

Enabling the Competitive Edge: Tennessee Higher Education in the New Economy

Master Plan Update 2020



2019-20 COMMISSION MEMBERS

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INTRODUCTION

This document is about the role higher education will play in the future of Tennessee's economy. As emerging technologies have created a pace of change faster than at any time in history, navigating this challenge requires the full commitment of our colleges and universities. Tennessee's public campuses possess unmatched intellectual capabilities, enduring community ties, and world-class research capacity unmatched by any other entity in this state. It is critical, therefore, that there is a roadmap for postsecondary engagement in the crucial task of shoring up the state economy where it is already strong, and building new capacity where it is needed. This update to the 2015-2025 Tennessee Higher Education Master Plan intends to serve as that guide.

Higher education strategic plans often suffer from a crippling case of insularity, developing goals detached from the reality of the average household and delivered in a complex format. This virtually assures no one will read them. This plan seeks to avoid this fate by establishing a simple framework, focusing on the success of our students, prosperity for Tennessee's families, and our state's workforce.

If we make progress in each of these areas, higher education will have been the catalyst for meaningful change, but will not be the most important beneficiary. The by-products of improved college affordability, gains in student success, and awarding high-need degrees will, as the title of this report indicates, develop a competitive edge in recruiting high quality jobs to our state. Closely allied to the economic impacts of a better-educated Tennessee are the societal effects: reductions in crime and recidivism, improvements to public health, and improved civic engagement.

The profound impact of a college degree on even one student would make the effort worthy, but when the multi-generational effects are considered, meeting the task ahead is not just the obligation of public higher education, it is a moral duty.



Mike Krause
Executive Director
Tennessee Higher Education Commission

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EXECUTIVE SUMMARY

The Tennessee Higher Education Commission (THEC) adopted the Master Plan for Tennessee Postsecondary Education 2015-2025 in 2015. Published as Tennessee was launching the Drive to 55, the 2015-2025 Plan includes state and system-level projections of the necessary degree production to reach our state's ambitious attainment goal. As a complement to the Plan, this update presents action-oriented, tactical strategies to support Tennessee's students and institutions toward greater success and improved workforce alignment, while continuing to focus on increasing the state's educational attainment.

Following discussions of Tennessee's higher education landscape and progress toward the Drive to 55, this update is organized into three sections, focusing on critical constituencies served by public higher education in Tennessee: Student Success, Family Prosperity, and The Future Workforce.

Each of these three sections is divided into subsections, highlighting success stories across campuses and presenting actionable, measurable goals toward which the state and its institutions will work over the next 10 years. The subsections are organized as follows:

Student Success

- Academic Readiness
- Access to Higher Education
- Completion

Family Prosperity

- Affordability
- Transparency
- Outreach to Adults

The Future Workforce

- Future of Work
- CTE and Work-Based Learning
- Academic Program Approval

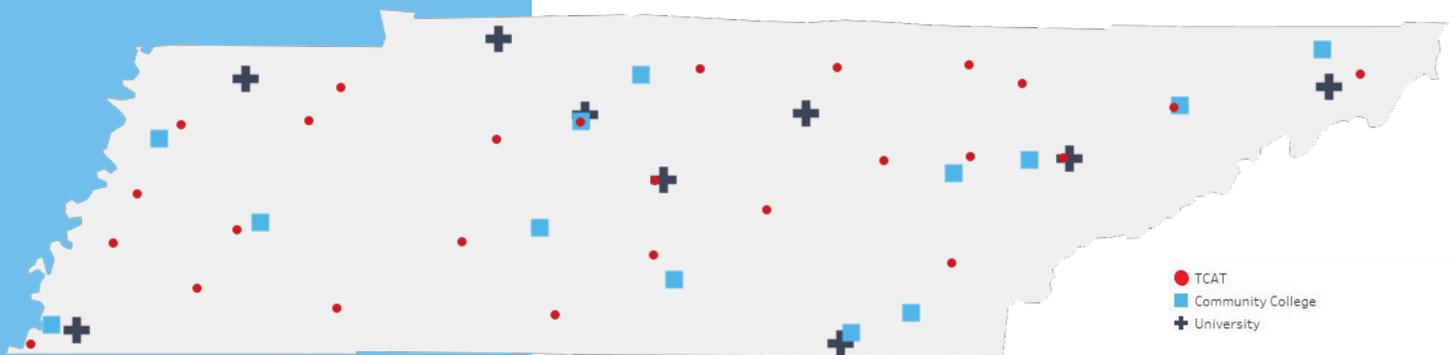
Finally, THEC staff recommends strategies and best practices to progress toward each stated goal. While each strategy's implementation will look different campus-by-campus to meet the needs of each institution's unique student body, we must commit as a state and as a higher education enterprise to working collectively, cooperatively, and intentionally to best serve the needs of students, their families, and Tennessee's economy.

DATA SNAPSHOT



Public higher education in Tennessee is comprised of nine universities, 13 community colleges, and 27 Colleges of Applied Technology (TCATs) across the state.

The map below depicts the main campus locations for each of these institutions; several campuses also have satellite locations, which allow institutions to serve Tennesseans beyond their main campuses and in their local communities. While each of these institutions serves unique and diverse students, the state must continue to prioritize and make strides toward access, inclusion, and equity for all student subgroups.

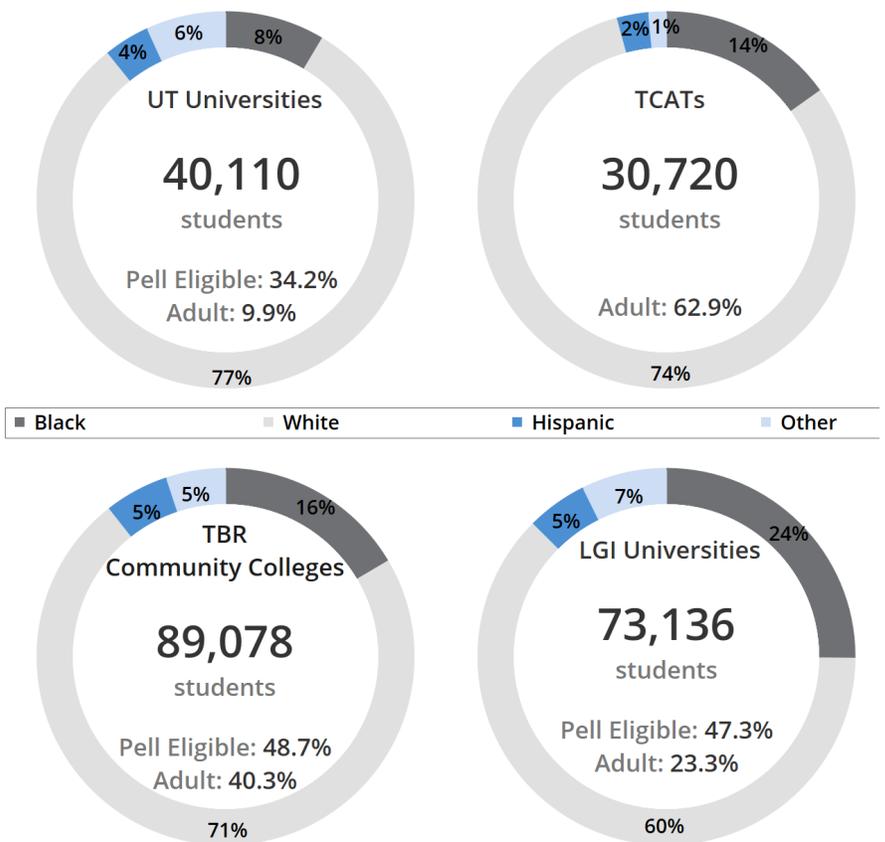


Note: For more information about off-campus sites and centers, please visit www.tn.gov/thec for location details. Please also refer to the Tennessee Higher Education Fact Book.

