

# Higher Education Profiles & Trends

2011

**Tennessee Higher Education Commission**  
404 James Robertson Parkway, Suite 1900  
Nashville, TN 37243

# Tennessee Higher Education Profiles and Trends

Tennessee Higher Education Commission  
March 2011

## Purpose of This Report

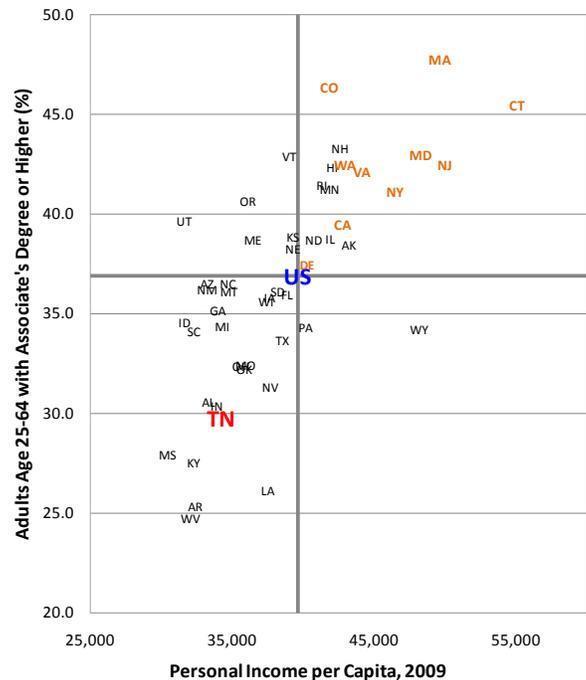
T.C.A. §49-7-202 (c) (7) requires the Tennessee Higher Education Commission to “submit a biennial report to the governor and the general assembly, commenting upon major developments, trends, new policies, budgets and financial considerations which in the judgment of the commission will be useful to the 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, *Tennessee Higher Education Profiles and Trends*, is to provide state policymakers with a brief overview of Tennessee higher education within a regional and national context. This report presents data and analyses on seven policy issues important to the state: 1) State Economy and Higher Education, 2) Student Preparation, 3) Student Participation, 4) Student Retention and Completion, 5) Finance, 6) Tuition and Financial Aid, and 7) Student Satisfaction.

## 1. STATE ECONOMY AND HIGHER EDUCATION

- **Figure 1** shows the relationship between states’ educational attainment levels and personal income per capita. In the chart educational attainment levels are characterized by the percentage of working-age adults with an associate’s degree or higher. This metric often corresponds to a state’s ability to attract business and industry. The other metric, personal income, has implications for citizens’ quality of life and a state’s ability to raise revenue. In 2009, Tennessee’s average per capita income was \$34,245. This ranked 38<sup>th</sup> in the nation. Meanwhile, 29% of Tennesseans have at least an associate’s degree, which ranked 45<sup>th</sup> in the nation.
- Personal income and adult educational attainment are linked to a state’s economic competitiveness. The orange coded states in the upper right quadrant scored in the top ten on the New Economy Index,<sup>1</sup> a compilation of 29 indicators of potential success in the knowledge based high-tech global economy. Tennessee ranked 41<sup>st</sup> in the New Economy Index in 2010.

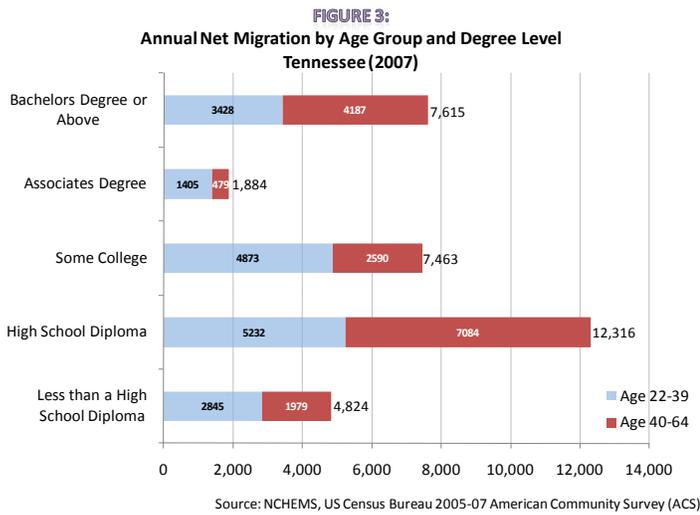
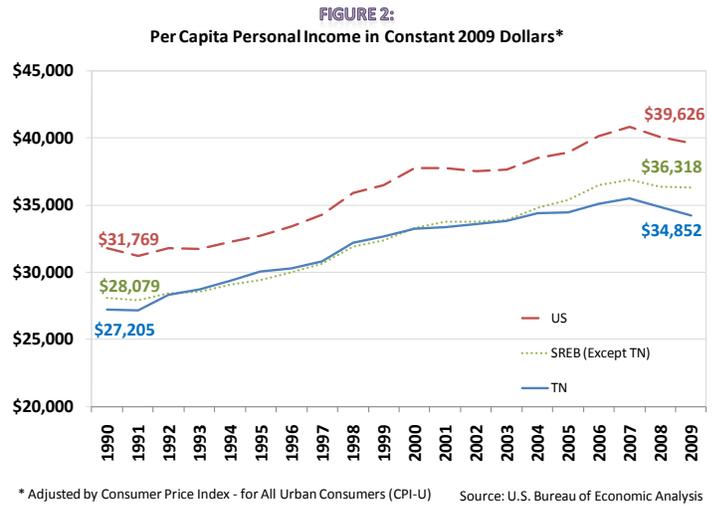
**FIGURE 1:**  
Educational Attainment and  
Personal Income per Capita (2009)



