

SREB

Southern
Regional
Education
Board

Challenge
to Lead

Goals for Education

Challenge to Lead: West Virginia

2006

“SREB states can lead the nation in educational progress.”

The 16 states of the Southern Regional Education Board are committed to improving education in the South. In fact, you and other policy-makers want more for your students than merely *catching up* to national averages: You believe the region can take the lead on many indicators of educational quality. To achieve this, SREB states have adopted 12 *Challenge to Lead* Goals for Education, and SREB provides regular reports on how each state is doing in meeting them. This report provides an overview of your state’s progress.

Challenge to Lead asserts: “Education is the surest bet in an uncertain and changing world.” Investing time, energy and resources in education already has paid off for SREB states. *Challenge to Lead*, in fact, reminds us that “SREB states have an economic vitality not dreamed of just two generations ago.” But the world continues to change: Industries that once supported whole towns are shut down; once-robust companies have disappeared or changed beyond recognition. New high-tech industries are emerging, and more jobs require a college degree. Most policy-makers in the South believe — more than ever — that educational progress is *the* key to long-term economic vitality. SREB states require an educational system that constantly looks to the future, strengthens the work force, stimulates economic activity and promotes a higher quality of life for all.

SREB states have achieved remarkable gains by identifying goals, working toward them and reporting on improvements year after year. But continuing to work toward these goals depends upon your action and leadership. You, along with other policy-makers and education leaders, can take important steps to demonstrate in many ways that ...

West Virginia can lead the nation in educational progress.

West Virginia

Themes: *Challenge to Lead* GoalsChallenge
to Lead

- **Transitions**
 - Pre-K to elementary school
 - Middle grades to high school
 - High school to college and careers

- **Closing the achievement gaps**
 - Race/ethnicity and gender
 - Geography
 - Income

- **Education systems**
 - Aligned curricula/assessments
 - Data from schools and colleges linked
 - Accountability to the public

Three themes tie the *Challenge to Lead* goals together:

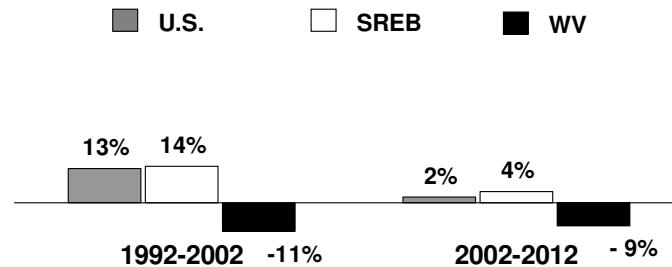
- ♦ helping students make smooth **transitions**: from “learning to read” to “reading to learn,” from one grade to the next, and from the classroom to the workplace;
- ♦ **closing gaps** between performance and standards: for different racial/ethnic groups and for boys and girls; for students in urban, suburban and rural areas; and for students from low-income families; and
- ♦ creating an **education system** of schools, community and technical colleges, and universities that work together to help all students achieve more.

Challenge to Lead identifies indicators for each of the goals so that your state can track progress and determine whether policies are making a difference. The indicators do not stipulate how your state will achieve the goals. They simply help you determine whether your state is making progress on key measures.

This report provides data on indicators for all 12 goals. It places your state achievement in the context of long-term trends and of progress in the nation and the region.

West Virginia

State Profile

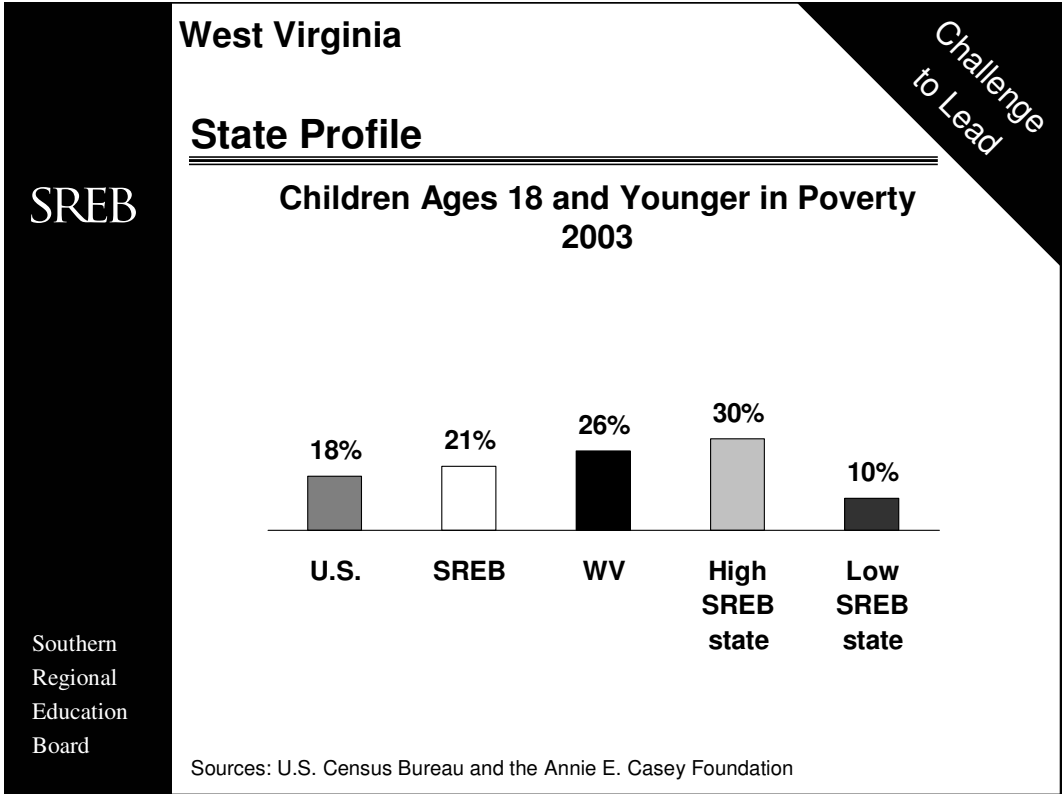
Challenge
to LeadActual and Projected Changes
Public Elementary and Secondary EnrollmentSource: *SREB Fact Book on Higher Education*, 2003 and 2005**West Virginia's K-12 enrollment will continue to decrease.**

The population in SREB states grew by 17 percent from 1992 to 2002, so it is no surprise that enrollments at public elementary and secondary schools increased during that time. Enrollment grew by 14 percent in SREB states — slower than overall population growth, but faster than the 13 percent increase in enrollments nationally.

Thirteen SREB states had higher enrollments in 2002 than in 1992, and three SREB states had declines. Changes in enrollments ranged from an increase of 28 percent to a decrease of 11 percent. Public schools in SREB states accounted for 36 percent of the nation's public school students; SREB states had 35 percent of the nation's population.

Public school enrollments across the United States are not expected to increase as much in the next 10 years. Eleven SREB states are projected to have fewer students at the end of the 10 years, with decreases from 1 percent to 9 percent. The other SREB states are projected to grow slowly, but none is expected to have an increase larger than 0.5 percent annually.

- About 282,000 students were enrolled in public schools in West Virginia in 2002.
- West Virginia public school enrollment decreased by about 11 percent between 1992 and 2002.
- Total K-12 enrollment in West Virginia ranked 38th in the nation in 2002.
- West Virginia is projected to have a 9 percent decrease in enrollment by 2012.



West Virginia had a higher percentage of children living in poverty than the nation.

In 2003, nearly 13 million children in the United States were living in poverty — about 18 percent of all children ages 18 and younger. The number of children in poverty in SREB states was nearly 6 million, and the SREB median percentage — 21 percent — was higher than the nation’s.

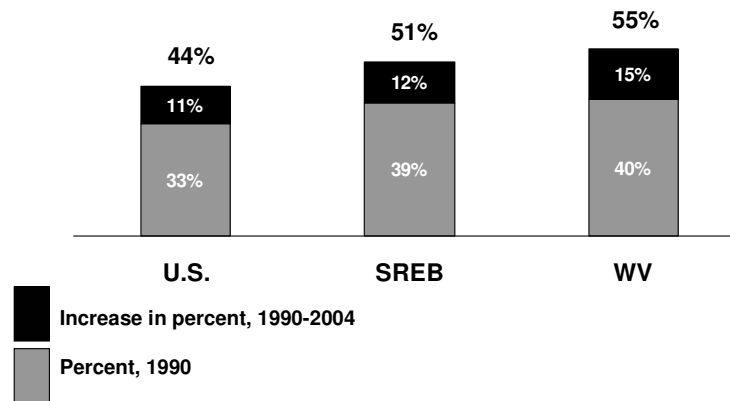
The U.S. Census Bureau measures poverty according to income and household size. For example, in 2003 a household of four with an income of no more than \$18,400 was considered to be living in poverty.

SREB states vary considerably in the overall economic well-being of their children. The percentages of children living in poverty in SREB states in 2003 ranged from 10 percent to almost 30 percent.

- In 2003, the poverty rate among children in West Virginia was higher than the national rate and the rate for SREB median states. It was also higher than West Virginia’s rate in 2000.
- Almost 100,000 children in West Virginia lived in poverty in 2003.

West Virginia

State Profile

Challenge
to LeadPercent of Students Approved for a Free or
Reduced-Price Lunch
1990 and 2004

Sources: U.S. Census Bureau and the National School Lunch Program

More than half of students in West Virginia lived in low-income households.

While the percentage of children living in poverty in SREB states has remained steady at about 20 percent, the percentage in low-income households has risen substantially. This increase, largely unrecognized, is in children from households above the federal poverty line but still low income.

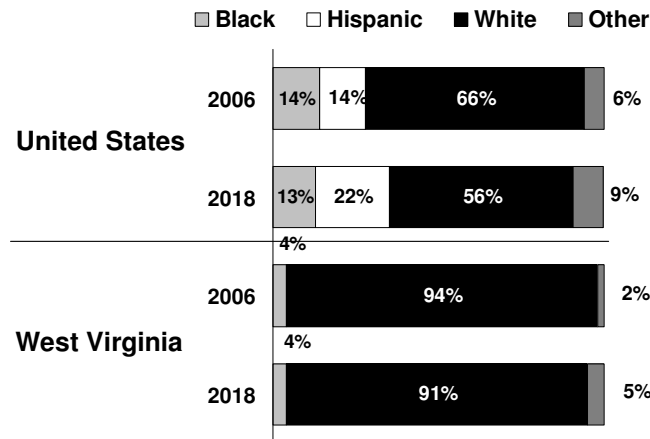
A student's eligibility for the National School Lunch Program is a common indicator of low household income. Students from households with incomes up to 130 percent of the federal poverty line qualify for free lunches. Those from households with incomes up to 185 percent of poverty are eligible for reduced-price lunches. In 2004, students from families of four with household incomes up to \$24,505 were eligible for free lunches, and those with incomes between \$24,506 and \$34,873 were eligible for reduced-price lunches. In 1990, 39 percent of students in SREB states were approved for the federal lunch program, and by 2004, more than half were approved. In 1990, 33 percent of students in the nation were approved, compared with 44 percent in 2004. SREB states increased 12 percentage points during this time, compared with 11 percentage points in the nation.

This growth in students from low-income households is important for policy-makers. *No Child Left Behind* requires that states report the progress of these students in meeting state standards. These students figure prominently in schools' efforts to make adequate yearly progress.

- In 1990, 40 percent of students in West Virginia were approved for free and reduced-price lunches. By 2004, the percentage had climbed 15 percentage points to 55 percent.
- In 2004, 152,000 students in West Virginia were approved for the school lunch program.

West Virginia

State Profile

Challenge
to LeadRacial/Ethnic Proportions
Public High School Graduates

Source: Western Interstate Commission for Higher Education

The proportions of high school graduates will not change much in West Virginia.

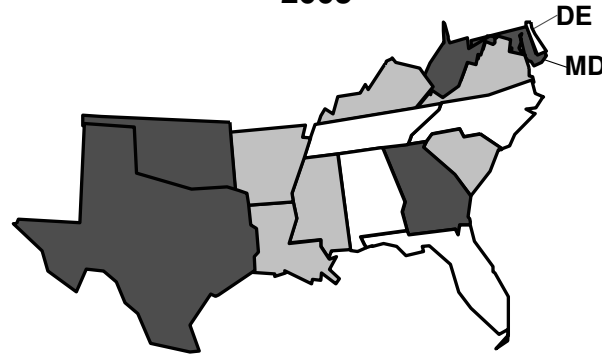
Elementary and secondary school enrollments are not expected to grow much in the next 12 years, but they will become much more diverse. This change will be obvious in high school graduating classes over the next 12 years, as current first-graders become seniors.

Across the United States today, about 66 percent of graduating seniors are white; by 2018, that proportion will decline to 56 percent. The proportion of graduating seniors who are black will decline somewhat — from 14 percent to 13 percent. The significant change in graduating classes will result from the growth in Hispanic student populations over the next 12 years. The proportion of Hispanic graduating seniors in the U.S. is expected to grow from 14 percent in 2006 to 22 percent in 2018. The increase will be even greater in SREB states — rising from 14 percent in 2006 to 29 percent in 2018.

- Changes in high school graduating classes over the next 12 years in West Virginia will not likely parallel those in the nation. White students are expected to decline as a proportion of the class from 94 percent to 91 percent. At the same time, the proportion of black students will remain at about 4 percent. Hispanic students will grow slightly but will not reach 1 percent by 2018. Other minority groups in West Virginia will grow — from about 2 percent to about 5 percent.
- West Virginia's public high schools are projected to graduate fewer students in 2018 than in 2006.

West Virginia

First-Grade Readiness

Challenge
to LeadChildren in Poverty Compared With Children
in Prekindergarten Programs
2005

■ 200% or more ■ 100% to 199% □ Less than 100%

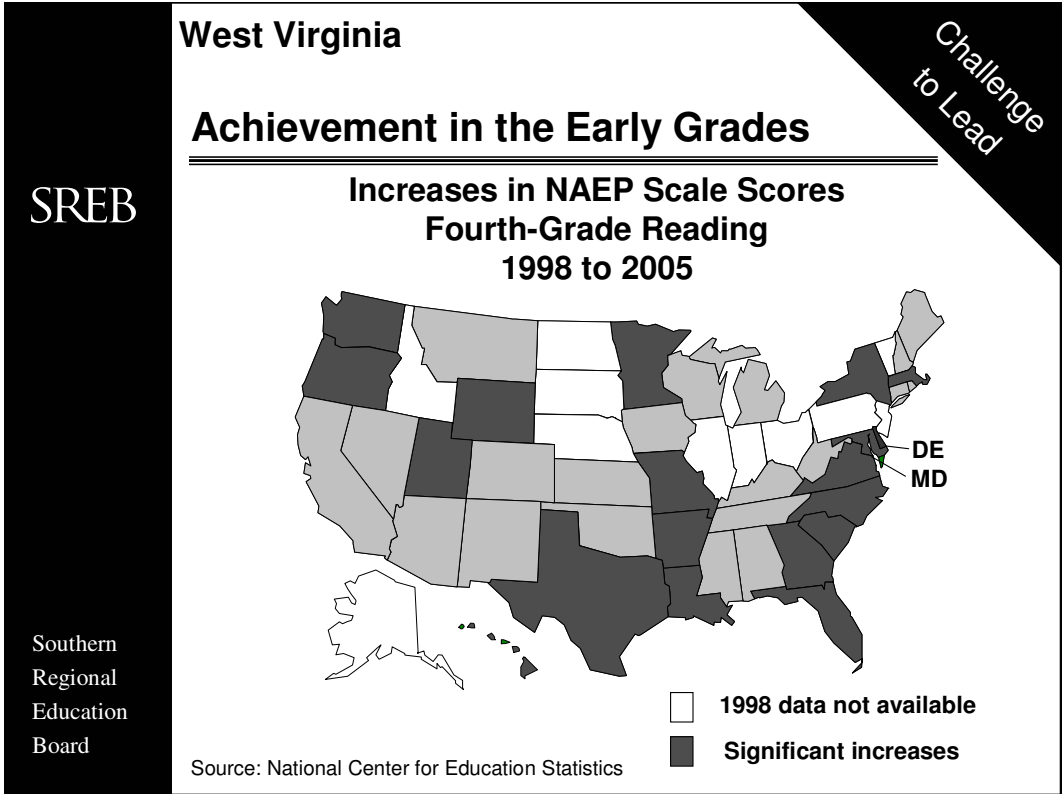
Sources: U.S. Head Start Bureau and the National Institute for Early Education Research

Children in poverty had full access to West Virginia's public pre-K programs.

