2014 – 2015 COMMISSION MEMBERS

Mr. Evan Cope, Chair, Murfreesboro, 4th Congressional District

Mr. Robert Fisher, Voting student member, UT Chattanooga

Mr. Tre Hargett, Secretary of State

Ms. Sharon Hayes, Vice Chair, Brownsville, 8th Congressional District

Mr. Jon Kinsey, Chattanooga, 3rd Congressional District

Ms. Pam Koban, Nashville, 5th Congressional District

Mr. Bill Lee, Franklin, 7th Congressional District

Mr. David Lillard, Jr., State Treasurer

Mr. Alex Martin, Non-voting student member, TTU

Ms. Pam Martin, Mount Juliet, 6th Congressional District

Dr. Sara Heyburn, Executive Director, State Board of Education, Non-voting ex-officio

Mayor A C Wharton, Secretary, Memphis, 9th Congressional District

Mr. Justin Wilson, State Comptroller

Mr. Keith Wilson, Vice Chair, Kingsport, 1st Congressional District

VACANT, 2nd Congressional District
PURPOSE OF THE REPORT

The Tennessee Higher Education Commission prepares a report for the Governor and the General Assembly, commenting upon major developments, trends, new policies, budgets and financial considerations which in the judgment of the commission will be useful to the Governor and to the General Assembly in planning for the sound and adequate development of the state’s program of public higher education.

The purpose of this report is to provide state policymakers with a brief overview of Tennessee higher education in a regional and national context. This report presents data and analyses on five broad policy areas important to the state: 1) State context of higher education, 2) Student preparation, 3) Student participation, 4) Student progression, and 5) State higher education finance.
1. STATE CONTEXT OF HIGHER EDUCATION

1.1. Educational Attainment and Personal Income per Capita, 2013

Educational attainment and personal income show a positive correlation and are linked to a state’s economic competitiveness.

In 2013, Tennessee’s per capita income was $39,558, ranking 34th in the US. Meanwhile, 33.1 percent of adult state residents (25-64) had at least an associate’s degree, ranking Tennessee 42nd in the nation. The orange-lettered states in the upper right quadrant of Figure 1.1 scored in the top ten on the New Economy Index, which measures the extent to which state economies are knowledge-based, innovative, and globalized. In 2014, Tennessee ranked 40th in the New Economy Index, a slight drop from the 39th position in 2012.  


<table>
<thead>
<tr>
<th>Education Level</th>
<th>U.S.</th>
<th>SREB (excluding TN)</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 9th grade</td>
<td>4.7%</td>
<td>5.0%</td>
<td>3.9%</td>
</tr>
<tr>
<td>9-12th grade</td>
<td>5.0%</td>
<td>6.9%</td>
<td>7.3%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>8.3%</td>
<td>8.5%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>21.9%</td>
<td>22.2%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Associate’s</td>
<td>8.7%</td>
<td>8.3%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>19.6%</td>
<td>18.3%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Graduate / Professional</td>
<td>11.1%</td>
<td>10.0%</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

* Includes equivalency.

Research has demonstrated positive relationships between educational attainment and various economic and social measures. The ongoing “Drive to 55” campaign puts high premium on raising educational attainment in Tennessee. The key factors affecting educational attainment are: college participation and completion, migration of students and graduates, and economic climate.

Although Tennessee has a comparatively large percentage of its adult population with a high school diploma or equivalent, it is below the averages for the U.S. and Southern Regional Education Board (SREB) states in college educational attainment. In 2013, 12.2 percent of Tennessee’s adult population (25-64) did not have a high school diploma, and 54.7 percent of adults had completed either high school or some college. Just over 33 percent of the state’s citizens aged 25-64 had a college degree, ranking Tennessee 42nd nationally on this measure.
1.3. In-migration, Out-migration, and Net Migration to Tennessee by Educational Attainment: Age 25 and Over (2013)

