

May 2014

*Degree Attainment and Student Success
in the Commonwealth*



State Council of Higher Education for Virginia

Advancing Virginia through Higher Education

Degree Attainment and Student Success in the Commonwealth

Since the gubernatorial election of 2009 and the passage of the Governor McDonnell’s higher education centerpiece, the Virginia Higher Education Opportunity Act of 2011, Virginia has pursued a major goal of achieving a cumulative increase of 100,000 undergraduate degrees awarded to in-state students by 2025. The law also includes a “like” increase in cumulative in-state undergraduate degrees from the nonprofit private institutions. Current projections have the Commonwealth well on its way to attaining that goal without difficulty. This would bring the degree attainment rates of Virginians aged 25-64 to approximately 55% with an associate’s degree or higher.

Total Public Institutions

The total cumulative degrees projected by 2019-20: 496,544

The total cumulative additional degrees projected by 2019-20: 72,844

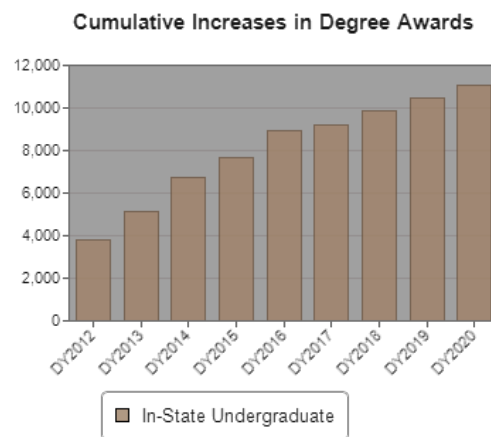


Figure 1

The common thread in any discussion about achieving the 100,000 degree goal has been the question of “How do we get there?” Clearly, degree production is about enrollment and completion. We can hold completion rates the same (or hope they stay the same) and focus on enrolling more students thus creating more degrees, or we can focus on increasing graduation rates so the same number of students entering college earn more degrees, or we can attempt both. With either of the last two options, it is useful to know where we are currently with respect to graduation rates. For this report our focus is on the public four-year institutions. As can be seen from the large chart on below, Virginia public four-year colleges and universities, as a group, have the second highest combined graduation rate in the nation (70% and tied with Iowa), lagging behind only Delaware (73%) using the IPEDS Graduation Rate Survey results of the 2007 entering cohort of first-time, full-time students. Delaware only has two public four-year institutions (Delaware State University and University of Delaware) representing an adjusted cohort of 4,381 students compared to 28,608 in Virginia. Iowa also started with many fewer students, 9,873, from only three institutions. North Carolina is at 60%, Maryland at 61%, West Virginia 45%, and the



District of Columbia 15%.

Figure 3: Six-Year Graduation Rates at Public Four-Year Institutions

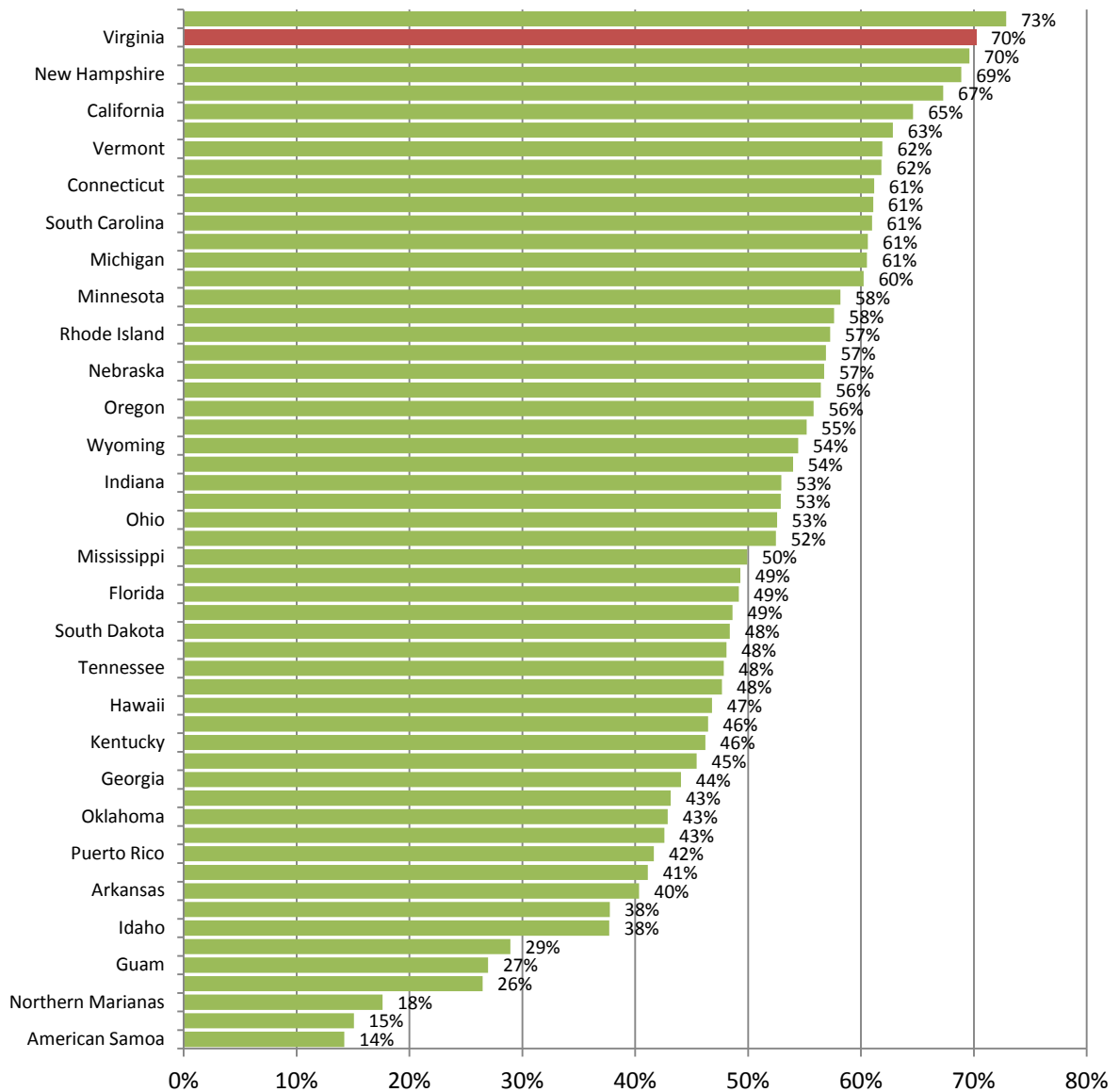


Figure 2

The National Student Clearinghouse’s Signature Report #6 State Supplement provides different view of graduation rates by state. The National Student Clearinghouse (NSC) collects student-level data from participating institutions of all sectors representing approximately 94% of enrolled students. The scope of data collected on each student is quite limited, but its coverage of undergraduate enrollment and degree awards is unmatched. While NSC data cannot be used to precisely reproduce the IPEDS data, they are used to produce more complete and more nuanced measures that provide a necessary context for understanding student success.



