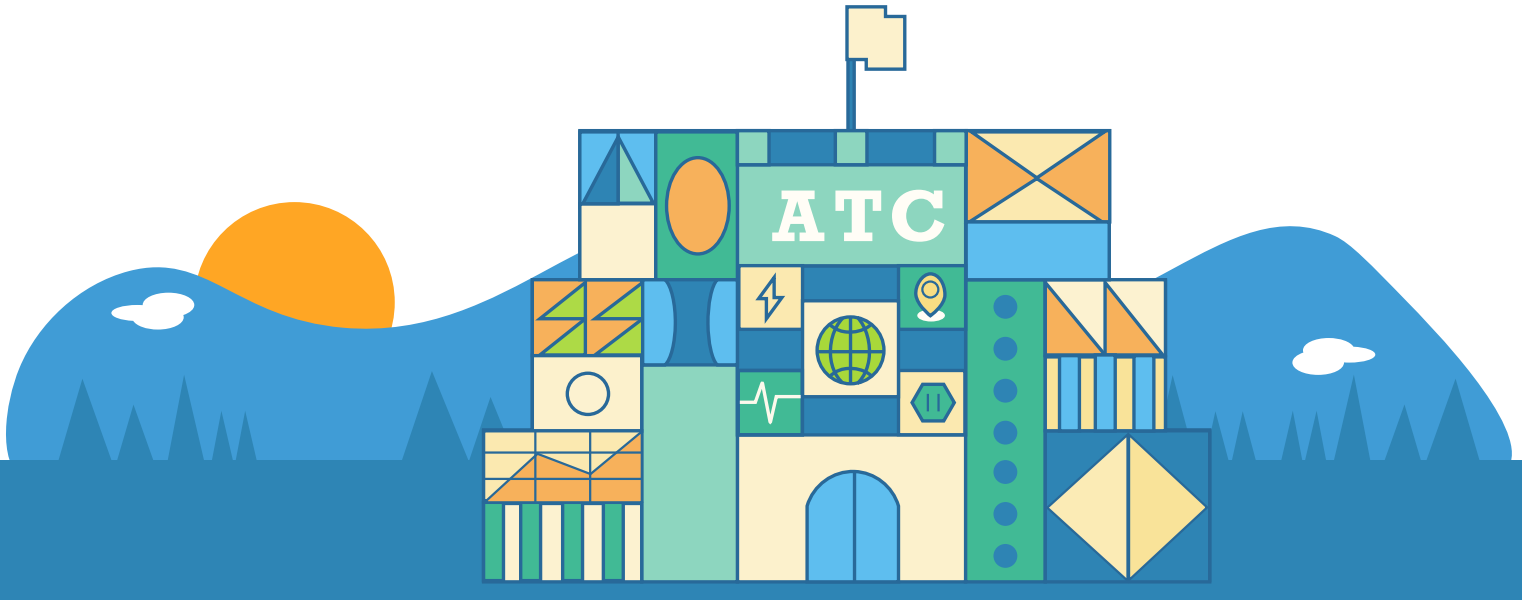
Building Better Futures for Learners

A 50-STATE ANALYSIS OF AREA TECHNICAL CENTERS

ADVANCE CTE
State Leaders Connecting Learning to Work

FEBRUARY 2021

Contents



Key Findings

There are more area technical centers (ATCs) in the United States than there are community colleges. Despite their prevalence, ATCs are not well understood and, as a result, are often overlooked in wider discussions and decisions regarding postsecondary education and workforce development. These under-utilized public institutions can and should be better leveraged to help more learners equitably access and attain postsecondary education and related credentials of value. Doing so will help close skills and equity gaps and ensure that more Americans have the skills, competencies and credentials they need for future career success and economic prosperity.

This report[1] examines these under-studied and under-utilized public assets and found that:

- There are at least 1,346 unique ATCs in 39 states and territories in the United States. That number rises to 1,481 when taking into consideration ATCs with multiple, affiliated locations.
- The history of ATCs and Career Technical Education (CTE) is inextricably linked and can be traced back to the early 1960s when these institutions were first conceptualized and constructed.
- ATC governance and related funding structures vary considerably by state and even within individual states or territories. While this variation is also true with regards to funding sources, most ATCs receive financial support primarily from local, rather than state or federal, funding sources.
- Twenty-seven states have ATCs that serve postsecondary learners to some degree, although most ATCs are primarily considered secondary institutions serving mostly secondary learners. However, most states said ATCs help contribute to their postsecondary attainment goals, primarily through shorter-term and non-degree credentials that fall below the associate degree level.
- ATCs are largely open admissions for postsecondary learners.
- CTE program offerings at ATCs cover the breadth of the U.S. economy and are represented within every Career Cluster®.
- Accreditation, or the lack thereof, does not appear to be a limiting factor regarding whether ATCs offer programs designed for postsecondary learners. However, issues related to accreditation do appear to inhibit ATCs' integration within wider systems of postsecondary education and can, at times, make transferring coursework and credits more difficult for learners.
- Most states and territories reported that if their ATCs have articulation agreements in place, they are local articulation agreements rather than statewide agreements and that those agreements are most frequently in place with two-year postsecondary institutions such as community or technical colleges.

Introduction

A postsecondary education, in particular one that leads to a credential of value, is increasingly necessary for success in today's talent-driven economy. Postsecondary educational attainment is strongly linked to improved quality of life, particularly as measured by higher earnings, for those who pursue opportunities for educational advancement after high school. A highly skilled and educated workforce is not only important for learners but also essential for ensuring the competitiveness of the American economy as a whole, especially at a time of unprecedented technological change, global competition, and uncertainty brought about and accelerated by the ongoing pandemic. Yet, despite the enormous demand for postsecondary education and related credentials of value, 90 million working-age adults lack a postsecondary credential beyond a high school diploma. These educational opportunities remain out of reach for far too many learners throughout the country, and this gap in opportunity is made worse by long-standing racial and economic inequities that persist to this day.

AREA TECHNICAL CENTERS: A WORKING DEFINITION

For the purposes of this report, ATCs are defined as CTE-focused institutions that serve learners from across multiple geographies, such as school districts, educational service areas, and workforce development areas or regions. These institutions offer secondary and sub-baccalaureate-level education and training and can serve secondary learners, postsecondary learners or both.

To meet these challenges, the vast majority of states, 44 in total, have established postsecondary attainment goals to support and further encourage more individuals to prepare for success in today's economy.[2] These efforts have largely been driven by Lumina Foundation, which set a nationwide goal of equipping at least 60 percent of the working-age population with a postsecondary degree or credential by 2025. To achieve this goal, nearly 7 million more individuals will need to earn such a credential over the next five years. Significant progress has been made toward this ambitious target, but much work still lies ahead. The success of this effort largely depends on the ability to fully leverage the nation's postsecondary education and workforce training system — a diverse ecosystem composed of educational institutions and training providers that must work together to provide opportunity for every learner. State and federal policies must ensure that these systems are responsive, aligned and permeable to provide clear pathways for learners to earn credentials of

value and secure success in the labor market.

All too frequently, however, K-12, postsecondary and workforce development systems are disconnected from or misaligned with one another. While much progress has been made to more closely connect these systems, they are too often thought of as independent endeavors rather than a cohesive system of career preparation programs and related supports.

Career Technical Education (CTE) seeks to bridge these gaps, encompassing and linking these systems and allowing learners to explore careers, engage in contextualized learning, and pursue multiple educational and career pathways beyond high school. CTE programs can be found in every state and community throughout the country. By design, CTE is incredibly diverse because it must align to the breadth of the wider economy and the related high-skill, high-wage and in-demand occupations and sectors that constitute it. CTE delivers rigorous programmatic content at a wide range of institutions including traditional/comprehensive high schools, technical/vocational high schools, career academies, early college high schools and community/technical colleges as well as via apprenticeship programs.[3]

While many of these entities are likely familiar, there is a unique set of institutions that serve secondary, postsecondary and adult learners — area technical centers (ATCs).[4] As will be explored throughout this report, ATCs come in many different forms and can even go by different names. In California, for instance, ATCs are known as regional occupational centers and programs while in New York ATCs are known as boards of cooperative educational services. In other states or territories, ATCs are sometimes called regional technical centers, career and technical centers, or more simply technical centers or even technical colleges.

Despite variations in terminology, these institutions all are exclusively or primarily delivering CTE programs and related content. ATCs, much like CTE itself, have much in common:

- **Connecting Systems:** CTE and ATCs sit at the intersection of K-12, postsecondary education and workforce development systems, often providing a critical bridge among them.
- **Diversity of Delivery:** Both come in many shapes and sizes, serve different learner populations, and are offered across all geographies and governance structures.
- **Responsiveness to Industry:** CTE and ATCs are designed to support and prepare learners to meet the needs of industry and the wider economy.
- **Preparation for Career and Life Success:** CTE and ATCs aim to prepare learners for a wide variety of careers and lifelong success and lead to credentials of value.

With the pandemic and related economic recession, postsecondary educational attainment is more important than ever before. Due to COVID-19, more than 57 million people filed for unemployment between mid-March and August 2020, and those most affected have disproportionately been people of color and those with lower levels of educational attainment.[5] During the Great Recession, most new and replacement jobs went to those who had more than a high school diploma, and more than 50 percent of displaced workers changed industries after rejoining the workforce.[6] Given that the needs of the labor market are not static and will continue to evolve at an accelerated pace, education and

training systems must be nimble and responsive to these changes as displaced workers seek to reskill and upskill.

ATCs must therefore be a central component in any effort to meet these challenges and the needs of every learner. However, federal and state policymakers remain largely unaware of ATCs' existence when seeking to craft policies or support programs to help a greater number of learners attain postsecondary credentials and employment. Learners themselves too often lack awareness of the opportunities and the career pathways that these institutions can provide. With ATCs outnumbering community colleges, these public assets can and should be better leveraged to serve learners as federal and state policymakers chart a course of equitable economic recovery, providing more learners with a fair shot at the American dream.

This lack of awareness is likely the result of and compounded by a dearth of research on ATCs specifically and the potential role they can play in the wider postsecondary education and workforce ecosystem. Much still remains to be learned about ATCs, and this report uncovers nearly as many new questions as it answers. The purpose of this report is therefore threefold. First, it takes a critical first step in filling this gap in knowledge and research on these under-studied institutions. Second, it seeks to build awareness and a greater understanding among state leaders and policymakers regarding these important public assets and how they can be leveraged to equitably meet the needs of a greater number of learners, the economy, states and communities as they seek to meet postsecondary attainment goals. Third, and equally important, this report aims to draw attention to innovative policies and best practices in support of ATCs, particularly those that can ensure that more postsecondary learners can equitably access opportunity at these institutions.[7] As state leaders and local communities endeavor to meet their wider postsecondary educational attainment goals, a richer and more comprehensive understanding of these institutions will be critical to ensure that more learners have access to and the opportunity to pursue their career and life ambitions at ATCs throughout the nation.

ATCs: A Brief History

The concept of CTE institutions designed to serve an area of a state, rather than a single community, was first introduced in 1958 with the passage of the National Defense Education Act (NDEA). At the time CTE — then known as vocational education — was largely focused on preparing individuals for a handful of occupational sectors identified by the federal government via existing CTE legislation. Through the passage of NDEA, these efforts were further expanded to fields broadly connected to national defense. One of the law's chief purposes was to extend access to these newly expanded fields of study to learners who lived in areas that were "inadequately served" by existing federal investments in CTE at the time.[8]

Over time, a growing consensus formed among policymakers that CTE should be broadened beyond a handful of occupational sectors to more adequately meet the needs of the rest of the economy, which was rapidly changing and in need of more specialized workers for occupations that required more than a high school diploma but less than a college degree. In 1963, Congress responded by passing the Vocational Education Act of 1963 (VEA-63).[9] This legislation was enacted to support states and local communities in developing CTE programs that were "... compatible with the changes occurring in the economy and the world of work."[10] It defined vocational education mainly by describing what it was not, saying that it was preparation for careers that did not require a four-year degree or more. This broad-based definition greatly expanded the scope of CTE in the United States and intentionally carved out the sub-baccalaureate educational level as its main area of focus within the nation's postsecondary education and training landscape at

HOW FEDERAL POLICY ENVISIONS ATCS

VEA-63 proposed four distinct categories that ATCs, as institutions, would fall into:

- A specialized high school used exclusively or principally for delivering CTE;
- A department of a high school used exclusively or principally for delivering CTE;
- A technical or CTE school used exclusively or principally to deliver CTE to learners who have already left or completed high school; or
- A department or division of a junior college or community college or university that provides CTE in no less than five different occupational fields that lead to employment but not a baccalaureate degree.

Of particular note, the last category hews most closely to the current statutory definition for ATCs that is used in the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), which reduced the number of required occupational fields from five to three.[18]

the time — a legacy that endures to this day.

VEA-63 built upon NDEA's conception of area CTE programs by providing the first federal funds to support the construction of "area vocational education schools," which this report refers to as ATCs. The law envisioned these new institutions to exist in four distinct categories (see "How Federal Policy Envisions ATCs").[11]

There were several motivations for the passage of VEA-63.[12] First, there was a growing recognition that the world of work was changing, with businesses growing larger and more complex and thus requiring more specialized workers. Second, the occupational sectors that were growing the quickest during this period were those requiring one to three years of postsecondary education and training. These sectors are more commonly known today as "middle skill" occupations, which presently represent 52 percent of all jobs in the United States.[13] Third, there was mounting concern among policymakers regarding increasing numbers of disconnected or out-of-school youth, along with displaced incumbent workers, who needed new pathways back to school and work.