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Out-migration</th>
<th>In-migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate / Professional</td>
<td>+ 3,197</td>
<td>12,928</td>
</tr>
<tr>
<td></td>
<td>+ 5,106</td>
<td>19,356</td>
</tr>
<tr>
<td></td>
<td>+ 7,111</td>
<td>29,572</td>
</tr>
<tr>
<td></td>
<td>+ 7,395</td>
<td>22,243</td>
</tr>
<tr>
<td></td>
<td>+ 2,869</td>
<td>9,514</td>
</tr>
</tbody>
</table>

Source: 2013 American Community Survey

Migration data, presented by degree level, underscore the relationship between supply of educated citizens and interstate mobility. These numbers are essential for understanding dynamics of educational attainment and assessing the potential for statewide economic development. Figure 1.3 shows Tennessee’s success in attracting people from out of state with various levels of educational attainment.

At all educational levels, the net migration of the adult population (represented by green numbers above the bars) is positive. In 2013, Tennessee imported 8,303 more adults with a bachelor’s degree or higher than the same population that left the state. At the same time, many arriving workers do not have college education: 42,021 in-migrants (35.2 percent of all newcomers) arrived in Tennessee with no previous exposure to postsecondary education or training.
Three commonly used indicators of a state’s economic climate are per capita income, unemployment rate, and poverty rate. Figure 1.4 and the next three figures examine how Tennessee performs on these metrics.

Income per capita measures the amount of money earned per person in a given region. This measure is positively correlated with economic health and educational attainment of the population. Per capita personal income trends measure improvements in individuals’ quality of life and reflect a state’s ability to raise revenue.

Adjusted for inflation, Tennessee’s personal income per capita has increased over the past 20 years. Recently, it has increased from 85.8 percent of the national average in 2008 to 88.4 percent in 2013. However, Tennessee remains below the national mean and has fallen behind the SREB average since eclipsing the SREB average in the 1990s.
In line with national, SREB, and Tennessee trends over the past 20 years, per capita personal income has been on the rise for all three of the state’s Grand Divisions (Figure 1.5).

The relative positions of Tennessee’s Grand Divisions have been consistent over time. The average income for the Eastern counties of the state, at $36,362 in 2013, has been appreciably lower than the other regions, and the average for the state. West Tennessee is slightly above the state average, while Middle Tennessee demonstrates the highest per capita personal income of all the regions, at $42,135 in 2013.
1.6. Unemployment Rate for Each of Tennessee’s Grand Divisions

Unemployment rate, the ratio of the number of active job seekers to the labor force, is another critical indicator of states’ economic health. Figure 1.6 presents unemployment rate changes in Tennessee by Grand Division.

Recessions in the early and late 2000s led to accelerated growth in this indicator. The state’s unemployment rate reached a peak of 10.4 percent in 2009, declined to 8 percent by 2012, and grew slightly to 8.2 percent in 2013. West Tennessee has consistently had a higher unemployment rate than the other Divisions. The Eastern counties have an unemployment rate that is very close to the state’s average. Middle Tennessee demonstrates the lowest percent of unemployed populace; unlike the other regions and the state as a whole, its rate of unemployment has decreased since 2012 (from 7.3 to 7.2 percent). Figures 1.5 and 1.6 attest to economic vitality of Middle Tennessee.
### 1.7. Poverty Rate for Each of Tennessee’s Grand Divisions

The poverty rate is a key economic and social indicator that denotes inadequacy of family incomes for the consumption of food and other goods and services. The U.S. Census calculates this metric by measuring the number of individuals in a household below the poverty threshold against the total population. Poverty thresholds are based on age, the number of household members older than 18, and dependents younger than 18 years of age.

Figure 1.7 shows that Middle Tennessee has had the lowest poverty rate over time, while the West has been consistently higher on this indicator than the other Grand Divisions.

