



# Enrollment and Employment

Is Tennessee Preparing K-12 Students  
for Today's Economy?



## Introduction

The goal of K-12 education is to give students a foundation to enter the workforce or pursue higher education. So, are Tennessee graduates ready for the real world? Despite a record high graduation rate, the unfortunate reality is that nearly seven out of 10 recent Tennessee graduates feel traditional high school failed to prepare them for a job.<sup>1</sup> Nationally, 82 percent of Americans believe K-12 public education is not preparing students for the modern workforce.<sup>2</sup>

Tennessee has seen a boom in high-tech and high-skilled jobs arriving in the state. In recent years, Oracle, xAI, Amazon, and Google have all made investments in the Volunteer State.<sup>3</sup> In Middle Tennessee, job growth in tech has reached an estimated 18 percent from 2022 to 2027, exceeding national tech growth and overall job growth by seven percent each.<sup>4</sup> But job opportunities are not only in the tech sector, with skilled trades facing a shortage in available workers.<sup>5</sup> Despite increasing job opportunities, in industries like tech and the trades, a skills gap exists. Consequently, fewer than 27 percent of business leaders believe that there is an ample supply of locally trained workers for their employment needs.<sup>6</sup>

Tennessee needs to set its future on a clear path and meet the needs of the modern workforce. While K-12 education has taught students, for example, the important fact that mitochondria are the powerhouse of the cell, Tennessee students feel they're not being prepared to be the powerhouse of the state's economy. K-12 education must strive to better equip students with the knowledge and skills to enter the workforce or pursue higher education in a field that allows them to earn a living without being burdened by immense student loan debt. Tennessee is doing well in providing Career and Technical Education (CTE) opportunities to students, but policymakers should recognize that improvements can be made.

# Career and Technical Education

In 2021, Tennessee was recognized by Chiefs for Change, a national organization focused on workforce readiness, for the state’s work on CTE career pathways and programs. But the state should not rest on its laurels.<sup>7</sup> Taxpayers have invested hundreds of millions of dollars to improve CTE opportunities, and funding has not only increased but improved to be more aligned with today’s economy. Tennessee’s previous school funding formula required a local school district to place money in CTE programs to receive state CTE funds, but the new funding formula, the Tennessee Investment in Student Achievement, includes 100 percent state-funded money for CTE, with additional funding for programs focused on in-demand occupations.<sup>8</sup> These investments have welcomed some promising data that shows Tennessee has done well when students are engaged in these types of programs.<sup>9</sup> Students with a CTE concentration (completing at least two courses in a single CTE program) have a graduation rate of nearly 98 percent, in contrast to the statewide graduation rate of 90.6 percent for the 2022-2023 school year.<sup>10</sup>