Nationally, the NSC has calculated that 63.4% of students beginning at a public four-year institution in 2007 completed a degree within six years at any institution. Limiting the measure to students completing their degree at the institution where they began, only 50.6% completed within six years. Fifteen percent of students enrolling in college for the first-time in 2007 were still enrolled in year six without having yet completed. Here again, Virginia barely trails behind Iowa in overall completion rate with 77.8% to Iowa's 79.8. When it comes to graduating from the institution where the student initially enrolled, Virginia is on top at 67.3% with Iowa at 65.6%. A portion of Iowa's students are bit more likely to complete a degree at a two-year institution than Virginia's students.

The NSC report provides a comparable measure of graduation rate restricted to students who maintain continuous full-time enrollment. This is an interesting measure as it provides an indication of the success rates of students who clearly seemed aimed at completion. Iowa students achieve an overall 91.4% completion rate, with 79.5% completing at the original institution. Virginia students achieve a 90.6% completion rate with 83% completing at the original institution of enrollment.

Of course, since the data from the National Student Clearinghouse are, in fact, national, these are measures of student success more than any type of institutional effect. Typically, somewhere between 70 and 80% of students attending college in the year after high school attend college in Virginia. Thus while these measures are heavily driven by Virginia's public four-year colleges, a significant number of students go out of state and graduate at comparable rates. This speaks well of their preparation in Virginia high schools.

Looking at Virginia's institutions we see a range graduation rates.

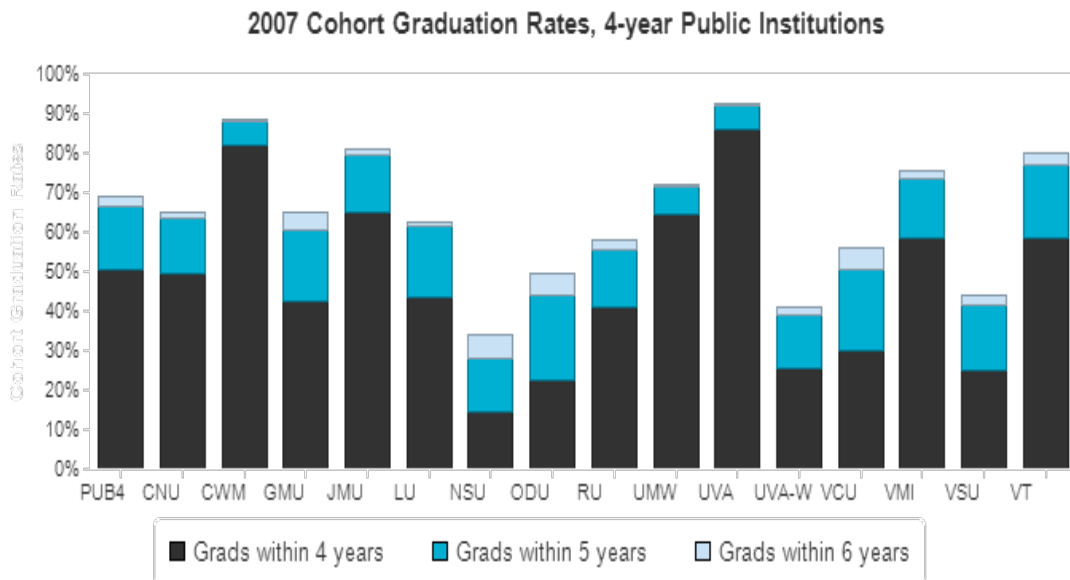


Figure 3



Table 1: First-time, Full-Time Cohort Graduation Rates By Institution							
Institution	Total #	Grads within 4 Years		Grads within 5 Years		Grads within 6 Years	
		#	%	#	%	#	%
Cohort Year: 0708							
Christopher Newport University	1,242	614	49%	786	63%	806	65%
College of William and Mary	1,345	1,105	82%	1,183	88%	1,193	89%
George Mason University	2,190	936	43%	1,326	61%	1,422	65%
James Madison University	3,864	2,508	65%	3,077	80%	3,126	81%
Longwood University	988	428	43%	609	62%	619	63%
Norfolk State University	938	137	15%	264	28%	321	34%
Old Dominion University	2,513	568	23%	1,112	44%	1,238	49%
Radford University	1,841	755	41%	1,025	56%	1,065	58%
University of Mary Washington	951	612	64%	678	71%	686	72%
University of Virginia	3,246	2,792	86%	2,990	92%	3,007	93%
University of Virginia's College at Wise	400	103	26%	157	39%	165	41%
Virginia Commonwealth University	3,860	1,153	30%	1,957	51%	2,153	56%
Virginia Military Institute	410	240	59%	302	74%	310	76%
Virginia State University	1,037	259	25%	431	42%	458	44%
Virginia Tech	5,119	2,984	58%	3,943	77%	4,085	80%

Over the past two decades, the combined public four-year graduation rate has increased from 42% of students completing within four-years to 51%, and 61% completing within six years to 69%, for all first-time, full-time students. This