Taken together, Figures 1.5 through 1.7 demonstrate a consistent and large disparity in West Tennessee among social strata in the population. That is, West Tennessee consistently outpaces the state average in personal income per capita; yet it also has the highest rates of poverty and unemployment among the Grand Divisions of the state.
1.8. Changes in Tennessee’s Age Composition

Demographic changes in the state have a direct influence on student enrollment patterns and student body composition. Research shows that these factors affect various educational outcomes. The most critical demographic changes include shifts in the age and racial/ethnic composition of the state’s population. Figure 1.8 and Figure 1.9 focus on these dynamics.

Figure 1.8 shows that over the last two decades, Tennessee’s population has increased by 31.3 percent. It has also grown perceptibly older: the share of young people has decreased, while the proportions of working-age and older individuals have risen. In absolute numbers, the size of the young population has grown by 365,410. Besides economic and social impacts of an aging population, critical implications for education include: a growing share of nontraditional students; shifts in demand for training, program offerings, and new modes of delivery; and the ever-present need for continued education.
1.9. Changes in Racial / Ethnic Composition among Tennessee’s Youth *

Figure 1.9 shows changes in the ethnic composition of the population under 18 years of age—potential higher education students—from 2000 to 2013.

Over the past 13 years, the share of nonwhite representation has risen dramatically: the Hispanic population grew by over 177 percent, from 38,899 in 2000 (less than 3 percent of the young population) to 108,053 in 2013 (over 7 percent of the state’s youth). Over the same period, the Asian population grew from 14,129 to 23,414, a 65.7 percent increase, now representing 1.6 percent of the state’s young population. In contrast, the proportion of whites has decreased by 5 percentage points and, at present, constitutes less than 68 percent of the state’s young population.

These demographic changes could have implications for a number of college outcomes—from enrollment to graduation.
The U.S. Census Bureau projects that, over time, the United States will become a plurality nation, in which the white population will remain the largest group, but no single racial/ethnic group will make up a majority. The U.S. is projected to become a plurality (majority-minority) nation in 2043. Already the USA’s largest minority group, Hispanics will continue to experience the biggest increase in the share of the overall population.

Figure 1.10 shows that Tennessee will follow these national trends. From 2015 to 2045, the white population’s share is projected to decrease from almost 74 percent to almost 61 percent of the overall state population. During the same period, the share of Hispanics will increase by 7.2 percentage points to 12.7 percent. This projected growth of the Hispanic population will outpace the increase in the Black population (0.9 percentage points) and all other non-Hispanic populations (4.9 percentage points).
SECTION II. STUDENT PREPARATION

2.1. Educational Progress of 8th-graders: 2013 NAEP Math and Reading Average Scores: U.S., SREB (excluding TN) and TN

Academic performance of secondary school students is a valid indicator of student readiness for college, and a reliable predictor of future college success.

Figure 2.1 depicts the educational progress of eighth-grade students in the nation, SREB states (excluding Tennessee), and Tennessee, as measured by students’ performance on mathematics and reading tests. These tests were conducted in 2013 as part of the National Assessment of Educational Progress. Black students underperform in comparison to other ethnic groups both in mathematics and reading and are thus less academically prepared for college-level work. Asian students are the best-performing group; however, their data are not available for Tennessee. All of Tennessee’s ethnic groups score below the US and SREB averages in mathematics; however, its nonwhite groups perform on par or better in reading.
### 2.2. Average Composite ACT Scores by State: SREB States (2014)