Challenge to Lead asks whether all first-graders are ready for school. Each state's commitment to school readiness can be measured by the percentage of its children living in poverty who are served by publicly funded prekindergarten (both state-funded and Head Start programs for 4-year-olds). Five SREB states — Georgia, Maryland, Oklahoma, Texas and West Virginia — are among national pre-K leaders in providing access to these programs. In 2004, the pre-K programs in these states enrolled at least twice as many children as the number of children living in poverty. Seven other SREB states had pre-K enrollments at least equal to the number of children living in poverty.

Preparing children for first grade depends on assessing each child's needs and having the high-quality programs to meet them. Nationally, too few states currently assess preschool children. Program quality is generally evaluated by class sizes, staff ratios and staff qualifications. The recommended maximum class size is 20 and the student-to-staff ratio is 10-to-1. Of 15 SREB states with state-funded programs in 2005, 14 met or exceeded the recommendations on student-to-staff ratio and class size. Eleven states now require every lead teacher to have a bachelor's degree, and most of these also require these teachers to hold pre-K certification.

- In 2005, enrollment in West Virginia's publicly funded pre-K programs was 204 percent of the number of 4-year-olds living in poverty, up from 119 percent in 2003. West Virginia's ranked fifth among SREB states. Fifty-five percent of West Virginia's 4-year-old population was enrolled in publicly funded programs.
- In 2004, West Virginia's student-to-staff ratio (10-to-1) and maximum class size (20) in its state-funded pre-K programs met recommended standards. Pre-K teachers must hold state teacher certification to teach in public schools or associate's degrees in non-public schools.



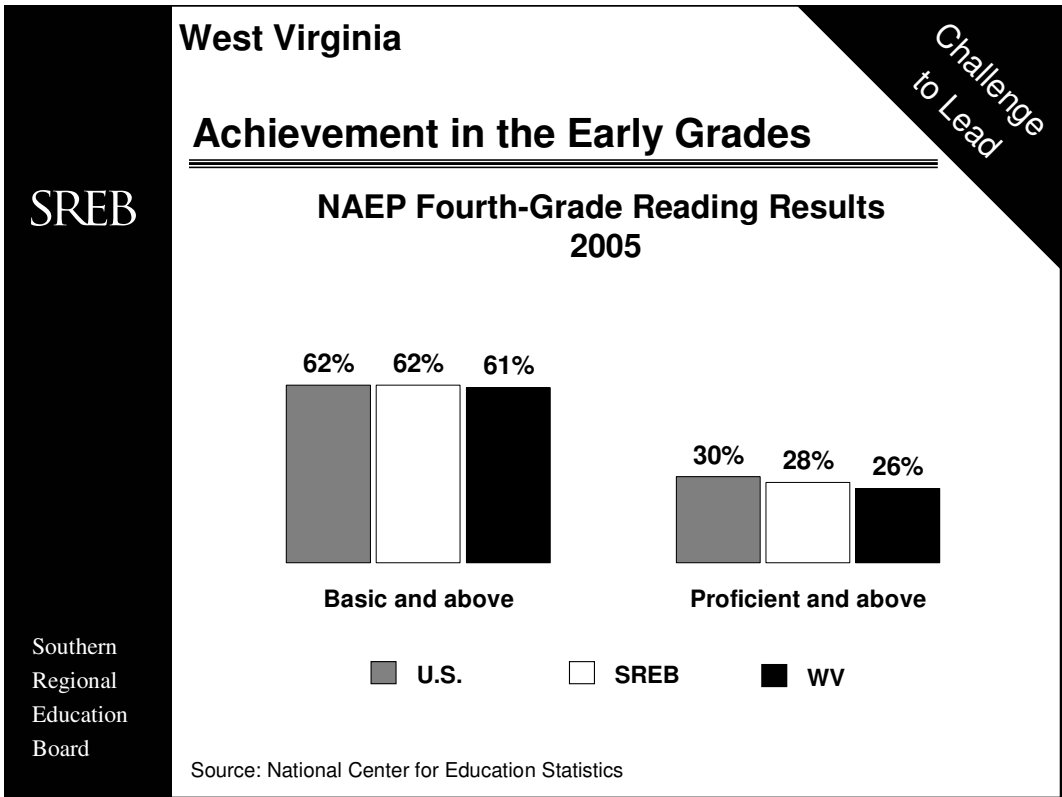
West Virginia has not made significant progress in fourth-grade reading since 1998.

Reading and mathematics are the fundamental building blocks of learning. It is critically important that students get a good start in these subjects, yet many students in the early grades are not achieving at grade level. Their poor performance leads to problems in the middle grades. If they cannot master reading in the early grades, they have little chance for success later.

SREB states have a good yardstick for measuring progress in reading over time. The National Assessment of Educational Progress (NAEP) is administered to samples of fourth-, eighth- and 12th-graders in each state every two years, and SREB states have been using this tool to assess themselves for 10 years or more.

In 2005, NAEP — known as the “Nation’s Report Card” — revealed strong reading progress. *Of the 19 states across the nation that showed significant increases in average reading scale scores for fourth-graders in public schools between 1998 and 2005, SREB states accounted for 10.*

- The average NAEP fourth-grade reading scale score in West Virginia was 216 in 1998 and 215 in 2005. This decrease is not considered significant.



West Virginia fourth-graders trailed the U.S. and the region in reading.

SREB states equaled the nation in the proportion of fourth-grade students who scored at or above the NAEP Basic level in reading in 2005: 62 percent. SREB states showed a 2 percentage-point increase from 2003, but the percentage of students scoring at or above Basic nationally remained the same as in 2003.

SREB states trailed the nation by 2 percentage points in the proportion of students who scored at or above the NAEP Proficient level in 2005. The percentage scoring at or above this level has not changed for either SREB states or the nation since 2003. Twenty-eight percent of students in SREB states read at or above the Proficient level, compared with 30 percent in the nation.

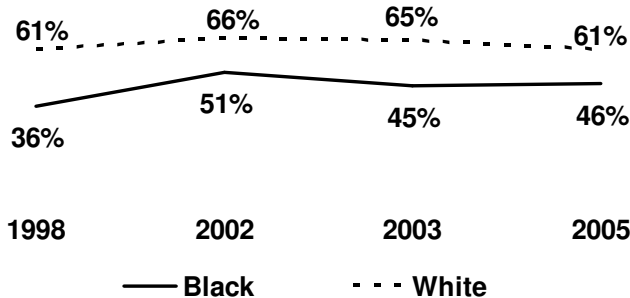
The NAEP Basic level denotes “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.” One step above, the NAEP Proficient level denotes “solid academic performance” and “demonstrated competency over challenging subject matter.”

SREB’s *Challenge to Lead* goals call for 100 percent of fourth-grade students to score at or above the NAEP Basic level and for the percentage of fourth-graders scoring at or above the NAEP Proficient level to exceed the national average. SREB states have a long way to go to bring *all* students to the Basic level and to bring a greater percentage to the Proficient level.

- In West Virginia, 61 percent of fourth-grade students scored at or above the NAEP Basic level in reading in 2005 — a 4 percentage-point decrease since 2003. In 2005, 26 percent of fourth-grade students scored at or above the NAEP Proficient level — a 3 percentage-point decrease since 2003.

West Virginia

Achievement in the Early Grades

Challenge
to LeadNAEP Fourth-Grade Reading Results
Percent Scoring At or Above Basic
by Race/Ethnicity

Hispanic: no scores reported in 2005 for 1998 to 2005.

Source: National Center for Education Statistics

Black fourth-graders in West Virginia improved performance.

Challenge to Lead calls for SREB states to bring *all* students to the NAEP Basic level. In 2005, white fourth-graders in the SREB median states scored at or above this level in reading at a much higher percentage than black fourth-graders: 72 percent, compared with 41 percent. At the NAEP Proficient level, 37 percent of white students met the standard, compared with 12 percent of black students.

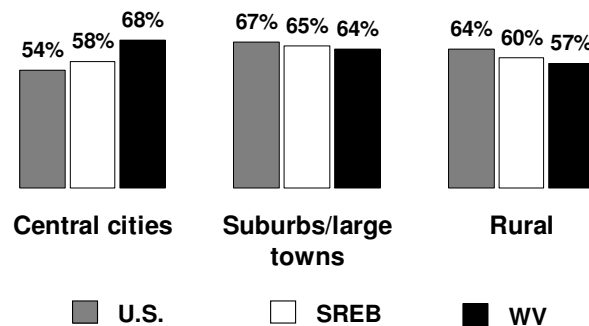
There has been progress in most SREB states. Black, Hispanic and white groups increased the percentage of students scoring at or above the Basic level in reading from 1998 to 2005. Black students increased the percentage by 8 points, Hispanics students by 7 points and white students by 6 points.

Black, Hispanic and white students in SREB states also improved in the percentages scoring at or above the NAEP Proficient level in reading from 1998 and 2005. The percentages of black and Hispanic students scoring at this level in SREB median states were at or above the average for their national peers. White students were below the average for their national peers.

- The percentage of black fourth-graders in West Virginia who scored at or above the NAEP Basic level in reading was 46 percent in 2005, up 10 percentage points from 36 percent in 1998. During the same period, white students' results stayed the same at 61 percent.

West Virginia

Achievement in the Early Grades

Challenge
to LeadNAEP Fourth-Grade Reading Results
Percent Scoring At or Above Basic Level
by School Location, 2005

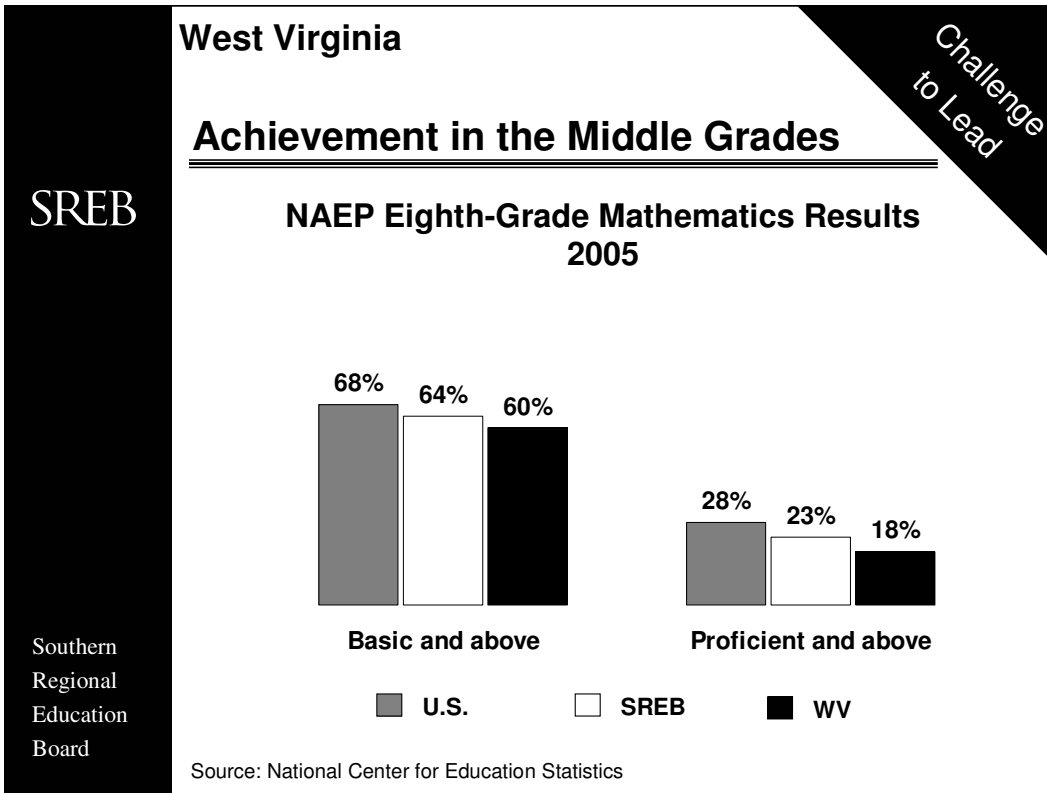
Source: National Center for Education Statistics

West Virginia's urban youth beat the U.S. in NAEP reading; suburban and rural youth did not.

Student achievement varied among types of communities nationwide and within SREB states in 2005. In SREB states, higher percentages of fourth-graders from suburbs and large towns scored at or above the NAEP Basic level in reading than fourth-grade students from rural areas or central cities. Slightly higher percentages of rural fourth-graders scored at or above this level than students from central cities. In the nation, the gap between central city fourth-graders and suburban and large-town fourth-graders was 13 percentage points; in SREB states, the gap was 7 percentage points.

A greater percentage of central city fourth-graders (58 percent) scored at or above the Basic level in reading in SREB states than in the nation (54 percent). In SREB states, fourth-graders from the suburbs/large towns and rural areas trailed their national counterparts slightly. In the suburbs and large towns, they lagged by 2 percentage points. In rural areas, they trailed by 4 percentage points.

- In West Virginia, 57 percent of rural fourth-graders scored at or above the NAEP Basic level in reading in 2005, down from 64 percent in 2003. The percentage of students in central cities scoring at or above this level in 2005 was 68 percent, up from 60 percent in 2003; and in suburbs/large towns, 64 percent, down from 70 percent in 2003.
- In West Virginia, 23 percent of rural fourth-graders scored at or above the NAEP Proficient level in reading in 2005, down from 27 percent in 2003. The percentage of students from suburbs/large towns who scored at or above this level fell from 35 percent to 27 percent from 2003 to 2005, but the percentage from central cities rose from 24 percent to 34 percent.



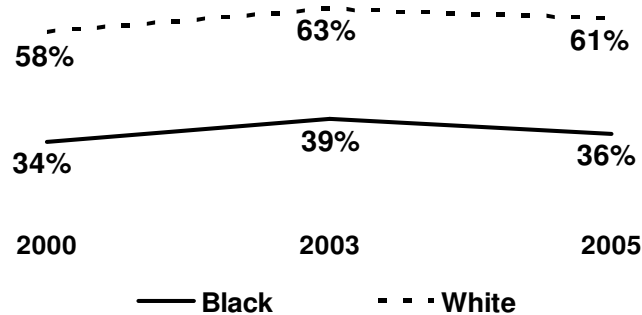
West Virginia eighth-graders trailed the U.S. and the region in NAEP math.

SREB's *Challenge to Lead* goals call for 100 percent of eighth-grade students to be at the NAEP Basic level and for the percentage of eighth-graders who achieve the NAEP Proficient level to exceed the national average. Monitoring performance in eighth-grade mathematics is important for policy-makers and education leaders. If students are not performing at grade level in eighth grade, they have little chance of doing well in challenging mathematics and science courses in high school.

Mathematics performance of eighth-grade students did not improve in the SREB median states from 2003 to 2005. More than one-third of students in SREB median states scored below the NAEP Basic level, and fewer than one in four scored at or above the NAEP Proficient level in both years. Percentages in the nation improved by 1 percentage point at both levels from 2003 to 2005. Eighth-grade students in SREB states trailed their national counterparts in the percentage scoring at or above Basic by 4 points, and the percentage scoring at or above Proficient trailed by 5 percentage points.

- In West Virginia, 60 percent of eighth-graders scored at or above the NAEP Basic level in mathematics in 2005, down from 63 percent in 2003. Eighteen percent scored at or above the NAEP Proficient level in math in 2005, down from 20 percent in 2003.
- West Virginia's eighth-graders scoring at or above the NAEP Basic level in math trailed the nation by 8 percentage points and the SREB median states by 4 percentage points. They trailed the nation by 10 percentage points in scoring at or above the Proficient level and the SREB median by 5 percentage points.

West Virginia

Achievement in the Middle GradesChallenge
to Lead**NAEP Eighth-Grade Mathematics Results
Basic and Above by Race/Ethnicity**

Hispanic: no scores reported in 2005 for 2000 to 2005.

