Investing in Tennessee:

The Postsecondary Education Strategic Financial Plan

THEC TSAC

About THEC

The Tennessee Higher Education Commission is relentlessly focused on increasing the number of Tennesseans with a post-secondary credential. We pursue this goal by innovating for student access and success, creating a policy environment conducive to increased degree attainment, and protecting students and consumers. The Tennessee Higher Education Commission was created in 1967 by the Tennessee General Assembly to achieve coordination and foster unity with regard to higher education in the state. The Commission coordinates and provides guidance to the institutions governed by the University of Tennessee Board of Trustees, the six locally-governed state universities, and the community colleges and colleges of applied technology governed by the Tennessee Board of Regents. There are currently nine public universities, two special purpose institutes, 13 community colleges, and 27 colleges of applied technology in Tennessee that serve approximately 250,000 students.

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Executive Summary

For decades, Tennessee has been known as a national leader in higher education finance innovation and reform. As early as 1979, Tennessee led the nation in adopting a performance funding component for higher education, and in 2010, the adoption of the Outcomes-Based Funding Formula revolutionized how the state incentivized student success. The inception of the Tennessee Promise and Reconnect programs redefined financial aid to be both transformative to the student and affordable to the state, and further, the FOCUS Act of 2016 gave the Tennessee Higher Education Commission the strength to maintain low tuition growth and to target capital investment toward degree production and workforce needs.

Indeed, the state's Drive to 55 attainment goal—in which 55 percent of Tennesseans will have a postsecondary credential by 2025—recognizes the return on investment for higher education is high. Attainment of 55 percent by 2025 will yield an increase in annual state tax revenue of approximately $750 million. More Tennesseans with college degrees has a direct effect on the state's unemployment rate, thereby lessening dependency on government benefits such as Medicaid. A strong higher education system has benefits to the state that go far outside the borders of college campuses.

Tennessee has also emerged as one of the most fiscally sound states in the nation, with a low debt budgeting approach that ensures competition for state revenue will always be tight. Thus Tennessee higher education must invest wisely in order to produce a clear return on investment. Each dollar invested should be put forward with a central premise: ensuring a quality postsecondary credential is attainable for all Tennesseans. The most attainable credential is an affordable one—one in which access is inexpensive and completion is efficient. As the Drive to 55 was implemented to give Tennessee the most competitive workforce among its southern peers, Tennessee should likewise compete on affordability. This strategic financial plan, therefore, recommends a series of policies to meet one goal:

Make Tennessee the most affordable state in the south for higher education.

This plan will assess affordability by comparing aggregate *net price*—or total costs less financial aid—to average family income. Based on this assessment, Tennessee moved up in affordability from *eighth* among its fifteen Southern Regional Education Board peers in 2008[1] to *sixth* in 2017. Investments in Tennessee Promise primarily contributed to this rise. Future increases in affordability will come with continued investment in financial aid, checks in growth on tuition, and strategic investments in operating and capital. A climb to number one in affordability will take coordination of robust fiscal policies over a sustained period of time and can be achieved by 2030.

The strategic financial plan considers these policies within two pillars: ***reducing the student burden*** (tuition and financial aid policies) and ***promoting efficiency and stability*** (operating and capital expenditure policies). The former directly addresses what students pay while the latter explores ways to reduce the overall cost of the enterprise. Aligning policies to address both areas will keep net price in check.

Each pillar explores three levels of policies: foundations, advancements, and innovations. *Foundations* are sound bedrock policies Tennessee currently practices (e.g., an outcomes-based funding formula, last-dollar community college financial aid, targeted capital investment) but must sustain to maintain affordability. *Advancements* are pragmatic extensions of current policies that could further lower net price. Finally, *innovations* are policies not yet implemented in Tennessee, requiring substantive changes in current practice. These policies are:

Pillar I: Reducing the student burden

Foundations

- Prioritize student affordability in setting binding tuition ranges.
- Ensure all eligible students receive TSAA grants.
- Maintain a robust portfolio of state financial aid programs.

Advancements

- Peg increases in TSAA eligibility and TSAA grants to inflation.
- Extend outreach resources to help students navigate the FAFSA verification process.

Innovations

- Link TSAA eligibility to Pell eligibility.
- Target retention grants toward non-tuition costs of attendance.
- Establish partnerships between institutions, the Department of Human Services, and the Department of Labor and Workforce Development to help eligible students attain federal benefits, such as Supplemental Nutrition Assistance Program (SNAP) or other financial assistance.

Pillar 2: Promoting efficiency and stability

Foundations

- Fully fund growth in outcomes each year.
- Prioritize capital outlay in a manner that meets the education and workforce needs of the state, while keeping costs at a minimum.
- Fund and distribute capital maintenance to campuses based on aggregate age, size and use of facilities.

Advancements

- Increase the value of outcomes to further incentivize completion initiatives and efficiencies.
- Address unfunded mandates currently in place, such as tuition and fee waivers.
- Require no-new increase in square footage for capital outlay projects, prioritizing renovations and demolitions above new space.
- Gradually increase recurring maintenance dollars to replace nonrecurring maintenance dollars.

Innovations

- Tie requests in operating increases to zero tuition growth.
- Promote creation of institutional rainy-day funds.
- Incentivize institutional collaboration to reduce operating costs.
- Embed future maintenance investment into outlay expenditures.
- Recast Capital Investment as Capacity Investment, inclusive of building capacity, technology investment, and rural extension.

Both advancements and innovations are meant to facilitate the Commission in developing future policies. These recommendations will be individually explored in future policy briefs and white papers and will strategically guide the Commission in making formalized fiscal policy recommendations.

Tennessee is known for innovative yet fiscally responsible higher education investment. To maintain this reputation, and to ensure future returns on investment, Tennessee must strive to make a postsecondary credential attainable for all students. Harnessing foundational, advanced and innovative fiscal policies that address all areas of fiscal policy—tuition, financial aid, operating and capital expenditures—will position Tennessee as the most affordable state in the south for higher education, ensuring robust higher education access and completion.

Introduction

Over the last 20 years, Tennessee has made significant investments in higher education with limited or no cost to taxpayers. The innovations Tennessee has introduced to higher education policy have all acknowledged the need to keep higher education affordable to the student *and* to the state. Investments in financial aid alone, growing from under $50 million in the early 2000s to over $450 million today, came not from an increase in sales tax or from an introduction of an income tax, but, rather, through an elective lottery program and sound protection of proceeds. Investments in institutional operating revenues now squarely reflect outcome production—requiring institutions to earn appropriations through success rather than enrollment.

Higher education occupies a conflicted place in current dialogue, on the one hand considered a necessity for workers in a global knowledge economy and on the other considered overpriced and inaccessible. Steep increases in tuition prompt questions about the value of higher education to individuals and society.[2] At the heart of these conversations are concerns regarding the cost burden of postsecondary education for students and states.

Meanwhile, Tennessee recognizes the return on investment an educated workforce will bring the state and has a stated attainment goal of 55% by 2025—the Drive to 55. To meet this goal, Tennessee must continue to strategically invest in higher education while keeping the cost burden low. In the sections that follow, Tennessee's financial interests in higher education will be analyzed through a framework that values efficiency, affordability, performance, and return on investment. The Strategic Financial Plan contextualizes historic trends with regional and national data and outlines policy foundations, advancements and innovations across the funding streams of tuition, financial aid, operating appropriations and capital expenditures. It is a systematic assessment of the funding of the public higher education enterprise that holds fiscal responsibility and student affordability as the guiding principles in pursuit of increasing the number of Tennesseans with a postsecondary credential.

