



# South Carolina Commission on Higher Education

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## **MEMORANDUM**

**To:** Chairman John Finan, and Members, Commission on Higher Education

**From:** Dr. Bettie Rose Horne, Chair, and Members, the Committee on Academic Affairs and Licensing

### **Consideration of Annual Evaluation of Associate Degree Programs FY 2012-2013**

#### **Background**

The *South Carolina Master Plan for Higher Education* (1979) requires the annual review of associate degrees in the State's public higher education institutions.<sup>1</sup> In 1996, the passage of Act 359 underscored the importance of program accountability by focusing on performance indicators including time to degree and graduates' first-time passing rates on professional licensure examinations.<sup>2</sup> This edition of the annual evaluation of associate degree programs provides an assessment of academic program performance across all disciplines during the 2012-2013 academic year. Data and assessment of program enrollment, completion and placement are provided through a general analysis of programs of study at the University of South Carolina system and the South Carolina Technical College System. Institutions complement the data provided with information about the initiatives implemented to continue success of strong-performance academic programs, and plans initiated to increase the success of programs needing to show improvement.

The purposes of this study remain relevant as part of the focus of both state and national governments on institutional accountability. The language of Act 359 maintained the purposes of this annual review as they had been articulated in earlier legislation and Commission policy as follows:

1. to ensure that programs demonstrate responsiveness to employment trends and meet minimum standards of enrollment, graduation, and placement
2. to identify programs which need to be strengthened.

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<sup>1</sup> *South Carolina Master Plan for Higher Education*. Columbia: South Carolina Commission on Higher Education, 1979. 24, 129.

<sup>2</sup> South Carolina, General Assembly. "S\*1195 (Rat #0368, Act #0359 of 1996) General Bill." 1995-96 Bill 1195. May 20, 1996. Accessed December 23, 2014. [http://www.scstatehouse.gov/sess111\\_1995-1996/bills/1195.htm](http://www.scstatehouse.gov/sess111_1995-1996/bills/1195.htm).

Given the preponderance of associate degree programs which are employment driven and thus related to specific occupations or occupational sectors, this report has consistently sought to provide insight into specific programs which are either *exceptionally achieving* their ends or are *underperforming* in relationship to the state's current and future economic development needs.

The procedures for this review require each program's productivity to be evaluated in terms of enrollment, number of graduates, and percent of graduates placed in a related job or continuing their studies full-time. The following criteria apply to this review process:

1. Each program must produce at least six (6) graduates during the evaluation year or an average of at least six graduates over the most recent three-year period.
2. At the most recent fall term, each program must enroll at least sixteen (16) students who generate twelve (12) full-time equivalents.
3. At least fifty percent (50%) of the graduates available for job placement must be placed in a job related to their education or continue their education on a full-time basis.

Programs which fail to meet these criteria must be canceled, suspended, or put on probation unless their continuation is justified to the Commission. Justification for programs may take into consideration factors such as manpower requirements, funding, and employment "stop outs" of students. In addition, three programs—General Technology, Vocational Technical Education, and General Engineering Technology—historically have had different and much more flexible standards of evaluation because of the unique needs they have filled and the low enrollments which they were expected to produce. As such, they have been considered "justified" for continuation regardless of whether or not they met the evaluation requirements.

When a degree program is placed on probation, the institution may continue to offer it but must provide a plan for the program to meet all criteria within three years. Suspension means that the program's inability to meet the minimum criteria is serious enough to discontinue temporarily the enrollment of new students in the program until the institution can study the need and demand for the program. A program may remain on suspension for three years.

### **Distribution of Associate Degree Programs by System and Sector**

For this reporting period, associate degree programs exist in all 16 technical colleges and the four two-year regional branches of the University of South Carolina (USC). In addition, associate degrees are offered by USC Columbia at Fort Jackson and by USC Beaufort at the Marine Corps Air Station. Both of these continue at the request of the military base administration and commanders.

This current assessment of associate degree programs in the state's public institutions relies on academic year 2012-2013 graduation and employment data and Fall 2013 enrollment data. Evaluation encompasses 293 associate degree programs in the technical college system, and nine (9) associate degree programs in the USC System: seven (7) at the two-year campuses, one at USC Beaufort, and one at USC Columbia. New associate degree programs (those implemented within the past three years) are always excluded from this analysis.

#### **I. General Analysis of the Programs of Study in the USC System**

As stated, all USC regional campuses designated as "two-year," as well as USC Beaufort at the Marine Corps Air Station and USC Columbia at Fort Jackson, continue to offer Associate of Arts/Associate of Science (AA/AS) degree programs. USC Beaufort, formerly a two-year institution approved to become a four-year institution in June 2002, has been permitted by the Commission on

Higher Education to continue to offer the Associate of Arts/Associate of Science degree program at the military bases in Beaufort. The number of graduates from the program at USC Beaufort has maintained a level trend, averaging precisely four (4) graduates annually over the past five years. (See **Table 1.**) However, according to USC Beaufort officials, the dramatic decline in the on-base associate degree program compared to previous years has been precipitated at least in part by the fact that once USC Beaufort became a four-year institution it charged tuition and fees for the two-year program at the four-year rate. Given the presence of other providers on the military base with significantly lower charges, enrollments have suffered. USC Beaufort has recently adopted a new “military rate” for active military personnel; along with other resources that will be allocated to the program, USC Beaufort is working proactively to revitalize this program.