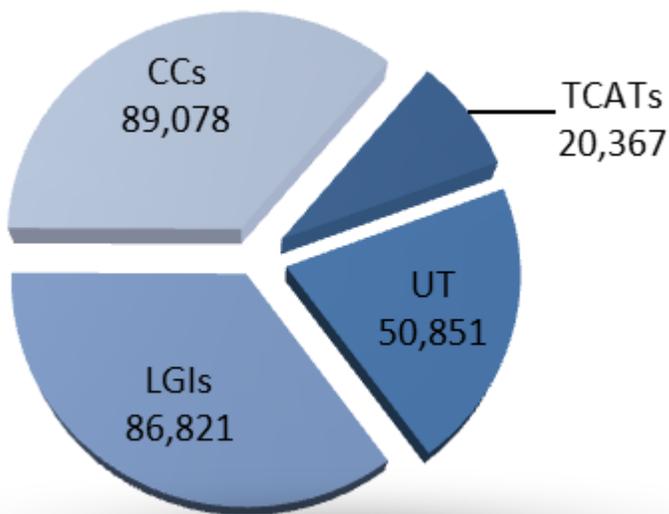


These institutions served over 230,000 students in the past academic year.

The figure to the right illustrates the composition of undergraduate students in Tennessee’s public colleges and universities. Despite improvements in access and affordability for all Tennesseans, low-income students and students of color continue to be underrepresented in our state’s public higher education enterprise.



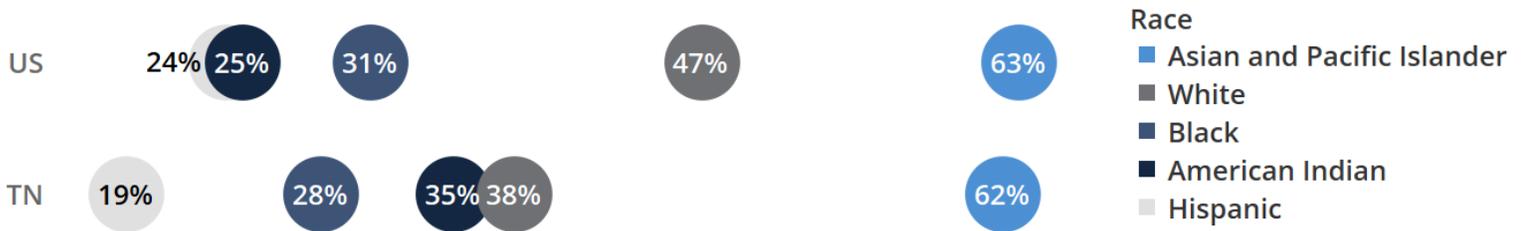
Note: TCAT data represent the 2017-18 academic year. Community College and University data represent fall 2018.
Source: THEC Student Information System



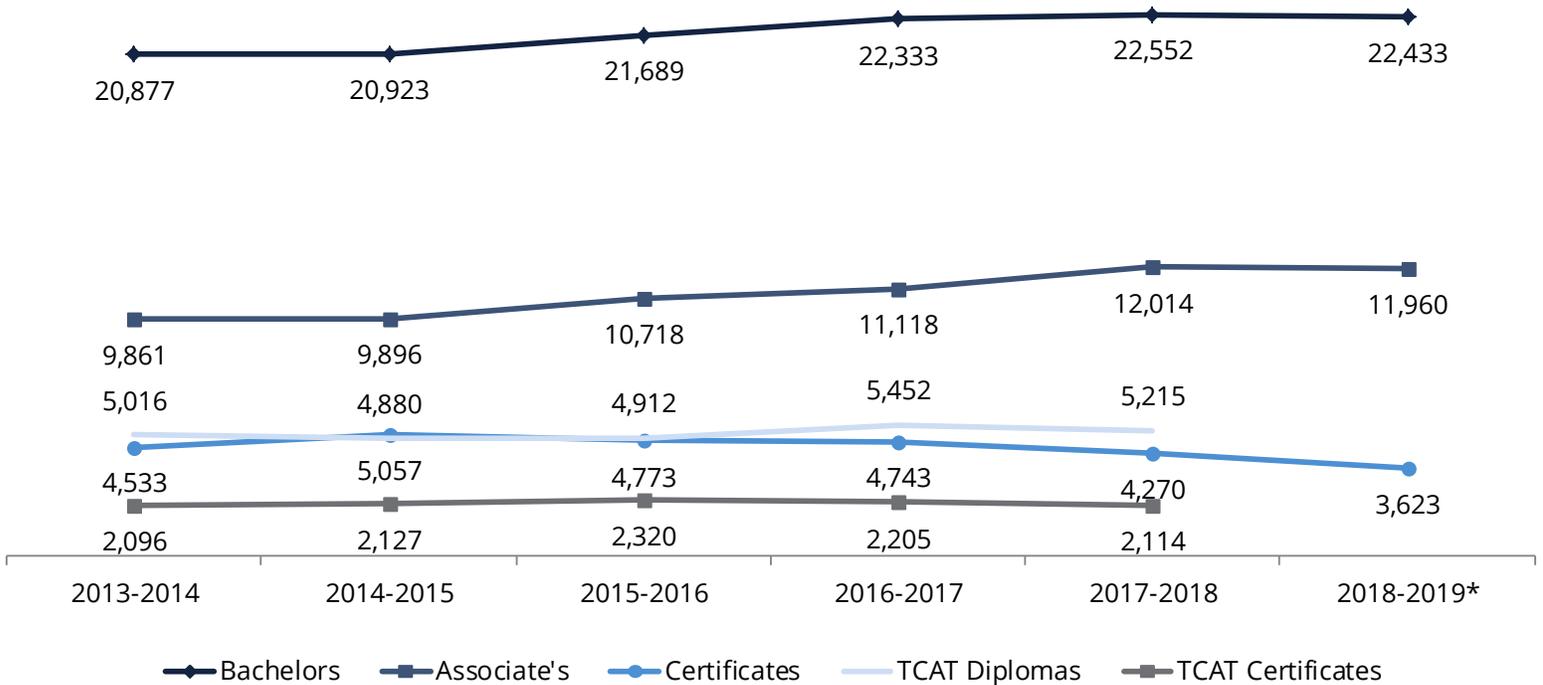
The pie chart illustrates the enrollment distribution of public higher education, including both undergraduate and graduate students. The community college sector enrolls the largest share of students (36%) followed by the Locally Governed Institutions (LGIs).

Note: All data represent fall 2018.
Source: THEC Student Information System and Tennessee Board of Regents

