Education In Tennessee:
At a Crossroads?

University of Tennessee Institute for Public Service

Local Government Leadership Program

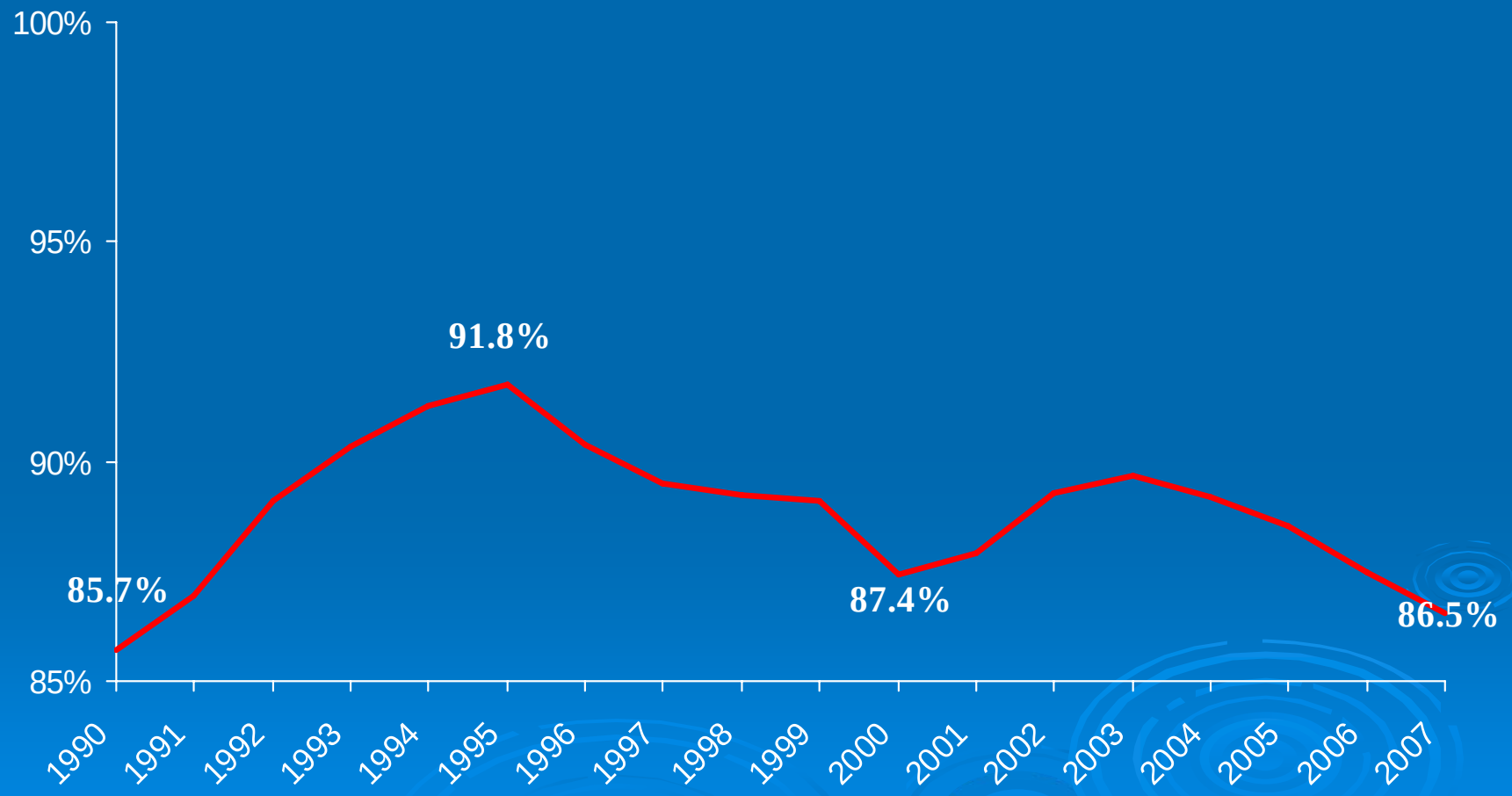
November 12, 2008

"….In the international competition to have the biggest and best supply of knowledge workers, America is falling behind."

- Bill Gates, "America's High Schools are Obsolete" Speech given to National Governors Association, February 26, 2005

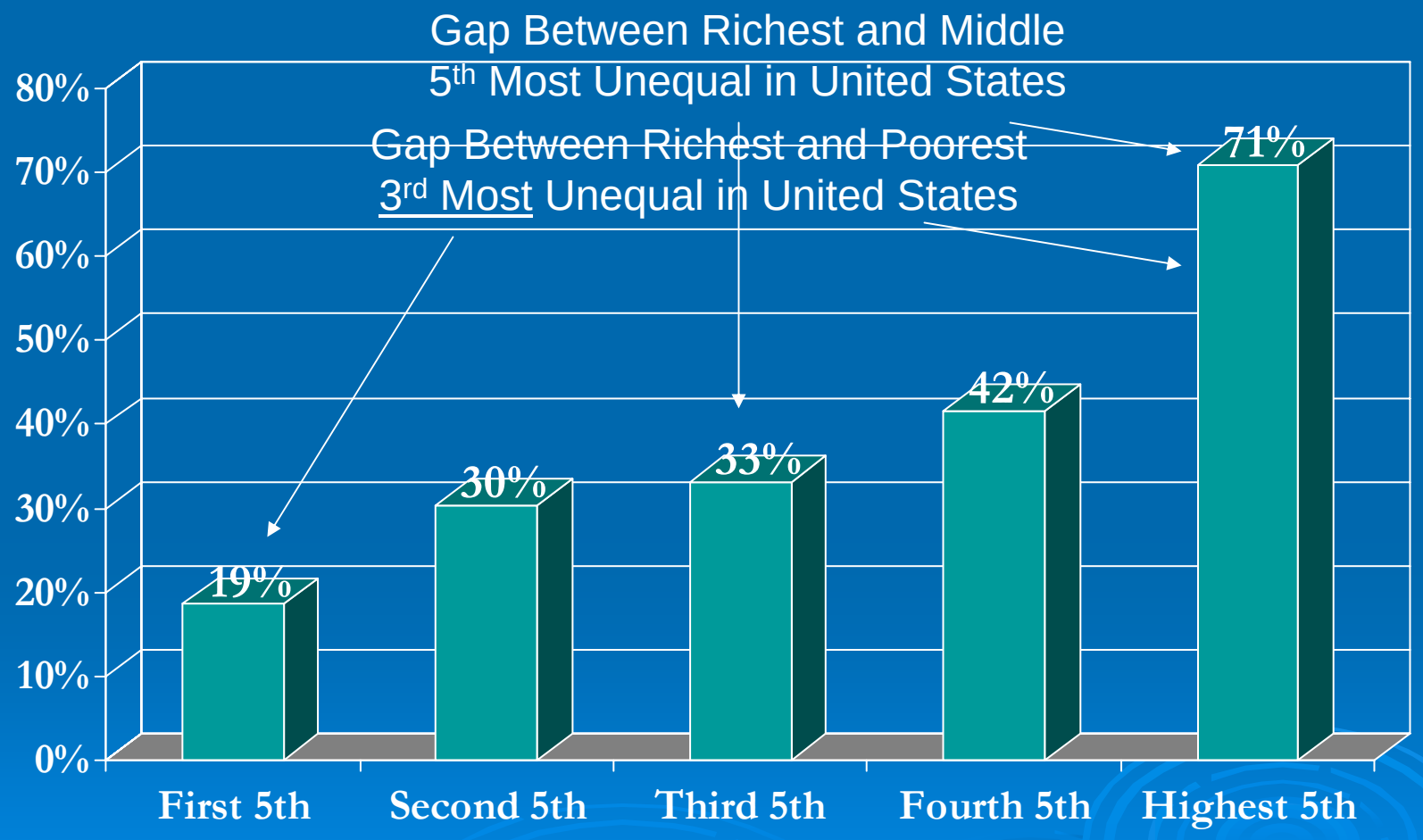
- A 2005 survey of manufacturers by National Association of Manufacturers found:
  - 84% do not believe K-12 schools are doing a good job
  - 80% of are experiencing a shortage of qualified workers; they need problem solving skills, reading, writing and communication skills
  - They want more investment in teacher education, science and math instruction, and career education in school
- For students in elementary school today, the majority of jobs they will hold do not exist (Jim Carroll)
- In today's global economy, work gets done where it is most effective and efficient (Thomas Freidman)

Tennessee Per Capita Income as a Percent of the U.S., 1990-2007



Source: Bureau of Economic Analysis.