In February 1998, USC Columbia requested and received approval to revise its mission statement so that its ongoing offering of the Associate of Arts degree program at Fort Jackson would be officially included as part of its institutional mission. Enrollment and graduation data show that this program is very small. (See **Table 1.**)

In the past, Commission staff reasoned that because the associate degree program at Fort Jackson is small and peripheral to the mission of the state’s comprehensive *research* university, the degree program would be more appropriately offered by a local two-year institution, either USC Sumter or Midlands Technical College. The University administration has maintained historically that the program is integral to fulfilling the University’s community and humanitarian mission, and representatives of Fort Jackson have strongly supported this view, despite the program’s small size.

As **Table 1** shows, over the most recent five years the numbers of graduates from the associate degree programs in the University of South Carolina system have varied considerably. The data reported from the USC Columbia Institutional Research Office show that for 2012-2013, four of the six USC campuses offering the AA/AS program have experienced increases in graduates compared to the 2011-2012 academic year (USC Beaufort, Lancaster, Sumter and Union). Two USC campuses experienced a decrease in graduates during the same time (USC Columbia and Salkehatchie). The total number of AA/AS graduates in the USC System increased 3.3% (356 to 368) from 2011-2012 to 2012-2013. Reviewing the most recent five years of data in **Table 1** verifies this increase is driven by degree completion growth at USC Salkehatchie, Sumter and Union, and degree completion resurgence at USC Lancaster.

However, a closer inspection of the data from two USC campuses reveals mixed productivity results. With an associate degree graduation average of 3.3 annually for the three years most recently available, 2010-11 through 2012-13, and producing a class of only four (4) graduates for the most recent year in review, 2012-2013, productivity at USC Beaufort did not satisfy the first benchmark (graduation). Moreover, 10 total students enrolled in the associate degree program (headcount) translating into eight (8) full-time equivalents (FTE) means USC Beaufort also did not meet the second criterion (enrollment) that required a sixteen-student headcount (16) and 12 FTEs, respectively. As data will show on p.12 and following, USC Beaufort demonstrates a successful job and full-time study placement rate for 2012-2013 graduates, seventy-five percent (75%), suggesting that the more students the campus can recruit and retain in the General Arts & Science program at the Marine Corps Air Station, and by maintaining its placement trend, the more graduates it can steer successfully to related jobs and continued full-time studies.

The General Arts & Science program at USC Columbia is the other associate degree curriculum that partially satisfies the three criteria. This program at Fort Jackson awards degrees to an average of six (6) graduates over the most recent three years available, 2010-11 through 2012-13, satisfying the first criterion (graduation). However, nine (9) total students enrolled in the program (headcount) translating into four (4) full-time equivalents means USC Columbia also did not meet the second criterion (enrollment) that required a sixteen-student headcount (16) and 12 FTEs, respectively. As

data will show on p.12 and following, USC Columbia demonstrates a successful job placement rate for 2012-2013 graduates, seventy-five percent (75%), but no full-time study placement rate (0%) for the same year, suggesting two conclusions. First, by maintaining its workforce placement trend, the more students the campus can recruit and retain in the General Arts & Science program at Fort Jackson, the more graduates it can steer successfully to related jobs. The second deduction is that recent full-time study placement trends (three AA/AS graduate placements in 2010-2011, and one in 2011-2012) require investigation to determine which if any recruitment reinforcement is needed to catalyze the student transfer pipeline from associate degree completion at Fort Jackson toward continuing full-time studies at four-year institutions or elsewhere.

Completion of an associate degree is a critical success factor for both student transfer to a four-year institution and *the rate* at which such transfer students complete the baccalaureate degree.<sup>3</sup> These dynamics, linked with students' eligibility for the Lottery Tuition Assistance Program while working toward their associate degrees, suggests that the two-year USC regional campuses should continue to review and implement the most effective strategies for promoting attainment of the associate degree as a "best practice" to encourage student progression toward completion of a baccalaureate degree.

Two developments in South Carolina have made the impetus even more important to increase the number of associate degree graduates, and their subsequent successful transfers to baccalaureate programs, even more important. As a matter of state policy through legislation, the Education and Economic Development Act of 2005 (EEDA) has placed a premium on "seamless" transfer in higher education with the end of creating a better-prepared and better-credentialed work force in the state. More recently, the Higher Education Study Committee and the Commission on Higher Education have identified as the first goal in the publication, *Leveraging Higher Education for Stronger South Carolina: Action Plan Implementation*, making South Carolina one of the most educated states by 2030 by increasing degree attainment.<sup>4</sup> This goal cannot be achieved without successful efforts, targeted to various elements of the population, to increase the numbers of persons with earned associate and baccalaureate degrees in South Carolina. Coupled with clear empirical evidence of the value added by baccalaureate-degree completers to the state's economic and civic development, this calls for state policy makers to make efforts to increase associate degree production at all the technical colleges and the USC two-year campuses. These institutions have a significant opportunity, challenge, and responsibility to increase the number of degree completers and prepare them for entry into a four-year program.

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<sup>3</sup> "Affordability and Transfer: Critical to Increasing Baccalaureate Degree Completion." The National Center for Public Policy in Higher Education. June 1, 2011. Accessed December 19, 2014. [http://www.highereducation.org/reports/pa\\_at/index.shtml](http://www.highereducation.org/reports/pa_at/index.shtml).