There was, however, a fourth motivation for both the passage of VEA-63 and the subsequent funding that supported the creation of area vocational education schools — economies of scale. Vocational education was becoming prohibitively expensive for individual schools and even some districts to develop and maintain. Specialized equipment, qualified instructors and related facilities were needed to sufficiently prepare learners for the changing world of work. Schools that could serve wider geographic areas and provide these resource-intensive programs were required to help ensure that these opportunities were available and accessible to a greater number of the nation's learners.

As initially conceived under VEA-63, area vocational education schools — known as ATCs today — were a crucial stepping stone in CTE's evolution in the United States, one that helped ensure that CTE was a viable option in more geographical areas and for a greater number of the nation's learners at a time when CTE, as an educational endeavor, was expanding and maturing. The notion of ATCs as both a more economical strategy for providing CTE and a more efficient method for providing costly postsecondary education and training is reflected in individual states' histories too.[14] Many of the most pressing issues today — the changing nature of work, growing demand for middle skill jobs, and the need to fill this gap in the nation's education and training delivery system — were top of mind during the passage of VEA-63.

As the core elements of VEA-63 were implemented, parallel economic development efforts led by the federal government helped accelerate ATCs' growth. By the early 1980s CTE professionals often pointed "... to the new

technical institutes and area vocational-technical centers that have sprung up across the nation" as evidence of VEA-63's success.[15] Some have even argued that although CTE legislation during these decades helped to initially spur the construction of ATCs, other economic development legislation may have provided the financial support that encouraged these institutions' proliferation across the country. Several regional economic development efforts, particularly the Appalachian Regional Development (ARD), Tennessee Valley Authority and Rural Development Acts, among others, by some estimates contributed more than $1.5 billion to the construction of ATCs during this period.[16]

In particular the federal government's investments through ARD had an explicit goal of increasing the Appalachian region's capacity to enroll at least 50 percent of all 11th and 12th graders in CTE programs in these areas.[17] From 1965 to 1975, ARD invested at least $263.8 million in CTE — nearly a quarter of all funds provided for the legislation during this time period.[18] These regionally focused investments could help explain some of the geographical clustering of ATCs that can be observed today. Nonetheless, the resources provided by these wider economic development efforts were seminal to ATCs' development during this period because subsequent CTE legislation after VEA-63 eliminated the ability to use those funds for the construction of new CTE facilities.

CTE legislation today acknowledges ATCs' existence and incorporates them into existing federal investment frameworks but largely leaves their structure and use up to states' and local communities' discretion. The Strengthening Career and Technical Education for the 21st Century Act (Perkins V), which is the most recent federal CTE legislation and is now in its fifth iteration, does not include any reporting requirements with regards to institution type.[19] This omission has further obscured ATCs' role over the decades following VEA-63. Much like CTE today, ATCs are incredibly diverse and vary considerably among states and communities. As a partial consequence, much remains unclear about these institutions and how the diversity of ATCs continued to grow after their creation during the early 1960s.

1958

National Defense Education Act (NDEA)

The passage of NDEA broadens the scope of CTE beyond a few occupational areas and introduces the initial concept of specialty CTE institutions that would serve wider geographic areas and help meet new workforce challenges of the time. This concept then evolves more formally into the ATCs of today.

1963

Vocational Education Act of 1963 (VEA-63)

Policymakers broaden the scope of CTE further, particularly by focusing on sub-baccalaureate postsecondary education and training. These efforts culminate in the passage of VEA-63, which provides the first federal funds for the construction of ATCs, helping to incubate these institutions during their first period of sustained growth.

1963-80

A great number of ATCs are constructed, and much of this work is at least partially funded by other regionally focused economic development efforts undertaken by the federal government during this period.

1980-Present

ATCs continue to exist, change and mature. Today, at least 1,346 unique ATCs exist, but the federal government no longer plays a role in their construction or growth.

ATCs & Related Systems

According to this analysis, 71 percent of states and territories (39 total) have ATCs as part of their CTE delivery system.[20] As will be explored in the "Where ATCs Are Located and Learner Populations Served" section, a complete accounting of these institutions is difficult to provide because they are included in two different federal datasets, which encompass K-12 and postsecondary respectively. They are in both datasets because ATCs can and do serve both secondary and postsecondary learners, often in the same physical building. Further complicating the situation, some states do not fully capture information about ATCs in their state data, program approval or administrative systems.[21]

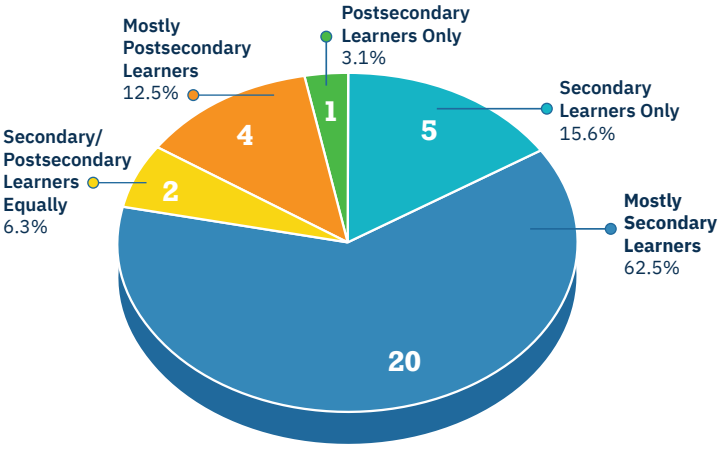
LEARNER LEVELS SERVED BY ATCS

ATCs often reflect states' unique circumstances and contexts. For this reason, these institutions often can and do serve secondary and postsecondary learners, depending on where an ATC is located. Of the states and territories that responded to the survey and make use of ATCs (20 total), 63 percent indicated that they consider ATCs to be primarily part of their systems for secondary education. Significantly, these same states and territories still offer access to postsecondary learners but reported that this is not the primary function of these institutions in their communities. On the other hand, 22 percent of responding states and territories (seven total) consider some, most or all of their ATCs to be part of their postsecondary education system. These findings are based on the perspectives of responding states and territories, and as a result, ATCs can and likely are integrated elsewhere beyond these learner levels.

Although ATCs are viewed primarily as secondary-serving institutions, many afford some degree of access for postsecondary learners, albeit in different ways across and within states and territories. At least 27 surveyed states and territories, the vast majority, offer at least some access for postsecondary learners, as seen in Figure 1. Three states and one territory — Ohio, Tennessee, West Virginia and Guam — mostly serve postsecondary learners while still providing

FIGURE 1

WHO IS SERVED BY ATCS?



some access to secondary students.[22] Florida is the only state that indicated it serves only postsecondary/adult learners; through interviews this was clarified, noting that some Florida technical colleges offer dual enrollment courses to secondary learners. Alaska and Oklahoma both indicated that their ATCs serve secondary and postsecondary learner levels equally. These seven states, according to these findings, have integrated ATCs the most prominently and intentionally within systems of postsecondary education and training. Only five states (16 percent) — Idaho, Maryland, Michigan, Texas and Washington — indicated that their ATCs exclusively serve secondary learners and do not provide access any access to postsecondary learners.

Taken together, these results mean that an additional 20 states and territories primarily serve subset of states and territories are therefore the best positioned to potentially grow ATCs' role in their respective systems of postsecondary education and workforce development should they choose to do so.

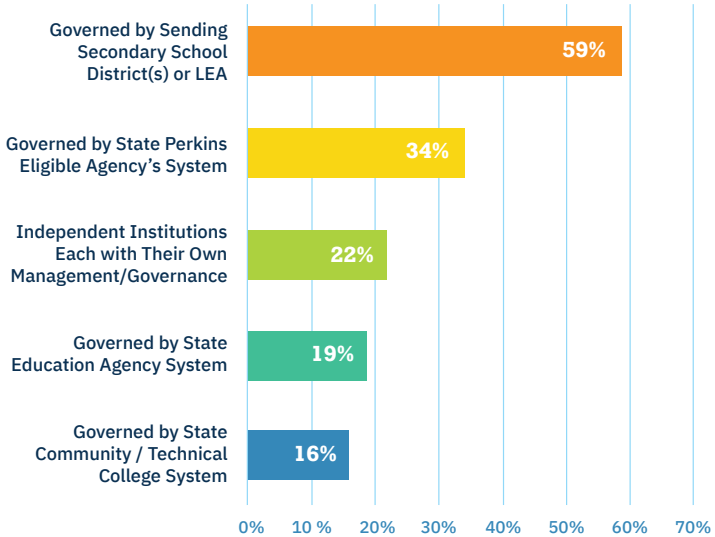
GOVERNANCE STRUCTURES

ATCs are embedded differently throughout states' and territories' systems for education and workforce development. Choices on governance structures are left up to states or, at times, local communities. Consequently, some states or territories have ATCs under multiple jurisdictions rather than one overarching system of governance, as noted in Figure 2. Nearly 60 percent of respondents (19 total) have at least some of their ATCs under the jurisdiction of the school district(s) "sending" their learners to these institutions or under the purview of the local education agency (LEA). Distantly second, 34 percent of respondents oversee at least some of their ATCs via the same system in which the state's Perkins eligible agency resides.[23] [24] In **Oklahoma**, for example, the state's network of 29 ATCs serving both secondary and postsecondary learners is administered by the state's Department of Career and Technology Education — the same entity that manages CTE for the state.

In 22 percent of responding states and territories (seven total), at least some ATCs are granted a large amount of autonomy and are considered to be independent institutions with their own management and governance system. For instance, **North Dakota**'s ATCs are governed by an ATC board composed of at least one member from every participating district or area served.[25] Only five states (16 percent) reported overseeing ATCs via community or technical college systems. As with other findings from the survey, this result aligns closely with ATCs being perceived primarily as secondary education institutions. State and territorial choices on governance often

FIGURE 2

PRIMARY STATE GOVERNANCE SYSTEMS FOR ATCS



LOCAL SPOTLIGHT

ATC Governance Structure Helping Learners in Florida

Lake Technical College is the only known postsecondary ATC that is operated as a charter school. While other ATCs in Florida are governed by K-12 school boards, Lake Technical College makes use of its own board of directors to oversee and provide guidance for the institution. In this way, Lake Technical College has significantly more independence in making decisions at the local level compared to other ATCs in Florida. This autonomy also helps the ATC connect with other K-12 schools and postsecondary institutions in the area.

Collaboration, not competition, best describes the relationship Lake Technical College has with nearby Lake Sumter State College. While many states report that their state and community colleges see ATCs as potential competition for postsecondary learners, Lake Technical College and Lake Sumter College share resources and consult one another before offering new programs so they do not duplicate efforts. In addition, Lake Technical College has a number of articulation agreements in place with both local school districts and other postsecondary institutions, including Lake Sumter State College, to ensure that learners can move seamlessly between schools and institutions within a single career pathway or program.

are closely aligned to how ATCs are perceived and used to serve learners, which suggests that these decisions play a crucial role in how these institutions can contribute to broader postsecondary and training efforts. One exception to this finding is **Florida**, where the state oversees ATCs through its K-12 education system but predominantly uses these institutions to serve postsecondary learners.

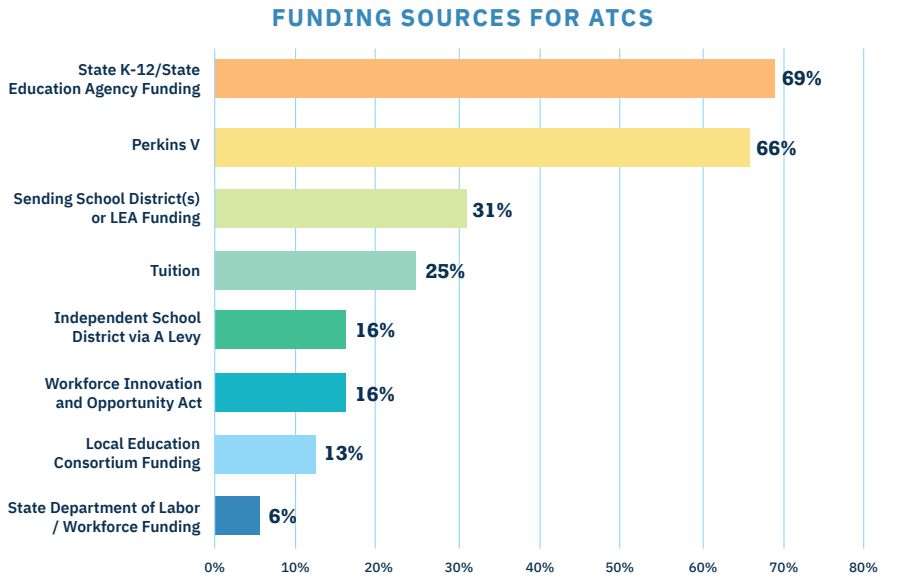
FINANCING ATCS

ATCs are supported via a variety of funding streams, as seen in Survey respondents indicated that some of the most common and well-known sources of financial support for ATCs are two streams of funding. Sixty-nine percent of respondents (22 total) indicated that K-12 funding from the state education agency (SEA) was among one of their state's or territory's top three sources of funding for their ATCs, while 66 percent (21 respondents total) indicated the same with regards to federal Perkins V funding. Broadly, ATCs do not appear to be commonly funded by workforce development sources. Sixteen percent of respondents (five total) reported using federal Workforce Innovation and Opportunity Act (WIOA) funds for these institutions, and 6 percent (two respondents total) indicated the same with regards to state workforce development funding. A quarter of respondents indicated that tuition is among the top three sources of funds for ATCs in their communities. However, whether tuition is paid by learners or otherwise subsidized through state or federal student aid remains unclear. As a consequence, ATCs' support from postsecondary education funding sources also appears to be quite limited, although the extent of that limitation remains difficult to fully determine.