Source: National Center for Education Statistics

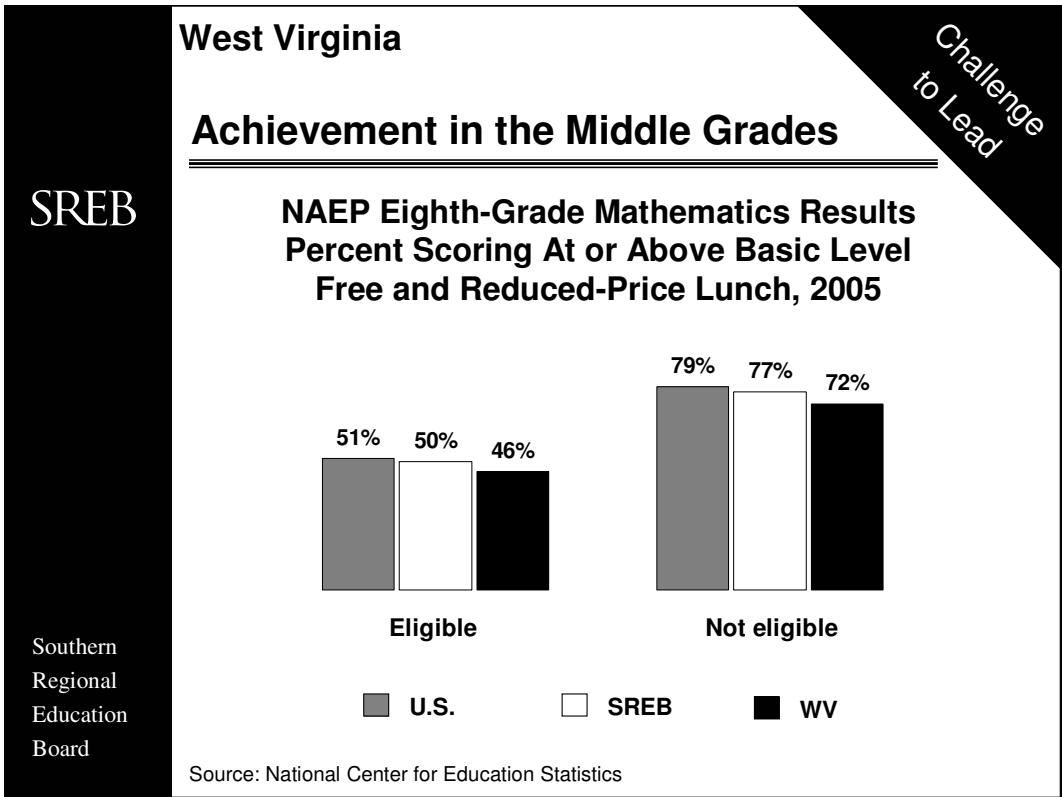
West Virginia's black and white eighth-graders improved in math.

Challenge to Lead calls on SREB states to close gaps in achievement and to bring all students to high performance levels. The good news is that, in the SREB median states, the percentages of black, Hispanic and white students meeting the NAEP Basic level in eighth-grade mathematics rose from 2000 to 2005. But this trend does not hold for every state.

Percentages of black and Hispanic eighth-grade students scoring at or above the NAEP Basic level have lagged behind those of white students in the U.S. and in SREB states from the earliest reports of the National Assessment of Educational Progress. Since 2000, the percentage of black students scoring at or above the NAEP Basic level rose by 11 percentage points in the nation and by 10 percentage points in SREB states. During this time, the percentage of Hispanic students scoring at this level increased by 10 percentage points nationally. White students increased by 4 percentage points nationally and by 9 percentage points in SREB states.

As in previous years, a much higher percentage of white students than black or Hispanic students scored at or above the NAEP Proficient level in 2005.

- Higher percentages of West Virginia's black and white eighth-graders scored at or above the NAEP Basic level in math in 2005 than in 2000.
- Black eighth-graders in West Virginia scoring at or above the Basic level trailed white students by 25 percentage points in 2005.



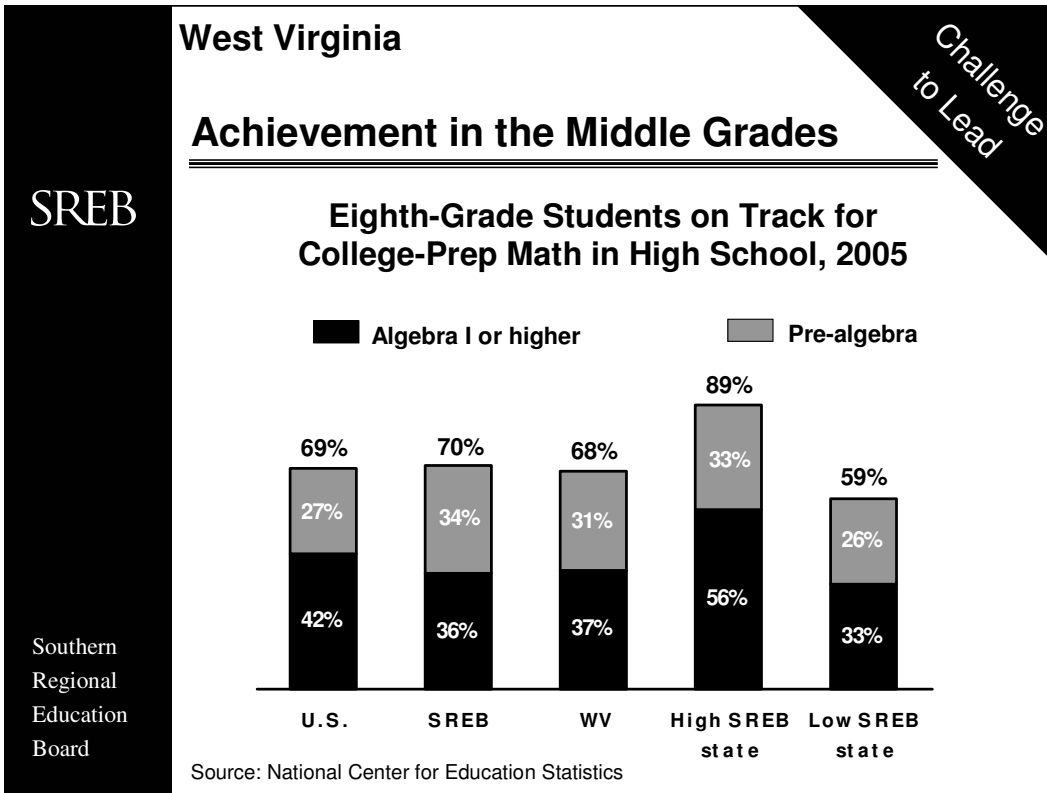
West Virginia eighth-graders eligible for the lunch program trailed the nation in NAEP math.

It is important to know how well students from low-income households are performing, since many states focus additional resources on low-income students, and the federal Title 1 program targets these students directly for extra help. Policy-makers need to be able to monitor the progress of low-income students as one indicator of how effectively resources are being used.

Eligibility for the National School Lunch Program is commonly used to identify students from low-income families. The program provides free lunches to those from families with incomes at or below 130 percent of poverty and reduced-price lunches to those from families with incomes above 130 percent but less than 185 percent of poverty. Just over half of eighth-graders eligible for the school lunch program in the nation scored at or above the NAEP Basic level in mathematics in 2005, compared with 47 percent in 2003 and 41 percent in 2000. In SREB states, half of eligible eighth-graders scored at or above Basic, compared with 48 percent in 2003 and 35 percent in 2000.

In 2005, 79 percent of students from higher-income households scored at or above the Basic level in mathematics nationwide, compared with 78 percent in 2003 and 74 percent in 2000.

- In West Virginia, 46 percent of eighth-graders eligible for the lunch program scored at or above the NAEP Basic level in mathematics in 2005, down from 51 percent in 2003 but up from 41 percent in 2000. Seventy-two percent not eligible for the lunch program scored at or above the NAEP Basic level in math in 2005, down from 73 percent in 2003 but up from 69 percent in 2000.
- The eighth-graders eligible for the lunch program in West Virginia scoring at or above the NAEP Basic level trailed non-eligible students by 26 points in 2005, narrowing the gap by 2 points since 2000.



West Virginia trailed SREB states in students taking algebra or pre-algebra in eighth grade.

Students who take pre-algebra or Algebra I (or higher) in eighth grade are more likely to be prepared for a rigorous high school curriculum in mathematics and science than are those who do not. *Challenge to Lead* calls for all students to complete Algebra I by the end of ninth grade and for a higher percentage to complete it by the end of eighth grade. More eighth-graders in the nation are taking Algebra I (or higher) than in SREB states — 42 percent, compared with 36 percent.

The mathematics courses that eighth-graders take vary widely among SREB states. The SREB state with the highest percentage of eighth-graders taking Algebra I or higher — Maryland — enrolls more than half of all eighth-graders in Algebra I (or higher) and one-third of all eighth-graders in pre-algebra. The state with the lowest percentage of eighth-graders taking pre-algebra and Algebra I (or higher) enrolls one-third of all eighth-graders in Algebra I (or higher) plus about one-fourth in pre-algebra.

- In West Virginia, 37 percent of eighth-graders took Algebra I (or higher). This percentage was up 7 percentage points from 2003. West Virginia ranked eighth among SREB states.
- West Virginia enrolled 31 percent of eighth-grade students in pre-algebra.
- West Virginia's eighth-grade enrollment in pre-algebra and Algebra I (or higher) was 68 percent — 10th among SREB states.
- West Virginia enrolled 27 percent of eighth-graders in general eighth-grade math in 2005.

West Virginia

High School GraduationChallenge
to Lead**Four-Year Graduation Rate From High School
2004**

Out of 100 ninth-grade students in West Virginia ...



77 became high school graduates



U.S. Graduation Rate: 75%

Source: National Center for Education Statistics

Updated 9/2006

West Virginia's high school graduation rate exceeded the national average.

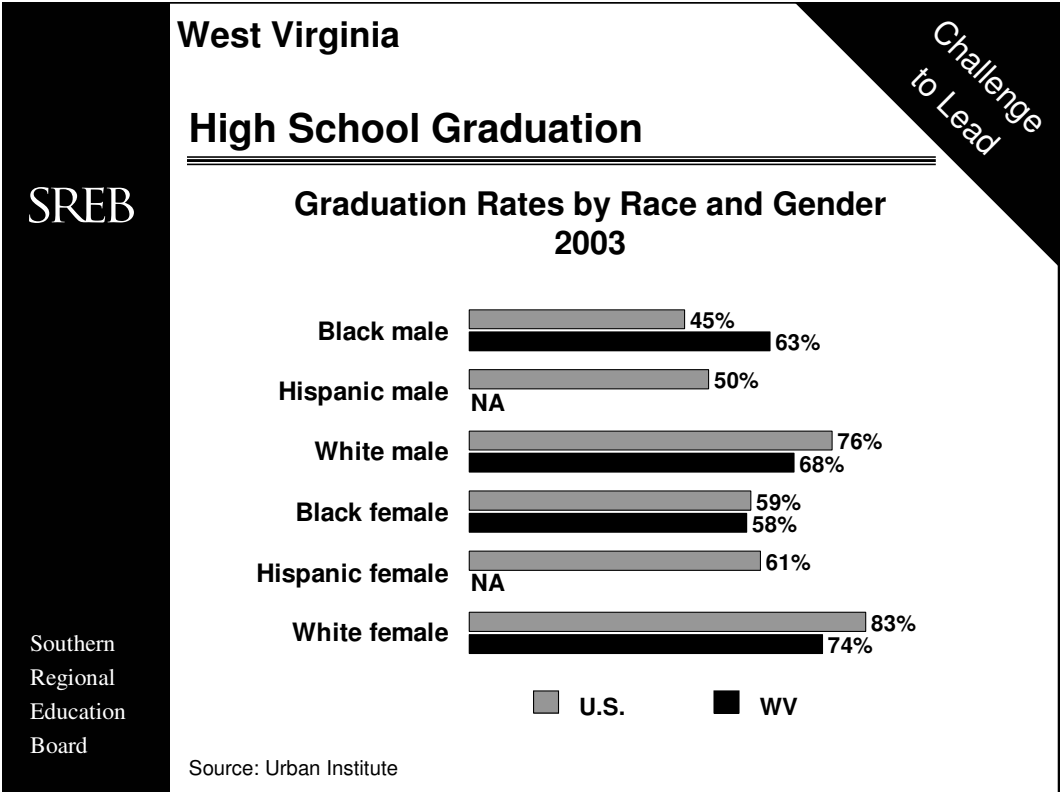
Challenge to Lead calls for SREB states to exceed the national average in the percentage of students graduating from high school with regular diplomas. Estimates of graduation rates in SREB states and the nation paint a bleak picture: Graduation rates are low, and they have declined in the last 20 years.

Prior to 2005, the National Center for Education Statistics (NCES) used counts of dropouts — often inaccurate — to estimate the size of the ninth-grade class when calculating graduation rates. In 2005, it began calculating these rates for public high schools in each state more accurately. The new rate compares an estimate of the number of ninth-graders who entered high school in the fall with the number of graduates reported four years later. The estimated ninth-grade class size is the average of the number of students who were enrolled in the class in eighth, ninth and 10th grades.

Even this new method is an approximation. It depends on enrollment and graduate counts reported by states to the NCES — and states count differently. Some include students receiving the GED certificate and other alternative credentials as regular high school graduates. Because of this, the graduation rate estimates in these states are higher than in states where only students who received regular diplomas were counted. SREB states are developing data systems that will make reporting of high school transfers, dropouts and graduates more accurate.

The graduation rate in the nation was 75 percent in 2004; the rate in SREB states was 71 percent.

- The high school graduation rate in West Virginia was 77 percent in 2004.
- West Virginia's graduation rate was 2 percentage points higher than the rate in the nation and 6 percentage points higher than the SREB average.



In West Virginia, most groups graduated at lower rates than their national counterparts.

Challenge to Lead also emphasizes the need to track graduation rates for *all groups* of students. Achievement gaps among racial/ethnic and gender groups exist at all levels of education, and graduation rates are no exception.

SREB applied a formula developed by the Urban Institute to current enrollment and graduation counts from the National Center for Education Statistics (NCES) to create graduation rates for racial/ethnic and gender groups. The overall graduation rate based on this calculation is very close to others, including a new calculation from the NCES. It is based on the promotion rate of students in a single year from grade nine to 10, from grade 10 to 11, from grade 11 to 12, and the percentage of seniors who graduate. It can be used to estimate graduation rates for groups of students.

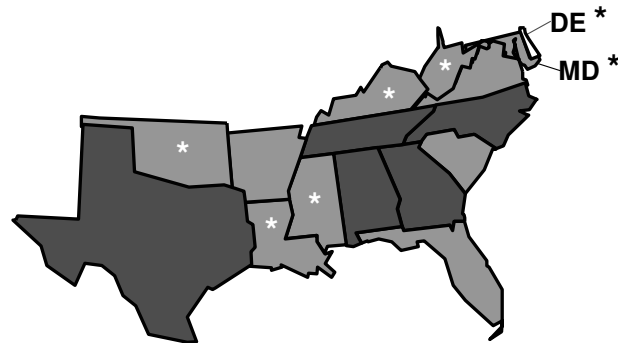
In SREB states in 2003, 45 percent of black males graduated from high school, 61 percent of black females graduated, 48 percent of Hispanic males graduated, 60 percent of Hispanic females graduated, 65 percent of white males graduated and 67 percent of white females graduated. In 2003, Hispanic and white students in SREB states graduated at lower rates than their counterparts nationwide. Black male graduates in SREB states exceeded the national rate slightly, but no more than half of black and Hispanic males graduated in either the nation or in SREB states. In SREB states, black females topped the graduation rate for their national peers, but the rates for both black and Hispanic females trailed the rate for white females by a wide margin.

- In West Virginia, the graduation rates for white males, black females and white females trailed the national averages. The rate for black male students exceeded the rate of their national counterparts. Hispanic students make up less than 1 percent of school enrollment in West Virginia — too few for reliable calculation.

West Virginia

College and Career Readiness

Math Courses Required for College-Prep Diploma

Challenge
to Lead

Algebra I, II and geometry
 Algebra I and geometry
 Not specified

* State has one standard diploma and does not specify a distinct college-prep diploma; courses indicated are for the standard diploma.