<sup>4</sup> "Leveraging Higher Education for a Stronger South Carolina." South Carolina Legislature. March 1, 2009. Accessed December 19, 2014. [http://www.scstatehouse.gov/archives/CommissiononHigherEd/ActionPlan\\_Fullreport\\_final\\_withcover.pdf](http://www.scstatehouse.gov/archives/CommissiononHigherEd/ActionPlan_Fullreport_final_withcover.pdf).

**Table 1 Five Year Data of USC System AA/AS Program Graduates**

	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
<b>Four-Year Campus</b>					
USC Columbia (Ft. Jackson)	5	8	6	7	4
USC Beaufort (Marine Corps Air Station)	5	5	3	3	4
<b>SUBTOTAL</b>	<b>10</b>	<b>13</b>	<b>9</b>	<b>10</b>	<b>8</b>
<b>Two-Year Campus</b>					
USC Lancaster	119	112	86	87	100
USC Salkehatchie	85	109	134	127	118
USC Sumter	50	64	88	75	84
USC Union	45	44	44	57	58
<b>SUBTOTAL</b>	<b>299</b>	<b>329</b>	<b>352</b>	<b>346</b>	<b>360</b>
<b>TOTAL</b>	<b>309</b>	<b>342</b>	<b>361</b>	<b>356</b>	<b>368</b>

Source: USC annual reports on associate degree data

### **Applied, Occupationally-Specific Two-Year Degrees in the USC System**

The two-year campuses of the USC system present an important challenge to and opportunity for higher education institutions in South Carolina. Three of the four two-year regional campuses are located in communities without a main campus of a technical college: USC Lancaster, USC Salkehatchie, and USC Union. Of these three, only USC Lancaster offers occupationally-specific degree programs, although neither their authorizing legislation nor Act 359 prohibits the others from offering such degrees. The occupational programs at USC Lancaster are in nursing, criminal justice, and business. Graduates for the past two academic years from the occupationally-specific two-year programs at USC Lancaster are listed below in **Table 2**. While the number of graduates has increased in criminal justice and business, the number of graduates in nursing has decreased. In the most recent year, all three of these occupational programs meet the CHE statewide productivity requirements. The USC Lancaster occupational associate degree programs serve a small—but vital—radius of counties in the state.

**Table 2 USC Lancaster Graduates of Two-Year Occupational Associate Degree Programs of Study (Academic Years 2011-2012 and 2012-2013)**

<b>Academic Year</b>	<b>Nursing</b>	<b>Criminal Justice</b>	<b>Business</b>
2011-2012	14	11	19
2012-2013	7	24	29

The Commission on Higher Education has encouraged collaborative efforts among the two-year USC regional campuses and the technical colleges as an avenue to spur economic development. Both systems have responded with a variety of initiatives designed to meet the needs of rural areas. For example, USC offers four Bachelor's degrees in Elementary Education, Nursing, Liberal Studies

and Organizational Leadership through USC Salkehatchie partnerships with USC Columbia and USC Aiken. USC Salkehatchie offers five other bachelor's degrees online through the USC Palmetto College. USC Lancaster offers the Bachelor of Science in Nursing through USC Columbia and two additional bachelors' degree through Palmetto College.

York Technical College has reported significant enrollment growth in occupational courses/programs offered in Lancaster County through the Kershaw-Heath Springs Center. The Technical College of the Lowcountry reports three developments: 1) collaboration with Colleton County to build a Quick Jobs Center to offer technology training; 2) collaboration with the Thunderbolt Career and Technology Center; and 3) partnership with Hampton County to renovate and expand technology training at the Mungin Center. In addition, a training center opened in Union in Fall 2009 in which USC Union offers general education courses, and Spartanburg Community College offers technical education courses.

Another effort of note is the collaboration between the Technical College System and the University of South Carolina's new online initiative, Palmetto College. The two organizations are exploring articulation and transfer agreements in several program areas. The intent of the initiative is to build upon existing agreements and continue the development of seamless educational pathways for students. All such initiatives are commendable.

In summary, graduation rates and student enrollment data for the current review period show that all the two-year programs in the USC system (AA/AS and occupational programs) are currently meeting at least one productivity requirement. Most of the campuses (four of six) are meeting all criteria. However, the data reveal that further consideration of best intervention practices are needed to improve and sustain productivity for all three criteria—enrollment, graduation and job or full-time study placement—at USC Columbia on Fort Jackson and USC Beaufort at the Marine Corps Air Station.

## II. General Analysis of Associate Degree Programs in the Technical Colleges

**Table 3 provides** a summary of the number of programs evaluated over the past 10 years in various performance categories at the technical colleges.

**Table 3 Ten Year Summary of Annual Associate Degree Program Evaluation In the Technical Colleges**

Year Evaluated	Good Standing	On Probation	Under Suspension	Cancelled	Total
2004	265	22	11	5	303
2005	276	13	8	4	301
2006	277	15	5	4	301
2007	281	15	4	4	304
2008	274	28	2	2	306
2009	275	29	5	0	309
2010	270	30	2	7	309
2011	291	22	4	0	317
2012	285	15 <sup>5</sup>	4	0	304
2013	283	7	2	1	293

In the data for the current annual report, seven (7) programs out of 293 (= 2.4%) analyzed at the technical colleges are on probation. By comparison, last year's report regarding academic year 2011-2012 showed a total of 15 programs out of a total of 304 (= 4.9%) were on probation; and the previous year 22 out of 317 programs (= 6.9%) were on probation. Overall, this decline to only seven (7) probationary programs represents a 53% reduction from the 15 programs on probation the year prior (2012), and a 77% reduction from the most recent five-year high threshold of 30 on probation in 2010. This trend is commendable. For this reporting year, the specific programs (by degree and institution) on probation are in **Table 4**.

