



THE STATE OF
**Career Technical
Education**

AN ANALYSIS OF
States' Perkins V Priorities

OCTOBER 2020

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Executive Summary

In summer 2018, the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) was signed into law. Perkins has historically afforded states significant flexibility in how they support their Career Technical Education (CTE) systems and programs, including how they direct resources, define quality and measure success. Perkins V maintains these flexibilities and the focus on program and system improvement. Perhaps most importantly, Perkins V planning provided states the opportunity to reflect, engage with a wide array of stakeholders and partners, reaffirm key priorities and commitments, and identify new opportunities to support learners and their industry partners.

The State of Career Technical Education: An Analysis of States' Perkins V Priorities examines how states have leveraged the development of Perkins V state plans to advance the dual priorities of expanding quality and increasing equity within their CTE systems. While there

is no one-size-fits-all approach to Perkins V planning, Advance CTE has identified common aspects of states' Perkins V plans that are indicative of a comprehensive and cohesive state plan, a number of which go beyond the law's requirements and expectations.



A shared **statewide vision** that has a clear through line to the major decisions made in the state plan, including how and where states direct their funding. Highlights include:

- ◆ Ninety percent of states are using the **Reserve Fund** option, with 27 percent of states using the full 15 percent of the Reserve Fund that is allowed under the law.
- ◆ States' most common uses of the Reserve Fund include supporting **programs of study** (53 percent of states), closing **equity gaps** (37 percent), expanding **rural CTE** (31 percent), and expanding **dual enrollment and articulation** (24 percent).



Mechanisms for ongoing and meaningful **alignment and collaboration** across the K-12, postsecondary and workforce systems at the state and local levels. Highlights include:

- ◆ Ninety percent of states are sharing **labor market information** across systems, and 53 percent are using **common definitions** for "high skill," "high wage" and "in demand."
- ◆ Seventy-eight percent of states report establishing **feedback loops** aimed at gathering regular input from secondary and postsecondary CTE practitioners, while only 43 percent of states have feedback loops to gather regular input from families, learners and community members.
- ◆ Eighteen percent of states submitted a **Combined State Plan** — a single plan that fulfills the requirements of both Perkins V and the Workforce Innovation and Opportunity Act.
- ◆ Sixteen percent of states are encouraging **secondary-postsecondary consortia**, with 6 percent of states requiring them for all eligible recipients.
- ◆ Just 32 percent of states are going beyond the minimum requirements outlined in the law to explicitly require or encourage some degree of collaboration across secondary and postsecondary institutions in the development of the **Comprehensive Local Needs Assessment** (CLNA).



A **commitment to equity** through the direction of resources, a focus on the needs of different populations of learners, and capacity building within CTE systems to recruit and support learners and close opportunity gaps. Highlights include:

- ◆ Closing equity gaps and addressing the individualized needs of each learner are major priorities in many states' Perkins V state plans, including a focus on **targeted technical assistance** (82 percent of states), **professional development** (80 percent) and the use of **State Leadership dollars** (69 percent). Nearly two-thirds of states are going above and beyond the requirements of the CLNA and/or the local application to prioritize closing equity gaps.
- ◆ Two-thirds of states (63 percent) are coordinating substantially with other state offices or agencies to deliver services to learners, and more than half (53 percent) are providing **dashboards or other data tools** to support equity gap analyses at the local level.
- ◆ Nearly all states (90 percent) are formally allowing Perkins V funds to support **middle grades CTE**. About half of states (49 percent) report that they are allowing funds to be used starting as early as grade 5. However, more than a third of states (37 percent) do not include any details within their plans regarding middle grades CTE efforts.



A commitment to **quality** driven by support for programs of study and the expansion of meaningful work-based learning experiences, credentials of value, and dual enrollment and articulation opportunities. Highlights include:

- ◆ More than three-quarters of states are prioritizing CTE **programs of study** above and beyond the minimum requirement in Perkins V, with about a quarter of states reporting that all Perkins and state funds are delivered through programs of study.
- ◆ Two-thirds of states include **work-based learning** in their definitions for size, scope and quality, which states use as a litmus test to determine Perkins V funding eligibility, among other uses. Nearly half of all states (49 percent) are prioritizing work-based learning as part of their CLNA or local application process, and 47 percent of states include work-based learning as a factor when approving new or existing CTE programs.
- ◆ Seventy-six percent of states include **credentials** as a component in their size, scope and quality definitions, and 41 percent of states require credentials as part of the state's program approval process. Twenty-seven percent of states reference developing or maintaining state-developed lists of approved credentials of value in their Perkins plans.
- ◆ More than 60 percent of states incorporate **dual enrollment and articulation** in their definitions of size, scope and quality. A third of states refer to developing statewide articulation agreements in their Perkins plans. And about half of states include dual enrollment or articulation as part of their CTE program approval process.



A comprehensive system to attract, retain and develop **CTE instructors** and other professionals who reflect the demographic makeup of the learners they teach. Highlights include:

- ◆ Nearly three-quarters of all states are providing **targeted professional development** for specific groups of educators, administrators or other CTE professionals. Forty-five percent of states are including **quality instructors** in their definitions for size, scope and quality, and 47 percent of states are going beyond the requirements laid out in the law to **prioritize supporting CTE professionals** in their CLNA or local application.
- ◆ One area of future work is ensuring that the CTE teacher workforce is representative of the learners they serve. Only 10 percent of states have identified in their plans any **explicit recruitment activities** focused on diversifying the CTE teaching field.



A commitment to **data-driven decisionmaking** supported by data quality, public reporting and meaningful accountability indicators. Highlights include:

- ◆ More than half of states (53 percent) have selected **work-based learning** as one of their program quality indicators. Forty-three percent of states have elected to use **recognized postsecondary credential attainment** as at least one of their secondary CTE program accountability measures. A quarter of states have selected **postsecondary credit attainment** for this purpose.
- ◆ About a third of states have selected **more than one program quality indicator**, with four states selecting all three options. Twenty-nine percent of states have selected at least one other program quality indicator outside the three required options.
- ◆ At least a third of states report having a **secondary concentrator definition** that is distinct from the one put forward by Perkins V but still meets the statutory requirements of the law, including 20 percent of states that are requiring that a learner must complete at least one intermediate, advanced or capstone course to qualify as a secondary CTE concentrator.



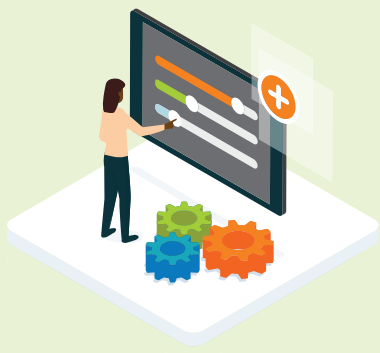
A strong system of **supports** to ensure fidelity of implementation across districts and institutions.

States have sought to make the most of the Perkins V planning process in a number of critical ways. States overwhelmingly have recognized the need to systemically and meaningfully attend to the issue of equity to better support each learner. They also are building upon Perkins' and CTE's legacy of connecting systems, promoting collaboration with and alignment of education and workforce development systems. This focus is especially evident in states' bold statewide visions for CTE. Many states also have taken up the challenge of reconfiguring their accountability frameworks to signal what they value most within their CTE systems.

In other areas, the work is just beginning. States have put a significant amount of time and effort into the development of their first-ever CLNAs. As state CTE systems mature, these processes will be revisited, presenting states with the opportunity to further refine and strengthen their efforts and deepen their impact over

time. In a few years, we will have a better sense of whether the intended power and promise of the CLNA — to purposefully interrupt the historical distribution of Perkins funds and instead intentionally focus resources on high-impact activities that close equity gaps, ensure learner access to high-quality CTE programs, and further align CTE to the needs of the labor market — have been realized.

Importantly, this analysis focuses on plans and not on subsequent implementation, which is the final “hallmark” of a strong state Perkins V plan. These plans are simply the first step of a much longer journey as states set out to implement their visions for CTE and refine their systems to improve program quality and equitably serve each learner. Even with the best-laid plans, states will likely need to make adjustments, reprioritize and otherwise adapt to stay responsive to both learners and the wider economy.



Introduction

In summer 2018, the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) was signed into law.¹ This legislation, which was passed with overwhelming bipartisan support in Congress, was the culmination of a multi-year reauthorization effort that formally renewed the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

There were many motivations for renewing Perkins, which is legislation that can be traced back more than a century and has historically sought to connect learning with the nation's economic needs. Perkins V builds upon this enduring legacy and, as the only federal investment specifically for Career Technical Education (CTE), aims to prepare learners for rewarding careers in all segments of the economy.

Some of the most significant changes under Perkins V include a much clearer emphasis on equity and access; additional intentionality with regards to state and local planning and spending, anchored by a new Comprehensive Local Needs Assessment (CLNA); a streamlined system of program accountability; a more robust focus on program quality and innovation; and a stronger emphasis on ensuring alignment between CTE and labor market demands, workforce development, and other state-level agencies and systems.

Perkins has historically afforded states significant flexibility in how they support their CTE systems and programs, including how they direct resources, define quality and measure success. Perkins V maintains these flexibilities and the focus on program and system improvement. Perhaps most importantly, Perkins V planning provided states the opportunity to reflect, engage with a wide array of stakeholders and partners, reaffirm key priorities and commitments, and identify new opportunities to support learners and their industry partners.

The State of Career Technical Education: An Analysis of States' Perkins V Priorities examines how states have leveraged the development of Perkins V state plans to advance the dual priorities of expanding quality and increasing equity within their CTE systems. This report is

not focused on which states met the law's expectations in their plans but instead on how states are taking advantage of the opportunities presented by Perkins V to strengthen their CTE systems, programs and supports. While there is no one-size-fits-all approach to Perkins V planning, Advance CTE has identified common aspects of states' Perkins V plans that are indicative of a comprehensive and cohesive state plan — and promising practices for CTE more broadly (see “Hallmarks of a Strong Perkins V State Plan” on p. 5).

This report is not an exhaustive overview of everything states are doing to advance CTE. Rather it is an analysis specifically of what states are seeking to address via their Perkins V plans. States have put different levels of detail into these plans, and at times it is difficult to determine what efforts are solely the result of Perkins V compared to policies and programs that preceded Perkins V or are being driven by state-level actions. As a result, this analysis is based only on the information made available through the Perkins V state planning process. (See Appendix C for more on the methodology.)

Perhaps most importantly, this analysis is based on plans and not on implementation. Given the recent events of 2020, particularly the COVID-19 (coronavirus) pandemic, states have begun to adjust and shift their investments and related plan timelines to reflect the current realities. As states endeavor to implement their bold visions for CTE and achieve related goals, it will be incumbent on the CTE community to support these efforts and ensure that each learner has access to a high-quality CTE program. These plans are simply the first step in a much longer process — one that will become more evident in the coming years as states put their Perkins V plans into action.

Hallmarks of a Strong Perkins V State Plan



A shared statewide **VISION** that has a clear through line to the major decisions made (e.g., alignment of planning elements and discretionary resource allocation, such as the use of State Leadership funds and the Reserve Fund; selection of program quality indicators; requirements for program approval; and priority areas within the CLNA)



A commitment to **QUALITY** driven by support for programs of study and the expansion of meaningful work-based learning experiences, credentials of value, and dual enrollment and articulation opportunities



A comprehensive system to attract, retain and develop qualified **CTE INSTRUCTORS** and other professionals who reflect the demographic makeup of the learners they teach



A commitment to **DATA-DRIVEN DECISIONMAKING** supported by data quality, public reporting and meaningful accountability indicators



A strong system of **SUPPORTS** to ensure fidelity of implementation across districts and institutions



Mechanisms for ongoing and meaningful alignment and **COLLABORATION** across the K-12, postsecondary and workforce systems at the state and local levels to address the entire CTE system cohesively and work to break down silos between these systems



A commitment to **EQUITY** through the direction of resources (financial and otherwise), a focus on the needs of different populations of learners, and capacity building within CTE systems to recruit and support learners and close opportunity gaps



Shared Statewide Vision

A strong statewide vision for CTE should serve as the north star, guiding policy and funding decisions, including those made throughout a state’s Perkins V plan. By their nature, statewide visions are aspirational and provide ambitious targets. They can, and should, be bold to push states to meet the needs of learners and other CTE stakeholders. Ideally, how the state’s Perkins plan aligns with and seeks to accelerate the accomplishment of the state’s vision for CTE should be clear. How and where states direct their funding is one critical lever for advancing a statewide vision.

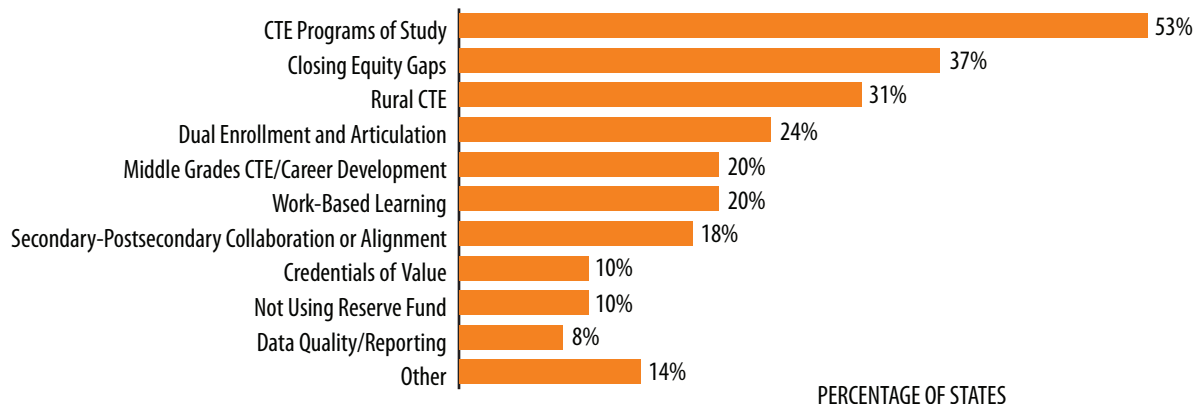
In particular, states have two areas of funding in which they can exercise significant discretion — a 10 percent set-aside specifically for statewide activities (State Leadership funds) and a flexible, optional pot of funding aimed broadly at supporting program quality and innovation (the Reserve Fund). Both funding streams provide state CTE leaders the opportunity to direct funding to the priority areas identified in their state’s vision for CTE. Intentional connections between spending priorities and a state’s vision for CTE help ensure that the vision is driving constant refinement of states’ efforts.

Perkins V reduces the number of *required* uses of State Leadership funds but ultimately incorporates a greater number of *allowable* uses of this funding than under Perkins IV.² Some of these activities are new in Perkins V while others have been either reconfigured or merely carried over entirely from Perkins IV. States are prioritizing the use of these funds in a variety of ways, as will be seen

throughout this report. While the law does not require states to make use of this funding to advance their statewide vision for CTE, one way to evaluate a vision’s effectiveness is by examining the degree to which a state’s plans for these funds align to the ambitions laid out in its vision.

Similarly, use of the newly expanded Reserve Fund is another aspect of states’ Perkins V plans that provides a window into their spending priorities and, consequently, how those priorities may match up to their vision for CTE.³ Ninety percent of states (46 total) are using the Reserve Fund, with 27 percent of states (14 total) planning to use 15 percent — the maximum allowable amount under the law. Perkins V is far less prescriptive with regards to use of the Reserve Fund than it is of State Leadership funds. As a result, state priorities with regards to the Reserve Fund vary widely, as seen in Chart 1.

CHART 1. How States Are Using the Reserve Fund



PERCENTAGE OF STATES



Shared Statewide Vision

State Highlights and Promising Innovations



A Clear Through Line in South Dakota

Another approach to assessing states' visions for Perkins V is to compare how aspects of these visions align with other parts of the plans themselves. South Dakota's CTE vision is a framework based on five core tenets. These tenets, such as ensuring that all CTE programs are connected to real-world experiences and labor market needs, show up in many aspects of the state's plan. One way to achieve this feature of South Dakota's vision is through work-based learning, which is a recurrent theme throughout the state's plan — it was selected as the state's secondary program quality indicator; is prioritized within its CLNA and local application; is a component of its size, scope and quality (SSQ) definition; and is a required element for CTE program approval.



Florida's 2030 Initiative

Florida anchored its Perkins V plan within the state's separate and existing goal to be a national leader in workforce education by 2030.⁴ The state's vision is founded on six objectives that can be readily identified throughout the plan, including in the CLNA, its SSQ definition, and its efforts to recruit and retain CTE teachers. As part of this 2030 initiative, Florida is also undertaking a statewide CTE program audit that it hopes will improve CTE program quality and further align programs to labor market needs, the latter of which is a key part of the state's vision for CTE.



Aligned Goals in Maryland

In Maryland, the Commission on Innovation and Excellence in Education has been developing recommendations for the past several years to improve the state's education system.⁵ The state's Perkins V plan builds on this work, most clearly through the shared statewide goal of having 45 percent of all Maryland learners concentrating in CTE and 55 percent of all adults in the state having an associate degree or higher by 2025. In addition to these goals, the state's vision focuses on access and opportunity for every learner. Throughout its Perkins V plan, the state makes clear that resources from the State Leadership funds and Reserve Fund are aimed at meeting each of the goals identified in its vision.

The Work Ahead

As states work to enact their statewide visions for CTE, it will be critically important for the CTE community to engage with and support these efforts. Equally as important, and aligned with the broader aims of Perkins V, stakeholders must actively monitor state progress toward realizing these visions and hold states accountable to the aspirations embedded in their Perkins V plans. Effective implementation of a statewide vision for CTE

necessarily requires a process of continual refinement and improvement of state CTE systems. To facilitate this work states should provide regular opportunities for stakeholders to monitor and engage with the state to ensure that the aspirations in their statewide vision for CTE become a reality. These efforts are examined in more detail in the next section.



Ongoing and Meaningful Alignment and Collaboration

Systems alignment — between the secondary and postsecondary education levels and between various education and workforce systems — was a key objective for the renewal of Perkins V. This focus is clearly apparent in the text of the law itself, which includes many direct connections between Perkins V, the Every Student Succeeds Act (ESSA), and the Workforce Innovation and Opportunity Act (WIOA).⁶

Perkins V provides states with a menu of required and optional ways to support systems alignment, including shared terminology, common planning elements, joint uses of funds, related accountability measures, and connected data disaggregation and reporting requirements.⁷ Collectively these options can ensure smoother transitions for learners across programs and systems, help to maximize limited resources, enable learner acquisition of credentials of value, ensure that all state systems are aiming to achieve related goals, and strengthen CTE's overall responsiveness to the needs of the economy.

