The Workforce Challenge

Improving Education to Meet the Region’s Workforce Challenge

Meeting the challenge of postsecondary educational attainment and workforce development

SREB states face serious challenges in meeting workforce needs within the next ten years. Decades of poverty, undereducation, and dependency on low-skilled jobs will come face to face with advancing technology and artificial intelligence in the workplace. Automation leaves the undereducated even more vulnerable to poverty — that is, unless secondary and postsecondary education combine efforts to help more people acquire skills they need for a new, middle-skills and high-skills marketplace. SREB’s 2019 research brief Unprepared and Unaware: Upskilling the Workforce for a Decade of Uncertainty lays out the challenge.

The 2019 Fact Book on Higher Education provides a picture of where SREB states stand on the changing workforce and on many aspects of postsecondary education, including college completion and college affordability. Here are some highlights.

Education attainment tied to jobs and wages

The percentage of working-age adults, 25 to 64 years old, in the SREB region holding an associate degree or higher still trails the national average, 39 percent compared with 42 percent in 2017. The SREB region’s rate has improved since 2012 when it was 36 percent. Associate degrees pay off, too. They bring 18 percent more in wages than a high school credential. The wage premium is even higher for a bachelor’s degree — 71 percent more than a high school credential. And jobs for individuals with postsecondary credentials are projected to grow 11 percent between 2016 and 2026, faster than for those with high school credentials only, at 5 percent.

Data on progress at key education milestones offer good news, but they also show challenges ahead. Pre-K-12 enrollment in the region increased from 2006 to 2016 by 8 percent, compared with 2 percent nationwide. This growth in the number of school-age children will soon make its way to college. But declines will soon set, in and by the early 2030’s SREB states will experience a slow-down in school and college enrollments. In the meantime, using the standard calculation (the Adjusted Cohort Graduation Rate), high school graduation rates rose from 80 percent in 2011-12 to 87 percent in 2016-17. SREB states now exceed the nation’s rate by 2 points.

Improving college enrollment and completion rates proving difficult

Even so, college enrollment nationwide and in the region declined from 2012 to 2017 by 5 percent and 3 percent, respectively. College-going rates dropped in 14 of the 16 SREB states. College enrollment shifted in its racial diversity. The enrollment of white students accounted for 56 percent of undergraduate enrollment in 2012 and dropped to 52 percent in 2017. During the same period, Hispanic students grew as a percentage of undergraduate enrollment from 15 percent of undergraduate enrollment to 19 percent, but black students fell from 23 percent to 20 percent.

Undergraduate and traditional-age students accounted for a larger percentage of students — from 58 percent to 60 percent from 2013 to 2017. The percentage of young adults 18 to 24 who attended college in 2017 was 36 percent in the region, up 2 percentage points from 2013. For the same period, the percentage of working age adults 25-49 dropped about 1 point. Any drop in adult attendance is troubling when workforce changes are looming.

Continued on inside back cover
Among the many documents that SREB produces, the *Fact Book on Higher Education* has been the most enduring. Since 1956, it has chronicled the history of progress in the South, as SREB states graduated more associate, bachelor’s, master’s and professional degree students year in and year out. In this, my first year at SREB, I have taken pride in claiming association with such SREB gems. The *Fact Book* represents the kind of work that keeps our region aware of the progress we are making — and our eyes focused on where we still need work.

I learned three features of the *Fact Book* are worth recalling from time to time.

First, **SREB has collected higher education data from its compact states for a long time.** Institutions and states in the region agreed these data are important enough to collect, tabulate, report and analyze annually. Each state’s Data Exchange coordinator submits the same core data sets, including degrees conferred, persistence and progression rates, credit and contact hours, funding, tuition and tuition policy, time- and credits-to-degree, and e-learning. These data help researchers and policymakers study trends and answer key policy questions.