**Table 4 Associate Degree Programs on Probation in Fall 2013 (Total = 7)**

College	Cluster	Program
Aiken Technical College	EDU	Early Care and Education
Aiken Technical College	MKT	Marketing
Greenville Technical College	LAW	Criminal Justice Technology
Greenville Technical College	STEM	Biotechnology
Greenville Technical College	STEM	Geomatics Technology
Trident Technical College	STEM	Civil Engineering Technology
Williamsburg Technical College	BUS	Administrative Office Technology

<sup>5</sup> After previously reporting the Diversified Agriculture program at Piedmont Technical College as *Probation-1* for the academic year 2011-2012 annual evaluation, the SC Technical College System discovered upon internal review that the course did not merit probation status since it had not yet completed three graduation cycles, which is a criterion required for programs to be subject to evaluation (SCTCS Procedure 3-1-301.1). Instead, the correct status for Diversified Agriculture for the 2011-2012 academic year evaluation is *NotSub-1* (Not subject to evaluation), reducing the number reported on probation from 16 in last year's report to the correct tally above, 15.

## II A. Engineering and Industrial Technology programs

In last year's report, Engineering Technology and Manufacturing programs represented the highest number on probation with four each (4). Business programs were third with two programs on probation (2). This year no single program represents a probationary outlier. As explained on page 6, particularly noteworthy is that only seven programs (7) are on probation: one each in Early Care and Education, Marketing, Criminal Justice Technology, Biotechnology, Geomatics Technology, Civil Engineering Technology, and Administrative Office Technology. Probation status across seven different programs means that focused efforts by the South Carolina Technical College System have eliminated probationary performance in any one program. For *students*, this movement of programs from probationary status to good status is evidence that colleges have focused intently on the assessment of student needs and program curriculum in an effort to improve retention and completion.

Some programs on probation last year, including Administrative Office Technology, Civil Engineering Technology and Biotechnology, have re-appeared on probation this year. Due to the lack of need in their service areas, the colleges hosting two of these three programs, Civil Engineering Technology and Biotechnology, have initiated program phase-outs. Moreover, regarding the Administrative Office Technology program, Williamsburg Technical College is working diligently to evaluate the staffing, class schedules, and program curriculum in hopes that it will regain *Good* status in the next evaluation cycle.

The data showing low enrollments and graduates in Engineering Technology degree programs is long-standing. As a system, the technical colleges of South Carolina have been described as a national model for preparing the state workforce. However, the System needs to continue to work on developing a long term plan to remove any Engineering Technology programs from the "probationary" group, and keep them off. These programs assist the state in attracting and retaining industries which want to locate in South Carolina. Such industries tend to be engines of major growth and innovation, attracting other corporations to enter into the state. BMW and Boeing are two examples of industries that have moved to South Carolina and provide extensive intangible benefits aside from jobs and income generated.

This report has cited the gulf between the often-stated need by the industrial/engineering community for Engineering Technology graduates and the small enrollments and graduates in these programs. Six years ago the Technical College System reported an initiative to address this issue more systematically by focusing on three areas:

- Elimination of excess coursework in some programs;
- Consolidation of multiple "engineering technology" programs at a single institution to concentrate resources and produce a more integrated curricular approach; and
- Vigorous recruitment of talented high school students, including the granting of college course credit through *Project Lead the Way (PLTW)*, into Engineering Technology programs.

Several institutions have developed initiatives aimed at increasing the numbers of student enrollment and graduation in the Engineering Technology programs. In September 2010, the SC Department of Education signed a formal agreement to work with technical colleges and public universities to promote engineering and mechatronics education after receiving a Rigorous Programs of Study grant from the US Department of Education to establish two pathways designed to positively impact the education of Science, Technology, Engineering, and Mathematics (STEM) professionals in the state. The partners include six technical colleges for *Project Lead the Way* and six technical colleges for mechatronics. Both *PLTW* and mechatronics are programs that begin in high school and allow students to take classes in which they receive dual credit. The University of South

Carolina College of Engineering and Computing serves as the state's *Project Lead the Way* University Affiliate for the grant.

Aiken Technical College has developed a dual-credit Early College for with Pre-Engineering or General Education pathways, available to Aiken county high school students. In Fall 2010, in addition to Teacher Cadets, the institution had 25 high school students enrolled in general education courses. Aiken Technical College and the University of South Carolina Columbia have signed an articulation agreement pertaining to the Pre-Engineering program.

The Technical College System continues to make efforts to increase student enrollment and retention in engineering technology programs. Two years ago, the System initiated a strategic retention plan across the state to create flexible, seamless learning environments while also providing additional academic support for students in engineering technology programs. The plan includes these features:

1. Curriculum revisions that require foundational math courses earlier in the program
2. Enhanced support services such as open labs, supplemental instruction, and mentoring services
3. Flexible scheduling to include smaller class sizes, as well as hybrid, day, and evening courses
4. Work-based learning opportunities through internships and cooperative experiences
5. Project-based learning experiences in core coursework
6. Partnerships with secondary districts through *PLTW*, pre-engineering academies, and agreements

These efforts continue to meet with some success, since three engineering technology programs (**Table 8**, p.11) have moved from *Probation* to *Good* status. All the prevailing economic models for the state's future assume that, together, engineers supported by engineering technicians will play an essential role in building South Carolina's 21st century economy. To meet this goal, the decreasing numbers of students enrolled in and graduating from Engineering Technology programs in the state must be addressed.