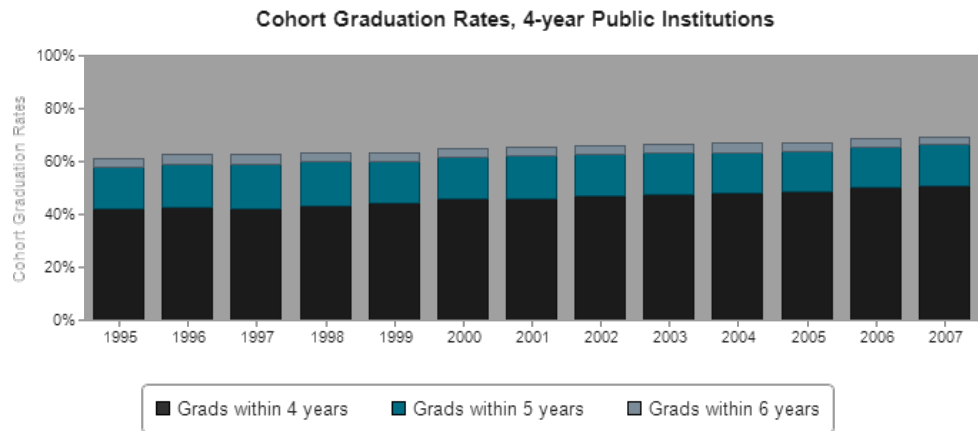


Figure 4

measure is slightly different than the previously used IPEDS measure as it ignores the exclusions for death, military service, public service, and religious mission. SCHEV has foregone those exclusions as there have never been more than 30 reported annually statewide on a basis of over 40,000 students in recent years. Further, because of file construction design and differences among institutions, we no longer include seventh summer graduates as part of year six of the graduation rate. This has very little impact, particularly as we view graduation rates in terms of annual trends. While the overall change of eight percentage points may not seem to be a huge increase over time, it certainly gives lie to the belief that graduation rates have not increased. Further, not only has the rate of graduation increased, but the raw number of entering students has increased by about 33% during the same time period.



**Table 2: First-time, Full-time Cohort Graduation Rates, Public Four-year Institutions
(includes students beginning in spring)**

Year	Total #	Grads within 4 Years		Grads within 5 Years		Grads within 6 Years	
		#	%	#	%	#	%
1995	22,454	9,520	42%	12,944	58%	13,764	61%
1996	23,739	10,191	43%	13,964	59%	14,902	63%
1997	23,942	10,059	42%	14,087	59%	14,971	63%
1998	24,093	10,381	43%	14,423	60%	15,233	63%
1999	24,785	11,005	44%	14,871	60%	15,741	64%
2000	25,627	11,730	46%	15,754	61%	16,653	65%
2001	26,367	12,163	46%	16,360	62%	17,299	66%
2002	26,860	12,648	47%	16,803	63%	17,681	66%
2003	27,740	13,190	48%	17,564	63%	18,465	67%
2004	27,674	13,293	48%	17,554	63%	18,525	67%
2005	29,044	14,111	49%	18,573	64%	19,527	67%
2006	28,654	14,382	50%	18,770	66%	19,736	69%
2007	29,944	15,194	51%	19,840	66%	20,654	69%

The rates in Table 1 are limited to a very traditional model of measurement – students enrolled in college for the first-time as full-time students in the fall semester. Table 2 expands the group slightly to include students entering in the spring semester. While such definitions as students enrolled as first-time, full-time in the fall, may have made sense two decades ago when the Student Right-to-Know Act was passed in 1990, they make much less sense today. At a growing number of institutions nationwide, these are a minority of students, particularly at community colleges. For Virginia public four-year institutions it is still a reasonable student cohort with which to start. It is, however, data that are not really actionable. In order to better understand who is not graduating, we need to review and compare various subcohorts of students to look at more discrete groups of students and their success. SCHEV has created and published dozens of these for review and study. Below, we have an example in Table 3. Notice that the heading specifies “Completed, Original Institution.” This is consistent with rates provided previously. However, given our statewide student-level data, we can also consider student outcomes for students that transfer between four-year colleges and universities as in the next table.



Total Public Four-year Institutions

Students Entering Institution in the fall and spring of 2001-02

Table 3: Degree Completion, Original Institution	Within 4yrs 2004-05	Within 5yrs 2005-06	Within 6yrs 2006-07	Within 7yrs 2007-08	Within 8yrs 2008-09	Within 9yrs 2009-10	Within 10yrs 2010-11
First-Time In College							
Dev. Ed. Coursework w/in First Two Years Receiving PELL, Recent HS Grads	2.2%	9.0%	11.2%	14.6%	16.9%	18.0%	18.0%
FTIC (All)	42.1%	60.6%	65.5%	67.1%	67.8%	68.3%	68.7%
FTIC, In-State	40.6%	59.9%	65.3%	67.1%	68.0%	68.6%	69.0%
FTIC, In-State, Direct from High School	41.7%	61.3%	66.8%	68.5%	69.3%	69.9%	70.3%
FTIC with No Financial Aid (In-State)	38.7%	57.5%	62.7%	64.5%	65.2%	65.7%	66.1%
FTIC with Pell	25.0%	43.3%	49.2%	51.5%	52.5%	53.2%	53.9%
FTIC, Family Income \$0 - \$49,999	26.6%	44.7%	50.7%	52.6%	53.8%	54.5%	55.2%
FTIC, Family Income \$50,000 - \$99,999	42.3%	61.6%	66.4%	68.1%	68.6%	69.0%	69.3%
FTIC, Family Income \$100,000 - \$149,999	56.7%	74.8%	77.9%	78.9%	79.5%	79.8%	80.0%
FTIC, Family Income \$150,000 and Greater	61.5%	77.8%	81.0%	81.9%	82.4%	82.6%	82.8%
FTIC, Family Income Not Reported	40.9%	59.6%	64.9%	66.6%	67.3%	67.9%	68.4%

Table 4: Degree Completion, Anywhere	Within 4yrs 2004-05	Within 5yrs 2005-06	Within 6yrs 2006-07	Within 7yrs 2007-08	Within 8yrs 2008-09	Within 9yrs 2009-10	Within 10yrs 2010-11
First-Time In College and New Transfer							
Dev. Ed. Coursework w/in First Two Years Receiving PELL, Recent HS Grads (detail)	5.6%	21.3%	25.8%	30.3%	34.8%	39.3%	40.4%
FTIC (All) (detail)	43.8%	63.9%	69.7%	72.0%	73.3%	74.2%	75.0%
FTIC, In-State (detail)	42.8%	64.2%	70.9%	73.6%	75.1%	76.3%	77.3%
FTIC, In-State, Direct from High School(detail)	44.2%	66.0%	72.6%	75.3%	76.7%	77.9%	78.8%
FTIC with No Financial Aid (detail)	40.2%	60.8%	66.9%	69.4%	70.8%	71.8%	72.6%
FTIC with Pell (detail)	26.4%	46.3%	53.1%	56.2%	57.9%	59.3%	60.6%
FTIC, Family Income \$0 - \$49,999(detail)	28.1%	47.9%	54.7%	57.5%	59.4%	60.7%	61.9%
FTIC, Family Income \$50,000 - \$99,999 (detail)	44.0%	65.5%	71.4%	74.3%	75.4%	76.4%	77.1%
FTIC, Family Income \$100,000 - \$149,999 (detail)	58.8%	78.0%	81.6%	83.0%	84.0%	84.6%	85.1%
FTIC, Family Income \$150,000 and Greater (detail)	62.7%	79.8%	83.7%	84.9%	85.5%	86.2%	86.6%
FTIC, Family Income Not Reported(detail)	46.0%	66.2%	72.1%	74.3%	75.4%	76.4%	77.1%

As can be seen, graduation rates typically increase by three to four percentage points when transfer within Virginia is included. When transfer outside Virginia is included, we tend to see a slightly smaller increase using data from the National Student Clearinghouse. More importantly, in both subcohort tables we can see significant differentials in graduation rates based on family income at entry. It should come as no surprise that students from wealthier families tend to be more likely graduate. Readers are urged to consider that these tables are an overall view of student outcomes reflecting 15 unique institutions before leaping to conclusions about the low success rates of students with Pell grants. It is



instructive to note that Pell grant recipients are not distributed equally among institutions. In fact, the percentage of students with Pell grants ranges from 12% to 68% at the public institutions where the institutions with the lowest graduation rates have the greatest proportion of Pell students and the institutions with the highest graduation rates have the lowest proportion of Pell students.