Landmark Financial Innovations in Tennessee Higher Education

Over the last decade, Tennessee has implemented several financial innovations to increase college access and completion. In 2010, Tennessee passed the Complete College Tennessee Act (CCTA), ushering in a transformative agenda of academic, fiscal, and administrative policies. CCTA aligned courses and programs in the community college system with statewide transfer pathways from two-year to four-year institutions to minimize student costs and time to degree. CCTA also established a new funding model as the state began funding institutions based on outcomes rather than enrollment, in part to recognize and reward institutions for supporting students through degree completion. The Outcomes-Based Funding formula was the first—and still only—funding model in the nation to distribute nearly all appropriations to community colleges and universities based on performance.

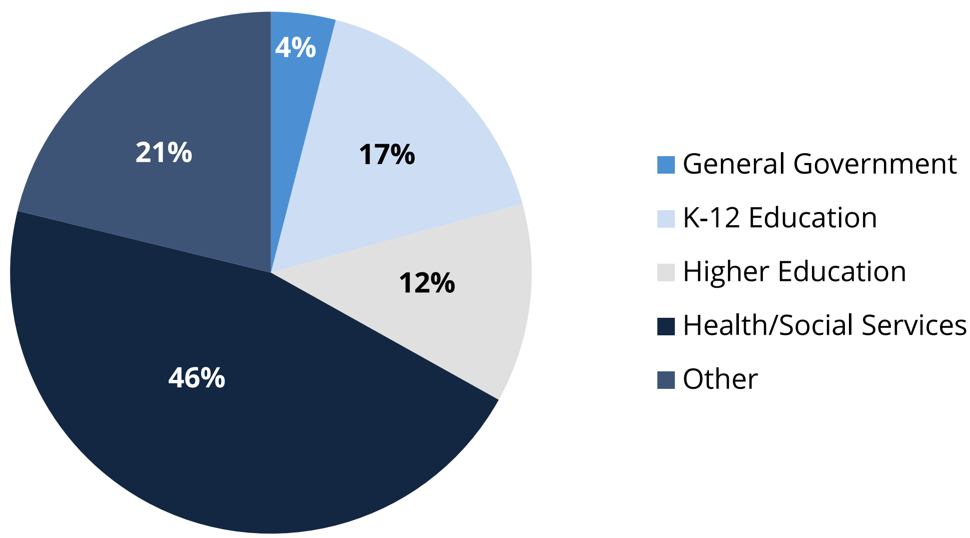
To overcome the barrier of affordability and to increase the college-going rate, the state implemented the Tennessee Promise program, the premier last-dollar, tuition-free financial aid program in the country. High school students graduate knowing that they can attend a community college or TCAT without paying tuition and fees.

Tennessee cannot meet the Drive to 55, however, on the back of high school students. More adults need to access and complete college. The Tennessee Reconnect program was launched in 2018 to extend access for adults to community college and TCATs free of tuition and fees. The implementation of the Outcomes-Based Funding formula, Tennessee Promise and Tennessee Reconnect catapulted the state into the national spotlight as higher education innovators. Tennessee leads the nation in financial policy innovation and is positioned to continue doing so in order to tackle remaining access and completion hurdles.

The Budget Landscape

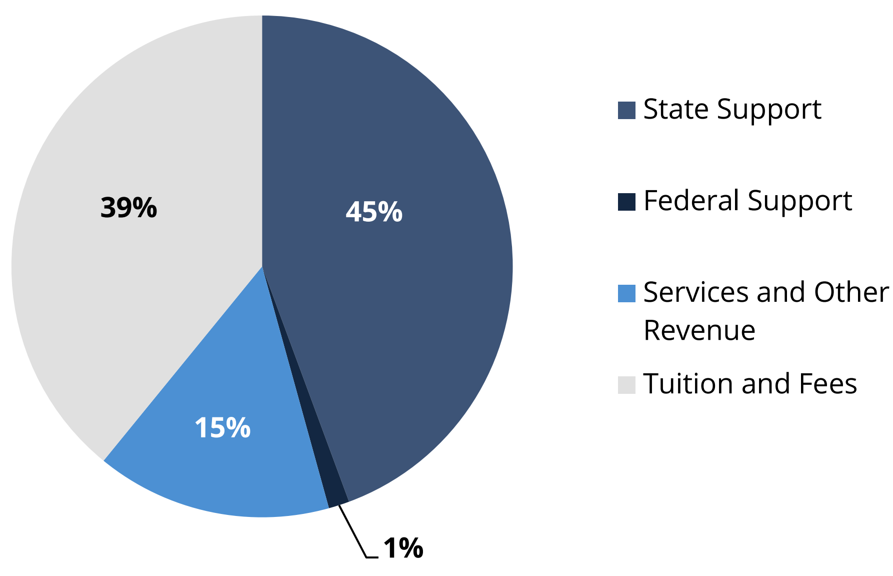
In Tennessee, health and social services account for nearly 46 percent of all operating expenditures, with K-12 and higher education a distant second and third, mirroring national investments. Tennessee expended $4.8 billion on higher education in 2019-20, accounting for 12 percent of state and local government general expenditures (Figure 1). Direct state investment accounted for over $2 billion of the total higher education revenues, while another $1.9 billion was generated by tuition and fees revenue (Figure 2).[3]

Figure 1: TN Total State Expenditures, 2019-20



Source: Tennessee Senate and House Finance Ways and Means Committee, 2019-2020 Factbook

Figure 2: TN Higher Education Revenues, 2019-20



Source: Tennessee Senate and House Finance Ways and Means Committee, 2019-2020 Factbook

In times of economic decline, policymakers have historically used higher education as a budgetary "relief valve," recognizing that institutions may offset reduced appropriations with increased tuition revenue. However, these tuition increases occur at times when students and families are the least likely to be able to pay.[4] As economies improve, support rebounds but typically falls short of previous funding levels. Buoyed by a booming economy and industry-friendly policies, Tennessee has outpaced the national average in appropriation growth with an increase of 24 percent since 2013.[5] As a result, state support for higher education currently sits at 85.9 percent of pre-Great Recession funding. While volatility is the norm in the budgetary process, it is mutually beneficial to state government and institutions that this volatility be reduced as much as possible, decreasing the likelihood of surprise tuition increases for students.[6]

Return on Investment

Tax dollars invested in higher education have a high return on investment for Tennesseans and for Tennessee as a whole. The premium associated with postsecondary credentials leads to not only increased earning and spending but also increased tax revenue. According to the Tennessee Department of Economic and Community Development, meeting the Drive to 55 goal will garner an annual additional tax revenue benefit across the state of $746 million.[7] On average, each additional degree creates a tax revenue premium of $1,400 per person and an income premium of over $17,000 per year (Table 1).