## **II B. Continuing Success of Associate Degree Programs in the Technical Colleges**

A primary purpose of the associate degree programs offered at the state's two-year institutions is to prepare students for transfer into baccalaureate programs. In South Carolina, associate degree programs began in the 1970s in response to the needs of persons who, for reasons of finance, geography, and/or historical under-representation in higher education (especially mature students, women, and minorities), found it much more possible to begin a baccalaureate degree program by taking the first two years of coursework at a technical college.

For this reporting year, all associate degree programs in the Technical College System are in the *Good* category regarding the first criterion: that is, producing "at least six (6) graduates during the evaluation year or an average of at least six graduates over the most recent three-year period."<sup>6</sup> (See **Table 5**.)

As **Table 5** demonstrates, the associate degree programs in the Technical College System produce a number of program completers, therefore availing the possibility for transfer into a four-year degree program to many South Carolinians. In fact, the 2012-2013 data show that associate degree programs produced 21% more graduates compared to the previous year (2391 to 1970 = +421). The majority of state technical colleges (10 of 16) graduated more students than in the preceding

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<sup>6</sup> P.2.

year. Six (6) graduated fewer students. Associate degree programs are of unique benefit to the state and to students because they provide the equivalent of the first two years of a baccalaureate education, but at a much lower cost than the standard four-year institution. As of Fall 2009, all associate-level degrees in the Technical College System have been changed to the three nationally recognized designations: A.S., Associate in Science; A.A., Associate in Arts; and A.A.S., Associate in Applied Science.

**Table 5 Graduates of AA/AS/AAS Degrees by Institution, 2008-09 through 2012-13**

Technical College	Year				
	2009	2010	2011	2012	2013
Aiken Tech	45	53	61	74	75
Central Carolina	42	31	28	37	65
Denmark	34	22	10	27	32
Florence-Darlington	36	59	68	76	61
Greenville	207	233	233	235	229
Horry-Georgetown	104	108	182	265	426
Midlands	308	285	312	426	393
Northeastern	28	41	30	28	35
Orangeburg-Calhoun	6	20	9	14	27
Piedmont	58	58	55	52	63
Spartanburg Community College	63	63	106	127	121
Lowcountry	28	54	29	37	26
Tri-County	78	86	120	90	112
Trident	342	313	368	364	611
Williamsburg	17	20	24	44	24
York	60	45	59	74	91
<b>TOTAL</b>	<b>1456</b>	<b>1491</b>	<b>1694</b>	<b>1970</b>	<b>2391</b>

Four institutions were exceptionally successful, graduating at least 61% more students in the current report cycle, class of 2013, than in the previous year, class of 2012.

**Table 6 Exceptional Achievement: Technical Colleges Graduation Rates, 2012-2013**

Technical College	Percentage Increase %	Increase Differential = N
Central Carolina	76%	+28
Horry-Georgetown	61%	+161
Orangeburg-Calhoun	<b>93%</b> (highest % improvement)	+13
Trident	68%	<b>+247</b> (largest headcount increase)

The SC Technical College System attributes these successes primarily to increased collaboration with senior institutions. Collaborative efforts have led to the development of new articulation agreements and transfer opportunities for students upon completion of their AA/AS degree. Horry-Georgetown and Coastal Carolina, for example, have implemented transfer pathways into Coastal Carolina's baccalaureate nursing and education programs. Additionally, the two institutions have established a broad transfer agreement granting junior-year status at Coastal Carolina to students who have completed an AA/AS degree from Horry-Georgetown.

Furthermore, increased emphasis on retention and graduation has prompted colleges to become more proactive in identifying students that may have met all graduation requirements, but failed to apply for graduation. In some instances, students may not be aware that they are eligible for graduation. The provision of enhanced advising and student support services in recent years is designed to keep students informed of their eligibility to graduate. Such services are likely to have contributed to the increase in AA/AS graduates.

The 2009 Higher Education Action Plan addresses the importance of institutions of higher learning creating pathways to transfer students successfully from two-year degree programs to four-year degree programs. In making South Carolina one of the most educated states in the country by the year 2030, the Action Plan recommends that the State "create incentives and requirements for seamless transitions between and among two-year and four-year institutions, including the implementation of a statewide initiative to monitor transfer."<sup>7</sup> The CHE has developed an online course transfer and articulation tool, *SC TRAC*, which will help transfer students identify course equivalencies and degree credit awards for transfer courses. Work is continuing with the institutions to manage course equivalencies, transfer information into the system, and to install interfaces with the system so that information related to course articulation and transfer is easily added and displayed.

## **II C. Importance of the Associate Degree Nursing Programs (ADN)**

For a number of years this annual report has been grounded in two basic assumptions about the program of study leading to the associate degree in nursing:

1. In South Carolina the associate degree in nursing is accepted by employers as a legitimate degree for a Registered Nurse (RN).
2. Meeting employers' demands for a well-educated nursing workforce to provide safe care in hospitals and other healthcare settings requires the sustained commitment of each institution to enroll and graduate increasingly larger numbers of students. (As in many other states, South Carolina regularly graduates about two-thirds of all its new nurse graduates from associate degree programs.)