Another new aspect of Perkins V is its strengthened focus on stakeholder engagement. Rather than providing a single opportunity for stakeholders to give input on a

state's plan during the development phase, Perkins V takes a much more systemic approach to ensuring that these feedback loops are sustained over time, particularly at the local level through the CLNA. Many states have chosen to formalize such engagement to ensure that key stakeholders have regular opportunities to provide input on the CTE system. Taken together, many states have made the most of these statutory options to promote systems alignment and collaboration and often are going beyond the minimum requirements laid out in Perkins V. These efforts support a process of continuous refinement and improvement that is necessary to fully realize states' bold visions for CTE and will have lasting impacts on state CTE systems, especially for the learners they serve, for years to come.

Structural Decisions

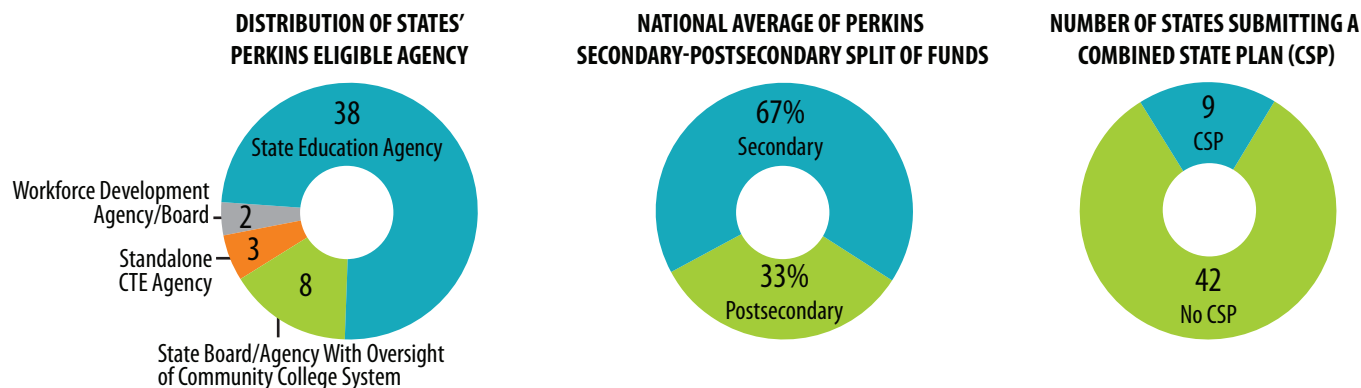
At the outset of the Perkins V planning process states were presented with several *structural* decision points to drive their planning and related implementation efforts. These decisions affect what states can do to encourage alignment of systems and can influence how effective these efforts will be. Three of the most foundational structural decisions include establishing the state's CTE governance structure through the selection of a Perkins eligible agency (i.e., the state agency that administers Perkins V funds), determining the split of Perkins V funds between the secondary and postsecondary CTE programs, and deciding what type of plan to submit to meet the requirements of Perkins V. These state decisions in the aggregate can be seen in more detail in Chart 2 on p. 9.

Perkins Eligible Agency Designation

Each state must identify an eligible agency to administer Perkins V funding within the state. Related planning and implementation decisions all flow through this agency, and the decision on where to locate this authority — within a secondary education, postsecondary education, workforce development or standalone CTE agency — will have long-standing impacts on how Perkins V and CTE more generally are carried out in a given state. While Perkins V is not the only factor states must consider when selecting an agency for this purpose — for instance, existing state law could require one agency rather than another to oversee CTE — a natural (and common) occasion to make such a change is during the initial phase of Perkins planning.



CHART 2. Perkins V Basics: Structural Decisions



CTE governance varies across states and tends to skew toward state education agencies (SEAs).⁸ (See Appendix A for a list of which states have chosen each governance structure.) States' different approaches, however, provide an opportunity to examine whether and how these structures foster collaboration among and between systems. In **Arkansas, Florida** and a few other states that have designated the SEA as the Perkins eligible agency, the SEA has responsibility for both secondary and postsecondary CTE systems, making collaboration and alignment efforts easier to some degree.

States with a standalone CTE agency — **Idaho, North Dakota** and **Oklahoma** — are structured in a similar manner, with the agency overseeing CTE at both learner levels. In eight states, including **Montana** and **Wisconsin**, CTE is administered through postsecondary governance systems that work closely with their secondary education counterparts. In **Indiana** and **Washington**, CTE is overseen directly by the state's workforce board — an entity with oversight authority for WIOA as well.

Secondary-Postsecondary Split of Funds

Most states plan to dedicate more of their Perkins funding to secondary CTE. Sixteen percent (eight states total) report having a 50-50 split. Of the three states that are dedicating more funding to postsecondary CTE than secondary CTE, two have eligible agencies that are not the SEA. Notably, the average split of funding did not change much from Perkins IV to Perkins V. In FY 2010 under Perkins IV, the national average split of Perkins funding allocated 64 percent for secondary CTE programs.⁹ This figure is now at 67 percent under Perkins V.

South Carolina is taking a noteworthy approach in regards to its split of funds. Acknowledging that its

current postsecondary allotment is the same as it was under Perkins IV, the state intends to gradually increase postsecondary CTE's share of Perkins V funds throughout the duration of its Perkins V plan to better reflect the greater degree of secondary-postsecondary collaboration now taking place. In **West Virginia**, rather than designating a specific percentage for each learner level, the state plans to have its funding distribution fluctuate year to year, pegging the distribution on full-time enrollment data within the state's secondary and postsecondary CTE systems.

Combined State Plans

Perkins V also continues to allow a planning option that was available under Perkins IV. Known as a Combined State Plan (CSP), states have the option to submit a single plan that fulfills the requirements of both Perkins V and WIOA, along with several other related federal programs that can be incorporated at the state's discretion.¹⁰ This planning option is one of several areas intended to foster alignment between Perkins and WIOA, with the goal of greater collaboration, reduced duplication of effort, and more seamlessness in learner experiences between state CTE and workforce development systems.

Nine states — **Alabama, Delaware, Indiana, Minnesota, Ohio, Pennsylvania, Rhode Island, Virginia** and **Washington** — chose to make use of the CSP option. This number is not, however, a significant shift — six states made use of this option under Perkins IV.¹¹ While the CSP, on the surface, may appear to be a preferred approach to systemic alignment, states' Perkins V plans offer an array of strategies for CTE and workforce development system alignment that do not rely on the submission of a CSP.



State-Level Collaboration Strategies

In addition to the structural decisions states had to make at the outset of their planning efforts, many states also have identified strategies aimed broadly at increasing collaboration and coordination across CTE learner levels and between education and workforce development systems. Although CTE has historically sought to align programs across learner levels and with the workforce needs of states and communities, Perkins V includes a number of provisions that aim to build on this legacy and strengthen the responsiveness of CTE programs to the needs of the labor market. States are leveraging many of these provisions going forward.¹² This analysis also looked for additional strategies that are not explicitly called out in Perkins V but can have a significant impact on alignment and collaboration.

As seen in Chart 3, the most common strategy states are using to promote systems alignment and collaboration (used by 90 percent of states or 46 total) is through the sharing of labor market information (LMI). A similar percentage of states (80 percent or 41 total) are using statewide, cross-sector advisory committees or boards to accomplish the same goal. These strategies are foundational to supporting deeper collaborative efforts — such as developing common credential lists; creating shared definitions for terms such as “high skill,” “high wage” and “in demand”; aligning career pathways with CTE programs of study; providing joint professional development; and developing joint CTE programs of study.

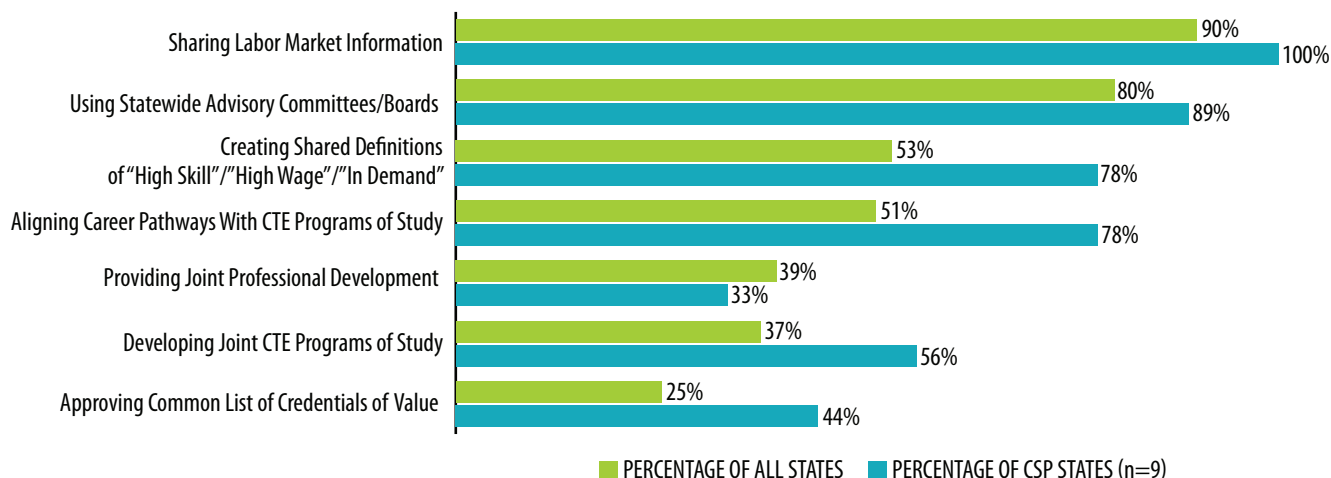
Each of these deeper collaborative efforts occurs with less frequency among states regardless of the type of plan

submitted. States that elected to submit a CSP, however, have pursued the examined strategies in Chart 3 slightly more often than states that did not submit a CSP, with the exception of joint professional development. Yet 79 percent of states that did not submit a CSP (33 states total) are pursuing at least half of these strategies, demonstrating that systems-level alignment and collaboration can take many forms regardless of plan type.

Stakeholder engagement and consultation are key priorities within Perkins V and related state planning. Perkins V extends considerable authority to states, most notably by allowing states to set their own performance targets for accountability purposes. In exchange, Perkins V requires states to engage with the public more extensively than before as a means to promote transparency and hold systems and programs accountable. Many states already had or are now building efforts to support *ongoing* collaboration and input from a variety of important CTE stakeholder groups — a list of groups that was also expanded under Perkins V to provide a more comprehensive representation of all stakeholders served by CTE programs. Efforts to collect and internalize additional perspectives are critical to ensuring that state CTE systems are positioned to continually refine their efforts, improve programs, and more effectively serve the needs of each learner.

As seen in Chart 4 on p. 11, states are undertaking a wide variety of complementary strategies in this area. Feedback loops aimed at gathering regular input from secondary and postsecondary practitioners is the most common

CHART 3. State-Level Collaboration Strategies





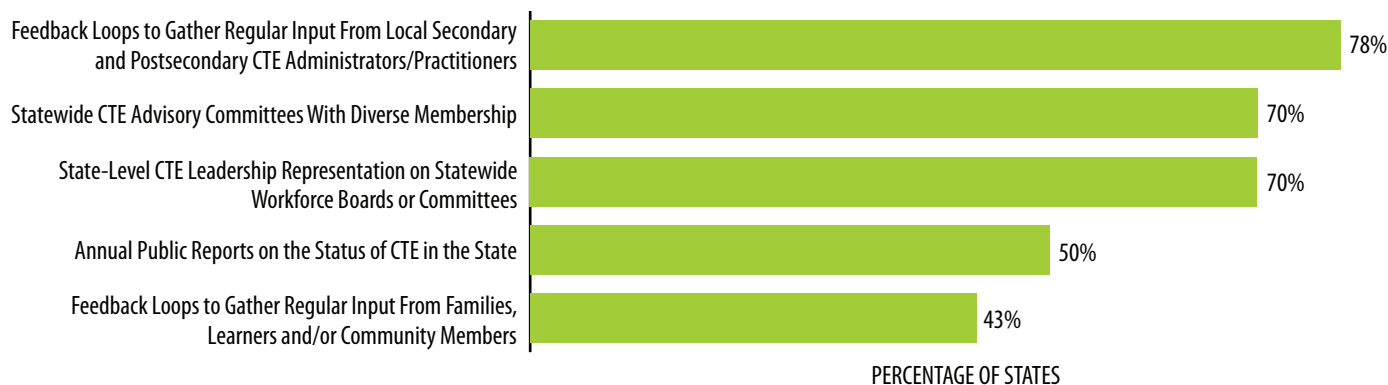
strategy, with 78 percent of states (36 total) reporting that they are implementing this approach. These efforts can take many forms but are best understood as regular engagement with CTE practitioners and the wider CTE field to solicit feedback and input to improve state CTE systems. Seventy percent of states (32 total) report that they have state-level CTE leader representation on a statewide workforce board or related entities — an important cross-sector opportunity for state CTE leaders to collaborate with their workforce counterparts and solicit feedback to inform state CTE systems.

An equally common approach to facilitating ongoing stakeholder feedback is through the creation and use of statewide advisory committees that have a diverse membership and related perspectives (used by 70 percent of states or 32 total). These committees often provide strategic direction for and input on state CTE systems and can also inform comparable local and regional efforts. One promising approach for advisory committees has emerged

in **Hawai'i**, with the state developing a robust system of subcommittees and working groups to carry out and monitor the implementation of its state plan. Each eligible recipient, along with a diverse set of other stakeholders, participates in these groups to provide direction and oversight for both the system and individual programs.

While efforts to facilitate feedback from state-level sources appear to be widespread, states generally do not seem to have structures in place like Hawai'i does to frequently or intentionally pursue gathering similar feedback directly from local stakeholders, especially from families, learners and other community members. Having such a mechanism for gathering feedback from learners, families and community members is an important first step, but the true value and impact of this feedback will be most observable during state plan implementation when systems can use this input to make necessary changes.

CHART 4. State-Level Mechanisms Supporting Ongoing Stakeholder Input and Consultation



State-Level Collaboration Strategies State Highlights and Promising Innovations



Braided Funding in Alabama

Alabama is one of the nine states that chose to submit a CSP to fulfill the planning requirements of both Perkins V and WIOA. Cross-agency collaboration is evident throughout the state's plan, including statewide efforts to combine and braid various federal and state funding streams to accomplish jointly established CTE and workforce goals. For instance, Alabama is pooling its State Leadership funding across both Perkins and WIOA, transferring these dollars to the Governor's Office of Education and Workforce Transformation to meet the state's labor force participation goals through an equity-based framework.¹³ Alabama also is knitting together various funding set-asides specified for special populations to maximize these resources and combine efforts to support these learner groups.



State-Level Collaboration Strategies

State Highlights and Promising Innovations



Ongoing Stakeholder Engagement in Maryland

Maryland has mapped out a number of ways that it will continue to engage stakeholders throughout the implementation of its Perkins V plan. The state is hosting quarterly meetings with local secondary and postsecondary CTE leaders throughout the year. The plan also indicates that representatives from industry, local school districts, community colleges, special population groups and parents will participate in program monitoring visits, career counseling activities, teacher and faculty recruitment activities, and other CTE-specific initiatives that support the implementation of the state's plan.

In addition, Maryland will continue to engage stakeholders through its statewide CTE Advisory Committee, which is charged with providing strategic guidance and direction for the state's CTE system. This Advisory Committee will be led by the Maryland Business Roundtable for Education and consist of stakeholders representing workforce development boards, chambers of commerce, economic development leaders, the Department of Labor, local school systems, institutions of higher education, special population groups and families. These efforts are mirrored at the local level, and the state is providing substantial guidance and support for local advisory committees that provide similar feedback to local CTE programs.¹⁴



Shared Oversight in Arkansas

Arkansas has established a Career Education and Workforce Development Board, which is charged with creating a comprehensive statewide system of CTE and workforce development rooted in the goals of economic development. The State CTE Director is an ex-officio member of the board, which meets quarterly to provide oversight and guidance for the state's CTE and workforce development systems. The board works to promote alignment between the state's workforce development and postsecondary systems as well as identify funding streams that could be used to achieve the goals of the state, among other activities. In particular, the state plan highlights two initiatives — the Arkansas Career Coach Program and Jobs for Arkansas Graduates — as strong examples of how Arkansas is combining efforts (and related funding streams) to more effectively support learners.¹⁵



Common Labor Market Information in Ohio

Ohio has long made use of a free, statewide online career counseling portal known as OhioMeansJobs.com, which provides career services and related labor market information for students and job seekers. Among other services, this resource provides a jobs board to connect employers with prospective applicants that is used by all relevant state agencies. Recently the Governor's Office of Workforce Transformation, in partnership with other state agencies and top experts, developed "top jobs" lists in several occupational areas. These lists are intended to inform a new career pathways component of the portal and aim to help CTE and workforce training programs more easily align with these priority areas in the state.



How States Are Encouraging Local Collaboration and Alignment

Coordinating state-level systems is an important part of states' planning efforts, but it is not the only way to encourage collaboration and alignment. States are also undertaking a range of activities to encourage local CTE stakeholders, including eligible recipients themselves, to collaborate and vertically align programs more closely across the secondary and postsecondary systems. As noted previously in this report, this work is critical to promote transparency and hold systems and programs accountable to the public — an objective that is most readily apparent in the CLNA process.

These efforts have taken shape in a few main ways in Perkins V state plans, including through the formation and use of secondary-postsecondary consortia, the structuring and leveraging of the CLNA process, the organization and use of local applications, the use of the Reserve Fund, and the degree of alignment between a state's secondary and postsecondary definitions of size, scope and quality (SSQ). Although not explored in this section, states are also requiring secondary-postsecondary CTE programs of study and making use of program approval processes to accomplish these goals.

Funding Collaboration: Secondary-Postsecondary Consortia and the Reserve Fund

As was the case before Perkins V, states have the ability to encourage or require the formation of secondary-postsecondary consortia as a means to distribute Perkins funding. The formation and use of consortia is a promising approach for encouraging collaboration among eligible recipients and helps to foster a greater degree of alignment between the learner levels, often regionally. The most direct route to accomplish this approach is by allowing Perkins V formula funding in a state to support secondary-postsecondary consortia while still adhering to the law's requirement that Perkins V funds first go directly to individual eligible recipients at the secondary and postsecondary levels. Sixteen percent of states (eight total) are using this strategy, including three (**Louisiana, Minnesota and New Mexico**) that are requiring a consortia framework, two (**Montana and Utah**) that are incentivizing the approach, and another three (**New Jersey, North Dakota and Rhode Island**) that are explicitly providing locals the option to form consortia.