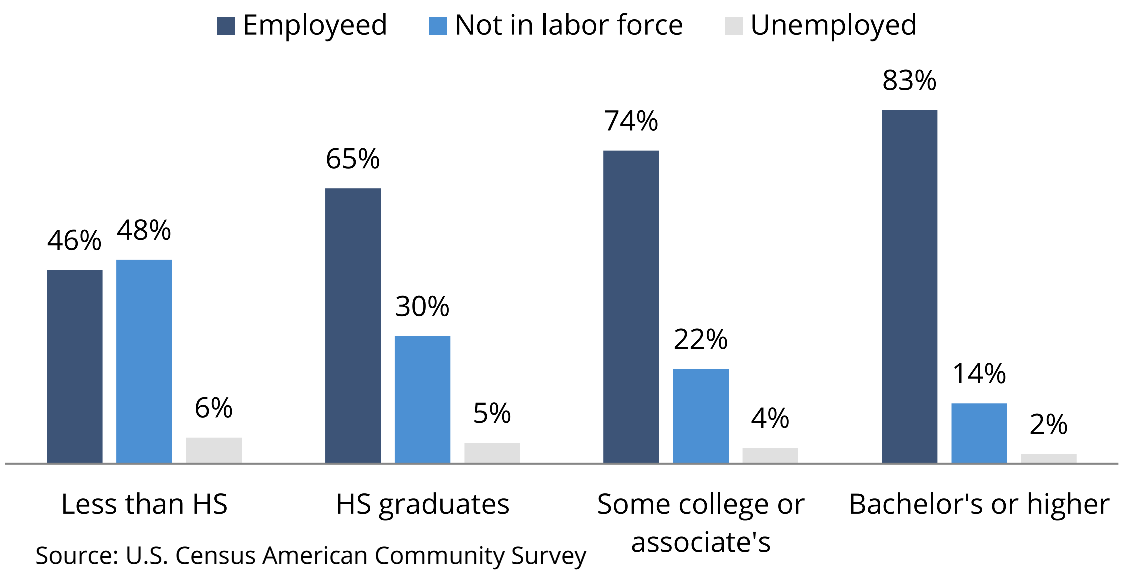
Table 1: Annual Income and Tax Revenue Premium in TN by Reaching Drive to 55

Type of Post-Secondary Attainment	Income per Worker	Tax Revenue per Worker	State Tax Revenue per Worker	Local Tax Revenue per Worker
Associates/ Certificates	$7,277	$582	$338	$244
Bachelor's	$23,099	$1,848	$1,074	$774
Graduate or Professional	$37,905	$3,032	$1,762	$1,271
Average	$17,649	$1,412	$820	$592

Source: Tennessee Department of Economic and Community Development

The return on investment in higher education extends beyond tax revenue, however. As educational attainment increases, so does the employment and labor force participation rate across the lifespan of workers (Figure 3). Educational attainment is also associated with decreased need for government assistance.

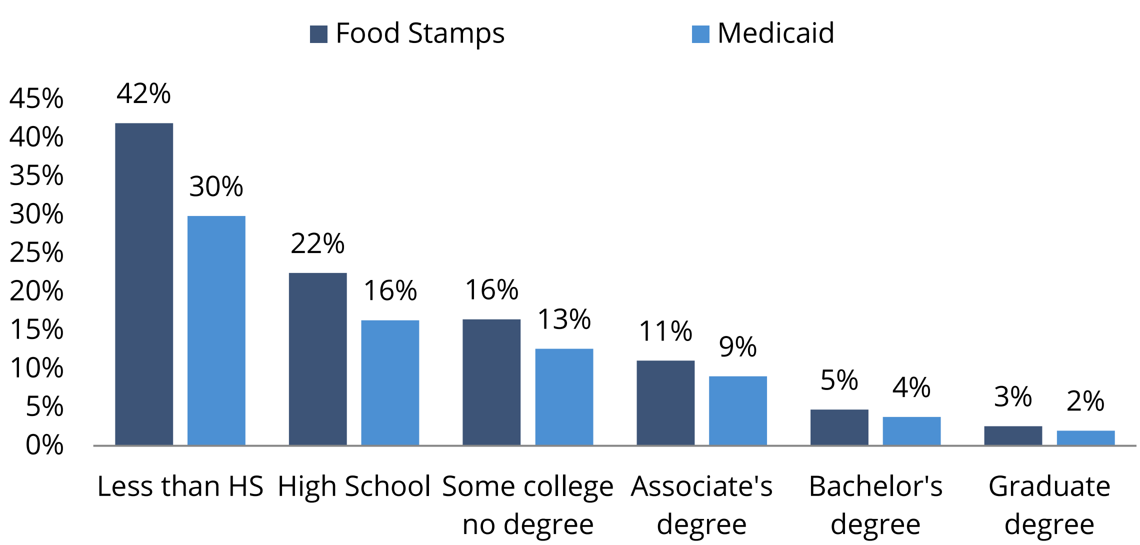
Figure 3: TN Employment Rates, Age 24-65



Source: U.S. Census American Community Survey

Figure 4 offers a snapshot of government assistance usage by Tennesseans age 24 to 65 by educational attainment level. Investing in higher education today saves the state from expending future government assistance dollars, serving as down payments for future prosperity—prosperity for Tennesseans and for Tennessee.

Figure 4: TN Use of Government Assistance Programs, Age 24-65



Source: U.S. Census American Community Survey

An Affordable Investment

Tennessee must ensure students can afford college in order to attain its favorable return on investment. College affordability influences both the college-going rate[8] and debt accumulation,[9] and both college enrollment and debt can affect the financial health and future of Tennesseans.

A common refrain remains that colleges across the country have become less affordable over time, but defining what is and is not affordable is up for debate. Some metrics are absolute. The Lumina Foundation created the Rule of Ten, labeling a college affordable if a student can pay for it following ten years of saving ten percent of family income *and* from working ten hours a week while in school. The rule assumes zero savings from families who earn less than double the poverty rate.[10]

Other metrics are relative. The Institute for Research on Higher Education compares affordability between income groups and then between states, pitting the average paid by students within an income group (example, $0 to $30,000) to the average income of that group.[11] This relative metric recognizes that perceptions of affordability differ across the income spectrum and that states can wield policies differently (e.g., merit-based aid versus need-based aid) to address affordability across the spectrum.

An affordability goal that rests on an absolute definition does not suit the current nature of state higher education and workforce development. Tennessee competes directly for employers, employees and students with its southern peers. Even if Tennessee public higher education attained an absolute definition of affordability, it matters less if other states are *more* affordable. Tennessee should, therefore, strive to be the most affordable state in the south for higher education. Tennessee can meet this goal within ten years by strategically aligning tuition, financial aid, operating and capital appropriation policies.

Goal: Make Tennessee the most affordable state in the south for higher education.

To measure relative affordability, this strategic financial plan will borrow from the Institute for Research on Higher Education and utilize *net price* relative to *average family income*. The cost of attending college (cost of attendance) is more than a student's bill from the Bursar's Office. The *cost of attendance* includes tuition and fees, on-campus room and board (or off-campus housing and food), books, supplies, transportation and other personal expenses—all potential barriers a student faces when accessing college. However, this is not the bottom line. Universities and colleges apply financial aid packages, reducing total costs to a *net price* for students to pay out-of-pocket or through loans.[12] Thinking in terms of *cost of attendance* and its relationship to *net price* highlights completion hurdles and identifies solutions more fully than conceiving of costs and funding mechanisms as separate and distinct from one another.

