# South Carolina Course Alignment Project

## Environmental Scan

### What is an environmental scan?

An *environmental scan* is designed to identify key issues of policy and practice in an area of interest so that action can be taken. By definition, an environmental scan focuses upon areas of concern. However, the results of an environmental scan are not designed to be either an indictment or endorsement of the current way of doing business since the environmental scan is undertaken to highlight issues in terms of strengths and areas of potential change. While the results of an environmental scan may be difficult to view objectively by some, particularly those most involved in the field under analysis, the intent is to present data, not to reach judgments; the goal is to provide a starting point for contrasting "what is" with "what ought to be." Such a process is also widely known as a *discrepancy analysis*.

Here we present the first phase (the "what is") for a series of issues related to high school completion and college attendance in South Carolina. The results of this scan can help all involved in the South Carolina educational system, both secondary and postsecondary, to understand and reach agreement on potential actions that are necessary to improve the alignment of high school and postsecondary systems in the state.

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# Key Characteristics of the South Carolina Environmental Scan

## Focusing on the high school-to-college connection

The South Carolina environmental scan focuses on the high school-to-college connection. Data were gathered from available sources that provide information on high school performance in college preparatory courses, high school completion, and postsecondary participation. The goal is to highlight the current state of student transition from high school to postsecondary education in South Carolina.

The challenge is that available data sources do not fully illuminate this issue because the available measures do not necessarily directly gauge student possession of the knowledge and skills necessary for postsecondary participation and success. The available data do, however, provide some general insight into the relationship between high school and postsecondary educational systems.

Like many states, South Carolina faces a major challenge in developing an environmental scan of education because of the lack of a unified data system which contains information on both high school and postsecondary education. Most of the information is found in one or another of the systems, but not both. The current scan, therefore, has been developed with this limitation. Nevertheless, the facts presented are illuminating in many ways and provide information about the historical development of K-12 and postsecondary education in South Carolina.

The historical development of the two educational systems explains many current aspects of these systems and their relationship to each other. These factors should be fully acknowledged when assessing many elements which are presented in the environmental scan. The scan stands as a very good baseline to assess what exists in both educational systems and is the basis for planning for the changes South Carolina must undergo to meet the dramatic, global challenges of the current century.

The scan will also allow policymakers to consider how best to articulate useful goals and success markers as change takes place. Within the context of the South Carolina Course Alignment Project, the scan helps explain why many of the specific activities of the South Carolina Course Alignment Project are being undertaken. By describing and identifying through the data presented both challenges and opportunities in the state, the scan also suggests ways in which K-12 and postsecondary educators will want to consider working together closely in order to increase the numbers and proportion of students in postsecondary education.

# Key Points and Observations from the South Carolina Environmental Scan

Despite data collection limitations, this section of the environmental scan identifies key points from available data sources about important issues related to the high school-to-college connection in South Carolina. Together, these data provide a baseline for understanding the South Carolina educational context as well as an empirical foundation for launching the South Carolina Course Alignment Project.

This section also includes general observations derived from the key points about the challenges and opportunities available in South Carolina. The general observations are areas that can be targeted for potential change and success. This section serves as the preliminary analysis for the South Carolina Course Alignment Project and helps frame the conversation about how to improve alignment between high school and college.

## Issue: Assessments

### Key Points

| | | | |
|---|---|---|---|
| Academic performance by the best high school students, as indicated by AP participation and scores on AP exams, is slightly below the national average. In 2006, 22.0% of South Carolina high school students took an exam before graduating, compared to 24.2% nationally. [1] | Only 56.9% of South Carolina students taking AP exams in 2006 scored a 3 or higher, compared to 61.0% nationally. [1] | The composite 2007 SAT score (in critical reading and math) for seniors is the lowest among the 24 states that use the SAT as their primary admissions test. South Carolina's average score was 984, compared to an average of 1,008 in these 24 states. [2] | South Carolina student SAT scores are underrepresented in the top 20% of student scores nationally. Only 14% of South Carolina students scored in the top 20% of students nationally. [3] |

### Observations

- South Carolina does have in place a system of standards and assessments that can become better aligned with postsecondary expectations over time, both for two- and four-year institutions.
- Although AP participation, AP performance, and SAT scores are not at optimal levels, the potential exists to strengthen student performance on these tests through better alignment with college readiness expectations as well as through proper course selection.
- Additional programs focused on providing students with more college-like experiences in high school can help raise expectations in this area.