Source: National Center for Higher Education Management Systems (NCHEMS),  
U.S. Bureau of Economic Analysis

<sup>1</sup> The indicators of the New Economy Index are grouped under five categories: Knowledge Jobs, Globalization, Economic Dynamism, The Digital Economy, and Innovation Capacity. Source: The Information Technology and Innovation Foundation (ITIF), <http://www.kauffman.org/research-and-policy/snei-interactive.aspx>

- Adjusted for Inflation, Tennessee’s personal income per capita has increased steadily over the past 20 years, representing 86% of the national average in 1990 and 88% in 2009. However, as shown in **Figure 2**, Tennessee remains below the national average and has fallen behind the Southern Regional Education Board (SREB) average.

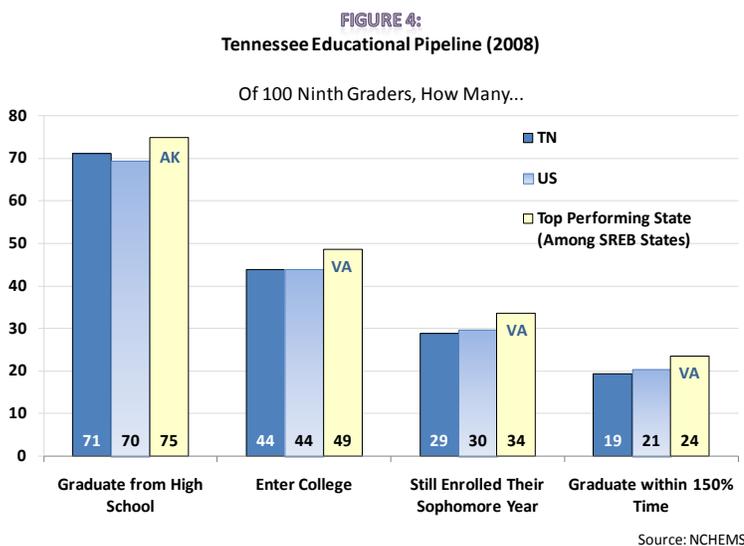


**Figure 3** shows Tennessee’s success in attracting people from out-of-state that have various levels of educational attainment. In 2007, Tennessee imported approximately 10,000 more working-age adults with an associate’s degree or higher than the same population that left the state. However, 72% of workers arrived in Tennessee without a college degree.

## 2. STUDENT PREPARATION

### Tennessee’s Education Pipeline

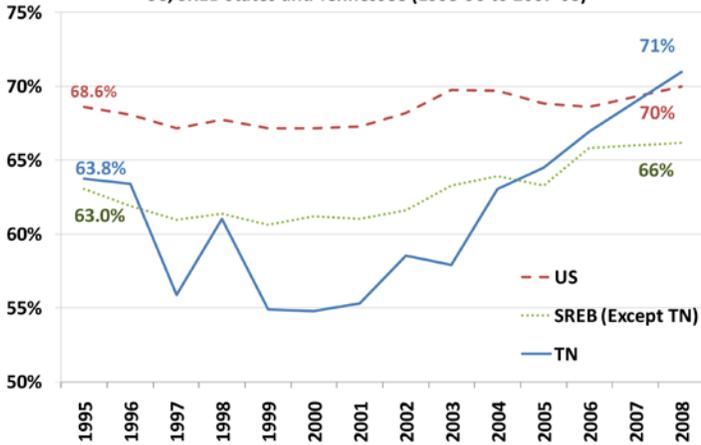
- Student success in college depends greatly on student preparation in high school. Studies show a student’s high school academic performance correlates with the likelihood of graduation from college.<sup>2</sup> As **Figure 4** shows, Tennessee’s educational pipeline productivity trails the national average. According to an analysis by the National Center for Higher Education Management Systems, only 19 of 100 ninth-grade students graduate from



college within six years.

