SREB

Shared-Time Technology Centers: A Study of Six State Funding Systems

A Special Report for the Kentucky Career and Technical Education Task Force

Southern Regional Education Board

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Shared-Time Technology Centers: A Study of Six State Funding Systems

Background

At the request of the Kentucky Board of Education, in the spring of 2019, the Kentucky General Assembly created the Kentucky Career and Technical Education Task Force to address the state's funding model for CTE programs. This task force is expected to make recommendations to the Assembly before the 2020 biennial budget session.

According to a July 10, 2019, press release from the Kentucky Department of Education, Commissioner of Education Wayne Lewis and Associate Commissioner David Horseman recently asked the Kentucky Budget Review Subcommittee on Education to create a unified system for providing CTE to all students in Kentucky.

Kentucky currently lacks a unified system for delivering career and technical education. In the press release, Lewis noted the existence of 53 state-funded Area Technology Centers in addition to many locally operated ATCs across the Commonwealth. As Lewis said, "Funding for both state ATCs and local centers is too low to deliver quality programs based on regional workforce needs… the demand is far greater than we're able to deliver on, and we find ourselves shifting money around to subsidize the operations of the state-operated ATCs."

Kentucky State Senator Mike Wilson, co-chair of the Kentucky CTE Task Force, asked the Southern Regional Education Board to provide an overview of CTE funding models from states that either border Kentucky or operate several shared-time technology centers. This special report offers the Task Force a brief discussion of the importance of CTE, a review of six states and a set of considerations for the Task Force's review.

Context

A fundamental economic assumption in the United States is that adults will work, have careers and contribute to the overall economy, according to a 2017 blog from the Aspen Institute. The pathways by which children mature into adolescents who then become contributing adults are influenced by several factors, not the least of which are education and training for employment. Within this context, career and technical education programs have historically provided the education that connects youth to the workplace. The focus and quality of CTE programs have evolved over time in response to the needs of the workplace, students and society.

The field of CTE has been the focus of continuous improvement efforts for decades, beginning with the 1983 publication of *A Nation at Risk* and followed by the passage of federal legislation supporting Tech Prep, Youth Apprenticeship, School-to-Work and several iterations of the Perkins Act that funds CTE. Leaders from the worlds of policy and practice have focused on facilitating the transition of youth and adults from education to the workplace and improving the design and delivery of high-quality CTE, as Stone noted in a 2016 discussion of CTE in the 21st century.

About two out of every three jobs now require some postsecondary education and training, according to the Georgetown University Center on Education and the Workforce. By 2025, demand for Americans with a credential or degree may exceed supply by as many as 11 million. There is no disputing that young people benefit from connected learning experiences that equip them with the lifelong learning skills needed to enter the workforce, secure good jobs and enjoy a middle-class life. Given this information, it is important to consider the needs of the future workforce and develop learning experiences that will prepare more young people with anticipated competencies. High-quality CTE offers the kinds of learning experiences that empower young people to connect what they learn in the classroom with the world of work.

"High-quality CTE" is how a growing number of national organizations describe something more than just a good high school agriculture program or a good high school marketing program. We can also use this phrase to describe a set of relationships that link CTE to a larger framework of college and career readiness.

Behind this resurgent interest in CTE are several factors. Perhaps most compelling is the understanding that the United States cannot compete with less developed nations on labor costs. This means we must compete on the quality of goods and services we produce, which in turn requires a highly skilled workforce with a range of mid-level trade, technical and professional skills in addition to those high-level skills associated with a university education.

The demise of many traditional blue-collar jobs in the United States is well documented. While manufacturing, the core of such employment, has shown a rebound in recent years, the new blue-collar jobs are not of the same kind or quantity as those lost during the 1970s and 1980s. Research from the National Research Center for Career and Technical Education shows that these new "middle-skill" jobs require a different set of skills — skills that are best learned in an applied context. Such shifts in America's economic landscape have led to a growing recognition that CTE has the potential to play a key role in our economic competitiveness.

According to reports by the NRCCTE, high-quality CTE includes the following key features.

First, high-quality CTE programs must be relevant not only to the postsecondary education programs and careers into which students will transition, but also to students' interests and the global economy. Any curriculum for an occupationally oriented career pathway program ought to begin with the knowledge and skills required for successful entry into and advancement within careers in that pathway. We typically identify this framework of requisite knowledge and skills as *career readiness* — one part of a much larger discussion of *college and career readiness* as the purpose of public education. In applying this framework to the issue of how to create world-class CTE curricula, three kinds of knowledge and skills emerge as foundational. Stone and Lewis defined these as (1) the occupational expression of academics, (2) occupational or generalizable employability skills and (3) technical skills.