## Issue: Standards and Alignment

### Key Points

The South Carolina system of K-12 standards and assessments has not been systematically aligned with the knowledge and skills necessary for postsecondary readiness. [4, 5]

K-12 standards were recently revised and now compare better to best practice standards from exemplar states and national organizations. [6]

### Observations

- The state already has a challenging set of course requirements for high school graduation. These requirements create the potential for better alignment with colleges because all students must take at least math and English during their senior year, and many will likely be taking science and social studies as well.

- Significant efforts for remedial education will always be necessary given that many adults return to college after being out of school for a number of years and need additional support. Nevertheless, remediation rates for students who come directly from high school to college can be reduced substantially with better alignment of courses.

## Issue: College Readiness

### Key Points

Math and computer science courses had the lowest passage rates (78%) for courses completed during the first year of college at four-year institutions. These subjects represent critical areas for preparing for success in the 21st Century economy. [14]

Approximately one-third of South Carolina college students report taking at least one remedial course during college. Most of this remedial coursework occurs in two-year public institutions due to policies that discourage public four-year institutions from offering remedial or "developmental" credit-bearing courses. Four-year institutions can and do provide academic support to students who arrive in college needing additional help. [16]

In 2006, 40% of enrolled college undergraduates were male; 60% were female. [15] The implications of this emerging educational attainment gap should be considered in planning for South Carolina's future.

### Observations

- Few measures exist to gauge how well high school graduates in South Carolina are prepared for postsecondary learning, but current participation and persistence rates suggest that improvements in readiness could lead to increases in postsecondary enrollment and improved persistence.