<table>
<thead>
<tr>
<th>State</th>
<th>Average Composite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>23.2</td>
</tr>
<tr>
<td>VA</td>
<td>22.8</td>
</tr>
<tr>
<td>MD</td>
<td>22.6</td>
</tr>
<tr>
<td>TX</td>
<td>20.9</td>
</tr>
<tr>
<td>GA</td>
<td>20.8</td>
</tr>
<tr>
<td>OK</td>
<td>20.7</td>
</tr>
<tr>
<td>WV</td>
<td>20.6</td>
</tr>
<tr>
<td>AL</td>
<td>20.6</td>
</tr>
<tr>
<td>SC</td>
<td>20.4</td>
</tr>
<tr>
<td>AR</td>
<td>20.4</td>
</tr>
<tr>
<td>KY</td>
<td>19.9</td>
</tr>
<tr>
<td>TN</td>
<td>19.8</td>
</tr>
<tr>
<td>FL</td>
<td>19.6</td>
</tr>
<tr>
<td>LA</td>
<td>19.2</td>
</tr>
<tr>
<td>MS</td>
<td>19.0</td>
</tr>
<tr>
<td>NC</td>
<td>18.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Percent of Students Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>18%</td>
</tr>
<tr>
<td>VA</td>
<td>28%</td>
</tr>
<tr>
<td>MD</td>
<td>22%</td>
</tr>
<tr>
<td>TX</td>
<td>40%</td>
</tr>
<tr>
<td>GA</td>
<td>53%</td>
</tr>
<tr>
<td>OK</td>
<td>75%</td>
</tr>
<tr>
<td>WV</td>
<td>65%</td>
</tr>
<tr>
<td>AL</td>
<td>80%</td>
</tr>
<tr>
<td>SC</td>
<td>58%</td>
</tr>
<tr>
<td>AR</td>
<td>93%</td>
</tr>
<tr>
<td>KY</td>
<td>100%</td>
</tr>
<tr>
<td>TN</td>
<td>100%</td>
</tr>
<tr>
<td>FL</td>
<td>81%</td>
</tr>
<tr>
<td>LA</td>
<td>100%</td>
</tr>
<tr>
<td>MS</td>
<td>100%</td>
</tr>
<tr>
<td>NC</td>
<td>100%</td>
</tr>
</tbody>
</table>

US average: 21.0 (57% tested)
SREB states median: 20.5

At the individual level, ACT scores are another measure of readiness for college-level work, and a useful predictor of future academic performance. At the state level, states with higher average scores on this test produce larger numbers of high school graduates who are prepared for college. Figure 2.2 shows the average composite ACT score for each SREB state in 2014. When comparing state performance, one should be aware that the proportion of high school graduates tested in each state is different and ranges from 18 percent in Delaware (where SAT is mandatory) to 100 percent in states with a mandatory ACT—Kentucky, Louisiana, North Carolina, and Tennessee.

In 2014, Delaware had the highest average score of 23.2, while North Carolina, with 18.9, had the lowest performance among the SREB states. Tennessee, with an average score of 19.8, ranked 12th among the SREB states. In 2013, Tennessee ranked 13th in the SREB with the average score of 19.5 (not shown on the graph). However, these results are greatly affected by the percent of test takers and the voluntary/mandatory nature of college entrance exams. Tennessee is at the top of states with 100 percent participation.

Source: 2014 ACT
Students taking higher education courses while in high school are more likely to enroll and succeed in college. Positive trends in high school student involvement in higher education may attest to greater college accessibility and effectiveness of relevant state policies.

Figure 2.3 displays changes in the percent of undergraduate credit hours taken by high school students at 2- and 4-year institutions from 2007-08 to 2011-12 for select SREB states. This metric measures high schoolers’ involvement in state higher education. Tennessee shows solid, if not accelerated, progress on this metric at both community colleges and universities. To some extent, this can be attributed to the lottery-sponsored Dual Enrollment Grant program.

High school graduates are the primary source of postsecondary education enrollees. Changes in high school graduation rates affect the pool of potential college students; increasing rates may offset the effects of the reduced size of college-age population caused by demographic shifts. The Averaged Freshman Graduation Rate (AFGR) is an estimate of the percentage of an entering freshman class graduating in 4 years. It is estimated as the total number of diploma recipients in a year divided by the average membership of the 8th-grade class four years prior, the 9th-grade class three years prior, and the 10th-grade class two years prior. The AFGR differs from the graduation rates in Figure 2.5; thus, Figures 2.4 and 2.5 are not directly comparable.