Second, high-quality CTE requires effective pedagogy. CTE is more than a job-training program. While it is important to align CTE curricula with industry practices, it is equally important to align pedagogy with sound learning theory that focuses on meeting individual student needs. High-quality CTE should employ three pedagogical strategies: (1) classroom instruction, (2) industry-driven work-based learning experiences and (3) participation in co-curricular career-technical student organizations.

Third, high-quality CTE programs must actively involve employers in the training and education of youth. Both the Organisation for Economic Co-operation and Development's 2010 report *Learning for Jobs* and the Harvard Graduate School of Education's 2011 report

Pathways to Prosperity described work-based learning as a necessary part of preparing youth for a successful adulthood.

While the federal Perkins legislation — recently reauthorized as the Strengthening Career and Technical Education for the 21st Century Act, otherwise known as Perkins V — provides a basic framework for high-quality CTE, lessons from contemporary business suggest that an integrated system of key components is a necessary condition for success.

For high-quality CTE, an integrated system should include:

- Horizontal integration of academic and occupational education within high schools and shared-time centers. This report defines *shared-time centers* as stand-alone schools or facilities that deliver CTE services to part-time students who are drawn from surrounding schools or districts and who receive all or a majority of their academic instruction at their home high school.
- Hierarchical integration between secondary and postsecondary education programs.
- Stronger connections in the form of partnerships with business and industry.
- A robust career development process that begins in the early grades and continues through high school and beyond.

Access and Equity

A recent policy brief by Advance CTE, the Council of Chief State School Officers, and the Education Strategy Group noted that much of the conversation about equity in CTE is centered around access. Working toward parity in CTE programs is a good way to ensure that learners are not under- or over-enrolled in a specific program area, but such efforts must also be coupled with a focus on program quality so that each and every learner is able to access and participate in high-quality CTE program of his or her choice.

These organizations encouraged state leaders to consider the following when working to close opportunity gaps in CTE:

- **Secure and leverage resources to close CTE opportunity gaps**. State leaders should actively seek and reallocate resources to better serve the institutions and learners that are most in need. State leaders should leverage funding to incentivize and hold institutions accountable for closing equity gaps.
- **Work with stakeholders to expand geographic access to CTE**. State leaders should identify why and where learners cannot access CTE opportunities because of geographical barriers. State leaders should work with the appropriate stakeholders to create strategies to expand access to CTE opportunities, such as leveraging funds to provide appropriate transportation to CTE opportunities and leveraging technology to connect learners with industry experts.
- **Dismantle barriers that prevent learners from entering CTE programs**. State leaders should identify the barriers that potentially prevent learners from being prepared to participate in CTE programs of study; these barriers may include a lack of academic preparation or advising or exclusionary entrance requirements, among others. State leaders should then build strategic partnerships and advocate for programmatic and policy changes that will ensure that each learner is prepared to participate in high-quality CTE programs of study. State leaders can now leverage Perkins V to extend career exploration into the early grades to prepare learners for challenging CTE programs.

A 2018 report from the U.S. Department of Education showed that while 98 percent of public school districts offered CTE programs to students at the high school level in the 2016-2017 school year, only one-third of districts reported that all of their CTE programs were structured as career pathways that align with related postsecondary programs. The report also noted that although 42 percent of urban school districts reported that all of their CTE programs were structured as career pathways that align with related postsecondary programs, only 30 percent of rural districts reported that all of their CTE programs met these criteria.

The following common barriers may prevent learners from participating in high-quality CTE:

- Geography and availability of high-quality CTE programs in their school
- Funding and resources
- At-home factors (parent involvement, income, trauma, child care or health needs)
- Academic preparation
- Awareness and advising
- Cultural awareness
- Physical and learning disabilities

Some of the states studied for this report are addressing barriers to entry into their CTE programs of study and expanding geographic access to CTE opportunities.

Ohio uses Geographic Information Systems to identify equity gaps in access to meaningful programming, serve learners of color and urban learners more effectively, and tighten the alignment between program offerings and local workforce needs. Ohio plans to use GIS data to help districts develop action plans to address equity gaps. The state is also piloting a new series of equity labs during the 2019-2020 school year. These labs will bring together community shareholders to examine data and identify equity gaps. Actions to address gaps must be addressed in local applications for Perkins V funds.

South Carolina is addressing the awareness and advising barrier through a program called Personal Pathways to Success. Every high school student is required to declare a "major" aligned with one of the 16 nationally recognized Career Clusters®. The state's Education and Economic Development Act provides a framework for career advisement that spans the elementary grades through high school. At the high school level, districts are required to provide at least one counselor for every 300 students, and many districts have career coaches who work with middle and high school students.