In addition, **SREB collects data from a variety of sources,** some of which are not curated elsewhere. We choose sources that provide the most reliable and valid data to inform us on demographic, economic and policy trends while situating SREB states in both a regional and national context. SREB staff look for providers that collect data every year to ensure we can track long-term trends with comparable data. Federal sources are valuable, including the U.S. Census Bureau and the National Center for Education Statistics. Non-government sources, including the National Science Foundation and the College and the National Association of State Student Grant and Aid Programs, are indispensable also.

Finally, all **regular users of the *Fact Book* realize it is more than a book.** It’s a compilation of rich data tables — over 100 of them — displayed with engaging narrative and graphics. While printed biennially, it is available online, where it comes alive every day. There, we update tables to make new data available soon after it is released. Years of related data accompany each *Fact Book* table online, making even more information readily accessible. Lay users as well as institutional and legislative researchers can download what they need, match it with their own data and use the results to tell their own stories.

Since coming to SREB, I’ve been concerned about the readiness of young adults for the changes in the workplace that economists are now forecasting. How well prepared is the current generation of young workers and high schoolers for what’s to come? When will automation begin to disrupt their lives and careers? By 2030? How nimble are today’s education systems for re-thinking education for tomorrow’s challenges? Here’s some advice: keep the *Fact Book* close at hand. Bookmark it on your computer. It might help us forecast more accurately as we try to weather the stormy decade ahead. Knowing what’s coming helps to strategize for better days. I plan to host a lot of discussion on this topic in the months and years ahead. We certainly hope SREB is the first place you call when you and your colleagues are ready to talk.

Stephen L. Pruitt, Ph.D.
President
Over half (50.5 percent) of the nation’s population growth from 2018 to 2028 is expected to be in the 16 SREB states — an increase of over 15 million. West Virginia’s population is projected to decrease by 4 percent (65,900 people) by 2028.
The increase in Hispanic residents is the region’s major demographic trend. Hispanic population growth accounted for 47 percent of all growth in the SREB region from 2007 to 2017. The Hispanic population in West Virginia grew by 9,400 — bringing the proportion of Hispanic residents to 2 percent of the overall resident population of West Virginia in 2017.
From 2015 to 2017, the SREB region's public high school graduation rate increased by 1 percentage point to 87 percent. In West Virginia, the public high school graduation rate rose from 87 percent in 2014-15 to 89 percent in 2016-17.
Working-age adults have been a common focus in recent years when comparing education attainment levels. Using an equivalency yardstick common for international attainment comparisons (percentage with the equivalent of an associate degree or higher), the United States drops to fifth place internationally, behind Canada, Japan, Israel, and Korea.

*Percentages are based on the working-age population aged 25 to 64.*

Source: Organisation for Economic Co-operation and Development.
The percentage of adults with associate degrees or higher has risen since 2012 nationally and in all SREB states. In 2017, 30 percent of adults ages 25 to 64 in West Virginia had at least an associate degree, up from 27 percent in 2012.
The percentages of working-age adults with at least an associate degree nationwide vary by race and ethnicity. In the SREB region, they are below national averages for white and black adults but above the average for Hispanic adults. In 2017, 33 percent of Hispanic working-age adults in West Virginia had an associate degree or higher, compared with 27 percent of black adults and 29 percent of white adults.