In addition, 18 percent of states (nine total) are using the Reserve Fund to incentivize or support secondary and

State Definitions of Size, Scope and Quality

Like its predecessors, Perkins V includes language aimed at ensuring that CTE programs receiving funding are of sufficient "size, scope and quality" (SSQ). The law itself does not define this term but does require it as an element within local applications and as part of a state's wider determination of eligibility for funding. As a result, states must develop their own definitions of this term to fit the context of their state CTE system and meet the needs of their learners. States can maintain SSQ definitions individually for secondary and postsecondary CTE programs.

With this approach, states can align programs across the learner levels by incorporating definitional elements that are complementary or mutually reinforcing, while still maintaining distinct expectations for their secondary and postsecondary programs. States can also develop shared SSQ definitions that are used for both secondary and postsecondary CTE programs to promote alignment more directly, which 35 percent of states do. With either approach, SSQ definitions are an important way states are endeavoring to more closely align local CTE programs and drive program quality.



postsecondary collaboration and alignment. This number includes Louisiana, which is using this approach to support its new consortia. **Virginia** is directing its Reserve Fund to enhancing and implementing regional work-based learning experiences, which aim to foster collaboration among secondary, postsecondary and business and industry.

CLNA and Local Applications

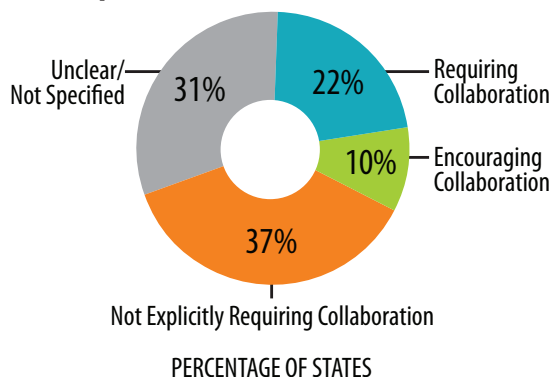
Perkins V makes use of a CLNA — a new component of the law that requires local eligible recipients to assess and audit their programs at least once every two years, with input from a broad list of stakeholders and partners. Additionally, Perkins V requires that eligible recipients submit a local application, rather than a local plan, to receive Perkins funding from the state. The results of the CLNA must be included in the local application for Perkins V funding, and grantees must articulate how these results informed the contents of their application. Taken together, the CLNA and the local application are meant to more deliberately connect planning and spending decisions at the local level to focus on improving the quality of programs and closing equity gaps.¹⁶

States have a significant amount of discretion when designing the CLNA and local application templates used by eligible recipients.¹⁷ For example, 71 percent of states (36 total) require that eligible recipients use the same CLNA template, and 57 percent of states (29 total) require the same local application for both secondary and postsecondary CTE programs. These requirements

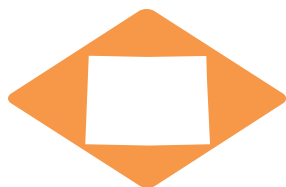
are notable because states can potentially encourage alignment of CTE programs across the learner levels and with the needs of the wider community by using the same set of criteria for secondary and postsecondary programs. Slightly fewer than half of states (21 total) are requiring both a shared CLNA and a shared local application.

About a third of states appear to be using the CLNA as a means to drive local collaboration between eligible recipients as seen in Chart 5. Thirty-two percent of states (16 total) explicitly require or encourage some degree of collaboration in the development of CLNAs beyond the minimum stakeholder engagement requirements outlined in Perkins V. These efforts can take shape in many ways, such as by requiring collaboration at the regional level to examine labor market data or explicitly requiring sign-off on the CLNA by both secondary and postsecondary partners.

CHART 5. State Requirements for Collaboration Among Eligible Recipients for the CLNA



Encouraging Local Collaboration and Alignment State Highlights and Promising Innovations



Regional CLNA Planning in Colorado

One promising strategy that encourages secondary and postsecondary alignment, as well as collaboration among eligible recipients, is through a *regional* CLNA approach, as seen in Colorado.¹⁸ The state requires that the CLNA process be completed by eligible recipients on a regional basis across 14 economic development areas. Colorado's Perkins eligible agency provides LMI to these regions as part of the CLNA and intends for its regional model to lead to deeper collaboration among eligible recipients, more effective identification of gaps in CTE programming, and better targeting of technical assistance to meet wider workforce development and education priorities throughout the state.



Encouraging Local Collaboration and Alignment State Highlights and Promising Innovations



Leveraging the Reserve Fund to Incentivize Collaboration in Montana and Kentucky

Eighteen percent of states (nine total) are using at least a portion of their Reserve Fund to incentivize efforts aimed at encouraging secondary-postsecondary collaboration in some fashion. For instance, **Montana** is dedicating 1 percent of its Reserve Fund resources toward a vertical consortia pilot project that aims to incentivize partnerships between local secondary and postsecondary Perkins grant recipients and more seamlessly align pathways for learners. In **Kentucky**, the state's Reserve Fund is awarded only to applications submitted jointly by secondary and postsecondary entities.



Local CTE Program and Workforce Board Coordination in Illinois

Illinois, which did not submit a CSP, prioritized systems alignment extensively at the local level. Specifically, local workforce development boards are the primary source of LMI used at the outset of local Perkins V planning. In exchange, local secondary and postsecondary CTE programs are required to provide the results of their respective CLNAs to help inform local WIOA plans. The state intends for both of these activities to more closely align with the development and implementation of CTE programs of study and career pathways, among other joint CTE-workforce development activities.



Louisiana's Perkins Regional Coalitions

Under Perkins V, Louisiana has launched Perkins Regional Coalitions, which are required to include secondary and postsecondary CTE along with several other key stakeholders, including industry representatives. A unique membership requirement for these coalitions is the inclusion of adult education and state corrections representatives. These consortia are regionally based partnerships that are co-located geographically with the state's regional labor market areas — regions that are identified by the state's workforce board. In doing so, Louisiana's Perkins Regional Coalitions more closely align with the state's WIOA governance structure at the local level and will be positioned to be even more responsive to these regions' economic needs given the composition of their membership.

Louisiana's Perkins Regional Coalitions also serve as the lead entity for the CLNA process and will help to identify work-based learning opportunities and evaluate CTE program offerings for quality. In addition to these responsibilities, the coalitions broadly focus on various funding streams, including Perkins, that are available to members of the coalition to further coordinate the use of these funds and maximize their impact. Importantly, the Perkins Regional Coalitions must identify at least three Career Clusters® to prioritize for each region. In future years, the state anticipates that Perkins funds will be made available to these coalitions only for CTE programs of study that are aligned to the Clusters identified by these consortia. As an added incentive, the state is also directing a portion of its Reserve Fund to support these efforts.



The Work Ahead

The strategies explored in this section are not exhaustive of all state efforts to promote collaboration and alignment. There is no one-size-fits-all approach to meet these broad objectives, which will necessarily be unique to each state and community. Rather, the approaches examined here are the ones that are most clearly established within Perkins V and are often commonly accepted best practices within the CTE community more broadly. States undoubtedly can and are pursuing other ways to promote collaboration and alignment, some of which will be explored further in other sections of this report.

Nonetheless, in a few areas states apparently have only just begun to make progress. This situation is particularly evident with the CLNA. Given that this requirement is new under Perkins V, this initial phase is crucial as states will be able to see, for the first time, how this process is being implemented by eligible recipients. Equally important, states will be able to use these insights to refine their CLNA process and further improve its impact. Perkins V requires that the CLNA be revisited at least once every two years — an intentional opportunity to re-examine and potentially refine these processes at the halfway mark of states' four-year Perkins V plans.

At this time, more than two-thirds of states (35 total) are not using their CLNA process to require or encourage cross-systems collaboration, or they simply do not speak to it in their plan. While this cross-systems collaboration is not technically required by Perkins V, not requiring or encouraging it is certainly a missed opportunity. As states mature in their implementation of the CLNA, there is a significant opportunity to more visibly make use of this process as an additional way to foster collaboration and alignment.

Concerning ongoing stakeholder engagement, only 43 percent of states (20 total) have systems that support ongoing feedback loops with families, learners and community members. These stakeholders provide invaluable input into the development and implementation of CTE programs, and states should work to create processes that consistently solicit their input to ensure that engagement goes beyond compliance and remains a meaningful endeavor. This input is critical to ensuring that programs remain responsive to the needs of individual learners as well as industry demands.

Finally, a priority within Perkins V is to strengthen the connections between Perkins, as well as the CTE systems it supports, and other existing federal education and workforce development programs. State efforts to connect to WIOA are readily apparent in many plans, and some efforts to connect with ESSA and the Individuals with Disabilities Education Act (IDEA) are identifiable as well, albeit to a lesser degree. However, comparable efforts to connect to the Higher Education Act (HEA) are not often apparent in states' Perkins V plans. Given Perkins' strengthened focus on equity and learner transitions, states can likely be more explicit when attempting to connect these systems and related laws. For instance, public reporting requirements are one area in which states can consider further aligning ESSA and Perkins. States should also consider further alignment with regards to IDEA to ensure that each learner has equitable access to quality CTE programs and the supports they need to be successful.

Commitment to Equity and Learner Supports



CTE was once primarily an alternative educational pathway meant for learners who were not expected, or even in some cases allowed, to attend college or university after high school.¹⁹ Once known as “vocational education,” these programs, which were often terminal and low quality, disproportionately enrolled low-income learners, learners of color, those with disabilities, and others from historically marginalized groups. CTE has changed considerably and is now, in many communities, a highly sought-after pathway that leads to multiple educational and career opportunities beyond high school.

The evolution from vocational education to modern CTE was more than just a change in name — it was a paradigm shift that demanded quality not just for quality’s sake, but rather as a means to ensure that each learner has the opportunity for career and lifelong success. Nevertheless, far too many learners today still lack equitable access to high-quality CTE programs. The same systemic barriers that led to the tracking of these learner groups into the vocational education systems of the past must still be addressed and further dismantled today.

One of the seismic shifts in Perkins V is the expanded and prevalent role of equity in the statute.²⁰ The law embraces equity as a central construct and infuses it within nearly every aspect of Perkins V — from planning, uses of funds and stakeholder engagement to accountability and reporting. States have risen to the challenge and fully and somberly embraced this responsibility. Many states include equity in their statewide vision or Perkins V theory of action. **Vermont’s** state plan eloquently speaks to the value proposition of using the federal funds to promote equity:

Federal funds through Perkins should be used to break the cycles of poverty that play out in families and communities, and to level the playing field for vulnerable [special] populations by providing appropriate supports to equitably access and equitably succeed in education and training programs.²¹

At the same time, Perkins V includes an increased focus on learner supports through specific equity efforts and set-asides of State Leadership funding, as well as an increased focus on career advisement. The law also allows Perkins V funds to be used to support the expansion of middle grades CTE and career exposure opportunities to as early as the fifth grade. As will be explored in this section, this expansion of funding eligibility to the middle grades, along with a greater focus on career advisement activities, has the potential to expand the pipeline of CTE learners.²² By beginning a learner’s CTE journey earlier in their education, these efforts can better support learners as they make critical decisions about their future educational plans, develop occupational identities and sharpen their career aspirations.

What Is an Equity Gap?

The term “equity gap” is broad based and is not defined by Perkins V or other federal laws. For the purposes of this report, this term means an observable disparity in access and/or outcomes for specific subgroups of learners or special populations (as defined by Perkins V) that is the result of systemic inequities, implicit biases, and/or outright discrimination on account of a learner’s identity. These disparities are often a result of lack of access to opportunity, not an individual learner’s ability to achieve. As a result, they are sometimes referred to as an “opportunity gap.”



State Strategies to Close Equity Gaps

Closing equity gaps and addressing the individualized needs of each learner are major priorities in many states' Perkins V state plans. States have structured their plans around several strategies aimed at closing equity gaps. Our analysis specifically examined the strategies listed in Chart 6.

The most common state strategies are the provision of targeted technical assistance (82 percent of states or 42 total) and professional development (80 percent of states) to support efforts to close equity gaps at the state and local levels. For instance, **Oregon** is working with its newly formed Educator Advancement Council to provide professional learning opportunities and related technical assistance for CTE educators in areas such as trauma-informed practices, culturally responsive teaching methods, inclusivity and classroom management techniques (especially as they relate to off-campus learning opportunities).²³ **Wyoming** is working with an open educational resource developer to provide CTE instructors professional development coursework designed to create supports for special populations to complete work-based learning experiences.²⁴

Further underscoring states' commitment to advancing equity for all learners, nearly two-thirds of states (33 total) plan to use their CLNA and/or local application to prioritize the closing of equity gaps. This approach is notable

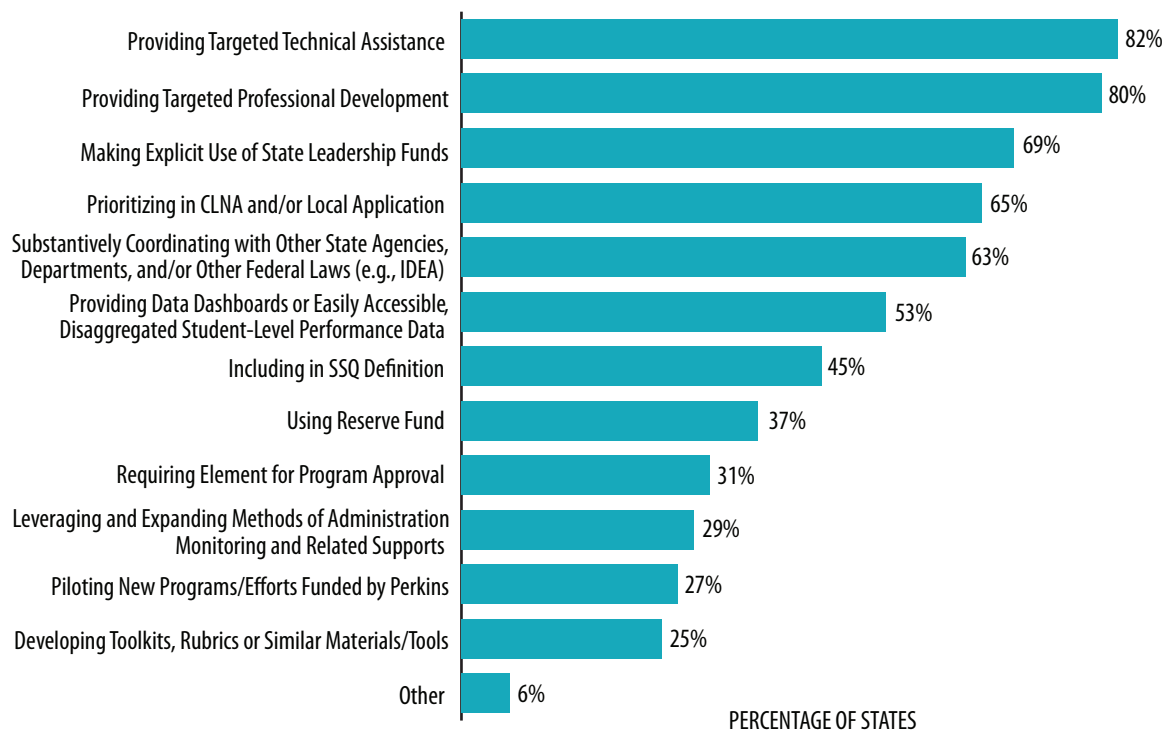
because, while the CLNA requires eligible recipients to conduct an equity gap analysis of learner performance data and assess their progress in providing equal access to programs, these states are going above and beyond these minimum federal requirements.

For instance, the **District of Columbia** has embedded root cause and equity gap analyses within its shared secondary and postsecondary CLNA template. These analyses are then used to develop specific strategies to address program-level equity challenges and help to create feasible solutions that deal with the underlying causes that may be perpetuating these challenges. **Ohio** has included equity-focused questions within each section of its CLNA, not just those sections focused explicitly on equity gaps and supports. About half of states (27 in total) are providing dashboards or other accessible reports with disaggregated student performance data to support local efforts.

Sixty-three percent of states (32 total) also include details in their plans regarding efforts to meaningfully collaborate with other state agencies or departments to deliver supports, monitor efforts and provide other equity-minded services to help meet these goals.

Finally, many states are also prioritizing Perkins V funding to meet equity challenges. With regards to state-level

CHART 6. State Strategies for Closing Equity Gaps





funding, 69 percent of states (35 total) are using more than the required set-asides of their State Leadership funding to close equity gaps, and more than one-third of states (19 total) indicate that they are using some of their Reserve Fund for similar purposes. At the local level, **Kansas'** Perkins V plan is a good encapsulation of a few of the

strategies examined in Chart 6, particularly with regards to connecting planning processes with funding decisions. Specifically, the state is leveraging its local application process by requiring local eligible recipients to set aside at least 5 percent of their local grant to support special populations.

Closing Equity Gaps

State Highlights and Promising Innovations



Rhode Island's Equity Grants

The Reserve Fund is a source states can tap to target funding to priority initiatives or programs. Rhode Island's Perkins V plan follows this approach and is using a portion of the state's Reserve Fund to provide Equity Grants to secondary CTE programs.²⁵ This grant opportunity formalizes what was previously a one-time investment of state funds, spurred by the state's New Skills for Youth grant.²⁶ These funds are intended to be used to address access, participation or performance gaps of specific learner populations enrolled in priority program areas. To be eligible, recipients must complete a root cause analysis and propose specific program-level solutions to address identified root causes of these gaps.



State Agency Collaboration in Montana

In Montana, the state Perkins eligible agency, in conjunction with its secondary counterpart, recognizes the intersecting needs of special learner populations designated by Perkins V. To address these needs, a cross-agency partnership, including the state homeless coordinator, state foster care point of contact, students with disabilities staff, and those with responsibility for English learner education, provides a wide array of supports for learners and technical assistance for eligible recipients serving them. In addition to this work, both partner agencies are offering statewide professional development opportunities to help eligible recipients more effectively serve the needs of special populations designated by the law.



Using the CLNA to Promote Equity in Illinois

Equity is a clear priority for Illinois, as evidenced by a strong focus on supporting learners throughout its state plan and in its CLNA. The state agencies with CTE oversight responsibilities — the Illinois State Board of Education and the Illinois Community College Board — collaborated to develop step-by-step guidance and related technical assistance for local recipients to make the most of their CLNA process.²⁷ Both the secondary and postsecondary CLNA processes focus strongly on equity gap analyses as part of this work. All districts and colleges must develop a learner recruitment and retention plan starting in 2021.

The CLNA template used by Illinois' postsecondary programs requires grant recipients to undertake their CLNA entirely through the lens of equity.²⁸ For instance, the template requires that eligible postsecondary recipients reflect on and describe how each component of the CLNA is meeting the equity needs of each learner.