During the recession, demand for new nurses declined, in part because of delayed retirements, but at the moment we have no way to quantify the decrease. The actual level of employer demand for nurses is unknown because no database has been made available to show what the actual level of employer demand might be. Therefore, it is not possible to know exactly the number of years required to sustain a commitment to increase the totals of nursing graduates. However, the recently established Office for Healthcare Workforce Research in Nursing in the USC Columbia S.C. Center for Nursing Leadership has set one of its priorities as collecting and disseminating supply and

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<sup>7</sup> "Leveraging Higher Education for a Stronger South Carolina." South Carolina Legislature. March 1, 2009. Accessed December 19, 2014.  
[http://www.scstatehouse.gov/archives/CommissiononHigherEd/ActionPlan\\_Fullreport\\_final\\_withcover.pdf](http://www.scstatehouse.gov/archives/CommissiononHigherEd/ActionPlan_Fullreport_final_withcover.pdf).

demand data. As of 2012-2013 data, the South Carolina Technical College System reports a 96% nursing placement rate for the ADN graduates.

The supply of graduates from nursing programs in the Technical College System has grown convincingly since the issuance of the *Colleagues in Caring* report in 2001. Among the 14 established ADN programs in the Technical College System, 10 graduated more students in this year's reporting class and four graduated fewer than last year. A total of 1413 ADN nurses graduated from the Technical College system in 2012-2013. The significant growth in 10 years from 918 graduates in 2003-2004 to 1413 in 2012-2013 demonstrates the capacity of the technical college system to respond to market demand. (See **Table 7**.)

**Table 7      Ten Year Data for Total Numbers of Graduates from Technical Colleges' Associate Degree in Nursing Programs, 2003-2004 through 2012-2013**

2003-2004	918
2004-2005	968
2005-2006	940
2006-2007	982
2007-2008	1156
2008-2009	1274
2009-2010	1283
2010-2011	1272
2011-2012	1264
2012-2013	1413

Two programs are noteworthy for recent success. The nursing program at Spartanburg Community College achieved the highest percentage of improvement compared to the previous reporting year, producing 48% more graduates (+15) in 2012-2013 than in 2011-2012 (46 to 31). Moreover, Horry-Georgetown Technical College achieved the highest headcount increase, producing 154 ADN graduates in 2012-2013, compared to 121 in 2011-2012 (+33 = 27% increase).

#### **II D.      Degree Programs No Longer on Probation**

For the current reporting year, a total of nine (9) programs which had been on probation in the technical colleges for last year's reporting period have been recommended by the State Technical College System for placement in *Good* standing. In this group there are three programs in Engineering Technology (STEM), three in Manufacturing, and one each in Instructional Technology, Finance, and Business. The degrees and institutional locales of all the programs moving from *Probation* to *Good* are in **Table 8**. Engineering Technology programs accounted for one third of the programs moving from *Probation* to *Good* status.

**Table 8 Degree Programs Returning to Good Status from Probation 2012-2013 (=9)**

College	Degree	Program
Denmark Technical College	IT	Computer Technology
Greenville Technical College	FIN	Accounting
Greenville Technical College	BUS	Administrative Office Technology
Midlands Technical College	MFG	Machine Tool Technology
Piedmont Technical College	STEM	General Engineering Technology
Piedmont Technical College	STEM	Mechanical Engineering Technology
Tri-County Technical College	MFG	Heating, Vent., and Air Cond. Technology
Trident Technical College	MFG	Aircraft Maintenance Technology
Trident Technical College	STEM	Mechanical Engineering Technology

## II E. Tabular Analysis of Associate Degree Programs

**Table 9** shows the programs in the Technical College System for this period which are on suspension. It is noteworthy that there are only two programs in this category, a fact which suggests that planning by the Technical College System for technical programs, based upon community and business demand for graduates in certain fields, has minimized the need to suspend and cancel programs.

**Table 9 Associate Degree Programs on Suspension in 2013 (or Continued for 1st or 2nd Year Suspension) (=2)**

College	Degree	Program
<b>First Year:</b>		
Aiken Technical College	BUS	Administrative Office Technology
Spartanburg Technical College	STEM	Civil Engineering Technology

## III. Analysis of Job Placement and Continued Education for Completers

### III A. The University of South Carolina System

As noted, associate degree programs satisfy the job placement and continuing education criterion when fifty percent (50%) or more of their available graduates<sup>8</sup> are employed in fields related to their education, or are continuing their studies on a full-time basis.<sup>9</sup> For the current reporting cycle (AY 2012-2013), all associate degree programs in the University of South Carolina system satisfy this benchmark. Between the two trajectories of job placement and continued studies, three of the six USC campuses produce more graduates that immediately enter the workforce than graduates that continue immediately with full-time studies: USC Beaufort, USC Columbia, and USC Union. The remaining three campuses produce more graduates that immediately continue with full-time studies than graduates that enter the workforce: USC Lancaster, USC Salkehatchie, and USC Sumter.

<sup>8</sup> For reporting accuracy, the CHE annual evaluation aligns with both the SC Technical College System and the USC system, reporting on "Available Graduates" instead of "Total Graduates" for a specific academic year. *Available Graduates* are a subset of *Total Graduates* and equal the total number of graduates for a specific year, here 2013, minus "Graduates Excluded," who are identified as either "deceased, disabled or were not actively seeking employment." Source: SC Technical College System, *Program Evaluation Legend of Abbreviations and Terms for the College Exhibits*, November 2015. N.B. A review of the data confirms that Available Graduates always equal 90% to 100% of Total Graduates: 100% for the six USC campuses and 97% or higher for 14 of the 16 SCTCS institutions.