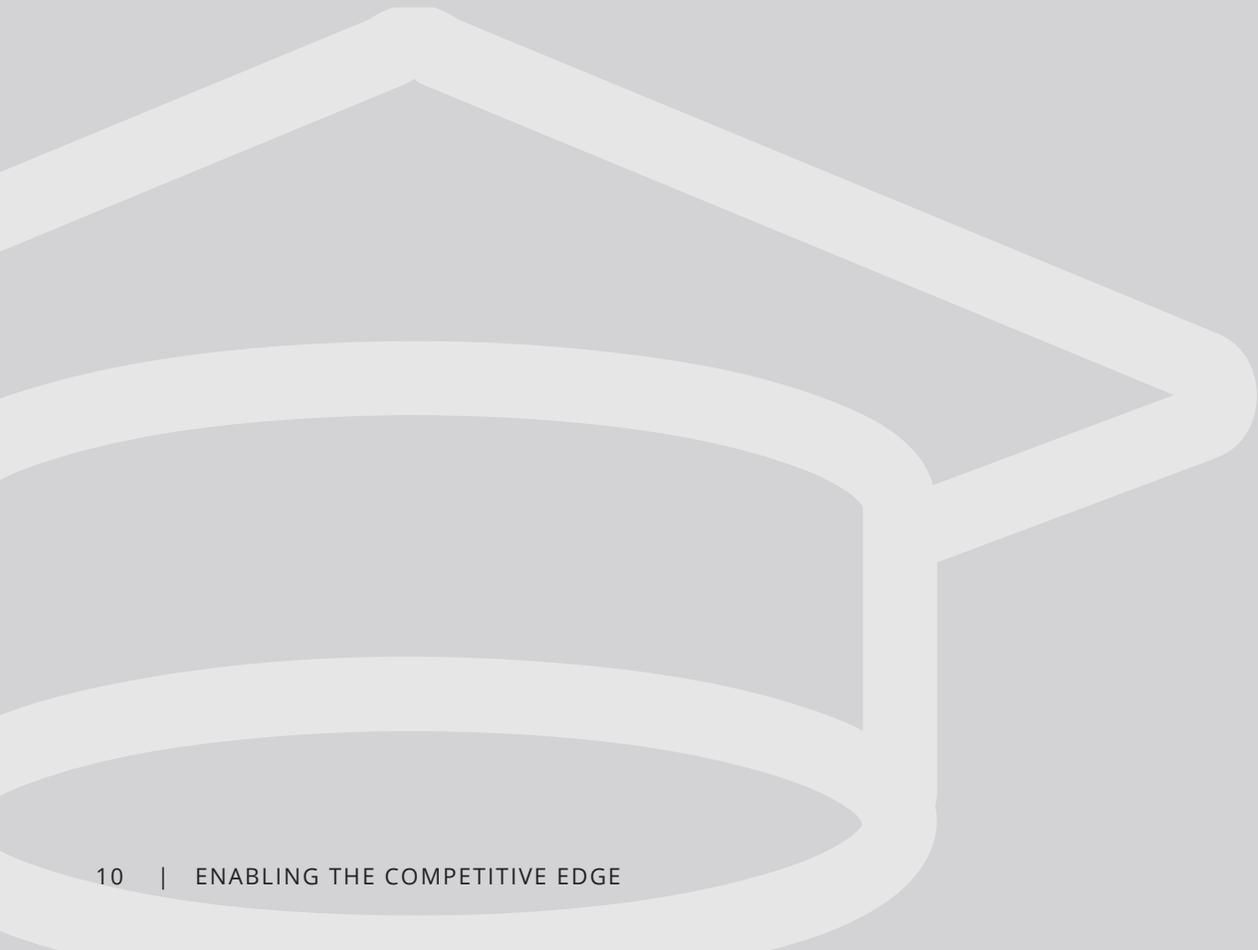
Further, gaps in educational attainment exist by race. These gaps must be addressed through state-level policy interventions (i.e., expanded dual enrollment opportunities, convening stakeholders around racial and socioeconomic equity) as well as tactically (i.e., mentorship programs, targeted student supports) at each of Tennessee's higher education institutions.



In pursuit of the Drive to 55, degree production has increased across all institution types and degree levels over the past five years. This is testament to the hard work of students and the commitment of campus administrators, faculty, and staff focused wholly on student success.



Source: THEC Student Information System
 *TCAT data not yet available for AY 2018-19



STUDENT SUCCESS

READINESS —

ACCESS —

COMPLETION —

READINESS

It is important that students graduate from high school prepared for postsecondary education. Across the state, K-12 and higher education professionals collaborate to ensure that initiatives supporting college readiness are aligned with the curriculum, standards, and demands of higher education.

Current Efforts

Seamless Alignment and Integrated Learning Support (SAILS)

Launched in 2013, the SAILS program delivers developmental math coursework to students during the senior year of high school, avoiding the need for Learning Support once enrolled in higher education. SAILS coursework is aligned with community college Introductory Mathematics (MATH1010) standards and curriculum, and is currently offered in 274 high schools across Tennessee. The proportion of community college students requiring Learning Support in math has decreased 14 percentage points since 2011, from 71 to 57%.

Early Postsecondary Opportunities (EPSOs)

EPSOs (i.e., Advanced Placement, dual enrollment, and dual credit courses) provide students the opportunity to earn postsecondary credit while still attending high school. These course offerings, particularly dual enrollment courses offered in partnership with higher education institutions, have increased substantially over the past five years. While this growth is impressive, much more must be done to increase EPSO offerings and diversify the types of students taking these courses beyond those who are high-achieving, non-minority, and high income.



Goals and Metrics

Increase enrollment in EPSO courses: Enrollment in these courses, particularly dual enrollment, will increase by at least 10 percentage points (N = 2,250) over the next five years. THEC/TSAC will focus its efforts on expanding opportunities for students living in distressed counties and students who are traditionally underserved (i.e., male, nonwhite, lower income) by EPSO courses.



SAILS Math teacher Mr. Jon Nelson is the SAILS instructor at McGavock High School. He actively engages with students each day by monitoring their progress and regularly meeting one-on-one to discuss problem areas and strategies for success. He encourages students to collaborate and tutor each other, rather than rely solely on him for assistance. Mr. Nelson instills in his students the value of independent learning with support. He believes that healthy accountability is a necessity in life and that SAILS offers that to students.

ACCESS

Tennessee is a national leader in college access, with initiatives ranging from an enduring GEAR UP grant to the Tennessee Promise and Tennessee Reconnect scholarships. These initiatives, however, mean little to everyday citizens without a robust effort to inform them about the state's diverse postsecondary options. In collaboration with high school counselors and community partners, THEC/TSAC staff work to ensure that students have complete information about their best postsecondary paths, whether they are entering higher education immediately following high school or returning as adults.

Current Efforts

AdviseTN

AdviseTN is a corps of college advisors who serve students in 33 of our state's neediest high schools. These advisors support students through the college and financial aid search, application, and enrollment processes. Since this program's inception, overall FAFSA filing has increased 10 percentage points (74% to 84%) in schools served by an AdviseTN advisor.

Outreach

The nine-member THEC/TSAC outreach team travels the state to inform high school students about federal and state financial aid opportunities, facilitate FAFSA completion, and support students as they make their college-going decisions. During the 2018-19 academic year, the outreach team facilitated 2,925 events, serving over 88,000 students and families. As a result of these critical efforts, Tennessee's FAFSA-filing rate has increased 12 percentage points to 80% over the past five years, growth that has resulted in students across Tennessee receiving more financial aid dollars than ever.

Navigate Reconnect

Informing adults about available higher education opportunities looks, by necessity, different from engaging with high school students. Across the state, 12 Reconnect Navigators provide adults who want to (re)engage with higher education with institution-neutral guidance about programs of study, financial aid, and potential workforce outcomes. This initiative will be discussed in greater depth later in this document.



Goals and Metrics

Increase college-going in distressed counties: The overall college-going rate (the percentage of students enrolling in higher education immediately following high school) in Tennessee's 15 distressed counties will increase by 4 percentage points in the next five years.

Increase FAFSA filing rate: Tennessee's FAFSA filing rate will increase 4 percentage points, to 84%, in the next five years. Outreach efforts will focus on distressed counties and students who are typically underrepresented in higher education.



“Advise TN means the ‘difference’ for students in Hickman County: a ‘difference’ in choosing the best college and career fit, a ‘difference’ in completing all the necessary paperwork to enroll and be accepted into their college of choice, a ‘difference’ in believing that college is possible for them. Advise TN has provided guidance and helped students remove barriers, and created confident, college-going students who will be successful.”

Kathy Dick
Supervisor for grades 6-12
Hickman County Schools



COMPLETION

While Tennessee has made enormous strides to ensure students enroll in higher education, it is critical that they persist and complete their credential. THEC/TSAC has partnered with institutions across the state to initiate interventions to directly support students and encourage completion. While Tennessee has led the nation in completion initiatives over the past two decades, much work remains to increase student persistence and completion across the state's higher education institutions.

Current Efforts

Intrusive advising

Based on best practices modeled by Georgia State University, institutions across Tennessee have increased the intensity of their advising. Each of the 13 community colleges, for example, now employs completion coaches and professional advisors to help students navigate the college experience. These coaches and advisors not only help students with scheduling and course plans, but intervene via email and text message when a student falls off track.

Cohorting and prescribed scheduling

Assigning groups of students to cohorts that will take courses together is widely considered a best practice throughout higher education. Students feel as though they are part of a unit, and can support and learn from each other. TCATs do this very well: students who are enrolled in a particular program of study take all of their courses with the same group of peers. Further, this limits student choice – students are not given a catalog of courses and asked to choose what to take, they are simply placed into courses with their cohort.