CTE Funding

There is very little literature on the topic of funding for career and technical education beyond the federal Perkins funding. In 2014, the U.S. Department of Education commissioned the National Center for Innovation in Career and Technical Education to conduct a study on state approaches to funding CTE programs. According to the study's report, "state approaches to funding CTE programs vary in their emphasis and complexity. Some states provide no dedicated funding for CTE, while others allocate funds to shared-time centers or on a formula basis to all service providers in the state."

The report also indicated that state funding methods fall into one of three categories:

- **Foundational Funding Only** — Local CTE programs are financed out of general state aid formulas that provide no earmark for CTE. Because all allocations to local education agencies and institutions of higher education are independent of student participation in CTE, local administrators must decide how funds should be distributed across instructional priorities.
- **Funding for Shared-Time Technology Centers** — Dedicated funds are provided to support programming at shared-time centers that deliver CTE services to part-time students. CTE services offered in other locations in these states, such as at comprehensive high schools or community and technical colleges, are supported through a state's foundational funding formula.
- **Categorical Funding** — Dedicated funding for CTE programs that is distributed to local education agencies or institutions of higher education to support career-related instructional services. These approaches – which may include student-based, cost-based and/or unit-based formulas — typically target state funding for the exclusive use of CTE programming.

This report concluded that more research is needed to determine the impact state funding has on program and student outcomes. It recommended that policymakers study the strengths and weaknesses of each funding approach and determine which approach best aligns with state workforce goals. It also recommended that states periodically review and update their funding approaches to meet state priorities and address the access and equity of CTE programs.

In several states, the initial step in determining the funding model for career and technical education is to set a vision for the workforce. States rely on data and input from business and industry representatives, workforce development agency heads and community leaders to identify the competencies associated with current and future in-demand careers. States next set goals related to credential attainment in these fields. Describing future workforce needs helps states create high-quality CTE programs of study and establish CTE governance structures. States then develop funding models to support their governance structures.

State Reviews

The six states highlighted in the following section of this report — Arkansas, Indiana, Ohio, Oklahoma, South Carolina and West Virginia — use a combination of these approaches to fund their career and technical education programs.

To begin its review of these state funding models, SREB staff collected information found on state education agency websites. Staff also reviewed information produced by such professional associations as Advance CTE, the Association for Career and Technical Education, the National Alliance for Partnerships in Equity, and others. Staff also conducted a thorough review of the U.S. Department of Education's 2014 report, *State Strategies for Financing Career and Technical Education*.

After analyzing this information, staff conducted telephone interviews with four state directors of career and technical education and two CTE professional association leaders.

Arkansas

Fast Facts

- Arkansas's **career and technical education concentrator graduation rate is 99 percent** — 11 percentage points higher than the state's adjusted cohort graduation rate.
- **95 percent of CTE concentrators go on to postsecondary education** or advanced training, military service or employment within six months of leaving high school.
- At the postsecondary level, **68 percent of CTE concentrators earn a credential, certificate or diploma**, and **70 percent are placed in employment**, military service or apprenticeship programs within six months.
- In 2017, **21,510 associate degrees and certificates were awarded** — 47 percent of all degrees and certificates awarded in the state.

Labor Market Snapshot

In Arkansas, **53 percent of "good jobs" are held by workers without a bachelor's degree**. This report defines "good jobs" as offering median annual earnings of $55,000 and paying no less than $35,000 for adults under age 45, according to the Georgetown University Center on Education and the Workforce.

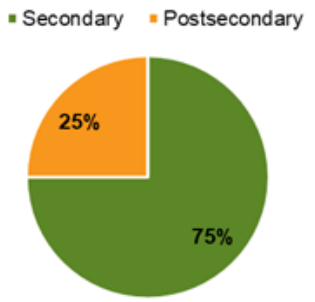
Top 5 Industries for Good Jobs That Pay Without a BA

- Manufacturing
- Transportation and utilities
- Health services
- Retail trade
- Construction

CTE Facts

Public High Schools	277
Public High Schools Offering All/Mostly CTE Courses	24
Public High School Enrollment	128,366
Public High School CTE Enrollment	159,694
Public High School CTE Concentrators	12,402
Public Community Colleges	24
Public Shared-Time Technology Centers	25
Public Community College Enrollment (FT/PT)	72,149
Postsecondary CTE Enrollment	25,536
Postsecondary CTE Concentrators	18,666

Arkansas Perkins Funding



Perkins Eligible Agency and Annual Funding

Arkansas Department of Education

FY18 – $12,315,679

FY19 – $13,036,153

Arkansas State Funding Method	Total Categorical State Funding for CTE
Vocational Center Aid is the fund used to support secondary career centers in Arkansas. Funds are allocated to shared-time career centers based on the number of students served during the previous school year. Funding is based on a fixed per-student rate ($3,250), with allocations capped at 60 percent if more than 60 percent of students come from a single sending school. Funds are distributed annually to the secondary career centers — 28 local education agencies — with 21 locations residing on postsecondary campuses.	$20,136,383

Notes on Funding in Arkansas

Currently, funding flows to the centers in two ways.

