

CAN TENNESSEE M



EASURE UP?



What policies might increase the qualifications of the state's workforce and contribute to its economic development?

by Barbara Haskew

Tennessee's fiscal problems have occupied the headlines for many months. Seemingly endless tax proposals and budget plans generated both discussion and dissension as state policymakers wrestled with balancing the books for fiscal year (FY) 2002 and developing a workable budget for FY 2003. Similar scenarios were played out in state legislatures all across the nation. The double whammy of the recession and the September 11 attack depressed state revenue collections and left governors and legislators in all regions seeking possible areas of spending retrenchment. Faced with a cacophony of demands from many sectors—K-12 education, healthcare, welfare, and corrections—policymakers often look to higher education to absorb at least part of the cut. While many states enjoyed budget surpluses in the late '90s and provided some special funding to higher education, public universities in Tennessee did not receive such bounty. In Tennessee, dollars have been scarce and the share of higher education funding provided by state appropriations has steadily declined for more than a decade.

While the economic recovery may alleviate funding problems in other states, addressing the Tennessee budgetary problems will likely require both tax reform and tax increases. The mismatch between revenue production from the state's inelastic tax system and Tennessee's spending needs grew even when the economy and job growth were booming. A recent study indicates that over the past 10 years appropriations per student in higher education in Tennessee have increased in constant dollars only two percent.¹ Consequently, Tennessee's pub-

continued on page 4

Table 1. Report Card Scores for Tennessee and Southern States Compared to the Top Performing State*

	Preparation	Participation	Affordability	Completion	Benefits
Alabama	F	C+	D	B-	C
Arkansas	D	D-	C+	D+	D-
Florida	C	D+	D	B+	C-
Georgia	D+	F	D+	B-	C
Kentucky	C	D	B	C-	D+
Louisiana	F	F	C-	C	D+
Mississippi	D	D-	C+	C+	C
North Carolina	B	D	A	B+	D+
Oklahoma	D+	C	B-	C-	C-
South Carolina	C-	D-	C	B	B-
Tennessee	C-	D-	C	C	D+
Texas	C	D	C	D+	C
Virginia	B	B-	C	B	B+
West Virginia	D+	D+	D	C	F
Southern Average	C-	D	C	C+	C-
National Average	C+	C	C	B-	B-
Top State	A	A	A	A	A
	Utah	Delaware	California	New Hamp.	Maryland

Notes: * Index scores on each indicator and category are found in *Measuring Up 2000, the State by State Report-Card for Higher Education*, pp.166-171. Category index scores are converted to grades using the following scale: A= 90-100, B=80-89, C=70 -79, D= 60 - 69, F=Below 60.

continued from page 3

lic universities are practiced in bare bones operations and routinely prepare for mid-year cuts and rescissions. Frustrated, the Tennessee Higher Education Commission (THEC) has proposed enrollment caps and program cuts in a last-ditch effort to protect current levels of educational quality.²

Faced with a flat or declining share of state appropriations, Tennessee's public universities may have no alternative in the coming decade except to aggressively and steadily increase student tuition and fees. Over the past decade tuition at Tennessee's public four-year institutions measured in constant dollars has increased 62 percent.³ This combination of increases in tuition and fees and caps on enrollment growth may be particularly troublesome because the state is experiencing a college-age population boom that is projected to be both lower-income and more diverse than that of the past decade.⁴

These approaches may also operate to stifle economic development in Tennessee if they further slow down the progress Tennessee has been making to produce a larger college-educated labor force. The educational attainment of a state's population is linked to its economic development and welfare. Today, earning a bachelor's degree is viewed as the ticket to the middle-class lifestyle. Consequently, as the college-educated portion of a state's population grows, personal income increases, enhancing the tax base for both the state and its communities. Further, a college-educated workforce and an up-to-date educational system appear to play major roles in sustaining economic momentum by attracting the new, more technical, well-paying jobs of the knowledge-based economy.

