NOVA | Northern Virginia Community College

Student Achievement Criteria at NOVA: Comprehensive Evaluation Report 2019

NORTHERN VIRGINIA COMMUNITY COLLEGE

OFFICE OF INSTITUTIONAL EFFECTIVENESS AND STUDENT SUCCESS

The purpose of the Office of Institutional Effectiveness and Student Success is to conduct analytical studies and provide information in support of institutional planning, policy formulation, and decision making. In addition, the office provides leadership and support in research related activities to members of the NOVA community engaged in planning and evaluating the institution's success in accomplishing its mission.

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I. Introduction

Northern Virginia Community College (NOVA) is deeply committed to the values of student access and student success. NOVA demonstrates this commitment by using evidence-based decision-making to improve opportunities for students to succeed. After a long-standing history of evaluating outcomes related to retention, graduation, and other evolving priorities, NOVA refocused efforts in 2018 on a more comprehensive evaluation of eight critical measures of student achievement.

In This Report

This comprehensive report identifies and describes NOVA's student achievement criteria; determines the College's minimum thresholds of acceptability as well as future achievement goals for each criterion; evaluates the outcomes and historical trends for each criterion; and presents information regarding related initiatives and programs designed to support the achievement goal.

Furthermore, this report shows how the systematic evaluation of these eight student achievement criteria can assess how well the College is achieving its mission, vision, and strategic plan goals, which are as follows:

NOVA's Mission	NOVA's Vision	NOVA's Strategic Plan
"With commitment to the values of access, opportunity, student success, and excellence, the mission of Northern Virginia Community College is to deliver world-class, in-person and online postsecondary teaching, learning, and workforce development to ensure our region and the Commonwealth of Virginia have an educated population and a globally competitive workforce." [1]	"To be a learning-centered organization that promotes student success." [2]	"As its primary contributions to meeting the needs of the Commonwealth of Virginia, the Northern Virginia Community College pledges to advance the social and economic mobility of its students while producing an educated citizenry for the 21st Century. To deliver on this commitment NOVA will focus its creativity and talent, its effort and energy, and its resources and persistence, on achieving three overarching goals—success, achievement, and prosperity. It will strive to enable every student to succeed, every program to achieve, and every community to prosper." [3]

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[1] NOVA's Mission and Vision Statements: http://www.nvcc.edu/mission/index.html
[2] Ibid.
[3] *Pathway to the American Dream: Every Student Succeeds, Every Program Achieves, and Every Community Prospers.* Northern Virginia Community College. https://www.nvcc.edu/about/mission/strategic-plan2017-2023.pdf

NOVA's History of Evaluating Student Achievement

Since its establishment, NOVA has systematically evaluated student success on an evolving set of student achievement metrics based on College-wide priorities, Virginia Community College System (VCCS) goals, nationwide trends, or the College's participation with ATD. Two of NOVA's long-standing reports share this information with College constituents and the community on an annual basis: the *NOVA Fact Book*[4] and the *Indicators of Institutional Effectiveness* report.[5] In addition, NOVA has selected and evaluated other student achievement metrics each year. These additional analyses help the College to support, monitor, and assess the effectiveness of various initiatives or policies across the College or within the VCCS, as well as benchmark NOVA's trends against other postsecondary institutions.

NOVA's membership in Achieving the Dream (ATD)—a national network of colleges focused on evidence-based institutional improvement—has also played a key role in its student achievement work. Through its participation in ATD, NOVA has enacted numerous policies with the goal of improving student achievement outcomes through evidence-based decision-making. This has included initiatives and policies related to developmental course progression, course success, and retention and graduation rates. NOVA continuously monitors and evaluates progress on ATD initiatives and polices, and publishes the reports on the Office of Institutional Effectiveness and Student Success website.

A New Focus on Eight Student Achievement Criteria

Historically, NOVA administrators have selected and evaluated student outcomes based on the achievement metrics related to various College-wide priorities, VCCS goals, nationwide trends, or the College's participation with ATD, as described above. While the College evaluated some metrics on a regular basis—such as retention and graduation—others varied each year based on evolving priority areas.

