R. Wes Hayes, Jr.
Chairman

Rusty L. Monhollon, Ph.D.
President & Executive Director

CHE Meeting
8/12/2021
Agenda Item 6.02.C

South Carolina
Commission on Higher Education
Access | Affordability | Excellence

August 12, 2021

MEMORANDUM

To: Chair Wes Hayes and Members, SC Commission on Higher Education

From: Chair Charles Munns and Members, Committee on Academic Affairs and Licensing

Consideration of Annual Evaluation of Associate Degree Programs
FY 2018-2019

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.[1] 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.[2] This edition of the annual evaluation of associate degree programs provides an assessment of academic program performance across all disciplines during the 2018-2019 academic year. Enrollment and completion data and assessment 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.

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

---

[1] *South Carolina Master Plan for Higher Education*. Columbia: South Carolina Commission on Higher Education, 1979. 24, 129.
[2] South Carolina, General Assembly. "S*1195 (Rat #0368, Act #0359 of 1996) General Bill." 1995-96 Bill 1195. May 20, 1996. Retrieved from http://www.scstatehouse.gov/sess111_1995-1996/bills/1195.htm.

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:

Enrollment	**16** headcount or **12** full-time students at the most recent fall term.
Completions	**6** at the evaluation year or an average of **6** of the recent three-year rolling data.
Employment	**50%** of graduates available for job placement related to their education or continuation of 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 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 (AA/AS) 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 Fall 2018 enrollment data and academic year 2018-2019 graduation and employment data. Evaluation encompasses 317 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 at Fort Jackson. 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

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

	2014-15	2015-16	2016-17	2017-18	2018-19
Four-Year Campus					
USC Columbia (Ft. Jackson)	4	3	6	2	1
USC Beaufort (Marine Corps Air Station)	0	3	3	1	1
SUB-TOTAL	**4**	**6**	**9**	**3**	**2**
2					
Two-Year Campus					
USC Lancaster	67	67	104	85	84
USC Salkehatchie	227	146	153	153	132
USC Sumter	111	117	117	130	153
USC Union	44	55	62	57	61
SUBTOTAL	**449**	**385**	**436**	**425**	**430**
TOTAL	**453**	**391**	**445**	**428**	**432**

Source: USC Annual Reports on Associate Degree Data

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 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 decreased (See **Table 1**), it has not met the productivity standards since 2013-14 academic year.

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 small, and it did not meet the program productivity standards (**See Table 1**).

In the past, Commission staff reasoned that because the AA/AS 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 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 AA/AS programs in the University of South Carolina system have varied considerably. The self-reported data from the USC Columbia Institutional Research Office show that the total number of AA/AS graduates in the USC System

increased 0.93% (428 to 432) from 2017-18 to 2018-19. For 2018-19, two (2) of the six (6) USC campuses offering the AA/AS program has experienced increases in graduates compared to the 2017-2018 academic year. The number of graduates in AA/AS has steadily increased at USC Sumter with (17.69%) in the number of graduates (from 130 to 153).

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

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 from the occupationally specific two-year programs at USC Lancaster are listed below in **Table 2** for the past five academic years. While the number of graduates has decreased in criminal justice in this reporting year, the enrollment of the three programs have remained strong. The USC Lancaster occupational associate degree programs serve a small but vital set of counties in the state.

Table 2 USC Lancaster Graduates of Five-Year Occupational Associate Degree Programs of Study (Academic Years 2014-15---2018-19)

Academic Year	Nursing	Criminal Justice	Business
2014-2015	9	16	38
2015-2016	3	18	25
2016-2017	9	11	35
2017-2018	8	9	44
2018-2019	14	7	29

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 productivity requirements.

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 categories at the technical colleges.

---

[3] "Affordability and Transfer: Critical to Increasing Baccalaureate Degree Completion." The National Center for Public Policy in Higher Education. June 1, 2011. Retrieved from http://www.highereducation.org/reports/pa_at/index.shtml.
.