What is net price?

$25,000 per year

Sticker price (Tuition, fees, etc.)

— $10,000 per year

Gift aid (Scholarships, grants, etc.)

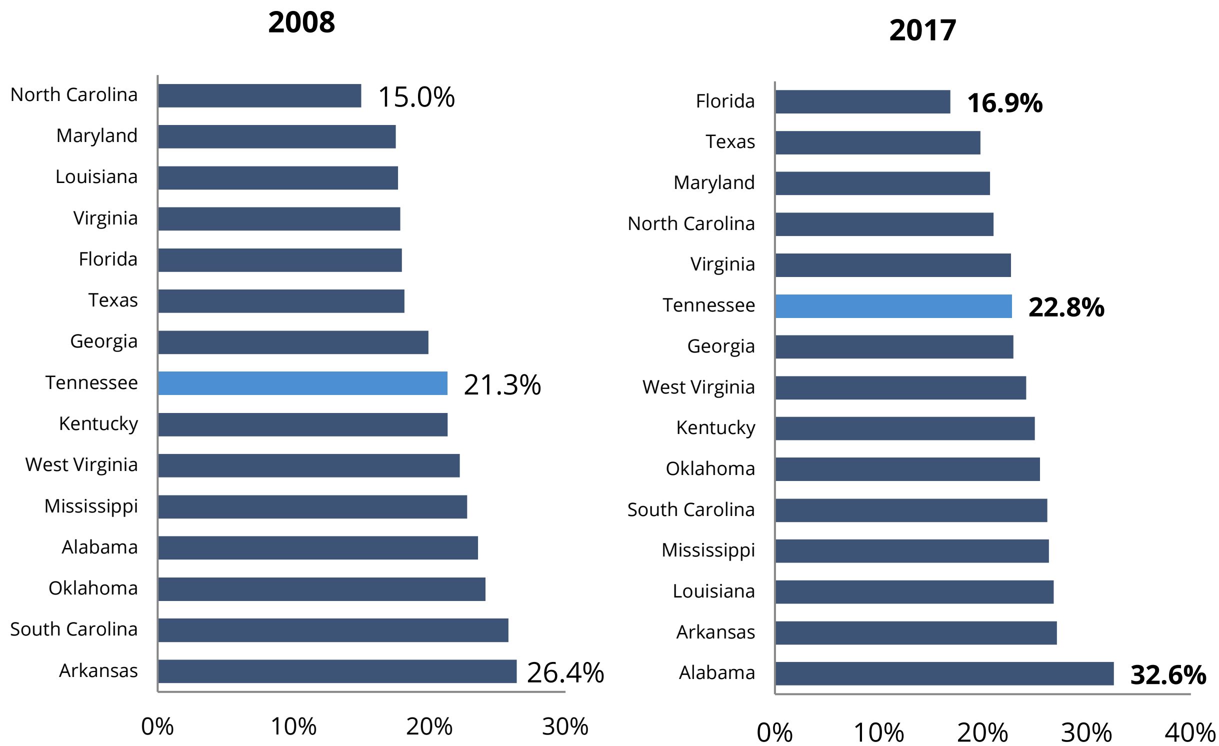
$15,000 per year

Net price (Actual cost to attend)

This assessment uses the Integrated Postsecondary Education Data System of the National Center for Education Statistics to capture the average *net price* paid between public two-year (including community and technical colleges) and four-year sector students within five household income categories.[13] It then aggregates into one affordability index that represents the average *net price* among all students against the average family income within the state.

Under this assessment, Tennessee students currently pay an average of 23 percent of their annual family income to attend public postsecondary education *after* all financial aid is awarded, ranking sixth out of fifteen in the south.[14] Although the percent of income required to attend postsecondary education has remained relatively constant between 2008 and 2017, the ranking within the SREB has improved from eighth to sixth (Figure 5).

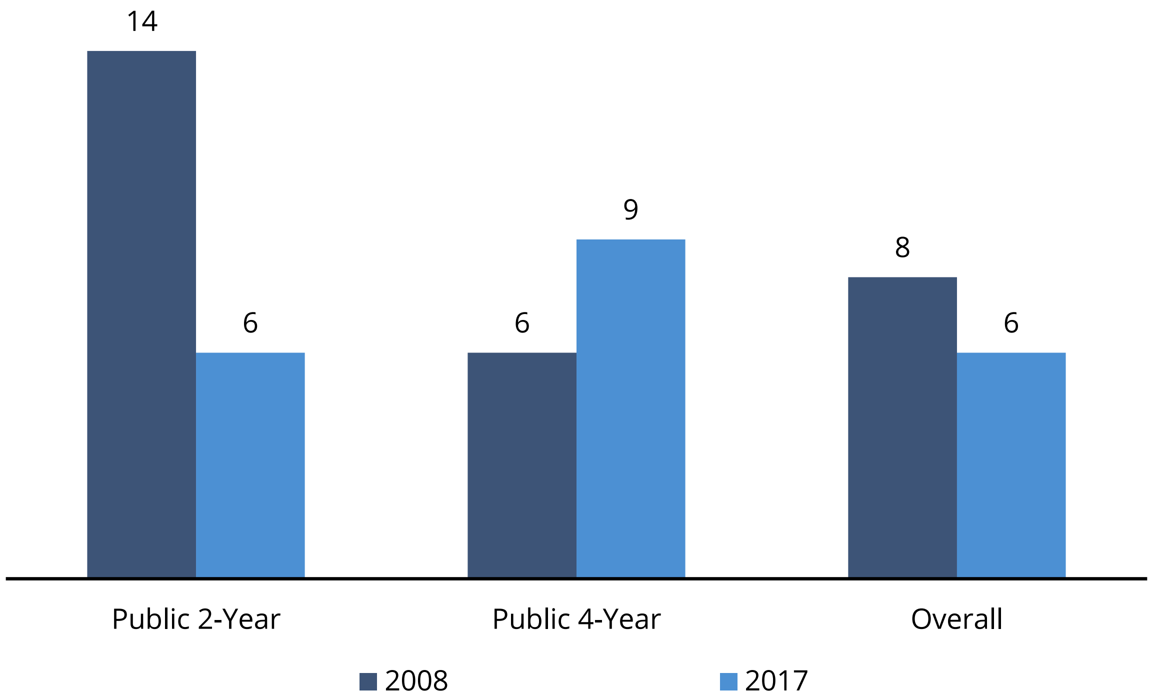
Figure 5: Public Affordability Index – Ratio of Net Price to Average Household Income



Source: U.S. Census American Community Survey and Integrated Postsecondary Education Data System