Below, in Table 5, are six-year graduation rates for each institution, for each of the last eight cohorts of students that have had at least six-years to graduation. This table includes graduations from any Virginia public or private, nonprofit institution.

**Six-Year Graduation Rates, Fall and Spring Entry
FTIC (All), Full-Time at Entry**

Table 5: Six-year Graduation Rate (completed anywhere)	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Christopher Newport University	59%	63%	65%	72%	73%	75%	77%	79%
College of William and Mary	92%	93%	92%	92%	90%	92%	92%	91%
George Mason University	60%	62%	64%	65%	68%	65%	68%	70%
James Madison University	84%	85%	86%	86%	86%	85%	85%	85%
Longwood University	75%	72%	76%	71%	70%	73%	72%	74%
Norfolk State University	31%	31%	32%	33%	37%	35%	37%	39%
Old Dominion University	51%	51%	52%	53%	53%	55%	55%	56%
Radford University	64%	66%	69%	66%	68%	66%	71%	70%
University of Mary Washington	84%	82%	82%	81%	83%	80%	85%	82%
University of Virginia	93%	94%	94%	94%	93%	94%	94%	94%
University of Virginia's College at Wise	56%	50%	58%	59%	61%	51%	60%	58%
Virginia Commonwealth University	50%	50%	53%	54%	55%	58%	60%	60%
Virginia Military Institute	77%	71%	77%	79%	75%	71%	74%	76%
Virginia State University	43%	42%	41%	46%	43%	43%	46%	46%
Virginia Tech	80%	80%	81%	83%	84%	85%	87%	87%
Total Public Four-year Institutions	70%	70%	71%	72%	73%	73%	75%	75%

Institutions of specific note in Table 5 include Christopher Newport University which has increased its six graduation rate from 59% to 79% just from 2001-02 to 2007-08. In fact, in reviewing earlier cohorts, we see that Christopher Newport has actually increased from 44% for the 1995-96 entering cohort. Likewise, George Mason University, reported above with an increase from 60% to 70%, has increased from 51% for the 1995-96 entering cohort.

Norfolk State University's 1995-96 entering cohort experienced a 24% six-year graduation rate, compared to 31% for 2000-01, and 39% in the 2007-08. Overall we see increases and stability in the graduation rates of first-time students, enrolled full-time at entry.



Student Success Index

In 2013, SCHEV developed the Student Success Index (SSI) as a response to the criticisms that the traditional GRS was too narrowly focused. SSI is a single measure of student success and progress that combines first-time in college, new transfers, and full- and part-time students at entry. For a full discussion of the measure, please see the appendix. Essentially, we group students into the four groups described (first-time, fulltime; first-time, part-time, transfer, full-time; transfer, part-time), assign a standardized number of years for expected completion, and then compute an overall index of the percentage of student either having completed within the standards, or still enrolled at the end of the standards. Further, since the measure is focused on students, it considers completion at any Virginia institution a success.

Table 6: Student Success Index	4 year GRS	Student Success Index (Normal Time)	6 year GRS	Student Success Index (Extended Time)
Christopher Newport University (CNU)	50%	61%	72%	79%
College of William and Mary (CWM)	83%	85%	92%	94%
George Mason University (GMU)	33%	40%	62%	66%
James Madison University (JMU)	59%	62%	84%	87%
Longwood University (LU)	40%	55%	68%	75%
Norfolk State University (NSU)	10%	20%	31%	37%
Old Dominion University (ODU)	19%	32%	51%	57%
Radford University (RU)	32%	47%	63%	70%
University of Mary Washington (UMW)	66%	71%	78%	81%
University of Virginia (UVA)	85%	86%	94%	95%
University of Virginia's College at Wise (UVA-W)	27%	44%	44%	54%
Virginia Commonwealth University (VCU)	24%	34%	55%	61%
Virginia Military Institute (VMI)	59%	64%	71%	74%
Virginia State University (VSU)	22%	30%	43%	49%
Virginia Tech (VT)	53%	55%	83%	84%

As one can see from the table, the SSI results in higher numbers than the GRS rates. This is despite the fact that all students entering the institution in a given year are reported in the measure. One of the keys to this measure is recognizing that students entering with different plans and at different stages will take shorter or longer periods of time to graduate. Further, we count as successes students who are still continuing their enrollment in the last years of each component of the measure. As we have already



seen, students may take as long as 10 years to complete. In fact, a small number will take up to twice that length of time.

In the discussion of graduation rates, too often responsibility is placed solely on the institution. In all fairness, we must keep in mind that college students are (generally) legal adults with ability to take independent action that does not optimize their chances for success. Students have the decisive role in completing college – it is up to them to do the work. Table 7 provides the graduation rates for various categories of the number of credits earned with a grade “C” or better within the first year and 60 credits within the first two years. The data clearly indicate that once students successfully complete two years’ worth of credit, they are virtually assured to graduate from the institution at which they started. At the institution level, we typically observe a range of 89% to 99% completion rate for students completing 60 credits within the first two years with a “C” or better.

Table 7: Degree Completion at Original Institution Based on Earned Credit	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
First-Time In College							
Student Effort and Progress							
FTIC, Students earning 06 to 11 credits in First Year	3%	12%	16%	19%	21%	21%	22%
FTIC, Students earning 12 to 23 credits in First Year	22%	45%	52%	55%	56%	57%	58%
FTIC, Students earning 24 credits or Greater in First Year	61%	80%	83%	84%	85%	85%	85%
FTIC, Students earning 60 credits or Greater in First Two Years	81%	95%	96%	97%	97%	97%	97%

Closing Comments

Virginia’s graduation rates have improved slowly over time, as has overall degree production. However, this has come with a parallel increase in student debt. The percentage of bachelor degree graduates with student debt has increased from 53% to 57% between 2007-08 and 2011-12. Over the same period, median debt has increased from \$17,100 to \$24,354. Given the slow, but steady, increase in graduation rates, it is probably safe to say assume that most, if not all, of the no- or low-cost actions to improve graduation rates have been implemented. If the Commonwealth wishes to direct a focused effort to improve student success and graduation rates, it should be done through adequate general fund appropriations and not left to be funded through tuition increases.