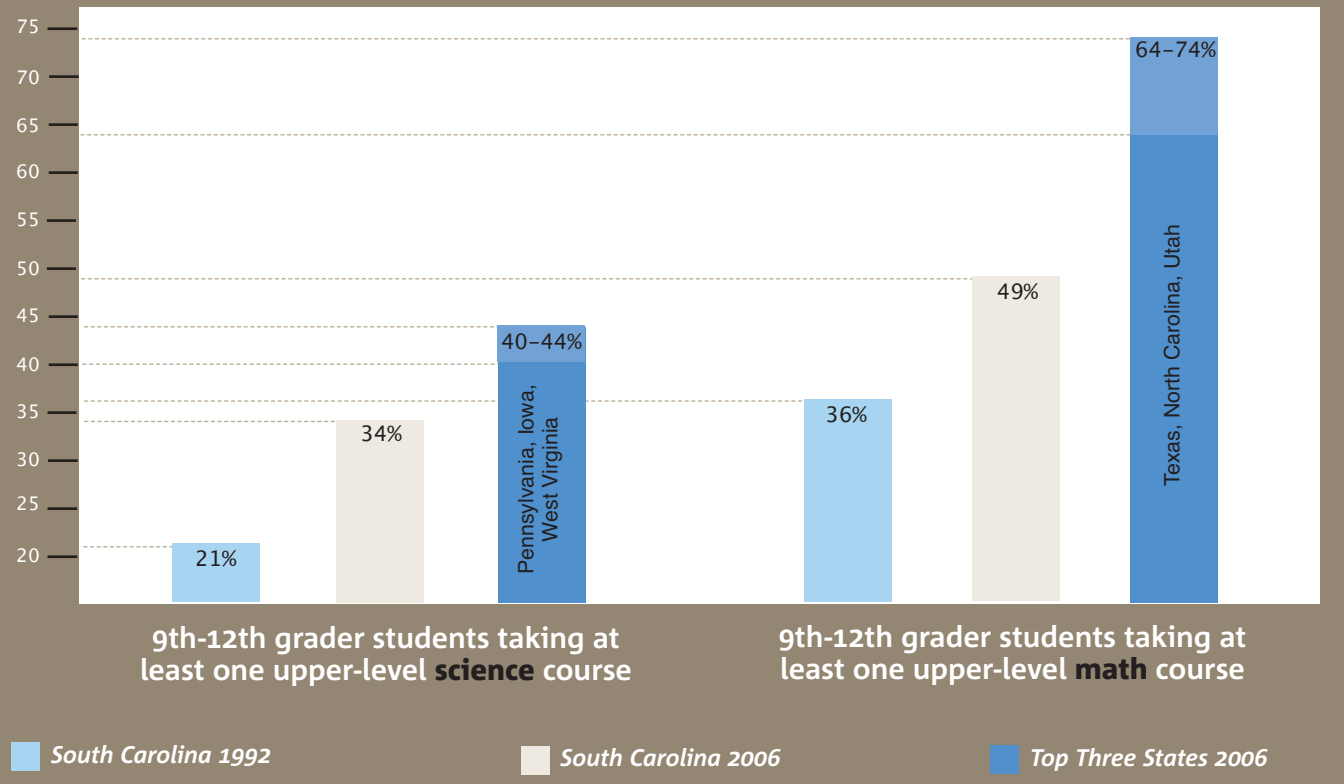
# Issue: High School Course Enrollment

## Key Points

As presented in Figure 1, in science, 34% of South Carolina high school students enroll in at least one upper-level science course compared to 40-44% of students in the top three states in the nation (Pennsylvania, Iowa, and West Virginia). Most recently, 49% of South Carolina high school students took at least one upper-level high school math course, compared to 64-74% of students taking upper-level math in the top three states in the nation (Texas, North Carolina, and Utah). [7]

Figure 1 also shows that the percentage of students enrolling in upper-level science and math courses in South Carolina has increased by approximately 13% in each subject between 1992 and 2006. This change is due in part both to increased high school graduation requirements and increased statewide pre-college course requirements. [3]

## Figure 1: Course-Taking Patterns of South Carolina High School Students Compared to Top Performing States




Source: National Center for Public Policy and Higher Education, *Measuring Up: The State Report Card on Higher Education, South Carolina 2006.* Retrieved July 31, 2007 from http://measuringup.highereducation.org

# Issue: High School Graduation

## Key Points

Table 1 presents the required high school courses for earning a standard diploma in South Carolina. Students are required to take four years of math and English, and three years of science and social sciences. No other state requires more course credits for high school graduation (in Carnegie units) than South Carolina. [8]

Table 2 lists high school graduation rates as reported by the South Carolina Department of Education. These data reveal achievement gaps: white students graduate at a higher rate (80%) than black (67%) and Hispanic (58%) students; females (80%) graduate from high school at a higher rate than males (69%); and the graduation rate for Free and Reduced Price Lunch eligible students (64%) is lower than the overall graduation rate for all students (74%). [12]

Depending on the source figures used, the high school graduation rate fluctuates from nearly 50% to almost 75% (see Table 2 and Figure 2 for two different examples). Either figure places South Carolina among the lowest in the nation. [4, 5, 9-12]

### Observations

- Numerous national surveys suggest that the vast majority of high school students, regardless of ethnic or racial group, indicate they hope to attend college. The current gap in South Carolina high school graduation rates between white students and students from ethnic and racial minority groups suggests that attempts to engage these students in activities connected with postsecondary access and success could help close the gap in graduation rates.