Sources: State departments of education

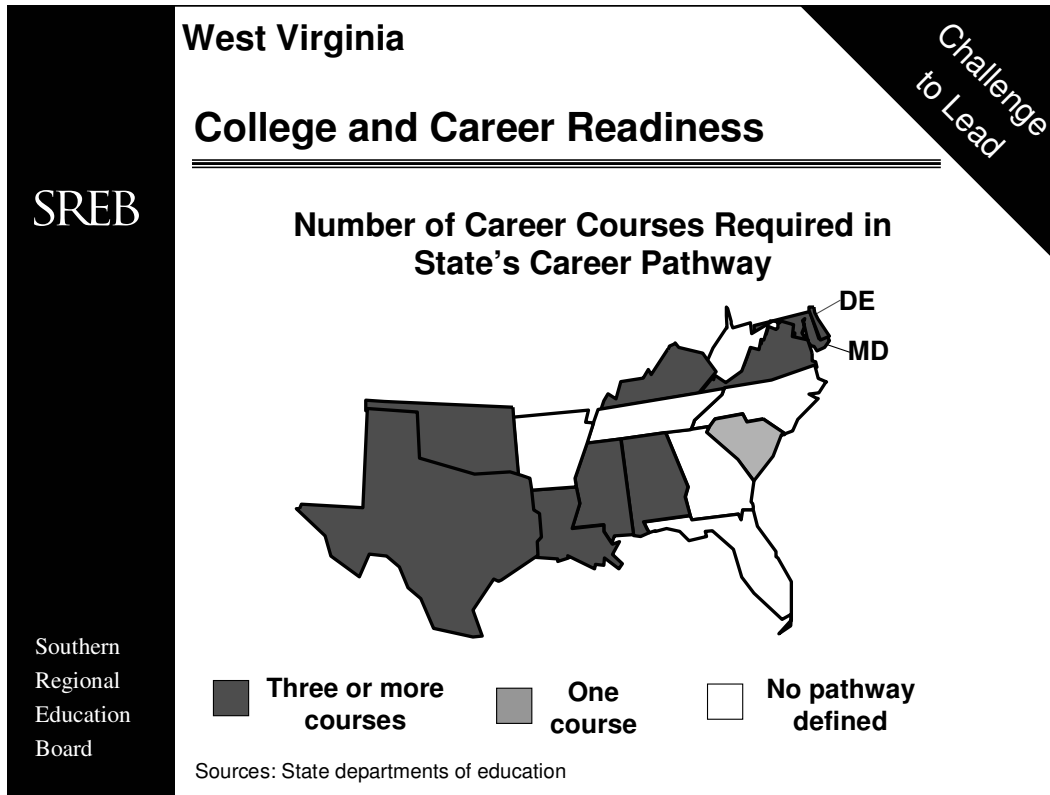
West Virginia does not require an essential core of mathematics for college-prep students.

Recent studies show that the courses a student takes in high school are the best predictor of whether the student will complete a bachelor's degree. Students who take more challenging academic courses are more likely to be successful. *Challenge to Lead* calls for states to ensure that all high school graduates are ready for college and the workplace.

SREB recommends that all students take an *essential core* of courses in high school regardless of their plans after high school graduation. The essential core includes four years of English, three years each of science and social studies, and four years of mathematics: Algebra I, Algebra II, geometry, and one course beyond Algebra II (such as statistics and data analysis, or one designed to prepare seniors for college mathematics).

No SREB state currently requires *all* students to take Algebra I, Algebra II and geometry. In fact, only six SREB states require that students seeking a college-preparatory diploma take these courses.

- West Virginia has a single pathway to high school graduation and does not specify a distinct college-prep diploma.
- Students in West Virginia must take three mathematics courses, including Algebra I and one higher-level course, to graduate from high school. Beginning with ninth-graders entering in 2006, West Virginia will require four math courses.



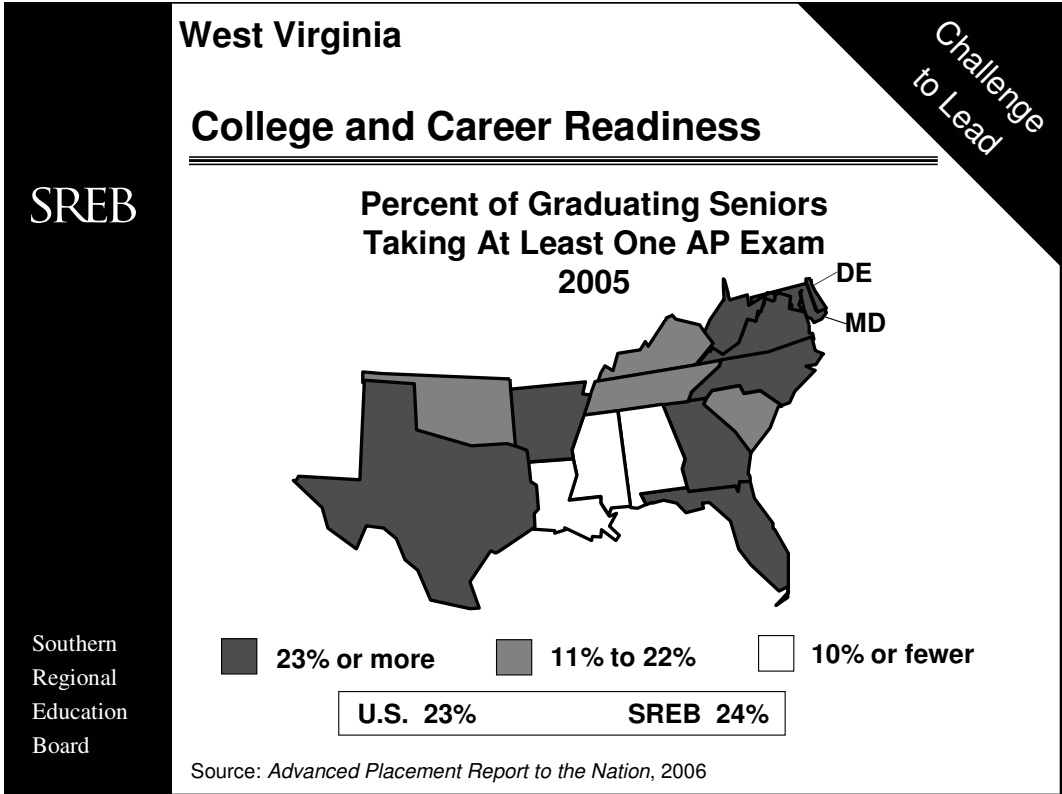
West Virginia requires courses in an academic or career pathway for all students.

Challenge to Lead makes it clear that all students — not just those seeking college-preparatory diplomas — need additional courses beyond the essential core to be ready for college and careers.

For students planning to go to college, these might include foreign language, fine arts, public speaking, and an additional course (beyond the essential core) in science and social studies. Seven SREB states require three or more additional academic courses for students seeking college-prep diplomas.

Students who are planning to pursue postsecondary technical study or to enter the work force right after high school should be required to complete a concentration of courses in a broad career field, such as health care or computer technology. The concentration generally should include additional academic courses related to the chosen field. Eight SREB states currently define a career pathway of three or more courses in a career field.

- West Virginia's standard diploma requirements specify that all students must take one course in fine arts. Beginning with the graduating class of 2008, students must also complete a fourth course in social studies.
- West Virginia's standard diploma requirements specify that all students must complete a concentration of four courses in a career field. Students can choose courses in both career and academic subjects for their concentration.



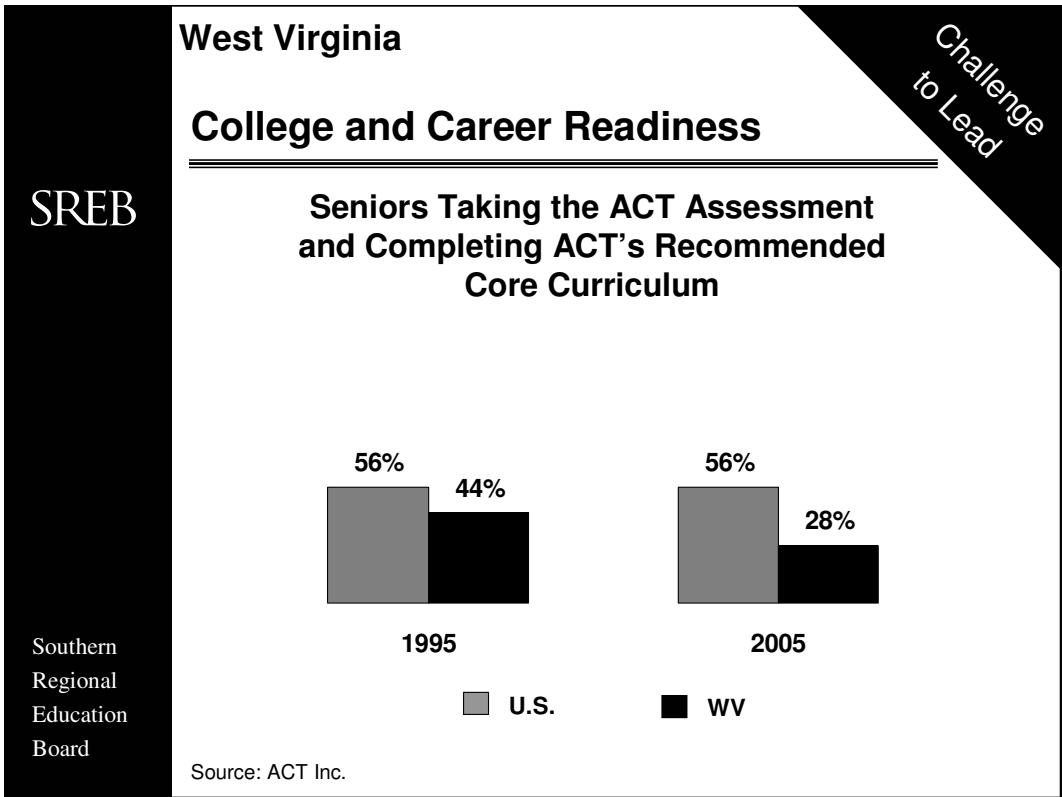
Student participation in Advanced Placement in West Virginia trailed the national average.

Students who take a rigorous and challenging high school curriculum are more likely to be successful in college and careers. The College Board’s Advanced Placement Program (AP) is one way that students take challenging courses in high school. Many SREB states lead the nation in the percentage of graduating seniors who have taken at least one AP exam. Overall, SREB states exceeded the national average in the percentage of graduating seniors who took at least one AP exam in high school in 2005. This is good news since research shows that even students who take AP exams, but who do not earn college credit for the course, are more successful in the freshman year of college.

Students in SREB states are also succeeding in these challenging, advanced courses. In SREB states, 13 percent of all graduating seniors earned a score of 3 or higher (considered “passing”) on at least one AP exam while they were in high school. About 14 percent of graduating seniors nationally passed one or more AP exams.

In 2005, SREB states also had 193 high schools that offered the International Baccalaureate (IB) curriculum, a rigorous two-year program. Nearly 18,000 students participated in these programs in 2005. About 46 percent of IB Programs and over half of the IB students in the United States were located in SREB states.

- In 2005, 12 percent of West Virginia’s graduating seniors had taken at least one AP exam, an increase of 4 percentage points from 2000.
- In 2005, 6 percent of West Virginia’s graduating seniors had passed at least one AP exam, an increase of 1 percentage point from 2000.

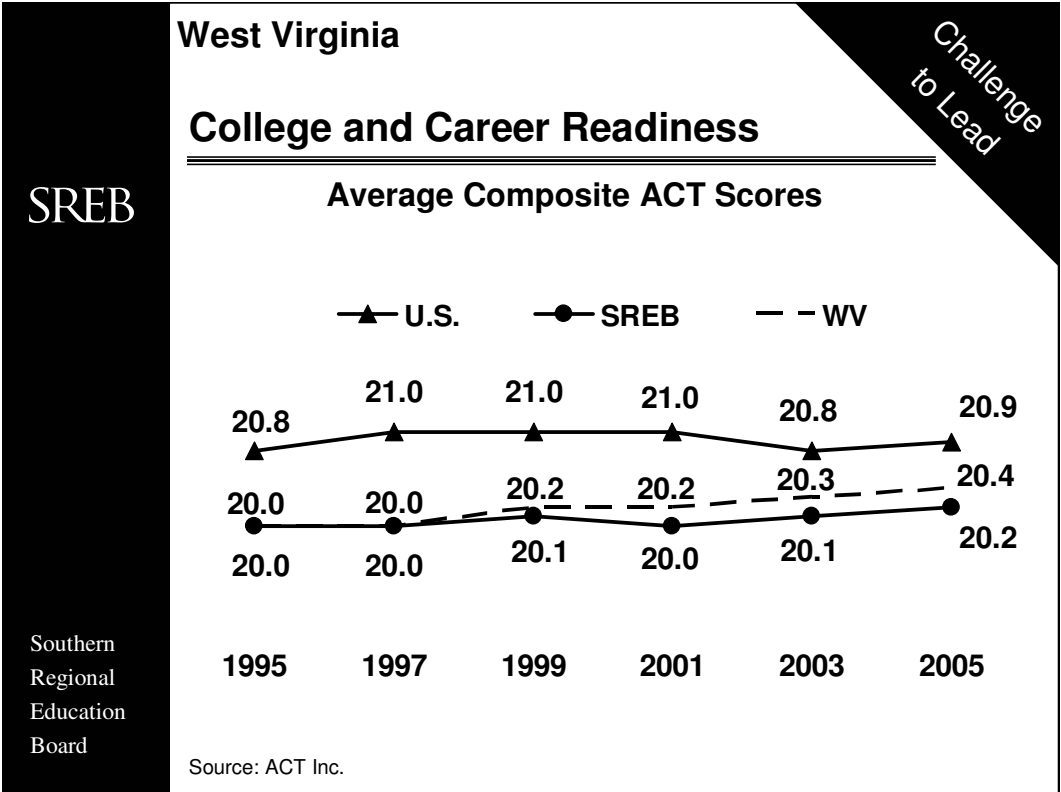


West Virginia's students likely underreported taking the ACT academic core.

A key measure of student readiness for college and careers is the rigor of the student's high school curriculum. ACT, the developer of one of the nation's most-used college admission tests, recommends a core curriculum of academic subjects, including four years of English, three years of mathematics (Algebra I and higher), three years of natural science and three years of social science, to prepare for college and careers.

ACT provides reports about the graduating seniors who take the test each year. Consistently, it has reported that students who take the recommended core curriculum score higher than students who do not. ACT reports that the percentage of graduating seniors in the United States who took the ACT and who took its recommended core remained steady at 56 percent between 1995 and 2005. The average composite score in 2005 for students who completed the ACT core was 21.9; for students who did not complete the core, it was 19.5.

- The percentage of West Virginia's graduating seniors who took the ACT and completed the ACT-recommended core decreased from 44 percent in 1995 to 28 percent in 2005. West Virginia's percentage trailed the national rate by 28 percentage points. West Virginia's ninth- and 10th-grade integrated science courses are college-prep, but many students fail to report them as such on the ACT survey. West Virginia's ACT score profile therefore underreports students who complete a college-prep curriculum.
- In West Virginia, the average composite ACT score in 2005 for graduating seniors who completed the ACT core was 21.8, compared with 19.9 for students who did not complete the core.



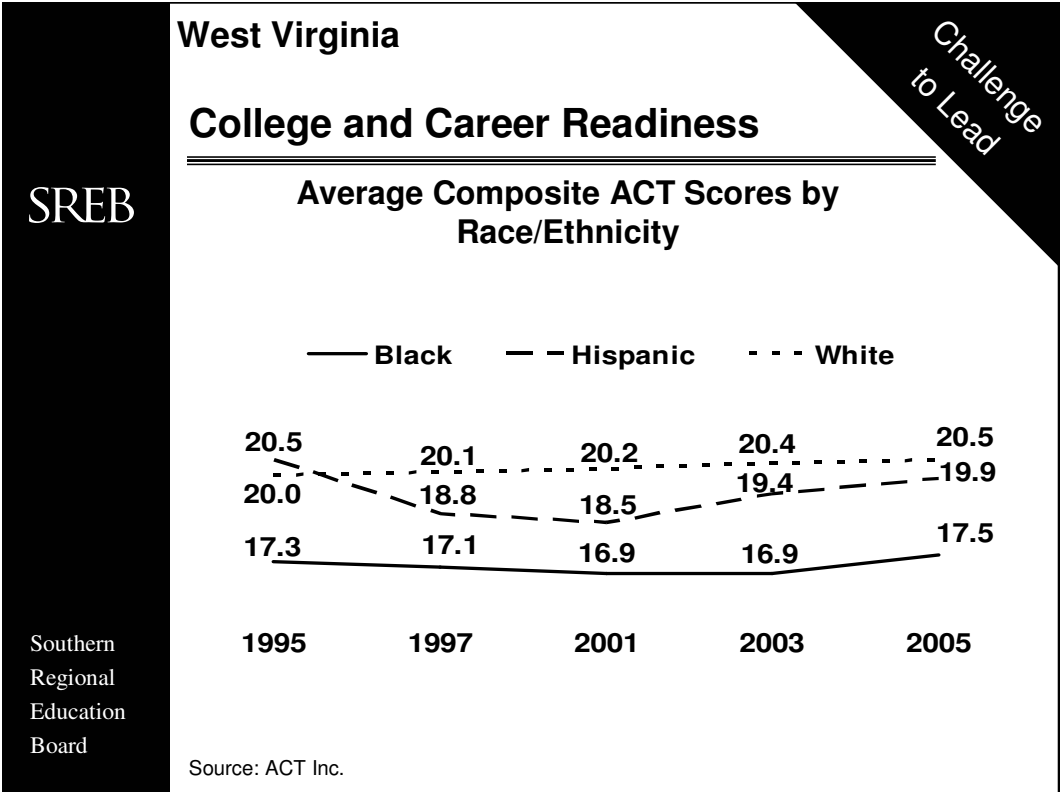
The average ACT score improved in West Virginia.