In 2016-17, NOVA enacted the new Strategic Plan, *Pathway to the American Dream: Every Student Succeeds, Every Program Achieves, and Every Community Prospers.*[6] To better support the new Strategic Plan, NOVA transitioned to a more systematic process of evaluating student outcomes. This process included the identification of eight critical student achievement metrics. In 2019, these metrics became the College's focus for improving student access and student success. The eight criteria were established in consultation with respective stakeholders, including senior leadership, the Office of Institutional Effectiveness and Student Success, and members of the Achieving the Dream Core Team.

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[4] *NOVA Fact Book.* Office of Institutional Research, Northern Virginia Community College. https://www.nvcc.edu/oiess/oir/fact-book/index.html

[5] *Indicators of Institutional Effectiveness.* Office of Institutional Research, Northern Virginia Community College. https://www.nvcc.edu/oiess/oir/report/Home/Report?id=897

[6] *Pathway to the American Dream: Every Student Succeeds, Every Program Achieves, and Every Community Prospers.* Northern Virginia Community College. https://www.nvcc.edu/about/mission/strategic-plan2017-2023.pdf

NOVA's Eight Student Achievement Criteria

Figure 1, below, shows NOVA's eight student achievement criteria. These eight metrics support NOVA's mission, the nature of the students it serves, and the kinds of programs it offers.

Figure 1. NOVA's Eight Student Achievement Criteria
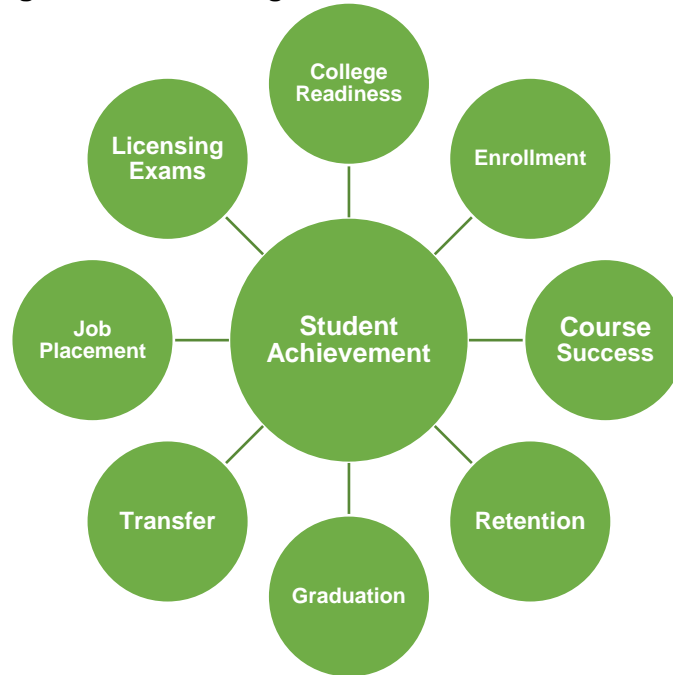
Achievement Goals and Threshold of Acceptability

For each criterion, NOVA sets a *threshold of acceptability,* as well as an achievement goal. The *threshold of acceptability* is the minimum level below which each measure should not fall. *Achievement goals* demonstrate NOVA's commitment to and goals for improvement relative to each criteria. Thresholds and goals were determined based on various internal and external factors. These factors include recent trends in higher education; national, Commonwealth of Virginia, and VCCS system accountability benchmarks and peer analysis; programmatic accreditor standards; federal requirements; the NOVA policy changes implemented in Fall 2014; resource allocation; discussions with respective stakeholders; and evaluations of the regional economy, labor market conditions, and population growth.

This report also includes achievement goals and thresholds of acceptability for historical cohorts to demonstrate the College's commitment to continuous improvement. By setting these figures for past terms and cohorts, NOVA is better able to understand trends and identify appropriate goals and thresholds for the future.