In the same line of thought, noting that Pell grant recipients have the lowest graduation rates, it is likely that focusing additional resources on supporting those students may have the greatest effect on student success. Such support could include additional financial aid, but may also include enhanced student



services, both academic and non-academic. Enhanced non-academic support may include childcare, greater levels of work-study support, and efforts to reduce food insecurity. There is a growing body of research pointing towards food-insecurity as a campus issue and at least 120 campuses nationwide have reported establishing food banks.

The Commonwealth is fortunate to have some of the highest levels of graduation rates in the nation. Improving them will be no small effort. However, targeted effort for specific student groups at each college may yield desired gains, but most efforts will need financial support.



Appendix

History & Background

(<http://www.acenet.edu/news-room/Documents/College-Graduation-Rates-Behind-the-Numbers.pdf>)

Up until 1985, there were no standardized institutional or national data on graduation rates. This changed in 1985 when the NCAA began requiring graduation rates by major sport and for all undergraduates; however these were not available to the public and only shared with NCAA member institutions that provided data. This led to the Senate bill 2498 proposed by Bill Bradley and Edward Kennedy in 1988, the Student Athlete Right-to-Know Act. It was the first bill requiring Title IV participating institutions to submit an annual report to the US Secretary of Education. This bill was followed by a 1989 General Accounting Office (GAO) report to help inform congressional deliberations about this bill. The report found that the graduation rate for men’s basketball and football players at the NCAA’s largest member schools (formerly Division I) were lower than the graduation rates for all students. The view of the committee expressed in S.2498 was that “student athletes about to enter college are consumers” and “as such are entitled to relevant and basic information in order to make an informed choice about which college to attend.”

In 1990, Congress passed PL 101-542, the Student Right-to-Know and Campus Security Act requiring the submission of graduation rate information for first-time undergraduates, by gender and race/ethnicity, with corresponding detail for basketball, football, baseball, cross-country/track, and all other sports combined. Despite what one might think to be an obvious measure, it took nine full years for the final regulations to be published in the *Federal Register* on November 1, 1999 (34 CFR 668.41, 34 CFR 668.45 and 34 CFR 668.48).

The 1999 SRK regulations required institutions to disclose the completion or graduation rate for first-time, full-time degree-or certificate-seeking undergraduate students who complete or graduate within 150 percent of the normal time for completion or graduation from their program. An institution that determines that its mission includes providing substantial preparation for students to enroll in another [Title IV, HEA] eligible institution is also required to disclose the transfer-out rate for its first-time, full-time, degree- or certificate-seeking undergraduate students who did not complete or graduate from their programs, but subsequently enrolled in another eligible program within 150 percent of the normal time for completion or graduation from their program.

Institutions participating in Title IV, HEA programs that provide athletically related financial aid are also required to report enrollment and graduation rate information to the Department of Education, and disclose the information to prospective student athletes, their parents, and their high school coach and guidance counselor at the time an offer of aid is made. This information must include enrollment data by race and gender; the number of students receiving athletically-related aid, by gender and race within sport; the completion or graduation rate, and, if applicable, the transfer-out rate, for all certificate- or degree-seeking first-time, full-time



undergraduates; and the completion or graduation rate, and, if applicable, the transfer-out rate for the subset who received athletically related aid, categorized by race and gender within sport.

<http://nces.ed.gov/pubs2012/2012833.pdf>, pp. GR-1,2)

The most basic form of the graduation rate, the one most familiar to the public, is this.

[Number of graduates from the institution from which they started in a given year from an initial cohort]

divided by

([number of first-time, full-time degree-seeking students in starting cohort]-[exclusions from cohort])

For example, if we had 100 students begin college as first-time, full-time in the fall of 2007 in pursuit of a four-year degree and 50 of those students graduated by spring 2011, the four-year graduation rate (100% of normal time) is 50%. However, in most cases the graduation rate used will be the 150% of normal time, or a six-year rate. Use of this rate accommodates for life getting in the way of a student's academic plans, as well as, for such things as a change of major.

$50/100 = 0.50$: 50% four-year graduation rate

And if 60 students graduate within six-years:

$60/100 = 0.60$: 60% six-year graduation rate

In the definition above, we provide for "exclusions from the cohort" which are students who are removed from the base number of entering students for certain reasons. These reasons include death, military service, religious mission, and public service as the Peace Corps. So, returning to our example above, if we assume that at the end of the reporting cycle, one student had died, and two had joined the military, we would exclude three students and change the denominator of our equation to 97.

$50/97 = 0.515$: 51.5% four-year graduation rate

And if 60 students graduate within six-years:

$60/97 = 0.6185$: 61.9% six-year graduation rate

The same approach is used for each major sport and disaggregation by gender and race. The same logic is used for two-year degrees where the rates are reported for two and three years. Note that students are only counted as graduates if they complete their degree at the same institution they started at as first-time in college.

There are some additional peculiarities to the measure. First, students who attend college for the first-time immediately in the summer before the fall term and enroll in that fall, are considered first-time in



that fall term. Second, even though federal reporting of degree completions are reported as of July 1 through June 30, graduates in July and August following the end of the sixth nominal year of completion, maybe counted as part of the six-year completers. Finally, predominantly two-year institutions with missions to prepare students for transfer to higher-level institution must also report the number and percentage of verified transfers.

Graduation Rates Reported by SCHEV

Throughout the last two decades, SCHEV has been very faithful to the strict federal definition. In 2006, SCHEV began expanding its concept of graduation rates and developed the *“Cohort Lifecycle Maps”* based on the work of Gary Rice at the University of Alaska. The *“Cohort Lifecycle Maps”*, followed the traditional first-time, full-time, first-year cohorts for a period of 10 years. Then in 2008 were expanded to include sub-reports for Title IV financial aid recipients – Pell, Stafford Loans, Perkins, and PLUS – Parent.