1. **Training Fees:** Each school district that sends students to a secondary career center pays a training fee of $3,250 per full-time equivalent or FTE. Districts make this payment once in the spring and once in the fall. In the following year, the Office of Skills Development reimburses the districts for the funds they sent to the secondary career center for the previous school year — roughly $10 to $11 million annually.
    a. Although the districts pay the centers twice a year, the Office of Skills Development reimburses the school districts with quarterly payments. This causes issues with legislative audits, as the accounts do not reconcile at the end of the school year.
    b. By reimbursing the districts, the Office of Skills Development starts the school year with $9 to $10 million.
2. **Vocational Center Aid Payment:** Once the district reimbursement funds have been accounted for, the Office of Skills Development distributes the Vocational Center Aid to secondary centers for their actual enrollments per semester. These payments vary throughout the year and also change annually due to increases or decreases in enrollment. In the past couple of years, VCA funds have ranged from $3,000 per FTE to as little as $2,510 per FTE.

Indiana

Fast Facts

- Indiana's **career and technical education concentrator graduation rate is 95 percent** — 11 percentage points higher than the state's adjusted cohort graduation rate.
- **80 percent of CTE concentrators go on to postsecondary education** or advanced training, military service or employment within six months of leaving high school.
- At the postsecondary level, **34 percent of CTE concentrators earn a credential, certificate or diploma**, and **96 percent are placed in employment**, military service or apprenticeship programs within six months.
- In 2017, **33,181 associate degrees and certificates were awarded** — 32 percent of all degrees and certificates awarded in the state.

Labor Market Snapshot

In Indiana, **55 percent of "good jobs" are held by workers without a bachelor's degree**. This report defines "good jobs" as offering median annual earnings of $55,000 and paying no less than $35,000 for adults under age 45, according to the Georgetown University Center on Education and the Workforce.

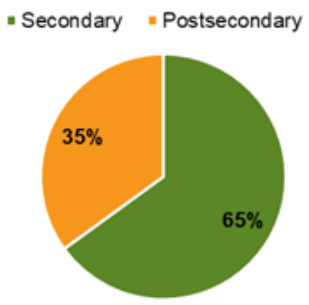
Top 5 Industries for Good Jobs That Pay Without a BA

- Manufacturing
- Construction
- Health services
- Transportation and utilities
- Retail trade

CTE Facts

Public High Schools	409
Public High Schools Offering All/Mostly CTE Courses	0
Public High School Enrollment	321,032
Public High School CTE Enrollment	167,611
Public High School CTE Concentrators	18,741
Public Shared-Time Technology Centers	22
Public Community Colleges	16
Public Community College Enrollment (FT/PT)	165,959
Postsecondary CTE Enrollment	27,972
Postsecondary CTE Concentrators	8,013

Indiana Perkins Funding



Perkins Eligible Agency and Annual Funding

Indiana Department of Education

FY18 – $26,909,456 FY19 – $28,478,889

Indiana State Funding Method

Indiana uses a **differential method of funding** for career and technical education. Additional Pupil County funding for CTE is distributed through a weighted formula based on credit hours and student enrollment in state-approved CTE programs. Programs are differentially weighted based on labor market demand and wages, with those programs that prepare students for careers in industries that require a more than moderate number of future employees and pay high wages receiving the largest weight.

Total Categorical State Funding for CTE

$130,000,000

Notes on Funding in Indiana

Advanced CTE Course Funding Levels: Enrollment Reimbursement Rates Per Credit Hour

- High Value Program = $680
- Moderate Value Program = $400
- Less than Moderate Value Program = $200

Other CTE Course Funding Levels — Enrollment Reimbursement Rates Per Pupil

- Introductory = $300
- Apprenticeship = $150
- Cooperative Education Course = $150
- Foundational = $150
- Work-Based Learning = $150
- Area Participation Program = $150

Ohio

Fast Facts

- Ohio's **career and technical education concentrator graduation rate is 95 percent** — 11 percentage points higher than the state's adjusted cohort graduation rate.
- **93 percent of CTE concentrators go on to postsecondary education** or advanced training, military service or employment within six months of leaving high school.
- At the postsecondary level, **44 percent of CTE concentrators earn a credential, certificate or diploma**, and **78 percent are placed in employment**, military service or apprenticeship programs within six months.
- In 2017, **61,047 associate degrees and certificates were awarded** — 37 percent of all degrees and certificates awarded in the state.