Although the survey data indicate that state or federal funding sources are often used to support

these institutions, further analysis of state and territorial financing arrangements also shows that many ATCs are supported significantly, and in some cases primarily, through local sources of funding such as levies or other local or district funding.

FIGURE 3



For some of the funding streams examined in Figure 3, financial resources for ATCs can also be determined by the number of learners being served. More than three-quarters of respondents (24 total) reported allowing some or all eligible funding to "follow" secondary learners directly to an ATC. Financing arrangements such as these aim to allocate resources based on enrollments and, in some cases, on demand for CTE programs. Funding that follows a learner also aligns with ATCs' early history of seeking to provide costly and resource-intensive CTE programs for schools and districts that may not be able to otherwise afford to provide these opportunities. In **Arkansas**, for

STATE SPOTLIGHT

Performance-Based Funding in Ohio ATCs

Since 2015, Ohio has made use of a performance-based funding system to finance postsecondary CTE programs at ATCs in the state. While some of the state's annual appropriation is dedicated for specific purposes — for instance, helping ATCs gain accreditation or provide business consultation services to employers in local communities — most of this funding goes to the state's ATCs based on four primary measures of learner performance at the postsecondary level.

These measures include the number of learners who complete at least 50 percent of a postsecondary CTE program (retention), the number of learners who successfully complete a postsecondary CTE program with a passing grade (completion), the number of learners earning industry-recognized credentials (credential attainment), and the number of learners who are employed full time after having completed at least half of a program (employment or placement). This formula strongly emphasizes the importance of the

last metric regarding learners' employment outcomes, requiring that at least 50 percent of the formula be based on these results. In this way, funding is directed toward the postsecondary programs at ATCs that are providing the strongest employment outcomes for their learners.

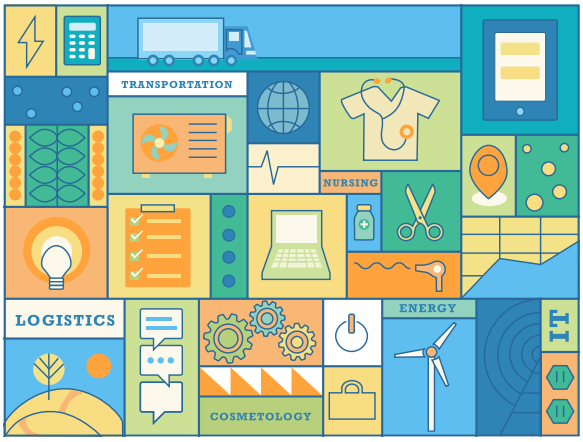
General Assembly of the State of Ohio. Am Sub H.B. 59, Section 363.120. http://archives.legislature.state.oh.us/BillText130/130_HB_59_EN_N.html

instance, funding for the state's ATCs is based, in part, on the number of full-time learners an ATC is serving within 25 miles or 30 minutes of a sending school.[26] Participating schools are each allotted a percentage of seats at an ATC based on the size of their 10th-grade enrollments and are reapportioned based on demand.[27]

States can, and sometimes do, target state-level funds directly at ATCs to provide financial support specifically for these institutions. According to previous research from the U.S. Department of Education (USED) examining CTE financing more broadly, at least seven states — Arkansas, California, Connecticut, New Hampshire, New Jersey, New York and Vermont — provided state-level funding specifically for ATCs to deliver CTE programming for secondary learners in past years.[28] At least two states at the postsecondary level, Ohio and Oklahoma, provide comparable ATC-specific funding for postsecondary CTE programs that are also at least partially based on learner enrollments at these institutions.[29]

ATCS' ROLE IN STATE SYSTEMS OF POSTSECONDARY EDUCATION AND WORKFORCE DEVELOPMENT

Due to ATCs' opaque history and locally driven evolution, these institutions' broader role in states' systems of education and workforce development can be difficult to fully determine. This report's survey therefore asked a number of questions regarding how ATCs are, or are not, integrated into these existing systems. About a quarter of responding states and territories (eight total) further reported that all their ATCs provide access for postsecondary learners. As noted earlier, five states reported that their ATCs solely provide access for secondary learners, most typically because of historical precedent or tradition.[30] Respondents also indicated that avoiding competition or duplication with other postsecondary institutions, such as community or technical colleges, is also an underlying factor for not offering postsecondary learners access to ATCs. Another potential reason is existing state law or regulation. In **Michigan**, for example, state law requires that adult CTE programs be delivered



separately from other CTE programs aimed at different learner populations. To address this requirement, ATCs in the state typically schedule secondary programs during the day and adult programs at night and consider these activities a wholly separate endeavor of alternative education.[31]

Of the responding states and territories that do serve postsecondary learners via ATCs, a significant number indicated that this was because such access was enshrined in state law, regulation or wider formalized policies. For instance, in **Kentucky**, access to ATCs for postsecondary learners is made on a needs basis, and existing policy encourages these centers to advise learners about options regarding transferring credits earned at an ATC to the state's wider system of technical colleges.[32]

Most often, respondents indicated that SEAs or their equivalents approve CTE programs

that are offered to postsecondary learners at ATCs. Only three states and one territory — Maine, Ohio, Tennessee and Guam — designate program approval through postsecondary education systems or agencies. West Virginia, New Hampshire and Missouri each have this responsibility shared by the SEA and postsecondary. Vermont and Alaska both approve postsecondary CTE programs at ATCs via their state's Department of Labor (DOL), while Arkansas has postsecondary program approval as a cross-agency responsibility shared by the SEA and the DOL. Oklahoma and North Dakota both have systems that empower stand-alone CTE agencies to make postsecondary program approval decisions, which further aligns with these states' wider systems of CTE governance. Taken together, these findings suggest that even when ATCs are offering programs for postsecondary learners, they still most often fall under the purview of secondary education. One likely reason for this, as explored earlier, is ATCs' early history as predominantly secondary institutions.

On the whole, these survey results demonstrate that the extent to which ATCs are integrated within state systems of postsecondary education is somewhat limited. One potential reason is that ATCs largely offer non-degree credentials, so these institutions are not always visibly embedded in existing systems of postsecondary education, where credit-bearing coursework and related degrees are far more common. Other factors likely contribute to this situation as well, which will be explored further in this report, although some factors remain outside the scope of this report. One indicator of ATCs' role in the current postsecondary education landscape is the existence or use of articulation agreements, both between individual institutions and among

LOCAL SPOTLIGHT

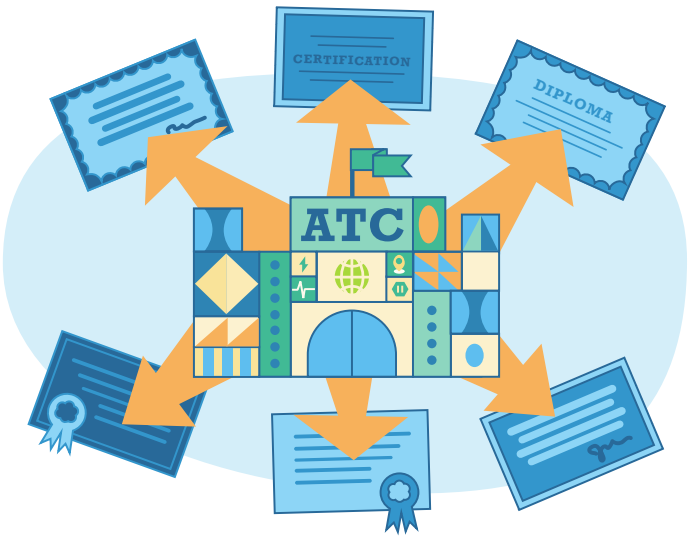
ATCs Providing Apprenticeship Opportunities in Delaware

The New Castle County Vocational School District (NCCVSD) is home to five area technical centers serving both secondary and postsecondary learners in Delaware's largest and most populous county. NCCVSD is also responsible for training most of Delaware's registered apprentices, serving 1,170 learners — 63 percent of the state's total registered apprentices — in 2018-19. NCCVSD is a learner's first stop in becoming a registered apprentice in New Castle County. NCCVSD offers and/or supports the Related Theory Instruction (RTI) portion of 21 different Merit and Union Apprenticeship Programs. Prospective learners must register for classes with the school district, create an account on the state's American Jobs Center site and then find an employer sponsor. Once sponsored as a State of Delaware Registered Apprentice through Delaware's DOL, learners begin their education with NCCVSD, completing a minimum of 144 hours of RTI combined with 2,000 hours of paid on-the-job training annually. Successful completers of apprenticeship programs receive an NCCVSD AED-issued diploma and coveted Delaware DOL-issued journey papers.

> ATCs are more likely to be integrated into state workforce development systems than within systems of postsecondary education.

statewide systems of postsecondary education. Many ATCs have institution-level articulation agreements in place, but states do not often integrate ATCs into wider articulation agreements covering state systems of higher education — a strong indication that more can likely be done to further embed and make use of ATCs to support learners as they work toward postsecondary credentials of value.

With regards to state systems of workforce development, only 28 percent of responding states and territories (nine total) reported having most or all of their ATCs on their WIOA Eligible Training Provider List (ETPL) — a designation that allows ATCs to provide training to WIOA participants and is a strong indication that these institutions are integrated into a state's or territory's system of workforce development. Yet, many states and territories also report that their ATCs often provide apprenticeship opportunities for learners. This is a strong indication that ATCs are likely more heavily integrated into state systems of workforce development than suggested by these survey results; this theory was further reinforced by interviews conducted for the five case studies published in concert with this report. Despite the limited instances in which ATCs are known to be on a state's or territory's ETPL, 59 percent of respondents indicated that ATCs are offering adult basic education (ABE). While the provision of ABE can sometimes be a local decision, this could also be a sign that many of these institutions are in a position to help postsecondary learners access programs should they elect to do so and is another indication that ATCs are likely more integrated into state systems of workforce development than within systems of postsecondary education.

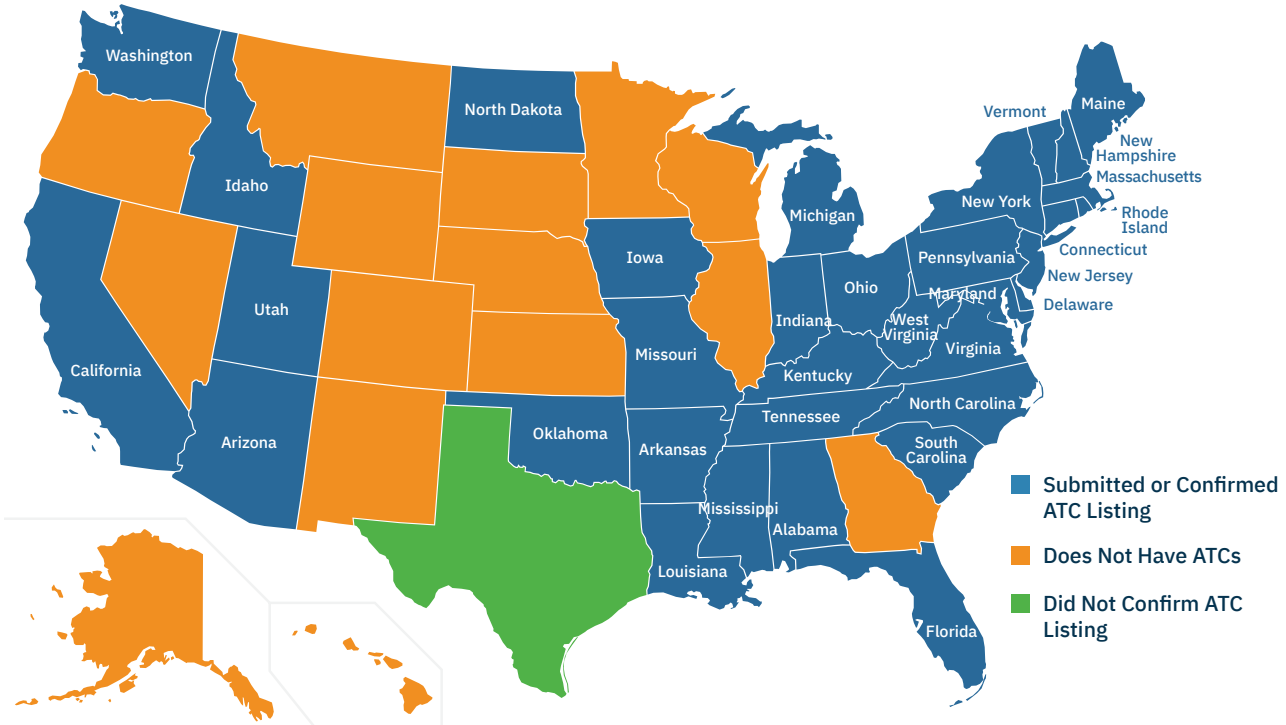


Where ATCs Are Located and Learner Populations Served

The last known comprehensive examination of the aggregate number of ATCs in the United States occurred in 2002. At that time, the effort found 1,191 ATCs across 41 states.[33] Today, there are more ATCs in the United States than there are community colleges (1,050).[34] This analysis has found at least 1,346 unique ATCs in 39 states and territories. When taking into account ATCs that have multiple, affiliated campuses, the total number of ATCs is 1,481.[35] Significantly, the exact methodology for the 2002 collection remains unknown, but it did not include outlying areas or territories, which are included in this report. Further, it is unclear if the 2002 count included affiliated campuses or only unique institutions. While it is not possible to fully liken these two figures as a result, when excluding outlying areas and territories for the purposes of comparison, there are at least 100 more ATCs in the United States today than there were in 2002. When controlling for these differences, the aggregate number of ATCs grew by roughly 8 percent over the past nearly two decades.