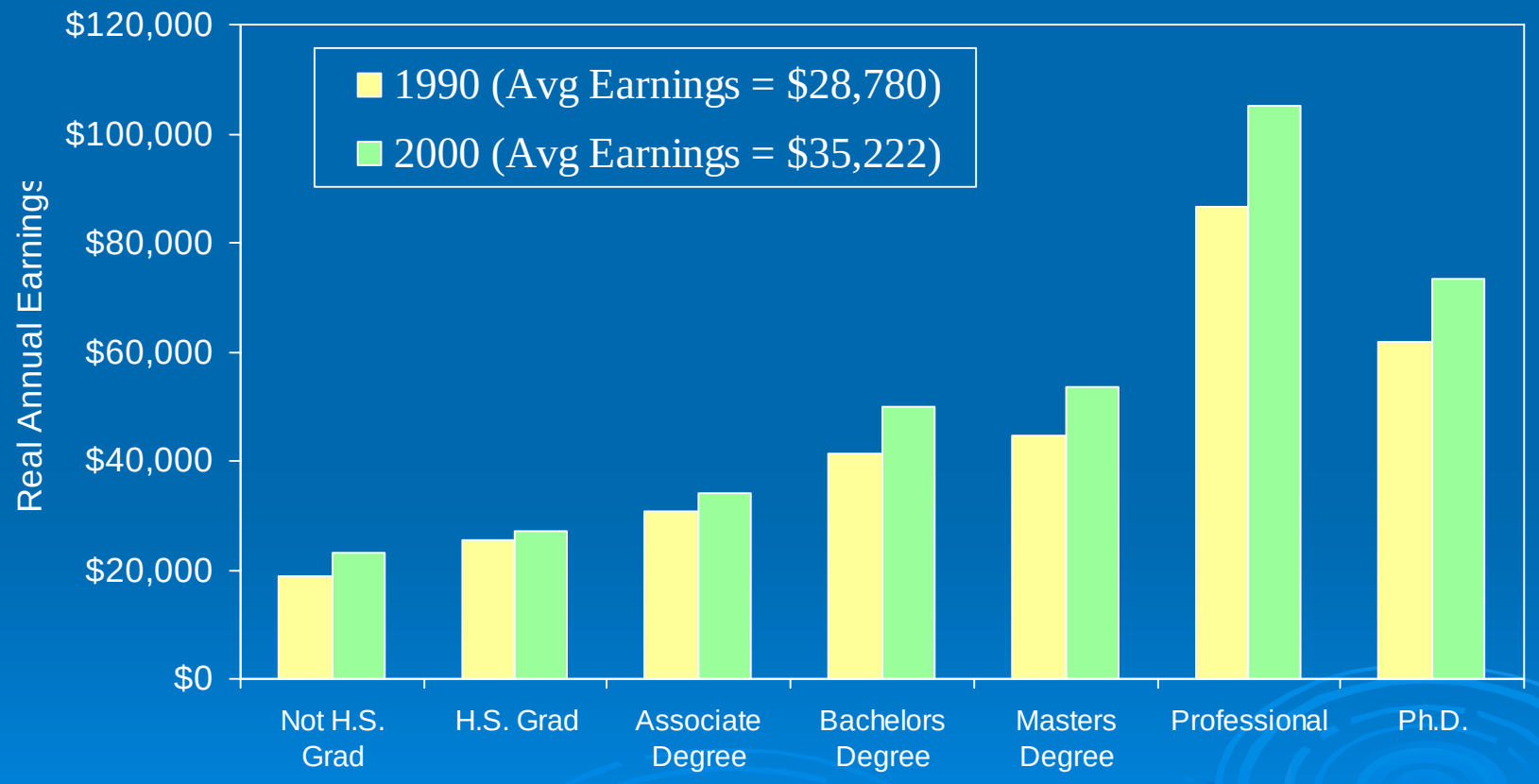
Income Changes for Tennessee Families Early 1980s to Early 2000s, by quintiles



Source: Economic Policy Institute/Center on Budget and Policy Priorities, *Pulling Apart: A State by State Analysis of Income Trends*, January 2006.

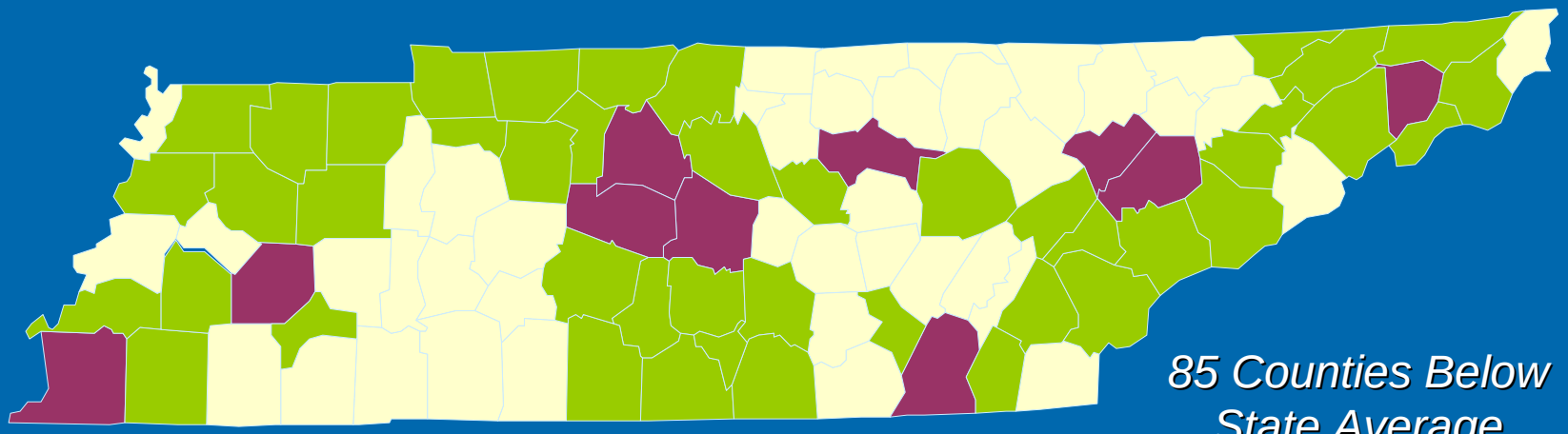
Educational Attainment And Economic Well-being (Real Average Earnings):

Tennesseans Aged 25 And Older



Source: CBER, UT

Educational Attainment of Persons 25 Years and Over, Percent With At Least A Bachelor's Degree, 2000