## More Tennessee Students Are Deciding to Become CTE Concentrators

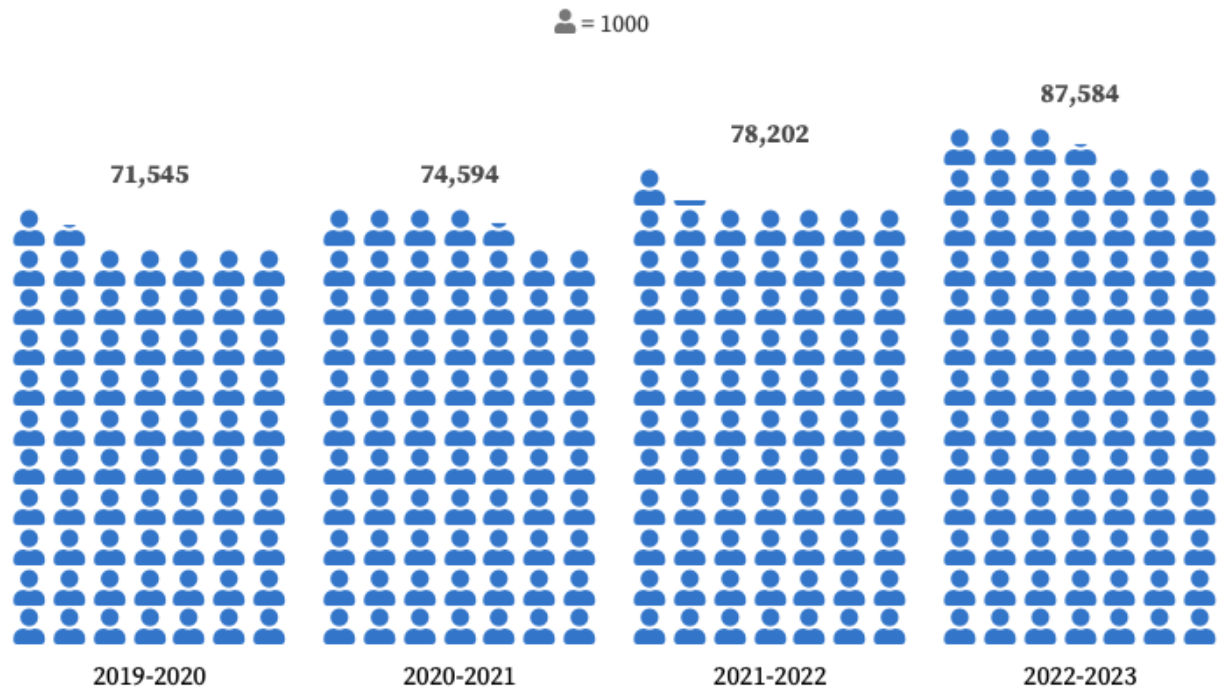


Figure 1. Tennessee CTE Concentrators have grown year over year.<sup>11</sup>



In addition to improved student outcomes, the state has also seen higher numbers of students concentrate in CTE coursework. The types of programs, which are much more than just the classic trades of woodworking and HVAC repair, span from architecture to finance to nursing and more. Here, Tennessee has offered ample opportunities to students, and some educators believe CTE is the reason kids are staying in school.<sup>12</sup> CTE can offer engaging, hands-on coursework that can lead to industry credentials or a pathway to higher education. CTE courses can mean aviation training, music production in a recording studio, and raising cattle.<sup>13</sup> These programs are not limited to wealthy or urban districts; data suggests rural students are actually more likely to be CTE concentrators.<sup>14</sup> With such a wide range of programs, students would be hard-pressed not to find a CTE program that suits their interests and abilities.

Despite the plethora of programs, the fact remains that nearly seven out of 10 young adults believe traditional high school does not adequately prepare graduates for the workforce. One state that has made workforce preparedness, higher

education, or military service a pillar of its K-12 education is Indiana. The Hoosier State passed new graduation requirements, which include a base diploma with the option of three “pathway seals” from which students can choose.<sup>15</sup> These pathways include higher education, job preparedness, or connections with the Indiana National Guard and other military branches.<sup>16</sup> Recognizing that not everyone goes to college, Indiana has set students up to choose their potential future while still in high school. Instead of requiring every public school student to meet the same standards that have historically focused on pursuing higher education, students now can take a personalized approach to education and focus on their interests, prepared and confident for their next step after graduation.<sup>17</sup>

If a student does want to pursue higher education, Indiana’s enrollment pathway grants automatic acceptance into all seven state colleges and universities, including Indiana State, Ball State, and Purdue.<sup>18</sup> For students looking for a career, the employment pathway has set up key partnerships with multiple industries and top employers, offering dedicated support for interviews and career opportunities.<sup>19</sup> Finally, for those students who wish to serve in the military, the enlistment pathway provides opportunities in the Indiana National Guard, partnerships to explore each military branch, as well as connections with public safety officials.<sup>20</sup> This pathway offers access to veteran mentors, military career counselors, and job placement programs.