Labor Market Snapshot

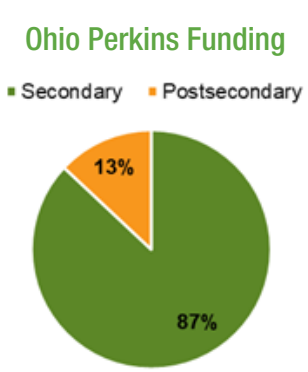
In Ohio, **51 percent of "good jobs" are held by workers without a bachelor's degree**. This report defines "good jobs" as offering median annual earnings of $55,000 and paying no less than $35,000 for adults under age 45, according to the Georgetown University Center on Education and the Workforce.

Top 5 Industries for Good Jobs That Pay Without a BA

- Manufacturing
- Construction
- Health services
- Information, financial activities and real estate
- Transportation and utilities

CTE Facts

Public High Schools	871
Public High Schools Offering All/Mostly CTE Courses	70
Public High School Enrollment	511,361
Public High School CTE Enrollment	125,375
Public High School CTE Concentrators	33,593
Shared-Time Technology Centers	41
Public Community Colleges	48
Public Community College Enrollment (FT/PT)	261,271
Postsecondary CTE Enrollment	94,291
Postsecondary CTE Concentrators	65,086



Perkins Eligible Agency and Annual Funding

Ohio Department of Education

FY18 – $43,755,429 FY19 – $46,313,409

Ohio State Funding Method

Ohio provides funds for per full-time equivalent career and technical education students participating in CTE programs in five identified categories.

- $5,192 for each FTE CTE student in agricultural and environmental systems, construction technologies, engineering and science technologies, finance, health science, information technology and manufacturing technologies.
- $4,921 for each FTE CTE student in business administration, hospitality and tourism, human services, law and public safety, transportation systems and arts and communications.
- $1,795 for each FTE CTE students in a career-based intervention.
- $1,525 for each FTE CTE student in education and training, marketing workforce development academics, publication administration and career development.
- $1,308 for each FTE CTE student in family and consumer sciences, which includes students enrolled in Graduation, Reality And Dual-Role Skills (GRADS) programs for pregnant teens or young parents

Total Categorical State Funding for CTE

$290,782,399

Notes on Funding in Ohio

All 612 school districts in Ohio are connected to one of 93 CTE planning districts. Ohio has three models of planning districts offering CTE.

- **City Districts** — These are found mostly in larger cities.
- **Compacts** — Compacts are formed when several districts come together to offer CTE at one of the high schools. An example is Maumee Bay.
- **Joint Vocational School Districts** — An example of a JVSD is Great Oaks in Cincinnati, which operates separately from the Cincinnati City District. A JVSD is a consortium of 36 districts that support four career centers. Students can elect to attend for one-half or one full school day. These four centers for the most part offer different program options than the sending high schools.
  - JVSDs are considered a school district with an appointed Board. Board members are generally from the sending districts. The Board hires a Superintendent who runs all aspects of the district. The JVSD has its own business office and HR department.
  - Transportation at the JVSD is the responsibility of the sending districts.
  - Buses at the JVSD are for JVSD student needs related to CTE experiences.

Oklahoma

Fast Facts

- Oklahoma's **career and technical education concentrator graduation rate is 81 percent**.
- **94 percent of CTE concentrators go on to postsecondary education** or advanced training, military service or employment within six months of leaving high school.
- At the postsecondary level, **50 percent of CTE concentrators earn a credential, certificate or diploma**, and **70 percent are placed in employment**, military service or apprenticeship programs within six months.
- In 2017, **27,133 associate degrees and certificates were awarded** — 47 percent of all degrees and certificates awarded in the state.

Labor Market Snapshot

In Oklahoma, **56 percent of "good jobs" are held by workers without a bachelor's degree**. This report defines "good jobs" as offering median annual earnings of $55,000 and paying no less than $35,000 for adults under age 45, according to the Georgetown University Center on Education and the Workforce.