**Table 3 Ten Year (from 2010-11 to 2018-19) Summary of
Annual Associate Degree Program Evaluation in the Technical Colleges**

Year Evaluated	Good Standing	On Probation	Under Suspension	Cancelled	Total
2010	270	30	2	0	302
2011	291	22	4	0	317
2012	285	16	4	0	304
2013	283	7	2	1	293
2014	292	13	3	6	314
2015	291	16	3	0	310
2016	294	17	3	2	316
2017	286	22	2	6	316
2018	282	26	3	6	317
2019	284	25	6	2	317

In the data for the current annual report, 25 programs out of 317 (= 7.88%) analyzed at the technical colleges are on probation. By comparison, the 2017-2018 academic year report showed a total of 26 programs out of a total of 317 (= 8.20%) were on probation. Compared with the previous year, the programs on probation decreased 3.2% in this reporting year. Twenty eight percent of the programs on probation fall into the disciplinary field of Administrative Office Technology or Business Administration. 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 Academic Year 2018-19 (Total = 25)

College	Degree	Program
Spartanburg Community College	BUS	Management
Orangeburg-Calhoun Technical College	BUS	Administrative Office Technology
Florence-Darlington Technical College	BUS	Administrative Office Technology
Central Carolina Technical College	BUS	Administrative Office Technology
Northeastern Technical College	BUS	Business Administration
Demark Technical College	BUS	Administrative Office Technology
Denmark Technical College	BUS	Business Administration
Northeastern Technical College	GEN	General Technology
Technical College of the Lowcountry	HEA	Physical Therapist Assistant
Orangeburg-Calhoun Technical College	HEA	Physical Therapist Assistant
Orangeburg-Calhoun Technical College	HEA	Respiratory Care
Greenville Technical College	HEA	Emergency Medical Technology

Demark Technical College	HUS	Human Services
Central Carolina Technical College	IT	Computer Technology
Denmark Technical College	IT	Computer Technology
Greenville Technical College	LAW	Fire Science Technology
Aiken Technical College	LAW	Criminal Justice Technology
Aiken Technical College	MFG	Nuclear Quality Systems
Spartanburg Community College	MFG	Automated Manufacturing Technology
Piedmont Technical College	MFG	Industrial Electronics Technology
Central Carolina Technical College	STEM	Environmental Engineering Technology
Aiken Technical College	STEM	Electronics Engineering Technology
York Technical College	STEM	Engineering Graphics Technology
Denmark Technical College	STEM	Electro-mechanical Engineering
Trident Technical College	STEM	Civil Engineering Technology

II A. Manufacturing Technology (MFG) Programs and Business Programs

In the 2018-19 report year, Business Programs (BUS) represented the highest number (7) on probation. STEM was the second highest with five (5) programs on probation, followed by four (4) programs in Health Care (HEA) programs.

The 2018-19 findings indicate that the program productivity in Manufacturing Technology (MFG) programs has improved greatly. Compared with 2017-18 academic year, the number of MFG programs were placed on probation has decreased 57% (from 7 to 3) and three MFG programs were moved from Probation status to Good standing. Yet, no STEM programs moved from Probation to Good standing. An emerging trend in low program productivity in Business programs signifies that four (4) out of seven (7) BUS programs on probation were Administrative Office Technology. The data indicate that the enrollment was low across the board.

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 recruit students and help student progress to completion in order to continue to remove any Manufacturing Technology and STEM programs from the "probationary" group and keep them off. According to the report of The Economic Impact of Manufacturing in South Carolina[4], "*the economic impact of manufacturing on the state of South Carolina is estimated to total between $194 billion and $206 billion annually. This figure reflects the dollar value representing all final goods and services produced statewide that can be attributed (directly or indirectly) to manufacturing. This level of economic activity corresponds to between 662,391 and 703,081 jobs and to between $34 billion and $37 billion in labor income for South Carolinians.*"   In addition, "*Although manufacturing's direct employment base alone represents 12.6 percent of all jobs in South Carolina, after accounting for the additional impacts resulting from all secondary economic multiplier effects, this percentage jumps to 30.2 percent. This means that manufacturing ultimately supports over 30 percent of all jobs in South Carolina, making it among the state's largest industry sectors."* As more and more factories are encouraged to move back to America, programs in MFG and STEM need to produce enough graduates to meet the workforce needs.

