



State OF CTE

The State of Career Technical Education: An Analysis of State Secondary CTE Funding Models

CASE STUDY

Massachusetts

Massachusetts is the 45th-largest state by area in the United States and consistently ranks as the top state in education and health care.¹ Career Technical Education (CTE) has played a large role in the state's strategy to support its industry and economic base by strengthening its talent pipeline. This case study highlights efforts by Massachusetts to support and expand secondary CTE through funding.

In FY 2022, Massachusetts allocated approximately \$388 million of categorical funding to secondary CTE, making it the third-largest CTE state investment, but the state ranked 34th in the United States for total secondary CTE enrollment. Massachusetts' state funding for secondary CTE per full-time equivalent (FTE)² was \$6,095 in FY 2022, which ranks second in the United States. The funds are administered through the Massachusetts Department of Elementary and Secondary Education (DESE),³ which is also the eligible agency for the administration of the state's \$22 million federal allocation under the Carl D. Perkins Career and Technical Education Act, as amended by the Strengthening Career and Technical Education for the 21st Century Act (Perkins V).⁴ This allocation ranks 22nd in the United States for federal CTE investment.

Massachusetts



Secondary CTE Education Context

DESE oversees the education of children in prekindergarten through grade 12, striving to ensure that all learners in Massachusetts succeed. The commissioner of DESE must approve public CTE programs by district and school. Secondary CTE is delivered through comprehensive high schools (with embedded career programs), regional technical districts, technical schools operated by local districts and county agricultural schools.

Career technical (vocational) education is specifically mentioned in Massachusetts' General Education Laws in Chapter 74.⁵ The Office for Career and Technical Education at DESE administers Chapter 74 and Perkins V programs in public school districts. Chapter 74-approved CTE programs are state-approved CTE programs that include at least 900 hours of immersive coursework/learning, opportunities to earn a Safety and Essential Industry Credential, and immersive work-based learning such as cooperative education, along with other requirements set forth in Chapter 74 law and regulation. Learners may also participate in locally approved programs that have different requirements for learner experience and outcomes.⁶ In addition, learners may attend out-of-district programs through non-resident tuition and school choice policies. In 2020-21, Massachusetts had 320 public high schools enrolling 63,660 learners in secondary CTE, of which 26,335 CTE were concentrators.⁷

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Massachusetts CTE Funding Overview

Massachusetts provides funding on a per-learner basis to districts reporting enrollment in state-approved programs. The state allocates funding through its **Chapter 70 funding model**, a long-standing formula developed in 1993 as part of the Education Reform Act.⁸ The Chapter 70 program is a major program of state aid to public elementary and secondary schools. It also establishes minimum spending requirements for each school district and minimum requirements for each municipality's share of school costs. Six factors work together to determine a district's Chapter 70 funding: enrollment, wage adjustment, inflation, property value, income and municipal revenue growth factor.⁹

6 factors

WORK TOGETHER TO DETERMINE A DISTRICT'S CHAPTER 70 FUNDING:

1. enrollment
2. wage adjustment
3. inflation
4. property value
5. income
6. municipal revenue growth factor



UNIT-BASED FUNDING APPROACH

Massachusetts dedicates categorical funding to secondary CTE, which is distributed using a unit-based formula. Categorical funding is dedicated state funding for CTE programs that is distributed to districts to support CTE.¹⁰ Massachusetts provides a higher per-pupil amount for learners enrolled in state-approved CTE programs. Although not actually documented, there is an assumption that costs for CTE learners in state-approved CTE programs are proportionally higher relative to other learners because the delivery of CTE is typically more expensive.

EXAMPLES OF PER-LEARNER COSTS ACCOUNTED FOR IN THE CALCULATIONS INCLUDE:

- instructors
- books
- instructional equipment
- technology
- learner services
- professional development



Considerations for Creating Opportunities for All Learners

In 2019, Massachusetts passed An Act Relative to Educational Opportunity for Students, commonly known as the Student Opportunity Act (SOA), to better address equity gaps in educational experiences and outcomes across racial and ethnic groups, communities with economic disadvantages, learners with disabilities and English language learners.¹¹ The SOA increased Chapter 70 funds by including new categories of learners that earn incremental additional funding – English language learners and learners with low income – increasing Chapter 70 funding by more than \$300 million dollars. The landmark legislation acknowledged public schools were underfunded and set a state requirement to fund the shortfall by FY 2027.