<sup>2</sup> Studies on this topic can be found at [www.act.org/path/policy/reports/index.html](http://www.act.org/path/policy/reports/index.html)

**FIGURE 5:**  
Public High School Graduation Rate  
US, SREB States and Tennessee (1995-96 to 2007-08)



Source: NCHEMS, National Center for Education Statistics (NCES)

### High School Graduation Rates

- Tennessee’s public high school graduation rate was 71% in 2007-08 (Figure 5). In 2008, for the first time, Tennessee’s graduation rate was higher than the national average. Tennessee’s graduation rate has risen substantially – by over 16 percentage points – since 2000, surpassing the SREB average.

### Remedial Education

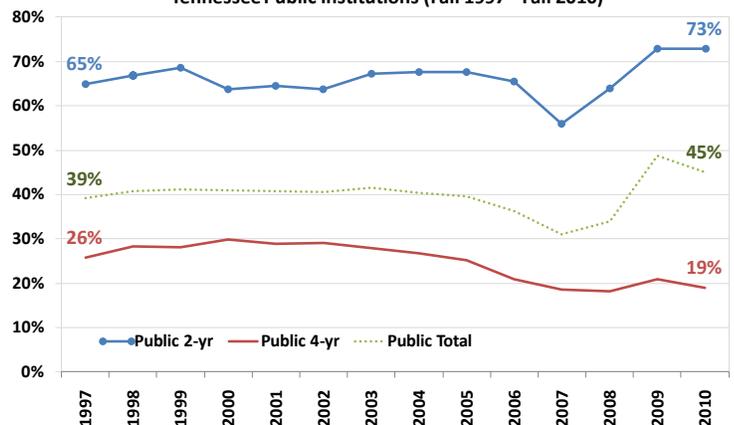
- High school diplomas are not always sufficient to guarantee college readiness. In Fall 2010, 45% of Tennessee public college freshmen were required to take at least one remedial or developmental course<sup>3</sup> (Figure 6). Among community college freshmen, the figure was higher, at 73%.

## 3. STUDENT PARTICIPATION

### Traditional Students

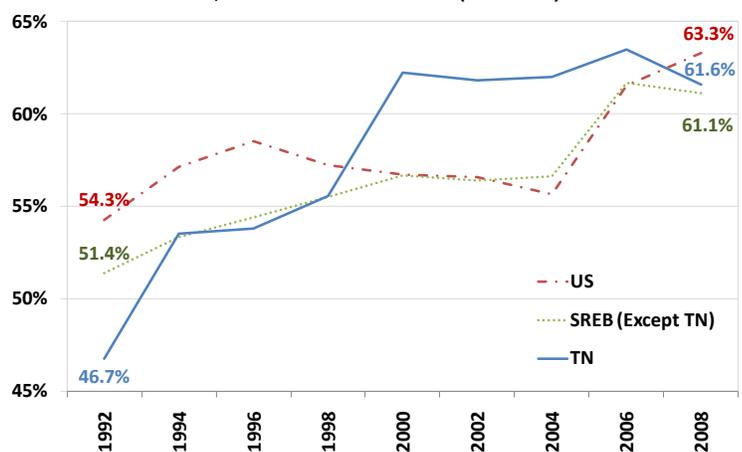
- In recent years, the percent of Tennessee’s high school graduates who go to college has increased. In 2008, 62% of high school graduates attended college immediately after high school graduation, up from 47% in 1992 and outpacing the rate of increase regionally (Figure 7). Tennessee ranked 22nd in the nation on this measure in 2008.

**FIGURE 6:**  
First-time Freshmen Enrolled in at Least One  
Remedial or Developmental Course  
Tennessee Public Institutions (Fall 1997 - Fall 2010)



Source: THEC

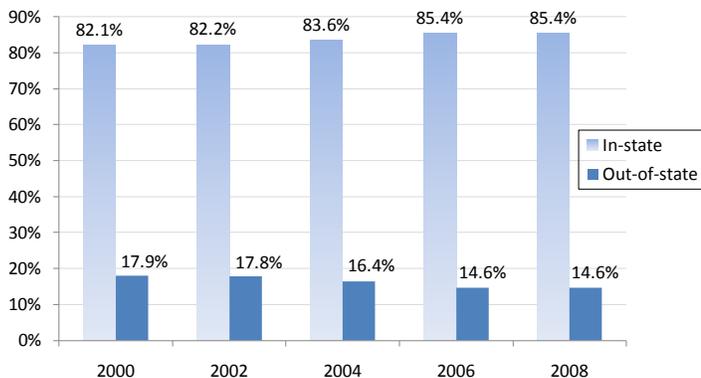
**FIGURE 7:**  
College-going Rates of High School Graduates Directly from High School  
US, SREB States and Tennessee (1992-2008)



Sources: NCHEMS, Tom Mortenson, Postsecondary Opportunity

<sup>3</sup> Remedial and developmental courses are below college entry-level courses and are designed to assist students in developing the basic skills (i.e. reading, writing, and math) necessary to succeed in college level courses.