Measuring Tennessee

How does Tennessee measure up in the processes that produce college graduates? What policies might be implemented to increase the qualifications of Tennessee's workforce and contribute to the state's economic development? *Measuring Up 2000, the State-by-State Report Card for Higher Education*, published by the National Center for Public Policy and Higher Education, may provide some perspective on how well Tennessee's and the South's systems of higher education are performing.⁵ The report card for each state considers five categories: *Preparation, Participation, Affordability, Completion, and Benefits*. Each category incorporates a number of measurable and weighted indicators and utilizes a system of benchmarking against top states on each particular indicator.⁶ Results for each state are then converted to a traditional grading scale. Table 1 provides the grades in each category for each southern state (including Tennessee) as well as the top state in that category.

Preparation

College attendance builds on the pool of students prepared by high schools in a state. The *Preparation* category assesses how well states prepare students for education and training beyond high school. Scores for each state consider the percentage of population that earn high school diplomas, the math and science curricula taken by students, and students' achievement on selected tests.⁷ Tennessee and the southern region each earn a C- for preparation.⁸ Virginia and North Carolina outperform both the region and the nation in preparation and score a B. Alabama and Louisiana each finish at the bottom of the class in the region and the nation, earning an F.

The percentage of the state's population ages 18 to 24 with high school credentials is a

core indicator used in developing a state's grade in the *Preparation* category. *Measuring Up 2000* indicates that 86 percent of Tennesseans aged 18 to 24 have high school credentials.⁹ This percentage is in the mid range of those recorded by southern states, but in benchmark states like Maryland, North Dakota, and Vermont the percent of 18 to 24 year olds earning high school diplomas equals or exceeds 93 percent.¹⁰ Recent analysis indicates that states where a high proportion of the population has at least a high school diploma are more likely to enjoy high employment and to experience both lower poverty rates and violent crime rates than states with a lesser proportion of high school graduates.¹¹ Increasing the percentage of the population that possesses high school credentials improves the minimum living conditions of a state's population and also augments the pool of students ready for college attendance.¹² Tennessee expects to experience a 13 percent increase in high school graduates by 2010.¹³ This growth is greater than that projected on average for the nation but is dwarfed by increases exceeding 20 percent expected in Florida, Georgia, and North Carolina.¹⁴

Improving the opportunities for education and training beyond high school and increasing the percentage of the state's population that have completed bachelor's degrees has significant implications for a state's economic development, its tax base, and the civic involvement of its citizenry. Policies to increase the percentage of college graduates in a state must consider the participation rate of high school graduates and those of young working adults and how well those enrolled in higher education persist in the completion of the bachelor's degree. Table 2 presents data for Tennessee and other southern states relevant to participation, college completion, and the resulting percentages of the state's population aged 25 to 65 that have earned at least a bachelor's degree.

Participation

Thirty-four percent of Tennessee's high school freshmen enroll in college somewhere within four years.¹⁵ Another group waits or works a few years and then enrolls part-time. This pattern of participation in higher education earns Tennessee a D- in the grading scheme employed in *Measuring Up 2000*. The South scores only slightly higher and earns a D for participation. In the region only Alabama and Virginia outperform the national average, scoring a C+ and a B-, respectively. The participation performance of Georgia and Florida is dismal enough to earn an F. Only Virginia, where 41 percent of recent high school graduates enter college, scores above the national average with



a B-.¹⁶ By comparison, in benchmark states like New Jersey, 54 percent of high school graduates enroll in an institution of higher education.¹⁷ Top states also boast of greater participation in higher education by those who have already moved into the workforce.

Completion

Tennessee scores a C on college completion. Forty-five percent of the state's first-time, full-time students complete a degree within five years. Top states boast a comparable percent of 66. The college completion percentages for Tennessee and other states, however, mask disparities in college completion between white and minority students. The closing of this gap assumes increasing importance as the college-age population becomes more diverse. It will also produce measurable financial benefits. *Measuring Up 2000* notes: "... if all ethnic groups in Tennessee had the same educational attainment and earnings as whites, total personal income in the state would be \$2 billion higher, and the state would realize an estimated \$719 million in additional tax revenue."¹⁸

Affordability

A major factor affecting college enrollment and its completion may well be the cost to students or their families. Tennessee received a grade of C in the *Affordability* category in the *Measuring Up 2000* study, while the southern region slightly outperformed the national aver-

Improving educational opportunities beyond high school has significant implications for a state's economic development, its tax base, and the civic involvement of its citizenry.