Annual Review and Evaluation of Student Achievement Criteria

Each year, NOVA assesses its progress toward established goals and thresholds of acceptability for each student achievement criterion. The annual review is a collective process, which enables College stakeholders to ensure each measure is appropriately addressing the student achievement criteria and that student outcomes are improving. Further, the process provides stakeholders with an opportunity to revise and update one-, two-, and three-year thresholds of acceptability and achievement goals given any changes in College policies, observed College-wide trends, or changes in the service area region. The Office of Institutional Research (OIR) plays a lead role in this process by analyzing and providing data and recommending appropriate goals. Student achievement remains and will remain an ongoing priority for the College, and NOVA is dedicated to its continual improvement.

This report provides the most recent available data to evaluate NOVA's progress toward its achievement goals for each of the eight student achievement criteria. The Office of Institutional Research will release annual updates to this report as new data become available.

1. **College Readiness:** The percentage of students in the GPS cohort who placed into developmental **English** was 20 percent in Fall 2018. The percentage of students in the GPS cohort who placed into developmental **math** was 44 percent in Fall 2018. Neither measure of college readiness met the threshold of acceptability.

2. **Enrollment:** College-wide **fall enrollment** exceeded the threshold of acceptability (50,000) but did not meet the achievement goal (52,000) in Fall 2018. **Annual enrollment** exceeded the threshold of acceptability but did not meet the achievement goal (74,500) in 2017-18.

3. **Course Success:**
   - **Overall:** The overall course success rate for all students was 74 percent in Fall 2018. The Fall 2018 course success rate exceeded the threshold but did not meet the achievement goal.

   - **Developmental English:** The Fall 2018 cohort met neither the threshold nor the achievement goal for course success in ENF 1, ENF 2 and ENF 3. The Fall 2016 cohort exceeded the threshold of acceptability but fell below the achievement goal for developmental students' progression and success in college-level English.

   - **Developmental Math:** The Fall 2018 cohort met neither the threshold nor the achievement goal for success in MTT courses. The Fall 2018 cohort did not meet the threshold of acceptability (at least 67 percent) or the achievement goal (68 percent) for success in MCR 4. Similarly, the Fall 2018 cohort did not meet the threshold of acceptability (at least 53 percent) or achievement goal (54 percent) for success in MCR 6. The Fall 2016 cohort did not meet the threshold of acceptability or the achievement goal for developmental math students' progression and success in college-level math.

   - **Gatekeeper:** The Fall 2017 cohort met the achievement goal in ACC 211, fell in between the threshold and goal in BIO 101 and ENG 111, and fell below the threshold in MTH 151/154 and MTH 163/161.

4. **Retention:** The **fall-to-spring** retention rate for Fall 2017 first-time in college, program placed students exceeded the threshold and fell just below the achievement goal. The **fall-to-fall** retention rate for the Fall 2017 cohort exceeded the threshold but did not meet the achievement goal.

5. **Graduation:** The College did not meet the threshold of acceptability (6,545) nor the achievement goal (6,700) for **annual number of graduates** in 2017-18. The Fall 2015 cohort of first-time in college, full-time, program placed students had a **graduation rate** of 26 percent, which fell in between the threshold of acceptability and the achievement goal.

6. **Transfer:** The College-wide **annual number of transfers** in 2017-18 exceeded the threshold of acceptability (10,750) but did not meet the achievement goal (12,250). The **transfer-out rate** for the Fall 2015 cohort of first-time in college, full-time, program placed students met neither the threshold of acceptability (16 percent) nor the achievement goal (19 percent).

7. **Job Placement:** In 2016-17, the job placement rate exceeded the threshold of acceptability and fell just below the achievement goal of 67 percent.

8. **Licensing Exams:** Among NOVA's programs with licensure exams, five out of 13 programs reached the achievement goal of a 100 percent pass rate in 2017, up from only three of its 11 programs in 2013.

III. Student Achievement Criteria at NOVA

1. College Readiness

Appropriateness of Criteria and Measures

Criteria: College readiness is the level of preparation a student needs to enroll and succeed in a credit-bearing, general education course without remediation.

Measures: College readiness is measured as the percentage of students who placed into developmental English and/or developmental math.