Tables listed are in the SREB Fact Book on Higher Education 2019.
The number of children in poverty decreased 5 percentage points nationally and in the SREB region since 2012. By 2017 in West Virginia, 26 percent of children were in poverty, up from 25 percent in 2012.
In 2017, a larger proportion of Asian young adults (65 percent) and black young adults (37 percent) attended college than in 2012 (60 percent and 36 percent, respectively). A smaller proportion of white young adults (41 percent) and Hispanic young adults (36 percent) attended college in 2017 than in 2012 (42 percent and 38 percent, respectively).
Between 2012 and 2017, the enrollment of men in U.S. colleges and universities decreased at a slightly slower rate than the enrollment of women. In West Virginia, enrollment dropped for both men and women (8 percent and 9 percent, respectively).
Among racial/ethnic groups, the number of Hispanic college students grew nationwide from fall 2012 to fall 2017. In West Virginia, enrollment increased by 445 Hispanic students. Enrollment in West Virginia also decreased by 1,100 black students and 10,800 white students from 2012 to 2017.
Education pays. In 2017, adults ages 25 and older with associate degrees earned 18 percent more than those with only high school-level credentials. Those with bachelor’s degrees earned 71 percent more than high school graduates. And those with professional degrees in fields such as law and medicine earned 99 percent more than those with bachelor’s degrees.
In the U.S., the fastest-growing, highest-paying jobs require education beyond high school. For all job categories requiring an associate degree or higher, jobs are projected to increase more than the overall 7 percent gain in total job openings.
At public two-year colleges, the highest three-year graduation rate for the 2014 cohort was in the Midwest. Gaps in the rates for racial and ethnic groups remain in all regions. Graduation rates in West Virginia’s public two-year colleges were below SREB averages for black, Hispanic and white students.
At public four-year colleges, the SREB region’s six-year graduation rates for black, Hispanic and white students in the 2011 cohort were below those of their national counterparts. In West Virginia’s four-year colleges, the graduation rates for black, Hispanic and white students were below SREB averages for their counterparts.
A substantial percentage of associate degree graduates in 2016-17 were transfer students to the colleges awarding their degrees. Among the 12 states participating in an SREB data collection on the entering status of graduates, the percentage of transfers ranged from 79 percent in North Carolina to 13 percent in Tennessee.
In many states, most associate degree graduates in 2016-17 entered the colleges from which they graduated as full-time students. Among the 12 states participating in a SREB data collection on the entering status of graduates, the percentage who attended full time ranged from 76 percent in Mississippi to 35 percent in Texas.
In SREB states, associate degrees awarded to men and women rose at the same rate from 2011-12 to 2016-17. In West Virginia, the number of associate degrees awarded to men increased 25 percent while the number earned by women increased 2 percent. Men accounted for 37 percent of the associate graduates in 2016-17.
The number of associate degrees earned by black and Hispanic graduates increased by 21 percent nationally and by 15 percent in the SREB region from 2011-12 to 2016-17. In West Virginia, the number rose by 100, for a 38 percent increase during the period. Furthermore, in West Virginia in 2016-17, black and Hispanic students added up to 7 percent of the graduates in the state.
A significant percentage of bachelor’s degree graduates in 2016-17 were transfer students to the colleges awarding their degrees. Among the 11 states participating in an SREB data collection on the entering status of graduates, the percentage of transfers ranged from 54 percent in Texas to 27 percent in Tennessee.
A very high percentage of bachelor’s degree graduates in 2016-17 entered the colleges from which they graduated as full-time students. Among the 11 states participating in an SREB data collection on the entering status of graduates, the percentage who attended full time ranged from 93 percent in West Virginia to 74 percent in Texas.
In most SREB states, bachelor’s degrees awarded to men rose more than those to women from 2011-12 to 2016-17. In West Virginia, bachelor’s degrees awarded to women increased 3 percent and those earned by men grew 8 percent. Men were 47 percent of graduates in 2011-12 and 48 percent in 2016-17.
The number of bachelor’s degrees earned by black and Hispanic graduates increased from 20 percent of the total nationally in 2011-12 to 24 percent in 2016-17. In West Virginia, the number of bachelor’s degrees earned by black and Hispanic graduates rose by 300 students and increased to 9 percent of the total.

Source: Table 53, National Center for Education Statistics.