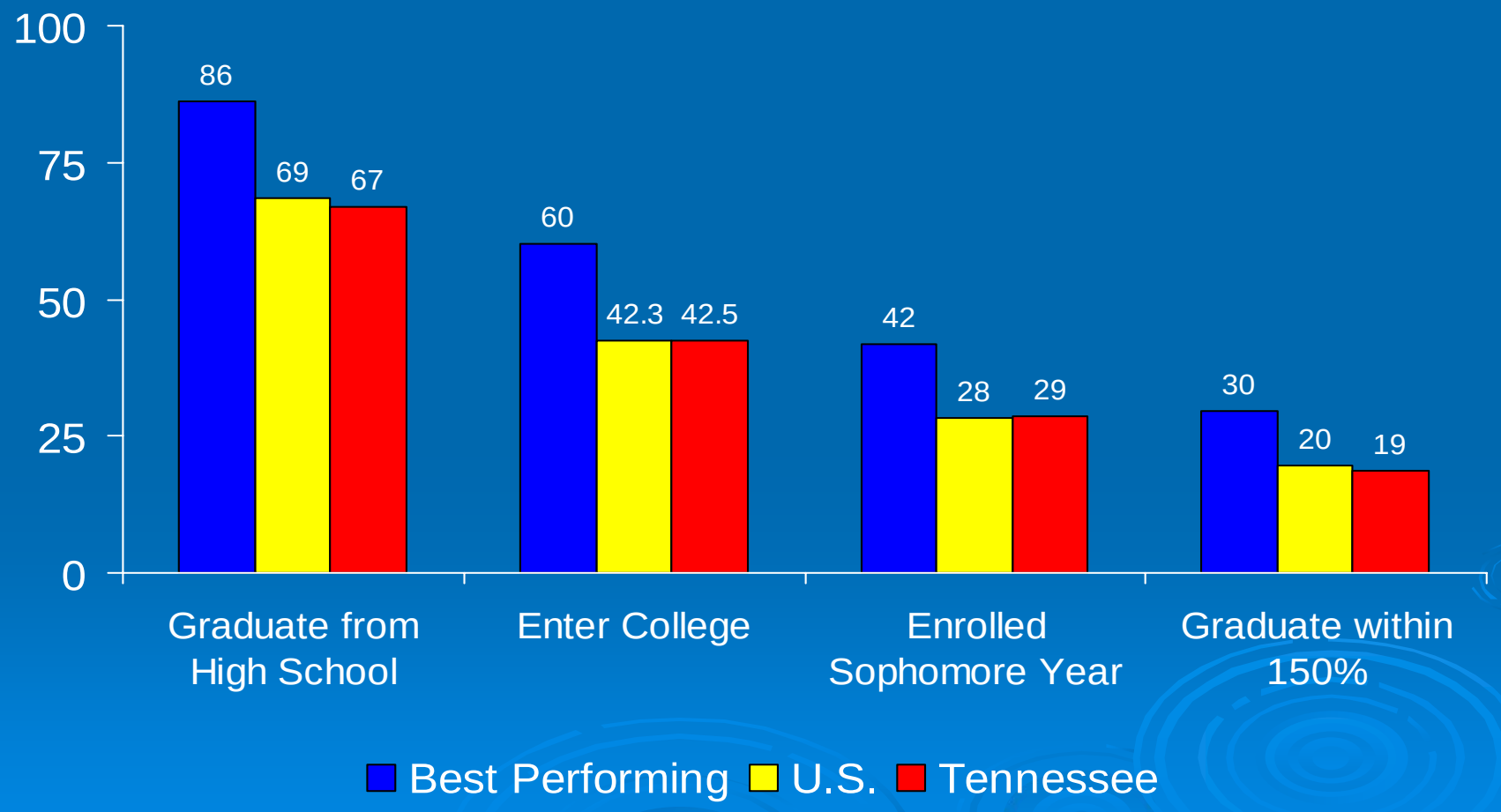


85 Counties Below State Average

TN Average = 19.6%
U.S. Average = 24.4%

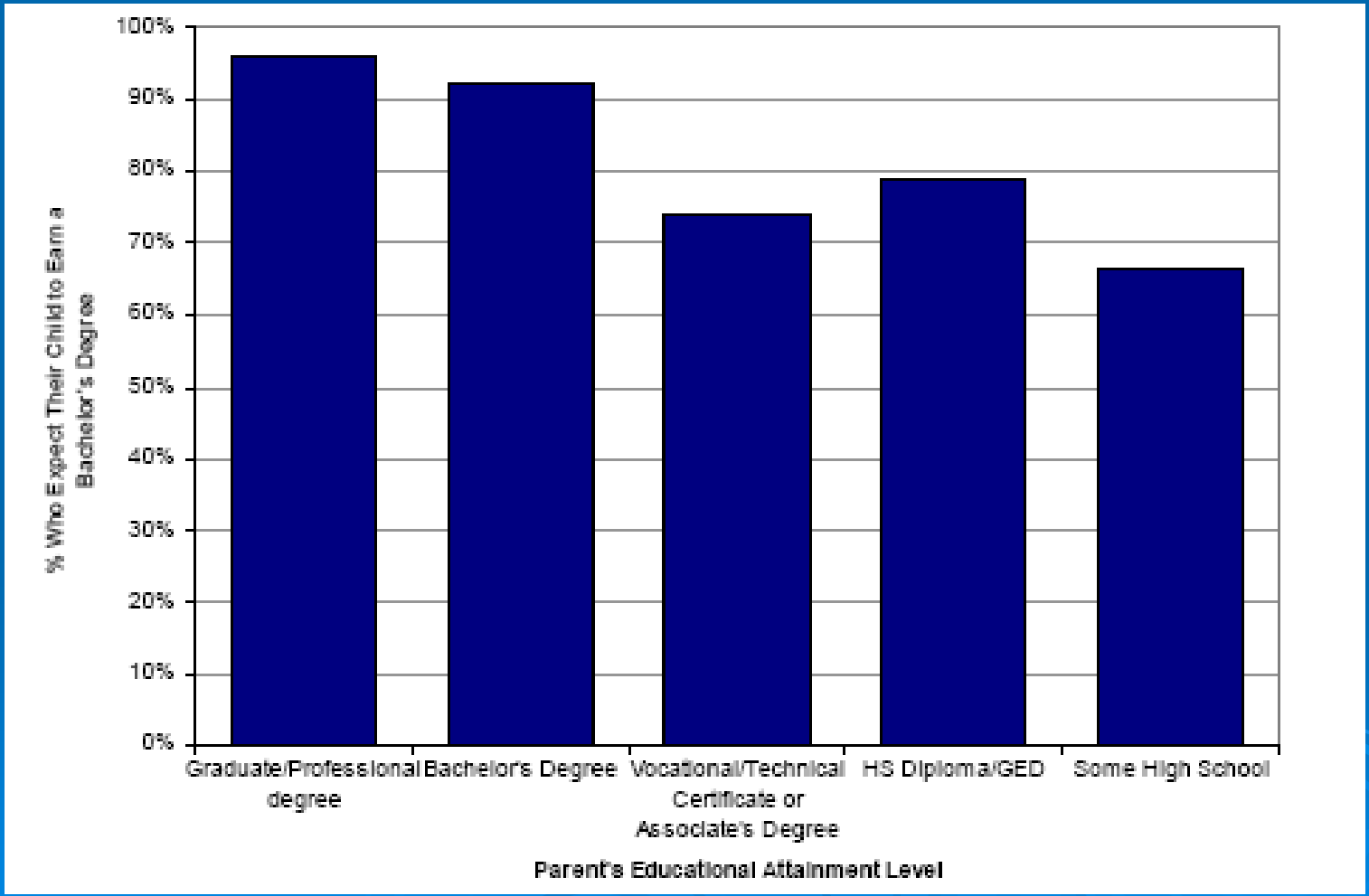
Less than 10.0% | 10.0% to 19.6% | Greater than 19.6%

The Student Pipeline - Tennessee, 2006



Percent of Parents Who Expect Their Children to Earn a Bachelor's Degree

By Educational Attainment Level



Source: University of Tennessee-CBER for the Comptroller of the Treasury of Tennessee, *Understanding Tennesseans' Attitudes About Education*, Part 1, Section IX, February 2006

K-8 All Students Achievement

2003 to 2006 State Report Card

State

	2006			2003		
CRT	% Below Proficient	% Proficient	% Advanced	% Below Proficient	% Proficient	% Advanced
Math	12.0	48.0	40.0	20.7	49.3	30.0
Reading	9.0	53.0	38.0	20.3	48.7	31.0

Source: Department of Education, State Report Card

National Ranking of Difference between State Proficiency and NAEP Proficiency

Tennessee

46

Out of 50 states ranked on the difference between the share of 4th graders rated proficient on the state reading test, compared to the NAEP test (1= best, 50= worst)

Tennessee

49

Out of 50 states ranked on the difference between the share of 4th graders rated proficient on the state math test, compared to the NAEP test (1= best, 50= worst)

Tennessee

43

Out of 47 states ranked on the difference between the share of 8th graders rated proficient on the state reading test, compared to the NAEP test (1= best, 47= worst)

Tennessee

47

Out of 47 states ranked on the difference between the share of 8th graders rated proficient on the state math test, compared to the NAEP test (1= best, 47= worst)

SOURCE: Skinner, Ronald A., "State of the States," *Education Week*, Jan. 6, 2005. Available at: http://www.edweek.org/ew/qc/2005/tables/17achieve-t1.html

Strength of state proficiency standards: 2005

	Overall	4th grade		8th grade	
	grade	Math	Reading	Math	Reading
Arkansas	B-	B	B+	B	C
Georgia	D-	D	F	D-	F
Kentucky	C+	–	C	B-	–
Mississippi	D-	F	F	D+	C-
Missouri	A	B	–	A	–
North Carolina	F	D-	D-	F	F
Tennessee	***F***	***F***	***F***	***F***	***F***
Virginia	D+	–	–	D-	C-

Note: No grade (–) means either state scores or National Assessment of Educational Progress (NAEP) standards were not available.