**FIGURE 8:**  
Destinations of College-going Tennessee High School Graduates  
Fall 2000 - Fall 2008



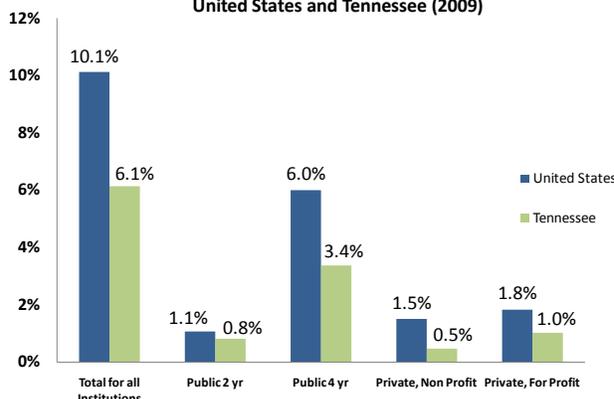
Source: IPEDS, Residence and Migration Survey

- One of the purposes of the Tennessee Education Lottery Scholarship (TELS) program is to retain talented students within the state. Data from the National Center for Education Statistics (NCES) indicate that Tennessee high school graduates have become more likely to enroll in state institutions over the last several years (**Figure 8**). The institutions that have lost the largest number of Tennessee high school graduates tend to be regional universities near the state border.

### Adult Students

- Tennessee’s adult participation rate is far below the national average. In 2009, there were approximately 1.4 million Tennessee adults who had a diploma but no college degree. Tennessee higher education enrolled approximately 6.2% of adults 25 or older whose highest credential was a high school diploma (**Figure 9**). This trails the national average of 10%, a gap of 53,000 adult Tennesseans.

**FIGURE 9:**  
Adult Participation Rate  
United States and Tennessee (2009)

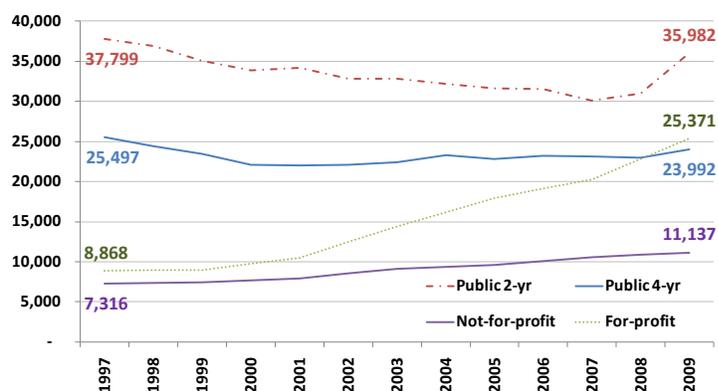


\*Enrollment of Adults 25 and Older as a Percentage of Adults 25 and Older with a High School Diploma but No College

Sources: NCHEMS; NCES, IPEDS Fall 2009 Enrollment File; U.S. Census Bureau ACS 2009

- Figure 10** displays the enrollment trend of adult students since 1996. Until recently, adult enrollment steadily declined at Tennessee’s public 4-year and public 2-year institutions, while private institutions have increasingly enrolled more adult students. While community colleges recently have begun to enroll more adults, private institutions represent a growing sector for adult enrollment. These institutions increased adult enrollment by 286% from 1997 to 2009. For-profit institutions<sup>4</sup> have been the primary contributor to the growth of this sector.

**FIGURE 10:**  
Tennessee Undergraduate Enrollment  
25 Years Old or Above (Fall 1997-Fall 2009)



\*Private institutions include non-profit and for profit. Data are estimated for even years; 2009 last year available.

Sources: IPEDS, THEC

<sup>4</sup> For-profit institutions’ enrollment data are available for Title IV (Federal Student Aid program) participating institutions only. Thus, their data do not reflect total proprietary enrollment in Tennessee.

## Minority Students

- The race and ethnicity profile of Tennessee’s higher education students has changed slightly over the past 14 years. At public 4-year institutions, the enrollment share represented by African-American students increased from 15% to 19% between 1996 and 2010. African-American enrollment share of total enrollment also increased at community colleges, from 15% to almost 19% over the same years. The small share of Hispanic students has steadily increased at both types of institutions (Figure 11).