Tables listed are in the SREB Fact Book on Higher Education 2019.
Median annual tuition and required fees (often called sticker price) at public two-year colleges reached $3,300 in SREB states in 2017-18. This was 2 percent more than in 2016-17 after adjusting for inflation. In West Virginia, tuition and fees at public two-year colleges were $3,900 — 2 percent lower than in 2016-17 after adjusting for inflation.
The median annual cost for tuition and required fees (often called sticker price) was $8,000 for public four-year colleges in the SREB region in 2017-18. This was 4 percent more than in 2016-17 after adjusting for inflation. In West Virginia, tuition and fees at public four-year colleges were $7,400—a change of 2 percent from 2016-17 after adjusting for inflation.
Nationally, 75 percent of first-time, full-time freshmen seeking degrees or certificates at public two-year colleges received a financial aid grant, took out a student loan, or both, in 2016-17. Twenty-one percent took out loans. In West Virginia, 86 percent had a grant, loan or both, and 39 percent had loans, which averaged $4,500 that year.

Note: Numbers in parentheses are average loan amounts.
Source: Table 69, National Center for Education Statistics.
Nationally, 84 percent of first-time, full-time freshmen seeking undergraduate degrees at public four-year colleges or universities received a financial aid grant, took out a student loan, or both, in 2016-17. Fifty percent took out loans. In West Virginia, the percentages were 94 and 58, respectively. The average loan amount for West Virginia freshmen taking out loans that year was $7,200.

Note: Numbers in parentheses are average loan amounts.
Source: Table 68, National Center for Education Statistics.

<table>
<thead>
<tr>
<th>Region</th>
<th>Grant or Loan</th>
<th>Loan</th>
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<td>United States ($6,900)</td>
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<td>50%</td>
</tr>
<tr>
<td>West ($6,000)</td>
<td>80%</td>
<td>39%</td>
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<tr>
<td>Midwest ($7,100)</td>
<td>85%</td>
<td>54%</td>
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<tr>
<td>Northeast ($8,000)</td>
<td>84%</td>
<td>58%</td>
</tr>
<tr>
<td>SREB states ($6,800)</td>
<td>86%</td>
<td>50%</td>
</tr>
<tr>
<td>West Virginia ($7,200)</td>
<td>94%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Tables listed are in the *SREB Fact Book on Higher Education 2019*. 
The average net price of college (cost of attendance minus grant and scholarship aid) for full-time, in-state undergraduates at public two-year colleges in the SREB region in 2016-17 was $6,900, the lowest of any U.S. region. In West Virginia, the net price at public two-year colleges was $6,300.
The average net price of college (cost of attendance minus grant and scholarship aid) for full-time, in-state undergraduates at public four-year colleges and universities in the SREB region in 2016-17 was $14,200. In West Virginia, the net price at public four-year colleges was $10,100.
In West Virginia in 2017-18, funding from state appropriations and tuition and fees per FTE student for public two-year colleges was $8,00 — almost 5 percent ($400) less than in 2014-15 after adjusting for inflation. The regional average funding per FTE student was $8,400 — 4 percent ($300) more than in 2014-15 after adjusting for inflation.

Note: Based on the Higher Education Price Index (HEPI), which increased by 8.1 percent from 2014-15 to 2017-18.

Source: Table 89, SREB-State Data Exchange.
In West Virginia in 2017-18, funding from state appropriations and tuition and fees per FTE student for public four-year colleges and universities was $15,100—7 percent ($1,000) more than in 2014-15 after adjusting for inflation. The regional average funding per FTE student was $16,700 — $20 less than the 2014-15 average after adjusting for inflation.
At West Virginia’s public two-year colleges, state/local appropriations fell $3.7 million from 2014-15 to 2017-18, while tuition and fee revenue increased $2.7 million — for a net funding decrease of $1 million.

At West Virginia’s public four-year colleges, state appropriations decreased $24 million from 2014-15 to 2017-18, while tuition and fee revenue increased $78.1 million — for a net funding increase of $54.1 million.
College faculty have higher levels of education and higher pay than American workers overall, but public sector faculty salaries have not grown as fast when compared with growth of the average American wage. Faculty salaries at public four-year colleges in the SREB region were 7 percent higher in 2018 than in 1988 when adjusted for inflation. The average increase for all workers nationwide was 29 percent.
From 2012-13 to 2017-18, the SREB region’s average two-year faculty salary, when adjusted for inflation, decreased less than 1 percent to $54,700 and remained lower than the national average of $64,200. The average salary at public two-year colleges in West Virginia declined 8 percent to $46,100.