The average composite ACT score in the United States has remained steady since 1995, with only 0.2 point separating the high score from the low score over the 10-year period. The average score nationwide in 2005 was 20.9, 0.1 point higher than two years earlier.

The average score in the eight SREB states in which the ACT is the dominant test has also remained relatively steady and has increased by 0.2 point over the 10-year period. This average has trailed the national average by 0.7 point to 1.0 point in each of the last 10 years. SREB states have made little progress in closing the gap with the nation.

State average scores on college admission tests are affected by the percentage of graduating seniors who take the test. In the eight ACT-dominant SREB states, the range was from 65 percent to 94 percent, and the median was 77 percent in 2005. When the percentage of students who take college admission tests increases significantly in a state, it is not uncommon for the state's average test score to drop.

- In West Virginia, 65 percent of all graduating seniors in 2005 took the ACT. Between 1995 and 2005, the percentage of graduating seniors tested in West Virginia increased by 7 percentage points.
- West Virginia's average composite ACT score increased by 0.4 point over the 10-year period. West Virginia's average ACT score was similar to the SREB average score and trailed the national average over the decade.

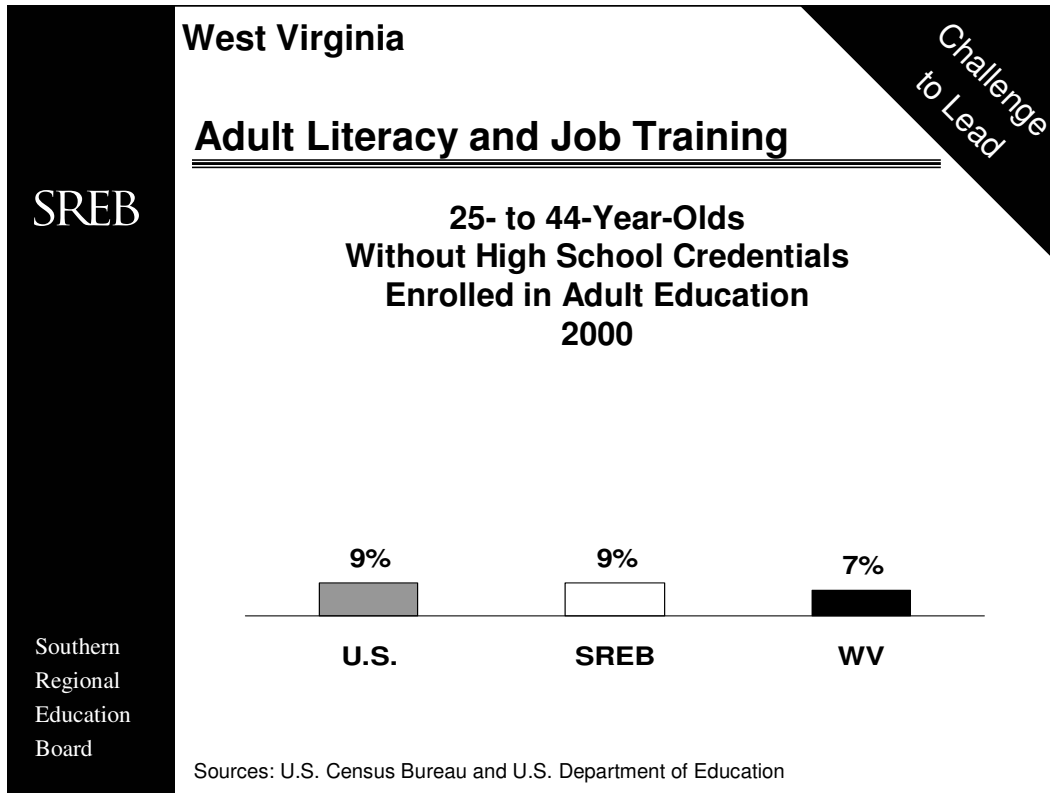


Achievement gaps among student groups on the ACT did not close in West Virginia.

Closing achievement gaps among racial/ethnic groups is central to *Challenge to Lead*. Yet, ACT scores indicate that these gaps are not closing for high school seniors. The average composite score of white students in the United States improved from 21.5 to 21.9 between 1995 and 2005. Black students' average score declined from 17.1 to 17.0, and Hispanic students' average score declined from 18.6 to 18.4 between 1995 and 2005. These declines among minority students may result from dramatic increases in the numbers of minority students who took the test. In the last 10 years, the number of black students who took the ACT has increased by nearly 56 percent and the number of Hispanic students tested has more than doubled. In contrast, the number of white students tested has increased by just over 20 percent in the last 10 years.

No SREB state in which the ACT is the dominant college admission test reduced the gap in scores between black and white students. Three states narrowed the gap between Hispanic and white students between 1995 and 2005.

- In West Virginia, white students' average composite ACT score increased by 0.5 point between 1995 and 2005.
- Black students' average composite ACT score increased by 0.2 point. The number of black students who took the ACT in West Virginia declined by 4 percent.
- In West Virginia, Hispanic students' average composite ACT score decreased by 0.6 point between 1995 and 2005, and the number of Hispanic students who took the ACT increased by 18 percent.



West Virginia had few 25- to 44-year-olds without high school credentials in adult education.

SREB states recognize the importance of the high school diploma to economic well-being and quality of life — and they set the goal that everyone should earn one, including adults who did not earn them as youth. *Challenge to Lead* encourages SREB states to increase the percentage of 25- to 44-year-olds who enroll in adult education programs, yet too few adults do so.

Further education is difficult for adults with financial responsibilities and family obligations. Although most adult education programs are tuition-free, little support for expenses such as child care or transportation is available. Course schedules and locations are often not flexible enough to serve students who have limited time for class. Few employers provide support for their employees to continue their education.

More than 5 million 25- to 44-year-olds did not have high school credentials in SREB states in 2000, including 1.4 million who did not complete ninth grade. In the SREB median states, 9 percent of 25- to 44-year-olds enrolled in adult education courses in 2000. Unless policy-makers pay more attention to the education needs of 25- to 44-year-olds, your state will not reach the goal that all young adults have high school diplomas or GED credentials.

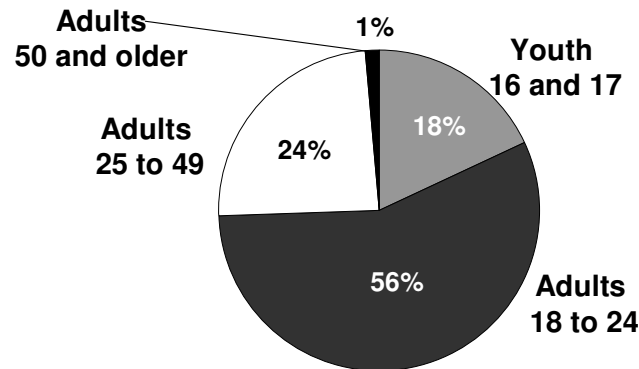
- In 2000, 7 percent (5,626) of West Virginia's 25- to 44-year-olds without high school credentials were enrolled in adult education programs. West Virginia was seventh among SREB states.
- In 2003, 4,372 of West Virginia's 25- to 44-year-olds without high school credentials were enrolled in publicly funded adult education.

West Virginia

Adult Literacy and Job Training

Challenge
to Lead

GED Awards by Age, 2004



Number of Awards in WV: 3,594

Pass Rates: U.S. 61% SREB 63% WV 71%

Source: American Council on Education

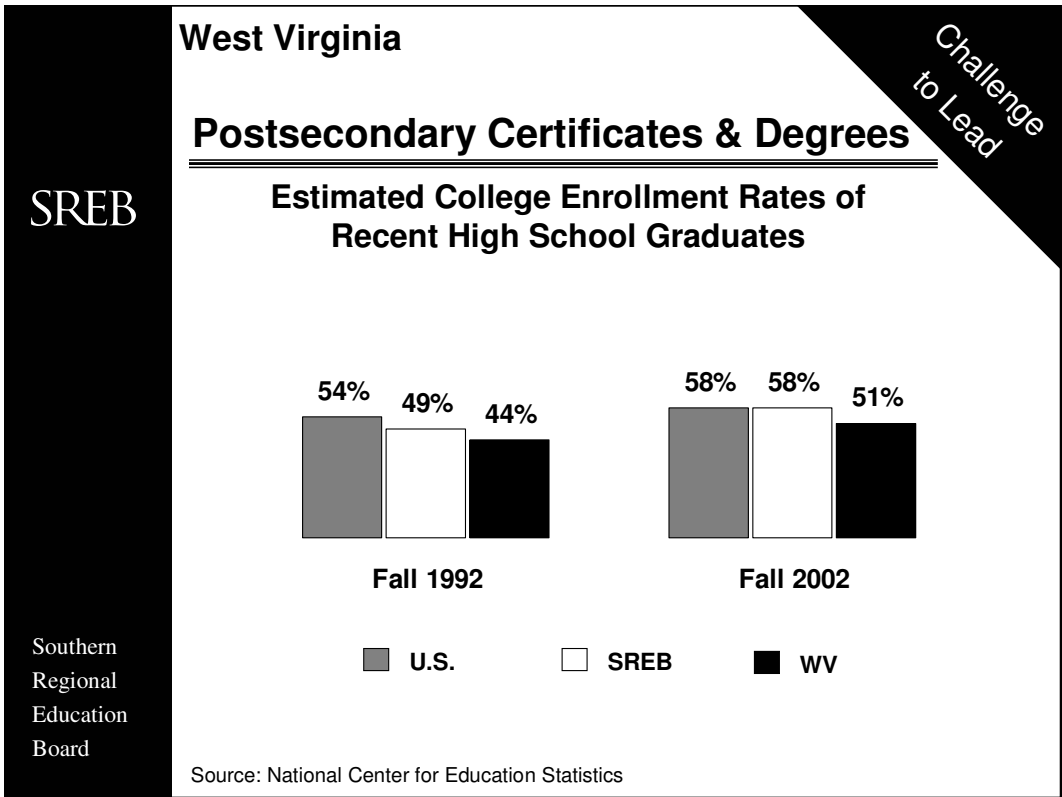
In West Virginia, more 16- to 24-year-olds earned GED credentials than 25- to 49-year-olds.

Challenge to Lead sets the goal that all adults have a high school diploma — or if not, pass the GED tests. All adults in SREB states need high school credentials — even those who are already in the work force.

Yet in SREB states, 73 percent of GED recipients in 2003 were 16 to 24 years old. In the last three years, young adults both in SREB states and nationally have been the primary GED completers. This suggests that adult education and GED programs are used primarily by recent high school dropouts. The working-age adult population, 25 to 49 years old, represents many more individuals but a much smaller percentage of those who earn a GED credential.

In the nation, 18 percent of GED credentials in 2004 went to 16- and 17-year-olds. Another 54 percent went to young adults, 26 percent to 25- to 49-year-olds, and 2 percent to adults 50 and over. In SREB states, about a fifth of GED recipients were 16 or 17 years old, just over half were young adults, a quarter were 25 to 49, and 2 percent were 50 and over.

- In West Virginia, 74 percent of GED credentials in 2004 were awarded to 16- to 24-year-olds, with 18 percent awarded to youth ages 16 and 17.
- In West Virginia, 24 percent of GED credentials were awarded to adults ages 25 to 49.
- The GED pass rate for West Virginia surpassed the national average and the SREB average.



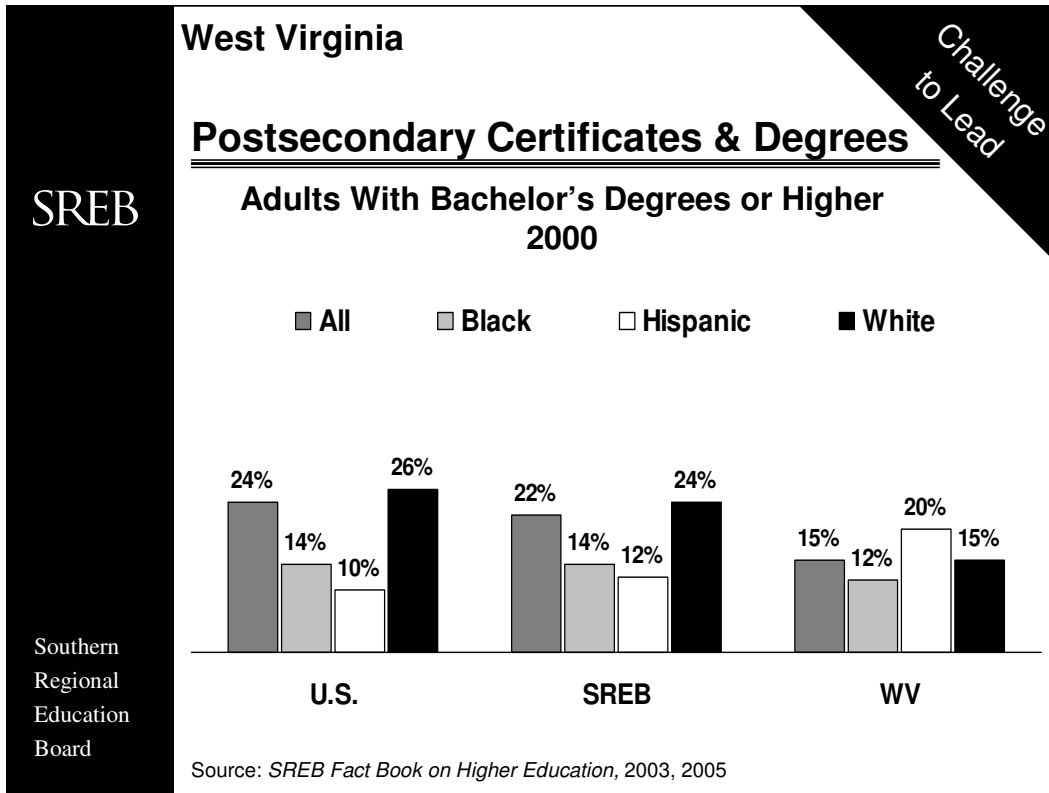
About half of West Virginia’s high school graduates enrolled in a college or university.

Getting more recent high school graduates to enroll in college is important to reaching *Challenge to Lead* goals. *Challenge to Lead* calls for your state’s percentage of adults earning postsecondary degrees or technical certificates to exceed the national average. Recent national research from the National Center for Education Statistics emphasizes the fact that students who enter college shortly after finishing high school are more likely to earn a degree.

In 1992, SREB states trailed the nation in the percentage of recent high school graduates who enrolled in college within one year by 5 percentage points. But by 2002 the gap had closed. This gain is an important milestone for SREB states.

But SREB states must look beyond these percentages — backward to the relationship between high school graduation rates and rates of college enrollment, and forward to their college graduation rates. Policy-makers need to ensure that the pipeline to college completion is not losing students before high school graduation or during college. Too few students graduate from high school, and college retention rates need to improve.

- West Virginia’s college enrollment rate of recent high school graduates in 2002 was lower than the rates in the nation and in SREB states.
- West Virginia ranked 15th in college enrollment among SREB states in 2002.