## Table 1: Required High School Courses for Earning a Standard Diploma

| Required High School Credits | Number of Credits |
|---|---|
| English/Language Arts | 4 |
| Mathematics | 4 |
| Science | 3 |
| History/Social Studies | 3 |
| Foreign Language or Career Technology | 1 |
| Physical Education | 1 |
| Other Credits | 8 |
| **Total Required Credits** | **24** |

Source: South Carolina Department of Education, *Curriculum and Standards 2006.* Retrieved July 17, 2007 from http://ed.sc.gov/agency/offices/cso

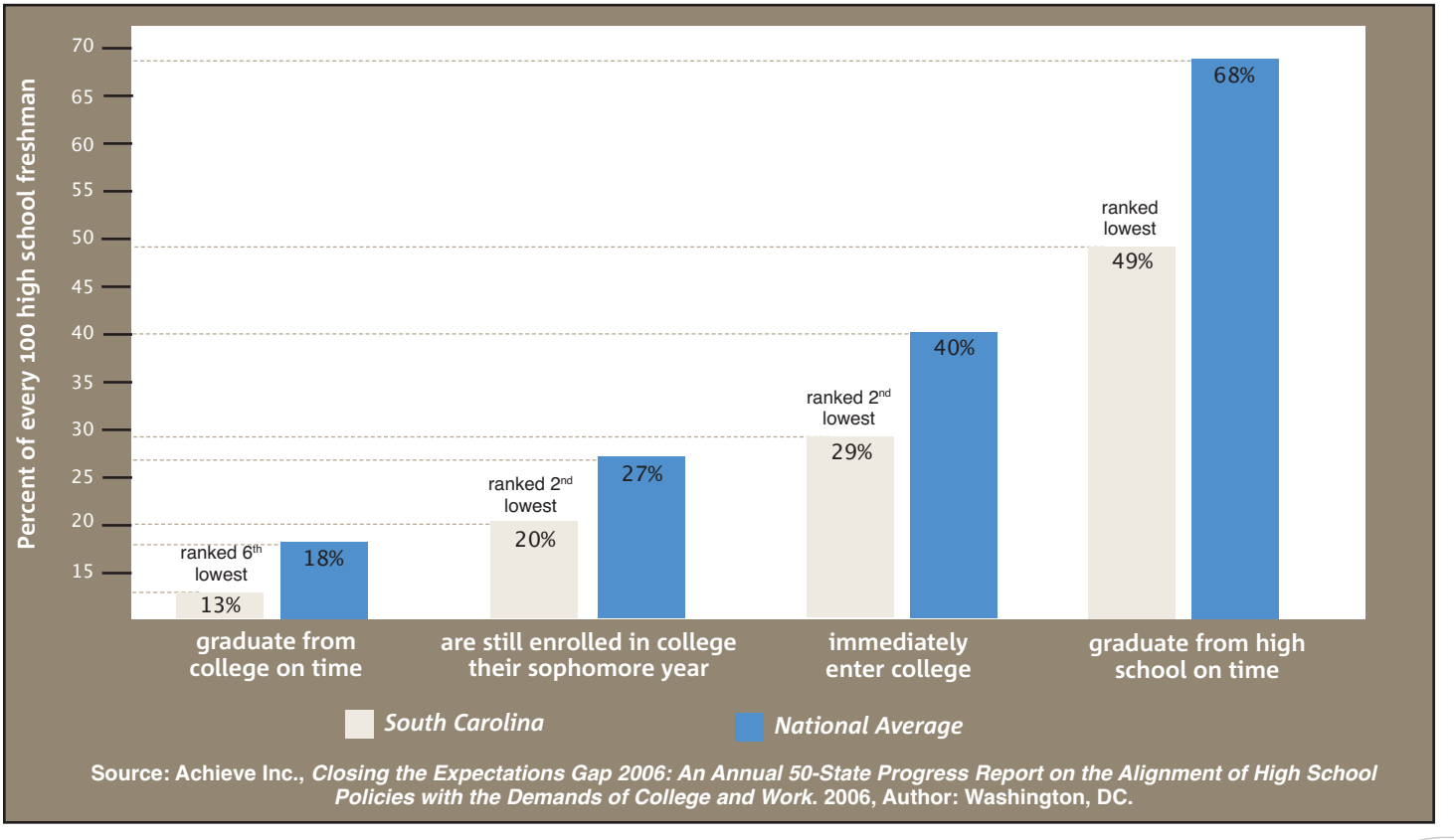
## Table 2: High School Graduation Rate: South Carolina Report Card Data