Source: Peterson and Hess, *Keeping an Eye on State Standards*, **Education Next**, 2006 No. 3.

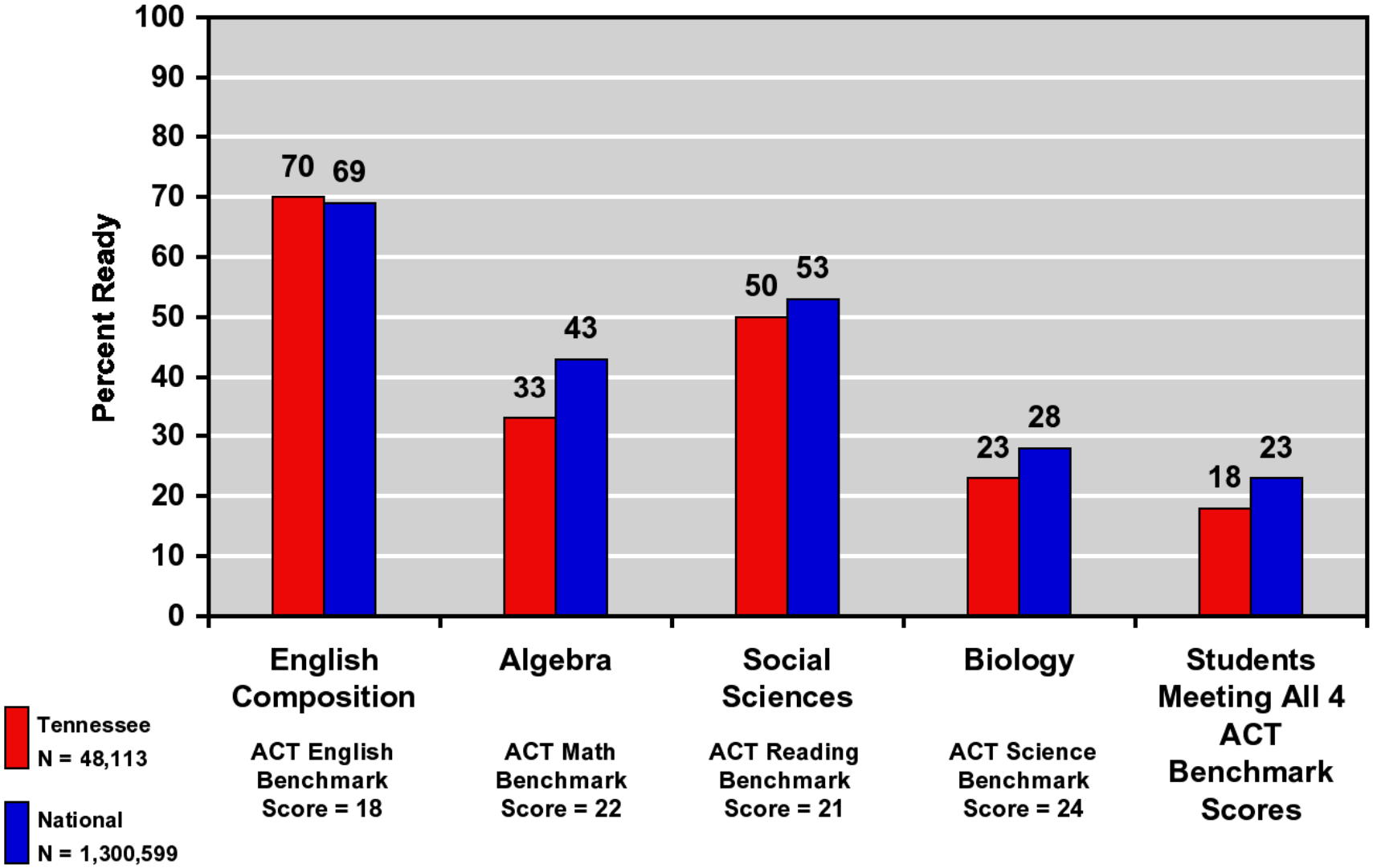
➢ACT College Readiness Benchmark Scores

➢Through collaborative research with postsecondary institutions nationwide, ACT has established the following College Readiness Benchmark Scores:

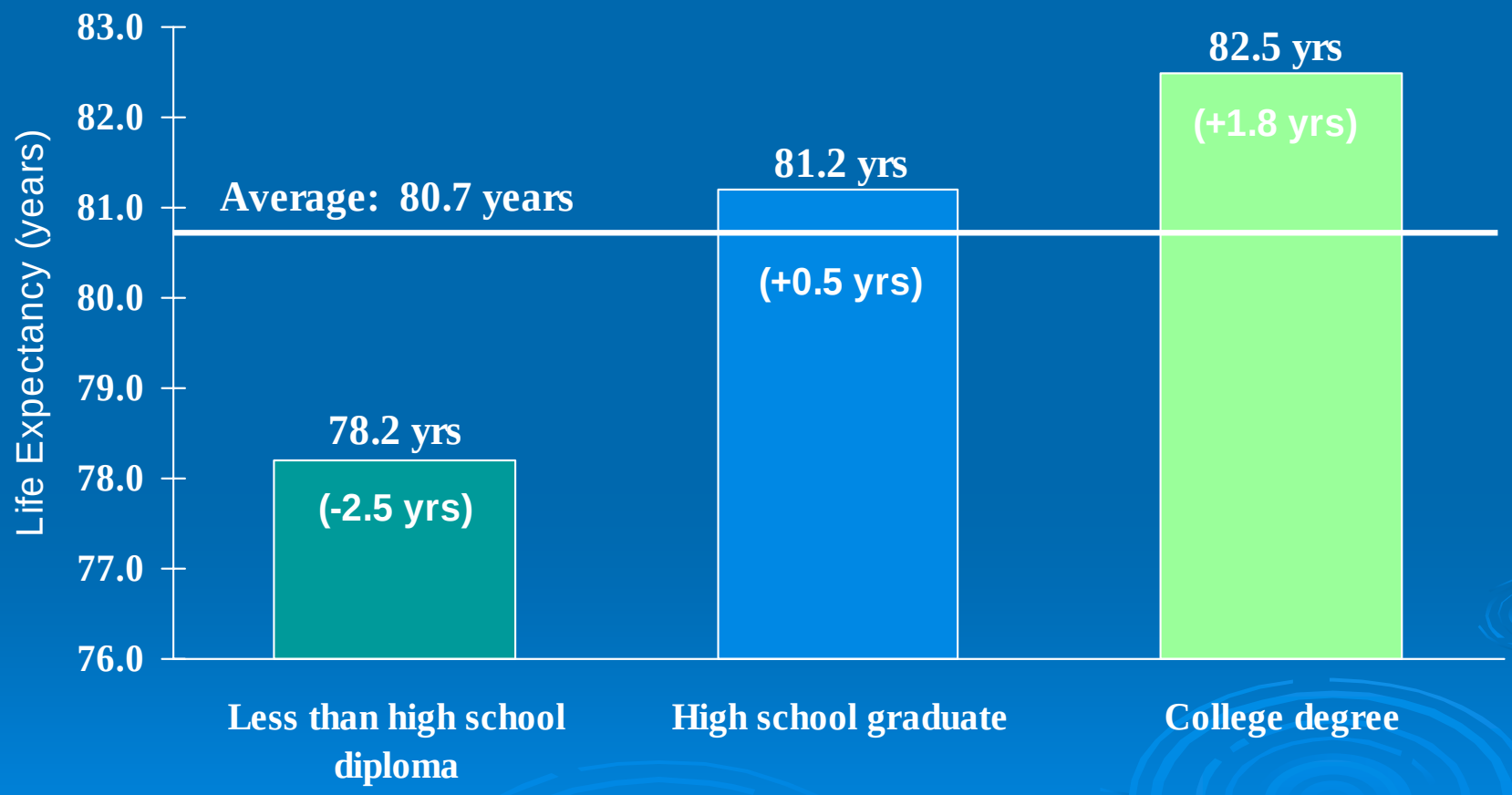
ACT Subject Area Test	College Course(s)	College Readiness Benchmark Score
English	English Composition	18
Math	Algebra	22
Reading	Social Sciences	21
Science	Biology	24

➢A benchmark score is the minimum score needed on an ACT subject area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses.