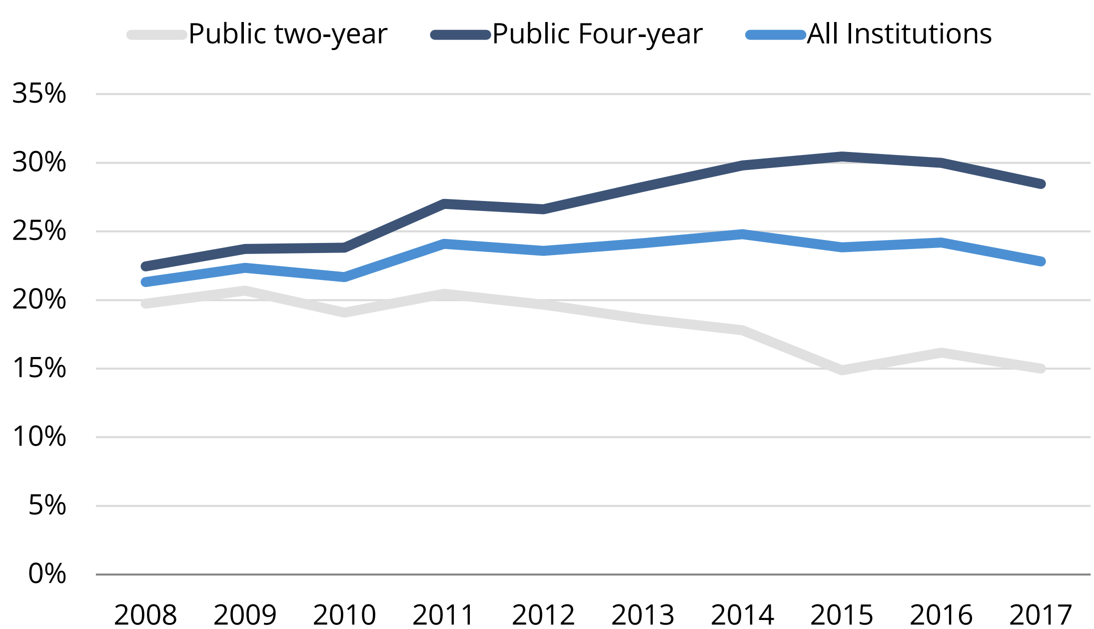
Tennessee has made significant progress in the costs associated with attending public two-year institutions, reflecting the state's investment in financial aid, operating revenue, and historically low tuition growths. However, in the same timeframe, the public four-year institutions have become relatively less affordable for Tennesseans (Figure 6). This loss in affordability follows an increase in relative net price from just under 24 percent in 2008 to over 30 percent in 2015. The trend upward, however, has appeared to halt and is back down to nearly 28 percent in 2017 (Figure 7). Becoming the most affordable state in the south for higher education will require policies that address affordability in both sectors and a continuation of state investment in all public institutions.

Figure 6: Tennessee Affordability Ranking Among Fifteen Southern Peers



Source: U.S. Census American Community Survey and Integrated Postsecondary Education Data System

Figure 7: Percent of Family Income to Attend College without Debt in TN by Sector



Source: U.S. Census American Community Survey and Integrated Postsecondary Education Data System

The remainder of this strategic financial plan will consider solutions that address affordability within two pillars. The first pillar will advocate for policies that directly impact tuition and financial aid while the second pillar will promote policies that directly influence institutional costs and operating efficiency. All policies are sorted into three categories: those that are currently underway and must continue, referred to as *foundational* policies; pragmatic policies that build upon current investments, identified as *advancements*; and policies Tennessee has yet to adopt and will require substantive change, presented as *innovations*.

Pillar I: Reducing the Student Burden – Tuition and Financial Aid

Net price is directly dependent on what the institution charges the student and the amount of financial aid the student receives to discount the charge. For the former, institutional charges includes tuition and fees, textbooks and supplies, room and board, and other personal expenses. For the latter, students have access to institutional, state, and federal aid. The state of Tennessee has direct control over tuition and mandatory fee levels, as well as state-funded financial aid. This section will focus specifically on what the state can control: tuition and state financial aid.

Tuition

Tuition, referred to as *maintenance fees* in Tennessee budgets, represents both the largest cost of attendance expense to students and the primary revenue source for institutions. Tuition makes up 51 percent of revenues for Tennessee community colleges and 59 percent of revenues for state universities.[15]

In an effort to keep student affordability central to all higher education policy discussions, the Commission was charged with setting binding tuition ranges in the FOCUS Act of 2016. To determine the range, the Commission utilizes a model which forecasts potential changes in institutional costs based on inflationary increases, enrollment changes, and state appropriation projections, with an over-arching focus on student affordability. Although institutional costs often inflate at a higher rate than the consumer price index (CPI)—an inflation metric that tracks the average consumer's growth in costs—the Commission uses the CPI to project tuition ranges rather than an inflation index more closely tied to higher education costs. Tying tuition to the costs realities of the average family better keeps student affordability in check.

Foundation: Prioritize student affordability in setting binding tuition ranges.

Institutions have also experimented with tuition policies to keep increases on the low-end of the Commission's range. Many, including the University of Memphis, University of Tennessee at Chattanooga, and University of Tennessee, Knoxville, have periodically capped tuition growth at zero percent. In 2019-20, the University of Memphis implemented a guaranteed four-year tuition plan to give students predictability of costs over their higher education career. All of these actions involve institutions making tuition decisions that keep tuition increases well under the upper-bound of the Commission's ranges.

Institutional efforts to contain costs have helped keep Tennessee higher education affordable relative to other states. Since 2015-16, Tennessee has had its lowest five-year consecutive growth in tuition and fees in four decades. To maintain and enhance student affordability, both the Commission and institutions must continue the trend of keeping tuition in check and striving to set tuition under the upper-bound of the tuition range.

Financial Aid

Few families can afford to pay for college outright. Costs are therefore defrayed with financial aid or deferred through student loans. Whether costs are defrayed or deferred can affect the enrollment and success of different types of students. Financial aid grant programs, as opposed to loan programs, can lead to decreases in racial and ethnic access gaps[16] while also leading to increases in credit accumulation and degree completion for all students.[17] Merit-based programs, like the HOPE scholarship, can positively influence college completion by as much as five percent.[18] Grants can also offset tuition increases and keep students from taking on insurmountable loans. Tennessee's investment in financial aid can help lower debt burdens while increasing completion.

Tennessee's Financial Aid Investments

When states invest in financial aid, they provide an alternative to student debt and minimize the harmful long-term effects of loans. Tennessee invests directly in students through two financial aid programs: the Tennessee Education Lottery Scholarship (TELS) program and the Tennessee Student Assistance Award (TSAA). Both programs, administered by the Tennessee Student Assistance Corporation (TSAC), are awarded to students for use at their choice of public, nonprofit, and proprietary institutions.

The TELS program is funded exclusively by the state's lottery program whereas the TSAA is funded by state appropriation. The TSAA is exclusively a need-based aid program and is dependent on recurring state appropriation revenue. Students are eligible in part if they have an expected family contribution—as determined by the Free Application for Federal Student Aid (FAFSA)—of $2,100 or less. Total awards differ by sector, from a minimum of $1,000 for the TCAT sector to $4,000 for a nonprofit institution. In total, over $85 million is distributed to over 50,000 students. Due to continued investment from the state—an increase of 75 percent since 2013-14—all students who are eligible for the TSAA grant receive one.

Foundation: Ensure all eligible students receive TSAA grants.