## 4. STUDENT RETENTION AND COMPLETION

### Retention

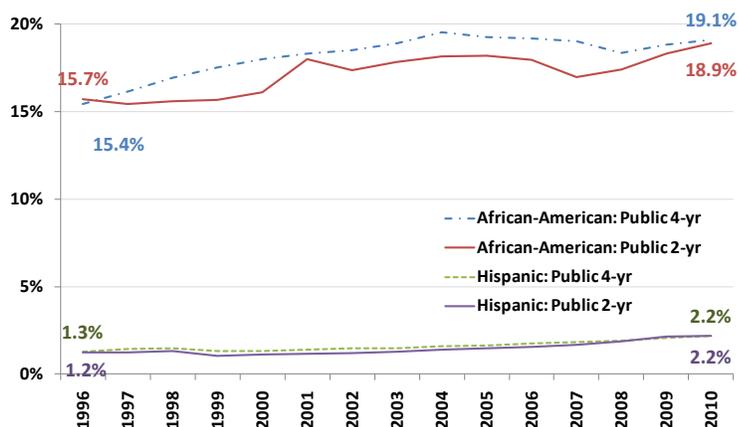
- Many observers affirm that the first year of college is critical in setting the stage for student success. Generally, dropout rates are largest at the freshman level.<sup>5</sup> Tennessee 4-year institutions’ retention rate, which includes students that transferred to another Tennessee public institution, has increased slightly from 80% to almost 84% for the 2009 cohort. However, community colleges’ retention rate dropped from 64% for the 1990 cohort to 59% for the 2009 cohort (Figure 12).

### Completion

- The 6-year graduation rate is widely used as a measure of student success and institutional productivity. Over the past thirteen years, this rate has increased at Tennessee’s 2-year and 4-year institutions (Figure 13).

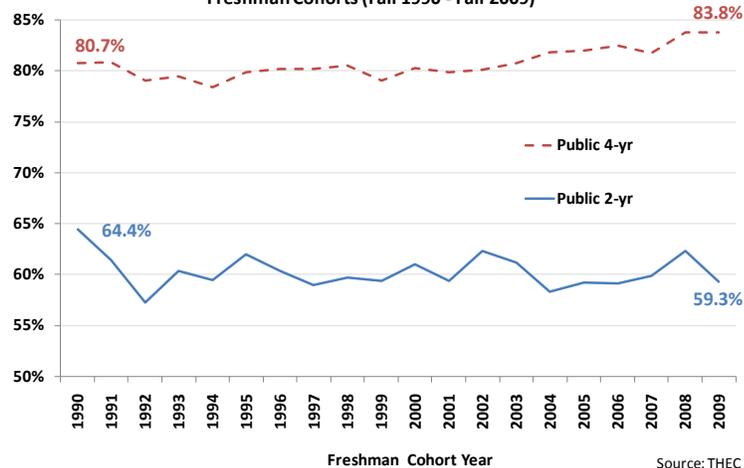
<sup>5</sup> Source: NCHEMS, Retention Rates - First-Time College Freshmen Returning Their Second Year

**FIGURE 11:**  
African-American and Hispanic Student Enrollment  
Tennessee Public Institutions (1996-2010)



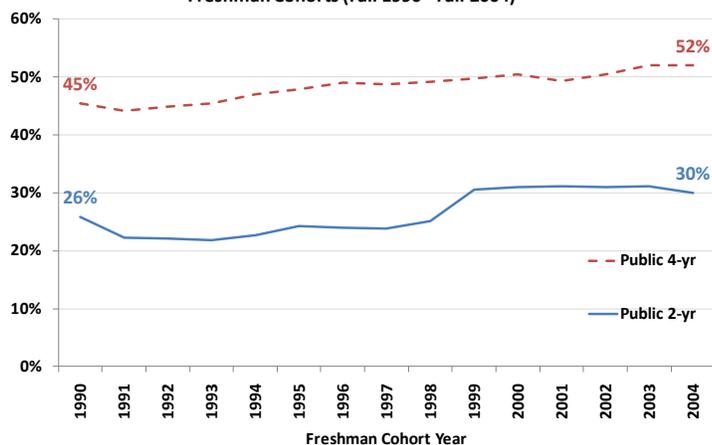
Source: THEC

**FIGURE 12:**  
1-year Retention Rate, Tennessee Public Institutions  
Freshman Cohorts (Fall 1990 - Fall 2009)



Source: THEC

**FIGURE 13:**  
6-year Graduation Rate, Tennessee Public Institutions  
Freshman Cohorts (Fall 1990 - Fall 2004)



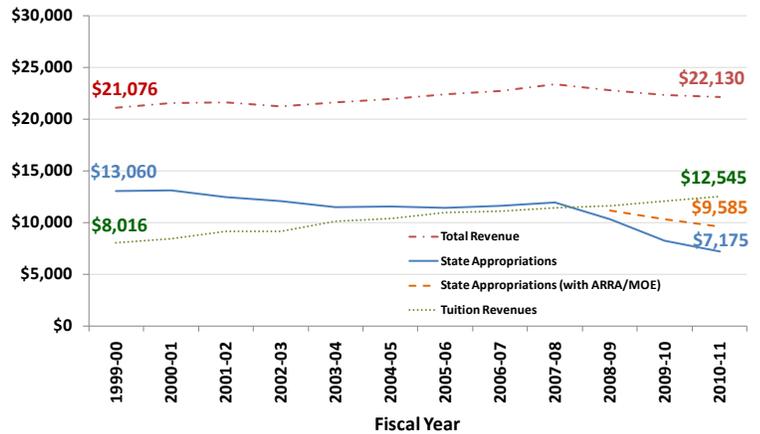
Source: THEC

## 5. FINANCE

- Over time, inflation and enrollment growth have combined to outpace nominal year-over-year increases in state appropriations for public higher education's general operating expenses. This has led to an increased reliance on tuition revenues. In 1998-99, tuition revenues composed 38% of total institutional revenue for general operating purposes.<sup>6</sup> This share increased to 57% in 2010-11 (**Figure 14**)<sup>7</sup>.