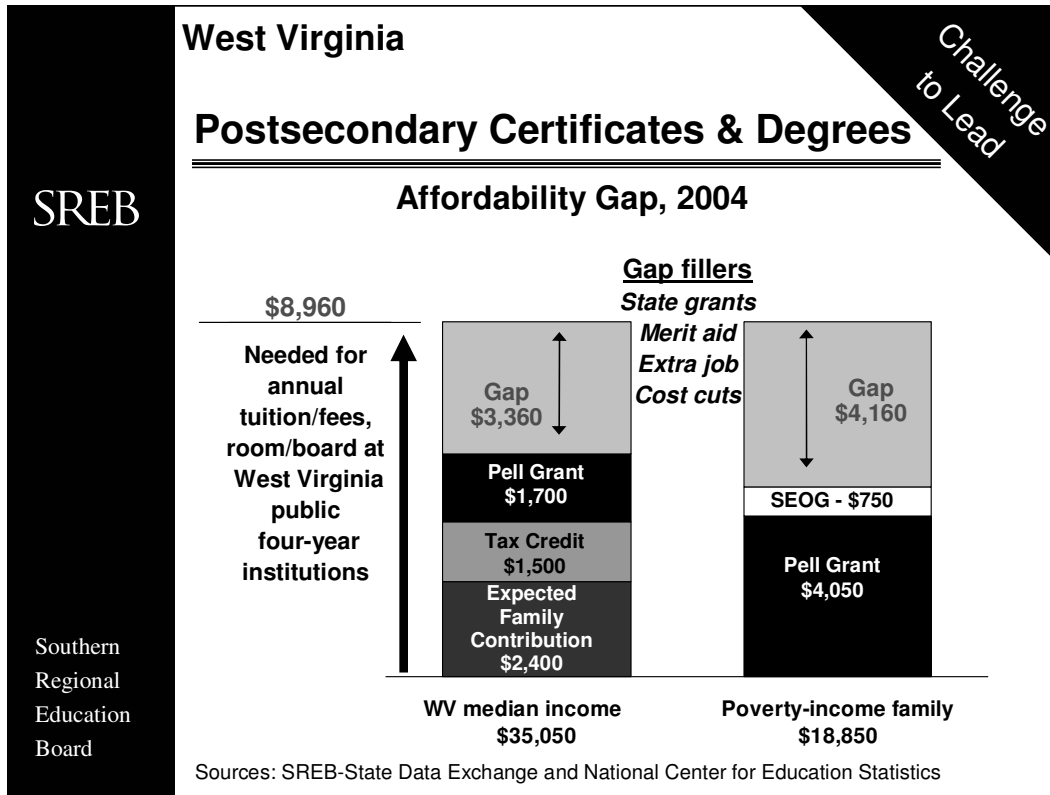
Lower percentages of adults in West Virginia had bachelor's degrees than in the nation.

The number of adults with bachelor's degrees in each state across the nation depends largely on the number of students who graduate from colleges and universities in the state. But it also depends on the migration of educated people among states. In the late 1990s, many urban areas attracted educated people to "knowledge industries," and many of them stayed. Others areas lost such people when job opportunities were not available locally.

Challenge to Lead focuses on the first of these factors: the number of adults who graduate from colleges within the state. It calls for higher college enrollments, better retention, no gaps in the percentages of all groups earning degrees, sufficient financial aid and better access to postsecondary training.

Nearly one-quarter of all adults in the United States had earned at least a bachelor's degree in 2000, the time of the last census. Twenty-two percent of adults in SREB states held bachelor's degrees or higher. But percentages varied widely, ranging from 31 percent in Maryland to 15 percent in West Virginia.

- In West Virginia, 15 percent of adults had earned bachelor's degrees or higher in 2000, up from 12 percent in 1990. West Virginia ranked 16th among SREB states.
- The percentages of black and white adults with bachelor's degrees in West Virginia trailed the national and SREB percentages. The percentage of Hispanic adults with bachelor's degrees in West Virginia exceeded the national and SREB percentages.



West Virginia students needed state aid to close college affordability gaps.

Policy-makers across the nation are asking whether states have priced college beyond the reach of students. The answer rests largely on the kinds of financial aid and scholarships the state offers. Federal aid provides grants, loans and tax credits, but loans do not reduce costs. They only help students and their families stretch out the payments. Shortfalls — or gaps — often remain.

The costs of tuition, fees, room and board to attend a public four-year college in SREB states for one year ranged from \$6,950 to \$12,600 in 2004. Families are expected to contribute. When they submit tax and other records to apply for federal aid, they receive notice of their expected contribution. Need-based aid does not cover this amount. Students from households in poverty receive a maximum \$4,050 Pell Grant. This grant is available to students in households up to about \$40,000 in income. Low-income Pell recipients also may receive a supplemental federal grant (SEOG), awarded by their college and averaging \$750. In addition, students whose families pay taxes are eligible for the federal HOPE tax credit of up to \$1,500. Yet family contributions, grants and tax credits taken together will not pay for college for students from low- or middle-income families in any SREB state.

All SREB states provide some combination of need-based and non-need-based/merit aid to bridge the gap. If state aid doesn't fill the gap, students often jeopardize their grades by working long hours or not buying books, or risk their health by foregoing insurance.

- In West Virginia, students from poverty-level households needed about \$4,160 in state or institutional aid to afford college without loans in 2004. Those from median-income families needed about \$3,360 to afford college without loans.

West Virginia

School Performance Standards

Challenge
to LeadPercent At or Above Standards
Fourth-Grade Reading
2005

State standards		NAEP			
		<u>Basic</u>		<u>Proficient</u>	
<u>West Virginia</u>		<u>WV</u>	<u>U.S.</u>	<u>WV</u>	<u>U.S.</u>
2003	NA	65%	62%	29%	30%
2005	81%	61%	62%	26%	30%

NA = Not available.

West Virginia had a waiver from the U.S. Department of Education in 2003.

Sources: West Virginia Department of Education and National Center for Education Statistics

West Virginia's state standards for fourth-grade reading appeared lower than NAEP Basic.

State standards should meet or exceed national expectations, according to *Challenge to Lead*. One common yardstick states can use to assess their standards is the National Assessment of Educational Progress (NAEP). This assessment is administered every two years, most recently in 2005, to samples of fourth-, eighth- and 12th-grade students in every state.

Policy-makers can compare the percentages of students who meet their state standards with the percentages of students who score at or above the NAEP Basic and Proficient levels. In all SREB states that report these data, the percentages of students who meet state standards are closer to the percentages of students who score at or above the NAEP Basic level than to the percentages who score at or above the NAEP Proficient level. States seem to have set their standards at the level that NAEP defines as "partial mastery," rather than the level defined as "demonstrated competence."

States with low standards risk having too many students who are unprepared for the next grade level but who are not identified for extra help. States with high standards risk having more schools cited for "low performance" than may be warranted.

- West Virginia reported in 2005 that 81 percent of fourth-grade students met state standards in reading, compared with 61 percent scoring at or above the NAEP Basic level and 26 percent scoring at or above the NAEP Proficient level. The percentage scoring at or above NAEP Basic decreased by 4 percentage points since 2003.
- West Virginia's standards for fourth-grade students in reading appear to have been lower than the NAEP Basic level in 2005.

West Virginia

School Performance Standards

Challenge
to LeadPercent At or Above Standards
Eighth-Grade Mathematics
2005

State standards		NAEP			
		<u>Basic</u>		<u>Proficient</u>	
	<u>West Virginia</u>	<u>WV</u>	<u>U.S.</u>	<u>WV</u>	<u>U.S.</u>
2003	NA	63%	67%	20%	27%
2005	70%	60%	68%	18%	28%

NA = Not available.

West Virginia had a waiver from the U.S. Department of Education in 2003.

Sources: West Virginia Department of Education and National Center for Education Statistics

West Virginia's state standards for eighth-grade math appeared lower than NAEP Basic.

State standards in mathematics should meet or exceed national expectations, according to *Challenge to Lead*. In fact, standards may be set well for some grade levels and subjects and not for others. Policy-makers have been interested in progress in eighth-grade mathematics because this subject at this grade level is indicative of readiness for rigorous mathematics and science courses in high school.

In all SREB states, state standards appear to be set closer to the NAEP Basic level than to the NAEP Proficient level. States seem to have set their standards at the level that NAEP defines as "partial mastery," rather than the level defined as "demonstrated competence."

By comparing state assessment results to NAEP results, states can measure their standards against national expectations. States with low standards risk having too many eighth-graders who are not prepared for the next grade level but who are not identified for extra help. States with high standards risk having more schools cited for "low performance" than may be warranted.

- West Virginia reported in 2005 that 70 percent of eighth-grade students met state standards in math, compared with 60 percent scoring at or above the NAEP Basic level and 18 percent scoring at or above the NAEP Proficient level. The percentage scoring at or above NAEP Basic decreased by 3 percentage points since 2003.
- West Virginia's standards for eighth-grade students in mathematics appear to have been lower than the NAEP Basic level in 2005.

SREB

West Virginia

School Performance Standards

Title 1 Schools in Need of Improvement
No Child Left Behind
West Virginia, 2005

Year 1: School choice	21 Schools
Year 2: Extra services	13 Schools
Year 3: Corrective action	1 Schools
Year 4: Plan to restructure	0 Schools
Year 5: Restructure	1 Schools

West Virginia had 715 public elementary and secondary schools in 2005.

Source: West Virginia Department of Education

Challenge
to Lead

Southern
Regional
Education
Board

Five percent of West Virginia’s public schools were on the *NCLB* “school improvement” list.

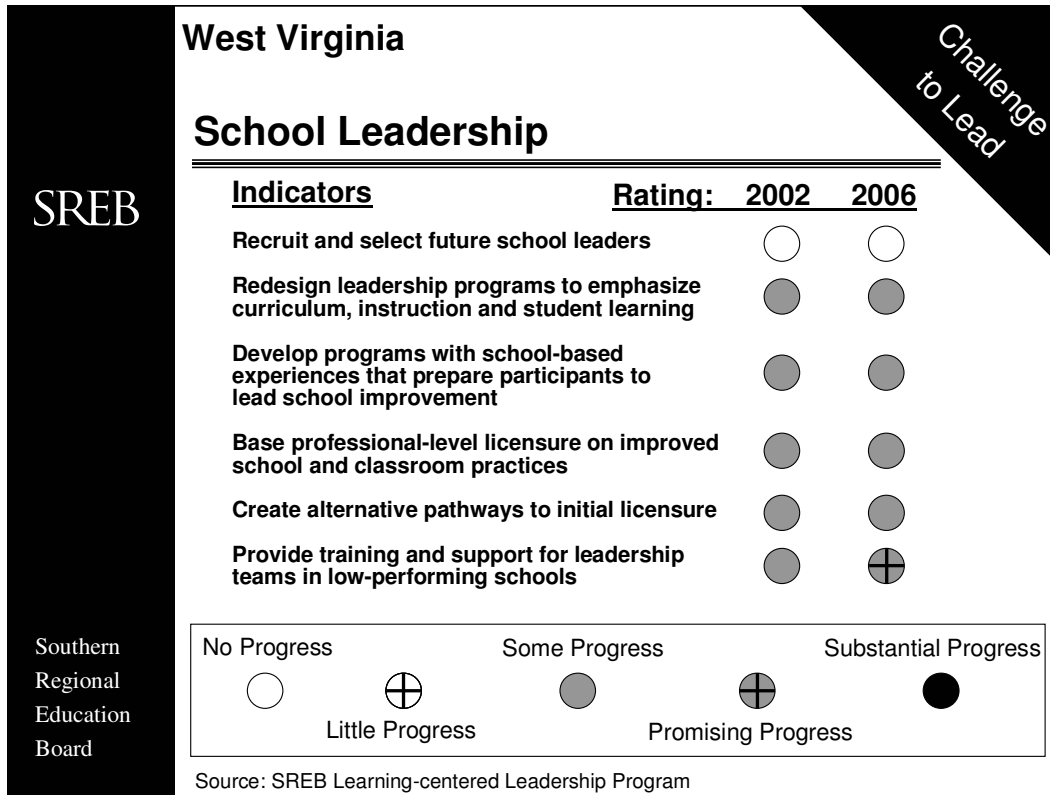
SREB states led the nation in developing statewide K-12 accountability systems. Most SREB states set accountability goals for themselves long before the *No Child Left Behind Act (NCLB)* was passed. Many SREB states now have parallel statewide accountability systems.

NCLB requires states to bring all students to their state standards by 2014. States must set annual targets, and schools must make “adequate yearly progress” toward getting all students to the targets. Schools that fall short for two consecutive years are considered “in need of improvement.” The consequences for schools are spelled out in *NCLB*. They apply to all Title 1 schools (which serve low-income students) and to other schools according to state policy. In summary, they are:

- Year 1: School must offer students a choice to transfer to a better-performing school.
- Year 2: Low-performing children must be offered supplemental services, such as tutoring.
- Year 3: School must take corrective action, such as extending the school day.
- Year 4: School must design a plan to restructure the school.
- Year 5: School must implement the restructuring plan.

In order to be removed from the “in need of improvement” list, the school must have all groups of students make adequate yearly progress for two consecutive years.

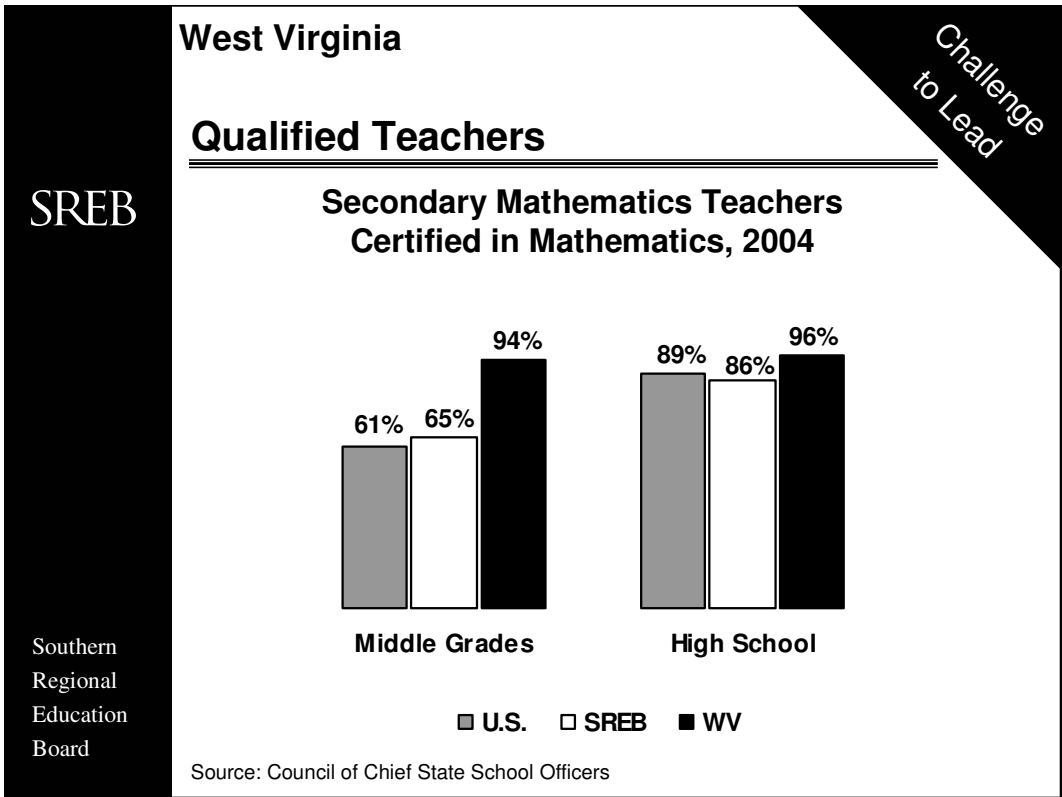
- In 2005, West Virginia had 36 schools identified as “in need of improvement” — 5 percent of the public elementary and secondary schools in the state.
- West Virginia has a parallel state accountability system — School Accreditation Status — in addition to *NCLB*.



West Virginia is making some progress in reforming school leadership.

Challenge to Lead identifies six indicators of progress in reforming school leadership. Since 2001, the SREB Learning-centered Leadership Program has worked with state education agencies, universities and leadership academies to develop criteria for assessing progress on these indicators. It reported baseline information for each state in 2002 and progress in 2004. Since then, the criteria have been revised and made more rigorous to reflect current research and best practices. The Leadership Program has again measured state progress. The 2006 rating is based on the revised criteria. States that maintained their 2002 rating generally made some progress. For the criteria, see *Scoring Guide for Evaluating State Progress* at www.sreb.org.

- Leadership program redesign: West Virginia is requiring programs to meet the Educational Leadership Constituent Council’s standards and state standards that emphasize student achievement to gain approval by the West Virginia Board of Education.
- Licensure: West Virginia’s two-step licensure system requires that candidates complete a beginning principal internship program that provides mentoring and professional development.
- Training and supporting low-performing schools: West Virginia’s Department of Education is assigning a Closing the Achievement Gap liaison to work with every low-performing school and providing training and assistance for district leadership teams. Leadership teams from low-performing schools participate in a series of quarterly workshops that include assignments designed to promote school-based application and follow-up activities.