Implemented in 2004, the TELS program grants over 100,000 scholarships annually and includes a variety of scholarships, including those that are strictly merit-based (e.g., HOPE), those that are both merit- and need-based (e.g., Access), and others that ensure tuition-free education (e.g. Promise). Each year between $350 million and $400 million is distributed to students attending both public and private institutions. Promise and Reconnect, a subset of TELS, are last-dollar scholarships covering tuition and mandatory fees for students who pursue an associate's degree or technical certificate through a community college, TCAT or qualifying university. The Tennessee Promise scholarship accounts for about 15,000 awards while Reconnect provided over 2,000 awards in its first year of implementation. The state's continued investment in financial aid, especially in Tennessee Promise, has resulted in a decline in students taking out loans.[19] Continued state investment in robust financial aid programs will help keep net price low for all students.

Foundation: Maintain a robust portfolio of state financial aid programs.

Continued and New Financial Aid Investments

Tennessee has been chipping away at the financial barriers to college access through investments in financial aid and state appropriations, supporting tuition containment. The additional costs of education, however, can derail students. Low-income students are especially vulnerable to unforeseen costs which force choices between work and study or textbooks and food.

Strategic state investment in financial aid can improve upon the strides made by Tennessee in recent years. First, continued investment in TSAA will allow the state to provide awards to more low-income students. Increased investment will also allow the TSAA grant to meet more non-tuition costs, such as textbooks and supplies. Tying increases in TSAA eligibility and grants to inflation will ensure that the value of the TSAA grant does not decline. Extending TSAA eligibility to all students who qualify for the Pell grant—the federal need-based grant—will help lower net price for more low-income students.

Second, Tennessee can focus on one-time college expenses that often serve as barriers to completion for many students. Financial emergencies, such as a medical bill or a major car repair, can force students to choose between taking on a second job and completing their studies. Too often, students choose the former, forcing them to drop out of college.[20] State investment in retention grants—one-time, small scholarships intended to help deserving students meet financial emergencies—can help students in their commitment to attending classes. These grants serve as a valuable investment to the institution, as students who are retained will pay tuition in future semesters.

Third, Tennessee can invest resources to reduce the burdens placed on students in accessing financial aid. The Free Application for Federal Student Aid (FAFSA) continues to serve as a barrier of access and completion for many students.[21] THEC, building on extensive outreach resources within TSAC, the College Access and Success division, and the Adult Learner Initiatives division, can help institutions better navigate FAFSA verification—a process requiring selected students to prove FAFSA claims—through coordination among financial aid offices and outreach to students. Most students are not selected for verification but those who are tend to be low-income and most at risk in accessing college. Because verification negatively impacts college access,[22] Tennessee can lead efforts to improve attainment by streamlining verification. Such an investment will ensure students are able to access college and secure financial aid, bringing down average net price.

Finally, the Commission can help establish partnerships between institutions, the Tennessee Department of Human Services, and the Tennessee Department of Labor and Workforce Development to help eligible students attain federal benefits, such as the Supplemental Nutrition Assistance Program (SNAP) or childcare assistance. Just as Tennessee has leveraged the federal Pell grant to bring down costs by requiring all students who apply for state aid to complete the FAFSA, institutions can direct students to available resources to ensure that all students eligible for other federal benefits receive them.

Tennessee has led the nation in financial aid investment over the last decade. Future investment can continue that effort and support students struggling to meet financial challenges while enrolled. Coupled with reduced barriers at the federal level, this investment will reduce net price and help Tennessee reach its college attainment goals.

FOUNDATIONS

- Prioritize student affordability in setting binding tuition ranges.
- Ensure all eligible students receive TSAA grants.
- Maintain a robust portfolio of state financial aid programs.

ADVANCEMENTS

- Peg increases in TSAA eligibility and TSAA grants to inflation.
- Extend outreach resources to help students navigate the FAFSA verification process.

INNOVATIONS

- Link TSAA eligibility to Pell eligibility.
- Target retention grants toward non-tuition costs of attendance.
- Establish partnerships between institutions, the Department of Human Services, and the Department of Labor and Workforce Development to help eligible students attain federal benefits, such as Supplemental Nutrition Assistance Program (SNAP) or other financial assistance.

Pillar II: Promoting Efficiency and Stability – Operating and Capital

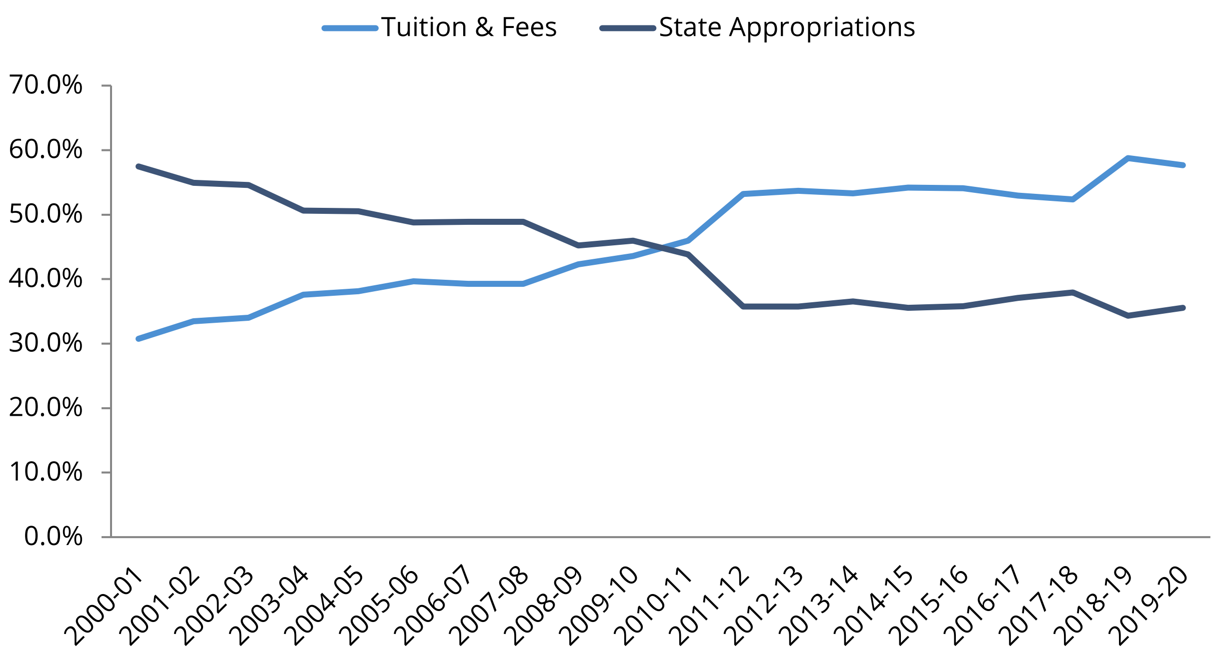
Although tuition and financial aid determines net price, the costs required to operate, to maintain facilities, and to invest in the overall education enterprise ultimately determines what the institution charges students. *Attaining* low net prices requires institutions to keep costs low *and* for the state to offset costs through appropriations. *Maintaining* low net prices during recessions, when appropriations are often reduced, requires institutions to cultivate and utilize reserves. Efficient institutions that help students meet intended outcomes on-time will keep costs low for the institution and the state. Tennessee needs stable institutions that can weather economic downturns without relying heavily on students. Targeted state investment in operating and capital—in coordination with policies that incentivize sound financial management—can ensure institutional efficiency and stability in all funding landscapes, ultimately lowering operating costs and bringing down the net price for students.