Note: Inflation adjustment based on the academic-year Consumer Price Index, which rose 6.6 percent over the period.
Source: Table 83, SREB-State Data Exchange and National Center for Education Statistics.
From 2012-13 to 2017-18, the SREB region’s average four-year faculty salary increased 4 percent to $82,500 when adjusted for inflation, and remained below the national average of $86,800. The average salary at public four-year colleges in West Virginia rose less than 1 percent to $72,200.
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Enrollment at four-year institutions was almost flat in the nation and in SREB states increased about 2 percent between 2012 and 2017 while two-year college enrollment dropped 11 percent nationwide and 10 percent in the SREB region. This drop at two-year colleges is troubling because these institutions enroll more non-traditional-age students. These adult students might need more job retraining to meet advancing skill demands in the workplace.

Students who entered college in fall 2011 as first-time, full-time, bachelor’s degree seeking students had a 78 percent progression rate as of 2016-17 — a 2 percentage-point increase over the last five years. First-time, full-time, degree- or certificate-seeking students who enrolled in two-year colleges in fall 2014 in the SREB region had a 57 percent progression rate by 2016-17, a 6 percentage-point increase over those who entered in fall 2009. If these rates continue to rise, they will lead to higher completion rates.

College affordability challenges efforts to raise education attainment levels

Keeping college affordable remains a challenge for SREB states. Many factors, including tuition and fees, student financial aid, state support of higher education, and family income affect college costs. The data indicate that most students and their families continue to struggle with paying for college.

The median annual tuition and fees for the SREB region increased between 2016-17 and 2017-18. These costs for in-state undergraduates at public four-year institutions totaled $8,000, an increase of 4 percent over the year before, adjusting for inflation. The increase nationwide was 2 percent.

Pell grant dollars awarded to students in the region dropped 6 percent. The number of Pell Grant recipients in the SREB region dropped by 18 percent, including a 16 percent drop at public colleges. Pell grants pay $3,972 on average in the SREB region and a maximum of $5,920; they boost a family’s ability to pay for college, but they are insufficient by themselves to cover costs. SREB states led other regions in overall state scholarships and grants. State financial aid in SREB states reached nearly $5.5 billion in 2016-17 — 43 percent of the nation’s total. In SREB states, need-based state scholarships totaled $2.4 billion, 29 percent of the U.S. total need-based aid. Non-need based state scholarships totaled $2.2 billion, 86 percent of the nation’s total non-need based aid.

Nationwide student loans represent a lower percentage of total student aid than grants and scholarships. Student borrowing peaked in 2011-12 and has since decreased by $9 billion dollars to under $106 billion. Federal loans provided $29 billion in loans for students in SREB states.

Postsecondary education, as always, will need to continue to prepare individuals for high-skills positions. But it will also need to play a more intentional role in helping more students develop middle-skills than it has in the past. Forecasters say that automation will launch at least as many jobs requiring education beyond high school — but not necessarily leading to a college-level degree — as it eliminates. As Unprepared and Unaware points out, no one needs to lose a job, but nearly everyone will need to learn new, more challenging skills for the jobs that will become available. Postsecondary institutions are key for most students, regardless of age and experience, in preparing for the future workforce. Postsecondary institutions are the key for most students and adults.
Copies of the *Fact Book on Higher Education* are available from the SREB publications office. SREB regularly monitors new comparative data and makes them available on the SREB website: www.sreb.org. The website also features an online edition of the *Fact Book* with links to the latest updates of the tables and individual *Featured Facts* reports for each of the 16 SREB states. For more information about the *SREB Fact Book on Higher Education*, contact Susan Lounsbury, director of Education Data Services, at (404) 875-9211 or Susan.Lounsbury@SREB.org.