Targeted interventions

Postsecondary institutions have implemented campus-specific interventions (i.e., Summer Bridge programs, peer mentorship programs) to encourage and support students, particularly those from traditionally underrepresented populations. With support from the Lumina Foundation, five institutions across the state initiated programs to support African American and Latino students, working with them to complete credentials and introducing critical conversations about racial gaps in completion across Tennessee.

It is important to note, however, that these initiatives have not yet been deployed in a uniform fashion across the state. Roane State Community College and the University of Tennessee, Chattanooga, for example, have led in this space and have experienced substantial increases in retention and completion as a result. Other campuses across Tennessee have much to learn from their successes.

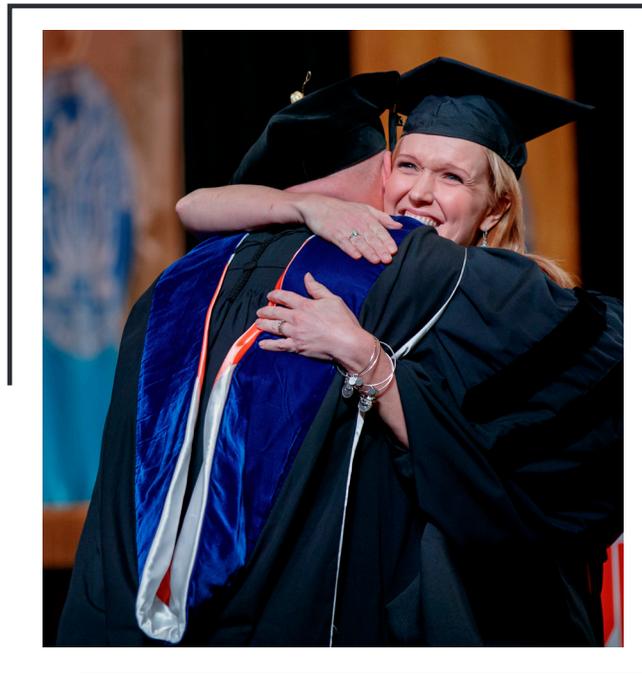
The initiatives these campuses have implemented are not new inventions, but rather are examples of campus leaders having the will and courage to do things that may seem difficult, but that are necessary to serve students.



Goals and Metrics

Progress toward 55% attainment goal: THEC will continue to support institutions to increase their completion rates and the number of degrees conferred in pursuit of the Drive to 55. As mentioned above, Tennessee’s educational attainment rate is currently 43%. To reach 55% in the next five years, approximately 80,000 Tennesseans must earn a postsecondary credential each year. THEC projects based on prior years’ data that approximately 30% of these degrees will be granted by public universities, 15% by community colleges, and 10% by TCATs.¹

¹ Postsecondary Attainment in the Decade of Decision: The Master Plan for Tennessee Postsecondary Education 2015-2025. p.14.

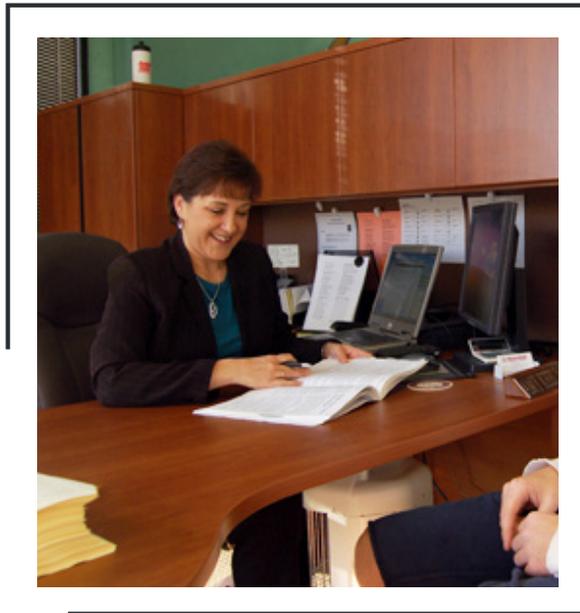


BEST PRACTICES

The Black Males on Campus (BMOC) initiative was implemented to support the success of black males on the University of Tennessee, Chattanooga (UTC) campus. Students who participate in BMOC have access to peer and community mentors, leadership training programs, and financial assistance. Approximately 95% of students participating in BMOC are in good academic standing; approximately 80% graduate from UTC. This far exceeds the proportion of black males who graduate from other higher education institutions across the state.¹

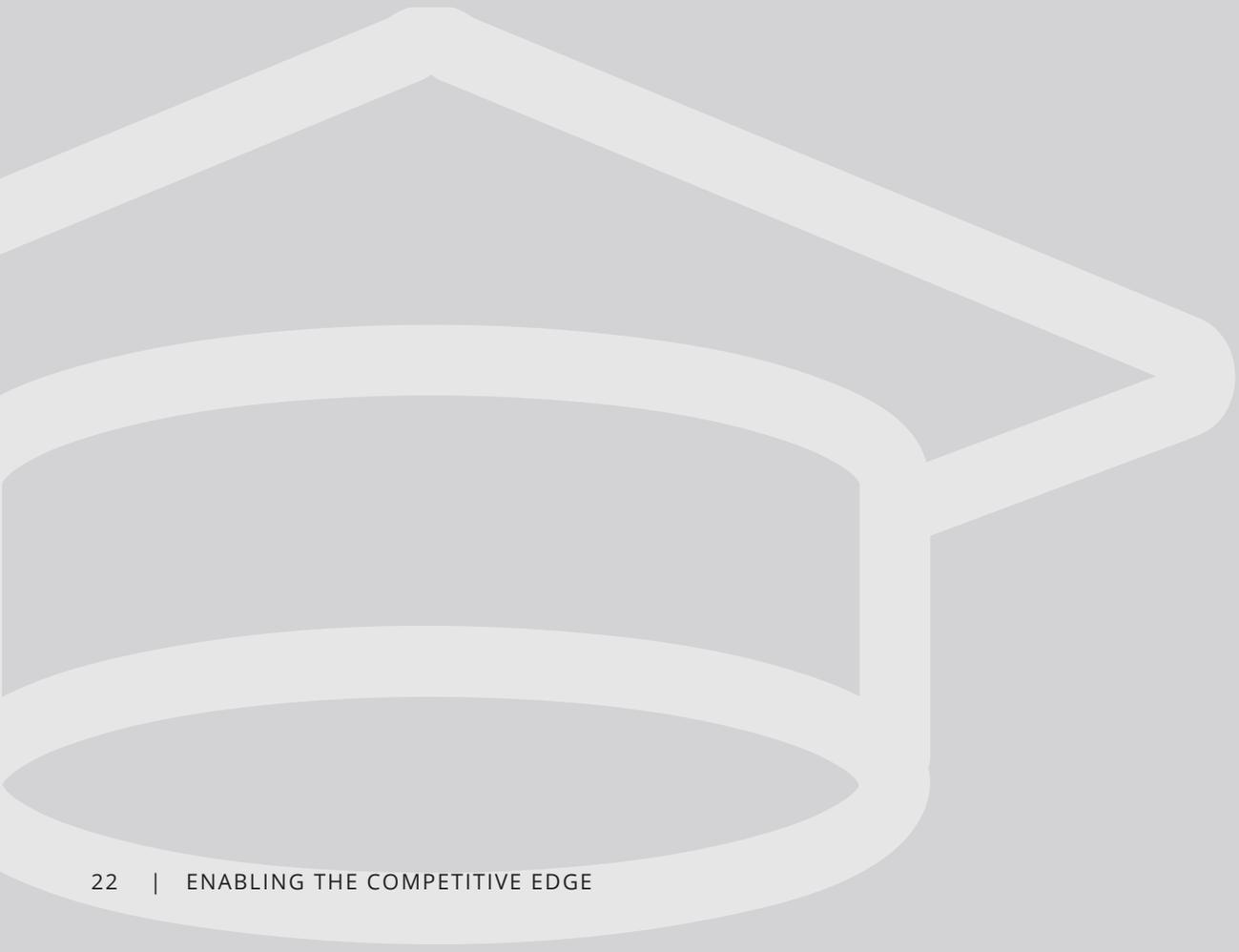
¹ <https://www.utc.edu/student-support-services/sss-statistics.php>





Roane State has established a one-on-one coaching model for entering students, with an assigned college coach serving as a student's primary point of contact. Coaches participate in extensive training on-campus to ensure that they can serve the diverse needs of their students. Since this program's inception, the persistence rates of low income students and students of color have increased substantially, and overall three-year graduation rates at Roane State have increased by approximately four percentage points.¹

¹ <https://diverseeducation.com/article/137510/>



FAMILY PROSPERITY

AFFORDABILITY —

TRANSPARENCY —

OUTREACH —

AFFORDABILITY

Tennessee has long been a national leader in higher education finance innovation. As early as 1979, Tennessee led the nation in adopting a performance funding component for higher education, and in 2010, the Outcomes-Based Funding Formula revolutionized how the state incentivized student success. The Tennessee Promise and Tennessee Reconnect programs have redefined state financial aid, and the FOCUS Act of 2016 gave THEC the authority to maintain low tuition growth and to target capital investment toward degree production and workforce needs.