| Student Type | 2006 Graduation Rate |
|---|---|
| All Students | 74% |
| Male | 69% |
| Female | 80% |
| White | 80% |
| Black | 67% |
| Hispanic | 58% |
| Asian/Pacific Islander | 83% |
| American Indian | n/a |
| Disabled | 40% |
| Limited English Proficient (LEP) | 64% |
| Free & Reduced Price Lunch Eligible | 64% |

Source: South Carolina Department of Education, *2006 EAA Report Card Excel Files- Performance High.* 2006, Author: Columbia, SC.

Note: These data represent the highest graduation figures reported; other sources (see Table 3 for example) report the graduation rate in South Carolina as low as 49%.

## Figure 2: State Education Pipeline Comparing South Carolina with the National Average

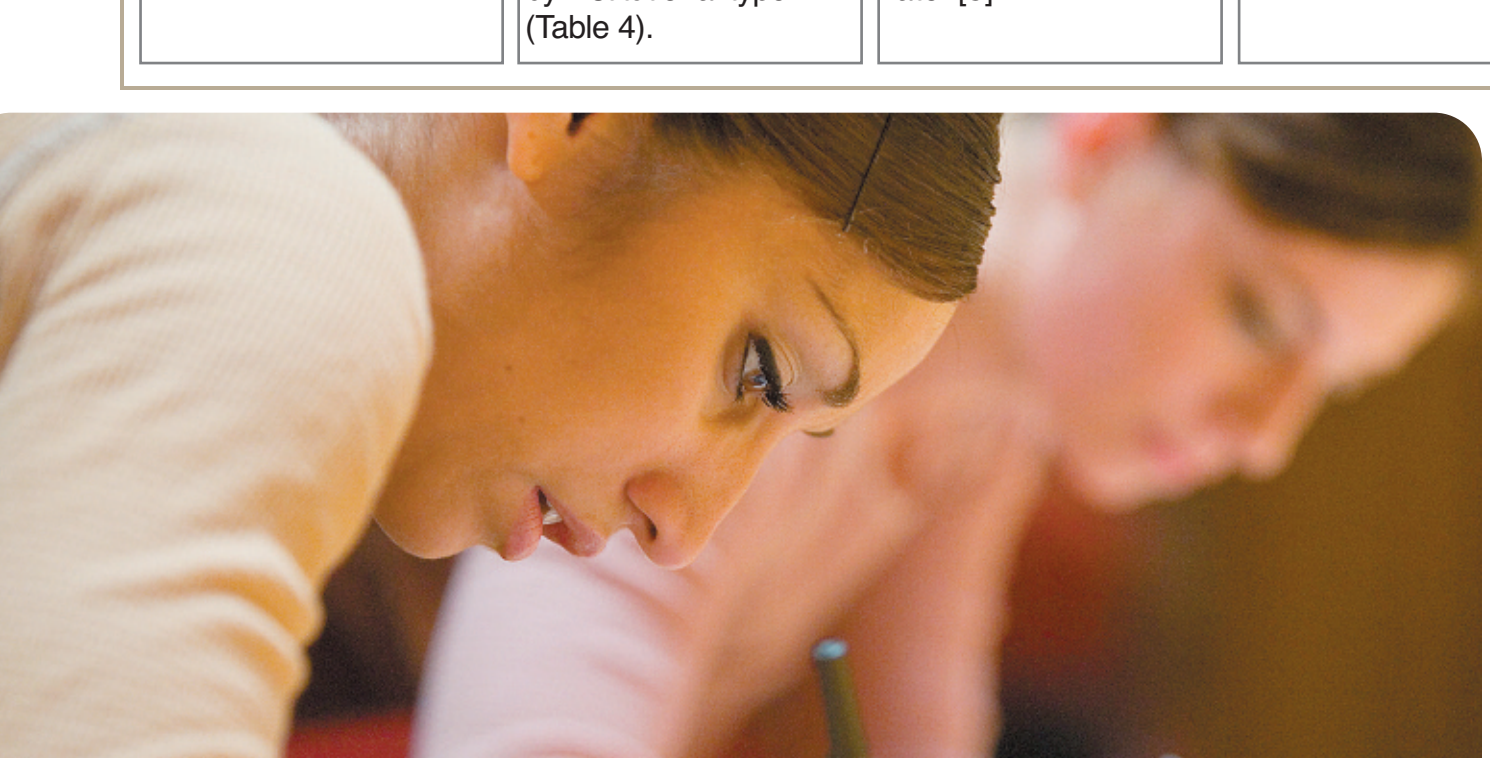



Source: Achieve Inc., *Closing the Expectations Gap 2006: An Annual 50-State Progress Report on the Alignment of High School Policies with the Demands of College and Work.* 2006, Author: Washington, DC.

# Issue: College Enrollment

## Key Points

| | | | |
|---|---|---|---|
| 29% of South Carolina students enroll in college by the age of 19. This percentage is lower than 47 other states primarily because the proportion of students who graduate from high school in South Carolina within four years is lower. The top three states (Minnesota, New Jersey, and North Dakota) enroll 53-62% of students in college by the age of 19. [7] | About two-thirds of South Carolina high school graduates went on immediately to some form of postsecondary education