**FIGURE 14:**

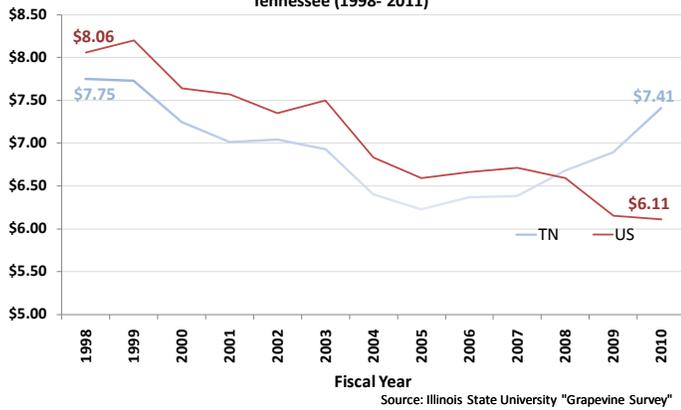
Total Revenues, State Appropriations, and Tuition Revenues per FTE: Public Total (2010 Constant Dollars)



Source: THEC

**FIGURE 15:**

State Appropriations to Public Institutions per \$1,000 of Personal Income Tennessee (1998- 2011)



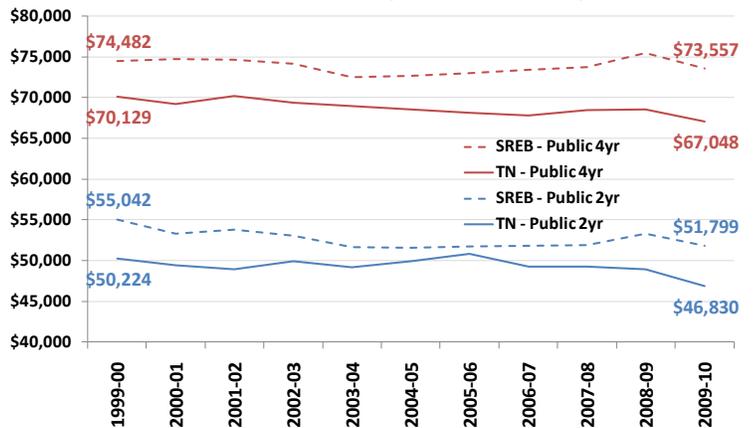
Source: Illinois State University "Grapevine Survey"

- Figure 15** shows how changes in Tennessee's state appropriations to higher education per \$1,000 of personal income compare with the national average over time. The figure illustrates that Tennessee's spending on higher education has declined over the past thirteen years. Additionally, higher education spending has not kept pace with the personal income growth shown in Figure 2. However, Tennessee's state appropriations are higher than the national average.

- Over the past ten years, faculty salaries have remained relatively constant when adjusted for inflation. However, faculty salaries at both Tennessee public 4-year and 2-year institutions trail their SREB counterparts by 10% (**Figure 16**). While the disparities have increased over the last decade, the gap is widening the fastest for faculty at 4-year institutions.

**FIGURE 16:**

Average Faculty Salary, in Constant 2010 Dollars\* SREB States and Tennessee (FY 1998-99 to 2009-10)



\* Adjusted by Consumer Price Index - for all Urban Consumers (CPI-U)

Sources: THEC, SREB

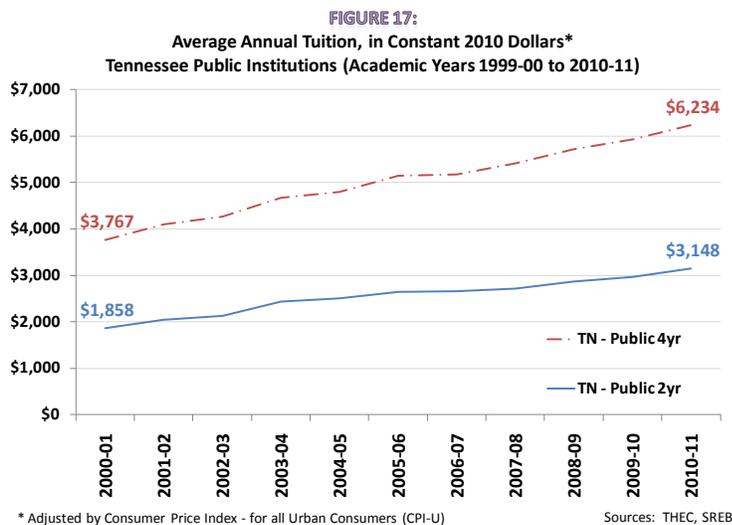
<sup>6</sup> Non-state and non-tuition revenue sources are excluded from the total revenue because those funds are principally available for auxiliary enterprises, research, hospital operations, and other non-instructional programs and services.