<sup>9</sup> P.2.

Identifying the reasons for these outcomes requires continued inquiry. However, strong correlations are evident.

### 2012-2013 Graduating Class Size

As **Table 10** shows, generally, the smaller the number of associate degree graduates from a USC system campus (column 1), the greater the percentage of these graduates that entered the workforce versus full-time school (columns 3 and 4). This is the case for the three system campuses noted. USC Beaufort and USC Columbia identified four (4) graduates each as “available for employment or transfer” (meaning, transfer to another campus to continue full-time studies). Fifty percent (50%: N=2) at USC Beaufort and 75% (N=3) at USC Columbia entered the workforce. USC Union reported considerably more graduates, 58, as available and 48% of them (N=28) entered the workforce.

However, the three USC campuses with the largest number of graduates available yielded higher percentages of graduates that continued in full-time studies after earning their associate degrees as opposed to entering the workforce. Of these, the USC Sumter pool of 84 available graduates was the smallest, but still 26 more (+44%) than the 58 at USC Union. Of Sumter's 84 available graduates, 37 were enrolled in full-time studies (44%), with only 26 in the workforce (31%). The status of the remaining 25% is unknown based on their responses to the USC inquiry.

USC Salkehatchie posted the class of graduates next largest by count available at the end of the 2012-2013 academic year. Of 118 associate degree completers, 80 pursued additional education full-time (68%), and 32 entered the workforce (27%). Again, the status of the remaining 5% is unknown.

The University of South Carolina at Lancaster posted the largest number of associate degree graduates available for employment or academic transfer among all the campuses in the USC system. The four associate degree programs in General Arts & Science, Criminal Justice, Nursing and General Business combined to produce 160 graduates after the 2012-2013 academic year. Seventy (70) of the graduates (44%) transferred to continue full-time studies. Forty-six (46 = 29%) entered the workforce. Among the four programs at USC Lancaster, the greater number of graduates continued full-time studies as opposed to entering the workforce after graduating from three programs: General Arts & Science, Criminal Justice, and General Business. Nursing was the single program with more graduates entering the workforce, indeed all (7 of 7 = 100% placement), with none continuing immediately with post-associate degree full-time studies (0 of 7).

**Table 10 Placement Benchmark for the University of South Carolina System**

USC Campus	Graduates Available	Graduates Employed in a Related Field	Graduates Pursuing Additional Full-Time Studies	Total Employed or Enrolled (Column 3+4)	Placement Percentage (of Column 5)
Beaufort	4	2	1	3	75
Columbia	4	3	0	3	75
Union	58	28	24	52	90
Sumter	84	26	37	63	75
Salkehatchie	118	32	80	112	95
Lancaster	160	46	70	116	74

## **Degree Program Discipline versus Location**

All of the USC system campuses offer the associate degree in General Arts & Science, and five of the six only offer this major. Only USC Lancaster offers additional majors, as noted, in Criminal Justice, Nursing and General Business. With the numbers of completers in General Arts & Science spanning from a low tally of four (4 each at Beaufort and Columbia) to as many as 118 (Salkehatchie), there is no correlation between the type of major offered and the number of students completing its curriculum. Therefore, no inference can be made from the data available of comparative student interest statewide in the General Arts & Science degree as offered in the USC system.

However, notable about the USC system data is that the General Arts & Science degree program consistently yields its strongest numbers of completers at two campuses in areas responding to high economic and workforce development needs<sup>10</sup>: USC Lancaster in Lancaster County and USC Salkehatchie Allendale County, graduating between 85 and 135 completers each year since 2010-2011. Moreover, the two USC system campuses graduating the least number of General Arts & Science completers each year are USC Beaufort and USC Columbia, graduating between three (3) and seven (7) annually since 2010-2011. Important to recall about the associate programs at USC Beaufort and USC Columbia is that both are offered on military bases, with considerable competition from other institutions in-state and out-of-state that market strategically to servicemen and servicewomen. Again, both campuses have made a case for maintaining program offerings at the Marine Corp Air Station (USC Beaufort) and Fort Jackson (USC Columbia), respectively. This assessment does suggest, however, that renewed dialogues may be warranted to appraise best strategies to recruit students among their respective local military populations to catalyze and sustain notable long-term growth.

### **III B. The South Carolina Technical College System**

Of the 293 associate degree programs evaluated in the SC Technical College System for 2012-2013, 291 appear to satisfy the workforce and full-time studies benchmark for graduate placement. The data available identifies students working or in school, with "in school" meaning both full-time and part-time enrollment, as opposed to full-time alone. As Table 11 shows, all of the 16 institutions placed a high percentage of their graduates in jobs or full-time studies, satisfying the 50% threshold by wide margins. Aiken Technical College and The Technical College of the Lowcountry are distinguished with the state's highest placement rate, 97%. Trident Technical College, Greenville Tech and Midlands Tech place the highest headcounts with over 3200 graduates entering the workforce or continuing full-time studies (1452+880+879=3211). Overall, the 16 Technical College System institutions average over an 89% placement rate for their graduates.