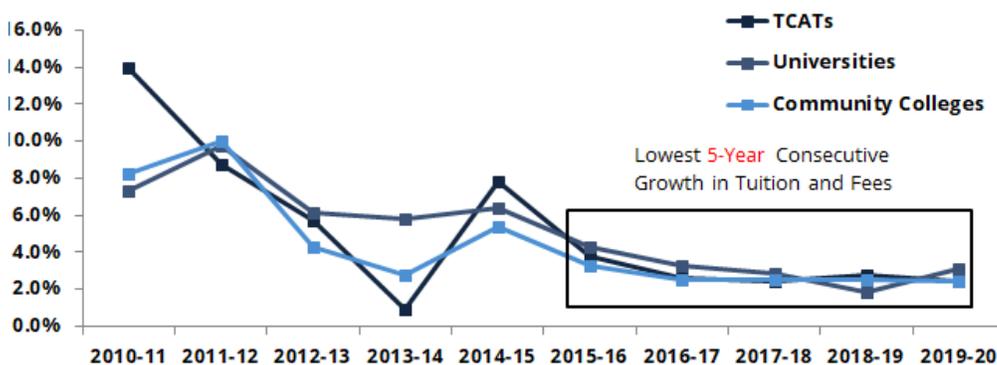
Tennessee must invest wisely in higher education to produce a clear return on investment. Each dollar invested via financial aid or an operating appropriation should be put forward with a central premise: ensuring that a quality postsecondary credential is attainable for all Tennesseans. As the Drive to 55 was implemented to give Tennessee the most competitive workforce among its southern peers, Tennessee should likewise compete on affordability, striving to be the most affordable state in the south for public higher education.

Current Efforts

Low Tuition

To determine increases to tuition, THEC forecasts potential changes in institutional costs based on inflationary increases, enrollment changes, and state appropriation projections – all with an overarching focus on student affordability. The Commission uses the consumer price index (CPI) to project tuition ranges; tying tuition to the cost realities of the average family better keeps affordability in check.

Over the past five years, the Commission has recommended the lowest tuition increases in four decades, this past year recommending its lowest ever 0 – 2% increase. Many higher education



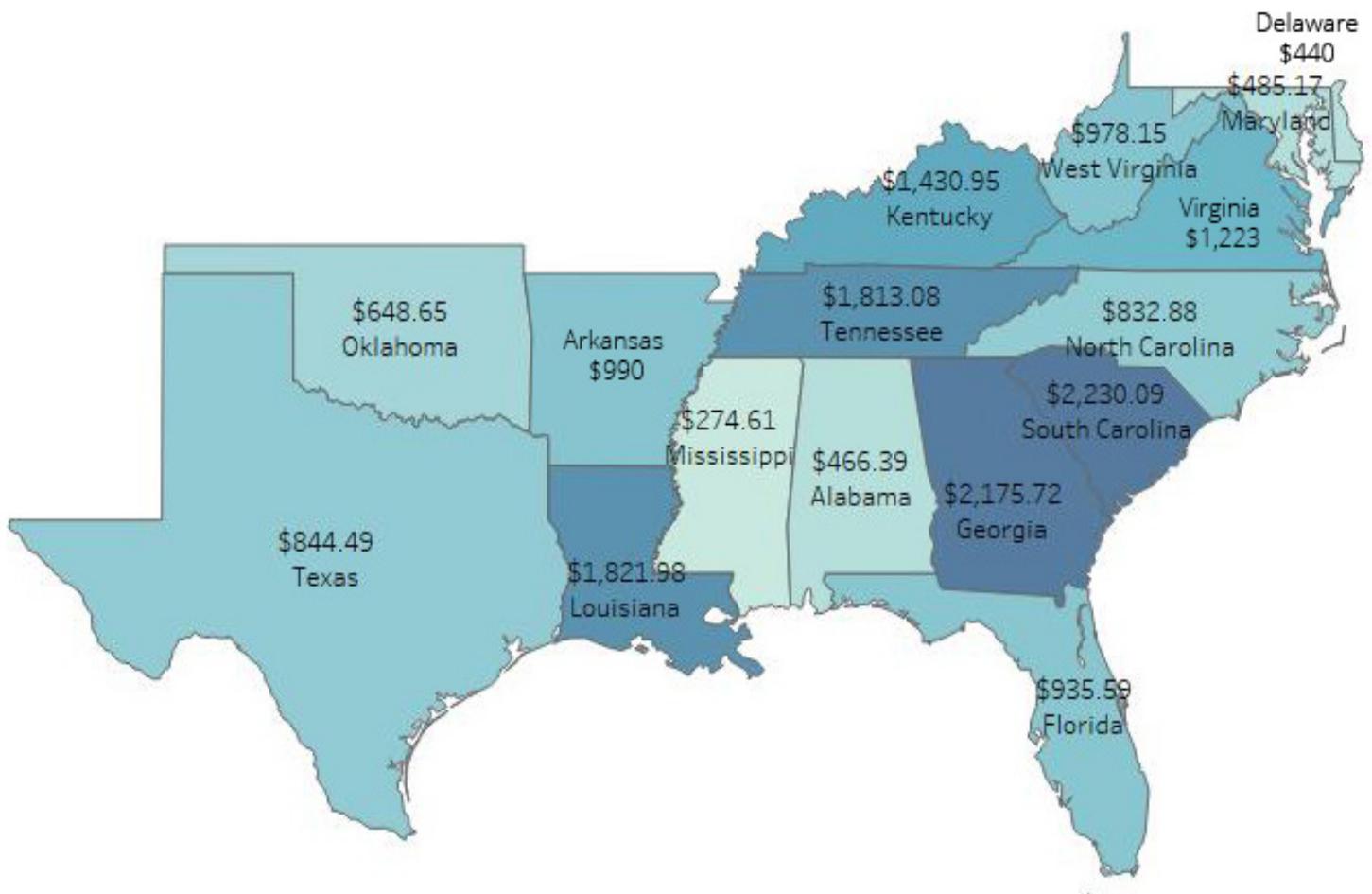
institutions, including the University of Memphis, University of Tennessee, Chattanooga, and University of Tennessee, Knoxville, have capped tuition growth at zero percent. Further, institutional efforts to contain costs have helped keep Tennessee higher education affordable

relative to other states.

Financial Aid

Tennessee leads the nation in the number of state financial aid programs available to students and the amount of scholarship dollars awarded each year. This suite of state financial aid programs includes merit- and need-based programs, as well as universal “free college” programs for students entering higher education immediately following high school and for adult learners. This robust portfolio does much to meet the diverse needs of students across the state.

Average financial aid awarded per student, SREB states



Goals and Metrics



Maintain low tuition growth: Consistent with the trend over past five years, THEC will focus on keeping tuition growth as low as possible, continuing to lead the region in this regard. Acknowledging that low tuition increases are contingent on full funding of the Outcomes Based Funding Formula, THEC will continue to advocate for full funding of the formula, while ensuring a fully transparent formula review process.

Maintain robust portfolio of state financial aid programs: Tennessee will continue to lead the nation in the number of merit-based, need-based, and universal financial aid programs that serve Tennessee's diverse student population. Further, THEC will simplify and streamline these programs, ensuring that financial aid in Tennessee is as accessible to as many students as possible.