<sup>7</sup> Funding from net lottery proceeds is not included in state appropriations.

## 6. TUITION AND FINANCIAL AID

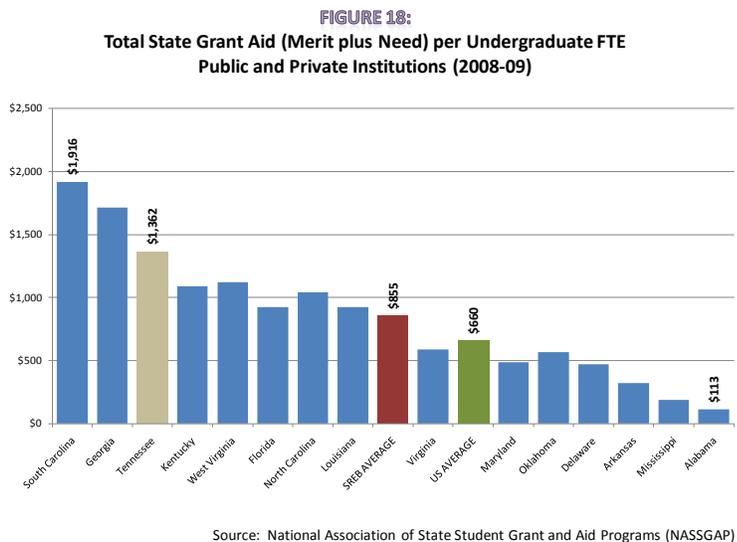
### Tuition

- Figure 17** shows average tuition rates at Tennessee public institutions. These rates have increased continually over the last 10 years even after adjusting for inflation. In 2010-11, the average tuition at public 4-year institutions is \$6,234 per academic year. This is 65% higher than 10 years ago. Meanwhile, on average, community colleges charge students \$3,148 per academic year, an 69% increase over 10 years ago. However, these are the “sticker prices” and do not take into account varying types of financial aid available to Tennessee students.



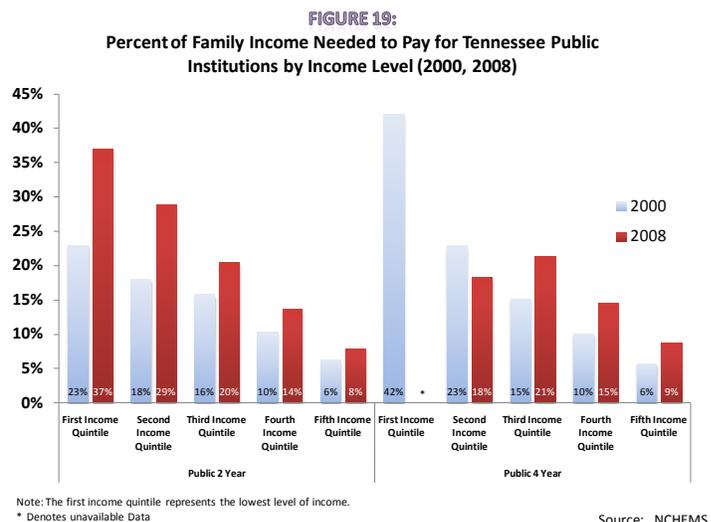
### Financial Aid

- In 2008-09, Tennessee ranked third nationally in the amount of grant aid per full-time undergraduate student equivalent (**Figure 18**). This represents remarkable progress given that Tennessee ranked 32<sup>nd</sup> only a decade ago. However, less than 25% of this aid is need based. Tennessee’s rise to third in the rankings can be attributed to the creation of the Tennessee Education Lottery Scholarship (TELS) in 2003 by the Tennessee General Assembly.