Figure 2.4 shows public high school graduation rates for the nation, SREB, and Tennessee. From 1991 to 2010, these rates have grown for the majority of the states and the nation as a whole. Since 1998 (the lowest point in the period), Tennessee’s graduation rate has risen by 22 percentage points, surpassing the SREB median by a large margin. In 2010, the high school graduation rate in the state reached 80.4 percent, exceeding the national average for the third year in a row.
In 2011, the US Department of Education introduced a new, common metric for four-year high school graduation rates across states. This new measure is more accurate than the one used previously (reported in Figure 2.4); however, it is not directly comparable to the data reported in the prior years.

Figure 2.5 compares the current high school graduation rates for the nation, SREB states (median for the 15 states, excluding Tennessee), and Tennessee from 2011 to 2013.

The new data show that Tennessee continues to demonstrate consistently high graduation rates, which surpasses that of the nation and the median for the other SREB states. In 2013, Tennessee ranked 2\textsuperscript{nd} among the SREB states (Texas with 88% ranked 1\textsuperscript{st}) and 11\textsuperscript{th} in the United States.
Figure 2.6 presents public high school graduation rates by race/ethnicity for Tennessee, Texas, and SREB states (excluding Tennessee) in 2012-13. The national data were not available for this year at the time of this report. Texas was selected for comparison because it is the SREB state with the highest graduation rate.

The position of Tennessee relative to Texas and the SREB median remains constant for all students and across different racial/ethnic groups. Tennessee generally does better than the typical SREB state and trails Texas performance.

Regarding racial groups, Asian students demonstrate the highest graduation rate, followed by white students. Black and Hispanic students show lower graduation rates from public high schools. In 2012-13, the graduation rate gap between white and Black students in Tennessee was 11.8 percentage points, in SREB 7.9 percentage points, and in Texas 8.9 percentage points.
**SECTION III. STUDENT PARTICIPATION**


The college-going rate is defined as a percentage of high school graduates who enrolled in college anywhere in the US in the fall semester following high school graduation. This measure is critical for identifying issues with higher education access and participation. It is also important to realize that this metric captures only traditional college-going patterns (immediate enrollment) and does not account for delayed enrollment or non-traditional students.

Disparity among racial/ethnic groups is one of the most severe issues in college participation. Figure 3.1 presents college-going rates for four major ethnic groups in Tennessee over time.

From 2011 to 2013, the college-going rates for these racial/ethnic groups have been stable. Hispanics, at 34 percent in 2013, have shown the lowest college-going rates among all ethnic groups in Tennessee. The postsecondary participation rates for Black high school graduates have been slightly above 50 percent. White graduates show a higher rate, approaching 60 percent. Asian graduates, at 69 percent in 2013, have had the highest college-going rate of all ethnic groups.

---

Sources: THEC, National Student Clearinghouse
Children from low-income families—defined as those who are approved for free or reduced-price school lunches (FRL)—have the greatest financial obstacles to obtaining a higher education. Positive changes in the proportion of these students in the entire college-going population attest to the success of states’ efforts to ensure greater access to, and affordability of, postsecondary education.

College Participation Rates for Students from Low-income Families are defined as the ratio of the number of undergraduate dependents receiving Pell Grants to the number of children in low-income families (FRL 4-9th graders nine years earlier).

Figure 3.2 shows that the share of the K-12 student population from low-income families pursuing higher education has been growing over time. This is true nationwide, for SREB states, and for Tennessee. Tennessee’s rate has grown from 16.5 percent in 1993 to 33.4 percent in 2013. In 2011, Tennessee had a rate of 37 percent, but it dropped over the next two years. Tennessee has outpaced the SREB average since 2007; however, as of 2013, it still trails the national average of 38.4 percent.
3.3. Destination of College-going Recent Tennessee High School Graduates (Fall 2000 – Fall 2012)

The decisions of college-bound high school graduates about where to attend higher education have critical implications for state economies. While in college, students will contribute to the state’s economy through tuition and costs of living. However, more importantly, many of these students will remain in the state after graduation, strengthening its labor force.