Increase Tennessee Student Assistance Awards (TSAA): Funding for TSAA, which provides need-based grant dollars to the state's lowest income students, has increased substantially over the past decade. THEC will work with the General Assembly to continue increasing this funding, such that all Pell recipients (approximately 140,000 students) have access to these funds.

TRANSPARENCY

Tennesseans engaging with higher education have the right to robust information about the institutions at which they enroll, the programs offered, and the outcomes of students who receive credentials from a given college or university in our state. Providing this information is one of THEC's core functions, and the THEC staff does so in a number of ways for a many diverse audiences and constituencies – most importantly, the student and his or her family.

Current Efforts

Reporting

The THEC staff annually produces research reports – many of which are statutorily mandated – discussing higher education's performance on a number of metrics. Each report includes data and information related to enrollment, persistence, completion, affordability, financial aid, and job placement. These data are presented at the state, regional, and local levels, and are available on the [THEC website](#) in both static and interactive formats.

Consumer protection

Three divisions at THEC – Postsecondary Authorization, Veterans Affairs, and Financial Aid Compliance – are tasked with ensuring that all students enrolled at an authorized institution, using GI Bill benefits, and/or receiving financial aid are receiving the benefits to their higher education experiences. Further, these divisions field student complaints and issues related to school closures to remediate any situations that are negatively impacting students, and link students to alternate opportunities in higher education should the need arise.



Goals and Metrics

Present financial returns to higher education: THEC will disseminate information about financial returns to higher education and to particular programs of study, in accordance with the Tuition Transparency Act. It is imperative that this information is available in a consumable format for students and their families across the state.

Protect consumers: THEC will continue to execute its student-centric approach to consumer protection, including the monitoring of institutions at risk of closure and facilitating expedited enrollment of displaced students. These processes also include investigation and review of student complaints, and auditing the disbursement of state financial aid.

BEST PRACTICES

THEC's Veterans Education division serves as Tennessee's State Approving Agency (TNSAA), charged by the federal government to work closely with the U.S. Department of Veterans Affairs (VA).

Through this partnership, the Veterans Education division ensures that higher education and training programs for which military-affiliated Tennesseans may use GI Bill benefits are of high quality and provide value to veterans and their families.

Institutions eligible to receive GI Bill benefits must comply with strict regulations, are regularly reviewed, and are periodically audited. Because of the exceptional work of THEC staff, the state of Tennessee has received completely clean audits and a rating of "satisfactory" (the highest possible) from the United States VA over the past 20 years.





OUTREACH TO ADULTS

If Tennessee is to meet its ambitious 55% educational attainment goal by the year 2025, it is imperative that adults engage or reengage in higher education. Upon receiving a postsecondary credential, these adults will have access to increased job opportunities, and a greater likelihood of earning a livable wage as Tennessee's economy continues to evolve – the overarching objective of the Drive to 55 as a workforce development initiative.

Current Efforts

Navigate Reconnect

Navigate Reconnect is the regional outreach arm of Tennessee Reconnect. A team of 12 Navigators provides institution-neutral services to over 20,000 adult Tennesseans who want to return to or enroll in higher education for the first time. To meet the complex needs of adult learners, each Navigate Reconnect Region serves as a hub for information about wrap-around resources, including childcare options and affordable transportation. Navigate Reconnect has also expanded to serve Tennessee's incarcerated population, supporting offenders through the college-going process up to and following their release.

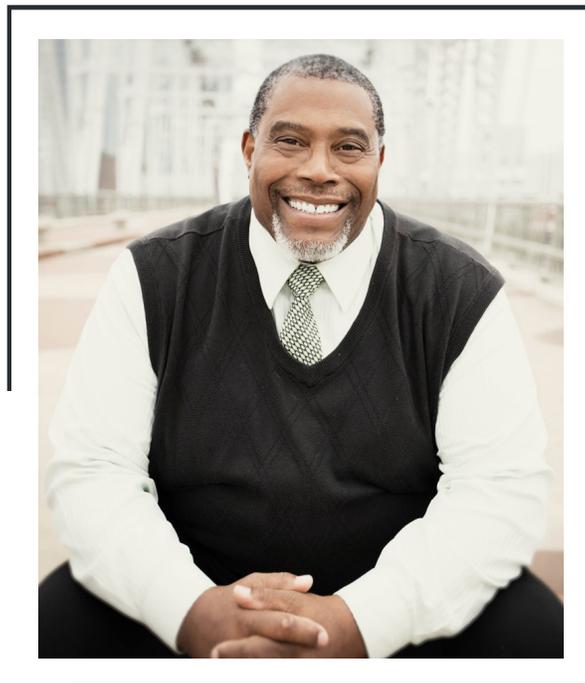
Reconnect Ambassadors

The Reconnect Ambassador program trains individuals at partner organizations throughout the state to identify potential adult learners, talk to them about completing a degree or credential and refer them to the best next step in the college-going process. To date, over 800 Ambassadors have been trained in partnership with the Tennessee Departments of Human Services and Transportation, as well as multiple employers and non-profit organizations. Through a partnership with the Tennessee Department of Labor and Workforce Development, all staff and partners at American Job Center locations throughout the state will be trained as Reconnect Ambassadors in 2020.

Goals and Metrics



Increase outreach to unemployed/underemployed adults: THEC staff will collaborate with the Department of Labor and Workforce Development to increase outreach to unemployed and displaced workers by at least 10% annually over the next five years. Reconnect Navigators will work with staff at American Job Centers across the state and the Tennessee Department of Corrections to ensure that adults seeking additional information about higher education have access to appropriate and useful resources.



Since November 2018, over 1,200 adult students have visited one of three Reconnect Café locations at Nashville State Community College. Staff and volunteers assist students with whatever they need: a snack to get them through their class (or until tomorrow if they need food for later), a computer to check their registration or financial aid, or a friend to listen while they process through a difficult class. When Nashville State opened the café, the team wanted a warm, inviting place where adults could find resources and support to help them get “to-and-through” their degree programs. Mr. Frazier is a Student Success Advisor with Nashville State Community College and staffs the Reconnect Café at the White Bridge Road campus.



THE FUTURE WORKFORCE

FUTURE OF WORK —
CTE & WORK-BASED LEARNING —
ACADEMIC PROGRAMS —

FUTURE OF WORK

It is imperative for Tennessee's economy and the financial security of Tennesseans that higher education prepares its graduates for high-demand jobs. This is true for the current economy, but is even more critical as we think about Tennessee's future economy. Higher education must work with industry leaders to identify the knowledge and skills that will best support Tennessee's economy, both today and tomorrow.

Current Efforts:

[Reporting](#)

Each year, THEC collaborates with the Tennessee Departments of Labor and Workforce Development and Economic and Community Development to produce the [annual Academic Supply and Occupational Demand report](#). This report outlines high-need jobs across the state, and the academic programs at Tennessee's colleges and universities that produce credentials often leading to employment in these areas. This report is the basis for defining high-need occupations that are linked to specific financial aid programs (i.e., Governor Lee's GIVE dual enrollment grants, which provide an additional subsidy for students to take dual enrollment courses linked to high-need fields).

Future of Work

In 2019, THEC convened its first ever Future of Work task force, comprised of representatives from higher education, state government, and industry across the state. This task force discussed not only the postsecondary credentials, but the skills that will be in high demand in Tennessee's workforce over the next decade. Specifically, much discussion centered around Computer Science and Data Analytics, and how to best provide opportunities in these fields to all students, not only those who select either discipline as a major/program of study.