---

[4] "The Economic Impact of Manufacturing in South Carolina." South Carolina Manufacturers Alliance SCFutureMakers, March, 2021. Retrieved from SCManufacturingEconomicImpact.pdf (scfuturemakers.com).

II B.   Continuing Success of the AA/AS Programs in the Technical Colleges

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.

A primary purpose of the AA/AS degree programs offered at the state's two-year institutions is to prepare students for transfer into baccalaureate programs. In South Carolina, AA/AS 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 AA/AS 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."[5] (See **Table 5.**)

As **Table 5** demonstrates, the AA/AS programs in the Technical College System produce a number of program completers, therefore availing many South Carolinians the possibility for transfer to a four-year degree program. In fact, the 2018-2019 data show that associate degree programs slightly decreased the number of graduates compared to the previous year from 2,993 to 2,992 (0.033%). Seven (7) state technical colleges graduated more students than in the preceding year.

Table 5   Graduates of AA/AS Degrees by Technical College, 2014-15 through 2018-19

Technical College	2015	2016	2017	2018	2019
Aiken Tech	56	51	58	49	85
Central Carolina	71	46	77	85	109
Denmark	25	21	9	16	16
Florence-Darlington	68	92	77	77	67
Greenville	312	419	322	405	404
Horry-Georgetown	533	533	530	454	391
Midlands	354	374	470	422	566
Northeastern	53	47	37	47	30
Orangeburg-Calhoun	15	38	20	26	25
Piedmont	94	118	100	71	110
Spartanburg Community College	126	174	153	200	175
Lowcountry	64	67	63	63	51
Tri-County	258	274	291	360	294

---

[5] P.2.

Technical College	2015	2016	2017	2018	2019
Trident	565	498	588	509	415
Williamsburg	30	34	20	20	21
York	137	135	139	189	233
TOTAL	**2,761**	**2,921**	**2,954**	**2,993**	**2,992**

Table 6 demonstrates at least 20% increase in completion in seven technical college compared with the previous year.

Table 6 Exceptional Achievement: Technical Colleges Graduation Rates, 2018-19

Technical College	Percentage Increase %	Increase Difference = N
Aiken Technical College	73.46%	+ 36
Piedmont Technical College	54.92%	+ 39
Midlands Technical College	34.12%	+144
Central Carolina Technical College	28.24%	+ 24

The 2009 Higher Education Action Plan addresses the importance of institutions of higher learning creating pathways to successfully transfer students 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."[6] 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 within 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 credential 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.

According to *South Carolina Industry Employment Projection,* employment projection increase rate in Healthcare Practitioners/Technical and Healthcare Support will be 10.30% and 18.11% respectively in

---

[6] "Leveraging Higher Education for a Stronger South Carolina." South Carolina Legislature. March 1, 2009. Retrieved from http://www.scstatehouse.gov/archives/CommissiononHigherEd/ActionPlan_Fullreport_final_withcover.pdf.
[7]South Carolan Labor Market Trends. Retrieved from
https://www.dew.sc.gov/sites/default/files/Documents/Current_Insights072020.pdf

2028 (Source: South Department of Workforce and Employment). The healthcare profession is the fastest growing industry in South Carolina[7].

Table 7 presents the number of graduates from the 14 two-year technical colleges over the course of ten consecutive report years. In this reporting year 2018-2019, the number of graduates increased 5.08% (from 1224 to 1286) compared with the previous year. The job placement rate of 96% has continued to remain high. The job placement at Aiken, Spartanburg Community College, Trident Technical College, and York Technical College was 100%, which should be commended.