continued on page 6

Table 2. Comparison of Tennessee, Southern States, and Top States on Data Relevant to College Participation and Completion*

	Percent High School Graduates Enrolling in College	Percent Working-Age Adults Enrolling in College	Percent Students Completing Degree in Five Years	Percent Population 25 to 65 With at Least Bachelor's
Alabama	35	4.0	45	21
Arkansas	39	2.1	32	18
Florida	29	3.5	52	24
Georgia	31	1.8	46	26
Kentucky	36	2.4	37	20
Louisiana	31	2.2	28	20
Mississippi	36	2.2	45	23
North Carolina	34	2.9	56	23
Oklahoma	35	3.8	40	22
South Carolina	32	2.5	52	24
Tennessee	34	2.5	45	21
Texas	32	3.2	43	25
Virginia	41	3.9	59	31
West Virginia	38	2.4	44	17
Top States	54	4.7	66	34

Note: * Data in Table 2 are from the State Profiles in *Measuring Up 2000, the State-By-State Report Card for Higher Education*, the National Center for Public Policy and Higher Education.

continued from page 5

age. Even after the provision of financial aid, approximately 23 percent of an average family's income is required in Tennessee to cover the costs of attendance at a public four-year institution.¹⁹ While the resident tuition and fees charged by Tennessee and many southern public colleges and universities remain below the national average, recent increases in the fees paid by students have exceeded increases in other regions.²⁰ Further, over the past decade these increases have significantly outstripped the increase in family income.²¹ These tuition increases have a disproportionate impact on low-income students for whom the cost of earning a college degree may constitute an extraordinary percent of family income.²² In these difficult fiscal times, Tennessee has not been able to identify the financial aid resources to address this need. Over the past decade a national study notes that state grant aid per student measured in constant dollars has increased only two percent.²³ Federal education tax credits put in place

during this period largely address the needs of middle-income families and in many cases do not effectively address the unmet needs of dependent students whose family incomes are below \$50,000.²⁴ Many students have few alternatives but to borrow significant dollars to access a college education. *Measuring Up 2000* notes that Tennessee students, on average, borrowed \$3,609 annually to help finance their college attendance. This is \$500 more per year than the average loan amount borrowed by students in top states.²⁵

Benefits

The State Report Card also assesses educational attainment for each state and then considers the benefits—economic and civic—associated with a college-educated populace. Tennessee scores a D+ in this *Benefits* category. As indicated in Table 2, 21 percent of Tennesseans aged 25 to 65 have earned at least a college degree. This places Tennessee in an average position in the South but leaves the state far behind Virginia, where 31 percent of the population has earned at least an undergraduate degree, and top states where 34 percent boast a bachelor's degree or more. The Southern Regional Educational Board (SREB) ranks Tennessee 40th in the nation in the percent of adult population that has earned at least one college degree.²⁶ Maryland, by comparison, ranks third.²⁷ Its experience may be relevant. Maryland went through a rough economic period in the '80s, when it lost much of its manufacturing base to lower wage states and to offshore sites. To address its future Maryland focused on enhancing higher education and producing graduates prepared to support technical and science-based industries. Today, 37 percent of Maryland's population between 25 and 65 boasts a college degree or more, and its per capita personal income for 2001 is estimated at \$34,950.²⁸ By comparison Tennessee's per capita personal income is estimated at less than \$27,000 per year.²⁹

Increases in educational achievement are positively and strongly correlated with a state's per capita personal income.³⁰ *Postsecondary Education Opportunity* notes that the relationship between the attainment of the bachelor's degree and increases in per capita personal income appears to have strengthened over the past decade. "Per capita personal income increased most in those states with the highest proportions of bachelor degree holders, and increased least in other states with the smallest proportions of adults with bachelor's degrees.... If states aim to improve living standards of their populations well beyond minimum living conditions, then increasing the proportion of the population with at least a bache-