in Fall 2004. This immediate matriculation rate ranks South Carolina third among all Southern Regional Education Board (SREB) states. [13] Tables 3 and 4 report the rates of college enrollment for all high school graduates (Table 3) and by institutional type (Table 4). | The proportion of South Carolina residents aged 18-24 in 2005 who have gone to college or hold a postsecondary credential ranks 43rd in the nation, indicating that South Carolina's young people are less likely to attend college if they do not do so immediately upon graduating from high school. This relatively low proportion also likely reflects the low high school graduation rate. [5] | South Carolina families who send a child to public colleges in-state devote a larger proportion of their income to the cost than do families in most other states nationally. [7] |



## Table 3: College Enrollment by Postsecondary Program Type for 2005 South Carolina Public High School Graduates

| Program Type* | 2005 Enrollment Rate |
|---|---|
| Four-Year Degree Program | 42% |
| Two-Year Degree Program | 27% |
| Other Postsecondary Degree Program | 1% |
| Did Not Pursue Postsecondary Education | 31% |

Source: South Carolina Department of Education, *2005-06 College Freshman Report*. 2006, Author: Columbia, SC.

* Includes all public and independent in-state and out-of-state institutions of higher education as well as all technical and regional two-year colleges. Also includes those who have already earned a technical certificate.