Though the number of graduates in seven (7) out of 14 nursing programs increased, the remaining seven (7) programs experienced decline in graduation. Among the seven institutions, Orangeburg-Calhoun Technical College increased about 63% (from 38 to 62) and Horry-Georgetown Technical College increased about 44% (from 117 to 168).

**Table 7 Ten Year Data for Total Numbers of Graduates from Technical Colleges'
Associate Degree in Nursing Programs, 2009-10 through 2018-19**

2009-2010	1283
2010-2011	1272
2011-2012	1264
2012-2013	1413
2013-2014	1308
2014-2015	1159
2015-2016	1192
2016-2017	1231
2017-2018	1224
2018-2019	1286

II D.   Degree Programs Returning to Good Standing Status from Probation

For the current reporting year, eight (8) programs which had been on probation in the technical colleges for the previous year's reporting period have been recommended by the State Technical College System for placement in *Good* standing. Three (3) MFG programs were moved back to Good standing status. The degrees and institutional locales of all the programs moving from *Probation* to *Good* are in **Table 8**.

Table 8 Degree Programs Returning to *Good* Status from *Probation* 2018-2019 (=8)

College	Degree	Program
Piedmont Technical College	HEA	Cardiovascular Technology
Piedmont Technical College	HEA	Respiratory Care
Orangeburg-Calhoun Technical College	MFG	Industrial Electronics Technology
Technical College of the Lowcountry	MFG	Industrial Electronics Technology
Piedmont Technical College	MFG	Machine Tool Technology
Piedmont Technical College	AGR	Horticulture Technology
Denmark Technical College	LAW	Criminal Justice Technology
Denmark Technical College	EDU	Early Care and Education

II E.   Degree Programs on Suspension

Table 9 shows the programs in the Technical College System for this period which are on suspension. It is noteworthy that there are six programs in this category, 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 2018-2019
(or Continued for 1st or 2nd Year Suspension) (=3)

College	Degree	Program
Aiken Technical College	MKT	Marketing
Northeastern Technical College	IT	Computer Technology
Midlands Technical College	HEA	Health Information Management
Midlands Technical College	STEM	Civil Engineering Technology
Spartanburg Community College	MFG	Industrial Electronics Technology
Spartanburg Community College	STEM	Radiation Protection Technology

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. Of the 317 technical college programs evaluated, 284 (89.59%) met 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 met the *Good* status requirements for this reporting year. The outliers are the associate degree programs at USC Beaufort and USC Columbia at Ft. Jackson campus. As noted on page 3, these programs need the continued implementation of proactive efforts to establish and sustain effectiveness above current productivity thresholds.

Similarly, this analysis of programs in the Technical College System also suggests that despite improvement in the eight (8) degree programs that progressed to *Good* status, efforts need to be made continuously to recruit, retain students, and help them progress toward graduation in STEM, Healthcare, and Manufacturing Technology programs, which are important fields to the State's economic development.

Recommendation

On July 13, 2021, the Committee on Academic Affairs and Licensing discussed the findings of this report and suggested that two-year colleges provide mitigation plans for the programs placed on the probation status.
The Committee on Academic Affairs and Licensing recommends the Commission commend this report's designation of programs for the current reporting year as shown in **Tables 1, 3, 4, 6, 8, and 9.**   Because of the importance of certain associate degree programs to economic development in South Carolina, the staff further recommends that the Committee and Commission encourage the State Technical College system to continue to explore ways to increase enrollments and retention to graduation in programs in manufacturing, STEM, and healthcare fields and the USC system campus in Beaufort and Ft. Jackson to increase enrollment and retention to graduation in their associate degree programs.

Though the present report reviews programs for academic years prior to the pandemic, the recommendations take into account program development during present pandemic conditions. The Commission acknowledges current efforts such as ReadySC and Ezone to support workforce and economic development recovery.

Given the present economic situation impacted by the Convid-19 pandemic, it is imperative that the technical

colleges and the University of South Carolina regional campuses work collaboratively to increase the numbers of AA/AS degree completers and prepare them for entry into a four-year program. Manufacturing and skilled trades continue to be in great demand. A learned and skilled workforce is essential for economic prosperity for any state and will promote a pervasive education culture in the state of South Carolina.