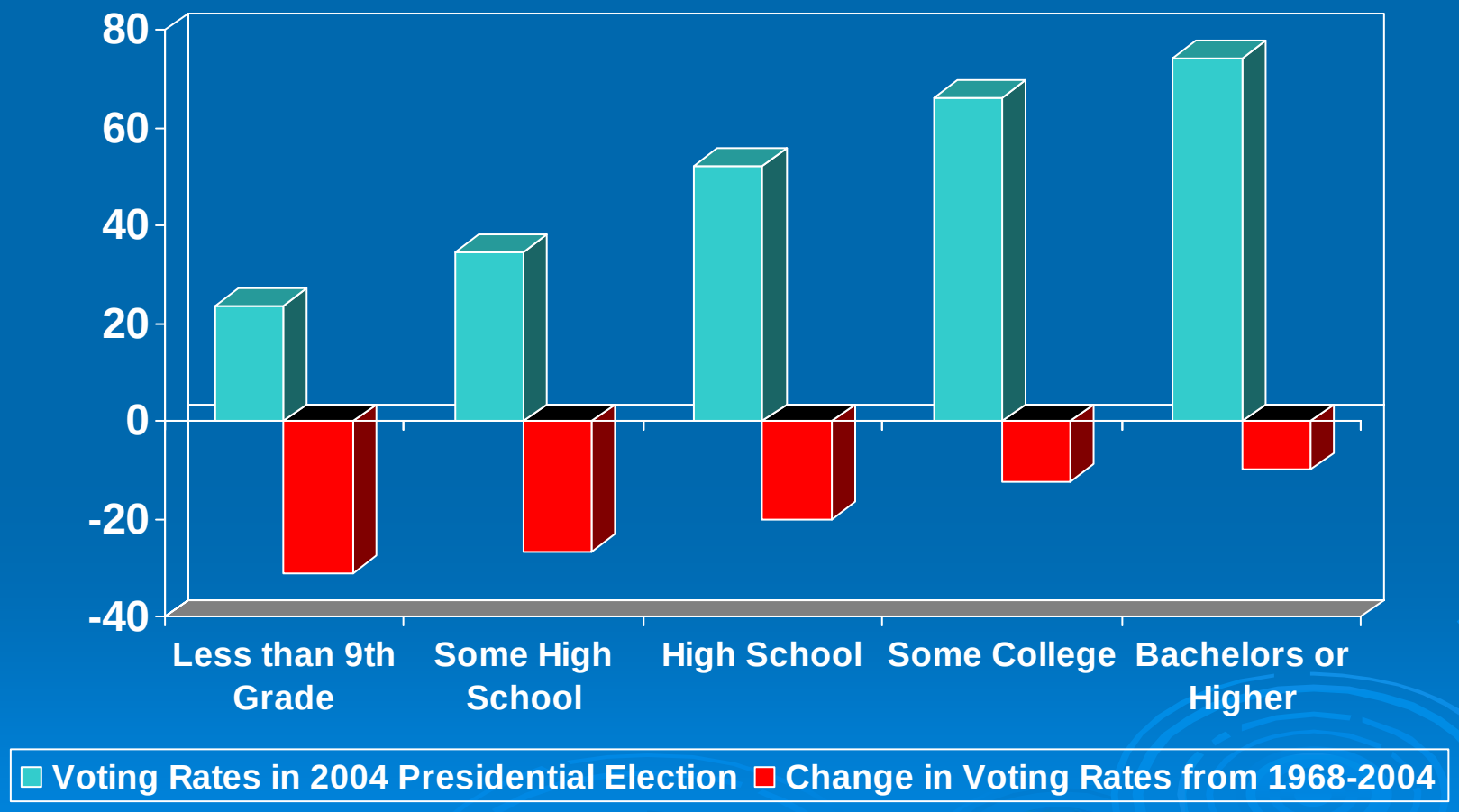
2007 Tennessee and National ACT-Tested Graduates Likely to Be Ready for College-Level Work (in percent)



A Person Without a High School Diploma has a Shorter Life Expectancy



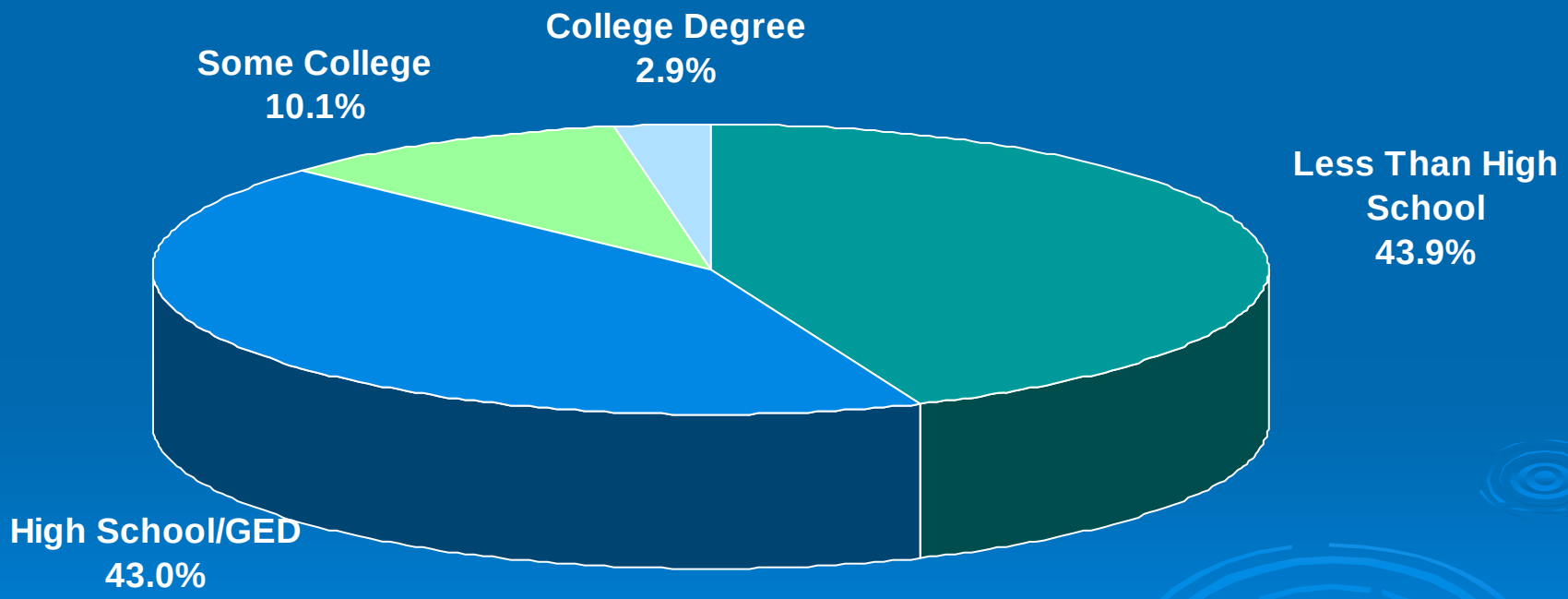
Educated People are More Likely to Participate (and Continue Participating) in Democratic Process