## Table 4: 2006 South Carolina Postsecondary Schools and Enrollment

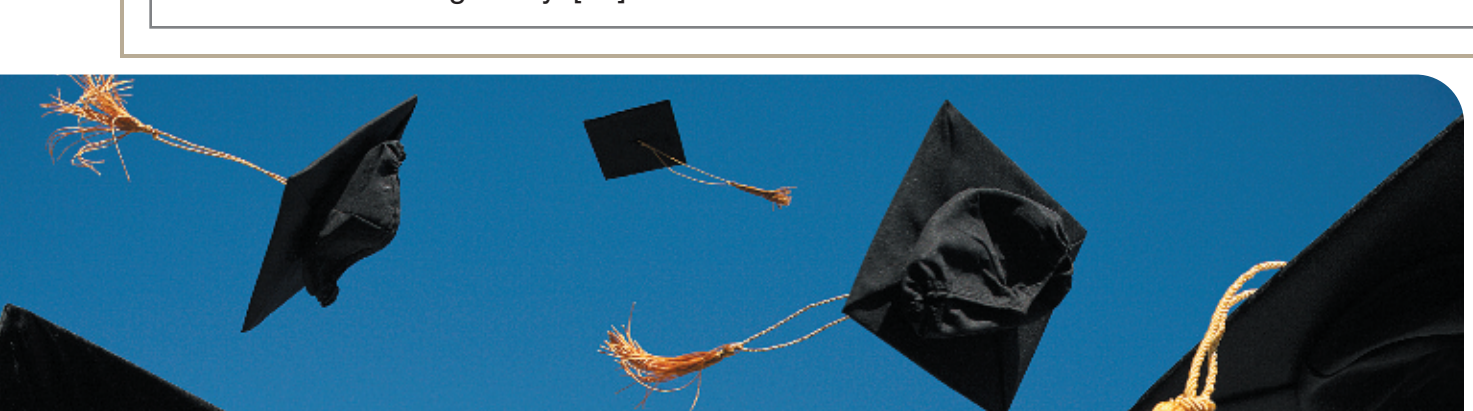
| | Number of Colleges and Universities | % of South Carolina Postsecondary Enrollment |
|---|---|---|
| Research Institutions | 3 | 17.5 |
| Teaching Institutions | 10 | 22.8 |
| Public Two-Year Regional | 4 | 1.9 |
| Public Technical Colleges | 16 | 40.4 |
| Independent 4-Year | 22 | 17.0 |
| Independent 2-Year | 1 | 0.4 |
| **Total** | **56** | **100.0** |

Source: South Carolina Commission on Higher Education, *South Carolina Higher Education Statistical Abstract.* 2007, Author: Columbia, SC

## Issue: Postsecondary Completion

### Key Points

The six-year degree completion rate for students at South Carolina's public four-year institutions was 60% for the 1999 beginning cohort, exceeding the 52% average completion rate for the Southern Regional Educational Board (SREB) states. For the cohort that began in 2002, the completion rate at South Carolina's public two-year institutions was 13%, which was lower than the 17% average for the SREB states. The transfer rate for the same cohort was 14% for South Carolina and 17% regionally. [19]



## Issue: Retention

### Key Points

58% of South Carolina students who do not require remediation will earn a baccalaureate degree within eight years. Only 17% of students who require remediation will receive a baccalaureate degree within eight years. [17]

The rate at which full-time students are retained places South Carolina's four-year institutions in the middle when compared to all other states, while the state ranks much lower in the retention of part-time students at four-year institutions. Table 6 breaks down the retention rates in South Carolina by student and institutional type and includes a national comparison. [16]

South Carolina postsecondary institutions retain full-time students at a much higher rate than part-time students. See Table 5 for the breakdown of South Carolina's full- and part-time student retention at two- and four-year institutions. [16]

### Observations

- The retention rate of first-time degree-seeking students at public two- and four-year institutions suggests that improvement in alignment between high school and college expectations might be a potential means to improve the retention rate.

## Table 5: Retention of South Carolina First-Time, Degree-Seeking Students Retained from Fall 2005 to Fall 2006

| Type of Institution | Full-Time Retention Rate | Part-Time Retention Rate | Overall Retention Rate |
|---|---|---|---|
| Research Institutions | 87.1% | 34.3% | 86.5% |
| Teaching Institutions | 70.8% | 32.8% | 70.0% |
| Public Two-Year Regional | 60.1% | 25.6% | 56.3% |
| Public Technical Colleges | 53.6% | 40.1% | 49.6% |
| Independent 4-Year | 69.4% | 50.5% | 68.8% |
| Independent 2-Year | 57.0% | 0.0% | 55.7% |
| **Totals** | | | |
| Public Institutions | 67.6% | 39.5% | 63.4% |
| Independent Institutions | 68.6% | 48.1% | 68.0% |
| 4-Year Institutions | 75.2% | 41.0% | 74.6% |
| 2-Year Institutions | 58.9% | 22.7% | 56.1% |
| All Colleges and Universities | 67.8% | 39.8% | 64.2% |