Appropriateness: Developmental courses in English and math prepare students for college-level work, but do not count as college credit towards the requirements for a degree or certificate. An institutional challenge is to ensure that students receive the appropriate amount of support they need in order to succeed academically in a timely and cost-efficient manner. One way in which an institution can achieve this is by minimizing the time a student spends in developmental coursework. The VCCS continues to seek ways to improve student success, including its developmental education offerings, which helps students to prepare for a college-level curriculum and achieve their educational goals as efficiently as possible.[7]

Threshold of Acceptability: For the Fall 2018 cohort of GPS students,[8] the percentage who place into developmental English will be 18 percent or less. The percentage who place into developmental math will be 40 percent or less.

Achievement Goals: For the Fall 2018 cohort of GPS students,[6] the percentage who place into developmental English will be 15 percent. The percentage who place into developmental math will be 35 percent.

Justification of Threshold of Acceptability and Achievement Goal

NOVA's threshold of acceptability and achievement goal for college readiness reflect the limited data available regarding the College's adjustment to the multiple measures placement policy (described below). Although more schools and systems are adopting the practice, extensive outcomes data is not yet available. Preliminary research is encouraging but setting modest targets for English and math placement levels allows NOVA to adapt to changes in placement testing and any unexpected outcomes as a result.

In the past, students were required to take the COMPASS placement test for appropriate placement into English and math courses. These tests were developed centrally by the VCCS. In mid-Fall 2011, VCCS introduced a new statewide test for developmental math placement: the

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[7] (January 2018). *VCCS Redesign of Developmental Education Leads to Greater Student Success.* Thomas Nelson Community College. https://tncc.edu/news/vccs-redesign-developmental-education-leads-greater-student-success
[8] GPS refers to the population of recent high school graduates (ages 17-24) who are first-time in college (FTIC) students. In Fall 2014, NOVA implemented policy changes mandating placement testing and enrollment in developmental courses in the first semester for GPS students.

Virginia Math Placement Test (VPT-Math). In late Fall 2012, VCCS introduced a new statewide test for developmental English placement: the Virginia English Placement Test (VPT-English).

In Fall 2014, NOVA enacted the Start Strong initiative, a set of six policies designed to foster a strong academic start for first-time in college (FTIC) students at NOVA.[9] One of the six new policies was mandating placement testing and enrollment in developmental courses during the first semester if placed. The policy applied to the GPS population, which is defined as recent high school graduates who are first-time in college (FTIC) students.[10] The GPS for Success program was developed to provide FTIC students with additional support through dedicated advisors, who serve to promote engagement, build connections, and assist students with navigating the transition to college.

In Fall 2017, VCCS established a set of multiple measures for determining developmental or college-level placement in English and math. In addition to utilizing standardized test scores (e.g., SAT, ACT, etc.), high school GPA and performance in high school coursework are also used to determine English and math course placement. In adopting the multiple measures placement policy, VCCS recognized that placement tests "aren't always the best way to determine the students' true skill levels" and voiced support that the new policy "will allow many students to demonstrate college readiness without having to take the placement test."[11]

The multiple measures approach has been adopted by all schools within the VCCS and allows students to be placed into the appropriate level of coursework based on considerations other than placement test scores. This provides colleges with a broader picture of students' abilities through their high school grades and other test scores, which will reduce the number of students placed in developmental coursework. Nationwide, preliminary research on multiple measures placement suggests "they enable colleges to make more accurate decisions about which students need developmental education. As a result, more students are being assigned to college-level English and math, passing those courses, and moving ahead with their programs of study more quickly — saving time and tuition money in the process."[12]

Nationwide estimates vary, but typically show a greater percentage of students placing into developmental education compared to the developmental placement rates of NOVA students. At two-year institutions, approximately 75 percent of incoming students "need remedial work in English, mathematics, or both."[13] Data from a sample of Achieving the Dream (ATD) schools shows that 59 percent of students placed into developmental math and 23 percent placed into developmental reading.[14] This suggests that NOVA's thresholds of acceptability and achievement goals are ambitious, but the College's historical data and continued efforts to ensure appropriate placement support the targets that have been set.