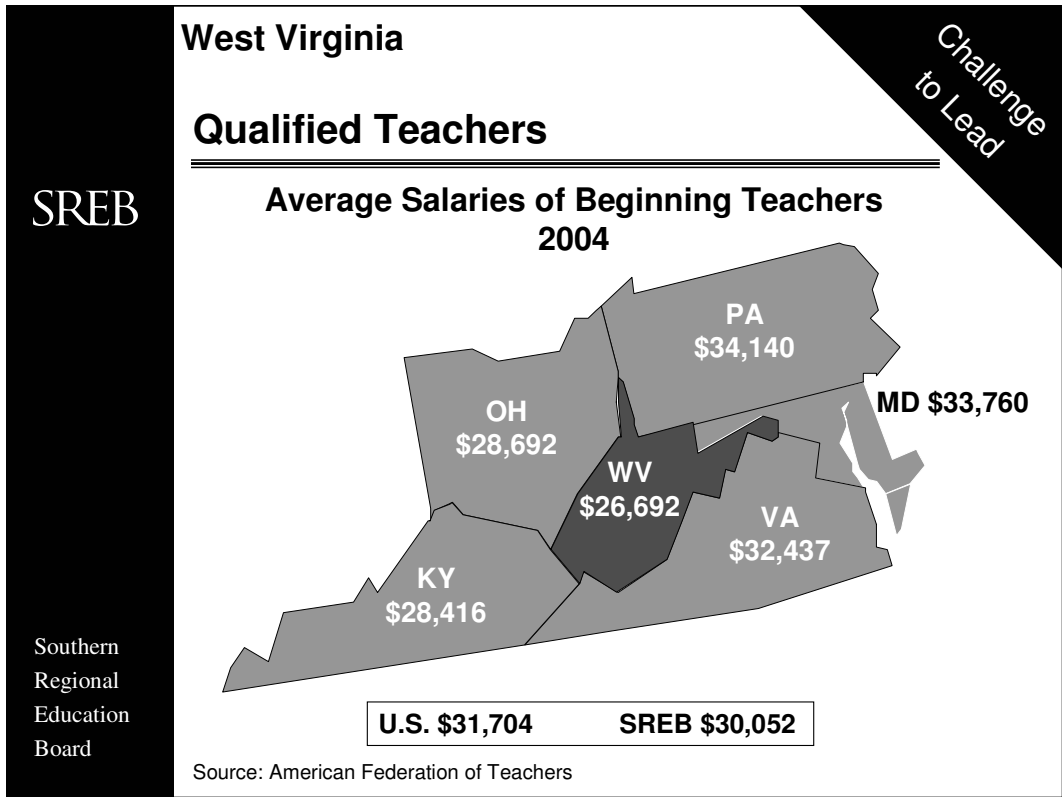
West Virginia beat the U.S. in middle grades and high school math teachers certified in math.

Challenge to Lead asserts that every student needs a qualified teacher — one who knows the subject matter well. Students need teachers who not only are certified to teach, but who also are certified in the content area they are teaching.

Content-area expertise is especially important for secondary mathematics teachers. Two important indicators of teacher quality are the percentages of teachers in middle grades and in high school who are certified in math. These percentages include both teachers with math as their main assignment and teachers who teach other subjects in addition to math.

In 2004 in the United States, 61 percent of middle grades teachers assigned to teach mathematics in grades seven and eight were certified in math. Among high school teachers, the percentage was higher — 89 percent of math teachers were certified in math. Eleven SREB states reported data to the Council of Chief State School Officers (CCSSO). In these states, a slightly higher percentage of middle grades math teachers — 65 percent — were certified in math than in the nation. A slightly lower percentage of high school math teachers — 86 percent — were certified in math than in the nation.

- In 2004, 94 percent of West Virginia middle grades math teachers were certified in mathematics.
- West Virginia beat the nation and SREB states in the percentage of high school math teachers certified in mathematics, with 96 percent of teachers certified.



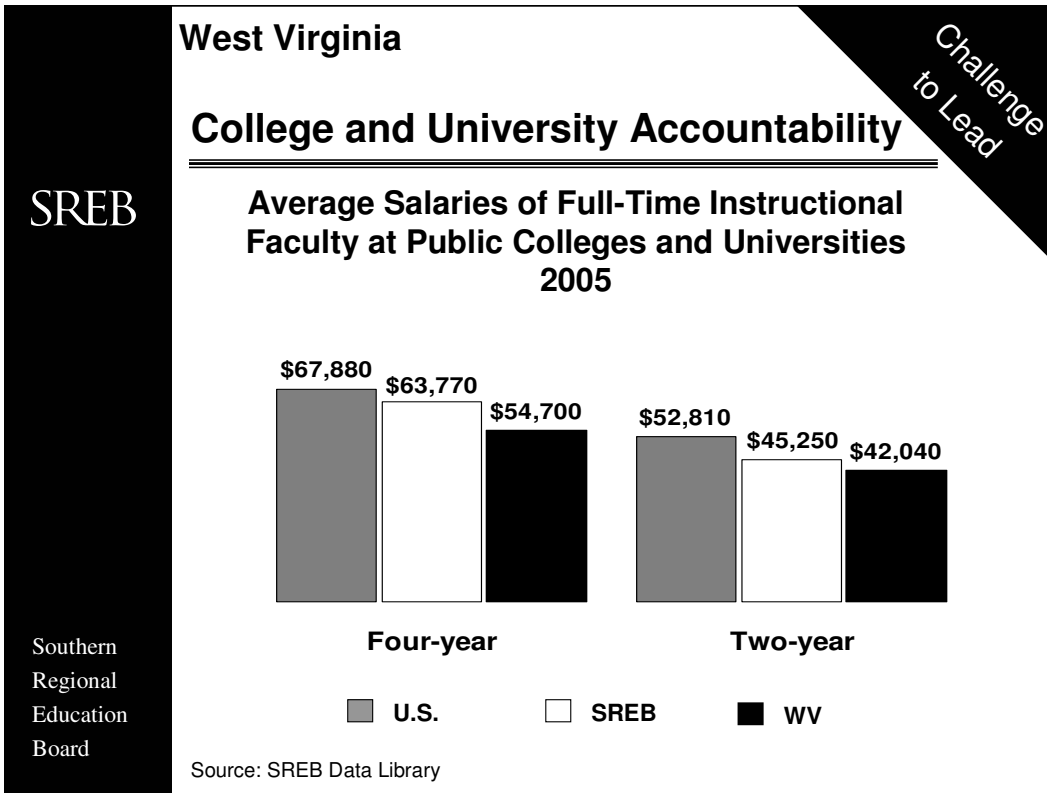
West Virginia paid beginning teachers less than surrounding states.

To put highly qualified teachers in K-12 classrooms, SREB states must provide compensation that is competitive in the marketplace. Looking at average salaries for beginning teachers is one way to compare your state with surrounding states, the region and the nation.

Teacher turnover is high among beginning teachers, and your state may need to provide additional incentives during these early years to keep teachers. States also may need to provide incentives for teachers who fill specific needs, such as teaching in particular subjects or geographic areas in which there are shortages.

On average in 2004, beginning teachers in the SREB median states earned salaries about \$1,650 less than the national average.

- The average salary for a beginning teacher in West Virginia in 2004 was \$26,692.
- The average salary for a beginning teacher in West Virginia was lower than the averages in its surrounding states.



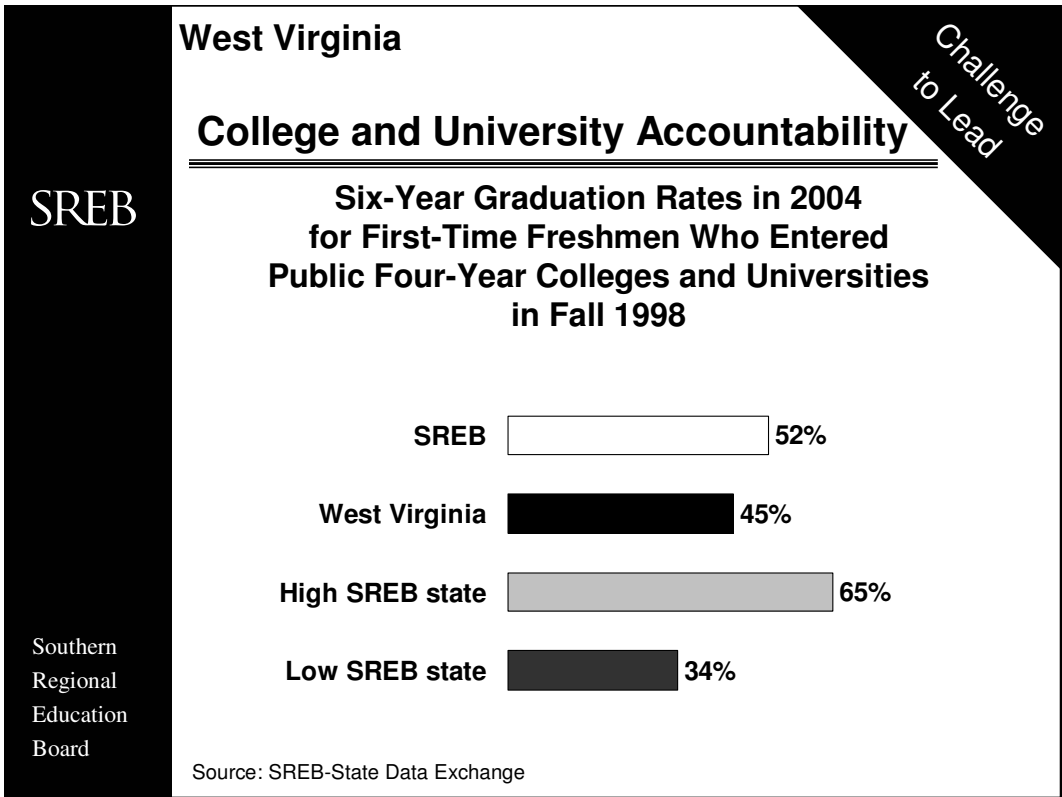
Average faculty salaries in West Virginia trailed national numbers.

The marketplace for hiring college faculty is nationwide — and even beyond. To attract top faculty, colleges and universities must provide competitive salaries and benefits, particularly in such disciplines as mathematics, science, engineering and business.

SREB states trail the nation in faculty salaries. In 2005, the SREB average salary for faculty at public four-year colleges was \$63,770 — 94 percent of the national average. At public two-year colleges, it was \$45,250 — 86 percent of the national average. Salaries in SREB states increased in the last two years, but at about the same rate as salaries in the nation.

Some policy-makers point out that if the local cost of living is lower than regional or national averages, it might be appropriate for local compensation packages to be lower. Yet, with the exception of obvious differences (such as real estate prices), living costs are generally the same throughout the continental United States. As a result, a college or university should offer compensation packages — especially in high-demand subjects — that meet the test of “face-value” competitiveness for candidates.

- In West Virginia, the average salary for faculty at four-year colleges and universities was \$13,180 less than the national average and \$9,070 less than the SREB average in 2005. West Virginia ranked 15th among SREB states.
- The average salary for faculty at two-year colleges in West Virginia was \$10,770 lower than the national average and \$3,210 lower than the SREB average in 2005. West Virginia ranked 11th among SREB states.



West Virginia ranked below the SREB median states on college graduation rates.

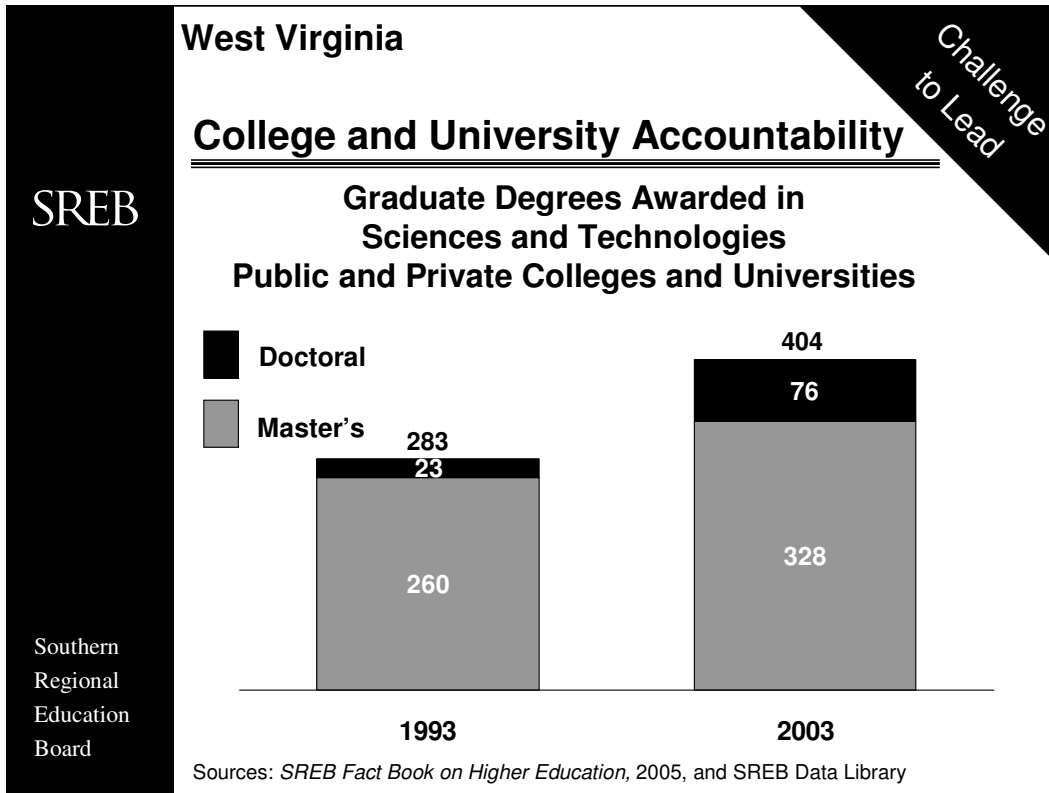
SREB states need to improve college graduation rates if they are to have the educated work force they need for the future. *Challenge to Lead* emphasizes the importance of this indicator for undergraduate students, who make up 85 percent of higher education enrollments.

A key measure of college and university performance is the six-year graduation rate for four-year college students and the three-year rate for two-year colleges. Calculating a true rate is difficult without a statewide system that follows students if they transfer. Colleges and universities can only calculate rates for students who enter as freshmen and remain at the same institution.

In SREB states in 2004, 52 percent of students who had entered four-year colleges and universities graduated from these colleges within six years. Individual state's rates ranged from 34 percent to 65 percent. At two-year colleges in SREB states, 18 percent graduated within three years. Individual state's rates varied, with a high of 34 percent. Again, these rates did not account for all graduates because they did not include transfers who graduate.

A U.S. Department of Education study puts the four-year college rates in perspective. Researchers followed a sample of students from the high school class of 1992 who entered four-year colleges. Within eight-and-a-half years, 66 percent had graduated from a four-year college. This rate is higher than institutionally based rates because it includes transfer students who graduate.

- West Virginia's four-year colleges and universities reported that 45 percent of students who entered in 1998 graduated within six years. West Virginia's two-year colleges reported that 16 percent of students who entered in 2001 graduated within three years.



In West Virginia, the number of science and technology graduate degrees awarded increased.

Colleges and universities play a significant role in advancing economic development and quality of life in SREB states. *Challenge to Lead* urges states to assess the quality and efficiency of public higher education institutions and to gauge whether they are serving state needs — particularly whether they produce sufficient graduates in key fields like sciences and technologies, including mathematics.

Challenge to Lead calls for SREB states to increase the number of advanced degrees awarded in these fields. Nationwide in 1993, there were 78,121 master's and doctoral degrees awarded in sciences and technologies, including mathematics. In SREB states, 21,322 master's and doctoral degrees were awarded in these fields in 1993 — accounting for 27 percent of all master's and doctoral degrees awarded in the nation that year.

In 2003, the nationwide number of master's and doctoral degrees awarded in these fields had grown to 92,802, with 27,522 of them in SREB states. The U.S. number increased by 19 percent, and the number in SREB states increased by 29 percent. The proportion awarded in SREB states increased from 27 percent to 30 percent.

- In West Virginia, 328 master's degrees were awarded in 2003 in sciences and technologies, including mathematics — up 26 percent from 10 years earlier.
- In West Virginia, 76 doctoral degrees were awarded in 2003 in sciences and technologies, including mathematics — up 230 percent from 10 years earlier.

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Education System That is Aligned

Ninth-Grade Bulge, 2004

For every 100 eighth-graders in West Virginia in 2003,



there were 8 *MORE* ninth-graders in 2004.