lor's degree is the appropriate strategy."³¹

Conclusion

It is difficult to predict what strategy Tennessee policymakers will adopt. Certainly some legislators found Tennessee's grades on the national report card alarming. Consistent with this concern the Tennessee General Assembly passed a joint resolution urging the National Center for Public Policy and Higher Education to select Tennessee as a participant in its follow-up study, *Making the Grade: A Partnership to Stimulate State Higher Education Dialogue and Change Using a National Report Card*.³² Tennessee was selected, and that effort is now under way. New, up-to-date report cards for each state will be available in fall 2002, and Tennesseans can again assess how the state's educational system is measuring up. Tennessee citizens already appear to be getting the message. Responses to the Middle Tennessee Poll reflect a growing awareness of the state's fiscal problems and their impact on educational funding at every level.³³ The MT Poll conducted in spring 2002 even found majority support for an income tax if the revenues were dedicated solely to education. Such responses may indicate that Tennesseans understand the relationship between education and economic development and are ready to support policies that will help Tennessee to measure up more effectively in the future. ■

Barbara Haskew, MTSU distinguished professor of economics, formerly served as MTSU's Provost and Vice President of Academic Affairs.

Notes

1. *Losing Ground, A National Status Report on the Affordability of Higher Education*, National Center for Public Policy, Appendix of State Trends. All dollar amounts are adjusted for inflation. Appropriations increase measured from 1992 to 2000.
2. Michael Cass, "College Athletics Face Cuts," *The Tennessean*, April 16, 2002, pp. 1A and 2A.
3. *Losing Ground*, op. cit. Tuition increase measured from 1992 to 2001. All dollar amounts are adjusted for inflation.
4. Rick Edmonds, *A Perspective—Educational Goals and Change 1988-2010*, Southern Regional Educational Board, p. 17.
5. *Measuring Up 2000, the State-by-State Report Card for Higher Education*, National Center for Public Policy and Higher Education (San Jose 2000).
6. *Ibid.*
7. *Ibid.*, p. 166.
8. Mario Martinez, "Supplementary Analysis for Measuring Up 2000," The National Center for Public Policy and Higher Education, November 2001.
9. *Measuring Up 2000*, p. 144.
10. *Ibid.*, pp. 100, 128, and 150.
11. Thomas G. Mortenson, "Educational Attainment and State Economic Welfare 1989 to 2000," *Postsecondary*



Education Opportunity, Number 116, February 2002, pp. 10-16.

12. *Ibid.*
13. *Measuring Up 2000*, p. 145.
14. *Ibid.*, pp. 79, 81, and 127.
15. *Ibid.*, p. 144.
16. *Ibid.*, p. 152.
17. *Ibid.*, p. 120.
18. *Ibid.*, p. 145.
19. *Ibid.*, p. 144.
20. *Student Charges and Financial Aid 2001-2002*, American Association of State Colleges and Universities and National Association of State Universities and Land Grant Colleges, pp. 10-11.
21. *Losing Ground*, op. cit. Increase in median family income measured from 1991 to 2000. All dollar amounts are adjusted for inflation.
22. *Student Charges and Financial Aid, 2001-2002*, op. cit.
23. *Losing Ground*, op. cit. Increase in student grant in aid measured from 1990 to 1999. All dollar amounts are adjusted for inflation.
24. Thomas G. Mortenson, "Hope Scholarship and Lifetime Learning Tax Credits: Distribution of Benefits 1998 and 1999," *Postsecondary Education Opportunity*, pp. 7-12.
25. *Measuring Up 2000*, p. 144.
26. Bracey Campbell, "We're No. 1 but Much of South Surpasses Tennessee," *Chattanooga Times Free Press*, February 17, 2002, pp. 1F, 2F.
27. *Ibid.*
28. *Measuring Up 2000*, p. 145; *Regional Economic Information System*, Bureau of Economic Analysis, Department of Commerce, preliminary estimate.
29. *Regional Economic Information System*, op. cit.
30. Thomas G. Mortenson, "Educational Attainment and State Economic Welfare 1989 to 2000," op. cit.
31. *Ibid.*
32. Senate Joint Resolution 59, a resolution to urge the National Center for Public Policy and Higher Education to select Tennessee as a participant in a multi-state long-term strategic planning team on state higher education policy, passed February 2001.
33. Middle Tennessee Poll, Middle Tennessee State University, College of Mass Communication.

Increases in educational attainment are positively and strongly correlated with a state's per capita personal income.