Designated Funding for Student Subpopulations

Perkins V also contains three state-level funding requirements — or set-asides — within the State Leadership funding stream to support specific subpopulations of learners. The first two of these set-asides have been carried over from previous laws and focus on learners enrolled at state institutions and learners enrolling in programs that are non-traditional for their gender. Perkins V includes a third additional set-aside for equity purposes, specifically state-level funding intended to support the recruitment of special populations as defined by the new law.

Perkins V expands the scope and allowable cap of the set-aside related to the support of CTE programs at state institutions, such as juvenile justice facilities, adult corrections institutions, and educational institutions that serve individuals with disabilities. Perkins V allows states to dedicate up to 2 percent (an increase from 1 percent in previous law) of the total allocation for these activities. About two-thirds of states (32 total) are setting aside at least 1 percent of their funds for this purpose. At least seven states are dedicating the maximum 2 percent allowed under law.

State Perkins V plans contain varying degrees of information regarding how these funds will be used. Most indicate that these resources are going toward professional development for instructors at these locations, curriculum specifically for the populations served by these institutions, and credentialing efforts aimed at helping learners at these institutions transition to fulfilling careers. **Michigan**, in collaboration with the state Bureau for Juvenile Justice, is using this set-aside to update CTE programs of study offered at these facilities with the aim of having all CTE programs at these facilities state approved and funded by Perkins V within the next five years.

Indiana is allocating \$150,000 to its Department of Corrections and extending an additional \$100,000 in new funding for juvenile justice programs. These funds will be used to support a variety of activities, including direct learner instruction, the purchase of CTE program-specific materials and equipment, the integration of academic skills into CTE programming, career exploration, the development of learners' employability skills, and the fostering of relationships between these individuals and potential career opportunities post-release. **Oregon** also is taking an interesting approach with these funds — the state plans to use its full 2 percent set-aside for this purpose to fund local consortia, including youth and adult corrections institutions, to facilitate better transitions for learners back to communities.

Massachusetts is maximizing the set-aside by braiding it with other resources. The state's Department of Elementary and Secondary Education offers a competitive request for proposals every year for up to \$30,000 to provide quality CTE programs of study and services to individuals in correctional institutions. These programs are often linked and strategically aligned to activities funded by WIOA Title I, specifically those activities focused on providing adult education to individuals in these institutions as a way to prepare them to participate in the more academically advanced CTE programs that lead to credentials in in-demand fields.

Another set-aside carried over from Perkins IV to Perkins V is aimed at helping learners prepare for occupational fields that are non-traditional based on their gender. This provision continues to require states to use at least \$60,000 of their State Leadership funds for this purpose with a maximum cap of \$150,000. Seventy-one percent of states (36 total) are dedicating \$60,000 for this purpose, and only 12 percent of states (six total) are dedicating the maximum

State Leadership Set-Asides

NON-TRADITIONAL TRAINING SET-ASIDE: \$60,000 to \$150,000 to be used for services that prepare individuals for fields that are non-traditional for their gender

INSTITUTIONAL SET-ASIDE: Up to 2 percent of the state allotment to be provided to state institutions such as correctional or juvenile justice facilities

RECRUITING SPECIAL POPULATIONS SET-ASIDE: At least the lesser of \$50,000 or 0.1 percent of State Leadership funds to be used for recruiting special populations to CTE



amount. While the remaining states fell somewhere within this range, most stuck with the funding floor or ceiling established in the law.

Professional development and technical assistance are among the most common areas of focus of these funds. For example, **Connecticut** is using this set-aside to support two state-level partnerships. One of these partnerships is with the Connecticut Women’s Education & Legal Fund to offer professional development assistance with a focus on expanding dual enrollment programs. The other is with the Connecticut Center for Advanced Technology, Inc., aimed at expanding young women’s exposure to and preparation for science, technology, engineering and math (STEM) careers.

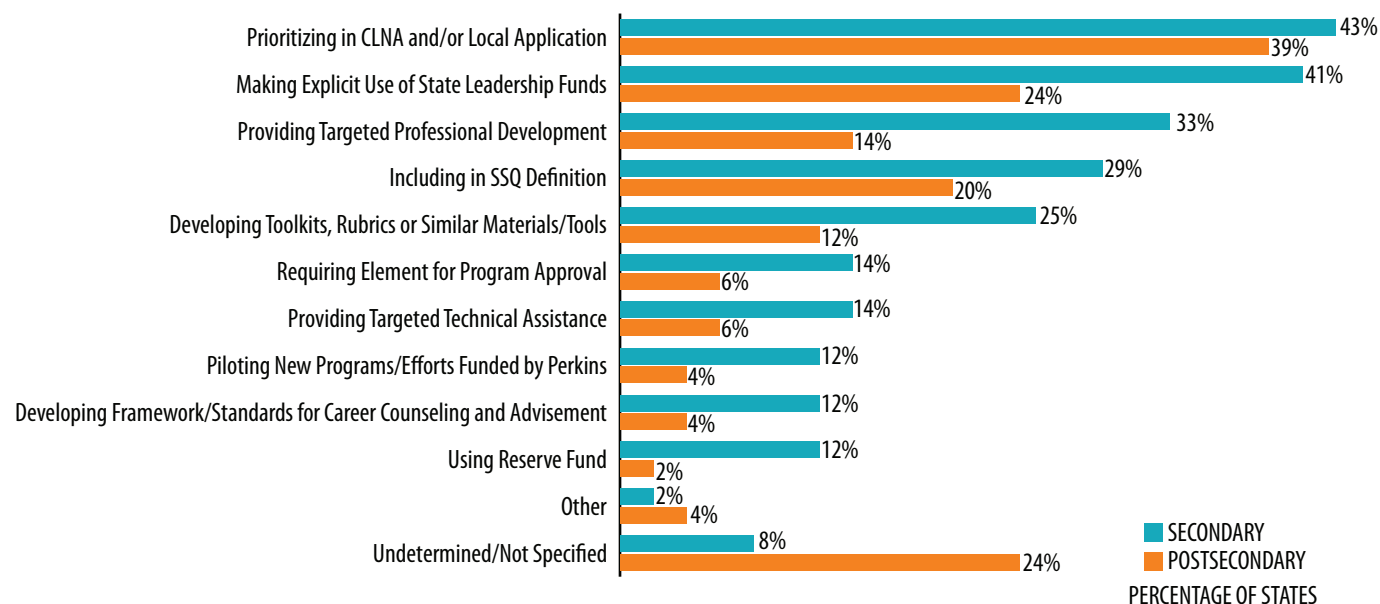
Perkins V includes a new provision that directs states to use a portion of their State Leadership dollars specifically for the recruitment of special populations of learners. States must set aside either 0.1 percent of their State Leadership allocation or \$50,000 (whichever is lesser) for this purpose. The underlying statutory language is admittedly unclear and by definition directs states toward a relatively small set-aside amount. As such, the data gleaned from this portion of the state plan analysis is difficult to parse out and interpret as many states do not provide specifics on how these limited resources will be used. A number of states are planning to braid or combine these funds with other funding streams and set-asides to maximize efforts.

Career Advisement and Middle Grades CTE Expansion

Career awareness and advisement activities are critical for ensuring that each learner can learn about, access and be successful in high-quality CTE programs. These efforts are also a crucial component of states’ equity strategies because they can help learners navigate increasingly complex education and workforce development systems on their way to a rewarding career. More fundamentally, these activities often provide social capital to learners who may not be aware of educational and career opportunities that may be a good fit for them based on their talents and interests.

Echoing previous Advance CTE research on this topic, state plans indicate that they are undertaking a number of efforts, at both the secondary and postsecondary levels, to provide robust advisement and related supports for learners.²⁹ Nearly half of all state plans (22 total) prioritize advisement efforts at the secondary level through their CLNA or local application processes, and 39 percent of states (20 total) indicate the same for the postsecondary level. Approximately 40 percent of states (21 total) indicate in their Perkins V state plans that they are using at least a portion of State Leadership dollars for this purpose at the secondary level. However, only 24 percent of states (12 total) do so at the postsecondary level. Another trend is

CHART 7. State Strategies to Advance Career Advisement





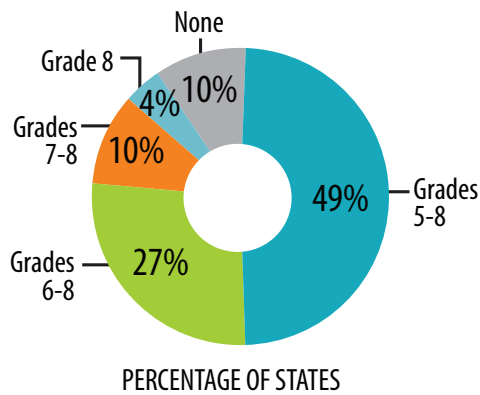
the widespread state use of individual career academic plans (ICAPs) at the secondary level. While the degree that Perkins V funds directly support these efforts remains unclear, the fact that many states include references to their ICAPs in their state plans indicates that states are increasingly working toward more clearly connecting ICAPs to their CTE systems.

One significant change ushered in under Perkins V is the expansion of funding eligibility to middle grades CTE programs and initiatives. Nearly all states, 90 percent, are formally allowing Perkins V funds to support middle grades. Forty-nine percent of states report they are allowing funds to be used starting as early as grade 5.³⁰ Underscoring the strong relationship between middle grades CTE and career advisement efforts, **South Dakota** is among the states allowing Perkins V funding to flow to the fifth grade, but it mandates that these activities be focused on career exploration for all 16 Career Clusters.

However, simply allowing Perkins V funding to flow directly to middle grades CTE programs does not necessarily imply that all states have fully embraced these opportunities. The most common strategy used by states is to prioritize middle grades in the CLNA or local application. This strategy is being leveraged by only 20 percent of states, followed by developing middle grades standards or curriculum (18 percent of states) and directing State Leadership funds to middle grades activities (18 percent of states).

More than a third of states (19 total) do not include any details within their plans regarding middle grades CTE efforts. One potential reason for this lack of specificity is a concern that without additional financial resources under Perkins V, fully expanding state CTE systems into middle grades could dilute finite resources, which have not kept pace with inflation.³¹ In other states, CTE is not offered until grade 11, and as a consequence, resources are often directed toward career development starting in grades 9-10.

CHART 8. Middle Grade Levels Eligible for Perkins V Funding



At the same time, even among the 10 percent of states (five total) that are not formally allowing funding to flow directly to middle grades CTE programs, work is still underway to support middle grades CTE programs indirectly. For instance, **Colorado** is using a portion of its State Leadership funds to evaluate, approve and administer middle school CTE programs throughout the state even though it is not formally allowing local Perkins V grant funding to flow directly to these programs.

Nonetheless, expanding state CTE systems to encompass middle grades programs has the potential to broaden the pipeline of prospective students that feed into existing secondary CTE programs. Ensuring that these efforts support students at this early juncture is a critical first step for states to support learners' access to these opportunities and position themselves for success.



Career Advisement and Middle Grades CTE

State Highlights and Promising Innovations



Employers Providing Career Advisement in Maryland

One of the key aims of effective career advisement and development efforts is to provide learners with an accurate-as-possible picture of what careers and related expectations look like outside of the classroom. In Maryland, the state education agency is collaborating with the Maryland Business Roundtable for Education to recruit and prepare industry professionals to serve as career counselors at both the secondary and postsecondary levels. This initiative builds on past collaborative work with the Maryland Business Roundtable for Education and aims to increase the overall capacity of the state to provide robust career counseling services to all Maryland learners.



Middle Grades CTE Expansion in Iowa

Iowa convened a panel of experts to develop a set of minimum program-level standards for middle grades CTE and has tied these requirements to Perkins V funding eligibility. These standards detail a range of important components, such as the role Career Technical Student Organizations (CTSOs) have in providing a co-curricular element for CTE programs at this learner level and the exploratory nature of the work-based learning experiences most appropriate for these learners. In addition, the state outlines specific professional development opportunities for middle grades CTE educators — an important supplementary activity given that this flexibility is new in Perkins V and, consequently, middle school educators may not have direct experience with CTE.



Career Coaches in Arkansas

School-based counselors are often tasked with an ever-increasing amount of responsibilities aimed at supporting students in a broad range of areas, including career preparation. Having staff specifically focused on career advisement and awareness efforts is one way to lighten this load and ensure that learners receive the attention and support they need to be successful. Through its Perkins V plan, Arkansas is continuing to support its Career Coaches Program, which works in tandem with school counselors and CTE instructors to provide supports to marginalized groups of learners.³² This locally operated program supports and guides learners in grades 5-6 as they explore careers and develop related navigation skills. In grades 7-8, these coaches help learners develop Career Action Plans and Student Success Plans to further guide their educational journey. A career development course is then required by grade 8. This ladder approach helps to ensure that learners are prepared for success by the time they enroll in a high school CTE program and are fully aware of the opportunities these programs can lead to.



The Work Ahead

States have undoubtedly prioritized equity issues throughout their Perkins V planning efforts. Achieving equity is not a conclusive destination but rather a continuous collaborative process of refinement and improvement to better serve each and every learner. The work ahead is to focus on the effective implementation of the strategies explored in this section. These efforts will remain a challenge, especially in the context of increased national attention on systemic racism and the educational inequities that were brought much closer to the forefront due to the coronavirus. This work is now more important — and more complex — than ever before.

States are clearly building their capacity to conduct equity gap analyses, particularly through targeted professional development, technical assistance, and ensuring that quality learner data is available and easily understood. However, the next step for many of these efforts will be in identifying and supporting specific interventions to address the equity challenges identified for different populations of learners. The success of these efforts will largely depend on building additional knowledge at both the state and local levels regarding effective practice. Similarly, as states implement their visions for equity in the coming years, it is critically important that they also provide eligible recipients with the supports and resources needed to carry out this important work.

While states can and should continue to leverage the specific equity set-asides, the work to identify equity gaps required under the CLNA — along with the direction of funding to close these gaps — is among the most

powerful opportunities states and locals have to fully realize the equity ambitions that are evident in state Perkins V plans. These are enormously important first steps as they create a strong foundation from which to build more impactful individualized learner supports. It will be incumbent on states to continue to maximize the use of the CLNA to keep making progress and iterate solutions that work for each and every learner.

The strategies explored in this section are by no means a complete picture of all the work states are doing in this space. Distinguishing between initiatives that are specifically driven by Perkins V and other efforts the state may already be undertaking continues to be a challenge, particularly with regards to states' career advisement and awareness efforts. Given their role in helping learners transition to the workplace, postsecondary advisement activities are an especially important area that many state Perkins V plans do not often address specifically.

Finally, the expansion of middle grades CTE is a key way to strengthen the pipeline of incoming CTE students by reaching further back in the education continuum. Some states are able to build on existing statewide initiatives while others are doing the work to build systems, standards and consistent procedures to ensure quality programs at this learner level. As Perkins V implementation moves ahead, and hopefully the investment in Perkins increases, we hope more states will expand access to middle grades CTE and comparably support ongoing local efforts.

Commitment to CTE Program Quality



Encouraging and improving CTE program quality is a long-standing, central purpose of Perkins V. The focus on program quality is perhaps most evident through the law's continued use of CTE programs of study, which incorporate several program quality elements that are essential for any high-quality CTE program. No single program element on its own fully speaks to the issue of quality. Only taken together does a picture of CTE program quality begin to emerge.

As will be explored in this section, states are undertaking a variety of efforts to realize the law's vision for program quality — one that will help to ensure that more learners have access to a high-quality CTE program. This work is incredibly important as CTE systems are able to meet their own bold visions for the future only if the programs that they are composed of are rigorous and equipped for excellence. State Perkins V plans therefore emphasize program quality frequently as a core tenet guiding their work.

To ensure program quality, states must structure rigorous program approval and review processes, scale CTE programs of study, and attend to other key aspects of high-quality CTE programs. Perkins V introduces three new secondary CTE accountability measures, known as program quality indicators, as one method available to

states to ensure program quality. All three of these options — work-based learning, recognized postsecondary credentials (credentials of value), and postsecondary credit attainment (dual enrollment and articulation) — are components of a high-quality CTE program of study.

States can and certainly are pursuing other critical elements, including rigorous standards, quality assessments, and Career Technical Student Organizations (CTSOs), that drive CTE program quality. While these concepts and strategies are important for the field broadly, they are not central points of focus within the law. As a consequence, states' Perkins V plans are not as often required to speak to these issues even if state CTE systems are embracing them.

State Program Approval Processes

Before examining these individual program quality elements and related frameworks for delivering content and instruction, it is important to examine how states are driving program quality through one of the most fundamental policy mechanisms at their disposal — program approval. State CTE program approval processes and related requirements are the way states, on the front end, can validate new or existing CTE programs. They also drive state efforts to retire or transform existing programs that may not meet state-established program requirements.

State program approval efforts often embed the individual program quality elements that are explored throughout this section and are one of the primary ways in which states

seek to ensure that the CTE programs offered within their systems are high quality. This section explores three program quality elements along with an overarching programmatic framework for their delivery (CTE programs of study): work-based learning, credentials and dual enrollment and articulation. As seen in Chart 9 on p. 26, states have variously chosen to include (or not) some of these elements in their program approval policies. The most common program quality elements included in states' program approval processes are dual enrollment and articulation (included by 55 percent of states or 28 states total), followed closely by work-based learning (47 percent or 24 states total). Forty-one percent of states (21 total) require credentials for the purposes of approving a CTE program.



CHART 9. Program Quality Elements in State Program Approval Processes



CTE Programs of Study

A CTE program of study is a comprehensive and intentionally structured approach for delivering academic and CTE instruction. The concept was first introduced in Perkins IV, which required that eligible recipients develop and implement at least one CTE program of study to be eligible for funding. Perkins V carries on this requirement but goes further than its predecessor by creating a statutory definition for this programmatic framework (see “CTE Programs of Study” below for the statutory definition).³³

CTE programs of study are designed to support learners as they move seamlessly from secondary to postsecondary education and ultimately into the workforce. To achieve these seamless transitions, by design, CTE programs of study include two of the three program quality elements

explored in this section, plus key elements not explored at length in this report. Although the law does not require all Perkins funding to be disbursed via CTE programs of study, many states are taking the lead on their implementation and directing more, and in some cases all, of their Perkins V funding via this impactful framework. CTE programs of study embrace the key tenets of high-quality CTE and are a central way in which states can seek to comprehensively promote program quality throughout their systems of CTE. As seen in Chart 10 on p. 27, 23 percent of states (11 total) are meeting only the minimum requirements in Perkins V, with 77 percent of states (40 total) going above and beyond the minimum. As discussed previously in this report, more than half of states (27 total) are using at least a portion of their Reserve Fund to support CTE program of study development and/or related implementation.