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[9] https://www.nvcc.edu/startstrong/
[10] GPS students are first-time in college, recent high school graduates ages 17-24. https://www.nvcc.edu/gps/
[11] http://www.vccs.edu/vccsblog_post/initiative-update-multiple-measures-for-student-success/
[12] https://ccrc.tc.columbia.edu/media/k2/attachments/Modernizing_College_Course_Placement_by_Using_Multiple_Measures_Final.pdf.
[13] http://www.highereducation.org/reports/college_readiness/CollegeReadiness.pdf
[14] https://ccrc.tc.columbia.edu/media/k2/attachments/student-progression-through-developmental-sequences-brief.pdf

Additional Data Supporting College Readiness Targets

See Appendix A for a list of peer institutions. See Appendix B for peer institution data supporting NOVA's thresholds of acceptability and achievement goals for college readiness.

Evaluation of Outcomes

Developmental English (Figure 2): Among the Fall 2018 GPS cohort, approximately 20 percent of students placed into developmental English. This cohort did not meet either the threshold of acceptability (18 percent or less) or the achievement goal (15 percent) for placement into developmental English.

**Figure 2. Developmental English Placement Rate:
Fall 2014 through Fall 2021 GPS Cohorts**
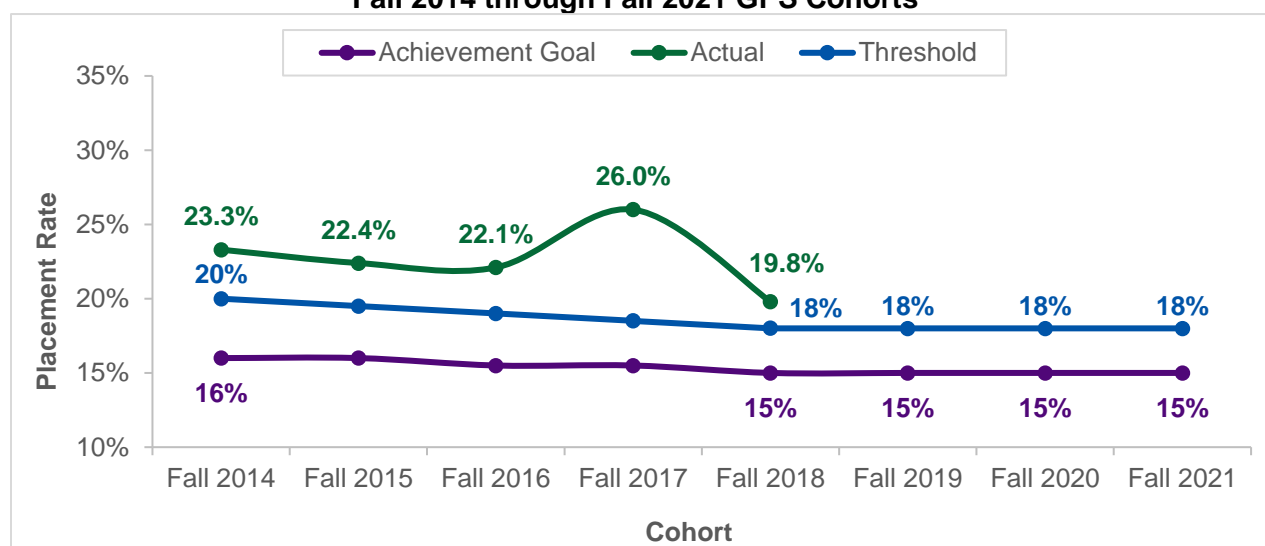
Notes: For the Fall 2014 through Fall 2016 cohorts, developmental English placement was determined by the Virginia English Placement Test (VPT-English). For the Fall 2017 and Fall 2018 cohorts, developmental English placement was determined by Multiple Measures. Data include students in the GPS population who were evaluated for placement.

