



LEGISLATIVE BRIEF

ACCOUNTABILITY FOR CTE PERFORMANCE IN TENNESSEE

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Overview

Over the past several years, Tennessee has introduced multiple initiatives to promote career and technical education (CTE) for students across the state. In order to measure the success of CTE programs, data is collected at the state level and federal level through narrative reports, financial records, and performance data.

The purpose of this brief is to highlight the data sources available to evaluate CTE programs in Tennessee and provide the most updated information on students who participate in CTE programs in secondary and postsecondary institutions.

Background

The federal Perkins V Act is a reauthorization of the Carl D. Perkins Career and Technical Education Act of 2006, or Perkins IV, and provides federal funding for CTE programs for federal fiscal years 2019-2024.^A

To be considered for Perkins V funds, states were required to submit plans with the following items: descriptions of plan development and coordination, descriptions of program administration and implementation, descriptions of fiscal responsibility, descriptions of accountability for results, assurances and certifications, budget documentation, and state-determined performance levels (SDPLs).^B After a one-year transition plan during FY 2019, the four-year state plans cover federal fiscal years 2020 through 2023. For FY 2024, states can either submit a new four-year plan in preparation for future Perkins funds or submit annual revisions to their existing state plan. The Tennessee state plan includes an overview of CTE participation in Tennessee and the workforce development system in place to align CTE education with workforce needs.

CTE concentrators are high school students who have completed at least two courses in a single CTE program of study or postsecondary students who have earned at least 12 credits within a CTE program.

CTE participants are those who have completed at least one course in a CTE program of study.

As a recipient of Perkins V funding, Tennessee is required to submit annual reports that detail financial expenditures and performance data of CTE concentrators at secondary and postsecondary levels across Tennessee. The Perkins Collaborative Resource Network (PCRN)^C serves as the USDOE's CTE website and provides publicly available data as reported by states and agencies that receive funds under Perkins V. Reported enrollment and performance data from states is published on PCRN and an interactive data explorer tool allows users to apply filters by program year, state, enrollment type, education level, student subgroups, and career clusters.^D The most recent published data is from the 2020-21 program year.^E

Federal reporting requirements

Under Perkins V, states are required to submit a Consolidated Annual Report (CAR). The Tennessee Department of Education (TDOE) compiles CTE data annually to complete the CAR, which includes a narrative performance

^A Perkins V is formally known as the *Strengthening Career and Technical Education for the 21st Century Act* and went into effect July 1, 2019.

^B Tennessee's Perkins V State Plan is linked here: https://s3.amazonaws.com/PCRN/docs/stateplan/TN_2020_State_Plan.pdf.

^C PCRN website: <https://cte.ed.gov/>.

^D Career clusters are occupational categories in which a CTE student may choose programs. There are 16 nationally recognized career clusters that, in Tennessee, represent 56 programs of study that reflect statewide labor, economic, and postsecondary opportunities. There are multiple programs of study within a career cluster, and each outlines a sequence of academic, career, and technical courses and training that start in high school and lead to progressively higher levels of education and higher-skilled positions in specific industries or occupations.

^E Due to the disruptions caused by COVID-19, states receiving Perkins V funding were provided optional adjustments to certain requirements. For FY 2019-20, the first program year of Perkins V, states were required only to submit narrative information and enrollment data for CTE participants and concentrators and were not required to submit performance data.

report, financial status reports, and performance data reports. Performance data is reported on the indicators for CTE concentrators and participants listed in the pullout box.

In previous iterations of Perkins acts, a state would enter negotiations with USDOE and the Secretary of Education to determine the state performance levels. In Perkins V, however, the performance levels are determined by the eligible agency or state and then approved by USDOE and the Secretary. Perkins V outlines requirements for the state-determined levels of performance and includes the following: levels of performance must be expressed in a percentage or numerical form to be objective and quantifiable, states are required to make meaningful progress each year, and the levels of performance must have been subject to a public comment process. The state-determined performance levels (SDPLs) are submitted as part of the state plan and serve as the goals for secondary and postsecondary CTE education in the state.^F The exhibit below outlines Tennessee’s performance goals for the duration of the grant period.