Source: U.S. Census Bureau

Educated Persons are Less Likely to be Incarcerated

Prison Population by Education Attainment, 2004



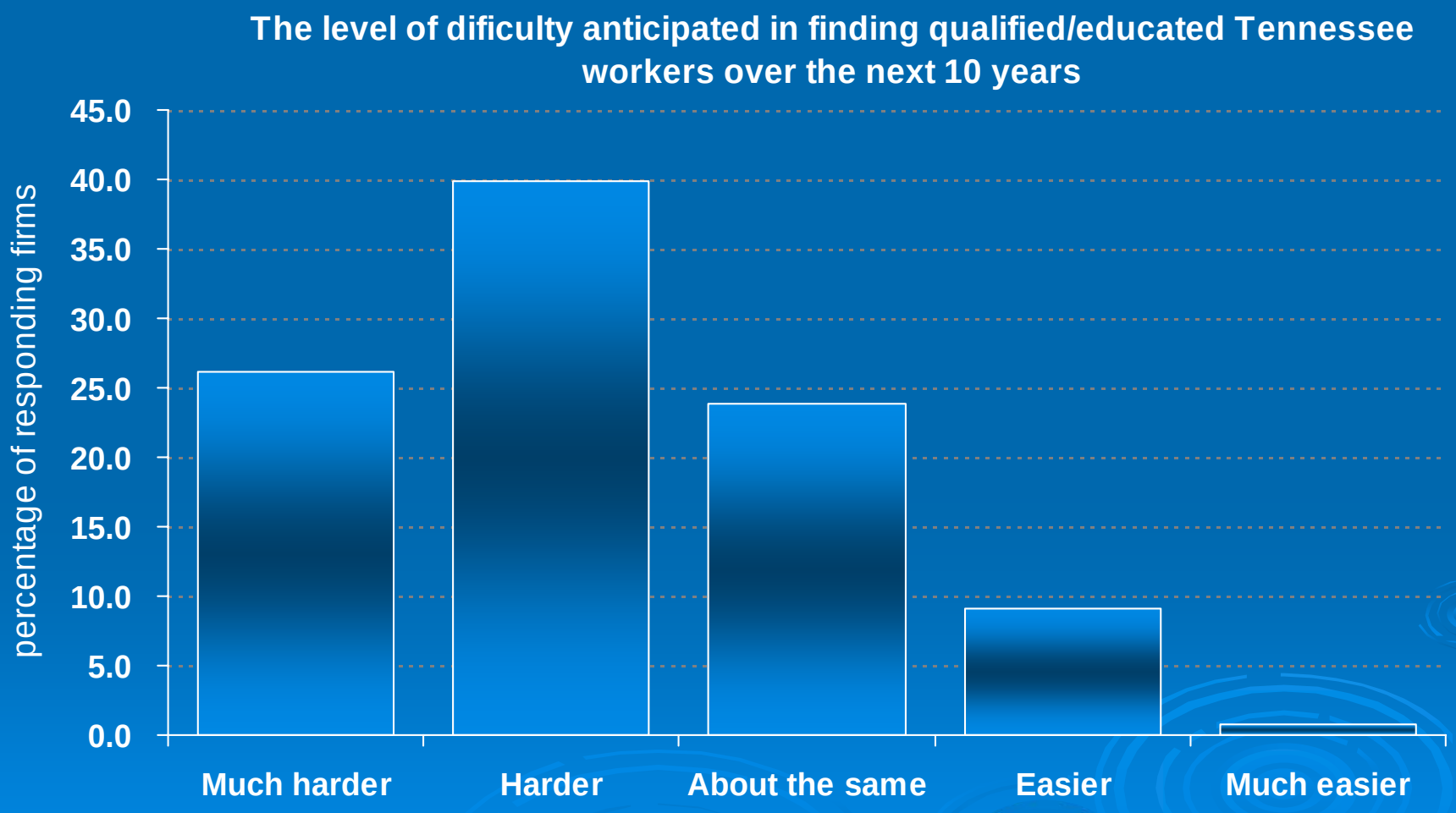
Source: Bureau of Justice Statistics, 2004

Job Trends for the Future

- **70%** of the 30 fastest-growing jobs will require an education beyond high school.
- **40%** of all new jobs will require at least an associate's degree.
- Total college-level job openings between 1990-2008 will nearly equal to the number of college educated entrants to the workforce.

Source: US Department of Labor, Bureau of Labor Statistics, The Outlook for College Graduates, 1998-2008, 2000, in Getting Ready Pays Off!

Expectations of the future Tennessee workforce



Source: CBER-UT, ***Tennessee Business Leaders' Survey,*** 2007, www.educationcrossroads.com

Why is curriculum rigor important?

High school students know they are <u>not</u> prepared for college or the workplace

- According to a February 2005 survey conducted by Peter Hart Research Associates, **approximately 40 percent of graduates reported key gaps in their preparation**. A majority noted that if they could do high school over again, they would work harder and take **more challenging courses**.

  Source: Peter D. Hart Research Associates/Public Opinion Strategies (Washington, D.C.: Achieve, Inc. February 2005)

U. S. businesses know high school students are <u>not</u> prepared for college or the workplace

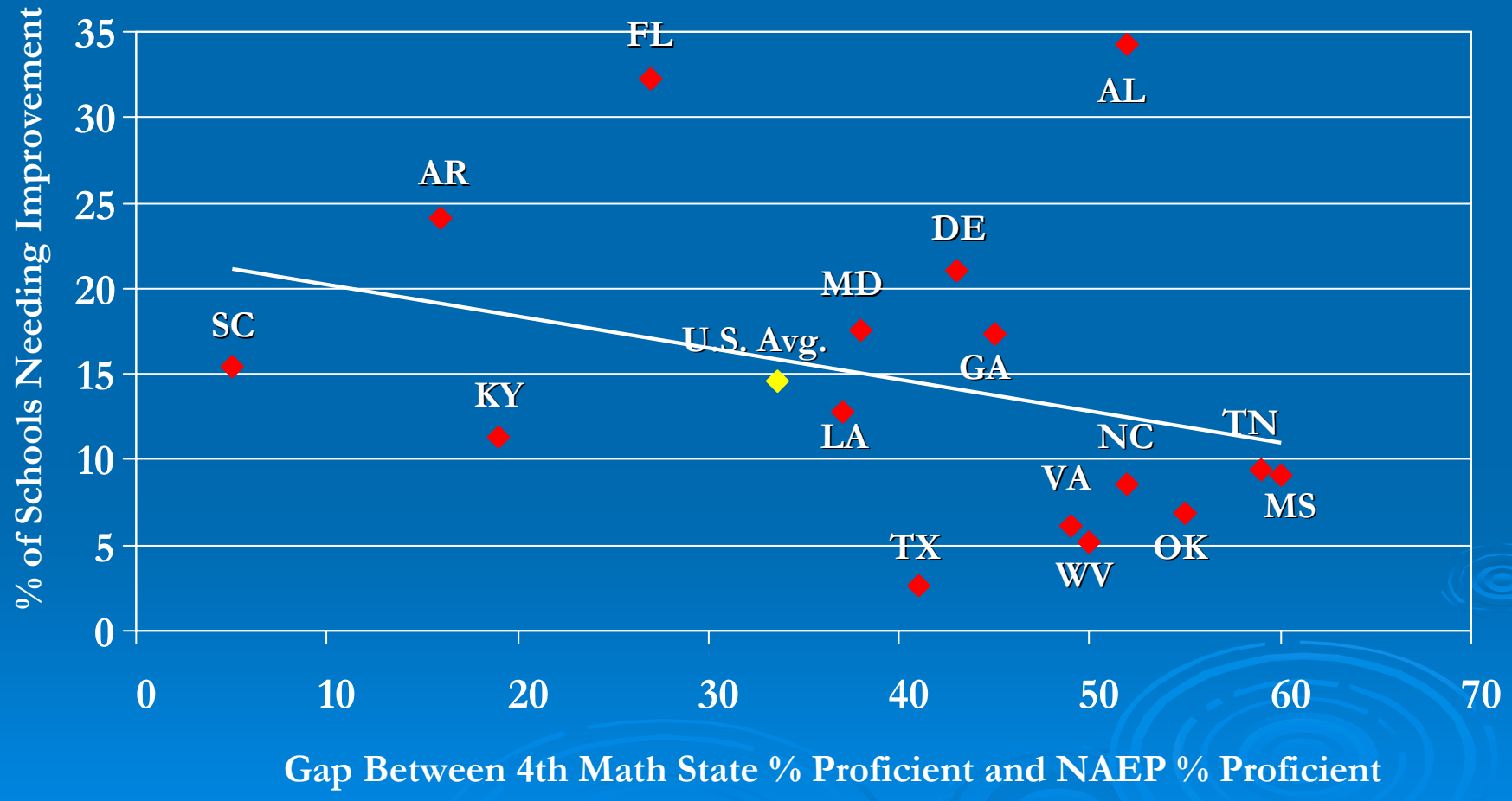
- According to the **Committee for Economic Development**, only **31 percent** of high school students complete the rigorous complement of courses recommended by the National Commission on Excellence in Education.

  Source: "Cracks in the Education Pipeline: A Business Leader's Guide to Higher Education Reform." Committee for Economic Development, (May 2005).