Tennessee trends show enrollment headcount in two- and four-year institutions has nearly flatlined in the past decade, but the Tennessee College of Applied Technology (TCAT) enrollment headcount has boomed nearly 70 percent in just the last five years.<sup>21</sup> Having high school graduation requirements that place college or university as the ultimate goal may not be the most beneficial thing for students or the state’s economy. With increasing shortages in skilled labor and an evolving job market thanks to tech companies moving to the state, Tennessee students may benefit from designated pathways that offer clear but differing avenues to where they see their future career.



# Partnerships, Innovation, and Expanding Options

Tennessee is facing a shortage of skilled trade workers, but this is not specifically a Tennessee issue.<sup>22</sup> Nationally, there is a dire need for skilled tradespeople.<sup>23</sup> While the state has done well with CTE offerings, organizations and businesses have seen the gap left by K-12 education and meaningful employment. Ford, which is slated to open Blue Oval City, has invested in building “Future Builders Labs” in Michigan and Tennessee.<sup>24</sup> Additionally, they have funded scholarships for trade schools, partnered with SkillsUSA to help high school students with technology and tools relevant to the automotive industry, while also providing mentorship and career exploration opportunities.

K-12 partnerships with businesses and organizations are essential for students to experience different career paths. But even with public and private investment, there is still a disconnect between K-12 education and today’s economy. For many students who attend a four-year college, they are left with enormous debt and, in some cases, skills and knowledge that can be outdated by the time they graduate.<sup>25</sup>

Realigning the state’s graduation requirements and class structure could provide benefits to students and the state economy as a whole. The economy today is largely different than what it was just 50 years ago, but the vast majority of education has remained relatively the same.<sup>26</sup> Tennessee has worked to create Innovative School Models in middle and high schools, offering career-oriented instruction, industry credentials, and more.<sup>27</sup> In addition, the state’s education savings accounts and education freedom scholarship programs give students the ability to attend schools that better suit their needs, which can include innovative private schools that have a focus on career or higher education pathways.<sup>28</sup>

In Tennessee’s public charter schools, specific careers are now forming the basis of education. At the Nurses Middle College in Nashville, students will receive their traditional high school curriculum and graduate with a diploma, but they will also

receive nursing training and clinical hours.<sup>29</sup> Educational options like this have caught the attention of one of the best hospitals in the nation, Vanderbilt University Medical Center. Being the largest employer in Nashville that employs thousands of nurses, Vanderbilt is looking to solve the “alarming decline in the nursing workforce.”<sup>30</sup> Partnerships with K-12 and local industry not only give students new career opportunities but can improve the community as a whole through pathways to in-demand careers.

Tennessee has a lot to offer students in traditional public and charter K-12 CTE programs or through the private school choice programs. While there is still a gap between student graduation and workforce readiness, the state now offers students more opportunities to explore careers. Reimagining education and giving the freedom to parents and students to choose paths for their future can help further close the graduation-skills gap. Tennessee is facing a tech and trades boom, and innovative, career-focused opportunities exist for the next generation. From AI to welding, nuclear energy to woodworking, Tennessee education should better prepare students for high-paying and in-demand jobs.



# Conclusion

Tennessee has done well to prepare students for local job markets and in-demand jobs if they participate in CTE programs. However, job opportunities have outpaced participants, and many businesses require more skilled workers. Both student and business leader surveys have shown there is still a disconnect between K-12 education and the Tennessee economy. Policymakers should be proud of their work to make Tennessee's well-regarded CTE programs a benefit to students. Yet, further increasing awareness and participation in CTE programs can give students a pathway to a high-paying and in-demand job, and Tennessee has more important work to do in this area. By looking to Indiana as a guide, Tennessee could institute further policy changes, detailed below, to set up students for success after high school graduation.

## Policy Recommendations

Create multiple high school diploma pathways that more directly prepare students for their chosen "next step" after graduation.

Align entrance criteria at state colleges and universities with K-12 graduation requirements so students are granted automatic acceptance, similar to Indiana.

Incentivize local and state wide industry partners to form deeper partnerships with K-12 education systems by removing bureaucratic red tape, and allow for more work-based learning and hands on experience before high school graduation.



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