One of the key goals of the Tennessee Education Lottery Scholarship (TELS) program is to retain the best and brightest students in the state. Figure 3.3 shows that since 2004, the year TELS was implemented, a greater percentage of recent Tennessee high school graduates are enrolling in state institutions. After an initial increase in the proportion of Tennessee high school graduates opting for in-state institutions, this ratio has remained stable over time at approximately 85 percent. However, in the fall of 2012, the percent of Tennessee high school graduates enrolling in the state’s institutions was 83.7 percent, down from 84.8 percent in 2010 and 2008.
3.4. Adult Participation Rate: U.S. and Tennessee (2013) *

Participation of non-traditional students in higher education is crucial for a number of reasons. First, enrolling (and graduating) more adults enables states to move toward attaining goals of a more educated citizenry, economic prosperity and competitiveness, and enhanced social mobility. Second, this metric shows the extent of states’ commitment to life-long learning and providing educational opportunities to all citizens. Finally, adult participation reflects demographic shifts in student populations and college access.

Figure 3.4 presents adult participation rates across various institutional types in the US and Tennessee in 2013. Participation rates of non-traditional aged students in Tennessee are far below the national average. Public and private higher education institutions in the state enrolled 5.1 percent of adults who had a high school diploma but no college degree, compared to 7.6 percent nationally. The gap in the adult participation rate in Tennessee and the US differs by institutional sector and is widest at public two-year institutions.

* Adult enrollment as a percentage of adults 25+ with a high school diploma.
Unlike prior reports, the estimates also include HS graduates with some college but no college degree.

Sources: IPEDS, ACS
3.5. Tennessee Undergraduate Enrollment: 25 Years Old and Above

The share of nontraditional students attending postsecondary institutions has been steadily increasing. According to the National Student Clearinghouse Research Center (2012), nationwide, 38 percent of all undergraduate and graduate students are adult learners.

Figure 3.5 shows the enrollment trends of Tennessee adult students. Until 2008, adult enrollment declined steadily at Tennessee’s public 2-year institutions, and then started to improve. However, adult enrollment in community colleges has declined since 2011. Public universities have also experienced a decline in adult enrollment. Private institutions have enrolled increasing numbers of adult students over the last 15 years. Despite a recent small dip in for-profit institutions, adult enrollment at private institutions increased by 247 percent from 1998 to 2013, with for-profit colleges being the primary contributor to the growth of this sector. ²

² For-profit institutions’ data are available for Title IV (Federal Student Aid program) participating institutions only and do not reflect the total proprietary enrollment.
Ethnic diversity in the student body is related to a number of educational outcomes, and is reflective of a commitment to equal access to education for all demographic groups. Reflecting the changes in the Tennessee’s population and the subpopulation of young people (Figure 1.9), the race and ethnicity profile of higher education students in the state has gradually changed over time.

Figure 3.6 shows a steady, if small, increase in nonwhite student participation in public higher education. Between 1998 and 2013, the enrollment share of Black students increased from 16.9 percent to 18.8 percent at public universities, and from 15.6 percent to 17.3 percent at community colleges. The small share of Hispanic students has also steadily increased at both types of institutions, reflecting both demographic shifts and changes in the college-going behavior of Hispanic high school graduates.
SECTION IV. STUDENT PROGRESSION AND SUCCESS

4.1. One-year Retention Rate for Tennessee Public Institutions: Freshman Cohorts Fall 1992 – Fall 2012

This section uses three indicators of student progression and success: one-year retention rate, six-year graduation rate, and award distribution by demographic group (Figures 4.1-4.5). The one-year retention rate (the proportion of freshmen who continue their studies into the fall of their sophomore year) is important because it is linked to the probability of graduation and has implications for outcomes-based funding.