Heading In The Right Direction

- Tennessee participating in American Diploma project.
  - More closely aligned with national standards
  - Raise high school graduation requirements to increase the value of a high school diploma
  - Improve the alignment of curriculum content, assessments and exit requirements
  - Improve integration of educational levels from Pre-k through senior level of college

Relationship between Proficiency Gap and % of Schools In Need of Improvement – 2005



Source: National Center for Education Statistics, U.S. Department of Education

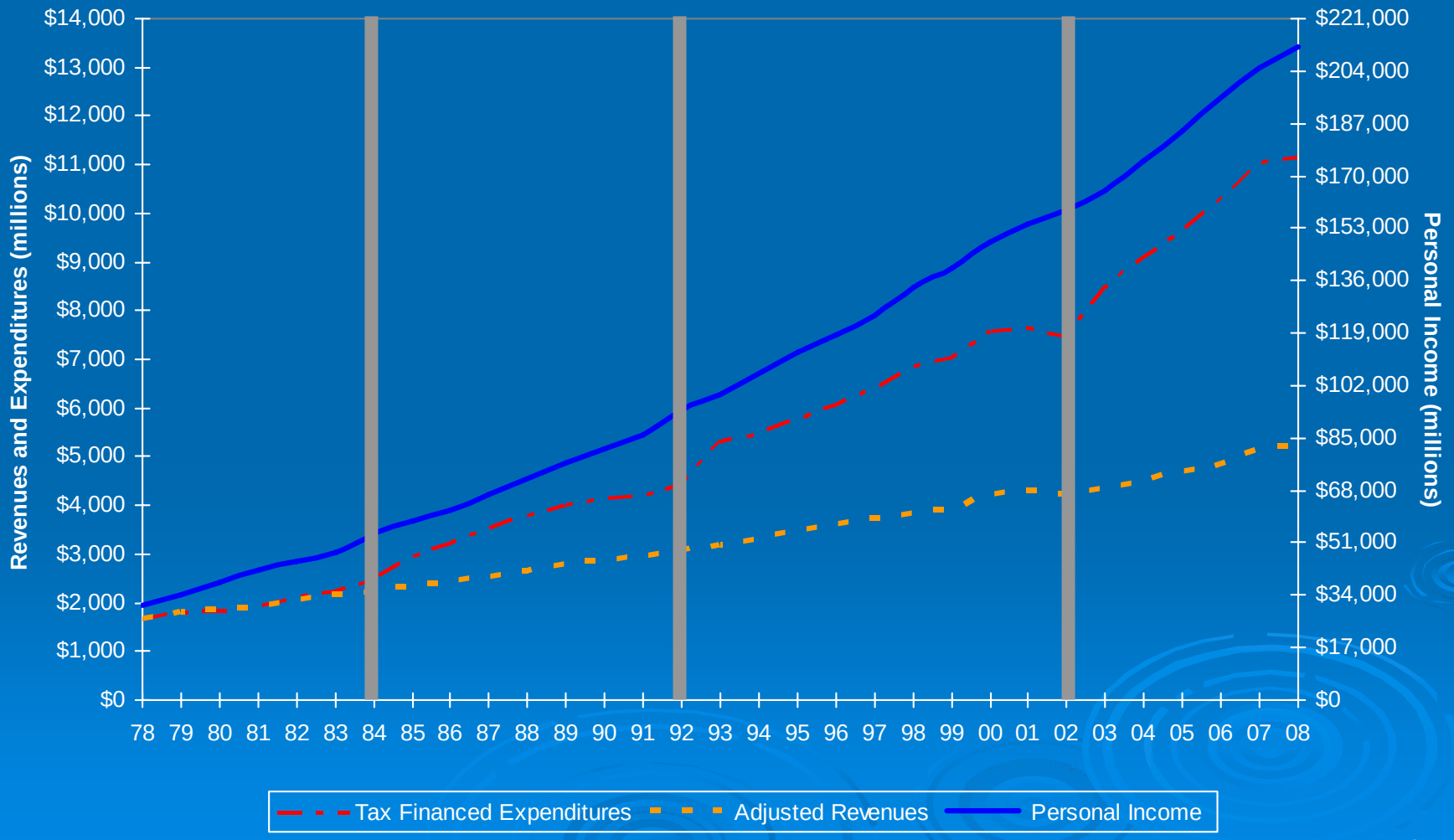
Reporting Progress

- The impact of making school harder means more schools will not meet standards for measured progress, INITIALLY.
- Informed public will serve a vital role (negative or positive)
  - Will be the interpreter of the results of the changes
  - Everyone needs to know what is happening in schools and why.
- *How the opinion leaders interpret the initial results from the American Diploma changes will be very important to the long-term success.*

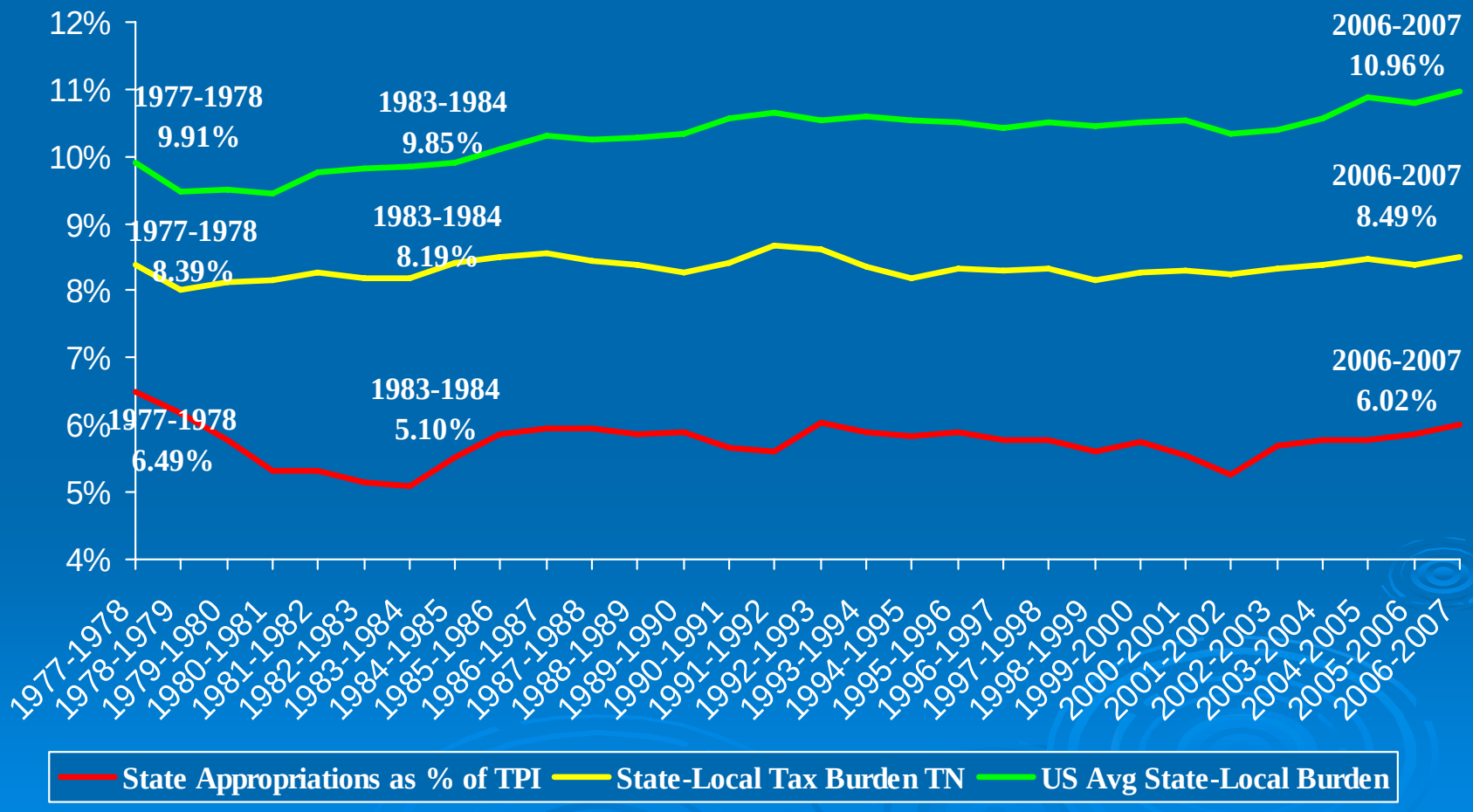
Education Crossroads

- A book about how education affects our lives and the lives of those around us.
- The data is easily accessed and verified through online and other sources.
- Broken into 6 chapters: Future, Foundation, Prosperity, Family, Citizenship, and Public Sector.
- ***If we cannot articulate and document how education matters, we cannot develop the momentum for change.***