In 2013 we made yet another change to our reporting. We dropped the institutional required review of the individual cohorts from six years and three years prior to mark exclusions and final year summer graduates in July and August. This was done for two reasons. First, changes to the IPEDS collection calendar make it next to impossible for SCHEV to maintain a collection that institutions could use to verify their reporting to IPEDS (which had been part of the past philosophy). We would have had to move the GRS Cohort collection and review into early fall, at a time when our institutions are already busily submitting files, files that are actually more important to our business model – fall headcount, current fall cohort, and financial aid. All of these are due right after completion of submission of course enrollment and degrees conferred files.

The second reason for the change was a result of reviewing the total cohort exclusions over the past two decades. In no year did the total number of exclusions across all institutions total more than 60 students. It is very difficult to justify either the institutional burden or burden on SCHEV staff to mark 60 students out of a base of 30,000 (and increasing) that may drive a half-percentage point change in a graduation rate at best. It is the position of SCHEV Research staff that the trends in graduation rates are far more important than a false precision suggested by a fractional difference. This is doubly true given that we know there are limits to the accuracy of the student identity records, especially prior to 2009 and the implementation of the Virginia College Student Identification Number (VCSIN) used in data submissions.

In 2013 we also implemented a far more profound change – the *“Subcohort Lifecycle Reports”* and the *“Student Success Index”*. These reports are a response to the continued criticism of the standard graduation rate that is too narrowly focused on just first-time, full-time students which are an increasingly smaller component of most colleges.

The Subcohort Lifecycle Reports

Following a legislative staff request for a variety of numbers and graduation rates of students in Virginia financial aid programs and demographic characteristics, SCHEV Research developed the *“Subcohort”* reports. The underlying data model and reporting model of these reports provides a rigorous approach



to observing student experience outcomes for up to 10 years post entry, whether as a first-time student or a new transfer. The associated demographic and student characteristics at entry allow us to present some of the most complex and nuanced looks at graduation rates available anywhere. These reports provide outcomes and tracking of all undergraduate students – new and transfer, full- and part-time, and students who enter the institution fall, spring, and summer.

Currently, we have published dozens of individual subcohort rates with dozens more under review. We have produced these data at the institution

**Total Public Four-year Institutions
Completed, Original Institution
Students Entering Institution in Fall/Spring 2002
Gender: All Students, Race/Ethnicity Status: All Students**
Color variation represents the low to high variation within each column.

Degree Completion	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
First-Time In College and New Transfer							
Summary Totals							
All, FTIC and Transfer (detail)	46.4%	60.8%	64.4%	66.0%	66.8%	67.3%	67.6%
Student Demographics							
All, FTIC and Transfer, Age 17 to 19 yrs(detail)	45.1%	63.2%	67.4%	69.0%	69.7%	70.2%	70.5%
All, FTIC and Transfer, Age 20 to 24 yrs(detail)	54.4%	60.9%	63.4%	64.6%	65.2%	65.7%	66.0%
All, FTIC and Transfer, Age 25 yrs and Older (detail)	46.5%	51.5%	53.9%	55.7%	56.6%	56.9%	57.6%
Financial Aid Programs at Entry							
All, FTIC and Transfers, with Pell and Developmental Coursework (detail)	12.7%	20.4%	26.8%	28.9%	29.6%	29.6%	29.6%
Student Effort and Progress							
Dev. Ed. Coursework (1-9cr) w/in First Two Years (detail)	11.7%	18.4%	24.4%	26.3%	26.8%	27.4%	27.6%
Dev. Ed. Coursework (10-18cr) w/in First Two	5.6%	9.9%	9.9%	11.3%	12.7%	12.7%	12.7%



Degree Completion	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
Years (detail)							
Dev. Ed. Coursework w/in First Two Years (detail)	10.5%	16.8%	21.7%	23.5%	24.2%	24.7%	24.9%
Dev. Ed. Coursework w/in First Two Years Receiving PELL, Recent HS Grads (detail)	2.8%	8.3%	13.9%	15.3%	15.3%	15.3%	15.3%
Students earning 06 credits or fewer in First Year (detail)	2.2%	5.5%	7.7%	8.6%	9.2%	9.7%	10.1%
Transfer-specific Characteristics							
CC Transfer Students with between 31 and 45 CC credits (detail)	72.5%	78.9%	79.8%	80.6%	81.5%	81.7%	81.9%
CC Transfer Students with between 46 and 60 CC credits (No AA) (detail)	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	81.8%
First-Time In College							
Summary Totals							
FTIC (All) (detail)	42.9%	61.4%	65.8%	67.5%	68.2%	68.7%	69.0%
FTIC (All), Full-Time at Entry (detail)	43.5%	62.1%	66.5%	68.1%	68.8%	69.3%	69.6%
FTIC (All), Part-Time at Entry (detail)	10.3%	20.6%	25.1%	29.1%	30.4%	31.1%	32.0%
Student Demographics							
FTIC, Age 17 to 19 yrs (detail)	44.1%	62.9%	67.2%	68.9%	69.6%	70.1%	70.4%
FTIC, Age 20 to 24 yrs (detail)	21.7%	33.3%	39.7%	41.4%	42.1%	43.0%	43.3%
FTIC, Age 25 yrs and Older (detail)	14.7%	21.1%	25.3%	25.3%	25.3%	25.3%	27.4%
FTIC, In-State (detail)	41.3%	60.7%	65.7%	67.6%	68.4%	69.0%	69.4%
FTIC, In-State, Direct from High School(detail)	42.3%	62.1%	67.0%	68.8%	69.7%	70.2%	70.6%
FTIC, In-State, Direct from High School, Full-Time at Entry (detail)	42.6%	62.4%	67.4%	69.2%	70.0%	70.5%	70.9%