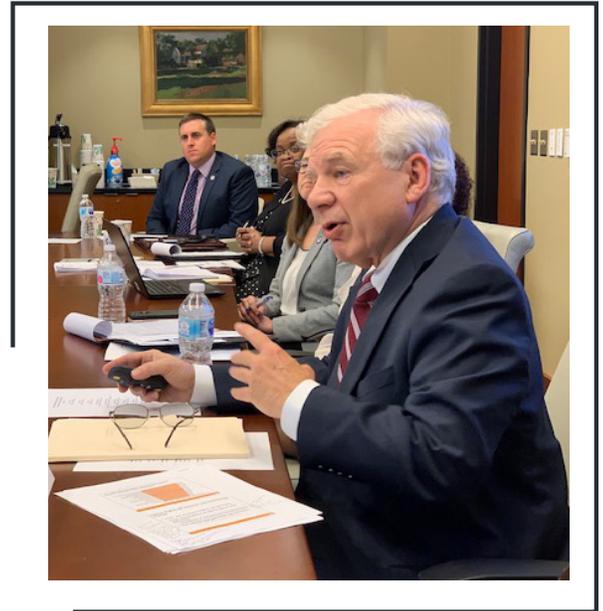
The THEC Future of Work taskforce convened representatives from higher education (i.e., Commission members, system and campus administrators, faculty), state government (i.e., Office of the Governor, Tennessee Departments of Labor and Workforce Development and Economic and Community Development) and prominent industry sectors (i.e., healthcare, automotive, computer science/technology) for a series of three meetings over the past year.

The overarching objectives of this taskforce were:

1. To align industry and higher education
2. To prepare for the state's workforce needs of 2030 and beyond
3. To ensure that skilled, credentialed Tennesseans are available to employers
4. To increase the speed and agility of workforce development

The Future of Work taskforce discussed many issues confronting Tennessee’s economy, and the ways in which industry and higher education must work collectively to ensure that Tennesseans have access to high-paying jobs, and that employers have access to a skilled, capable workforce. Key findings of the taskforce are presented below:

Artificial intelligence and automation: Tennessee’s economy is at great risk for disruption resulting from automation and artificial intelligence, according to Dr. Bill Fox (pictured below), professor of economics at the University of Tennessee, Knoxville. For this reason, all individuals employed in Tennessee must learn to interact with artificial intelligence using critical thinking, data analysis, and diverse communication skills rather than simply rely on artificial intelligence to complete a variety of tasks. The figure below, produced by Burning Glass Technologies, depicts the skills required in the new digital economy, both globally and within Tennessee’s borders.



The New Foundational Skills of the Digital Economy

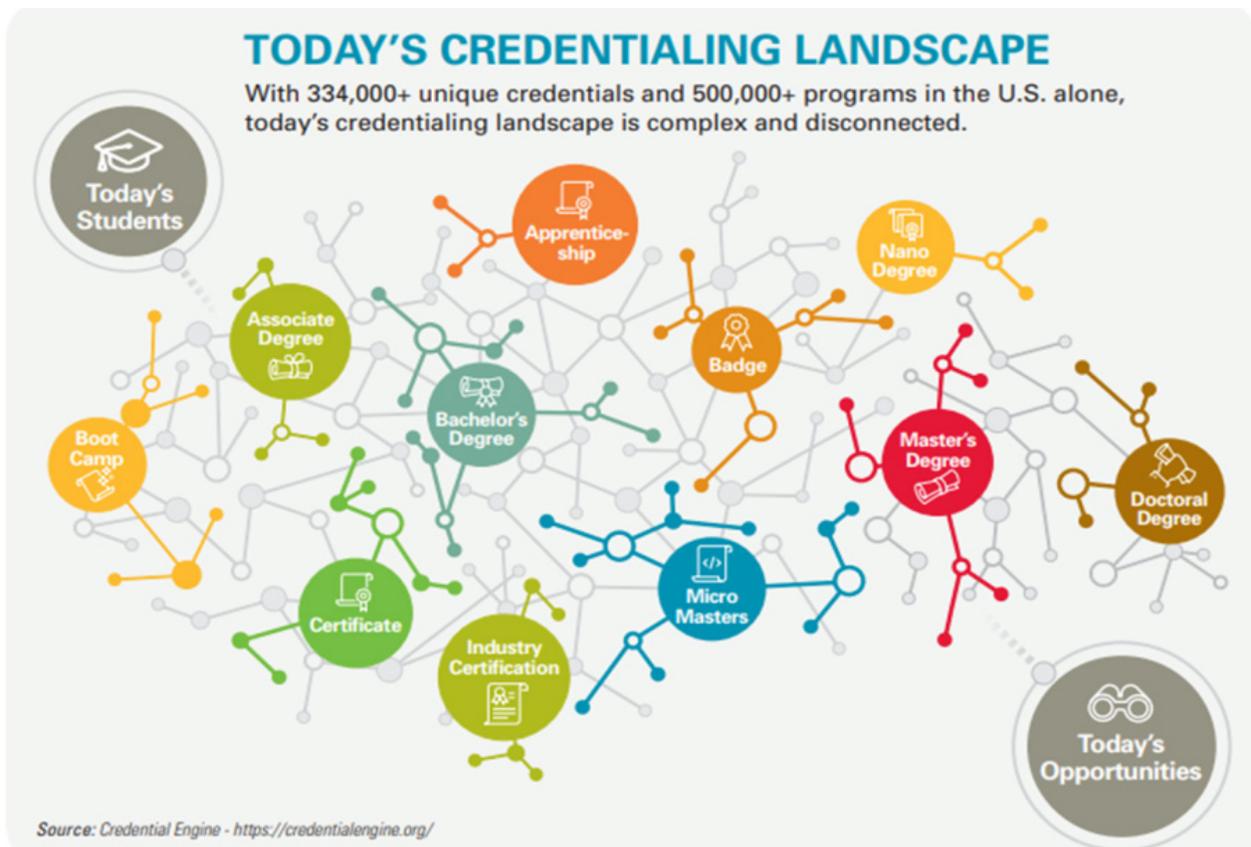


These 14 skills, already in wide demand by employers, command salary premiums and are crucial for workers who want to keep pace with a changing job market.

© Burning Glass Technologies

Computer Science and Data Analytics: A critical finding of the Future of Work taskforce was the need to develop more diverse Computer Science and Data Analytics course offerings across public higher education. This includes establishing concentrations of courses in addition to majors and minors, such that students majoring in a different field can gain useful computer science and data analysis skills. Further, faculty were encouraged by Future of Work taskforce members to think creatively about ways to offer this type of coursework in a manner that does not require proficiency in upper level (i.e., Calculus III) mathematics.

Stackable credentials: A student’s ability to accumulate credentials in a given field over his or her working life is critical to the success of Tennessee’s economy. “Stackable credentials” can be earned at all institution types, have cumulative industry value, and must be designed to build off each other. Further, institutions and industry must recognize that a student’s path to a terminal credential is not necessarily linear; stackability and transferability of credits and clock hours is imperative. THEC staff is working to standardize the process for awarding stackable credentials across the state, though there currently exist pockets of best practices: East Tennessee State University, for example, has partnered with a number of TCATs to award Bachelor of Science in Nursing (BSN) degrees to those credentialed in Licensed Practical Nursing (LPN) on an expedited timeline.



Industry growth and recruitment: The Tennessee Department of Economic and Community Development is tasked with recruiting new industry to Tennessee and supporting existing employers to expand their operations. Employers often have very specific workforce needs, which serve as the crux of their decisions surrounding location and expansion. For example, the Oshkosh Corporation partnered with TCAT-Morristown and TCAT-Knoxville to meet its need for skilled labor and to produce a credentialed workforce specifically trained to work with Oshkosh and its partners. This explicit alignment between higher education and industry has been extremely successful and can serve as a model for other employers across the state.



Goals and Metrics

Increase enrollment in majors leading to high-demand jobs: The proportion of students enrolling in degree programs that lead to employment in high-need fields, as determined by THEC's annual Academic Supply and Occupational Demand report, will increase by at least 5% annually (N = 500) over the next five years.

Increase Computer Science and Data Analytics offerings: THEC will encourage higher education institutions, via funding opportunities and pilot initiatives, to increase offerings in Computer Science and Data Analytics to all students, not only those who are pursuing either field as a major. Further, THEC will work with institutions to increase the number of degrees produced in Computer Science and Data Analytics by 20% (N = 260) annually over the next five years.