Source: National Center for Education Statistics

Challenge
to Lead

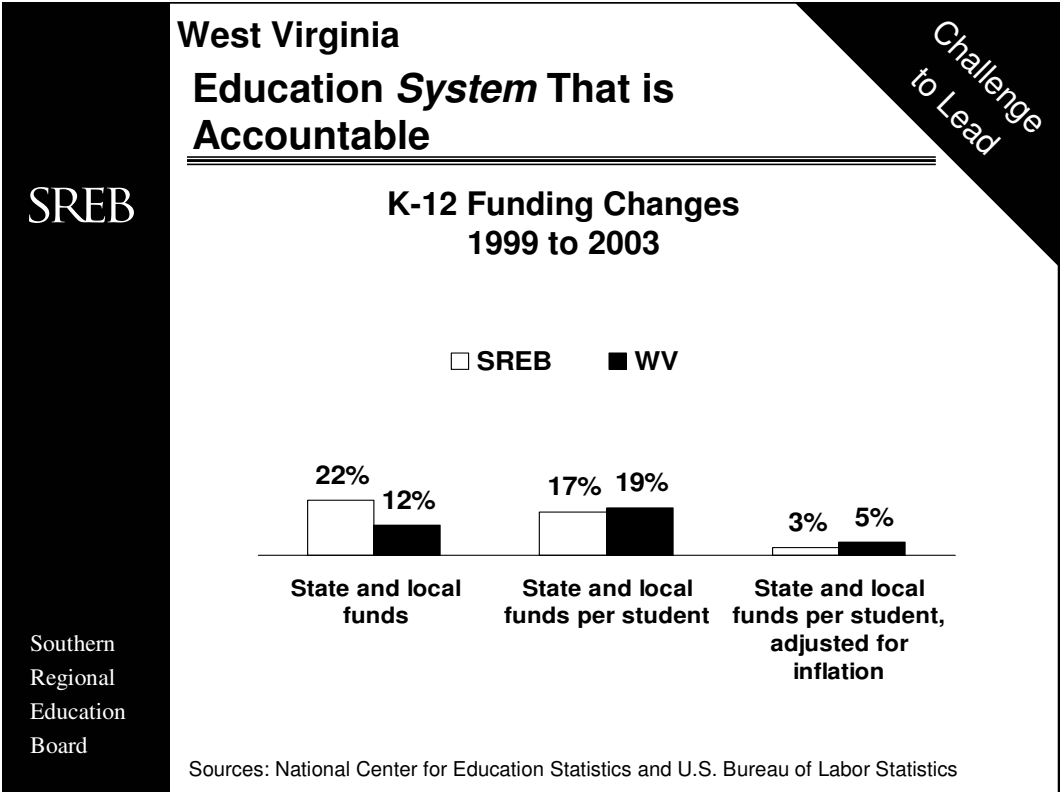
Too many eighth-graders in West Virginia were not ready for high school.

An aligned education *system* enables students to make smooth transitions from prekindergarten through college. The critical transition for many students is from the middle grades to high school. Students who leave the middle grades without developing the academic foundation, social skills and study habits needed for high school may become overwhelmed by ninth-grade courses.

As a result, more students perform poorly and are retained in ninth grade than in any other year, resulting in a larger enrollment — or bulge. In 2004, every SREB state except Louisiana had a ninth-grade bulge. Louisiana had a bulge in eighth grade because it tests students in eighth grade and retains those who do not meet state standards. Overall, the 2004 ninth-grade enrollment in SREB states was 16 percent larger than the eighth-grade enrollment in 2003. The bulges in SREB states ranged from 3 percent to 26 percent.

Focusing state attention on the ninth-grade transition is essential because, in most states, ninth-grade students are near the minimum age at which they can drop out. In fact, many ninth-graders who have been retained in early or middle grades may pass the age of compulsory attendance before they enter or while they are in ninth grade. Evidence shows that in some states more students drop out in ninth grade than in any other.

- In West Virginia in 2004, there were eight more ninth-graders for every 100 eighth-graders in 2003.
- The compulsory attendance age in West Virginia is 16.



West Virginia increased K-12 per student funding, adjusted for inflation.

Accomplishing “real-dollar growth per student” in education funding — the goal that *Challenge to Lead* sets — means policy-makers have to focus on both inflation and enrollments. From 1999 to 2003 in SREB states, state and local funding for K-12 increased by 22 percent, compared with 25 percent in the nation. Enrollments (based on average daily attendance) increased just over 4 percent in both SREB states and the nation.

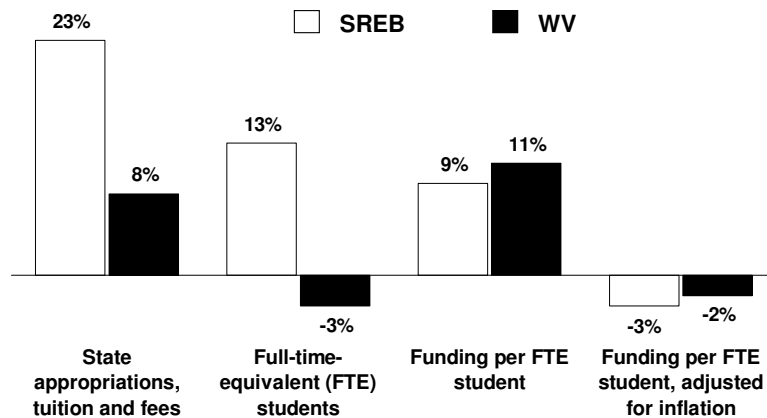
From 1999 to 2003, average state and local funding per student in SREB states rose by \$1,085 — from \$6,340 to \$7,425. The SREB average was 87 percent of the national average in 1999, compared with 85 percent in 2003. To look at real-dollar growth, these changes must be adjusted for inflation. The U.S. Bureau of Labor Statistics calculates a measure of inflation for public schools using an Employment Cost Index (ECI) that is based on field research into the full “market basket” of employees hired by public schools. From 1999 to 2003, inflation for consumers and for schools rose about 17 percent. When adjusted for inflation, per student funding in SREB states rose by \$229 (3 percent) from 1999 to 2003. The national increase was \$452 (5 percent).

- From 1999 to 2003 in West Virginia, state and local funding for K-12 increased by \$242 million (12 percent). Enrollment (based on average daily attendance) decreased by 15,987 students (6 percent).
- During this time, West Virginia’s per student funding rose by \$1,377 (19 percent) — from \$7,280 to \$8,657. When adjusted for inflation, West Virginia’s per student funding rose by \$395 (5 percent).

West Virginia Education System That is Accountable

Challenge
to Lead

Enrollment and Funding Changes Public Four-Year Colleges and Universities 2001 to 2005



Source: SREB-State Data Exchange

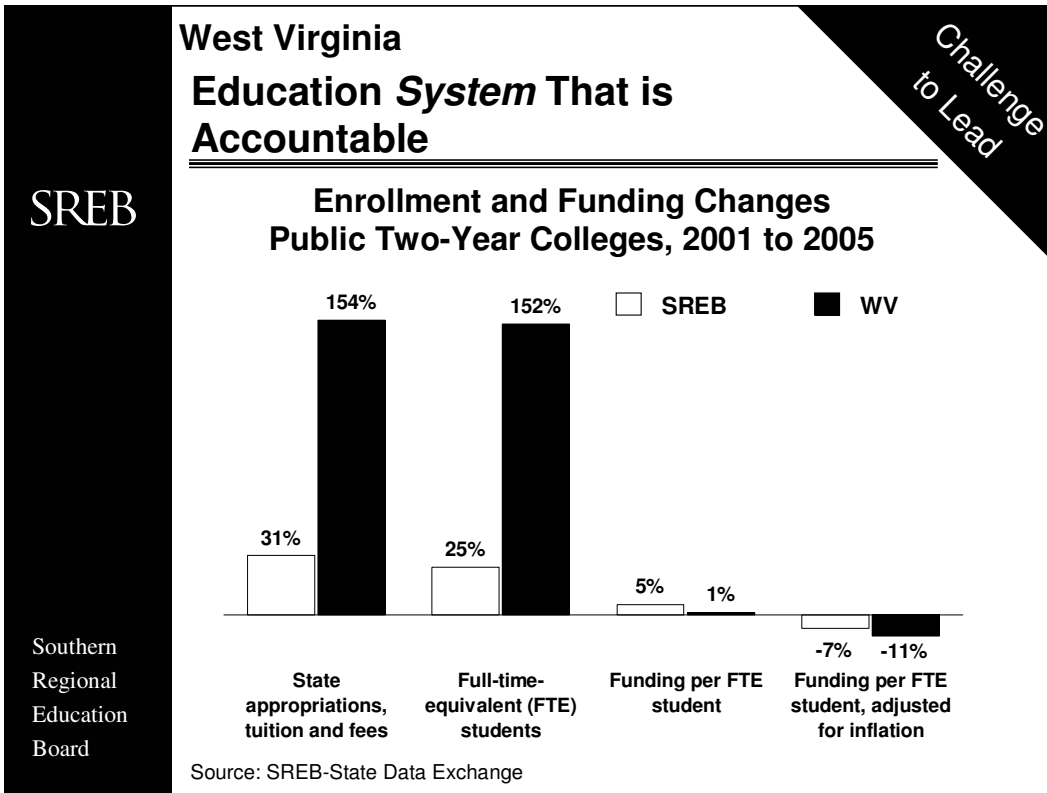
Per student funding at West Virginia's four-year institutions fell, adjusted for inflation.

As important as it is to follow funding changes in a state, it is also important to track the trends in costs per full-time-equivalent student and inflation. *Challenge to Lead* calls for state budgets to show real-dollar growth per student. Therefore, increases in funding must be adjusted for inflation.

From 2001 to 2005, funding (appropriations, tuition and fees) for public four-year colleges and universities increased by 23 percent in SREB states. The increase was \$4.4 billion. Full-time-equivalent enrollment in SREB states increased by 13 percent between 2001 and 2005. From 2001 to 2005, average total funding per full-time-equivalent student in SREB states increased by \$979 (9 percent) — from \$10,456 to \$11,435.

Inflation averaged 2.7 percent per year for this period, using the U.S. Bureau of Labor Statistics Employment Cost Index (ECI) for colleges and universities. When adjusted for ECI inflation, total funding per full-time-equivalent student in SREB states fell by \$371, a 3 percent decline.

- In West Virginia, funding for public four-year colleges and universities increased by \$35 million (8 percent) from 2001 to 2005.
- During the same time, West Virginia's full-time-equivalent enrollment at public four-year institutions fell by 1,737 students (3 percent). Total funding per full-time-equivalent student increased by \$920 (11 percent), from \$8,170 to \$9,090.
- Funding per full-time-equivalent student at public four-year institutions in West Virginia fell by \$135 (2 percent), adjusted for inflation, over the period.



West Virginia’s two-year colleges declined in per student funding, adjusted for inflation.

Challenge to Lead calls for state budgets to show real-dollar growth per student. It is important to follow funding changes in public two-year colleges in each state — and to track them for the effects of enrollment changes and inflation.

From 2001 to 2005, total funding (appropriations, tuition and fees) for public two-year colleges increased by 31 percent in SREB states. The increase was \$2.2 billion. Full-time-equivalent enrollment in SREB states increased by about 25 percent from 2001 to 2005. From 2001 to 2005, average total funding per full-time-equivalent student in two-year colleges in SREB states increased by \$302 (5 percent) — from \$5,601 to \$5,903.

Inflation averaged 2.7 percent per year for this period, using the U.S. Bureau of Labor Statistics Employment Cost Index (ECI) for colleges and universities. When adjusted for ECI inflation, total funding per full-time-equivalent student in SREB states decreased by \$421 (7 percent).

- In West Virginia, funding for public two-year colleges increased by \$55 million (154 percent) from 2001 to 2005.
- During the same time, West Virginia’s full-time-equivalent enrollment at public two-year colleges rose by 9,197 students (152 percent). Total funding per full-time-equivalent student increased by \$59 (1 percent) — from \$5,922 to \$5,981.
- Funding per full-time-equivalent student at these colleges in West Virginia decreased by \$706 (11 percent), adjusted for inflation, over the period.

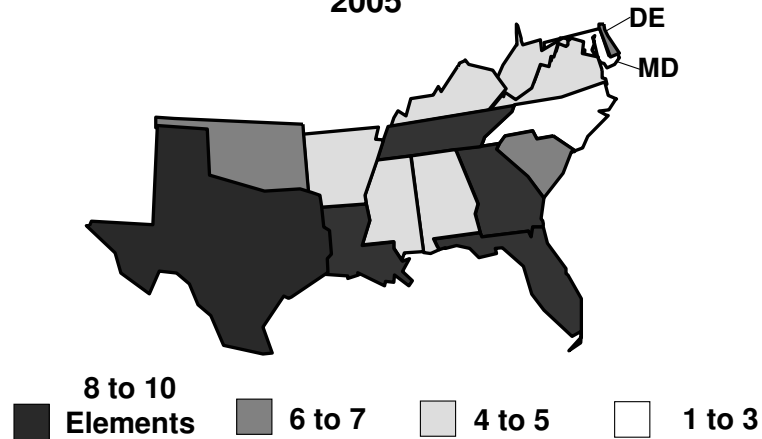
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Challenge
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Progress in Building the 10 Essential Elements for a Student Data System 2005



Source: National Center for Educational Accountability, August 2005 Survey

West Virginia reported that it had implemented six of the 10 essential elements.

High-quality data are fundamental to *Challenge to Lead*— which calls on states to link their data systems “throughout the educational system.” States need the ability to track progress of students from pre-K through college graduation. They also need the ability to link student academic information with other information, such as faculty qualifications. Few states have data systems that can do this.

The national Data Quality Campaign promotes the development of state student data systems that track information over time. It is sponsored by many national organizations, including associations of state chief school officers and higher education executive officers. Its goal is to help states implement 10 essential elements of effective student data systems by 2009. The campaign credits states with completion of an element only after they report implementation. In 2005, no state nationwide reported implementation of all 10. All SREB states had implemented at least one. In short, the elements are:

1. A unique statewide student identifier that is linked to student data
2. Student-level fall enrollment, demographic and program (e.g., free lunch) participation data
3. Individual students’ test records from year to year to measure growth
4. Data on untested students to ensure accountability for all groups of students
5. A unique statewide teacher identifier, with the ability to match teachers to students
6. Student-level transcripts, including courses completed and grades earned
7. Student-level college admission and Advanced Placement test scores
8. Student-level high school completion and dropout data, collected annually
9. Links between the pre-K–12 and higher education systems, to track students through college
10. Data audit system to allow for the assessment of data quality, validity and reliability

- By 2005, West Virginia reported that it had implemented six of the 10 essential elements, numbers 1, 2, 3, 5, 8 and 10. It had partially implemented two others, numbers 4 and 6.

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Available at www.sreb.org

Building a Foundation for Success by Getting Every Child Ready for School

This report reviews SREB states' progress in getting young children prepared to start first grade ready to learn.

Mastering Reading and Mathematics in the Early Grades

This report documents SREB states' progress in getting early grades students ready for the middle grades. The analyses are based on scores and standards for state achievement tests and on results from the National Assessment of Educational Progress.

Getting the Mission Right in the Middle Grades

This report documents SREB states' progress in getting middle grades students ready for high school. The analyses are based on scores and standards of state achievement tests and on results from the National Assessment of Educational Progress.

Getting Serious About High School Graduation

This report documents that graduation rates are low — especially for minority students and males. It explains how graduation rates are calculated and offers promising practices for increasing them.

Getting Students Ready for College and Careers

This report asserts that SREB states need to ensure that all graduates are ready for further education and the workplace. It concludes that *all* students should take an essential core of courses traditionally prescribed only for college-bound students, including four years of mathematics including Algebra II.

Investing Wisely in Adult Learning is Key to State Prosperity

This report documents the benefits of providing more education for adults who did not complete high school and the urgency for them to pursue further education.

Creating College Opportunity for All: Prepared Students and Affordable Colleges

SREB's *Challenge to Lead* goals call on states to ensure that many more youth — particularly from minority groups and low-income families — prepare for, enroll in and graduate from college.

Focusing on Student Performance Through Accountability

SREB states face new challenges as they adapt to the requirements of the federal *No Child Left Behind Act of 2001*. This report reviews SREB states' progress in implementing their accountability systems and in improving student performance in all groups.

Progress Being Made in Getting a Quality Leader in Every School

This report documents SREB states' progress in redesigning the preparation and development of school principals.

Resolve and Resources to Get a Qualified Teacher in Every Classroom

Every student deserves qualified teachers, but states are not yet providing qualified teachers for every subject in every school. This report documents progress SREB states are making.

Holding Colleges and Universities Accountable for Meeting State Needs

SREB's *Challenge to Lead* goals call for states to hold colleges and universities accountable for meeting state needs. This report looks at states' annual reports for higher education accountability.

From Goals to Results: Improving Education System Accountability

This last report in the first *Challenge to Lead* goals series culminates in a detailed call to action for state policy-makers and education leaders. Among other recommendations, it stresses the importance of statewide, linked data systems and the need for real-dollar growth in per student funding.