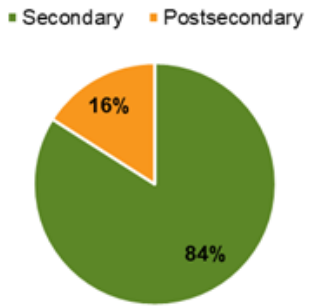
Top 5 Industries for Good Jobs That Pay Without a BA

- Manufacturing
- Transportation and utilities
- Natural resources
- Health services
- Construction

CTE Facts

Public High Schools	463
Public High Schools Offering All/Mostly CTE Courses	0
Public High School Enrollment	182,188
Public High School CTE Enrollment	40,758
Public High School CTE Concentrators	15,913
Public Shared-Time Technology Centers	37
Public Community Colleges	25
Public Community College Enrollment (FT/PT)	83,410
Postsecondary CTE Enrollment	36,641
Postsecondary CTE Concentrators	18,438

Oklahoma Perkins Funding



Perkins Eligible Agency and Annual Funding

Oklahoma Department of Career and Technology Education

FY18 – $15,094,180 FY19 – $15,996,375

Oklahoma State Funding Method

Oklahoma supports career and technical education programs in comprehensive high schools through the allocation of program Assistance Grants, which consider the relative cost of various CTE programs and instructor salaries. The state reimburses program costs at established rates for each program.

District technology centers are funded through a separate formula that considers a center's enrollment, number of sites, number of instructors, transportation costs and student services. This formula is intended to support the added costs to local education agencies in operating CTE programs in technology centers.

Total Categorical State Funding for CTE

Approximately $20,000,000

Notes on Funding in Oklahoma

Oklahoma centers are created and administered by a local board elected by area voters.

Funding from the state depends on the millage levies approved by district voters. The foundation for Oklahoma's statewide network of 29 technology center districts, which operate 58 campuses statewide, was laid in 1966 when Oklahoma voters approved a constitutional amendment allowing the establishment of what were then called "area vocational-technical schools."

In the 2018 Fiscal Year, 20,971 high school students enrolled in Oklahoma's technology centers. Most attended approximately three hours per day, either in the morning or the afternoon. Due to increased graduation requirements, Oklahoma's technology centers are adapting their schedules and pursuing other avenues to provide students with the flexibility they need to attend. The centers also serve more than 10,000 full-time adult students.

On a statewide average, technology centers receive about two-thirds of their funding at the local level. The remaining is a mixture of state and federal funds.

South Carolina

Fast Facts

- South Carolina's **career and technical education concentrator graduation rate is 98 percent** — 14 percentage points higher than the state's adjusted cohort graduation rate.
- **98 percent of CTE concentrators go on to postsecondary education** or advanced training, military service or employment within six months of leaving high school.
- At the postsecondary level, **56 percent of CTE concentrators earn a credential, certificate or diploma**, and **86 percent are placed in employment**, military service or apprenticeship programs within six months.
- In 2017, **22,105 associate degrees and certificates were awarded** — 39 percent of all degrees and certificates awarded in the state.

Labor Market Snapshot

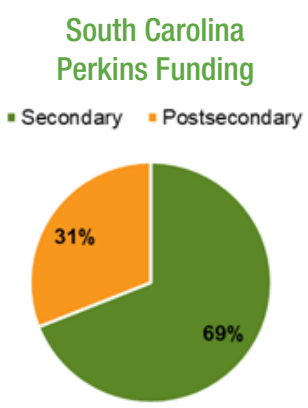
In South Carolina, **49 percent of "good jobs" are held by workers without a bachelor's degree**. This report defines "good jobs" as offering median annual earnings of $55,000 and paying no less than $35,000 for adults under age 45, according to the Georgetown University Center on Education and the Workforce.

Top 5 Industries for Good Jobs That Pay Without a BA

- Manufacturing
- Health services
- Transportation and utilities
- Retail trade
- Construction

CTE Facts

Public High Schools	229
Public High Schools Offering All/Mostly CTE Courses	42
Public High School Enrollment	217,694
Public High School CTE Enrollment	186,052
Public High School CTE Concentrators	21,450
Public Shared-Time Technology Centers	26
Public Community Colleges	20
Public Community College Enrollment (FT/PT)	123,511
Postsecondary CTE Enrollment	37,442
Postsecondary CTE Concentrators	29,047



Perkins Eligible Agency and Annual Funding

South Carolina Department of Education

FY18 – $20,256,936 FY19 – $21,447,519

South Carolina State Funding Method	Total Categorical State Funding for CTE
South Carolina funds are allocated in support of career and technical education to reimburse CTE programs for the costs of equipment, supplies, industry certifications, work-based learning activities and continuous school improvement strategies such as SREB's Making Schools Work frameworks.	$20,000,000

Notes on Funding in South Carolina

South Carolina's Office of Career and Technical Education provides local educational agencies with guidance and assistance through administrative provisions that help ensure success and compliance with applicable requirements.

In South Carolina, there are currently 79 school districts. Among these districts there are 27 career centers serving a single district operated by local boards of education. South Carolina also has 12 multi-district career centers serving students from more than one educational area.