The infusion of funding introduced by the SOA benefits districts and schools offering approved CTE programs and provides additional support to districts that enroll greater shares of English language learners and learners with low income. The SOA also established a process similar to Perkins V's Comprehensive Local Needs Assessment, in which districts must develop three-year, evidence-based plans for how they will use new funding to close equity gaps.¹² Regional career technical school districts are public Local Education Agencies and must meet these same expectations. This process promotes CTE as evidence-based programs that districts should consider for inclusion in their plans.

The state has also explored ways to expand access for learners through a Chapter 74 Partnership Program called After Dark, in which learners take core academics at their home high school and CTE studies at a regional technical school after school hours or through other flexible schedules.¹³ Typically, learner demand for CTE programs exceeds the number of available spots in Massachusetts. Schools partner with other school districts or schools within a single district to provide CTE opportunities outside of typical school hours when technical facilities are underused.



Looking Ahead

CTE is well funded in Massachusetts on a per-learner basis, but it is important to note that categorical funding allocations are made based on lagged enrollment data. Additionally, while it is too early to say what the impact of the SOA will be, there are opportunities to improve data collection. Better data collection will help stakeholders understand how districts and schools use state funds to improve access to and completion of high-quality CTE, as well as to tell the story of CTE's impact on learners. DESE is also working to improve Chapter 74 CTE frameworks and inviting educators and stakeholders to provide input.

Visit ctek12funding.careertech.org for additional details and resource of the different models states use to provide funding for secondary CTE.

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End Notes

- ¹ McNamara, N. (2023). *Massachusetts ranked top state in U.S. for low crime, education*. <https://patch.com/massachusetts/across-ma/massachusetts-ranked-top-state-u-s-low-crime-education>
- ² An FTE learner is enrolled in an education program. Full-time status is typically determined by number of courses or instructional hours.
- ³ Massachusetts Department of Elementary and Secondary Education. (n.d.). <https://www.doe.mass.edu/>
- ⁴ Advance CTE. (n.d.). *Massachusetts*. <https://careertech.org/massachusetts>
- ⁵ The 193rd General Court of the Commonwealth of Massachusetts, Mass Gen Laws Chapter 74 § 13. <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXII/Chapter74>
- ⁶ Massachusetts Department of Elementary and Secondary Education. (n.d.). *State-approved vs. local CTE programs*. <https://www.doe.mass.edu/ccte/cvte/cte-families/state-vs-local.html>
- ⁷ Advance CTE. (n.d.). *Massachusetts*. <https://careertech.org/massachusetts>
- ⁸ Massachusetts Department of Elementary and Secondary Education. (n.d.). *Chapter 70 program*. <https://www.doe.mass.edu/finance/chapter70/>
- ⁹ Massachusetts Budget and Policy Center. (2010, October). *Demystifying the Chapter 70 formula: How the Massachusetts education funding system works*. https://massbudget.org/reports/pdf/Facts_10_22_10.pdf
- ¹⁰ U.S. Department of Education, Office of Career, Technical, and Adult Education. (2014). *State strategies for financing career and technical education*. <https://files.eric.ed.gov/fulltext/ED555236.pdf>
- ¹¹ Massachusetts Department of Elementary and Secondary Education. (2021, January 27). *FY2022 preliminary Chapter 70 aid and net school spending requirements*. <https://www.doe.mass.edu/finance/chapter70/fy2022/preliminary.html>
- ¹² Advance CTE. (2022, January). *Lessons in collaboration and innovation: The impact and promise of the Comprehensive Local Needs Assessment*. https://careertech.org/resource/CLNA_Impact_Promise
- ¹³ Massachusetts Department of Elementary and Secondary Education. (n.d.). *Chapter 74 partnership program ("after dark")*. <https://www.doe.mass.edu/ccte/cvte/afterdark/>