THE GEOGRAPHIC FOOTPRINT OF ATCS

The map of the United States below shows the states that have ATCs, those that do not make use of these institutions, and where ATCs were not able to be validated. An interactive version of this map is available at www.AreaTechnicalCenters.org.



This map and the underlying listing of ATCs was compiled from 2018 data collected from the National Center for Education Statistics' (NCES) Common Core of Data (CCD) and the Integrated Postsecondary Education Data System (IPEDS) and verified by states. These datasets cover K-12 and postsecondary education respectively, and while ATCs serve populations of learners at both levels, the National Center for Education Statistics allows these institutions to be found in only one of the two datasets.[36] A broad definition of an ATC was used during the initial collection of data and information for this report, to fully capture the breadth and use of these institutions. States that have ATCs were asked to confirm these institutional listings using their own operational definitions for ATCs. States that make use of ATCs and confirmed their listings are labeled and shaded in dark blue and those that do not are unlabeled and unshaded. One outlier in these data is Texas. The state does not comprehensively track and report on these institutions and, as a result, at least at the state level has no way of validating the ATCs that can be found throughout the state.

In the aggregate, Mississippi (94 ATCs), Pennsylvania (89), Virginia (83), Ohio (80) and Kentucky (74) have the greatest number of ATCs among the 39 states and territories with these institutions. Compared to data collected in 2002, Massachusetts, Alaska, Arizona and Maryland appear to have significantly increased the number of ATCs in their states — or the way they collect data, count and report information on these institutions has changed, leading to increased numbers. Each of those four states reported at least doubling the number of these institutions from 2002 to 2018. Unsurprisingly, states with the fewest number of ATCs are most often those with the smallest populations, such as Connecticut, Delaware and Rhode Island, or states that are composed largely of rural or frontier areas, such as Alaska, North Dakota, Utah and Idaho.

Top states with the most ATCs: Mississippi, Pennsylvania, Virginia, Ohio and Kentucky.

Geographically, states without ATCs (18 total) are mostly concentrated in the Midwestern and Mountain regions of the United States. When asked why ATCs are not used in these states, many respondents shared that there were no existing policy barriers or related regulatory obstacles preventing their use. Much as the case with why many ATCs serve primarily secondary learners, this group of respondents indicated that they do not have ATCs simply due to long-standing or historical practice in the state or territory. A number of respondents also shared that other institutions, such as community or technical colleges, serve the same function as ATCs, rendering ATCs unnecessary. In **Georgia**, for example, the state converted more than 20 ATCs into technical colleges between 1986 and 2002.[37] A few states cited geographical limitations, particularly in remote or frontier areas. Finally, a number of other states cited a lack of funding and resources as the main reason why ATCs are not used, although these responses were not nearly as common.

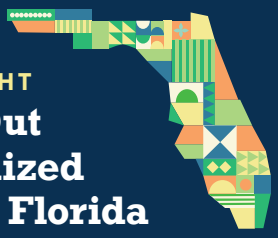
HOW ATCS SERVE SECONDARY AND POSTSECONDARY LEARNERS

As previously noted, the vast majority of respondents consider their ATCs to be secondary institutions primarily serving secondary learners. However, there is further variation in how states and territories have structured these institutions to serve secondary as well as postsecondary learners. Additionally, survey respondents reported variability in how ATCs are structured even within a single state or territory given the degree of autonomy many of these institutions have.

The most common approach taken by states and territories to serve secondary learners at ATCs is making these institutions "shared time" (i.e., learners travel to the ATC for part of the day and receive the remainder of their education at their "home" school). Sixty-nine percent of respondents (22 total) categorize these learners in this way and further indicated that ATCs exclusively deliver the technical instruction component of a CTE program while the remaining academic instruction is delivered at a learner's home or sending school. A further 68 percent reported a similar approach but indicated that ATCs and sending schools share at least some of the responsibility for both academic and technical instruction. A quarter of states and territories treat secondary learners at ATCs as full-time students who receive all of their academic and technical instruction at these institutions.

With regards to postsecondary learners, 59 percent of respondents (19 total) define such learners as full time. Examining this group further, 34 percent of these respondents (11 total) reported that ATCs provide full-time postsecondary learners with only the technical instruction component of a CTE program while the other quarter (eight total) indicated that these full-time learners receive both the academic and technical instruction of a CTE program at the ATC. The remaining 38 percent of states and territories (12 total) reported using different definitions and designations for their postsecondary learners. For example, a number of states and territories classify these learners as part time, primarily with regards to adult learners who may be accessing ATCs for basic education purposes or other comparable services.

To serve both learner populations, states and territories not only must work to thoughtfully classify learners at ATCs in these ways, but they must also schedule when instruction can take place. By law or regulation in some states, secondary and postsecondary students may not be allowed to attend ATCs simultaneously. While this requirement may not be the only reason to



LOCAL SPOTLIGHT

Reaching Out to Marginalized Learners in Florida

Miami-Dade County Technical Colleges is a system of seven institutions with campuses that cover all of Miami-Dade County. At Miami-Dade Technical Colleges, there is targeted recruitment of minoritized and economically disadvantaged learners. The institutions intentionally recruit from inner-city schools through college and career fairs and partner with community groups that work with learners from special populations. They also make diversity and inclusion a priority in their marketing, ensuring that learners who identify with an under-represented group are reflected in Miami-Dade Technical Colleges' recruitment efforts.

schedule instruction separately — for instance, differentiating instruction between learner levels may help instructors more effectively convey course content to different audiences — a slight majority of survey respondents (53 percent or 17 total) indicated that secondary and postsecondary instruction occurs separately despite the facilities themselves being shared. Forty-one percent of respondents (13 total) reported much more overlap between these learner populations, saying that both groups can be enrolled in the same courses while also sharing facilities. Only 16 percent of respondents (five total) indicated that all instruction for secondary and postsecondary learners occurs separately and facilities are not shared by learner populations.

ENSURING EQUITABLE ACCESS TO ATCS

Some states and territories report using selective admissions criteria to determine access to ATCs. In some instances, the rationale used for the selective admissions process is that thereis more learner interest than there are available seats. However, more generally, selective enrollment processes and criteria result in inequities in access and participation.[38] Selective admissions are much more common at the secondary level than the postsecondary level. Fifty-eight percent of responding states and territories (15 total) have selective admissions for secondary learners seeking to attend ATCs while only a third (nine total) require the same of postsecondary learners. Most respondents reported using multiple criteria as part of the admissions process for both learner populations. At the secondary level, the most common criteria used for this purpose are grade point averages (GPAs) (63 percent of respondents or 10 total), interviews (63 percent or 10 total), and/or test scores (56 percent or nine total). Just over one-third of respondents (six total) indicated that they use needs-based considerations to determine admissions, while much smaller numbers indicated using a lottery system, portfolio work or other criteria.

With regards to postsecondary learners, admissions criteria are much less frequently used. Two-thirds of responding states and territories (18 total) shared that ATCs in their communities do not make use of selective admissions for postsecondary learners. For the remaining third of respondents whose ATCs do use admissions criteria, interviews were the most common factor used for this purpose (56 percent of respondents or five total). One-third of states and territories indicated that GPAs, test scores and/or needs-based considerations are used for admissions purposes for postsecondary learners (three total for each category). These findings suggest that barriers to access, at least in the form of admission requirements, are far less prevalent for ATCs serving postsecondary learners than their secondary counterparts but are on par with most community colleges.

States and territories also shared a variety of overlapping reasons for why they believe postsecondary learners may not access CTE programs at their ATCs. The most common reason reported by survey respondents is a lack of awareness about these opportunities. More than half indicated that lack of recognition of ATCs as postsecondary institutions or lack of transportation is a potential reason for why postsecondary learners sometimes do not enroll in programs at these institutions. Taken together, these findings seem to indicate that states and territories can likely do more to increase awareness of ATCs and the opportunities they provide, as well as provide better supports for learners to access them. This situation is likely further compounded by long-standing and historical misconceptions about CTE and the many facilities, particularly ATCs, that deliver these programs today.[39]

In conjunction with these efforts, states and territories undertake various recruitment and awareness strategies aimed at encouraging learners to enroll in CTE programs at ATCs. For secondary learners, most recruitment efforts take place at K-12 schools themselves. Given that ATCs often serve learners from multiple schools or districts, survey respondents indicated that school-based professionals, such as counselors, teachers or other administrators, share information about ATCs and related opportunities with learners. Additionally, many respondents indicated that recruitment efforts are embedded in wider career exploration or development coursework. For postsecondary learners, most respondents reported making use of social media, using local advertising, working with workforce development professionals, or partnering with other postsecondary institutions to make opportunities at ATCs widely known and available. For the most part these efforts are left to local communities or institutions themselves — states and territories did not often report concerted, statewide efforts, although these do exist for the CTE system more generally.[40]

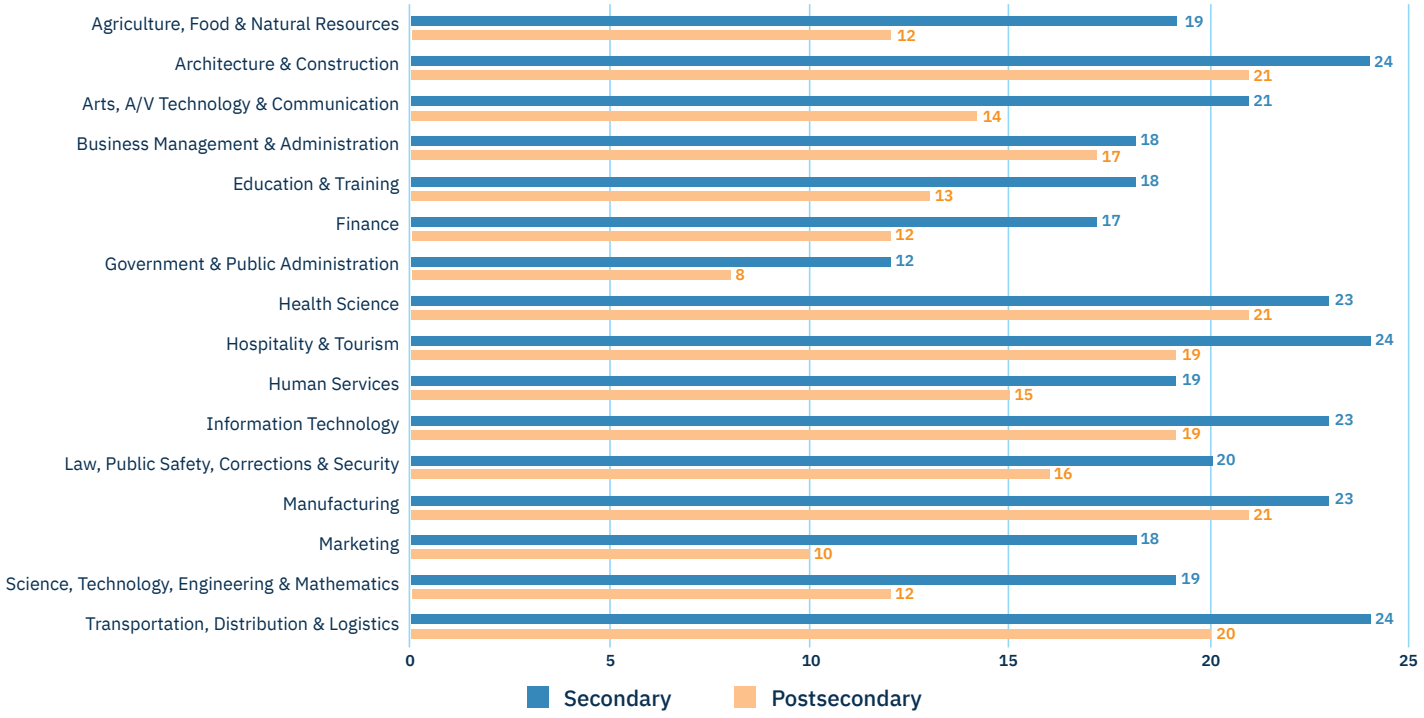
States and territories can likely do more to increase awareness of ATCs and the opportunities they provide.

Programs and Credentials Offered at ATCs

ATCs offer a broad array of CTE programs for both secondary and postsecondary learners, as seen in Figure 4. States report that these institutions offer CTE programs within each of the 16 Career Clusters for both learner levels — a strong sign that ATCs can and are aligning to the full breadth of the U.S. economy.[41] Respondents also indicated that there are a wider variety of programs offered to secondary learners than to postsecondary learners, consistent with other findings explored throughout this report. These survey results are also largely consistent with state-reported data from Perkins V regarding learner enrollment patterns more generally.[42] However, nearly all publicly reported and available data on CTE enrollment are not disaggregated by institution type, regardless of learner level. This lack of disaggregation remains a significant limitation when trying to determine the precise scope and reach of CTE programs at ATCs and, as will be explored in this section, the sorts of credentials that are offered at these institutions.