Of the career centers affiliated with one district, the district receives federal Perkins funding as well as state CTE funding. These funds are then shared with the career center. The 12 multi-district career centers receive some federal funding, primarily through consortium agreements with their feeder districts. These multi-district centers also receive state CTE funding.

Federal funding is allocated based on the formula defined by the legislation. The state funding is allocated based on enrollment in CTE programs. Local school districts and multi-district career centers that receive CTE funds are required to submit a local application and assurances that address state and federal laws and regulations for the use of these funds.

West Virginia

Fast Facts

- West Virginia's **career and technical education concentrator graduation rate is 99 percent** — 10 percentage points higher than the state's adjusted cohort graduation rate.
- **89 percent of CTE concentrators go on to postsecondary education** or advanced training, military service or employment within six months of leaving high school.
- At the postsecondary level, **59 percent of CTE concentrators earn a credential, certificate or diploma**, and **77 percent are placed in employment**, military service or apprenticeship programs within six months.
- In 2017, **11,812 associate degrees and certificates were awarded** — 33 percent of all degrees and certificates awarded in the state.

Labor Market Snapshot

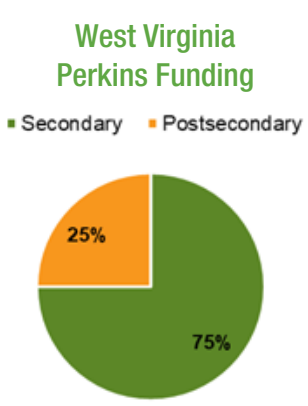
In West Virginia, **56 percent of "good jobs" are held by workers without a bachelor's degree**. This report defines "good jobs" as offering median annual earnings of $55,000 and paying no less than $35,000 for adults under age 45, according to the Georgetown University Center on Education and the Workforce.

Top 5 Industries for Good Jobs That Pay Without a BA

- Natural resources
- Manufacturing
- Transportation and utilities
- Construction
- Health services

CTE Facts

Public High Schools	120
Public High Schools Offering All/Mostly CTE Courses	27
Public High School Enrollment	78,586
Public High School CTE Enrollment	46,886
Public High School CTE Concentrators	6,781
Public Shared-Time Technology Centers	13
Public Community Colleges	15
Public Community College Enrollment (FT/PT)	10,243
Postsecondary CTE Enrollment	19,217
Postsecondary CTE Concentrators	10,355



Perkins Eligible Agency and Annual Funding

West Virginia Community and Technical College System

FY18 – $8,428,617

FY19 – $8,836,812

West Virginia State Funding Method

Total Categorical State Funding for CTE

$18,000,000

Secondary CTE Funds are distributed in four categories:

1. **Secondary Block Grants** are a pro rata share of the prior year's state CTE enrollment in occupational and non-occupational courses and the three-year average of CTE completers.
2. **Travel** covers any travel costs incurred by teachers and support staff related to CTE programming, such as attendance at in-service workshops, participation in career technical student organization activities, or program administration at non-school sites like employment sites. Funds are distributed based on each local education agency's pro rata share of the total adjusted staff per full-time equivalent or FTE, which considers the total number of instructors and staff, student enrollment in CTSOs and distance factor.
3. **Equipment replacement** is distributed as a pro rata share of the prior year's state CTE enrollment in occupational and non-occupational courses and the three-year average of CTE completers.
4. **Multi-county grant funding** is provided to seven area CTE centers that serve multiple counties. Multi-county centers qualify for funds to cover indirect costs based on a pro rata share of their total funding.

State funds are intended to offset the additional costs of providing CTE services, which the state defines as extended employment for instructional and administrative staff, supplies, instructional materials, equipment and placement services. To be eligible for block funds, providers must assign sufficient administrative oversight of technical programs, with those offering more than five CTE programs required to appoint a certified program administrator.

Notes on Funding in West Virginia

All shared-time career and technical education centers in West Virginia are governed by the 55 county school systems and operate under the authority of the West Virginia Department of Education, Division of Technical Education and Governor's Economic Initiatives.

There are 22 shared-time county technical centers and seven multi-county shared-time technical centers in West Virginia. The county centers are governed by county boards of education; multi-county centers are governed by administrative councils made up of the superintendents, a county board member from each participating county, and a representative of the Associate State Superintendent of Schools.

The funding for staffing in all shared-time technical centers is provided by the State Aid Formula to Schools based on school system FTE enrollments. Staffing is allocated to the shared-time centers and multi-county centers based on enrollment and need.

Considerations

After reviewing various state funding approaches, SREB encourages the Kentucky CTE Task Force to consider taking the following actions.