CTE AND WORK-BASED LEARNING

As public higher education in Tennessee continues to think about the Future of Work and the future of the state's economy, opportunities for students to engage in career and technical (CTE) coursework and to spend time working with industry partners is critical. In alignment with Governor Lee's priorities in this area, THEC will continue to work with the Tennessee Departments of Labor and Workforce Development and Economic and Community Development to develop new opportunities for apprenticeships, internships, and cooperative learning experiences for all students, particularly those pursuing credentials in high-need, technical fields.

Current Efforts:

Governor's Investment in Vocational Education (GIVE) Community Grants

Signed into law by the General Assembly in 2019, Governor Bill Lee's GIVE Act is a two-pronged strategy to increase students' participation in career and technical education (CTE). GIVE Community Grants, awarded to 28 sites across the state, reflect local partnerships between K-12 and higher education and local industry to establish and/or improve CTE and work-based learning opportunities for students in these communities.

GIVE dual enrollment grants

The second prong of the GIVE Act is an increase to dual enrollment grant funding, such that high school students enrolling in high-need dual enrollment courses (in partnership with community colleges and TCATs) have access to two additional tuition-free courses. Subsidizing these additional courses will allow students to make progress toward earning a technical certificate, diploma, or Associate of Applied Science while they are still in high school.

Supporting Postsecondary Access in Rural Counties (SPARC) grants

Through the SPARC initiative, THEC has provided a total of \$3.4 million to high schools in distressed and at-risk counties to invest in CTE equipment. As a result, coursework opportunities - particularly dual enrollment courses in partnership with local TCATs - have increased substantially. Further, these high schools are now beginning to deliver coursework after-hours to adults returning to higher education in pursuit of a technical certificate or diploma.

Goals and Metrics



Increase dual enrollment opportunities in high-need, technical fields: As facilitated by the GIVE Act, dual enrollment offerings in high-need technical courses/programs of study will increase by at least 5% (to 75% at TCATs and 15% at community colleges) in the next five years. Special emphasis will be placed on enrolling students typically underrepresented in dual enrollment courses.

Increase opportunities for work-based learning via the GIVE Act: GIVE grants proposing work-based learning opportunities will launch over the next year. THEC will evaluate the success of these 28 work-based learning initiatives across the state and report on them annually.



ACADEMIC PROGRAMS

For decades, THEC has been charged with approving new academic program proposals brought forward by higher education institutions across the state. Currently, this process involves: an evaluation of need (i.e., is this program redundant to others offered? Is there a need for the credentials produced?), external judgment of need and program readiness, governing board approval, Commission approval, and post-approval monitoring of the program's implementation, enrollment, completion rates, etc. This is one of THEC's core functions, executed by the Academic Affairs staff.

Current Efforts:

Brainstorming changes to the program approval process

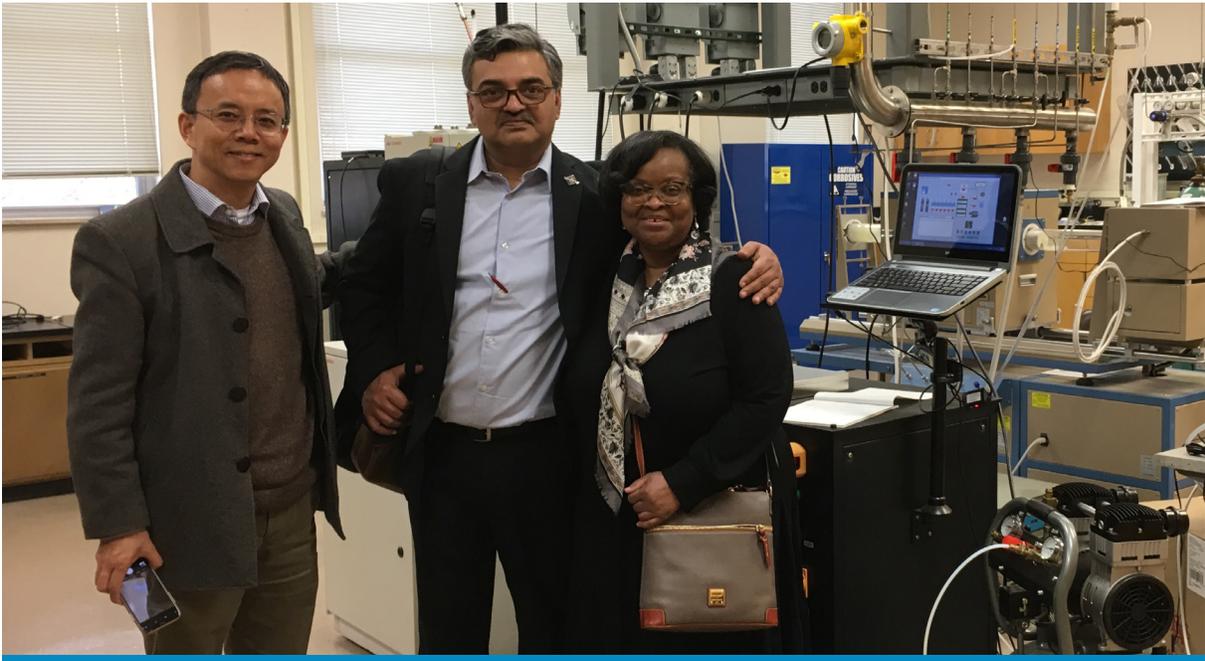
A key finding of the Future of Work taskforce was the need for an expedited academic program approval process for institutions planning to implement workforce-driven, industry aligned academic programs, as well as degree programs in Computer Science and Data Analytics. This will allow for faster start-up and improved alignment with the needs of Tennessee's economy, both present and future.



Goals and Metrics

Streamline approval process for academic programs leading to high-need credentials: New academic programs considered as high-demand in response to demonstrated workforce needs will be reviewed by THEC staff using an expedited approval process. While changes to this process are still under review, the ultimate goal is to reduce the time for program approval while still assuring quality, student demand, uniqueness and institutional capacity.

Execute partnerships between higher education and industry: Further, THEC will encourage and facilitate partnerships between higher education and industry. Specifically, THEC will work with the 24 new academic programs (i.e., dual enrollment, certificates, etc.) established via the GIVE Act. In the next two years, these proposed programs will be fully operational; THEC will track student progress and evaluate the success of these programs.



THEC's chief of academic affairs officer, Betty Dandridge Johnson, at the University of Memphis in 2019 for a proposed program site visit.

CONCLUSION

This update to the 2015-2025 Master Plan challenged THEC to think differently about effective strategic planning processes. This *Competitive Edge* document, therefore, outlines tactical, action-oriented practices for higher education to improve student success, increase families' prosperity, and prepare for Tennessee's economy in the next decade and beyond. In setting ambitious, measurable goals throughout this report, it is our intention that this document not simply sit on a shelf, but that it serves as a guidepost over the next 10 years as public higher education continues to grow and evolve.

By featuring best practices across campuses, THEC encourages and will support institutions to implement student success initiatives in ways that best serve the unique needs of their student populations. These initiatives include, but are not limited to:

Inclusive dual enrollment opportunities

Prescriptive scheduling

Intrusive advising

Cohorting

Mentorship programs

One-stop-shops/single points of contact for incoming students

Further, institutions must commit to making higher education as affordable as possible for students and their families, as well as make clear the total costs associated with attendance and the potential return on investment to the student. While THEC aggregates this information at the state level, increased transparency at campus- and program-levels provides complete, digestible information for higher education's more important constituencies.

Perhaps most critically, higher education must adapt to meet the needs of Tennessee's future economy. Whether new Data Science degree programs, increased Computer Science course offerings, or pathways to stacked credentials leading to improved workforce mobility, innovation is critical for the wellbeing of public institutions and for employers across the state. THEC will facilitate this progress through modifications to its academic program approval processes.

The next decade will be a time of dramatic growth in Tennessee's economy. As such, the same must be true for public higher education. While the five years since the adoption of the 2015-2025 Master Plan reflect tremendous innovation in Tennessee higher education, we must maintain the momentum and continue to focus wholly on the needs of students, their families, and the state's economy.



Several members of the Gooch family from White County, Tennessee, used Reconnect to go back to college.

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