CTE Programs of Study

A CTE program of study is a coordinated, non-duplicative sequence of academic and technical content spanning the secondary and postsecondary learner levels that:

- ✓ Incorporates challenging state academic standards (in particular those adopted under ESSA);
- ✓ Addresses both academic and technical knowledge and skills, including employability skills;

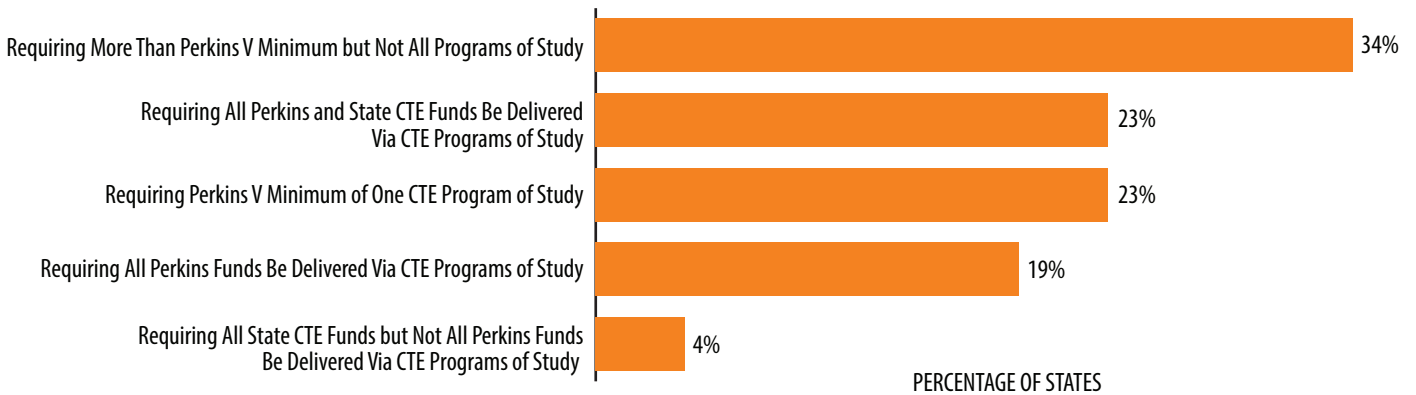
- ✓ Is aligned with the economic needs of the state, region, tribal community or local community;
- ✓ Progresses in content specificity (beginning with all aspects of an industry or Career Cluster and leading to more occupationally specific instruction);
- ✓ Has multiple entry and exit points that allow learners to earn credentials; and
- ✓ Culminates in the attainment of a recognized postsecondary credential.



Much as was the case in previous law, Perkins V allows states to develop and implement CTE programs of study in a manner of their choosing. Sixty-eight percent of states (32 total) allow local grant recipients to develop their own CTE programs of study, which the state Perkins eligible agency must then approve for use. Thirty-four percent of states (16 total) develop CTE programs of study and

mandate that local Perkins grant recipients use them. Thirty-six percent of states (17 total) develop CTE programs of study for optional local use and implementation. These aggregate findings overlap somewhat because some states are pursuing these strategies simultaneously (i.e., states can use more than one approach to develop and implement CTE programs of study).

CHART 10. How States Are Prioritizing CTE Programs of Study



State Program Approval Processes

State Highlights and Promising Innovations



Next Level Programs of Study in Indiana

Many states are using the Perkins V planning process to undertake a comprehensive review and restructuring of their CTE programs. The Governor’s Workforce Cabinet (Indiana’s Perkins eligible agency), in collaboration with several postsecondary institutions in the state, is undertaking an extensive redesign of CTE programs of study through the Next Level Programs of Study initiative to increase CTE program quality and vertical alignment between the secondary and postsecondary learner levels. Each newly designed Next Level Program of Study will be structured around several sequenced courses bridging secondary and postsecondary CTE, and the state intends to help all eligible Perkins recipients transition to using them over the next few years. The Governor’s Workforce Cabinet is currently offering pilot grants during the initial stage of this initiative and aims to fully phase in these requirements by 2023.



State Program Approval Processes State Highlights and Promising Innovations



Statewide Programs of Study in the District of Columbia

The District of Columbia offers 42 statewide CTE programs of study along with 107 individually aligned courses. The District’s Perkins eligible agency, the Office of the State Superintendent of Education (OSSE), recently undertook a comprehensive overhaul of all programs of study offered in the District. This overhaul was done by engaging with business and industry to modify and recommend new technical skills that should be embedded within each course standard underlying a state-approved program of study. This validation process will help to ensure that all CTE programs in the District are fully aligned to labor market needs. Beginning on July 1, 2020, OSSE requires that all Perkins V eligible recipients meet these program learning standards and also embeds a comparable requirement for all other CTE funding in the District.



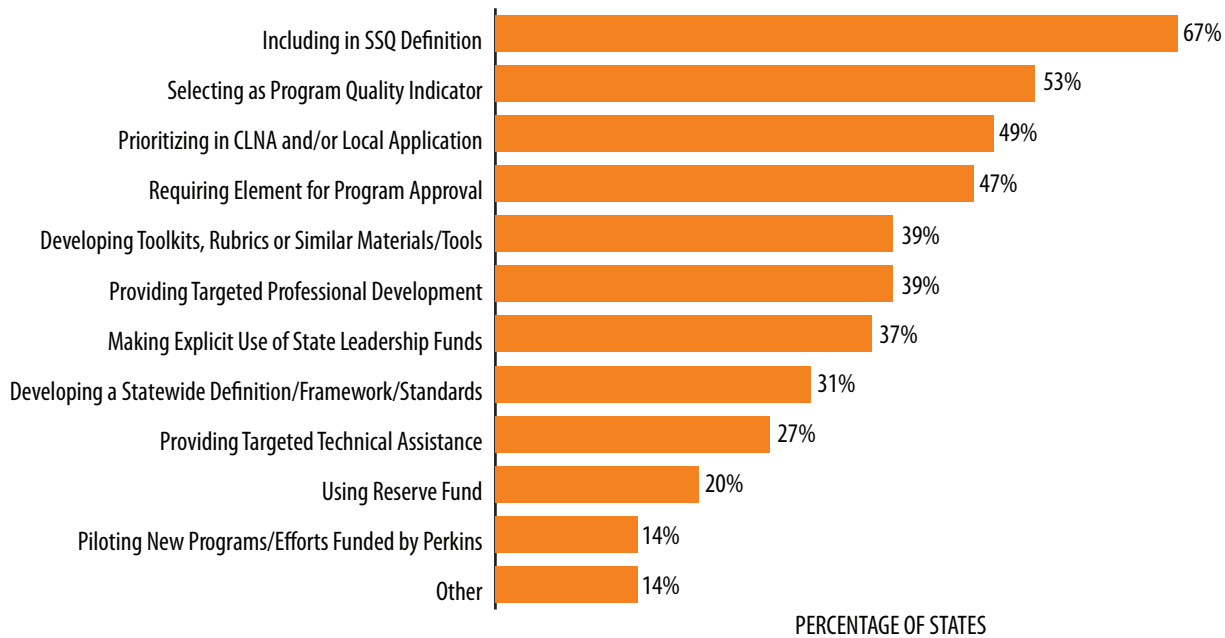
Defining and Committing to Quality in Illinois

In Illinois, the agencies responsible for secondary and postsecondary CTE closely collaborated on a joint SSQ definition that applies to all eligible Perkins recipients in the state. Illinois also requires that this definition be incorporated and used within the related program of study approval process. The quality component of this definition is quite robust and includes nine different programmatic elements that, taken together, outline the state’s expectations for high-quality CTE programs of study. The state has established clear expectations for local Perkins grant recipients through this effort. Programs must meet most of these criteria initially with the expectation that over the following years they will fully meet the entire definition.

Work-Based Learning

Work-based learning is increasingly a priority for states across all CTE learner levels.³⁴ This issue was a key priority for many employers who strongly supported Congressional efforts to reauthorize Perkins.³⁵ Consequently, work-based learning provisions have been greatly expanded in Perkins V and are now even reflected in the law’s accountability system as an option for the new secondary program quality indicator. Of particular consequence, the law formally defines the term “work-based learning” (see “Work-Based Learning in Perkins V” on p. 29 for the law’s statutory definition). This wide-ranging definition has the practical effect of allowing a multitude of different activities to “count” as a work-based learning experience under Perkins V, although it does specify that these experiences must be “sustained interactions,” which likely exclude more career exposure-focused activities such as career fairs or workplace tours.

States’ commitment to and inclusion of work-based learning show up in many aspects of state plans. As seen in Chart 11 on p. 29, work-based learning shows up most often in states’ SSQ definitions (67 percent of states or 34 states total). This definition is used as a litmus test by states to determine Perkins V funding eligibility, among other uses. Nearly half of all states (49 percent or 25 total) are prioritizing work-based learning as part of their CLNA process or local application process, most often by including specific questions or entire sections in these templates that go above the minimum requirements outlined in the law. As noted previously in this report, a nearly similar proportion of states (47 percent or 24 total) include work-based learning as a factor when approving new or existing CTE programs.


CHART 11. State Strategies to Advance Work-Based Learning


More than half of all states (53 percent or 27 total) have chosen work-based learning as at least one of their program quality indicators, which will be explored in greater detail in the “Data-Driven Decisionmaking” section of this report. However, among the states that selected work-based learning as their secondary program quality indicator, 41 percent (11 states total) do not require work-based learning for program approval, and 30 percent (eight states total) do not include work-based learning as part of their SSQ definition.

Taken together, these findings indicate that states are still in the process of building systems and related supports to bring work-based learning to scale. This situation is underscored by the fact that a sizeable portion of states are investing in professional development (20 states total), are developing materials such as toolkits or rubrics to help eligible recipients implement work-based learning (20 total), and are explicitly dedicating at least a portion of their State Leadership funds to advance work-based learning in some capacity (19 total).

Work-Based Learning in Perkins V

“Sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction.”



Work-Based Learning

State Highlights and Promising Innovations



Comprehensive Work-Based Learning System in Texas

Texas is pursuing two primary strategies to implement and further expand work-based learning opportunities. First, Texas is making extensive use of virtual schools to allow learners to participate in virtual work-based learning experiences. This option is extremely important in communities, especially rural areas, where work-based learning opportunities may be somewhat limited. In the short term, the option is even more critical given the impact of the coronavirus. Second, Texas is making use of an intermediary network that will help facilitate work-based learning opportunities throughout the state.

These intermediaries are strategically located throughout Texas and are tasked with coordinating and aligning efforts between local school districts and partnering employers. When these partnerships demonstrate evidence of success, Texas plans to scale them further with its State Leadership funds. The state is also working to create a new work-based learning data collection system that will help facilitate both of these initiatives and further support these efforts. This new statewide system collects information related to participating employers, the specific types of work-based learning experiences being offered, and documentation of learners' employability skills. It also facilitates the development of individual training plans to guide these efforts.



Ensuring That Every Learner Has Access in Delaware

A key component of Delaware's statewide vision for CTE is to "scale and sustain meaningful work-based learning experiences" for each learner in grades 5-14 in the state. To meet this goal, learner participation in a work-based learning experience is a required component of all state-approved CTE programs of study, and the state is funding a statewide work-based learning intermediary. Delaware takes these efforts even further in its Perkins V plan, ensuring close collaboration across state CTE and workforce development systems to provide youth and adults with disabilities the supports they need to participate in and complete work-based learning experiences. Coordinating these efforts with IDEA, the state is providing a comprehensive system of supports for individuals with disabilities who are enrolled in a CTE program.



Setting a Statewide Goal in Tennessee

Tennessee aims to double the number of learners who will participate in high-quality work-based learning experiences and attain a credential over the course of its Perkins V state plan. The state's strategy to achieve this goal is multi-faceted and incorporates several complementary approaches, such as developing a more robust system of wrap-around services and supports to expand work-based learning opportunities and revising its industry review and alignment process. To ensure that work-based learning experiences are high quality, the state is also developing a new certification process for providers and is working to ensure that work-based learning opportunities can be articulated for postsecondary credit.



Credentials of Value

Credentials that are valued in the labor market are an important component of any quality CTE program. They serve as anchors for the exit points within CTE programs, providing learners with a valuable way to signal to prospective employers and other postsecondary educational institutions along their career pathway what they know and are able to do. Underscoring the centrality of credentials to CTE programs, 76 percent of states (39 total) include them as a component in their SSQ definitions, as seen in Chart 12. Forty-one percent of states (21 total) report going a step further, requiring credentials as part of the state’s program approval process. Requiring credentials within these processes helps to ensure that more learners are earning them as part of their CTE experience.

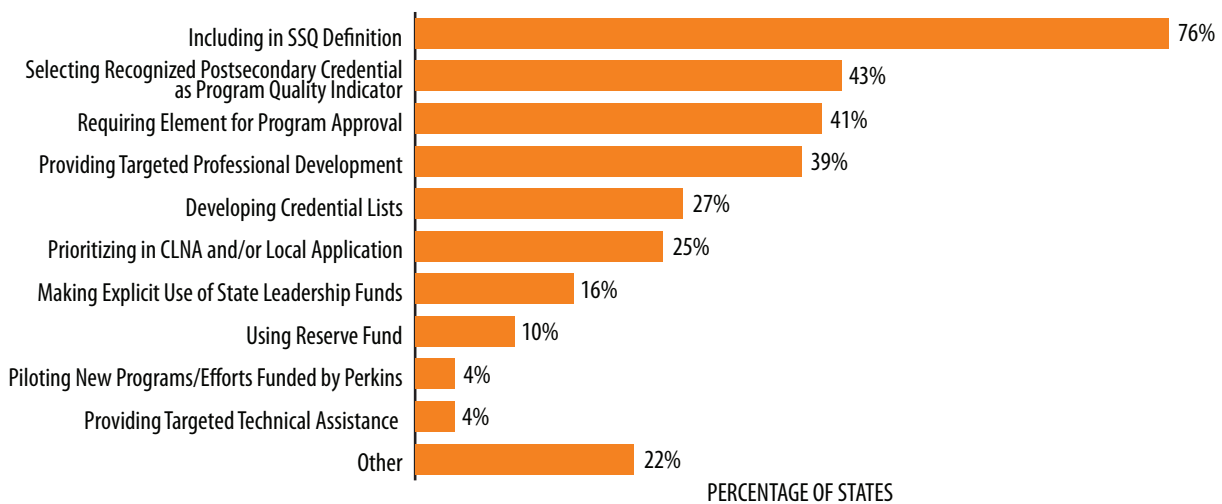
Previous research has shown that states have undertaken many strategies to ensure that these are *quality* credentials that are valued by the labor market.³⁶ One way to accomplish this goal is by creating state-developed credential lists. Twenty-seven percent of states (14 total) are pursuing this strategy. For instance, **Texas** reimburses eligible recipients at the secondary level for each credential earned by a learner enrolled in a qualifying program.³⁷ This incentive structure is linked to a list of more than 200 credentials that the state, through various processes, has vetted and approved for use in secondary CTE programs. However, a lot of uncertainty remains about how or if Perkins funds are being directed at these efforts across states and whether all states even include this type of strategy explicitly within their Perkins V plan.

Credentials in Perkins V

Perkins V most often makes use of the term “recognized postsecondary credential” when referencing credentials. This broad term, first introduced in WIOA, encompasses industry-recognized certificates and certifications, apprenticeship completion certificates, a state- or federally issued license, or an associate or baccalaureate degree.

As will be explored further in the “Data-Driven Decisionmaking” section, credential attainment is also a possible secondary program quality measure for state Perkins accountability systems. Forty-three percent of states (22 total) have selected recognized postsecondary credential attainment as at least one of their secondary CTE program quality measures. This finding indicates that, much as is the case with work-based learning, states place significant value on the attainment of credentials by secondary CTE learners. Eighty-six percent of the states that have selected recognized postsecondary credential attainment as their secondary CTE program quality indicator (19 states total) include credentials as part of their SSQ definition. While this finding is encouraging, these states are not comparably incorporating credentials within their CLNA or local application with the same frequency.

CHART 12. State Strategies to Advance Credentials of Value





Credentials of Value

State Highlights and Promising Innovations



Curating Credentials in Pennsylvania

Like most states, Pennsylvania has a statewide postsecondary attainment goal that aims to equip at least 60 percent of its residents with some form of postsecondary education or training by 2025. Pennsylvania is seeking to achieve this aim, in part, through extensive use of credentials recognized by employers, with a specific goal of having its learners earn 820,000 of these credentials by the same target year. As part of this work, the state maintains a list of credentials that are each aligned to individual Career Clusters and related CTE programs of study. This list is reviewed annually by the state Perkins eligible agency and requires that an occupational advisory committee provide substantial evidence that these credentials are necessary to obtain employment directly or advance within an occupation. These lists and a related user guide outlining aligned program areas are then shared with districts, schools, area technical centers and other postsecondary institutions. Through this process, the state ensures that these credentials are tightly connected to the course standards of these programs and are meeting the needs of the state’s employers.



Collaboration and Credentials in Michigan

As noted elsewhere, states can use the Reserve Fund to prioritize a wide range of important issues. Michigan is using this funding to establish a competitive grant application process to identify credentials and align them with the course standards for CTE programs of study. To be eligible, secondary and postsecondary Perkins eligible recipients must establish consortia and work closely with local employers that agree to make use of identified credentials to make hiring decisions. This initiative is meant to further align secondary and postsecondary CTE programs, encourage additional collaboration with employers, and ensure that the credentials offered through these programs are aligned to CTE programs of study and the needs of the wider economy.

Dual Enrollment and Articulation

Some form of postsecondary education or training beyond a high school diploma is increasingly a prerequisite for success in today’s global economy. Providing learners opportunities to earn postsecondary credits while in high school is a critical aspect of any quality CTE program because it helps to ensure that learners can pursue postsecondary education at a much earlier time in their educational journey. Perkins V is the only federal law that includes secondary and postsecondary education in the same statute, extending as far back as Perkins II. It is therefore ideally situated to support learners to seamlessly and successfully transition between these learner levels. States have long sought to provide learners with opportunities to earn postsecondary CTE credit and have also worked to ensure that the credits are transferable,

primarily through articulation agreements, to more effectively facilitate these transitions — not only between secondary and postsecondary but also between various postsecondary institutions.