Figure 4.1 shows that a recent downward trend in one-year retention has generally reversed itself. The retention rate for Black students attending community colleges, who had experienced the largest drop in retention by 2011, has gone up from 43.2 for the 2011 freshman cohort to 44.5 for the 2012 cohort. At the same time, retention of Black students at public universities has not rebounded after a three-year decline. One-year retention for white students has improved slightly from 2011 to 2012.

The six-year graduation rate is a common measure of student success and institutional productivity. In Tennessee, this metric is essential for meeting educational attainment goals set by the Drive to 55 campaign and for public colleges’ outcomes-based funding.

Traditionally, two-year institutions have lower graduation rates than their four-year counterparts. This is due to students’ demographics, lower retention rates, higher transfer-out rates, and the enrollment of many students who do not intend to pursue an associate’s degree.

Figure 4.2 shows the six-year graduation rate for each full-time freshman cohort from 1992 (graduation through 1997-98) through 2008 (graduation through 2013-14). The new metric, which uses additional data from the National Student Clearinghouse, has been applied since the 2005 cohort. Thus, the more recent graduation rates are not directly comparable to those prior to 2005.

The overall six-year graduation rate (Figure 4.2) masks differences among demographic groups. Sorting this indicator into various cohorts allows for a closer look at how institutional sectors are serving students in terms of their measurable college success.

Figure 4.3 presents six-year graduation rates for freshman cohorts of white and Black students, from 1994 through 2008.

At public universities and community colleges, white students perform better than average, while graduation rates for Black students are below average. These trends have been consistent over time. White students have demonstrated improvement in both sectors under the old (until 2005) and new metrics, while Black students have experienced only marginal changes in their graduation rates. A large increase in graduation rate for Black students in universities from 2004 to 2005 is due to a decline in 2004, followed by adoption of a new metric in 2005.
4.4. Six-year Graduation Rate for Tennessee Public Institutions by Gender, Race/Ethnicity, and Pell Eligibility: 2008 Cohort

Characteristics such as gender, race, and socioeconomic status greatly affect students’ likelihood of graduation. Figures showing graduation rates for these subpopulations allow legislators and other decision makers to see how likely different types of students are to graduate, and determine where improvements need to be made.

Figure 4.4 shows the six-year graduation rate for the 2008 freshman cohort by gender, race/ethnicity, and Pell eligibility. For every group, graduation at public universities is much higher than at two-year institutions. Females graduate at a higher rate than males in both institutional sectors. White students have the highest graduation rate, followed by Hispanic and Black students. As expected, students who qualify for federal Pell grants do not graduate as often as those students who do not qualify for Pell in the university sector. The graduation rate of Pell-eligible enrollees averages 37.6 percent for all public institutions in the state and is much lower than the statewide average of 45.9 percent (not shown on the graph).
The relationship between educational attainment and economic vitality (Figure 1.1) provides for the need to increase the number of postsecondary degrees. Understanding what types of degrees are awarded is an important part of examining progress toward this goal.

Figure 4.5 shows the distribution of degrees awarded at public Tennessee institutions in 2013-14, by select student demographics. The most common award across all demographic groups is the bachelor’s degree; the associate’s degree generally holds the second position. Although, in absolute numbers, white students earn more awards than nonwhite students, and females earn more degrees than males, the percent distribution of awards within each group differs only slightly. For adult students, the share of bachelor’s degrees is smaller than the combined share of certificates and associate’s degrees. Of note, adults earn lower-level certificates at nearly the same rate as traditional age students. For Pell-eligible students, associate’s degrees are more popular than for any other demographic.
Comparison of tuition in Tennessee to the tuition of institutions in neighboring states allows gauging how well Tennessee encourages its residents to attend higher education in-state. Nationally, the cost of higher education is climbing at a rate that forces many families to seriously consider cost when deciding where their child will enroll. With federal and state aid making up a smaller portion of the overall cost of college, legislators should be mindful of the influence that price has on a student entering college or entering the workforce.