Source: South Carolina Commission on Higher Education, *Retention Files*. Retrieved August 15, 2007 from http://www.che.sc.gov/New_Web/Rep&Pubs/Enrollment/2006-07.htm

## Table 6: Retention of First-Time Students Retained from Fall 2004 to Fall 2005

| Type of Institution | South Carolina | National Range | State Rank Nationally |
|---|---|---|---|
| Full-Time Students at 4-Year Institutions | 75% | 57-86% | 29 |
| Part-Time Students at 4-Year Institutions | 30% | 27-60% | 45 |
| Full-Time Students at 2-Year Institutions | 54% | 35-75% | 35 |
| Part-Time Students at 2-Year Institutions | 42% | 26-59% | 17 |

Source: U.S Department of Education; National Center for Education Statistics, *The Integrated Postsecondary Education Data System Dataset Cutting Tool*. Retrieved July 20, 2007 from http://nces.ed.gov/ipedspas/dct/index.asp

Note: Data excludes for-profit institutions.

Note: Full-time data includes degree-seeking students only, while part-time data includes degree- and non-degree-seeking students.

# Issue: Economic Implications

## Key Points

The percentage of South Carolina's adults with incomes above the national median is 42%. South Carolina's economic base is being transformed into one that will require far higher skill levels of workers. Shortages are being reported or forecasted in fields such as information technology, manufacturing technology, nursing, and teaching. [5, 19]

### Observations

- The proportionately higher cost paid by South Carolina families for their children to attend college in-state suggests a parallel responsibility of the state to ensure that students who are recruited to South Carolina institutions are truly prepared to succeed in entry-level college courses.
- The dynamically changing nature of the South Carolina economy suggests that the demand for students with postsecondary levels of education will continue to increase rapidly. Meeting this demand will require an expansion of the college-going pool and an increase in the retention of those students once they begin postsecondary programs of study.
- The median annual earnings in 2005 for South Carolina workers aged 25 and older without a high school diploma were $21,268. Those with a high school diploma and no college earned $30,316, 42% more than those with no diploma. Having earned an associate's degree led to a 71% increase in annual earnings over no high school diploma, to $36,348. Finally, residents with a bachelor's degree earned an average income of $48,724, nearly 130% more than those who did not earn a high school diploma. [20]
- Over the last three decades, the economic value of a high school diploma has declined, while the economic value of a four-year degree has increased, which indicates the growing importance of earning a bachelor's degree for South Carolina residents. [11, 21]

# Conclusion

This environmental scan highlights challenges and opportunities for the South Carolina educational system. The next steps will include the development of programmatic and policy responses that help address issues identified in the scan.

The South Carolina Commission on Higher Education, in partnership with the South Carolina Department of Education and the South Carolina Technical College System, has initiated a series of activities and programs designed to improve alignment between secondary and postsecondary institutions throughout the state. These initiatives are being undertaken to help the state's educational system respond to the legislative mandates found in the Education and Economic Development Act of 2005 and to adapt to the realities of the state's changing economy. Additional information is provided in separate documents and on the Project's website (www.epiconline.org/south_carolina).

The intent of the South Carolina Course Alignment Project is to provide a framework within which education stakeholders can develop strategies, programs, and solutions locally that address many of the issues identified in the environmental scan. In this fashion, local efforts and activities can serve as the basis for policy recommendations that lead to better alignment between high school and postsecondary education, thereby increasing the number of students in the state who are prepared to pursue postsecondary education successfully.

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**Please visit the Project's website at www.epiconline.org/south_carolina to learn more about the project.**

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