States have pursued a wide variety of strategies to advance these opportunities, as seen in Chart 13 on p. 33. More than 60 percent of states (31 total) incorporate dual enrollment and articulation within their SSQ definitions. More than half of the states (55 percent or 28 total) include dual enrollment or articulation as part of their CTE program approval process. For instance, **Ohio** is making use of a Career-Technical Articulation Verification system to facilitate postsecondary CTE credit transfer opportunities for this purpose. Forty-one percent of states (21 total) are

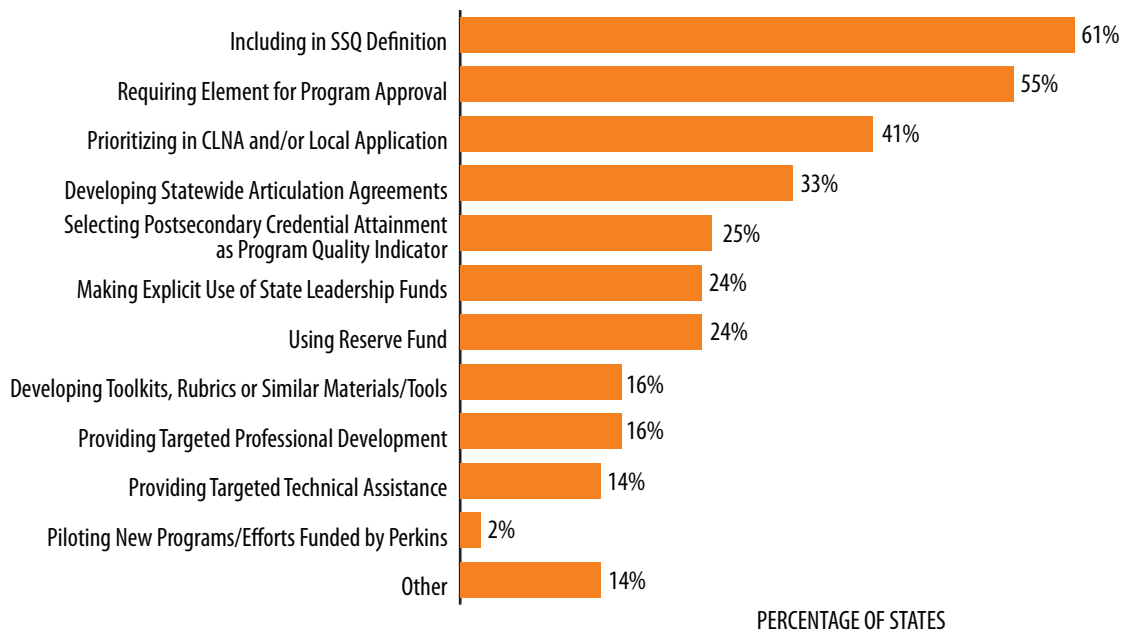


prioritizing dual enrollment and articulation within their CLNA or local application for Perkins eligible recipients. A third of states (17 total) refer to developing statewide articulation agreements in their Perkins plans. On the issue of accountability, just over a quarter of states (13 total) have selected postsecondary credit attainment — which encompasses dual enrollment and other early postsecondary opportunities — as at least one of their secondary CTE program quality indicators within their Perkins V accountability system.

States’ Perkins V plans do not focus as often on state funding for expanding dual enrollment and articulation, such as through State Leadership and Reserve Fund allotments, or seek to pilot new programs in this area. This finding may be because many states were already working to expand these opportunities for learners prior to Perkins V.

States also report different strategies that are not fully captured above. For instance, **Colorado** plans to use a dedicated staff liaison to help facilitate concurrent enrollment efforts between secondary and postsecondary institutions. Others are working to ensure that credits earned by learners are relevant to the postsecondary component of a student’s CTE pathway and are transferable to other institutions that may be providing these opportunities. **Rhode Island** in particular is pursuing such an approach — the state makes its Perkins funds available only for transcribed credit, rather than articulated credit, as a way to guarantee that students can transfer postsecondary credits successfully throughout the state.

CHART 13. State Strategies to Advance Dual Enrollment and Articulation





Dual Enrollment and Articulation

State Highlights and Promising Innovations



Articulation via Microcredentialing in Idaho

Idaho's Career & Technical Division is working to align the state's secondary CTE programs of study to its postsecondary CTE programs using a digital badging and microcredentialing system known as SkillStack®. Educators throughout the state use this platform to validate the skills taught in CTE classrooms and link individualized assessments to wider postsecondary credit opportunities. Secondary, postsecondary and workforce development educators evaluate students, and as students demonstrate competencies in each skill area, their performance is validated for specific digital badges and recorded on the SkillStack® platform. These microcredentials are also mapped to technical competency credits (TCCs), which are articulated, transferable postsecondary credits that are recognized by postsecondary institutions throughout the state. So far, the initiative is providing 63 TCC badges and up to 180 credits in 37 CTE programs of study.



Dual Enrollment in North Carolina

The state's community college system and K-12 education agency work closely together in several ways, including through the use of common course nomenclature and the delivery of joint professional development aimed at secondary and postsecondary educators. Most notably, North Carolina makes extensive use of a statewide articulation agreement that grants postsecondary credit for the completion of specific high school courses. As part of this work, the state provides a guide to help local school districts and individual postsecondary institutions develop and enter into local, program-level articulation agreements. The state's Career and College Promise program is another aspect of these efforts and is embedded throughout the state's plan. It provides high school students the opportunity to earn postsecondary credit tuition free in more than 1,500 state-approved career pathways in 270 programs of study as part of the program's CTE pathway.



Aligning Funding in Connecticut

Leveraging funding to create new opportunities and incentives to connect secondary and postsecondary CTE is another potential strategy for states to consider. Connecticut's College Career Pathway (CCP) program provides high school students with the opportunity to complete postsecondary coursework before graduation. However, the state takes this work a step further. Connecticut requires its Perkins eligible recipients that have a CCP or another similar articulation agreement with a postsecondary institution to dedicate, at minimum, 5 percent of their local Perkins grant to support these efforts. Further encouraging collaboration in this area, postsecondary eligible recipients in the state must use a minimum of \$20,000 of their local Perkins grant in support of these partnerships.



The Work Ahead

States have sought to advance program quality in a number of significant ways, as made clear throughout this report. The first and most obvious place to observe these efforts is within states' processes for approving CTE programs. Given that CTE programs of study necessarily incorporate two of the three program quality elements explored in this section, among other important program components, the most robust state systems for program approval (i.e., state systems that include the most program quality elements) are often those that also use CTE programs of study as their primary method for distributing Perkins V funding. This connection is most readily apparent in states that plan to implement statewide CTE programs of study. As this work continues it will be imperative to ensure that CTE programs of study are a central component of states' CTE systems as they are one of the most effective ways to ensure that each learner has access to a high-quality CTE program.

With regards to work-based learning, only 31 percent of states (16 total) are developing definitions, frameworks or related standards to further support implementation of these opportunities, as articulated in their state plans. Given that Perkins V defines work-based learning broadly, this work is incredibly important to ensure that these experiences are high quality, attend to equity, and are related to learners' courses of study. States are clearly prioritizing work-based learning, most especially by selecting it as a secondary CTE program quality indicator. As this work gets more fully underway, states should engage in these efforts more frequently to ensure that this priority is fully realized and impactful for every learner, including at the postsecondary level.

On the topic of dual enrollment and articulation, most states' work in this space focuses on providing secondary learners early postsecondary credit opportunities. While these efforts are important to help learners transition from secondary to postsecondary education, more can still be done to facilitate transitions at the postsecondary level.

States should consider developing additional pathways to help learners translate experiences in non-credit programs to pathways that provide credit. Similarly, state Perkins V plans do not often speak to efforts to support transitions from two-year institutions to four-year institutions. One of the best ways to achieve this goal is through statewide articulation agreements to ensure full transferability of any credits that are earned by learners. Yet only a third of states are prioritizing the creation of statewide articulation agreements in their Perkins plans. This finding may be due, at least in part, to the fact that statewide articulation has been a feature of Perkins legislation for several decades and some states already have these systems in place.

Finally, additional work likely lies ahead to more fully align definitions, program approval, elements of the CLNA, the local application and other components that make up a cohesive state CTE system. While this alignment is not required in the law, the intentional leveraging and alignment of these core policy elements ensures focus and consistency in the state's commitment to achieving its goals and vision. States clearly have some of these elements and processes aligned. This alignment is most apparent in states' SSQ definitions, which, on average, do include work-based learning, credentials of value and dual enrollment and articulation. This finding is laudable as SSQ definitions have a cascading effect throughout states' CTE systems.

However, more can likely be done to take this work even further. As this analysis shows, a much smaller percentage of states are similarly prioritizing these program quality elements within their CLNA or program approval processes. Both the CLNA and program approval are, inherently, "high-stakes" decision points for states that have the potential to intensify the focus on CTE program quality even more. To that end, states can also consider more intentionally embedding the CTE program quality elements examined in this section within both of these high-impact state processes.

Recruiting, Retaining and Developing Instructors



Research consistently shows that teachers and faculty are among the most important in-school factors that determine learner outcomes.³⁸ Evidence also points to the positive impact of a diverse teacher workforce on learner outcomes.³⁹ As the demographics of the nation's learners continue to become more diverse, states must work to ensure that their teacher workforces reflect the demographics of their learners.⁴⁰

Nonetheless, attracting and retaining qualified and diverse CTE instructors remains one of the most persistent challenges facing State Directors. According to previous Advance CTE research on this issue, 86 percent of State Directors reported a moderate or severe CTE teacher shortage in at least one Career Cluster at the secondary level, and a further 60 percent indicated the same at the postsecondary level.⁴¹ The underlying causes for these shortages most often relate to the difficulties CTE programs have in competing with the private sector for the same pool of qualified instructors along with the fact that many universities have closed their CTE teacher preparation programs in recent years.

These efforts are not only critical to ensuring learner success but also fundamental to CTE systems and the nation's economic future more broadly. Without a qualified pool of CTE professionals, one that is responsive to the needs of each learner, there would be no one to effectively educate and train the next generation of learners in the coming decades. Attracting, retaining and fully developing a strong workforce of CTE professionals is therefore a crucial ingredient CTE systems need for success, and this need is reflected throughout states' Perkins V plans.

As is the case in other sectors of the economy, the CTE teacher workforce is also aging rapidly. **Tennessee**, for instance, recently found that 24 percent of its CTE teachers are eligible for retirement within the next three years.⁴² This reality is being further exacerbated by the coronavirus. Similar challenges are even more acute in predominately rural or frontier states such as **Alaska**, which reports that approximately two-thirds of all its instructors and administrators are hired from outside the state.⁴³ Alaska's Perkins V plan recognizes the fundamental role quality

CTE instructors play in ensuring that learners have access to quality CTE opportunities, and this commitment is evident throughout its planning efforts. In partnership with the University of Alaska system, the state is offering content, pedagogical and special populations professional development opportunities for faculty members, administrators, counselors and paraprofessionals to address these challenges.

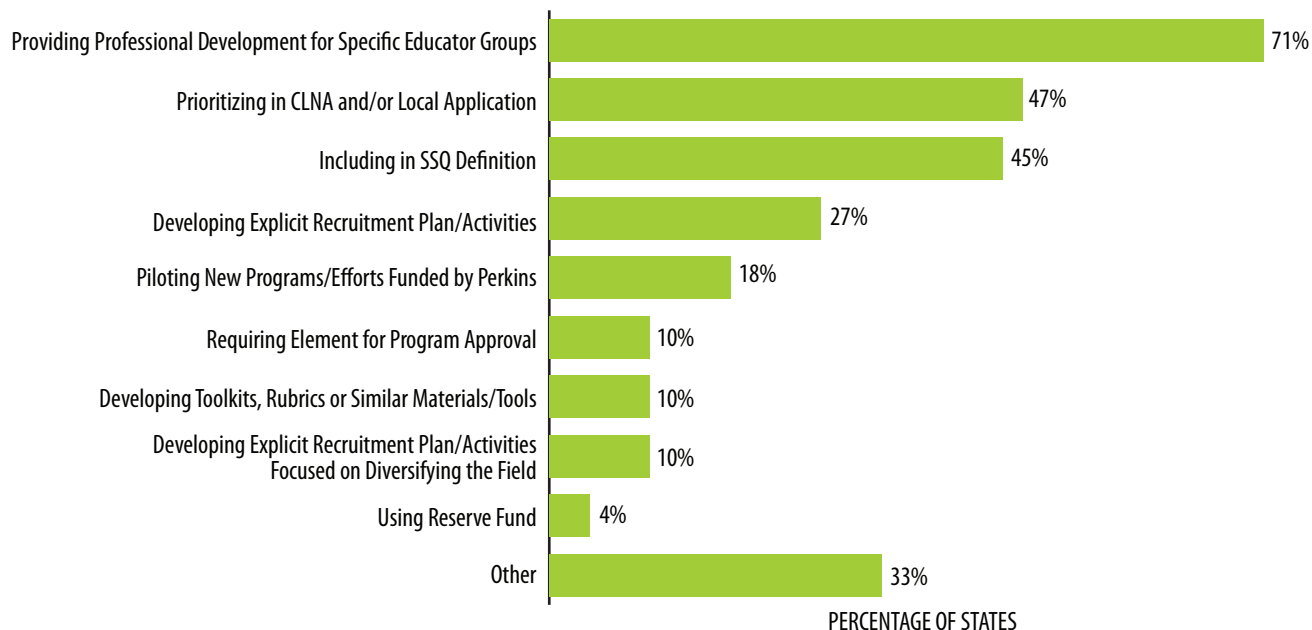
Through the Perkins V planning process, states have sought to tackle these persistent challenges in a variety of ways, as seen in Chart 14 on p. 37. States often are prioritizing professional development, as has been noted elsewhere in this report, in their Perkins V plans. Nearly three-quarters of all states (36 total) describe targeted professional development for specific groups of educators, administrators or other CTE professionals.

Virginia, for example, annually hosts a New Teacher Institute, for postsecondary credit, to help new CTE teachers design and implement engaging and effective classroom instruction. As part of this effort, Virginia provides new instructors supports as they develop lesson plans, assessments and instructional sequences. The initiative also emphasizes differentiated instruction to better assist CTE teachers in supporting learners from Perkins V's designated special populations.

These efforts are also aimed at retaining and further developing states' incumbent CTE instructor workforce. **Arizona** is making use of a series of professional development courses, known as the Premier Series, to help both existing CTE teachers seeking to improve instruction and industry professionals seeking to transition to CTE.⁴⁴ Of particular note, this effort emphasizes the importance



CHART 14. State Strategies for CTE Teacher Recruitment, Retention and Professional Development



of CTSOs and provides courses related to the benefits and uses of CTSOs specifically for CTE teachers seeking to be advisers for these important groups.

Importantly, many states explicitly identify qualified instructors as part of their definitions of program quality. For example, 45 percent of states (23 total) include quality instructors in their SSQ definitions.

A few promising and emerging trends surface in states’ Perkins V plans. **Minnesota** has launched a statewide initiative, known as CTEacher Prep 2030, in collaboration with several postsecondary institutions to more effectively meet its CTE instructor needs and has sought to diversify its CTE instructor workforce through multiple state grants stemming from this work. At least seven states are addressing licensure barriers and/or are developing new pathways to licensure as an approach to strengthening CTE instructor pipelines. For instance, **Mississippi** is

making use of its New Teacher Induction program to help industry professionals transition to CTE instructor roles by phasing in the state’s licensure requirements over time while providing these individuals with a system of supports. **New Hampshire** is partnering with its community college system to develop and provide an alternative credentialing program for inducting new teachers into the CTE teaching profession.

Some states are also pursuing “grow your own” (GYO) strategies that focus on the recruitment and preparation of local area learners to eventually become CTE teachers, making use of their own CTE systems to develop new sources of CTE teachers. **Iowa** aims to increase its CTE teacher pool through GYO efforts by leveraging its secondary-level Education & Training pathway program and raising awareness of this opportunity among learners in the state.

Career Technical Student Organizations

A Career Technical Student Organization (CTSO) is a co-curricular entity, often led by CTE instructors, focused on one or more Career Clusters or career pathways and is intended to enhance CTE learning through student participation in activities, events and competitions. CTSOs aim to supplement CTE programs by providing leadership opportunities, personal growth development and contextualized instruction to foster employability and technical skill development. More information can be found at the National Coordinating Council for Career and Technical Student Organizations (<https://www.ctsos.org>).



Recruiting, Retaining and Developing Instructors

State Highlights and Promising Innovations



GYO Grants in Texas

Texas created a GYO grant program to increase the quality and capacity of its teacher workforce. The initiative delineates three pathways for these grants, one of which is focused exclusively on providing competitive funding to secondary Perkins eligible recipients to design local solutions for recruiting and preparing CTE teachers. Using a portion of its State Leadership funds in support of this program, the state intends for this effort to help recruit CTE teachers in rural communities where CTE staffing challenges are particularly acute. In addition to this effort, the state is pursuing many other strategies to attract and retain CTE teachers, such as a robust new CTE teacher support and mentorship program, and is pursuing revisions to its CTE teacher certification requirements to align with CTE programs of study and reduce barriers to entry for industry professionals.



Diversifying the Profession in Oregon

Oregon's commitment to equity is powerfully embedded throughout its Perkins V plan. As part of this commitment, the state has created a multi-phase action plan related to the recruitment, retention and training of its CTE teacher workforce. Oregon is one of five states leveraging its Perkins V plan to help diversify the CTE teaching profession. Specifically, the state aims to recruit teachers from cultural and linguistic backgrounds that reflect Oregon's learner population. To achieve this goal, the state plans to partner with the Educator Advancement Council, a statewide education network focused on ensuring that the state has high-quality, well-supported and culturally responsive educators. Through this partnership, Oregon aims to create a comprehensive strategy focused on recruitment efforts in under-represented and under-served communities. In addition to this work, the state is clarifying alternative pathways that lead to the CTE teaching profession as a means to attract industry experts and potentially further diversify the field.



Focused Professional Development in Oklahoma

Oklahoma's Perkins V plan has a strong focus on quality professional development experiences for an array of CTE professionals including teachers, faculty, administrators, specialized instructional support personnel and paraprofessionals. The state is dedicating more than half a million dollars annually to provide targeted scholarships for individuals seeking teacher and administrator certifications.⁴⁵ As part of its wider efforts in this space, the state has developed a new teacher institute that provides a full year of training, coaching and mentoring for new CTE instructors. Oklahoma also makes use of a statewide learning management system — CareerTech's Master Educator platform — to structure and provide professional development that promotes continuous learning and improvement of its teachers. Finally, the state is working with local universities to provide shorter-term courses and online programs conducive to incumbent CTE teacher needs.