### Affordability

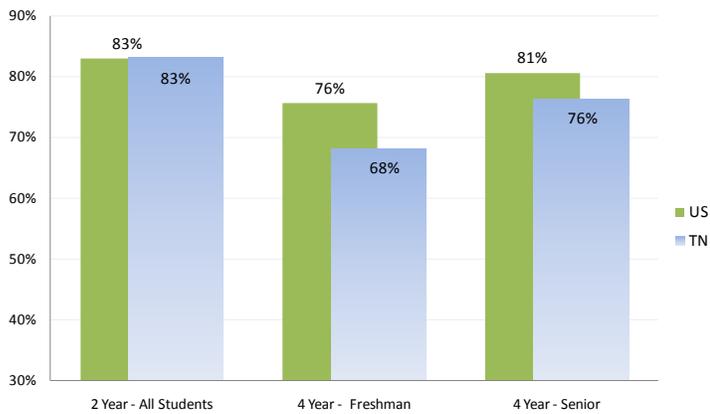
- Figure 19** shows the extent to which tuition increases have placed financial pressures on household budgets. For public 4-year institutions, a student from the middle income quintile will spend 21% of their family income for tuition and fees, a five percentage point increase since 2000. For students from the same quintile, the percent of income needed to pay for a 2-year college increased to 20%.



## 7. STUDENT SATISFACTION

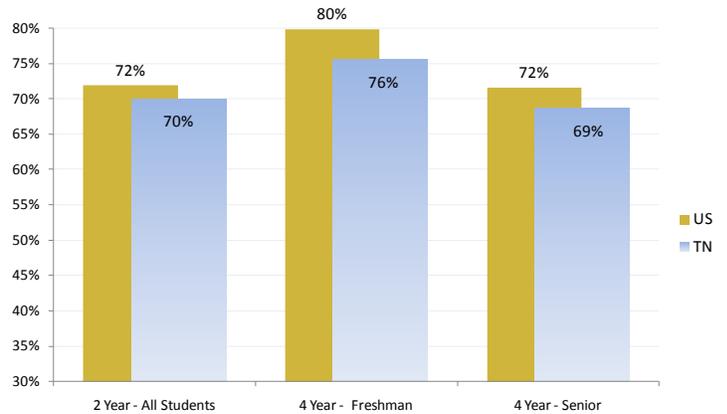
The Community College Survey of Student Engagement (CCSSE) and the National Survey of Student Engagement (NSSE) assess educational practices and student behaviors that research shows are connected to desired outcomes of college. **Figures 20** and **21** describe how Tennessee’s students assess the current quality of relationships with faculty as well as academic advisors. Tennessee students report less satisfaction than their national counterparts with both faculty and advisors. While the merits of strong relationships with faculty are well known, good advising may be an underestimated characteristic of a successful college experience.<sup>8</sup> Overall, better than 80% of all students describe their educational experience to be good or excellent (**Figure 22**).

**FIGURE 20:**  
Students Rate Quality of Relationships with Faculty/Instructors:  
Good or Excellent



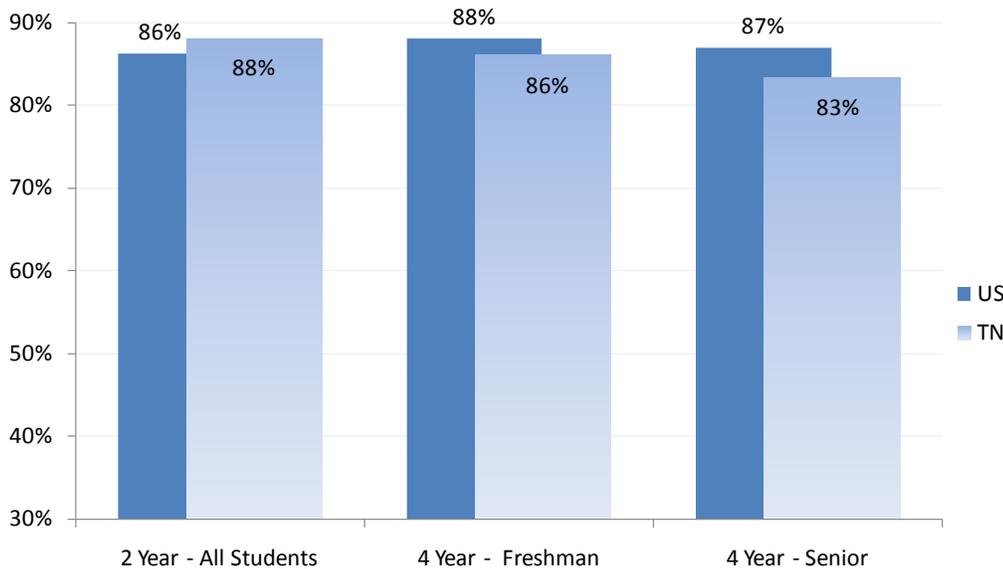
Sources: NSSE 2009, CCSSE 2009

**FIGURE 21:**  
Students Rate Quality of Relationships with Academic Advisors:  
Good or Excellent



Sources: NSSE 2009, CCSSE 2009

**FIGURE 22:**  
Students Rate Overall Educational Experience:  
Good or Excellent



Sources: NSSE 2009, CCSSE 2009

<sup>8</sup> Light, R.J. (2001). *Making the most of college: students speak their minds*. Cambridge, Mass.: Harvard University Press