Figure 5.1 demonstrates that, on average, changes in the median university tuition in Tennessee have been in step with the rise of average tuition across the other 15 SREB states. Tennessee universities remain as affordable as four-year institutions in other SREB states. However, annual tuition charges at public two-year institutions in Tennessee have outpaced the growth in the median tuition for these campuses in other SREB states. Even with these greater than average increases, community colleges remain an affordable option in Tennessee.
5.2. Total State Grant Aid (Need and Non-need) per Public and Private Undergraduate FTE (2012-2013)

Figure 5.2 shows the total amount of state grant aid (both need and non-need based) for the SREB states, and presents the average award per full-time equivalent (FTE) undergraduate student for SREB and the nation. In 2012-13, Tennessee ranked second nationally and among the SREB states in the amount of grant aid per FTE. This remarkable progress from Tennessee's 32nd position in 2003 is largely attributable to the creation of the Tennessee Education Lottery Scholarships (TELS) program in 2004. However, Tennessee (24 percent) continues to trail the nation (75 percent) and SREB region (60 percent) in the proportion of grant aid awarded based on need.
5.3. Net Cost of Attendance as a Percent of Median Family Income

The net cost of college as a percent of median family income is a telling indicator of higher education affordability. Figure 5.3 shows that public higher education in Tennessee remains comparatively affordable. In addition, the availability of TELS awards brings higher education within reach of more Tennesseans.
Student debt is a looming issue for the newest generation of college graduates. Nationally, in the past three years, total student debt has eclipsed credit card debt in size. The influence of student loan debt on the myriad life choices that college graduates face could have lasting impacts on the state’s and country’s future.

Figure 5.4 shows the marked improvement in the average debt level of a Tennessee graduate (public and private institutions) compared to the nation. Though the average debt for a Tennessee graduate has increased by almost $4,900 since 2005, this increase is much lower than that of the nation.

Until recently, Tennessee was among the lowest debt level states, ranking 9th among 49 valid states and DC in 2010 and 6th among 50 states and DC, respectively. It also ranked 7th out of 49 states and DC in 2012; however, the data for that year, not reported on the graph are not directly comparable to other years because they included for-profit colleges.

In 2013, Tennessee ranked 16th in the nation. Although no longer among the lowest debt level states, Tennessee is not among the top highest debt level states.
5.5. University Revenue per University Award (1988-2014)

Figure 5.5 presents the efficiency in degree production at Tennessee universities over the last 25 years. Total revenue (including state appropriations and tuition and fees) per award (as measured by total bachelor, master and doctoral degrees) has declined recently from a high of $70,100 in 2007-08 to $62,900 in 2013-14 in constant 2013 dollars. It now costs less to produce an award at Tennessee universities than it did nearly three decades ago. Additionally, the total amount of state appropriations per award has also declined, from $56,200 to $20,100. This corresponds to a greater reliance by campuses on tuition and fees revenue for each award, which accounted for $42,700 in 2014, as compared to $21,500 in 1988. The shifting of university revenue sources has implications for students’ ability to enroll and their cumulative debt upon graduation.
CONCLUSION

From any perspective – longitudinal, regional, or national – Tennessee has made strides in the performance of its postsecondary institutions with regard to degree efficiency and credential attainment. While this is to be applauded, there is room for improvement. Persistence and graduation rates can and must increase, and the variation in performance between institutions and student subgroups must decrease.

Tuition and financial aid policies that put postsecondary attainment within reach for Tennesseans must become a priority for policy makers and institutional leaders. The unique challenges faced by low-income, first-generation, and adult students must be addressed in ways that close performance gaps for these underserved populations. Growth in the population of Hispanic youth will move the academic performance of this population to center stage in the coming decade. College affordability and the ability of postsecondary institutions to sustain recent productivity gains in the face of dwindling state appropriations will demand that funding partnerships involving state, local, and private entities continue to develop. Tennessee’s success in addressing these challenges will in large part determine its future economic competitiveness and the quality of life for its citizens.