The Work Ahead

Recruiting, developing and retaining qualified teachers and faculty are critical for CTE programs to be successful. As noted previously, instructors are among the most important in-school factors that contribute to the success of learners. No single policy or strategy will fully address the challenges facing states with regards to this issue. Some of these challenges have to do with issues outside the realm of CTE, such as broader terms negotiated by labor and management (e.g., teacher/faculty pay scales or tenure requirements), lack of teacher preparation programs at universities and accreditation requirements or limitations. Only through a coordinated set of approaches can states begin to make progress on this critically important topic. Through the Perkins V planning process, states have certainly started to make significant progress in this area, as seen in this section.

At times, however, the most effective role a state can play is to support local stakeholders as they engage more directly in this work. Only a few examples emerged during our analysis of states providing guidance or supports for local CTE stakeholders to engage in this work. State Perkins eligible agencies are ideally situated to identify and raise awareness of promising practices. For instance, **Missouri** is developing professional learning communities to help CTE teachers and faculty learn from each other and from those in industry. Additionally, given that the CLNA is designed to drive planning and spending decisions at the local level, states should consider prioritizing these issues more explicitly within that process to further nurture and encourage efforts among eligible recipients.

Yet the state's role, particularly through the Perkins V planning process, is not just about creating and

implementing a cohesive set of policies or serving as a convener and facilitator to support local CTE stakeholders. States must also set about to systematically remove barriers that may be impeding this work. The benefit of this work is most clearly seen in states that have sought to revise or update their teacher certification or licensure requirements or those that have endeavored to create new alternative pathways to the profession as part of their Perkins V planning process. As these plans are implemented in the coming years, this work will likely pay dividends for states seeking to strengthen teacher pipelines.

Finally, CTE has evolved and changed over time, as discussed in the "Commitment to Equity and Learner Supports" section. The demographics of the learners these programs are serving also have changed over time. Research consistently points to a strong linkage between higher levels of learner achievement when they are taught by teachers who look like them. Yet 90 percent of the national CTE teacher workforce is White, while the majority of the country's learner population is now composed of students of color.⁴⁶ Although states have pursued recruitment and retention strategies to further bolster their CTE professional workforce, one area that can still be improved upon is instructor diversification efforts, given that only five states (**Florida, Minnesota, New Hampshire, Oregon** and **Washington**) have identified explicit recruitment activities focused on diversifying the field. As CTE learner demographics continue to change, the diversity of the CTE instructor workforce will necessarily need to change with it to ensure that each learner feels supported and welcomed and can successfully complete quality CTE programs.



Data-Driven Decisionmaking

Perkins V has brought about significant changes in how states will hold their CTE programs accountable for performance and publicly report results. The new law eliminates some previous accountability measures from Perkins IV, streamlines others, and provides states with several new flexible options to hold their programs accountable. Perkins V also allows states to set their own performance targets for these measures — targets that were previously negotiated with the U.S. Department of Education. Taken together, these changes significantly empower states to develop systems of accountability and related data reporting that work for their unique circumstances and local contexts. This devolution of federal authority to states was largely in exchange for significant new stakeholder engagement requirements and public transparency provisions.

Perkins V also continues to allow states to invest additional resources and build the capacity of the data and reporting systems that serve as a foundation for the law's performance accountability system. The data gleaned from these systems is crucial for making informed decisions. Ensuring that the data is accurate and meaningful helps state CTE leaders, and the systems they oversee, identify problems and iterate solutions to solve them. Data often also serves as currency between various state agencies working collaboratively toward shared goals. In these and other ways, data is an essential tool that helps states

extend and deepen nearly all of the efforts explored in this report.

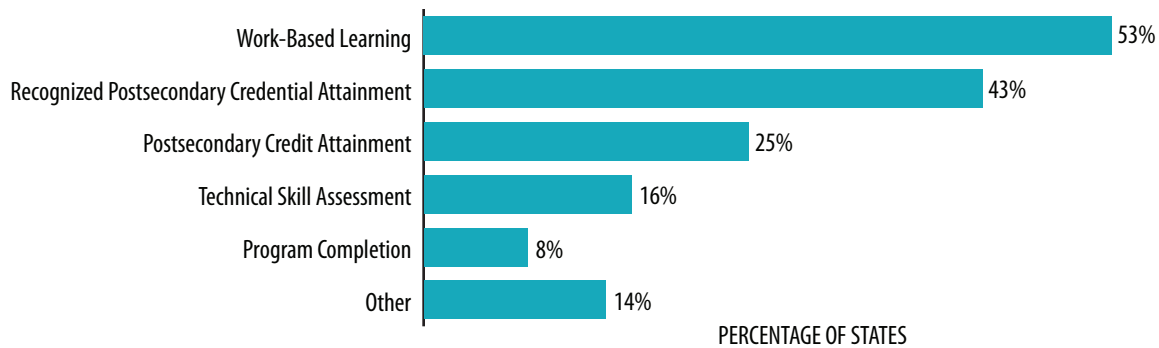
Of particular importance are new requirements around public reporting of CTE performance data disaggregated by learner subgroups and special populations at the Career Cluster or program of study level. This data will be instrumental in identifying and closing equity and opportunity gaps. As Perkins V implementation gets more fully underway, it will be critical that states, along with the federal government, continue to invest in these systems and related capacity.

Perkins V Accountability

Perkins V affords states several new flexibilities concerning their systems of accountability. This new flexibility is most evident with regards to the secondary CTE program quality indicator in the new law. States were presented with three options for this accountability measure and were required to pick at least one of the following to apply to all graduating secondary CTE concentrators: attainment of a recognized postsecondary credential, attainment of postsecondary credits earned through dual enrollment or a credit transfer agreement, or participation in a work-based learning experience. States can pick all

three measures, pick two, or even use alternative measures in conjunction with one of these indicators. States were required to solicit substantial stakeholder feedback to help inform this consequential decision.

As seen in Chart 15 on p. 41, states' choices on this important decision point within Perkins V run the gamut of possible options. The most common indicator selected among states for this purpose focuses on work-based learning participation (53 percent of states or 27 total). Following closely behind, 43 percent of states (22 total) have elected to use recognized postsecondary credential


CHART 15. States' Secondary CTE Program Quality Indicator


attainment as at least one of their secondary CTE program accountability measures. Only a quarter of states (13 total) have selected postsecondary credit attainment for this purpose.

Particularly notable, 37 percent of states (19 total) have selected more than one program quality indicator. Four states (**Delaware, Indiana, Washington** and **West Virginia**) are using all three of the secondary CTE program quality measures outlined in statute. And 29 percent of states (15 total) have selected at least one other program quality indicator outside the three options. Collectively these choices underscore the complexity of state CTE systems and provide a window into how states may be leveraging Perkins V's accountability system to realize their visions for program quality. (See Appendix B for a full list of states' program quality indicators.)

Sixteen percent of states (eight total) have included a secondary CTE program quality indicator related to technical skill assessment — a measure similar to one that was included in Perkins IV but not carried forward in Perkins V. By and large, these states have elected to use existing technical skill assessment systems that are designed to measure the full range of knowledge and skills learned through a high school CTE course or program. Making use of these systems in this context can help states measure student progress and achievement when other measures of secondary CTE program quality outlined in Perkins V might not be available or applicable.

Additionally, 16 percent of states (eight total) have chosen an additional accountability indicator not outlined in Perkins V or previous iterations of the law.⁴⁷ Three of these states — **Rhode Island, Tennessee** and **Utah** — have chosen indicators that align with the state's School Quality and Student Success measure, a comparably flexible indicator required by ESSA. These shared measures most often relate to learners' preparedness for postsecondary

education. Four states (**Georgia, Rhode Island, Texas** and **Utah**) have selected program completion to incentivize districts and institutions to ensure that learners persist and fully complete their CTE programs or related pathways.

A number of other states have started to collect CTE learner performance data, sometimes gleaned from efforts funded by ESSA and Perkins V, and are feeding this information into their own systems of state accountability to drive program refinement and more effectively support each learner. For instance, the **District of Columbia** is implementing work-based learning as its Perkins V indicator for secondary CTE program quality but is also collecting data on CTE learner attainment of credentials and postsecondary credit and using that information for a separate system of state-level accountability. Taken together these findings suggest that states, along with their stakeholders, are not shying away from accountability but rather seeking to embed measures that are meaningful to the state and the attainment of its goals.

On the issue of postsecondary CTE program accountability, Perkins V does not provide a degree of flexibility that is comparable to the flexibility provided to secondary CTE. States must hold all Perkins-funded postsecondary CTE programs accountable to the same set of measures. As a result, how states have structured their systems of accountability for these programs does not vary widely. Moreover, postsecondary CTE's responsibilities to learners differ somewhat from secondary CTE's, especially with regards to preparing learners to more immediately enter the labor market. These goals of more immediate career preparation dovetail with many states' existing postsecondary attainment goals. One strong example of this alignment is in **Ohio**, which has established its state-determined levels of performance for its postsecondary Perkins V accountability system to align with the statewide attainment goals.



CTE Concentrators

Perkins V seeks to bring a consistent understanding of concentrator status within the law’s system of accountability and within CTE more broadly (see “Perkins V CTE Concentrator Definitions”). Despite this aspiration, the statutory definition for secondary CTE concentrators still allows for variability and interpretation across states. Historically, states used a variety of definitions to define learners who concentrate in CTE. These definitions primarily ranged from one credit to four credits, with most states using two to three credits or courses as the threshold for determining whether a learner is concentrating in CTE. Perkins V’s new secondary concentrator definition uses courses rather than credits to determine learners’ concentrator status. Despite the intent of Perkins V to create a consistent understanding of CTE concentrator status throughout the country, the statutory definition is not being operationalized in every state in the same way. At least a third of states (18 total) report having a secondary concentrator definition that is distinct from the one put forward by Perkins V but still meets the statutory requirements of the law.

These differences in states’ definitions are largely attributable to the fact that the statutory definition for secondary CTE concentrators failed to account for the unique structures of many state CTE systems and the circumstances in which they operate. For instance, one-third of the states that have a secondary CTE concentrator definition that is different from Perkins V (six states total)

specify in their plans that a concentrator must earn at least two credits — a change needed to bring the Perkins V definition in sync with these systems. Two other states delineate specific hour requirements, which can be critical if they allow competency-based credit.

However, the most common approach used by states with a secondary CTE concentrator definition that is different than Perkins V is to exclude *introductory* courses from an eligible course sequence. Ten states are requiring that a learner must complete at least one intermediate, advanced or capstone course to qualify as a secondary CTE concentrator. This approach ensures that a learner has more deeply focused on CTE coursework during their journey through high school.

Importantly, for the states that had to modify their existing secondary CTE concentrator definition to align with the new one in Perkins V, this change also has the practical effect of requiring states to reset baseline data for their state-determined levels of performance for each of their accountability indicators.

At the postsecondary level, the Perkins V postsecondary CTE concentrator definition does not deviate significantly from past practice in most states. Our analysis and subsequent survey of states therefore finds more consistent adoption and implementation of this definition in Perkins V state plans.

Perkins V CTE Concentrator Definitions

SECONDARY CTE CONCENTRATOR: A student served by an eligible recipient who has completed at least two courses in a single CTE program or CTE program of study.

POSTSECONDARY CTE CONCENTRATOR: A student enrolled in an eligible recipient who has either completed 12 credits within a CTE program or program of study OR completed a CTE program or program of study that encompasses fewer than 12 credits.



Data Quality and Reporting

Fewer than half of State Directors say their CTE data systems provide enough information for them to make decisions about CTE program quality and related initiatives at both learner levels.⁴⁸ While this issue is a much lower priority in most Perkins V state plans, most states are devoting at least some of their Perkins resources or related capacity to improving data quality and reporting. As seen in Chart 16, states are pursuing several different strategies to advance these efforts.

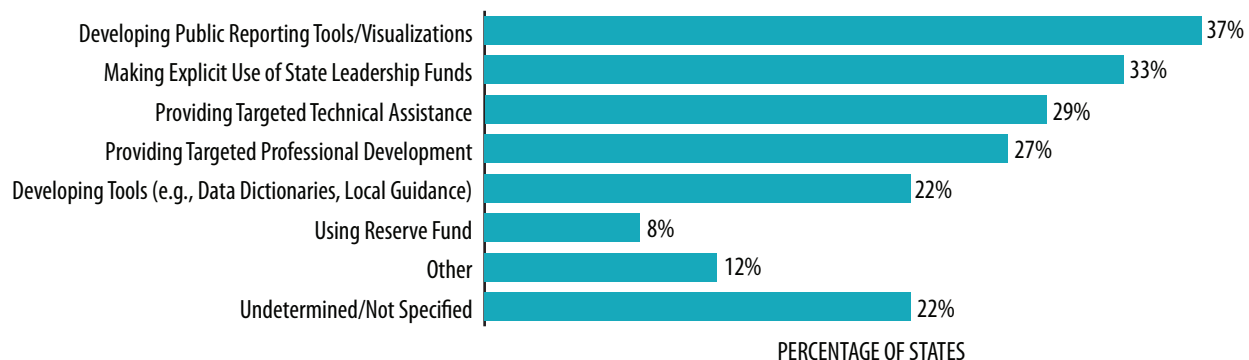
More than one-third of states (19 total) are developing public reporting tools for their CTE programs. Many of these investments appear to be aimed at equity-related data tools or related visualizations. **West Virginia**, for example, is creating CTE data profiles for each county and school district to provide policymakers and the general public a better picture of who is being served by CTE and what their related outcomes are. About another third of states (17 total) are directing at least some of their State Leadership funds to support data quality improvement and expanding CTE data collection capacity.

Our analysis additionally indicates that states are modestly incorporating data collection and use within their SSQ definitions. Some states are also requiring evidence of

data use for the purposes of program approval, and other states are piloting new data collection efforts. For instance, as explored in the “Commitment to CTE Program Quality” section, **Texas** is piloting a new data collection system to better support its efforts regarding work-based learning.

As noted in the “Ongoing and Meaningful Alignment and Collaboration” section, states are also increasingly making use of LMI to drive CTE program improvement and ensure responsiveness to industry needs. States are building shared processes across multiple agencies and state systems to make use of the same LMI to drive decisionmaking regarding credentials and CTE programs of study, among other uses. In this way, states are sending the same signals to local programs and employers and ensuring that all state systems, including and especially CTE, are being responsive to the demands of the economy. One way to achieve this goal at the program level is through investments in data use and literacy. **Michigan**, for example, is investing heavily in technical assistance for CTE practitioners to ensure that they can maximize the use of student and program performance and outcomes data, along with LMI more broadly, to drive program improvement.

CHART 16. State Strategies to Advance Data Quality and Reporting





Data-Driven Decisionmaking

State Highlights and Promising Innovations



Aligned Accountability in Delaware

Delaware has one of the strongest examples of a comprehensive and aligned state system of accountability. Throughout its plan for CTE, Delaware outlines an aligned accountability model traversing Perkins V, WIOA and ESSA — a system that aims to drive the collection and use of data to foster continuous program improvement across these systems and guide the allocation of resources to support each learner and close achievement gaps. This holistic approach to accountability provides policymakers in the state with a high-level overview of how these systems are connected and working collaboratively toward shared state goals. To this end, Delaware is one of four states that are making use of all three secondary CTE program quality indicators under Perkins V. As part of its commitment to a comprehensive statewide and aligned system of accountability, the state is also in the process of developing an additional optional measure of middle grades CTE program quality that will be formally deployed in the coming years.



State Accountability in Vermont

A number of states are choosing to collect additional CTE learner performance data to inform and strengthen their own, non-federally mandated systems of accountability. Vermont in particular outlines such an approach in its Perkins V plan. While the state is using recognized postsecondary credential attainment as its secondary CTE program quality indicator for federal reporting purposes, Vermont is supplementing this effort by also collecting data and reporting on secondary CTE learner attainment of postsecondary credits. At the postsecondary level, Vermont is making use of a “pathway/academic momentum” measure, separate from Perkins V, that is intended to include learners who have earned at least six postsecondary credits prior to enrollment at a community or technical college in the state. These efforts collectively are intended to provide Vermont with a more comprehensive picture of the impact its dual enrollment programs are having, especially as it relates to learners’ later enrollment in the state’s Perkins eligible institutions.

Vermont is also collecting work-based learning data and goes further than the statutory requirements of Perkins V by tightening what “counts” as a qualifying experience for program accountability purposes. In addition to these efforts, the state is collecting data on a few other indicators, such as introductory CTE course participation rates and program continuation rates, and is making use of related contextualized assessment tools to evaluate secondary-level learners’ performance. In doing so, the data is intended to provide Vermont with a holistic picture of its CTE system that goes far beyond the requirements outlined in Perkins V.



The Work Ahead

Many states are making the most of the flexibilities afforded to them under the new law. Yet more work lies ahead. Data is an indispensable tool available to states to extend and deepen many of the efforts explored in this report. Data is a critical ingredient at the local level, most particularly via the CLNA. It informs program approval decisions, ensures labor market alignment, and helps states more fully attend to equity and the needs of each learner. Ensuring that this information is understandable and usable by a wide array of stakeholders is also important as it fuels the feedback loops that help inform and drive these efforts. Improving the quality of the data therefore has a cascading impact throughout a state's CTE system and should be prioritized as Perkins V is more fully implemented.

The most direct source of much of this data comes from Perkins V's system of state accountability itself. It is crucial to ensure that these systems are not only effectively holding all programs accountable for results but also producing usable data to inform decisions regarding program improvement and learner supports. Perkins V provides a significant amount of flexibility with regards to these systems and their structure and therefore has a large impact on states' overall ability to achieve these goals.

For instance, Perkins V structures the work-based learning program quality measure around learner *participation*. As a result, states are not required to comparably structure this measure around *completion* or attainment, as is the case for other accountability measures in Perkins V. One-third of states that are using work-based learning as at least one of their secondary CTE program quality indicators (nine states total) go beyond this minimum requirement. Six of these states have established completion objectives within their work-based learning measure, and an additional three states have attached substantial time requirements for their related numerator for this measure. It is also possible that states simply have not included these details in their Perkins V plans but may further clarify these requirements elsewhere in the CTE systems, such as through the development of alternative, state-level definitions for work-based learning or through business rules governing how data is collected and reported.

Given that Perkins V defines work-based learning quite broadly, states must commit to ensuring that learners' work-based learning experiences are meaningful and result in tangible outcomes such as completion. While the definition includes the important requirement that

these experiences be "sustained," more can be done to ensure that learners are completing and successfully incorporating what they have learned into their courses of study. **Massachusetts** requires that learners complete at least one of several intensive forms of work-based learning to be included in the numerator. **New York** is requiring a learner to complete at least 54 hours of a work-based learning experience before their inclusion in the state's Perkins V system of accountability.