Degree Completion	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
FTIC, In-State, Direct from High School, Part-Time at Entry (detail)	6.1%	18.8%	23.0%	28.5%	32.1%	32.7%	34.5%
FTIC, In-State, Full-Time at Entry(detail)	41.8%	61.3%	66.3%	68.1%	69.0%	69.5%	69.9%
FTIC, In-State, Part-Time at Entry(detail)	11.0%	22.9%	27.4%	31.9%	33.9%	34.8%	36.1%
FTIC, Out-of-State (detail)	47.7%	63.4%	66.2%	67.2%	67.5%	67.8%	67.9%
FTIC, Out-of-State, Full-Time at Entry(detail)	48.5%	64.4%	67.1%	68.1%	68.5%	68.7%	68.8%
FTIC, Out-of-State, Part-Time at Entry(detail)	8.8%	15.3%	19.7%	22.6%	22.6%	22.6%	22.6%
Financial Aid Programs at Entry							
FTIC with Athletic Award (detail)	38.5%	61.7%	67.1%	67.6%	68.6%	68.9%	69.1%
FTIC with Commonwealth Award(detail)	25.0%	40.7%	44.9%	47.6%	48.9%	49.7%	50.3%
FTIC with No Financial Aid (detail)	39.8%	58.8%	63.4%	65.2%	66.0%	66.5%	66.8%
FTIC with Pell (detail)	25.2%	43.8%	49.5%	52.1%	53.0%	53.8%	54.2%
FTIC with Perkins (detail)	51.8%	70.0%	73.7%	74.5%	75.1%	75.2%	75.4%
FTIC with PLUS Loan (detail)	43.8%	64.7%	69.2%	70.8%	71.4%	71.8%	72.0%
FTIC with Stafford Loan (Sub.) (detail)	38.2%	58.0%	62.5%	64.3%	65.1%	65.7%	65.9%
FTIC with Stafford Loan (Unsub.)(detail)	42.8%	62.7%	67.1%	68.5%	69.1%	69.8%	70.1%
FTIC with Tuition Waiver (detail)	31.4%	53.5%	60.1%	62.4%	63.1%	63.8%	64.4%
FTIC with VGAP Award (detail)	32.8%	54.6%	60.8%	63.3%	64.4%	65.2%	65.7%
FTIC with Work Study (detail)	35.3%	54.9%	59.7%	61.6%	62.1%	62.7%	63.0%
Student/Family Income at Entry							
FTIC, Family Income \$0 - \$49,999(detail)	26.9%	45.0%	50.5%	52.9%	53.7%	54.4%	54.9%



Degree Completion	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
FTIC, Family Income \$50,000 - \$99,999 (detail)	42.6%	61.9%	66.5%	68.3%	69.1%	69.7%	69.9%
FTIC, Family Income \$100,000 - \$149,999 (detail)	55.7%	74.0%	77.1%	78.1%	78.4%	78.8%	78.9%
FTIC, Family Income \$150,000 and Greater (detail)	62.3%	78.9%	82.2%	83.1%	83.6%	83.9%	84.1%
FTIC, Family Income Not Reported(detail)	45.0%	63.5%	67.8%	69.3%	70.1%	70.5%	70.8%
FTIC, Family Income Not Reported, Full-Time at Entry, In-State (detail)	43.8%	63.7%	68.5%	70.1%	71.1%	71.5%	71.9%
FTIC, Family Income Not Reported, Full-Time at Entry, Out-of-State (detail)	52.3%	66.9%	69.9%	70.6%	70.8%	71.1%	71.2%
FTIC, In-State, Family Income Not Reported (detail)	43.2%	62.9%	67.6%	69.3%	70.3%	70.8%	71.2%
New Transfer, Full-Time at Entry, Attempting 25 or Greater Credits in Year 1 (detail)	70.7%	76.3%	78.0%	78.8%	79.3%	79.7%	80.0%
Student Effort and Progress							
FTIC, In-State Students with no Dual Enrollment credit (detail)	39.8%	59.7%	64.8%	66.7%	67.7%	68.3%	68.7%
FTIC, Students earning 06 to 11 credits in First Year (detail)	3.2%	11.6%	16.4%	19.2%	20.6%	21.4%	22.0%
FTIC, Students earning 11 credits or Fewer in Dual Enrollment (detail)	42.9%	61.8%	66.5%	68.4%	68.9%	69.4%	69.8%
FTIC, Students earning 12 to 23 credits in Dual Enrollment (detail)	51.4%	67.9%	72.0%	73.4%	73.9%	74.4%	74.8%
FTIC, Students earning 12 to 23 credits in First Year (detail)	22.0%	44.8%	52.1%	54.8%	56.1%	56.9%	57.5%
FTIC, Students earning 24 credits or Greater in Dual Enrollment (detail)	57.9%	72.4%	75.0%	75.9%	76.1%	76.4%	76.6%
FTIC, Students earning 24 credits or Greater in First Year (detail)	61.1%	80.0%	83.3%	84.3%	84.7%	85.0%	85.2%
FTIC, Students earning 60 credits or Greater in First	80.7%	94.8%	96.2%	96.5%	96.6%	96.7%	96.7%



Degree Completion	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
Two Years (detail)							
New Transfer to the Institution							
Summary Totals							
New Transfer (All) (detail)	53.6%	59.5%	61.6%	63.0%	63.7%	64.3%	64.7%
New Transfer (All), Full-Time at Entry(detail)	58.6%	64.4%	66.2%	67.3%	68.0%	68.5%	68.8%
New Transfer (All), Part-Time at Entry(detail)	37.6%	43.7%	46.7%	49.1%	50.1%	50.7%	51.4%
Student Domicile Status at Entry							
New Transfer, In-State (detail)	53.7%	59.9%	62.1%	63.7%	64.5%	65.0%	65.5%
New Transfer, In-State, Full-Time at Entry (detail)	58.5%	64.6%	66.5%	67.7%	68.4%	69.0%	69.4%
New Transfer, In-State, Part-Time at Entry (detail)	39.1%	45.6%	48.7%	51.3%	52.3%	52.8%	53.6%
New Transfer, Out-of-State (detail)	52.8%	56.9%	58.5%	59.3%	59.7%	60.2%	60.2%
New Transfer, Out-of-State, Full-Time at Entry (detail)	59.1%	63.2%	64.8%	65.4%	65.6%	65.9%	65.9%
New Transfer, Out-of-State, Part-Time at Entry (detail)	26.9%	30.9%	32.9%	34.2%	35.4%	36.4%	36.7%
New Transfers, Age 17 to 19 yrs(detail)	60.3%	68.2%	70.1%	71.1%	71.5%	72.1%	72.4%
New Transfers, Age 20 to 24 yrs(detail)	57.3%	63.3%	65.5%	66.7%	67.3%	67.7%	68.0%
New Transfers, Age 25 yrs and Older(detail)	47.7%	52.6%	54.9%	56.8%	57.7%	58.1%	58.7%
Financial Aid Programs at Entry							
New Transfer with Athletic Award(detail)	51.9%	54.3%	55.6%	55.6%	55.6%	56.8%	56.8%
New Transfer with Commonwealth Award (detail)	58.5%	64.0%	66.2%	67.7%	68.7%	69.2%	69.5%
New Transfer with No Financial Aid(detail)	54.0%	60.0%	62.0%	63.4%	64.2%	64.7%	65.1%