Operating Appropriations

During economic crises, higher education institutions across the nation have often faced disproportionately declining rates of state investment, acting as the good on which the budget is balanced.[23] Due to public higher education's ability to generate revenue from secondary resources—primarily through tuition and fees—state lawmakers frequently turn to higher education for funding reductions.[24] Conversely, when economies rebound, state government will invest in colleges and universities. However, the rate of reinvestment in higher education rarely exceeds that of divestment, meaning public institutions never fully recover from economic declines.[25]

In 2000-01, nearly 60 percent of total revenue available to Tennessee higher education came from direct state appropriations. This rate of statewide investment allowed institutions to keep tuition and fee levels lower. As the decade progressed, however, state investment waned, and by 2010, revenue generated by tuition and fees exceeded state appropriation revenue (Figure 8). Even with recent investments by the state, institutions still rely on tuition and fees to generate more than 50 percent of total revenue. The statewide adoption of outcomes-based funding in 2010, however, provides a map for halting further divestment by demonstrating that higher education is continuously improving and, therefore, worthy of investment.

Figure 8: Percent of Total Tennessee Higher Education Revenue



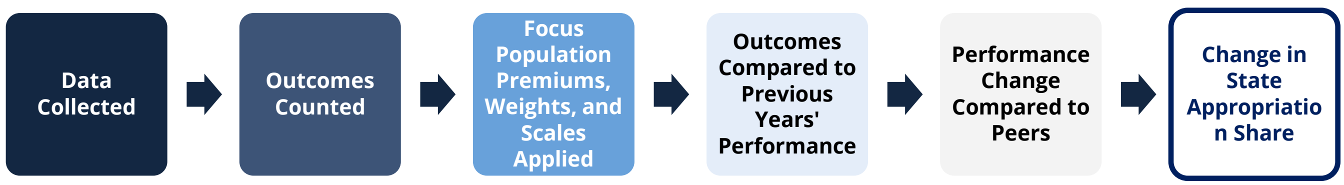
Source: THEC Operating Budgets
Note: Values do not add to 100 percent as other forms of revenue, including sales and services, are excluded.

Incentivizing Performance and Efficiency: Outcomes-Based Funding

Tennessee's Outcomes-Based Funding formula model rewards institutions for the production of outcomes that further educational attainment and productivity. Two sets of outcomes are identified—those for universities and those for community colleges—that best reflect the purposes of each type of institution. The outcomes were chosen to represent differing missions across institutions and are grouped into the categories of student progression, degree production, and other important institutional functions. Ultimately, the formula incentivizes efficiency. The faster an enrolled student can complete her studies, the faster the institution will be rewarded for that success.

The outcomes-based funding formula is both a request and allocation tool. The Commission uses the formula to determine the allocation of funding under new money, no-growth, or reduction scenarios. Regardless of the funding level provided by the state each year, all funding available is allocated based on each institution's performance in the model that year (Figure 9).

Figure 9: Outcomes-based Funding Formula Process



Source: THEC

Indeed, community colleges now award more associate degrees and long- and short-term certificates, provide more dual enrollment opportunities, and transfer more students to universities to continue their education than they did prior to the formula's implementation. Universities help more students reach progression benchmarks, award more bachelors and doctoral degrees, and receive more research funding than before the formula. These successes have resulted in increases in graduation rates across institutions. The state has rewarded institutions for their performances as nearly $250 million of new money has been distributed to higher education institutions following the formula's creation.

The conversation in Tennessee around higher education has fundamentally changed. A 2015 ethnographic study of Tennessee higher education found that since the implementation of the outcomes formula, institutions have implemented crucial campus-level completion interventions, including enhanced mentoring programs, one-stop shops to address student needs, and new advising software.[26] In 2017, Research for Action found a significant positive impact on accumulation of early credit hour benchmarks, certificate completion, and degree completion for low-income students who attended community college full-time.[27] The outcomes formula encourages an institution to remove barriers to completion, directly improving efficiencies and limiting costs to the student. Fully funding growth in the formula and distributing all state appropriations as dictated by the formula will continue to yield efficiencies.

Foundation: Fully fund growth in outcomes each year.

Building on the Formula's Success

One primary lesson is apparent from the formula's success: institutions respond to strong financial incentives. Tennessee has an opportunity to extend the formula's success to improve affordability.

First, Tennessee can increase the value of outcomes. Prior to implementing a new completion initiative, administrators often consult the Commission's formula analytic tools to determine the extent to which the formula may reimburse them. If the reimbursement rate is low, institutions may not implement the practice. Increasing the value of outcomes through growths in appropriations will encourage more adoption of completion initiatives.

Second, the state can incentivize institutions to collaborate. The formula currently incentivizes institutions by rewarding successful transfer outcomes and reverse articulated associate degrees. Either the formula or other targeted state investment can encourage institutions to partner on needed technology, services or facilities. Sharing costs between institutions can help lower overhead costs and reduce net price for students.

Preparing for Stress and Structuring Reserves

The strong link between state investment and tuition revenue highlights the relationship between state appropriations and student affordability. Decreases in state appropriations force institutions to address expenditures, either by identifying alternative funding sources or operating efficiencies. While institutions should limit excess costs, some cost-saving measures can be harmful to students' opportunities. In addition to increasing revenue through

Increasing the value of outcomes

The value of outcomes can be increased in coordination with other policies. For instance, the Commission can recommend appropriation increases that ensure no growth in tuition rates, ultimately reimbursing institutions not just for growth in outcomes but for commitments to lock tuition.

The State could also increase appropriations by addressing unfunded mandates currently in place, such as the fee waiver and discount program. The State requires institution to provide discounts and waivers for over half a dozen classifications of students, including teachers' children, state employees, and state employees' children. The total cost of these programs to higher education is over $20 million; however, institutions are reimbursed at approximately ten percent of cost.

Including full funding for these waivers and discounts in the institution's overall funding, and increasing available funding to match current expenditure, will effectively increase the value of outcomes.

tuition hikes, colleges and universities can reduce expenditures by hiring more part-time faculty, increasing faculty teaching loads, or divesting from student support services—all actions that may lead to reductions in completion or instructional quality.[28]

Indeed, Tennessee institutions identified these and other potential measures when THEC conducted a stress test in 2018. THEC assessed financial health—as measured by the composite financial index (CFI), an industry standard—for each university and community college under scenarios in which state appropriations declined by two, five and ten percent. Institutions were asked to state potential actions to maintain financial health without relying on tuition increases. In the wake of severe appropriation cuts, institutions mentioned limiting class offerings—thereby increasing course bottlenecks—, truncating student support services, and reducing scholarships. Unexpected declines in state appropriations could cause institutions to make cuts that directly hurt completion initiatives.