Similar issues are also sometimes observable with regards to the implementation of the law's other two program quality indicators. For instance, only about half of states that are using postsecondary credit attainment as their secondary CTE program quality measure explicitly require that these credits be related to a student's CTE program of study or wider career pathway. This situation could, however, simply be because this alignment is already implied or ensured in some other way in a state's CTE system (e.g., through the development of additional rules not included in a Perkins V plan). **Indiana**, for instance, includes only learners who have earned at least nine postsecondary credits in a course that maps directly toward a postsecondary certificate or degree program for this measure within the state.

With regards to states using the recognized postsecondary credential attainment measure for this purpose, 32 percent of states (seven total) have established specific quality thresholds for credentials that "count" for this indicator. **Georgia** explicitly requires that the credentials earned by its learners must be of value and vetted by business and industry or must be able to be articulated for postsecondary credit.

Finally, states must continue to invest in data quality and capacity. Although this was not a core focus of Perkins V, more can be done to ensure that the data infrastructure underlying states' CTE systems is robust, can help demonstrate program efficacy, and can support resource allocation decisions to equitably serve each learner. While there are some notable exceptions to this finding, particularly at the secondary level as noted elsewhere in this report, state investments in postsecondary data infrastructure are largely absent as part of the Perkins V planning process. As noted, this work also depends on a more robust commitment and investment from the federal level to help states engage with this effort.



Conclusion

States undoubtedly have sought to make the most of the Perkins V planning process to expand program quality and deepen their commitment to equity within and throughout their CTE systems. As noted, there is no single approach to Perkins V planning. Further, states have a tremendous amount of flexibility within the law itself and also regarding how each one aligns its Perkins V plan with other state policies, priorities and funding. This report does not focus on whether and how states are meeting the law's expectations. Rather, it aims to identify which states are taking the most advantage of the opportunities provided by Perkins V to advance commonly accepted best practices that propel the CTE field forward in terms of quality and equity.

There are, however, common aspects and related features of states' Perkins V plans that merit distinction. These have been explored throughout this report, and while the report is not an exhaustive overview of everything states are doing to advance CTE, it nevertheless provides a window into what states hope to achieve with their systems of CTE moving forward. In many ways, states have successfully leveraged the Perkins V planning process to advance new ideas and expand the scope and structure of their CTE systems. Encouragingly, states appear to be using their Perkins V plans as living documents that will help drive their decisionmaking for years to come.

Many themes and trends have emerged in the course of examining these plans. States overwhelmingly recognize the need to systemically and meaningfully attend to the issue of equity to better support each learner. They also are building upon Perkins' and CTE's legacy of connecting systems, promoting collaboration with and alignment of education and workforce development systems. This focus is especially evident in states' bold statewide visions for CTE. Many also have taken up the challenge of reconfiguring their accountability frameworks to signal what they value most within their CTE systems. The plans also often seek to address long-standing challenges facing the CTE community, most notably by prioritizing support for CTE instructors and other professionals through providing more professional development and technical assistance. States also are taking advantage of new

funding flexibilities within Perkins, most notably through the increased use of the Reserve Fund to drive innovation and bring quality initiatives to scale.

In other areas, the work is just beginning. States have put a significant amount of time and effort into the development of their first-ever CLNAs. As state CTE systems mature, these processes will be revisited, presenting states with the opportunity to further refine and strengthen their efforts and deepen their impact over time. In a few years, we will have a better sense of whether the intended power and promise of the CLNA — to purposefully interrupt the historical distribution of Perkins funds and instead intentionally focus resources on high-impact activities that close equity gaps, ensure learner access to high-quality CTE programs, and further align CTE to the needs of the labor market — have been realized.

States' work to develop more sophisticated methods to ensure data quality and reporting — a vital ingredient in efforts to close equity gaps and expand quality programs — is also just beginning. Many of these efforts go beyond the minimum requirements laid out in law, and for that states deserve to be commended.

Importantly this analysis focuses on plans and not on subsequent implementation, which is the final "hallmark" of a strong state Perkins V plan. These plans are simply the first step of a much longer journey as states set out



to implement their bold visions for CTE and refine their systems to improve program quality and equitably serve each learner. Even with the best-laid plans, states will likely need to make adjustments, reprioritize and otherwise adapt to stay responsive to both learners and the wider economy.

These efforts will be most readily apparent and meaningful for the more than 12 million CTE learners throughout the country who regularly engage with state CTE systems to explore career opportunities, engage in contextualized learning, and ultimately prepare for a meaningful career. Advance CTE and the rest of the CTE community are excited to support these efforts in the years to come as states endeavor to make their bold visions for CTE a reality, ensuring that each learner has the access to and the supports necessary to be successful in their career pathway of choice.

Appendix A: State Perkins Eligible Agency Designations

State	State Education Agency	State Board/Agency With Oversight of Community College System	Standalone CTE Agency	Workforce Development Agency/Board
Alabama	✓			
Alaska	✓			
Arizona	✓			
Arkansas	✓			
California	✓			
Colorado		✓		
Connecticut	✓			
Delaware	✓			
District of Columbia	✓			
Florida	✓			
Georgia	✓			
Hawai'i		✓		
Idaho			✓	
Illinois	✓			
Indiana				✓
Iowa	✓			
Kansas		✓		
Kentucky	✓			
Louisiana		✓		
Maine	✓			
Maryland	✓			
Massachusetts	✓			
Michigan	✓			
Minnesota		✓		
Mississippi	✓			
Missouri	✓			
Montana		✓		
Nebraska	✓			
Nevada	✓			
New Hampshire	✓			
New Jersey	✓			
New Mexico	✓			
New York	✓			
North Carolina	✓			
North Dakota			✓	
Ohio	✓			
Oklahoma			✓	
Oregon	✓			
Pennsylvania	✓			
Rhode Island	✓			
South Carolina	✓			
South Dakota	✓			
Tennessee	✓			
Texas	✓			
Utah	✓			
Vermont	✓			
Virginia	✓			
Washington				✓
West Virginia		✓		
Wisconsin		✓		
Wyoming	✓			

Appendix B: State Program Quality Indicators

State	Recognized Postsecondary Credential Attainment	Postsecondary Credit Attainment	Work-Based Learning	Technical Skill Assessment	Program Completion	Other
Alabama	✓					
Alaska	✓					
Arizona	✓			✓		
Arkansas	✓					
California		✓				
Colorado			✓			
Connecticut			✓			
Delaware	✓	✓	✓			Middle grades CTE (TBD)
District of Columbia			✓			
Florida	✓					
Georgia			✓		✓	Credential of value for CTE completers
Hawai'i		✓				
Idaho		✓		✓		
Illinois		✓	✓			
Indiana	✓	✓	✓			
Iowa			✓			
Kansas		✓				
Kentucky	✓					
Louisiana	✓					
Maine	✓					
Maryland	✓			✓		
Massachusetts			✓			
Michigan	✓					
Minnesota			✓			
Mississippi	✓					
Missouri	✓					
Montana		✓	✓			
Nebraska			✓			
Nevada		✓		✓		
New Hampshire			✓			
New Jersey			✓			
New Mexico		✓				
New York			✓			
North Carolina	✓					CTE course "proof of learning"
North Dakota			✓			
Ohio			✓	✓		
Oklahoma			✓			
Oregon			✓			
Pennsylvania	✓			✓		
Rhode Island			✓		✓	Postsecondary success
South Carolina	✓					
South Dakota			✓			
Tennessee			✓			Ready Graduate index
Texas	✓				✓	

State	Recognized Postsecondary Credential Attainment	Postsecondary Credit Attainment	Work-Based Learning	Technical Skill Assessment	Program Completion	Other
Utah			✓		✓	Readiness coursework
Vermont	✓					
Virginia	✓		✓	✓		Participation rate of CTE completers taking external credentialing tests; passing rate among credential takers; passing rate on credentials among all completers
Washington	✓	✓	✓			
West Virginia	✓	✓	✓	✓		
Wisconsin			✓			
Wyoming	✓					

Appendix C: Methodology

This report made use of a mixed-methods approach that incorporated the collection of both quantitative and qualitative data from several sources. Over the course of several months, a cross-functional team composed of nine staff members and consultants from Advance CTE and the Association for Career and Technical Education reviewed and analyzed all 51 Perkins V state plans that have been approved by the U.S. Department of Education. This review and analysis effort used a common intake form to quantify various aspects of states' Perkins V plans and included 57 unique data elements. This data, along with individual reviewers' analyses, was collected and aggregated to develop the comprehensive dataset referenced throughout this report.

A supplemental survey of State CTE Directors was also conducted from June to July 2020. This survey asked 21 separate questions intended to complement the dataset compiled from the wider state plan analysis. Forty-six states and the District of Columbia responded to this survey request, and another two states provided partial responses. Although full participation was not met in this survey, the response rate was substantial enough to warrant interpreting its results as representative of overall national trends.

Finally, Advance CTE engaged with the U.S. Department of Education's Office of Career, Technical and Adult Education to verify information that was missing or incomplete from some state plans.

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Endnotes

- 1 Strengthening Career and Technical Education for the 21st Century Act of 2018, Public Law 115-224.
- 2 Perkins V includes a total of 27 different uses of State Leadership funds. Perkins IV had 26 uses of funds. Reducing the number of required uses of these funds was a priority during the Perkins reauthorization process as a greater number of activities can potentially dilute the overall impact of this funding stream.
- 3 Perkins V increased the amount states are allowed to set aside for this purpose, moving from 10 percent under Perkins IV to 15 percent under the current law. The law also modestly expands the allowable uses of these funds, although to a much lesser extent than State Leadership funding.
- 4 DeSantis, R. (2019). *Executive order 19-31: Charting a course for Florida to become number 1 in the nation in workforce education by 2030 and ensuring Florida students are prepared for the jobs of the future*. <https://www.flgov.com/2019/01/30/governor-ron-desantis-issues-executive-order-19-31/>
- 5 Maryland Commission on Innovation and Excellence in Education. (2019). *Interim report*. <http://dls.maryland.gov/pubs/prod/NoPblTabMtg/CmsnInnovEduc/2019-Interim-Report-of-the-Commission.pdf>
- 6 Perkins V also connects to the Individuals with Disabilities Education Act (IDEA) and the Higher Education Act (HEA), although to a lesser extent and with less frequency than with regards to ESSA and WIOA. A number of state-level examples connecting IDEA and Perkins V emerge in the analysis of states' plans. However, comparable examples connecting HEA and Perkins are not as readily apparent.
- 7 For more information on these efforts, see Association for Career and Technical Education, National Skills Coalition & Advance CTE. (2015). *Aligned by design: WIOA and career and technical education*. https://cte.careertech.org/sites/default/files/Aligned_Design_WIOA_CTE_2015.pdf
- 8 For a full listing of state Perkins eligible agencies, see Appendix A.
- 9 U.S. Department of Education. (2014). *National assessment of career and technical education final report to Congress* (p. 43). https://s3.amazonaws.com/PCRN/uploads/NACTE_FinalReport2014.pdf
- 10 For more information on other federal programs that can be incorporated into a Combined State Plan, see U.S. Department of Education. (n.d.). *WIOA state plan*. <https://wioaplans.ed.gov/>
- 11 The three additional states that are using a CSP for Perkins V as compared to Perkins IV are Alabama, Indiana and Washington.
- 12 For instance, the CLNA requires that local applicants evaluate CTE programs' alignment to the labor market, essentially making this a requirement for all programs receiving Perkins V funding.
- 13 The Office of Alabama Governor. (2019). *Governor Ivey moves Alabama's workforce development efforts forward*. <https://governor.alabama.gov/newsroom/2019/07/governor-ivey-moves-alabamas-workforce-development-efforts-forward/>
- 14 Maryland State Department of Education. (2020). *Policies & procedures for the development of Career and Technical Education Local Advisory Councils and Program Advisory Committees*. http://www.marylandpublicschools.org/programs/Documents/CTE/PerkinsV/Resources/CTEAdditionalResources/LAC-PAC_Policies-Procedures_2020.pdf
- 15 Arkansas' Career Coaches initiative is explored in more detail in the "Commitment to Equity and Learner Supports" section of this report.
- 16 For more information about these processes, see Advance CTE. (2018). *Maximizing Perkins V's Comprehensive Local Needs Assessment & local application to drive quality & equity in CTE*. https://cte.careertech.org/sites/default/files/Maximizing_Perkins_Local_Needs_Assessment_10-27-18.pdf
- 17 States have discretion with regards to the CLNA and local application because Perkins V outlines these requirements in statute as minimum requirements. States therefore have the ability to add elements and features to both the CLNA and the local application.
- 18 Colorado Career & Technical Education. (2019). *Regional needs assessment handbook*. <http://coloradostateplan.com/wp-content/uploads/2019/09/Needs-Assessment-Handbook-9-6-19.pdf>
- 19 For more information, see Advance CTE. (n.d.). *Making good on the promise*. <https://careertech.org/resource/series/making-good-promise>
- 20 As part of this paradigm shift, Perkins V includes an updated statutory definition for special populations of students that is intended to align with ESSA and is more expansive than under Perkins IV. This new definition is inclusive of individuals with disabilities, individuals from economically disadvantaged families, individuals preparing for non-traditional fields, single parents, out-of-workforce individuals, English learners, homeless individuals, youth who are in or have aged out of the foster care system, and youth with a parent in the military. References to special populations in this report have the same meaning as outlined in statute.
- 21 Vermont Agency of Education. (2020). *Vermont state plan (2020-2024): Strengthening Career and Technical Education for the 21st Century Act ("Perkins V")* (p. 20). https://s3.amazonaws.com/PCRN/docs/stateplan/VT_2020_State_Plan.pdf
- 22 See also Advance CTE & Association for Career and Technical Education. (2020). *Broadening the path: Design principles for middle grades CTE*. <https://cte.careertech.org/sites/default/files/files/resources/BroadeningPathFINAL.pdf>
- 23 Educator Advancement Council. (n.d.). <https://www.oregon.gov/eac/Pages/default.aspx>. These efforts are explored in more detail in the "Recruiting, Retaining and Developing Instructors" section of this report.
- 24 Wyoming Department of Education. (n.d.). Open educational resources. <https://edu.wyoming.gov/in-the-classroom/technology/open-range-wyoming/>
- 25 Rhode Island Department of Education. (n.d.). *RIDE awards nearly \$1.2 million to increase equity in career education*. <https://www.ride.ri.gov/InsideRIDE/AdditionalInformation/News/ViewArticle/tabid/408/ArticleId/481/RIDE-Awards-Nearly-1-2-Million-to-Increase-Equity-in-Career-Education.aspx>
- 26 Council of Chief State School Officers, Education Strategy Group & Advance CTE. (2019). *New Skills for Youth impact snapshot: Rhode Island*. <https://careertech.org/resource/nsfy-rhode-island-impact-snapshot>
- 27 Illinois State Board of Education & Illinois Community College Board. (2019). *Comprehensive Local Needs Assessment guidance document*. <http://www.iccb.org/cte/wp-content/uploads/2019/11/CLNA-guidance-document-FINAL-1.pdf>
- 28 Welton, A. D., Rockey, M., & James-Gallaway, C. (2019). *An equity-centered, comprehensive local-needs assessment*. Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. <http://www.iccb.org/cte/wp-content/uploads/2019/10/CLNA-FINAL-9.13.19-fillable.pdf>

- 29 Advance CTE, Council of Chief State School Officers, Education Strategy Group & American School Counselor Association. (2018). *State of Career Technical Education: Career advising and development*. https://cte.careertech.org/sites/default/files/files/resources/State_of_CTE_Career_Advising_Development_2018.pdf
- 30 Previous laws included funding eligibility only through grade 7; Perkins V now aligns with state-developed definitions of middle grades based on their ESSA plans.
- 31 Advance CTE. (2020). *Investing in Career Technical Education: An American imperative*. https://cte.careertech.org/sites/default/files/documents/fact-sheets/Investing_CTE_American_Imperative_2020.pdf
- 32 Advance CTE. (2020). *Arkansas: College and career coaches*. <https://careertech.org/resource/arkansas-college-and-career-coaches>
- 33 Perkins V sometimes uses the terms “CTE program” and “CTE program of study” interchangeably. For the purposes of this report, “CTE programs of study” have the same meaning as the law’s statutory definition. While the term “CTE programs” can be inclusive of CTE programs of study, the latter has a unique and more specific meaning in both contexts.
- 34 Advance CTE, Association for Career and Technical Education & Education Commission of the States. (2020). *State policies impacting CTE: 2019 year in review*. https://cte.careertech.org/sites/default/files/files/resources/State_Policies_Impacting_CTE_%202019_Year_in_Review_Final_Jan_2020-small.pdf
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- 36 Education Strategy Group, Advance CTE & Council of Chief State School Officers. (2018). *Credential currency: How states can identify and promote credentials of value*. <https://careertech.org/resource/credential-currency>
- 37 Texas Education Agency. (2020). *House Bill 3 (HB 3) industry-based certification examination reimbursement frequently asked questions*. https://tea.texas.gov/sites/default/files/IBC%20Reimbursement%20FAQ%20V16_Final.pdf
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- 41 Advance CTE. (2017). *State Director survey*. Unpublished.
- 42 Tennessee Department of Education. (2020). *Strengthening career and technical education in Tennessee state plan for the Strengthening Career and Technical Education for the 21st Century Act 2020-2024* (p. 58). https://s3.amazonaws.com/PCRN/docs/stateplan/TN_2020_State_Plan.pdf
- 43 Alaska Department of Education & Early Development. (2020). *Four-year state plan: Alaska Perkins V plan* (p. 23). https://s3.amazonaws.com/PCRN/docs/stateplan/AK_2020_State_Plan.pdf
- 44 Association for Career Technical Education of Arizona. (n.d.). *Premier Series information*. <https://www.acteaz.org/premier-series/>
- 45 Oklahoma’s Perkins eligible agency receives approximately 5 percent of the state’s lottery trust fund, which serves as the primary funding source for these grants. More information on the effort can be found at https://www.muskogeephoenix.com/news/oklahoma-careertech-awards-2-35-million-in-lottery-grants/article_2e2070f1-eda0-5b0c-9d01-b06cf8af746c.html.
- 46 Advance CTE. (2019). *Making good on the promise: Building trust to promote equity in CTE*. https://cte.careertech.org/sites/default/files/files/resources/Building_Trust_Promote_Equity_CTE_Jan_2019.pdf
- 47 These “other” measures vary considerably across states and include indicators such as technical skill assessments, completion of a CTE pathway or program, a state-defined measure of postsecondary readiness, learner outcomes from performance-based assessments, and the percentage of learners successfully participating in middle grades CTE programs.
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