FIGURE 4

NUMBER OF STATES OFFERING PROGRAMS AT ATCS BY CAREER CLUSTER



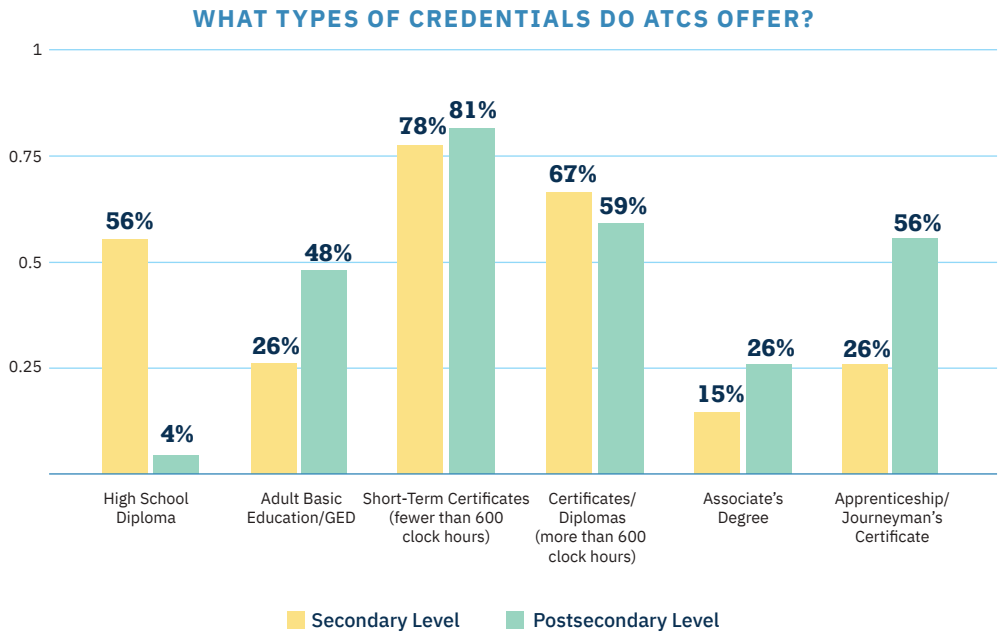
For postsecondary learners, the most common Career Clusters in which CTE programs are offered via ATCs are Architecture and Construction (in 78 percent of states and territories or 21 total); Health Science (78 percent or 21 total); Manufacturing (78 percent or 21 total); and Transportation, Distribution and Logistics (74 percent or 20 total). As noted, ATCs primarily offer programs at the sub-baccalaureate level, which may help to explain why these institutions less frequently offer CTE programs that require baccalaureate degrees or above, such as programs in the Finance Career Cluster and the Science, Technology, Engineering and Mathematics Career Cluster.

CREDENTIALS OFFERED AT ATCS

ATCs offer a wide range of credentials but for the most part predominantly provide credentials below the level of associate degrees, as seen in Figure 5. Many of these credentialing efforts align with states' existing postsecondary attainment goals. ATCs most commonly provide learners at all levels with shorter-term certificates that, on average, take fewer than 600 clock hours to complete — 78 percent of respondents (21 total) indicated that these were available to secondary learners, and 81 percent (22 total) indicated the same for postsecondary. Closely behind were certificates and/or diplomas that take more than 600 clock hours to complete — 67 percent of respondents (18 total) indicated these were available to secondary learners, while 59 percent (16 total) indicated the same for postsecondary learner populations.

More than half of states and territories reported that their ATCs provide apprenticeship and/or journeyman's certificates for postsecondary learners, a strong indication that many ATCs are connected to wider workforce development efforts. For instance, if an ATC or related program is the formal sponsor of a Registered Apprenticeship program, a designation made by

FIGURE 5

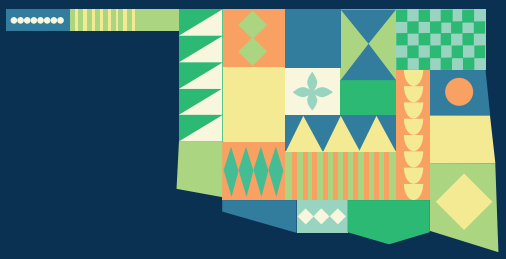


the U.S. Department of Labor for apprenticeship programs meeting certain requirements, then it is automatically eligible to be placed on a state's WIOA ETPL.

With regards to two-year degrees, only 26 percent of respondents (seven total) indicated that ATCs offer associate degrees to postsecondary learners. Since most states are not using ATCs to offer associate degrees or higher, ATCs are serving the role of providing learners with credentials and postsecondary credits that can be used for direct employment, reskilling or upskilling efforts to support career advancement. Survey results suggest that ATCs offer learners early exposure to postsecondary coursework before moving on to the labor market with a shorter-term credential of value or on to further education and training.

These findings, coupled with the lack of articulation agreements, suggest that ATCs remain largely disconnected from wider systems of postsecondary education. Since an associate degree is far more likely to be recognized at other institutions of higher education, the infrequency with which ATCs provide these degrees means that ATCs that do serve postsecondary learners are likely serving the more immediate employment-related priorities of their learners and communities. As a partial consequence, states may not be fully making use of these public institutions; there is likely significant room for ATCs to play a larger role in state systems of postsecondary education and, by extension, a larger role in helping states meet their postsecondary attainment goals.

Most often, states and territories indicated that existing state policy or regulation affects ATCs' ability to confer specific credentials. In **Arizona**, for instance, credentials offered at ATCs must undergo a state approval process overseen by the state board of education. Similar responses came from **Ohio** and **Massachusetts**, both of which have comparable statutory requirements. In other states, seat time requirements related to certain CTE programs and related credentials can be a challenge. For instance, in **Missouri**, the



LOCAL SPOTLIGHT

Meeting the Needs of Business and Industry in Oklahoma

Located in Stillwater, OK, Meridian Technology Center has always been at the forefront of workforce development. Initially established to provide high-quality career and technical training to high school students and adults, Meridian Tech has grown to provide training for 420 area businesses and 12,500 employees. Meridian Tech has a Center for Business Development, which functions as a business incubator to assist area and virtual businesses in the early stages of their venture. The Center provides business consulting and coaching courses and entrepreneurship training for those early in the process, and facilities, mentorship and networking opportunities for businesses that are in the expansion phases of the process. This allows businesses to have a safe and affordable space to experiment and grow while not relinquishing their independence as a business.

state requires a specific number of clock hours of instructional time, depending on the CTE program area, to be able to confer specific credentials. As with much of this work, resources can also be an obstacle, especially when an ATC depends on state or local funding to pay the costs associated with some credentials.

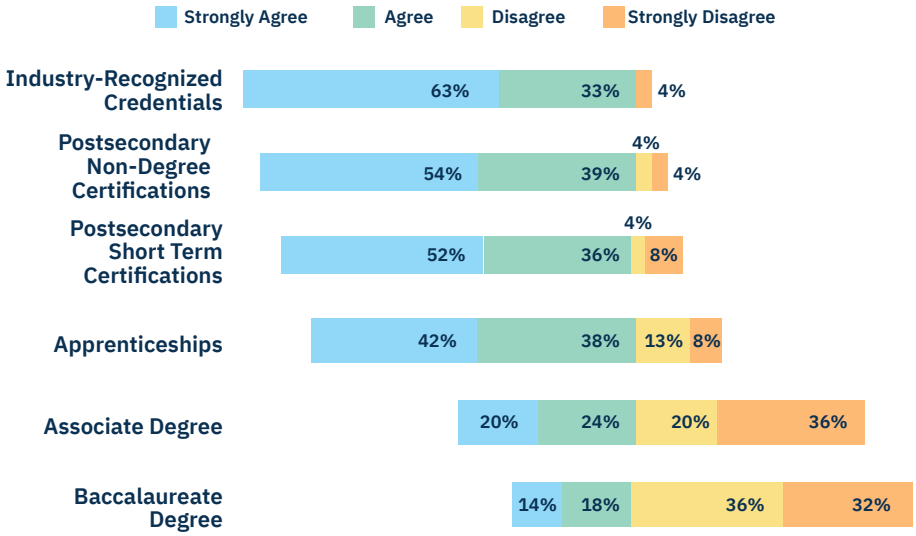
ATCS AND STATE POSTSECONDARY ATTAINMENT GOALS

As noted previously, nearly all states throughout the United States have established postsecondary attainment goals to ensure that a greater number of their learners are prepared for career and life success.[43] Ensuring that every facet of state systems of postsecondary education and workforce development is working toward this goal is critical to ensuring that this ambition can be realized over the next few years. Because ATCs are oddly positioned — partially a component of K-12 systems and partially a component of postsecondary education but largely independent from both — they are often overlooked and/or under-utilized. To overcome these challenges and fully realize their potential to support more learners working to attain postsecondary education and earn credentials of value, ATCs must be more fully recognized by and integrated in state postsecondary and workforce development policy and practice.

Of the states with ATCs that serve postsecondary learners, 28 have an articulated statewide postsecondary attainment goal. All 28 of these states explicitly allow baccalaureate degrees, associate degrees, industry-recognized credentials and shorter-term certificates to count toward these goals. Given that states often use different terminology to describe credentials falling below an associate degree, these findings indicate that states, across the board, recognize the value that these credentials have for learners, their communities and wider state economies as expressed through their inclusion in a statewide postsecondary attainment goal. Because ATCs predominantly offer these sorts of credentials, it is critically important that these institutions play a larger and more visible role in these efforts in the coming years to further support states' work toward these laudable ambitions of equipping more learners with credentials of value.

FIGURE 6

ATCS IN MY STATE CONTRIBUTE TO POSTSECONDARY ATTAINMENT GOALS



As seen in Figure 6, the vast majority of survey respondents either agreed or strongly agreed that ATCs help them meet statewide postsecondary attainment goals with regards to industry-recognized credentials, postsecondary non-degree certifications, short-term certifications and apprenticeship programs. Responding states and territories indicated that ATCs play a much smaller role in helping facilitate learner attainment of associate degrees and no role whatsoever in the attainment of baccalaureate degrees — a finding that is further supported by the lack of widespread articulation agreements between ATCs and other institutions that more commonly confer these credentials.

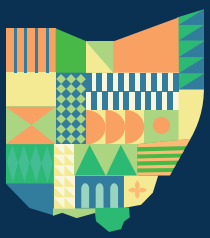
Nearly two-thirds of respondents (17 total) reported that their state or territory does not have policies that affect ATCs' ability to contribute to the state's postsecondary attainment goals. However, some states indicated that their policies could help ATCs contribute to postsecondary attainment goals. For example, in **Missouri**, ATCs have a positive impact on the state's efforts to meet its postsecondary attainment goal by offering dual credit or apprenticeship opportunities, both of which can help learners accumulate credits or work-based learning experiences that can later articulate or be used toward a longer-term credential or an apprenticeship certificate. For states indicating that current policies are inhibiting ATCs' contribution to postsecondary attainment goals, a number pointed to existing state policy frameworks that unintentionally excluded these institutions. For instance, in **Vermont**, the state was primarily focusing its postsecondary attainment efforts on degree-granting institutions but is now working to more deliberately integrate ATCs into CTE programs of study that are required to culminate in an industry-recognized credential. Together these findings are a strong indication that ATCs are likely well positioned to be more deeply integrated into wider state efforts to meet attainment goals should states choose to do so.

LACK OF COMPREHENSIVE DATA REGARDING CREDENTIAL ATTAINMENT AT ATCS

The availability of comprehensive data on learner attainment of credentials, disaggregated by type of postsecondary institution, remains an ongoing challenge in determining precisely how many credentials ATCs confer each year and in what Career Clusters as well as which learners are earning them. This situation is complicated further by the fact that there is no universally accepted definition for what constitutes an ATC.[44] As a result, comparisons between states that do collect and make credential attainment information available, disaggregated by institution type including ATCs, are extremely limited. Of the states that do make some of these data publicly available, most do so through the development and use of data dashboards.

Few states have data dashboards that present statewide data and information regarding education and workforce development systems in a visually appealing way that can be easily understood, is interactive and is engaging for the general public. There are, however, a few exceptions to this finding. First, in **Tennessee**, the state makes comprehensive data regarding credential attainment for learners enrolled in ATCs — what the state calls Tennessee Colleges of Applied Technology (TCATs) — widely available to the public.[45] In the most recent academic year for which data is available (2017-18), nearly 30,000 postsecondary learners were served by these institutions, and they earned 12,161 credentials of value in just that year alone.[46] ATCs in Tennessee also report impressive program completion and job placement rates, likely as a result of TCATs' strong connections to business and industry within the communities they serve. In the same year, 82 percent of learners completed a postsecondary program, and 89 percent of this same cohort were employed following graduation or program completion.[47]

Area technical centers in Tennessee have strong outcomes for learners. **82 percent** of learners completed a postsecondary program, and **89 percent** of this same cohort were employed following graduation or program completion.



LOCAL SPOTLIGHT

Providing Career Pathways to Employment for All Learners in Ohio

Started in 1975, Butler Tech, located in Southwestern Started in 1975, Butler Tech, located in Southwestern Ohio, serves 18,000 secondary and postsecondary learners from 11 associated school districts at six different campuses. Due to proximity to significant logistic chains and major international business hubs (including Proctor and Gamble and Amazon), Butler Tech is able to provide unique and responsive training to employers and learners alike. For employers, Butler Tech hosts a designated Workforce Services Department that serves as a catalyst for driving economic growth through the elimination of the skills gap. For example, in 2019, due to a rise in local demand for more aviation-related training in Southwestern Ohio, Butler Tech launched an Aviation Exploration program. This program uses the Aircraft Owners and Pilots Association curriculum, preparing students to take the FAA Private Pilot written test and/or the FAA Commercial Drone License. Many of the students are also working to obtain college credits in aircraft maintenance programs in partnership with local colleges and universities.

Butler Tech has focuses on programs that are responsive to the needs of its learners. One nationally replicated model, Project LIFE, began at Butler Tech and provides transition-to-work services for learners with documented disabilities. As a partnership of Butler Tech, Project SEARCH, the Department of Vocational Rehabilitation and local businesses, Project LIFE generates employment opportunities for learners while developing and strengthening adult independence skills. Fifty percent to 75 percent of the students' time is spent in an entry-level job training experience, benefiting both the learner and the employer partner.