Because state government uses investment in higher education as a way to balance the budget in tough economic times, institutions *should* anticipate and prepare for these declines, implementing revenue strategies that limit complete dependence on tuition increases. A major component of the CFI is the *primary reserve ratio*, or the availability of sufficient and flexible expendable reserves relative to expenditure commitments. A solution to maintain robust health in the wake of a recession is to allow institutions to build rainy-day funds during robust economic times.[29] The state can incentivize this behavior by changing the narrative around the benefits to placing tax dollars and tuition revenue in these funds.[30] Most states use general fund reserve accounts to plan for economic downturns yet often higher education is discouraged from instituting the same budgetary practice. Encouraging the growth of institutional rainy-day funds will grant institutions the reserves needed to mitigate cuts during leaner times, allowing them to maintain access and affordability while investing in completion practices.

Capital and Technological Infrastructure

State higher education capital expenditures are funds provided to institutions for new construction, infrastructure, land purchases, the acquisition of existing structures or major equipment, or major repairs and improvements. Failing to invest in capital infrastructure can increase costs over time due to aging facilities and deferred maintenance. For the greatest return on investment, the Commission should continue prioritizing policies and processes which provide greater predictability to support institutional planning, clarify state priorities, and enhance operating efficiencies.

Building What We Need: Strategic Outlay Investment

The changing landscape following the FOCUS Act required an intentional revision of the prioritization process for capital project funding. The new capital recommendation process formalizes a data-centered approach predicated on thoughtful planning and the advancement of state goals. It also allows for greater flexibility: institutional leadership can assess each project in the context of ever-shifting conditions, priorities, and institutional funds; state leadership, in turn, assesses likewise. Each project, whether new construction or a repurposed existing facility, is evaluated on its own merit and cost economy, with each institution putting their best solution forward each year. Further, the process ensures the state invests in projects that directly improve an institution's ability to produce marketable degrees efficiently. Removing barriers to completion—such as space-limited class sections for required courses—can help students graduate on-time, limiting the cost of their education. Prioritizing capital in alignment with the education and workforce needs of the state will help keep education costs low.

Foundation: Prioritize capital outlay in a manner that meets the education and workforce needs of the state, while keeping costs at a minimum.

Although strategic facility expansion can help institutions meet the need of more students quickly, holding on to inefficient or unused space requires unnecessary upkeep. As the state invests in space best aligned with institutional efficiency, it can further ensure efficiency by requiring institutions to demolish unneeded space—to offload space equivalent to the newly constructed space. The state can also incentivize major renovation over new construction, encouraging institutions to transform old space created for yesterday's pedagogy into space that reflects current pedagogy. A capital process that encourages no new growth in square footage will minimize costs.

Taking Care of What We Have: Maintenance Investment

Tennessee has historically invested in capital maintenance, paying for roof replacements, electrical system upgrades and other needs to keep the state's buildings in shape. Since the implementation of the FOCUS Act, the Commission has distributed capital maintenance to institutions based on aggregate age, size and use of facilities. This distribution ensures that capital maintenance investment goes to the institutions with the greatest needs. Deviating from this policy risks disrupting an equitable approach to maintaining facilities across institutions and may require institutions to disproportionately maintain buildings on the backs of students.

Foundation: Fund and distribute capital maintenance to campuses based on aggregate age, size, and use of facilities.

Continued recurring funding for capital maintenance may be the greatest facilities stabilizer the state can offer. Until recently, capital maintenance has solely relied on nonrecurring revenue to fund capital maintenance. While institutions were grateful for any maintenance investment, complete reliance on nonrecurring dollars meant institutions could not rely on a steady annual investment. Tennessee’s 2017-18 investment of $40 million in recurring revenue for maintenance was a great step in ensuring stability in maintenance investment. Gradually increasing recurring investment will yield considerable predictability in the state’s process for addressing maintenance, allowing institutions to plan needed capital maintenance in advance without having to shift unanticipated costs to the student.

Despite near-constant state investment, institutions have accumulated hundreds of millions in deferred maintenance. The state can help institutions address deferred maintenance by electing to not fund capital outlay for one year in exchange for funding additional maintenance projects. The state can also defray deferred maintenance by requiring institutions, when granted a new capital outlay project, to set aside institutional revenue to pay down future capital maintenance on that facility. Strategically addressing current and future maintenance needs will ensure institutions do not rely on alternative revenue sources—like student fees—to extend a building's lifespan.

Building Capacity: Technology and Partnerships

In recent years, the Commission has received a growing number of proposals for expenses that do not fit into existing funding pathways, including funds for campus safety and security, technology and equipment and strategic investments. The requests reflect changing environmental needs, innovations and investments that are forward-looking and invite the Commission to broaden the concept of capacity beyond traditional square footage. Rather than the current one-off approach, a broader definition of capital allows for assessment of a subset of strategic investments for equipment and technology, most notably at TCATs; counter-cyclical investments, including investments in efficiencies that will reduce costs long-term; and, new models of educational delivery. Tennessee can implement new models that extend the educational footprint while improving the quality and efficiency of existing square footage.

Tennessee's existing campuses are place bound, but Tennesseans and the modern economy require an expanded postsecondary reach into rural areas. The Commission has identified 19 distressed counties, most of them higher education "deserts," and is developing partnerships to improve educational options with the Supporting Postsecondary Access in Rural Counties (SPARC) Initiative. Tennessee is exploring collaborative higher education centers and some states have begun using technology to link virtual colleges. For example, the Northern Pennsylvania Regional College utilizes local high schools and libraries as regional hubs to host virtual and in-person classroom opportunities from accredited state institutions.[31] A similar model in Tennessee could help established institutions meet the needs of students in every corner of Tennessee, limiting transportation costs and other obstacles students from rural communities face.

The costs associated with these models (including technology, equipment, lease agreements, etc.), however, do not fit easily into the existing capital process. A shift toward *capacity investment*—instead of strict facility expansions—encourages all parties to consider new models of learning spaces and campuses. Continued investment in capital maintenance, new or restructured facilities, and capacity-enhancing technology and partnerships will strengthen Tennessee's ability to enhance college access and attainment, ensuring no student in Tennessee is more than a short drive from an affordable postsecondary opportunity.

FOUNDATIONS

- Fully fund growth in outcomes each year.
- Prioritize capital outlay in a manner that meets the education and workforce needs of the state, while keeping costs at a minimum.
- Fund and distribute capital maintenance to campuses based on aggregate age, size and use of facilities.

ADVANCEMENTS

- Increase the value of outcomes to further incentivize completion initiatives and efficiencies.
- Address unfunded mandates currently in place, such as tuition and fee waivers.
- Require no-new increase in square footage, prioritizing renovations and demolitions above new space.
- Gradually increase recurring maintenance dollars to replace nonrecurring maintenance dollars.

INNOVATIONS

- Tie requests in operating increases to zero tuition growth.
- Promote creation of institutional rainy-day funds.
- Incentivize institutional collaboration to reduce operating costs.
- Embed future maintenance into outlay expenditures.
- Recast Capital Investment as Capacity Investment, inclusive of building capacity, technology investment, and rural extension.

Conclusion

Tennessee has an opportunity make higher education the most affordable in the South. Affordability yields postsecondary credential attainment, building on Tennessee's robust economic health. Tennessee is known for yoking fiscal responsibility to higher education innovation. Sustaining foundational tuition, financial aid, and operating and capital policies while adopting pragmatic advancements and innovations will bend the cost curve down and lower the net price charged to students. Strategically investing in higher education will allow Tennessee to realize its great return on investment.

End Notes

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