Degree Completion	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
New Transfer with Pell (detail)	49.3%	55.4%	57.7%	59.4%	60.2%	61.0%	61.5%
New Transfer with Perkins (detail)	69.8%	75.0%	76.0%	76.0%	77.1%	78.1%	78.1%
New Transfer with PLUS Loan (detail)	62.0%	67.3%	69.7%	70.5%	70.5%	70.7%	70.7%
New Transfer with Stafford Loan (Sub.)(detail)	57.0%	62.0%	64.1%	65.1%	65.8%	66.4%	66.6%
New Transfer with Stafford Loan (Unsub.) (detail)	59.7%	64.4%	65.9%	66.7%	67.4%	67.8%	68.0%
New Transfer with Tuition Waiver(detail)	49.9%	58.5%	60.8%	62.0%	62.7%	63.8%	64.5%
New Transfer with VGAP Award (detail)	75.7%	79.7%	79.7%	79.7%	79.7%	79.7%	81.1%
New Transfer with Work Study (detail)	64.8%	69.0%	70.5%	70.8%	71.7%	72.6%	72.6%
Student/Family Income at Entry							
New Transfer, Family Income \$0 - \$49,999 (detail)	50.2%	56.0%	58.4%	59.8%	60.6%	61.2%	61.7%
New Transfer, Family Income \$50,000 - \$99,999 (detail)	61.1%	66.1%	67.9%	68.9%	69.7%	70.2%	70.4%
New Transfer, Family Income \$100,000 - \$149,999 (detail)	66.8%	73.6%	74.6%	75.9%	76.2%	76.4%	76.6%
New Transfer, Family Income \$150,000 and Greater (detail)	64.3%	69.7%	72.4%	73.0%	73.5%	74.1%	74.1%
New Transfer, Family Income Not Reported (detail)	52.3%	58.4%	60.5%	62.0%	62.8%	63.3%	63.8%
New Transfer, Family Income Not Reported, Full-Time at Entry, In-State(detail)	59.6%	66.1%	68.1%	69.3%	70.1%	70.6%	71.1%
New Transfer, Family Income Not Reported, Full-Time at Entry, Out-of-State (detail)	62.6%	66.6%	67.8%	68.1%	68.3%	68.6%	68.6%
New Transfer, In-State, Family Income Not Reported (detail)	52.0%	58.6%	60.8%	62.6%	63.5%	64.0%	64.5%
Student Effort and Progress							



Degree Completion	Within 4yrs 2005-06	Within 5yrs 2006-07	Within 6yrs 2007-08	Within 7yrs 2008-09	Within 8yrs 2009-10	Within 9yrs 2010-11	Within 10yrs 2011-12
New Transfer, Students earning 06 to 11 credits in First Year (detail)	16.2%	22.9%	25.9%	29.7%	31.3%	32.3%	33.4%
New Transfer, Students earning 12 to 23 credits in First Year (detail)	48.6%	57.0%	60.1%	61.7%	62.8%	63.6%	64.0%
New Transfer, Students earning 24 credits or Greater in First Year (detail)	82.1%	86.3%	87.3%	87.9%	88.2%	88.4%	88.6%
Transfer-specific Characteristics							
AA/AS Awarded Prior to Transfer(detail)	65.4%	69.5%	71.4%	72.9%	73.6%	73.9%	74.0%
AA/AS Awarded Prior to Transfer, 2 or fewer years prior to Transfer (detail)	66.3%	70.5%	72.3%	73.7%	74.4%	74.8%	74.9%
AA/AS Awarded Prior to Transfer, 2.01 to 5 years prior to Transfer (detail)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CC Transfer Students with 15 CC credits or Fewer (detail)	46.9%	59.6%	63.3%	65.0%	65.7%	66.2%	66.7%
CC Transfer Students with 31 CC credits or Greater (No AA) (detail)	72.5%	78.8%	79.6%	80.5%	81.3%	81.5%	81.9%
CC Transfer Students with between 16 and 30 CC credits (detail)	57.1%	64.4%	66.8%	68.1%	69.0%	69.5%	70.0%
New Transfer Students at Junior Level(detail)	64.0%	68.2%	69.7%	71.0%	71.6%	72.0%	72.3%
New Transfer Students at Sophomore Level (detail)	67.4%	67.4%	67.4%	67.4%	67.4%	69.8%	76.7%

Each subcohort in the table has an associated detail link which provides the user ability to compare the graduation rates of students who finish at their institution of origin, or as transfers to another institution. Further, they are provided with both a chart and a table depicting student enrollment, transfer, and completion term by term for 10 years post-entry.

We have extended this model further yet to create the **“Transfer Feedback Reports”** which provide detailed information about transfer activity and outcomes from each of the VCCS colleges and Richard Bland College to each of the public and private four-year colleges in the Commonwealth.



The final outgrowth (thus far) of these reports is the **“Student Success Index”** (SSI). The SSI provides a composite or holistic success rate for all undergraduate students entering in a given term. We start with the basic IPEDS GRS definitions for four-year institutions of four years as a normal time-to-completion for first-time, full-time students. For part-time students, we increase that to six years for first-time students. For new transfer students, we assume that on average students transfer with one year of credit and thus allow three years and five years respectively. For extended time-to-completion, equivalent to 150% of full-time, we add two years to each standard. We follow a similar model for two year institutions where the expected time-to-degree is scaled appropriately to the two year degree expectations.

We add two additional considerations to the SSI model. First, the model does not care as to which institution the student graduated. This is a student-focused measure, not an institution-focused measure, although it is reported at the institution level. Finally, we also count as a success students that are still enrolled in the last year of the appropriate measure if they have not yet counted a degree. This is done in recognition that any expected measure of time-to-completion is essentially arbitrary and student behavior is part of the intent of the measure and we have evidence that some small number of students will take up to 20 years to complete.



Total Public Four-year Institutions

Student Success Index

Students Entering the Institution in Fall and Spring

All, FTIC and Transfer (Normal Time)

Student Success Index

Normal Time-to-Completion

Status at Entry		Full-Time	Part-Time
	Cohort Size	27,977	324
First-Time in College		w/in 4 years	w/in 6 years
	Graduates	12,458	64
	Continuing Enrollment	1,768	21
New Transfers	Cohort Size	10,779	2,773
		w/in 3 years	w/in 5 years
	Graduates	4,451	926
	Continuing Enrollment	746	178

Student Success Index (Measure Completed) 49%

Extended Time-to-Completion

Status at Entry		Full-Time	Part-Time
	Cohort Size	27,977	324
First-Time in College		w/in 6 years	w/in 8 years
	Graduates	19,379	89
	Continuing Enrollment	1,108	23
New Transfers	Cohort Size	10,779	2,773
		w/in 5 years	w/in 7 years
	Graduates	6,327	1,238
	Continuing Enrollment	535	118

Student Success Index (Measure Completed) 69%