Equally as robust, **Ohio** makes a wealth of learner progress and achievement data from ATCs available to the public as way of measuring its progress toward its statewide postsecondary attainment goal — one that seeks to equip 65 percent of all Ohioans with a degree, certificate or other postsecondary credential of value.[48] In the most recent year for which data is available, the 2017 academic year, learners completed 10,671 technical certificates (programs of one year or less) at Ohio's Technical Centers (Ohio's postsecondary-serving ATCs). Ohio's data dashboard goes further by breaking down this attainment data by learner demographics, including age range, gender, race and socioeconomic status. Of particular note, the dashboard also provides a window into learner enrollment patterns by CTE program area. Learners in Ohio most often earn credentials in the Health Science; Law, Public Safety, Corrections and Security; and Manufacturing Career Clusters — programs that often are aligned to the state's most in-demand occupations.[49]

Accreditation and Articulation at ATCs

One critically important issue facing ATCs and their ability to be part of state postsecondary education systems is accreditation.[50] Since accreditation is a significant factor in determining institutions' and individual programs' eligibility for federal postsecondary funding, and sometimes state-level funding, states and territories were asked several questions regarding the extent to which their ATCs and related postsecondary programs are accredited and whether or not accreditation is an ongoing challenge for these institutions as they seek to serve postsecondary learners and meet related credential attainment goals.

Survey respondents by and large did not indicate that accreditation, or the lack of accreditation, is a contributing factor for whether or not ATCs offer programs designed for postsecondary learners. Only two states and one territory agreed or strongly agreed that accreditation is a barrier for this purpose. Nine were noncommittal, neither agreeing nor disagreeing, and six respondents disagreed or strongly disagreed that accreditation is an obstacle to offering postsecondary programs at ATCs. Only 17 percent of responding states and territories (four total) indicated that postsecondary programs at their ATCs lack accreditation.

For states and territories that do have accredited postsecondary programs at ATCs, most respondents indicated that accreditation is typically a program-level effort rather than an institution-wide one. Because of this, sometimes multiple entities provide accreditation at an ATC or within a state or territory for multiple institutions and/or programs. For instance, in **Tennessee**, many of the state's ATCs are accredited by a national entity — the Council on Occupational Education[51] — but a significant number of individual programs at these institutions are accredited by another entity focusing on specific postsecondary programs.

STATE ACCREDITATION OF ATCS

In some instances, state agencies can serve as an accreditor for ATCs. For instance, USED recognizes the **Oklahoma** Board of Career and Technology Education (OKBCTE) — the agency with responsibility for CTE in the state – to provide accreditation for "the approval of public postsecondary [CTE] offered at institutions in the State of Oklahoma that are not under the jurisdiction of the Oklahoma State Regents for Higher Education … ."[52] This distinction is important because institutions in Oklahoma falling under the purview of the State Regents are able to confer credit-bearing degrees, while the institutions accredited by OKBCTE are not. Much like ATCs themselves, the scope of this accreditation for these institutions is squarely in the sub-baccalaureate realm with an intentional

focus on CTE-oriented programs and short-term credentials. Through this arrangement, all of Oklahoma's ATCs, known in the state as technology centers, are eligible for funding under Title IV of the Higher Education Act (HEA)[53], which allows postsecondary learners enrolled in eligible programs at these institutions to access federal financial aid to defray tuition and other associated costs of attendance.

Although accreditation is incredibly beneficial for learners who are able to make use of the financial resources from HEA at technology centers in Oklahoma, this approach is not without associated challenges. Besides access to additional financial resources, accreditation helps to ensure that credits earned at one institution are portable and can be transferred to other institutions accredited by the same entity. In Oklahoma, other accreditors, most commonly the Higher Learning Commission (HLC), accredit other non-ATC postsecondary institutions in the state. Because each accreditor uses different standards and criteria, HLC has ruled that the postsecondary institutions that it accredits may not accept specific coursework completed at a technology center for credit. While a number of local-level partnerships do exist that allow for some courses at ATCs to be accepted for credit at other postsecondary institutions in the state, these do not cover every ATC or program offered at these institutions.[54]

As a consequence, prior learning assessments are used to facilitate the transfer of credits or coursework if a learner elects to continue their postsecondary education and training at another postsecondary institution with HLC accreditation. Forty-four percent of secondary and postsecondary learners at Oklahoma's technology centers choose to do this, likely meaning that a significant number of learners in the state could

HEA TITLE IV ELIGIBILITY

To access federal student aid provided under Title IV of HEA, a learner must be enrolled at an IHE or in a program that meets the law's complex and sometimes overlapping eligibility requirements.

At the most basic level, an IHE must be authorized to offer postsecondary programs in the state where it is physically located (state authorization) and must be accredited. USED must then verify that an IHE has met these requirements to certify the institution and make it eligible for Title IV student aid. This process is known as the program integrity triad.

IHEs must meet numerous other institutional and programmatic criteria depending on how they are classified and the type of Title IV aid a learner seeks to use. Given the diversity of ATCs throughout the country, especially the types of programs that are offered, these institutions and their related postsecondary programs must meet different sets of criteria depending on how they are structured.

Most often, however, ATCs are classified as "postsecondary vocational institutions," focused on providing shorter-term, non-degree programs. In these instances, HEA requires that programs at these institutions must take place over predetermined amounts of time (most often measured in weeks, months or clock hours) and lead to "gainful employment" for learners enrolled in the program. More information can be found at https://files.eric.ed.gov/fulltext/ED593611.pdf.

potentially need to redo coursework to continue on with their studies.[55] The state is working toward a systemic solution, including efforts to re-establish statewide articulation agreements that are inclusive of ATCs.

USED also recognizes the **Pennsylvania** State Board for Career and Technical Education (PSBCTE) to provide accreditation to postsecondary CTE programs offered at public institutions throughout the state.[56] While the scope of PSBCTE's accreditation does not cover programs offering college credit, as is the case in Oklahoma, this designation creates an incentive structure that can nudge ATCs in Pennsylvania to provide a larger number of programs that qualify for accreditation given the greater availability of funding for accredited programs. Additionally, a focus on non-credit programs can help other postsecondary institutions, such as community or technical colleges, prioritize two-year degrees while allowing ATCs to focus on programs and related credentials falling below this threshold.

In this way, the state is able to maximize finite resources and related capacity within its system of postsecondary education by using ATCs to plug gaps in access in areas where community or technical colleges may not exist, broadening the scope and reach of these institutions and the state's postsecondary education system as a whole. As noted in the state's most recent application to USED for accreditation recognition, structuring postsecondary education in this way means that PSBCTE accreditation can benefit more than 13,000 postsecondary learners who were most recently enrolled in non-degree programs at one of the state's 57 career and technical centers — what the state calls ATCs — by providing a greater number of accredited postsecondary options at these institutions.[57]

59 percent of respondents indicated ATCs offer adult basic education.

For an ATC or a postsecondary program at a Pennsylvania career and technical center to be accredited, PSBCTE considers a number of factors, including the labor market needs of the surrounding community, program content, industry standards, instructor qualifications and awarded credentials, among other criteria.[58] Programs are reviewed by accreditation specialists at the state agency and are approved if they meet these requirements. Once accredited programs and institutions are approved, they are also regularly evaluated based on surveys of students, faculty and industry, which examine institutions' and programs' quality from these perspectives. As part of this evaluation process, institutions are also required to report completion rates, earned credentials, placement rates, drop-out ratios, and how these data conform or align to the institution's wider goals and objectives.[59]

Finally, many ATCs use clock hours, rather

than credit hours, when offering non-degree postsecondary programs. PSBCTE therefore uses a statewide credit-to-clock-hour conversion formula that helps institutions communicate learner experiences to the state and ultimately to USED. This conversion seeks to align to federal accreditation requirements and is necessary for determining a program's eligibility for federal student financial aid under Title IV of HEA. Under Pennsylvania's formula one credit hour is equal to 10 theory hours, 20 lab hours and 30 internship/externship hours.[60] Accredited non-degree programs in Pennsylvania must be at least 300 clock hours and no longer than 24 months — prerequisites that are also aligned with current federal requirements stemming from HEA to ensure institutional and programmatic eligibility with regards to federal student aid funds.[61]

CREDIT TRANSFER AND ARTICULATION AT ATCS

The ability to transfer credits from one school or institution to another can help support seamless learner transitions to and within systems of postsecondary education. Formal articulation agreements, which match coursework and credits between institutions of higher education (and sometimes K-12 schools), help learners maintain momentum with their studies, reduce duplication of learning, and can reduce the time it takes to complete a program or degree. Between the secondary and postsecondary learner levels, articulation agreements most typically help dual or concurrently enrolled learners accumulate postsecondary credits while in high school that can count toward their postsecondary studies. At the postsecondary level, the accreditation status of an institution can also play a significant role in the feasibility of transferring credits from one institution to another, as noted earlier. This situation is made even more acute if, as is the case with many ATCs examined in this report, multiple entities provide accreditation for programs offered at a single institution.

As a result, at least in part, most respondents indicated that ATCs and related programs are far more likely to have local articulation agreements than statewide articulation agreements, as seen in Figures 7.1 and 7.2. Institution-level

16 states reported having no statewide articulation agreement in place between ATCs and other postsecondary institutions.

agreements such as these are typically the result of local relationship building and can be a natural outgrowth from ATCs' efforts to connect to their wider communities to meet education and workforce development needs. In a recent 50-state review of transfer and articulation policies, ATCs were seldom explicitly referenced in states' existing policies regarding common course numbering or the development of a transferable core lower-division courses.[62] Taken together, these findings suggest that ATCs largely exist outside of the more traditional postsecondary education continuum or are not taken into account during the development of such agreements. Moreover, these findings underscore that ATCs are more likely to offer terminal credentials and career pathways, as explored in the "Programs and Credentials Offered at ATCs" section.

FIGURE 7.1

LOCAL ARTICULATION AGREEMENTS FOR ATCS

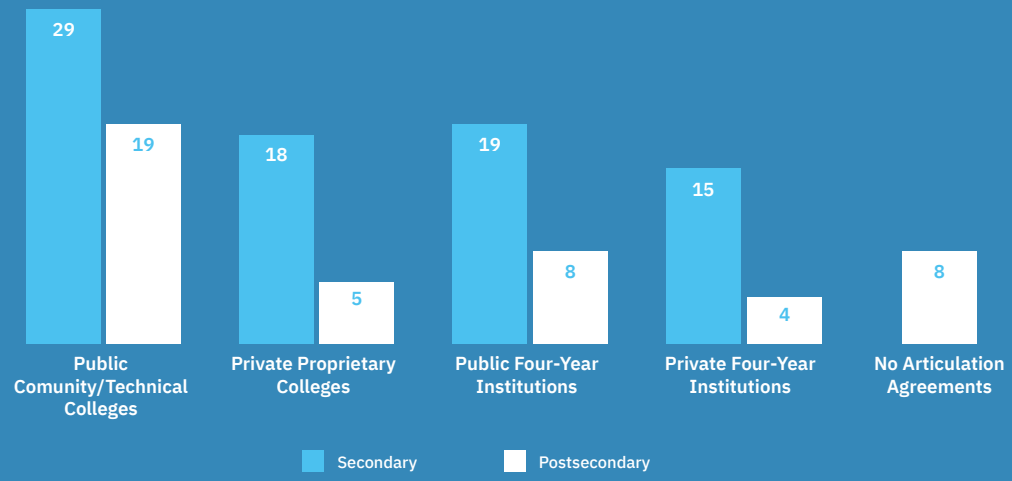
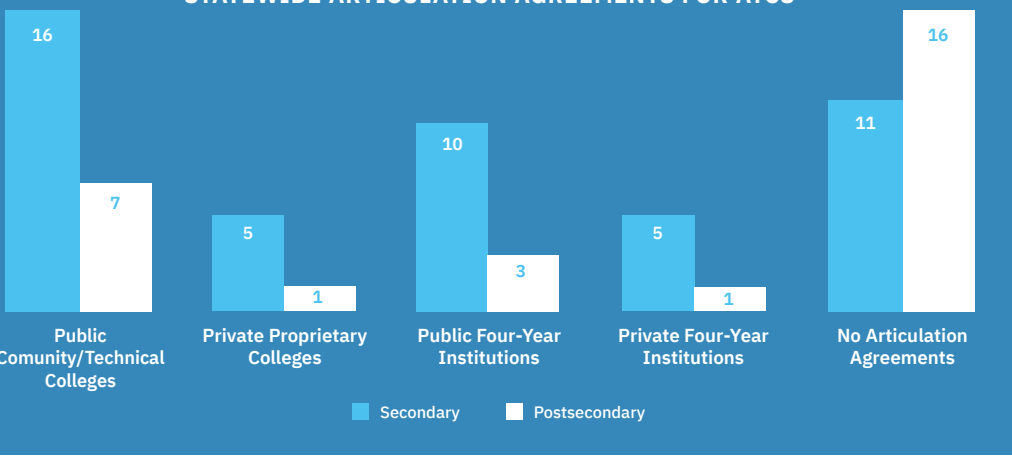


FIGURE 7.2

STATEWIDE ARTICULATION AGREEMENTS FOR ATCS



In addition, both statewide and local articulation agreements are far more common at the secondary level than the postsecondary level. This lack of portability and transferability of credits is not unique to ATCs — it is a hallmark of the decentralized system of postsecondary education and training in the United States. Nevertheless, given that at least a third of all dual enrollment credits are earned in CTE courses, this finding makes sense, especially when considering ATCs' history as primarily secondary institutions providing CTE programs at this learner level.[63] In an effort to partially address this situation, **Arkansas** encourages all of its ATCs to be co-located on college campuses to ensure closer collaboration and alignment of programs between an ATC and other postsecondary institutions. While not every ATC in the state is structured in this fashion, this co-location and related collaboration enrolled in ATCs in Arkansas can earn postsecondary credits that can count at other postsecondary institutions such as community colleges or four-year universities, which is where career centers — the state's term for most of its ATCs — are most often located.