South Carolina
Commission on Higher Education

Annual Evaluation of Associate Degree Programs

FY 2018-2019

South Carolina
Commission on Higher Education

Total Number of Programs Reviewed Comparison

Two-Year Colleges		FY2016-2017	FY2017-2018	FY2018-2019
16 Technical and Community Colleges	# of Programs	316	317	**317**
	Good Standing	286 (90.51%)	282 (88.96%)	**284 (89.59%)**
	Probation	22 (6.96%)	26 (8.20%)	**25 (7.89%)**
	Suspension	2 (0.63%)	3 (0.95%)	**6 (1.89%)**
	Termination	6 (1.90%)	6 (1.89%)	**2 (0.63%)**
4 USC Two-year Campuses + Ft. Jackson + USMC	# of Programs	9	9	**9**
	Met the Standards	7	7	**7**

Number of Completers in A.A. and A.S. at Each Institution in 2017-18 vs. 2018-19
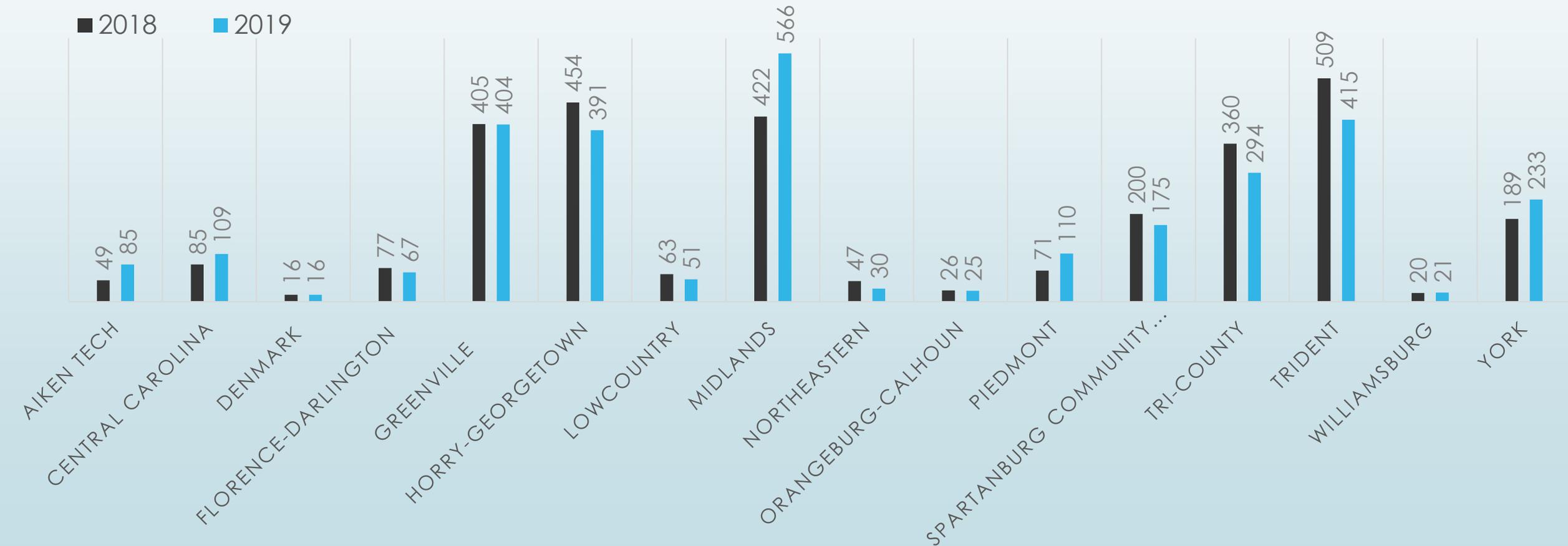
TOTAL NUMBER OF COMPLETERS IN 16 TECHNICAL COLLEGES, 2015-16 TO 2018-19