1. Determine what characteristics and competencies the workforce of 2035 should possess.

America is experiencing a dynamic shift in employment for many working-age adults. In the past four decades, the manufacturing industry has lost more than 7 million jobs to automation, and many service industries are experiencing similar shifts, according to SREB's 2019 report, *Unprepared and Unaware: Upskilling the Workforce for a Decade of Uncertainty*. It would benefit the Task Force to collaborate with business and industry to identify the characteristics and competencies needed in the workforce of the future. The first step in addressing employment shifts is to set goals for credential attainment and work-based learning. Points of discussion in setting goals may include (a) incentives for adult education programs and training models, (b) contextual learning programs that integrate academic and technical skills, (c) apprenticeships and (d) performance measures. Now is an excellent time to set bold goals that span state agencies and federal funding sources like Perkins V, the Every Student Succeeds Act and the Workforce Innovation and Opportunity Act.

2. Select a governance model that drives Kentucky's funding approach; do not allow the funding model to determine the state's governance structure.

In their review of state CTE funding models, SREB staff found that most governance models are determined by the state's funding approach. When asked why such governance models are in place, interviewees usually pointed to a funding structure that was created four, five or even six decades ago. Such outdated funding structures often do not align with current education and workforce goals or outright inhibit the implementation of high-quality CTE programs. SREB encourages Kentucky to determine the characteristics and competencies of the future workforce, establish goals for CTE completers and identify criteria for high-quality CTE programs. This information can help the state create a governance model that aligns with its needs. The state's funding model should then support the governance structure for tomorrow's workforce.

3. Establish goals for CTE program completers.

Once the characteristics and competencies for Kentucky's future workforce are determined, the state should develop desired outcomes for students who complete a CTE program of study in high school. In 2018, Kentucky developed the profile of a high school graduate. This profile can be expanded to identify the competencies CTE students should have.

Questions to ask include:

- What certifications or postsecondary credits should a student have at the end of his or her high school CTE experience?
- What types of work-based learning experiences will provide students with the employability skills needed to make a smooth transition from school to the workforce?
- What rate of successful transition from high school is acceptable for the state?
- Are students aware of high-wage, high-skill, in-demand career opportunities in the state?
- Do students know what education and training are needed to obtain in-demand jobs?

4. Identify criteria for high-quality CTE programs.

When developing criteria for high-quality CTE programs, SREB recommends that Kentucky focus on the five areas of SREB's research-based school improvement framework: *engaging instruction, aligned curriculum, career pathways, systems of support and leadership that promotes continuous improvement.*

In all CTE classrooms, qualified instructors should use research-based instructional strategies and innovative technology practices to engage each student. Schools and districts must provide teams of teachers with the training, time and support they need to work together to improve instruction. Curricula should engage students and allow time for teams of teachers to teach academic and technical content through the lens of real-world problems and projects. Schools and districts should ensure that each student develops and completes a personalized program of study that leads to success in postsecondary education or the workplace. CTE program offerings must align with in-demand careers in the region or state and provide each student with a continuum of real-world learning experiences that connect the classroom and the workplace.

Students in CTE programs must have access to guidance and advisement that empower them to pursue a full range of career and postsecondary options after high school. High-quality programs also provide students with the extra help or accelerated learning strategies they need to graduate ready to transition to their next step, whether that is a postsecondary education and training program, a well-paying job or military service. To achieve this, schools and districts must support a culture of high expectations. School leaders should engage the whole school and community shareholders in continuously using data to identify problems and develop plans to solve them.

5. Address access and equity when determining the funding model.

Any governance structure and funding model must address access and equity. SREB's research indicates that in urban, suburban and rural settings, school improvement frameworks like the one described above provide a structure that empowers schools to make the changes needed to expand or improve access to high-quality programs and ensure that all students — regardless of their gender, race, socioeconomic background, ability level or location — discover a purpose for learning and life.

Through funding from the New Skills For Youth initiative, Kentucky took a close look at its CTE offerings. The state's NSFY self-assessment identified gaps among CTE programs and in-demand careers, secondary and postsecondary offerings, technical and employability skill needs, and credential attainment. Kentucky can use this information to form regional career academies that address access. With the right funding model, Kentucky can also ensure equity across the state.

In addition to these considerations, Kentucky may wish to take this opportunity to align its state plans for three recently reauthorized federal laws that support public education, training and services from kindergarten through adulthood. Perkins V, the Every Student Succeeds Act and the Workforce Innovation and Opportunity Act require states to coordinate their work across agencies to ensure that states have a unified plan for improving achievement and fostering career development from childhood to the workforce.

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