At the postsecondary level, the most frequent agreements, whether statewide or local in scope, are with community and technical colleges, indicating that out of all the institutional types listed in Figures 7.1 and 7.2, ATCs are likely most closely linked to other two-year institutions. Over a quarter of responding states and territories (seven total) — Alabama, Connecticut, Kentucky, Mississippi, Ohio, Oklahoma and Tennessee — reported having statewide articulation agreements in place between their ATCs and these institutions. In **Ohio**, for example, the state has a long-standing and robust statewide articulation agreement for its ATCs and other public postsecondary institutions. Known as Career-Technical Credit Transfer (CT)2, the effort ensures that learners at ATCs can transfer agreed-upon technical courses and related credentials to any public postsecondary institution in the state "... without unnecessary duplication or institutional barriers."[64] To facilitate credit articulation and transfer, Ohio's public postsecondary institutions, ATCs and other public institutions delivering CTE programs make use of

LOCAL SPOTLIGHT

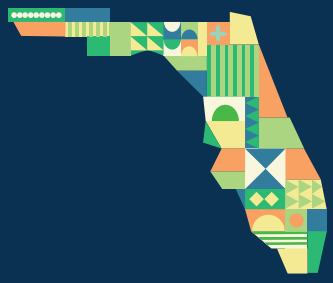
Articulation and Collaboration in Alaska

Among the ATCs that make extensive use of local articulation agreements is Alaska's Institute of Technology (AVTEC), which is located in Seward, AK, and is the state's largest ATC serving secondary and postsecondary students. AVTEC maintains an articulation agreement with the University of Alaska Fairbanks Community and Technical College (UAF CTC) and offers 11 short-term programs lasting longer than six weeks and 95 short-term programs lasting fewer than six weeks in several in-demand occupational areas critical to the state's economy. Located in the gulf coast region of the state, AVTEC and UAF CTC are working to formalize a consortium to provide high-quality maritime training and ultimately become a Domestic Maritime Center for Excellence — a formal designation made by the U.S. Department of Transportation that would make the program eligible for additional federal funding, surplus equipment and technical assistance.

STATE SPOTLIGHT

Connecting the Dots in Florida

By state law, the 48 ATCs in Florida are all considered postsecondary institutions. Recently enacted legislation requires all postsecondary institutions in the Florida College System, including ATCs, to create regional career pathway articulation agreements to facilitate the transfer of credits between and among public postsecondary institutions in the state.[66] Each ATC and public postsecondary institution with an overlapping service area must develop a regional career pathway articulation agreement for each certificate program offered at an ATC and align this to a related associate degree in the same service area. These agreements must guarantee postsecondary credit toward an aligned degree program for learners who graduate from an ATC with a CTE certificate. In this way, the state is able to overcome challenges regarding the difficulty of articulating credit across institutions, particularly if they are accredited by different entities.



a Career-Technical Assurance Guide, which is a detailed crosswalk of all approved coursework and programs needed to earn postsecondary credits that will be accepted at these institutions.[65]

Much as is the case at the secondary level, local articulation agreements are by far the most common type of articulation agreement in place for postsecondary learners. Seventy percent of states and territories (19 total) reported having local agreements with individual community or technical colleges. Despite these promising local-level trends from the survey, 22 percent of respondents (six total) reported having no local or statewide articulation agreements between ATCs and community or technical colleges. A further 60 percent (16 total) reported having no statewide articulation agreement in place between ATCs and other postsecondary institutions. Given the importance of articulated credit for postsecondary learners, these findings indicate significant room for growth and improvement on this issue. This is doubly important given that many CTE programs offered at ATCs culminate in short-term credentials and the ability to translate these credentials into postsecondary credit is necessary to support learners who hope to advance their postsecondary studies further.

Additional Considerations and Recommendations

While this report has uncovered much about ATCs, there is still much more to learn about these institutions and the potential they have to help more learners equitably access postsecondary and economic opportunity. As a result, this analysis answered just a few questions and generated many more. Until more robust and comprehensive data on ATCs is available, answering the following questions will remain extremely difficult:

- What are the demographics of learners — including race/ethnicity, gender and special population status — who have access to ATCs, enroll in ATC programs, successfully complete programs and earn credentials of value? With this information, policymakers will be able to identify any systemic barriers to access and tailor supports and related services to ensure equitable access and outcomes for every learner.
- Which credentials are offered at ATCs, how many are earned, and what outcomes are associated with those credentials, such as employment in careers that offer livable wages and career progression? With this information, policymakers can direct resources appropriately and attend to issues of quality and equity.
- How do different funding models affect ATCs' ability to equitably provide access to learners and opportunity to earn credentials? With this information, policymakers can make more informed decisions about how to leverage federal, state and local dollars to best serve learners.

This research is the first step in a much longer journey of supporting states and local communities as they seek to maximize these important institutions, learn from one another, and devise more inclusive systems of postsecondary education and training that more fully harness the potential of ATCs. Without reliable and comprehensive sources of data regarding ATCs, determining how best to make use of these institutions and where to integrate them into existing state systems of education and workforce development will remain a challenge. To that end, policymakers should consider the following recommendations to better leverage ATCs in the pursuit of equitable access to economic opportunity:

Build Awareness of and Visibility for the Role of ATCs in Postsecondary Education and Workforce Development

ATCs are emblematic of the silos that exist between state postsecondary education and workforce development systems. States must build the visibility of and support for the role of ATCs within their CTE, postsecondary education and workforce development systems. Compounding this situation is ATCs' early history as secondary institutions, which in some states translates to these institutions being disconnected or isolated from broader postsecondary attainment and workforce development efforts. States need to engage in concerted efforts to recognize, celebrate and leverage ATCs as institutions that serve adults learners. Further, ATCs that offer postsecondary education are often accredited. Thus, they are eligible for federal financial aid, and they are otherwise relatively low cost, making them an accessible option. For instance, while the average cost per credit hour at public two-year institutions is $135, instruction at ATCs is approximately $2 per clock hour.[67][68] Despite their affordability and legacy of conferring credentials of value, ATCs remain underutilized. States must better leverage ATCs, especially as they draw closer to their deadline to achieve their postsecondary attainment goals.

Enhance or Re-Establish State Oversight of ATCs

Since their inception in the 1960s, ATCs have been largely operating quasi-independently, evolving in response to the local communities they serve. This quasi-independence helped the development of these institutions in certain ways but has ultimately left ATCs largely disconnected from wider systems of postsecondary education and workforce development in most states. In an October 2020 roundtable with 17 states focused on this topic, many states indicated that they had stopped collecting data or information on ATCs that serve postsecondary learners. They could not identify why or how this happened, other than to postulate that state capacity was a cause. While honoring the robust community connections ATCs have fostered, states need to establish or re-establish their responsibilities of overseeing all CTE programs offered in their state, including those at ATCs, to ensure program quality, labor market relevance, equitable access and supports for learners, and

the full utilization of the significant public assets that are going to these institutions. Through this oversight, ATCs can be better leveraged and utilized to attain state postsecondary and workforce development goals.

Improve States' Collection of Data and Accountability for ATCs

States must start capturing and disaggregating their data collection by institution type. A brief review of state postsecondary attainment dashboards found that only eight of the 28 states with such dashboards included any information about ATCs. To get to issues of equity, access and quality and ultimately help learners and their families to make informed choices, ATCs, which are publicly funded institutions, must be brought into the fold for public accountability and data transparency. Further, data dashboards should make clear the role of short-term credentials in meeting postsecondary attainment goals and ensure that consumers have clear information on which credentials have true labor market value, all disaggregated by learner demographics. The completion and outcomes data gathered for this report were encouraging. Sharing these data is a vital step to building awareness, visibility and greater utilization of ATCs.

Update NCES' Data Collection on ATCs

The last time NCES reported a listing of ATCs by state was in 2002. This report required the creation of a patchworked compilation of listings of ATCs derived from IPEDS and CCD that was validated by states to get to an accurate and current count. There should be an easier way to capture data on such a robust component of the education and workforce systems. At the federal level, NCES' surveys and data collection must be remedied to reflect the enrollment reality of these ATCs —that they serve secondary, postsecondary and adult learners and both part-time and full-time learners. Because of their varied learner populations some institutions can and should be in both IPEDS and CCD, and secondary ATCs that serve learners from multiple school districts should not be discarded from research samples because they show "zero" enrollment (since that enrollment is currently captured at the home high school). Having a more accurate and current listing of ATCs will ensure that they are brought into the fold of education and workforce research, a necessary step to more fully understanding the reach, impact and promise of ATCs.

Ensure Transferability and Inclusion Within Career Pathways Systems

Most states and territories report that a majority of their ATCs are not part of statewide articulation agreements, and when states do have articulation agreements that include ATCs, they most often cover only secondary programs. Further, it is unclear how or if CTE programs offered at ATCs connect into or with systems of career pathways or guided pathways. When states are crafting policies related to career pathways, guided pathways and articulation agreements, ATCs must be included. These policy actions are necessary to bring ATCs more fully and systemically into states' public postsecondary education and workforce development efforts.

Leverage State Postsecondary Attainment Strategies to Highlight ATCs

For decades, policymakers have sought to increase postsecondary attainment for learners, primarily by seeking to boost support for and access to four-year degree programs. As a consequence, sub-baccalaureate institutions, such as ATCs, and the critical role that they have in preparing learners for career and life success have been often overlooked. According to Lumina Foundation, to meet the national postsecondary attainment goal of 60 by 2025, 2.6 million more U.S. adults must earn quality, short-term and innovative credentials, and another 3.3 million adults must earn associate degrees. By integrating ATCs' programs and credentials into statewide postsecondary attainment strategies, states can not only help close this gap but also raise awareness about ATCs and their role in CTE, postsecondary education and workforce development.

Value All Learner Experiences

ATCs, particularly at the postsecondary level, are largely open admission and seek to serve learners with greatly varied backgrounds and lived experiences. These experiences, as well as any prior credentials, should have meaning not only in the labor market but also at other postsecondary institutions. On top of statewide articulation agreements, states should be working toward statewide policy that requires equitable and consistent use of prior learning assessments, allowing more learners to seamlessly move within and among postsecondary institutions, including ATCs, without having to redo coursework. This ability to move seamlessly among institutions will help ensure learner success and accelerate time to completion.

Remove Any Barriers to Access

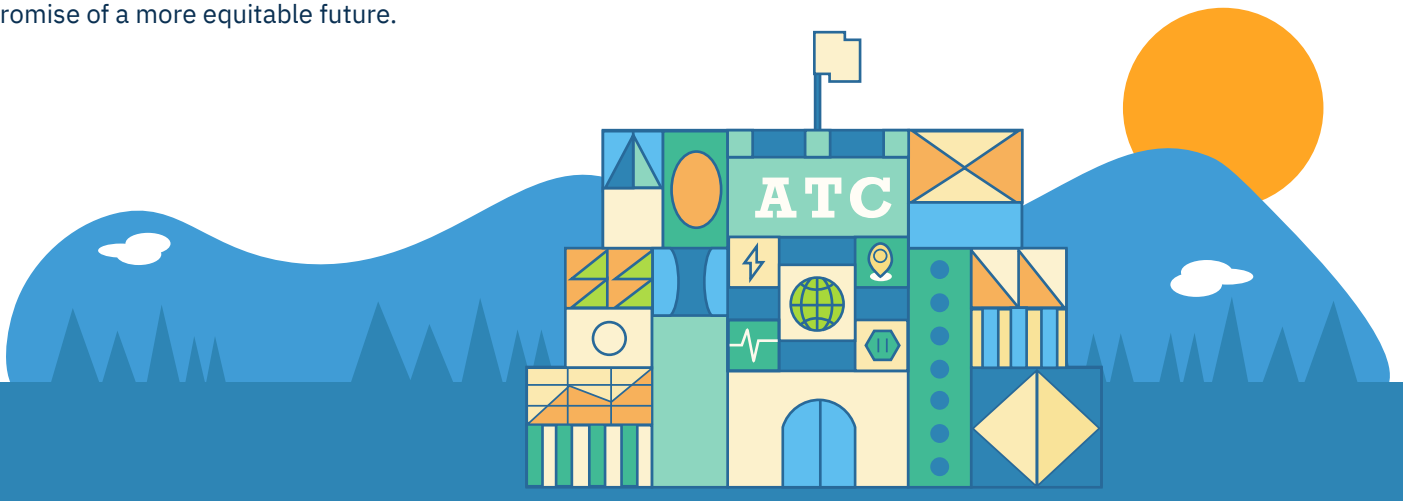
Given that ATCs were historically created to serve wider geographic areas, the ability to get to and from campus is critical for many learners enrolled at these institutions. This situation is compounded by the significant variation in how ATCs structure and schedule instruction for learners. Transportation was the most frequently cited barrier for postsecondary learners accessing ATCs, and many of these same learners, particularly those who are most in need of additional postsecondary experiences, will likely need additional flexibilities to ensure that they can access opportunities at these institutions.