USDOE specified secondary and postsecondary indicators that states and agencies use to report performance data:

- 1S1: Four-Year Graduation Rate
- 2S1: Academic Proficiency in Reading/Language Arts
- 2S2: Academic Proficiency in Mathematics
- 2S3: Academic Proficiency in Science
- 3S1: Post-Program Placement
- 4S1: Non-traditional Program Concentration
- 5S3: Program Quality – Participated in Work-Based Learning (WBL)
- 5S4: Program Quality – Ready Graduate Indicator
- 1P1: Postsecondary Placement
- 2P1: Earned Recognized Postsecondary Credential
- 3P1: Non-traditional Program Concentration

Exhibit 1: Tennessee performance level goals for secondary and postsecondary CTE concentrators

Indicators	Baseline level	Performance levels			
		FY 2020	FY 2021	FY 2022	FY 2023
Secondary indicators					
1S1: Four-year graduation rate	96.5%	96.5%	97.0%	97.5%	98.0%
2S1: Academic proficiency in reading/language arts	41.2%	41.2%	42.6%	44.0%	45.5%
2S2: Academic proficiency in mathematics	36.8%	36.8%	39.3%	41.7%	44.2%
2S3: Academic proficiency in science	51.4%	51.4%	53.6%	55.8%	58.0%
3S1: Post-program placement	81.7%	81.7%	82.8%	83.9%	85.0%
4S1: Non-traditional program concentration	29.9%	29.9%	30.4%	30.9%	31.5%
5S3: Program quality – Participated in work-based learning	9.4%	9.4%	12.5%	15.7%	18.8%
5S4: Program quality – Ready Graduate attainment	39.2%	39.2%	46.1%	53.1%	60.0%
Postsecondary indicators					
1P1: Postsecondary placement	48.0%	48.0%	55.3%	62.7%	70.0%
2P1: Earned recognized postsecondary credential	40.0%	40.0%	46.7%	53.3%	60.0%
3P1: Non-traditional program concentration	18.0%	18.0%	22.5%	27.0%	31.5%

Source: Perkins Collaborative Resource Network.

In the state plan, Tennessee set all performance indicators to a baseline level. The state is required to set all performance level goals so that they make meaningful progress toward improving the performance of all CTE students regardless of the determined baseline level. For each year the state plan is in effect, Tennessee assigned a target level to show incremental improvement on each indicator. For example, the four-year graduation rate performance level baseline was 96.5 percent of CTE concentrators graduating in four years. The baseline

^F The performance goals were submitted as part of the state plan and were approved by USDOE.

then rises incrementally over the years the state plan continues. By FY 2023, the four-year graduation rate performance level goal for CTE concentrators was 98 percent. Performance indicator goals are considered “met” if the state met 90 percent of the state-determined performance level. A program improvement plan is required to be submitted with the CAR if a state failed to meet at least 90 percent of a state-determined performance level for any of the core indicators.

In addition to CTE performance data, the PCRN website includes enrollment data for each recognized career cluster, detailed definitions and explanations of calculations, student counts, and disaggregated data for race and ethnicity subgroups, as well as special population subgroups. The overall progress toward Tennessee’s FY 2020 goals is included on PCRN. The table below details the state-determined performance levels (SDPLs) per indicator and the difference between the state-determined performance level goal and actual reported level of performance among CTE concentrators in Tennessee for the 2020-21 program year.

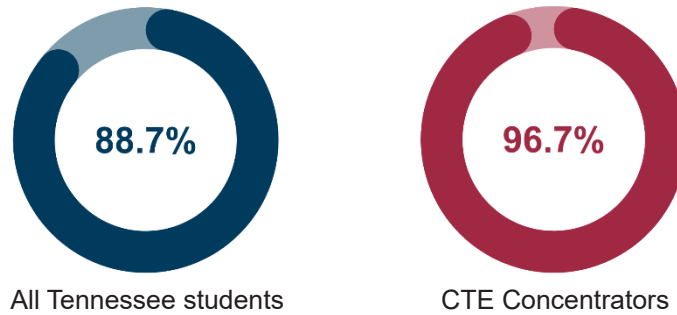
Exhibit 2: FY 2020 goals compared to the actual performance for academic year 2020-21

	FY 2020 SDPL	Actual performance	SDPL vs. actual
Secondary indicators			
1S1: Four-year graduation rate	96.5%	96.67%	+0.17
2S1: Academic proficiency in reading/language arts	41.2%	40.78%	-0.42*
2S2: Academic proficiency in mathematics	36.8%	24.42%	-12.38
2S3: Academic proficiency in science	51.4%	31.44%	-19.96
3S1: Post-program placement	81.7%	88.51%	+6.81
4S1: Non-traditional program concentration	29.9%	33.81%	+3.91
5S3: Program quality – Work-based learning	9.4%	19.95%	+10.55
5S4: Program quality – Ready Graduate attainment	39.2%	43.52%	+4.32
Postsecondary indicators			
1P1: Postsecondary placement	48.0%	76.43%	+28.43
2P1: Earned recognized postsecondary credential	40.0%	57.68%	+17.68
3P1: Non-traditional program concentration	18.0%	15.91%	-2.09

*Note: Indicator 2S1 is considered “met” because it met 90 percent of the performance level goal.
Source: Perkins Collaborative Resource Network.