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<sup>10</sup> Business Intelligence Department, S.C. DEW. "Community Profile - Lancaster County." December 17, 2014. Accessed January 26, 2015. [http://lmi.dew.sc.gov/lmi site/Documents/CommunityProfiles/04000057.pdf](http://lmi.dew.sc.gov/lmi%20site/Documents/CommunityProfiles/04000057.pdf).  
"Monthly Unemployment Rates Ranked By County." Monthly Unemployment Rates Ranked By County. December 19, 2014. Accessed January 26, 2015. [http://www.eascinc.com/unemployment\\_rate.html](http://www.eascinc.com/unemployment_rate.html).  
"Allendale County QuickFacts." Allendale County QuickFacts from the US Census Bureau. December 4, 2014. Accessed January 26, 2015. <http://quickfacts.census.gov/qfd/states/45/45005.html>.

**Table 11 Placement Benchmark for the SC Technical College System**

<b>Institution</b>	<b>Total Placed</b>	<b>Percentage Placed</b>
Aiken Tech	289	<b>97</b>
Central Carolina	274	94
Denmark	67	74
Florence-Darlington	474	93
Greenville	<b>880</b>	78
Horry-Georgetown	743	93
Midlands	<b>879</b>	84
Northeastern	120	92
Orangeburg-Calhoun	256	95
Piedmont	486	85
Spartanburg Community College	403	87
Lowcountry	177	<b>97</b>
Tri-County	492	82
Trident	<b>1452</b>	90
Williamsburg	55	92
York	370	93
<b>TOTAL PLACEMENT</b>	<b>7417</b>	<b>AVERAGE 89%</b>

The two programs that did not immediately place available graduates in discipline-related jobs or continued full-time studies differ significantly from each other by field and recent productivity history, therefore availing no apparent correlations to infer common factors in their performance. As noted, Criminal Justice Technology, a law discipline at Greenville Technical College, was on probation in 2013.<sup>11</sup> However, 2013 was its first probationary year, with only 40% of the program's graduates placing immediately in continuing full-time studies or a job related to the discipline. For the two previous reporting years, 2011 and 2012, the program was in Good status, signifying again that the placement decline was a new development.

Contrary to this, the associate program in Civil Engineering Technology, a STEM discipline at Spartanburg Community College (SCC), was in its third and final year of probation in 2011 and moved to suspension in 2012 and 2013, the two most recent years available. As noted in the introduction of this report, "suspension means that the program's inability to meet the minimum criteria is serious enough to discontinue temporarily the enrollment of new students in the program until the institution can study the need and demand for the program. A program may remain on suspension for three years." While SCC no longer publishes the program as an available curriculum<sup>12</sup>, forthcoming annual evaluation data from the Technical College System will confirm its status.

A final observation concerning the associate degree programs offered at the technical colleges is that while all 16 institutions demonstrate exceptional institutional placement rates, among their 293 majors evaluated this cycle, there is a small complement of associate degree programs that are not failing but are not substantially outpacing the 50% placement threshold either. Nine (9) successful associate degree programs are within 10 percentage points of the 50% placement requirement to

<sup>11</sup> P.6

<sup>12</sup> "Credit and Degree Programs": Spartanburg Community College. Accessed January 22, 2015. <https://www.sccsc.edu/credit-programs/>.

avoid probation, meaning only fifty (50) to fifty-nine (59) percent of their 2013 graduates found immediate placement in a job related to their degree discipline or continued in full-time studies. Surpassing the 50% success threshold means this is no cause for alarm. However, surpassing it at this rate means these programs require urgent renewed productivity reviews, which the institutions may have initiated already. As an example, for a degree program that annually produces 25 to 30 completers but places 59% of them or less in jobs or continued full-time studies, if only three more available graduates did not find placement in a given year, the program enters probation. Whether such a liminal performance is an aberration or a recent trend, leaders of degree programs should consider investigating actionable best practices for implementation that will elevate the graduates' jobs and full-time studies placement success from proximity to programmatic probation to a more prosperous posture that can generate new graduation, placement and recruitment momentum.

#### **IV. Summary**

The associate degree programs in the USC system and the Technical College System are overwhelmingly meeting statewide productivity standards which have been reported annually since 1983. Two hundred and eighty-three (283) of the 293 technical college programs evaluated meet the *Good* status requirements for this reporting year. Additionally, seven (7) of the nine (9) associate degree programs in the University of South Carolina system meet the *Good* status requirements for this reporting year. The two exceptions are the associate degree programs at USC Beaufort and USC Columbia. As noted on pages 3 and 4, these programs need the continued implementation of proactive efforts to establish and sustain effectiveness above current productivity thresholds.

Similarly, analysis of programs in the Technical College System also suggests that despite improvement in the nine (9) degree programs that progressed to *Good* status, efforts need to continue to bolster enrollments and graduations in Engineering Technology, a field important to the State's economic development.

#### **Recommendation**

The Committee on Academic Affairs and Licensing commends favorably to the Commission this report's designation of programs for the current reporting year as shown in **Tables 1, 3, 4, 6, 8, 9, 10 and 11**. Because of the importance of certain associate degree programs to economic development in South Carolina, the Committee further recommends that the Commission encourage the State Technical College system to continue to explore ways to increase enrollments and retention to graduation in programs in Engineering Technology, and to explore means to improve job placement and continuation to full-time studies for programs where needed. Furthermore the recommendation includes an encouragement for the USC system campuses in Beaufort and Columbia to explore ways to increase enrollment, graduation and placement in their associate degree programs.

Given the present economic situation, it is imperative that the technical colleges and the University of South Carolina regional campuses work collaboratively to increase the numbers of associate degree completers and prepare them for entry into a four-year program. A learned and skilled workforce is essential to economic prosperity for any state and will promote a pervasive education culture in South Carolina.