2761 — 2015
2921 — 2016
2954 — 2017
2993 — 2018
2992 — 2019

4
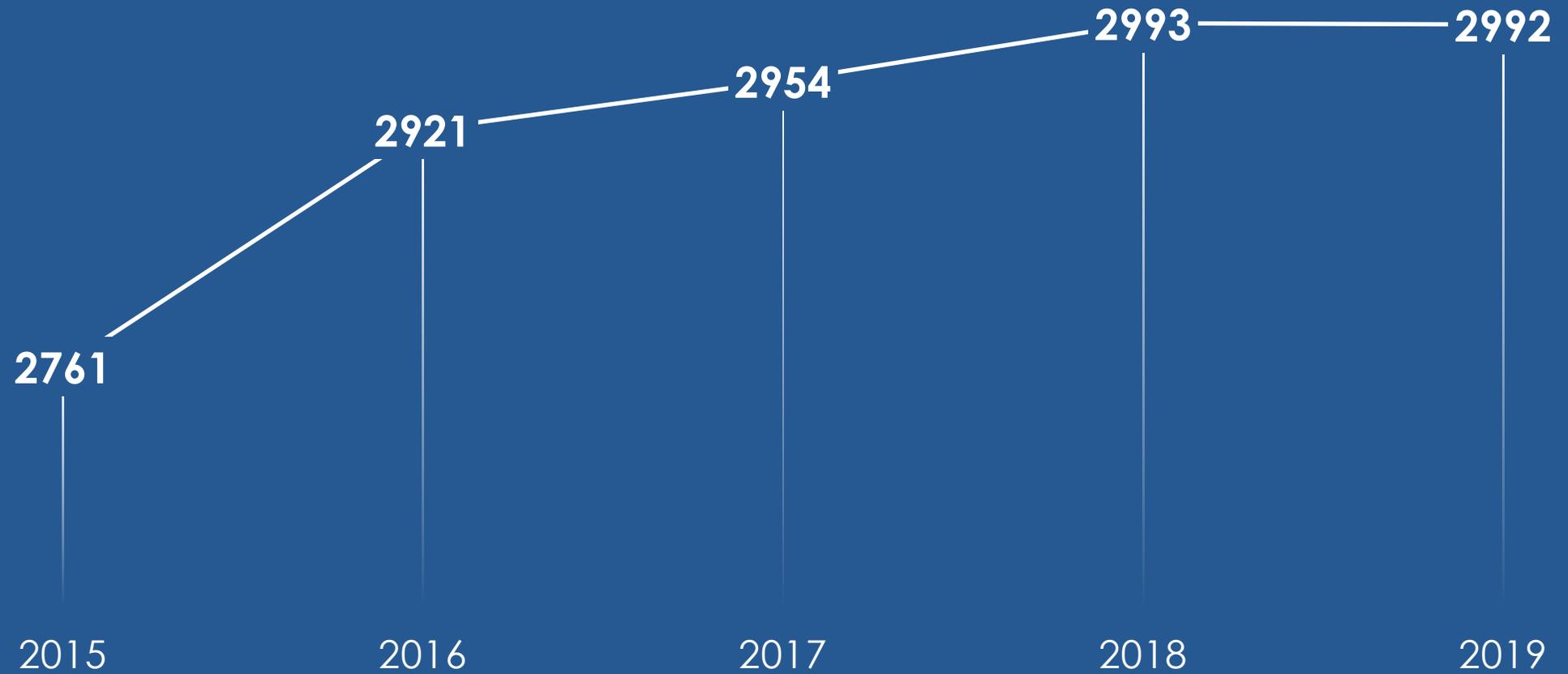
Trend Identified

2018-19 Review Cycle

Four disciplinary areas had the highest numbers of programs on probation:

- ➢ **BUS (7)**
- ➢ **STEM (5)**
- ➢ **HEA (4) and MFG(3)**