Policymakers should therefore craft policies and initiatives that provide physical access supports, including transportation options; last-dollar scholarships for adult learners to address gaps in financial aid or funding; and flexible scheduling options for learners to ensure equitable access. ATCs that serve secondary learners should reconsider or eliminate admissions criteria that limit access. Finally, both secondary and postsecondary learners need increased advisement and navigational resources to support them on their career and educational pathway.

Conclusion

The need for Americans to obtain postsecondary skills and credentials has never been more apparent as the nation cements itself as a knowledge economy. Yet just half of Americans hold a credential beyond high school. The data are even more daunting considering the disparities in attainment, with significantly more White and Asian American adults obtaining postsecondary credentials than Black, Latinx or Native American adults. The 2008 Great Recession claimed 7.2 million jobs, more than three-fourths of which belonged to workers with a high school diploma or less. Now barely out of that recession, Americans are grappling with a new economic crisis. In 2020, the COVID-19 pandemic devastated the labor market, leaving 3.8 million people permanently out of work. Once again, Black and Latinx populations and Americans without education beyond a high school diploma were the most affected by the latest economic downturn.

While the future of the labor market may be uncertain, one consistent trend is the need for Americans to gain skills that will allow them to transition into new careers or advance in current ones. Driven by Lumina Foundation's commitment to a national postsecondary attainment goal of 60 percent of Americans holding a postsecondary credential by 2025, states have stepped up. Now is the time for states to leverage all of their assets, including ATCs, to help meet this goal and help more Americans secure the skills and credentials needed on their pathway to a livable wage and the promise of a more equitable future.



Appendix

Methodology

For a comprehensive overview of this project's methodology, including this report's methodology and data sources, please go to: www.AreaTechnicalCenters.org

Acknowledgements

Advance CTE recognizes and thanks the following individuals for their support in the development and release of this report, the related state profiles and assets, all of which can be found at www.AreaTechnicalCenters.org:

Brittany Cannady, Dan Hinderliter, Katie Fitzgerald, Kimberly Green, Kate Kreamer, Brian Robinson, and Stacy Whitehouse of Advance CTE. Greg Kienzel, independent contractor; Steve Voytek from Foresight + Law; Kathy Ames from Next Chapter Communications; Kyle Conrad, Olive Hoffman, Ross Nover, and Alicia Schreder of Friendly Design Co.; and the following state and local CTE leaders: Delaware - Luke Rhine, Jonathan Wickert, and Jessica Hansen of the Delaware Department of Education; Mark Wilson and Annemarie Linden of the New Castle County Vocational School District. Florida - Henry Mack, Tara Goodman and Brittany of the Florida Department of Education; Renee Mantilla, Miami-Dade County Public Schools; Diane Culpepper, Lake Technical College. Ohio - Leah Amstutz, Ohio Department of Education; Anthony Landis, Ohio Department of Higher Education; Maggie Hess and Bill Bussey, Ohio Association of Career-Technical Superintendents; Jon Graft, Butler Tech; Oklahoma- Dr. Marcie Mack, Oklahoma Department of Career and Technology Education; Dr. Doug Major, Meridian Technology Center. Utah - Thalea Longhurst, Utah State Board of Education; Jared Haines, Utah System of Higher Education; and Clay Christensen, Mountainland Technical College. This report and related assets were developed with the generous support of Lumina Foundation.

What Is Accreditation?

Postsecondary education in the United States is incredibly diverse, and for the most part, the federal government affords a significant amount of autonomy to colleges, universities and other institutions of higher education (IHEs) in determining the structure and content of their programs. At the same time, USED oversees more than $120 billion in federal student aid funds authorized by the Higher Education Act (HEA), mostly found under Title IV of the law, which helps millions of learners afford and access programs at thousands of IHEs throughout the nation annually.

To be eligible for this funding, along with numerous other federal grants, IHEs must be accredited by a USED-approved accrediting entity. These entities are non-profit membership organizations, often composed of IHEs themselves. USED approves accrediting agencies to ensure that these entities can reliably affirm the quality of an IHE or the individual postsecondary programs it offers. Accreditors' main responsibility is to determine whether an IHE meets the established criteria and related standards set by an accrediting entity. If an IHE meets these requirements, it is accredited for a specified period of time. This distinction allows learners to use federal aid at an IHE, among other benefits.

In light of recent regulatory changes at USED, the federal government no longer makes a distinction between national and regional accreditors, although some states, territories and institutions still continue to distinguish between the two.

From the federal perspective there are now two main types of entities in the United States that provide IHEs with accreditation: institutional accrediting agencies and programmatic accrediting agencies. Institutional accrediting agencies accredit whole institutions and all the programs that that they may offer. Programmatic accrediting agencies, on the other hand, accredit educational programs that seek to prepare students for entry into a specific profession, occupation or vocation. Unlike accreditation for an entire institution, this type of accreditation means that only those programs, departments or embedded schools receive and maintain accreditation from an accreditor.

For more information see: https://www2.ed.gov/admins/finaid/accred/accreditation.html#Overview.

Endnotes

1 For this project's methodology, please visit www.AreaTechnicalCenters.org.

2 Nietzel, M. (2020). Lumina's big postsecondary goal: Still within reach, but much work remains to be done. Forbes. https://www.forbes.com/sites/michaeltnietzel/2020/07/02/luminas-big-goal-still-within-reach-but-much-work-remains-to-be-done/?sh=1a233827696a

3 For more information about how CTE is delivered, see Advance CTE. (2020). Delivering Career Technical Education. https://cte.careertech.org/sites/default/files/documents/fact-sheets/CTE_DeliverySystems_2020.pdf

4 There is immense variation in how states and local communities make use of these institutions, especially with regards to how they are, or are not, embedded within state education and workforce development systems, which will be explored throughout this report. The working definition for ATCs used throughout this report can be found in the textbox on page 3, "Area Technical Centers (ATCs): A Working Definition."

5 Kelly, J. (2020). Jobless claims: 57.4 million Americans have sought unemployment benefits since mid-March—over 1 million people filed last week. Forbes. https://www.forbes.com/sites/jackkelly/2020/08/20/jobless-claims-574-million-americans-have-sought-unemployment-benefits-since-mid-marchover-1-million-people-filed-last-week/?sh=3df92e246d59

6 Georgetown University Center on Education and the Workforce. (2016). America's divided recovery: College haves and have-nots. https://cew.georgetown.edu/wp-content/uploads/Americas-Divided-Recovery-web.pdf. See also The Council of Economic Advisers. (2018). Addressing America's reskilling challenge. https://www.whitehouse.gov/wp-content/uploads/2018/07/Addressing-Americas-Reskilling-Challenge.pdf

7 For the purposes of this report, the term "postsecondary learners" includes adult learners.

8 National Defense Education Act of 1958, Title VIII, Section 801, Pub. L. No. 85-864.

9 Vocational Education Act of 1963, Pub. L. No. 88-210. VEA-63 was later reauthorized as the Carl D. Perkins Vocational Education Act of 1984, Pub. L. No. 98-524.

10 U.S. Department of Health, Education, and Welfare, Office of Education. (1965). Vocational Education Act of 1963. https://files.eric.ed.gov/fulltext/ED019402.pdf

11 These categories are summarized and condensed for clarity. The full taxonomy for these schools can be found in Section 8(2) of VEA-63.

12 U.S. Department of Health, Education, and Welfare, Office of Education. (1965). Vocational Education Act of 1963. https://files.eric.ed.gov/fulltext/ED019402.pdf

13 National Skills Coalition. (2020). Skills mismatch fact sheets. https://www.nationalskillscoalition.org/state-policy/fact-sheets

14 For instance, New York's boards of cooperative educational services and California's regional occupational centers and programs both echo these early motivations in their respective histories. More information can be found at http://www.p12.nysed.gov/mgtserv/boces/primer.html and https://www.csba.org/GovernanceAndPolicyResources/StudentAchievement/~/link.aspx?_id=C37F9988679844C1B81A14D4A1367A98.

15 Rosenfeld, S. (1982). Cutting vocational education could kill its momentum. Education Week. https://www.edweek.org/ew/articles/1982/03/10/01240098.h01.html

16 Ibid.

17 U.S. General Accounting Office. (1979). Should the Appalachian Regional Commission be used as a model for the nation? p. 115. https://www.gao.gov/assets/130/126638.pdf

18 Ibid, p. 143.

19 The Strengthening Career and Technical Education for the 21st Century Act of 2018, Pub. L. No. 115-224.

20 Several of these 39 states did not respond to this report's survey but are included in this report because Advance CTE was able to verify ATCs in these states via alternative means. For more information on this process and this project's methodology, go to www.AreaTechnicalCenters.org.

21 For instance, Texas does not formally track or keep a record of the number of ATCs in the state.

22 Florida indicated in the survey that its ATCs serve postsecondary learners exclusively; however, through interviews Advance CTE learned that some Florida ATCs also serve secondary dual enrollment learners.

23 A Perkins eligible agency is the primary entity designated by a state or territory to administer federal funding authorized by the Strengthening Career and Technical Education for the 21st Century Act (Perkins V).

24 https://cte.careertech.org/sites/default/files/documents/fact-sheets/Understanding_Perkins_V_2020.pdf

25 North Dakota Department of Career and Technical Education. (n.d.). Additional clarifying guidelines. https://www.cte.nd.gov/sites/www/files/documents/AreaCTCs/AreaCenterGuidelines.pdf

26 Arizona Office of Skills Development. (2018). Special policies and procedures for secondary technical centers, p. 4. https://arcareereducation.org/docs/default-source/skills-and-development/secondary-technical-centers/policies-and-procedures/secondary-center-policies-procedures_effective-8-25-18.pdf?sfvrsn=6b4a4116_2

27 Ibid, p. 5.

28 Rasmussen Foster, L., Klein, S., & Elliott, B. (2014). State strategies for financing career and technical education, p. 6. U.S. Department of Education. https://files.eric.ed.gov/fulltext/ED555236.pdf

29 Ibid, p. 17.

30 Idaho, Maryland, Michigan, Texas and Washington.

31 More information on how ATCs schedule learner time at these facilities can be found in the "Where ATCs Are Located and Learner Populations Served" section of this report.

32 Kentucky Administrative Regulations. 705 KAR 3:141. Area center or public high school, standards for vocational department. https://apps.legislature.ky.gov/law/kar/705/003/141.pdf. See also 09.121. Program enrollment. http://policy.ksba.org/Search.aspx?distid=176

33 https://nces.ed.gov/pubs2008/2008035.pdf, Table 2.5.

34 https://www.aacc.nche.edu/research-trends/fast-facts/

35 Please see the methodology section of this project for more information: www.AreaTechnicalCenters.org.

36 Although ATCs are included only in either CCD or IPEDS (it is not possible for an institution or school to be part of both), this analysis found 17 institutions that exist but do not appear to be in either dataset. Please see the methodology section of this project for more information: www.AreaTechnicalCenters.org.

37 Koon, M. D. (2015). Technical College System of Georgia (TCSG). New Georgia Encyclopedia. https://www.georgiaencyclopedia.org/articles/education/technical-college-system-georgia-tcsg#:~:text=In%201944%20the%20North%20Georgia,in%20Georgia%2C%20opened%20in%20Clarkesville.&text=In%202007%20the%20DTAE%20created,name%20officially%20changed%20to%20TCSG

38 https://www.mdrc.org/sites/default/files/CTE_Equity_Brief_2019.pdf

39 Advance CTE. (2017, April). The value and promise of Career Technical Education: Results from a national survey of parents and students. https://careertech.org/resource/value-and-promise-of-cte-results-from-a-national-survey

40 For more information, see https://careertech.org/recruitmentstrategies. Current federal grant regulations affecting Perkins V significantly limit the ability of states and local recipients to promote or market programs and related CTE opportunities receiving funding from the law. Although a small state set-aside requirement does allow for these activities within Perkins V, this prohibition on marketing may help to explain why these efforts are not well known or understood.

41 Advance CTE. (n.d.). Career Clusters. https://careertech.org/career-clusters

42 Perkins Collaborative Network. (n.d.). Reports to Congress. https://cte.ed.gov/accountability/reports-to-congress and U.S. Department of Education, Office of Career, Technical, and Adult Education. (n.d.). Perkins state plans and data explorer. https://cte.ed.gov/dataexplorer/

43 Le, C., Pisacreta, E. D., Ward, J. D., & Margolis, J. (2019). Setting a north star: Motivations, implications, and approaches to state postsecondary attainment goals. https://doi.org/10.18665/sr.311539

44 Perkins V includes a definition for ATCs; however, the research this paper is based on used an expanded definition, noted on page two of this report, that more fully captures all ATCs (based on discussions and input from the state CTE leadership).

45 The College System of Tennessee, Office of Policy and Strategy. (n.d.). TCAT — data dashboards. https://www.tbr.edu/policy-strategy/data-and-research

46 The College System of Tennessee. (2019). Tennessee Colleges of Applied Technology 2019 data profile. https://www.tbr.edu/sites/default/files/college-profiles/tcatprofiles/TBR_TCATProfile.pdf. Note that the state differentiates between the types of credentials awarded by TCATs largely by the number of clock hours they take to complete.

47 Ibid.

48 Ohio Department of Higher Education. (n.d.). Department of Higher Education attainment dashboard. https://www.ohiohighered.org/attainment/dashboard

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50 See the appendix for more information about accreditation.

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59 Ibid, p. 19.

60 Ibid, p. 35.

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68 Note: Clock hour to credit hour translation varies from institution to institution, ranging from 10 to 30 clock hours per credit hour. See also U.S. Department of Education. (n.d.). Program integrity questions and answers — credit hour. https://www2.ed.gov/policy/highered/reg/hearulemaking/2009/credit.html