The Consolidated Annual Report includes information on the four-year graduation rate for CTE concentrators, and the Tennessee state report card details the graduation rate for all Tennessee students. The graph below compares the four-year graduation rate of all students to the graduation rate of CTE concentrators for the 2020-21 academic year. The four-year graduation rate among CTE concentrators was eight percentage points higher than the 2020-21 graduation rate of all Tennessee students.

Exhibit 3: The 2020-21 four-year graduation rate of CTE concentrators was higher than the graduation rate of all Tennessee students



Source: Tennessee Department of Education and Perkins Collaborative Resource Network.

Perkins V requires that enrollment data and performance level data be disaggregated. Both enrollment and performance data on CTE concentrators in Tennessee are available by career cluster, race/ethnicity, gender, and special population groups. The exhibit below highlights the 2020-21 graduation rate for CTE concentrators by career cluster.

Exhibit 4: In 2020-21, all CTE clusters had higher graduation rates than the graduation rate for all Tennessee students

Career cluster	Graduation rate
Finance	98.67%
Health Science	98.48%
Marketing	98.38%
Science, Technology, Engineering, & Mathematics	97.60%
Information Technology	97.24%
Business Management & Administration	97.10%
Education & Training	97.02%
Law, Public Safety, Corrections & Security	96.96%
Arts, A/V Technology, & Communications	96.78%
Human Services	96.53%
Agriculture, Food, & Natural Resources	96.44%
Manufacturing	96.32%
Government & Public Administration	96.30%
Hospitality & Tourism	95.26%
Architecture & Construction	94.49%
Transportation, Distribution, & Logistics	93.95%
All Tennessee students	88.70%

Source: Perkins Collaborative Resource Network.

Similar performance data for each indicator is available on the data explorer tool on the PCRN website and includes tables and charts for indicators such as proficiency in core subjects for secondary CTE concentrators, post-program placement of secondary CTE concentrators, and placement rate of postsecondary students.

State reporting requirements

While the published PCRN data is reported at the federal level, TDOE oversees a data verification process to collect data from school districts for the same Perkins V indicators and other CTE-related initiatives in Tennessee. TDOE conducts an annual CTE data review for school districts. The review process has typically entailed three steps completed over several months during which school districts can ensure data reported to TDOE is accurate across all required data review categories. School districts submit middle school and secondary CTE enrollment data, early postsecondary opportunity (EPSO) completion data, CTE concentrator data, reports on industry credentials earned by students, programs of study available, Career and Technical Student Organization (CTSO) national membership information, and performance data for the Perkins V secondary indicators.

Data regarding CTE concentrators, including CTE concentrators by student group and CTE concentrator rates over time, are published on Tennessee's state report card. Districts determine how many students meet the criteria for CTE concentrator status, which is defined as a student who completes two or more credits within a single CTE program of study. The state report card indicates that 55.4 percent of Tennessee secondary students in the 2020-21 graduating cohort were CTE concentrators.

Conclusion

Tennessee's CTE initiatives and Perkins V legislation emphasize the importance of CTE programs leading to high skill, high wage, and in-demand occupations in current or emerging professions. Data reporting requirements can highlight how CTE students perform academically, as well as how closely aligned current CTE programs are with workforce needs at a local, regional, or state level. The data on PCRN and Tennessee's state report card are two such sources where stakeholders can get information on CTE programs and how CTE students are performing within career clusters, student subgroups, or programs of study. PCRN data reports on academic proficiency, post-program placement rates, and graduation rates of secondary CTE concentrators can inform future CTE programs and programs of study in a district or inform new or existing partnerships with local workforce leaders. For postsecondary students, PCRN data can highlight trends in post-program placement across career clusters or the rate at which CTE students earned a recognized postsecondary credential leading to an in-demand occupation. With continued investments in CTE programs from federal, state, and local entities, accountability measures will seek to ensure that funds support students in developing academic knowledge and technical and employability skills through CTE programs at secondary and postsecondary institutions.

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