Revenues and Expenditures in Tennessee, 1978 Base

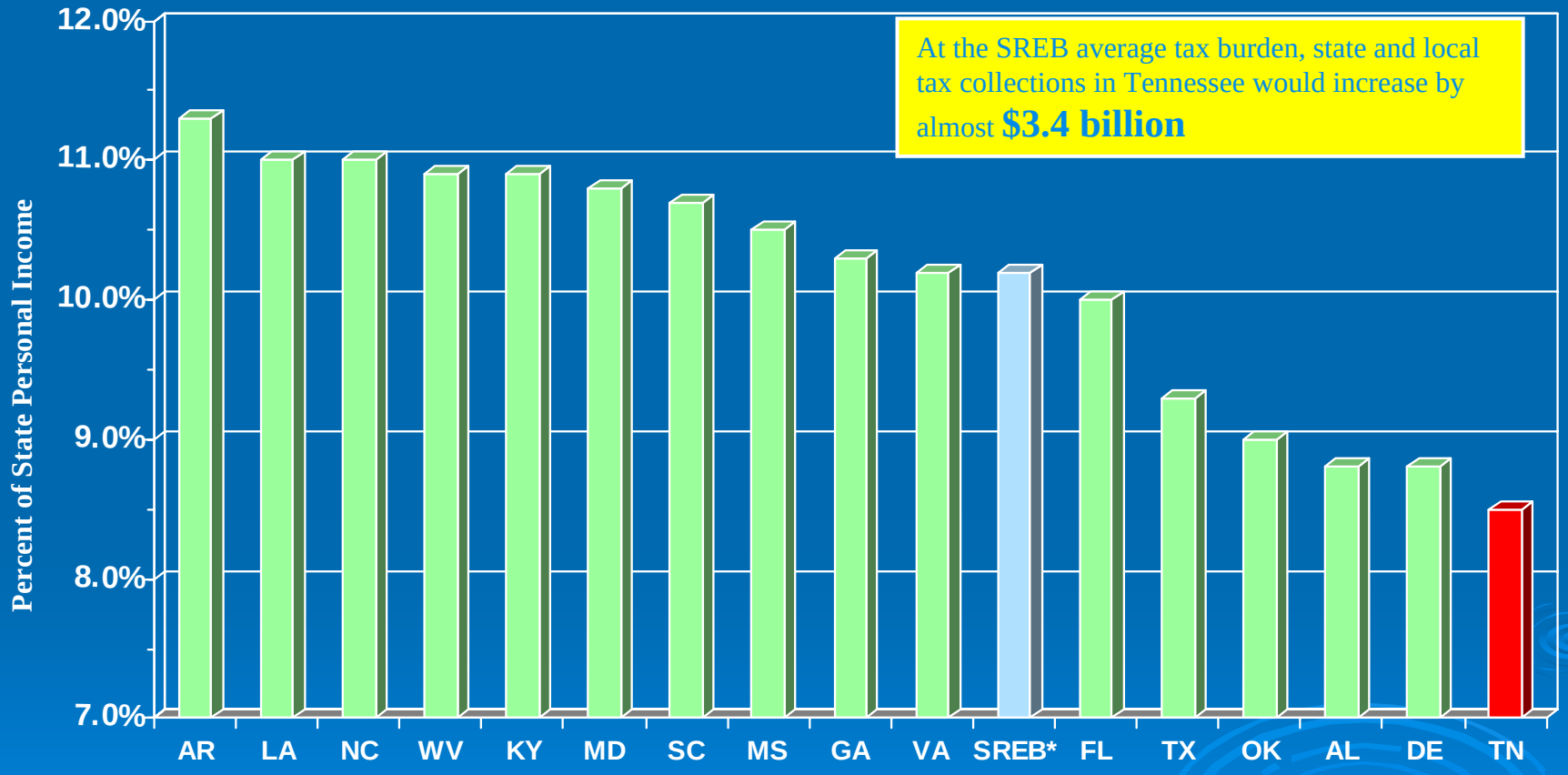


Various Tax Burden Measures as a Percent of Personal Income

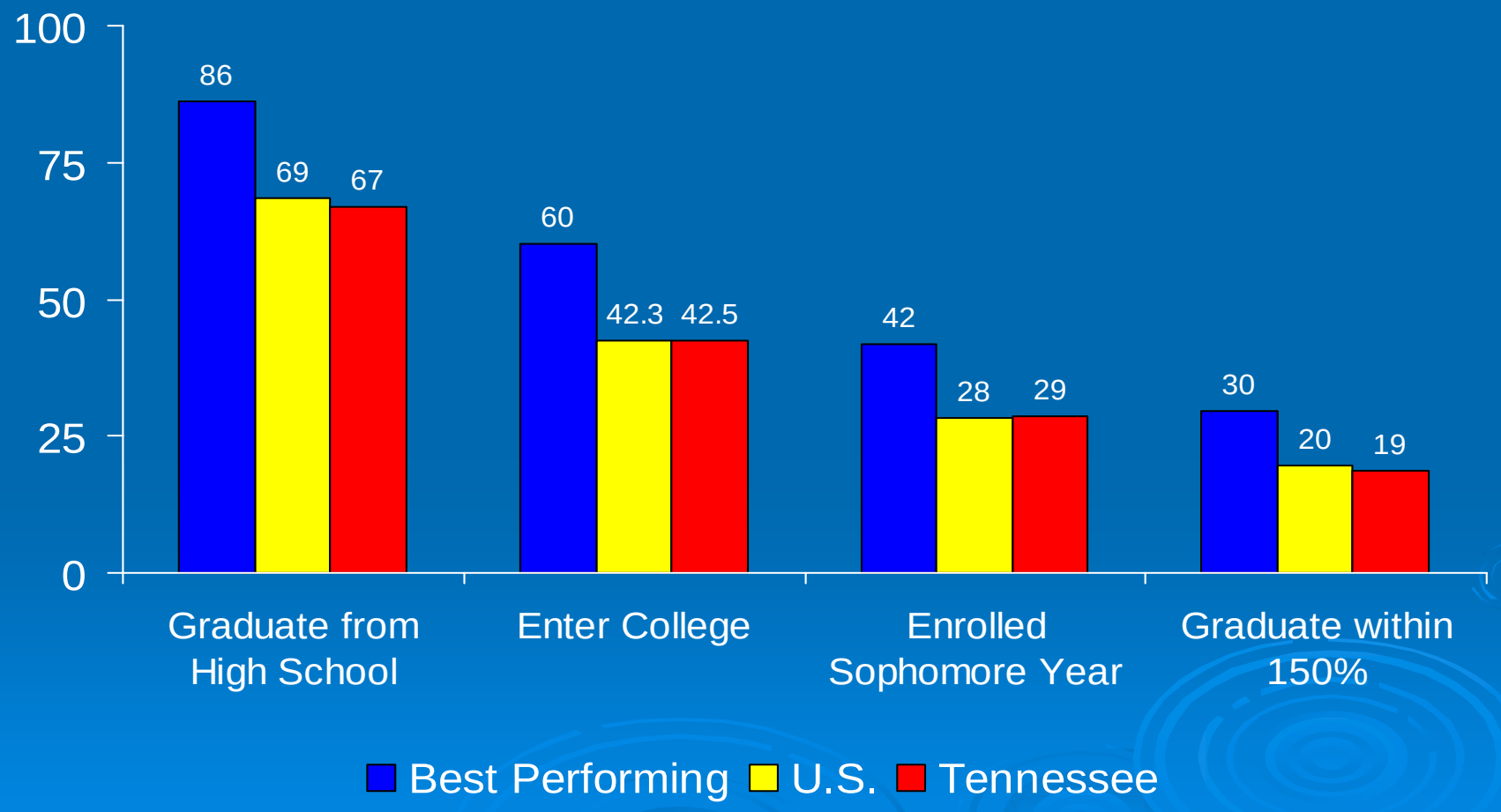


Source: Bureau of Economic Analysis.

2007 State and Local Tax Burden as Share of Personal Income in the SREB States



*Average of SREB states excluding Tennessee. The SREB average including Tennessee is 10.1%

Source: The Tax Foundation

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