**Table 1. Developmental English Placement Rate:
Fall 2014 through Fall 2018 GPS Cohorts**

| GPS Cohort | Developmental English Placement | | | | |
| | Placed | | Not Placed | | Total |
	#	%	#	%	
Fall 2014	907	23.3	2,987	76.7	3,894
Fall 2015	948	22.4	3,291	77.6	4,239
Fall 2016	902	22.1	3,174	77.9	4,076
Fall 2017	873	26.0	2,491	74.0	3,364
Fall 2018	907	19.8	3,677	80.2	4,584

Source: Office of Institutional Research, Northern Virginia Community College.
Notes: For the Fall 2014 through Fall 2016 cohorts, developmental placement was determined by the Virginia English Placement Test (VPT-English). For the Fall 2017 and Fall 2018 cohorts, developmental placement was determined by Multiple Measures. Total includes students in the GPS population (ages 17-24 who are first-time in college students) who were evaluated for placement.

Developmental Math (Figure 3): Among the Fall 2018 GPS cohort, approximately 44 percent of students placed into developmental math. This cohort did not meet either the threshold of acceptability (40 percent or less) or the achievement goal (35 percent) for placement into developmental math.

Figure 3. Developmental Math Placement Rate: Fall 2014 through Fall 2021 GPS Cohorts
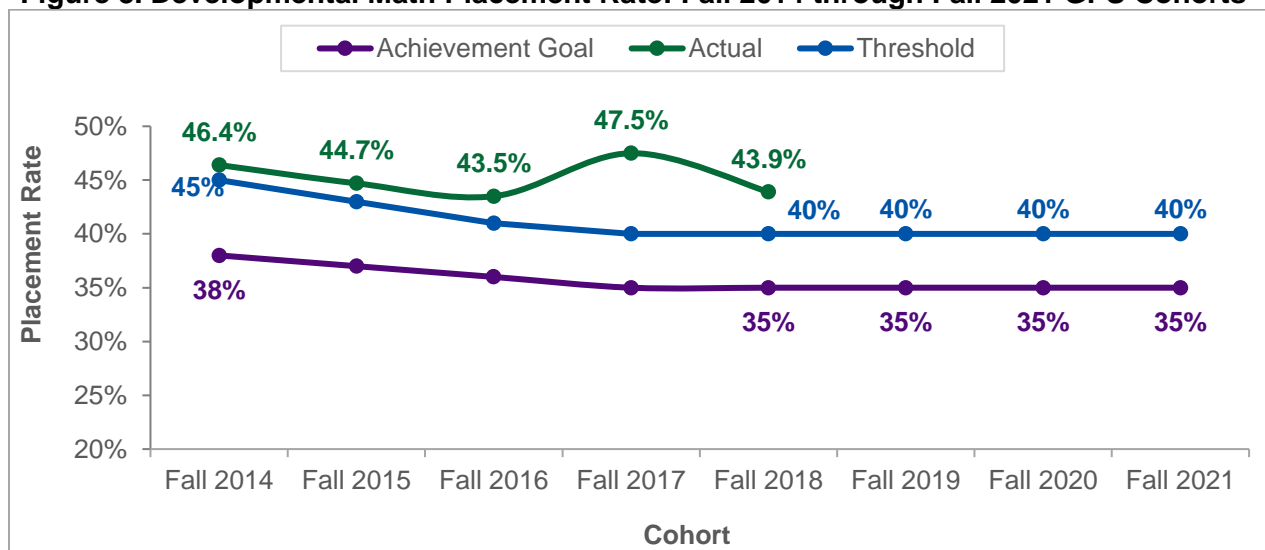
Notes: For the Fall 2014 through Fall 2016 cohorts, developmental math placement was determined by the Virginia Math Placement Test (VPT-Math). For the Fall 2017 and Fall 2018 cohorts, developmental math placement was determined by Multiple Measures. Data include students in the GPS population who were evaluated for placement. .

Table 2. Developmental Math Placement Rate:
Fall 2014 through Fall 2018 GPS Cohorts

GPS Cohort	Developmental Math Placement				
	Placed		Not Placed		Total
	#	%	#	%	
Fall 2014	2,035	46.4	2,355	53.6	4,390
Fall 2015	2,079	44.7	2,568	55.3	4,647
Fall 2016	2,045	43.5	2,656	56.5	4,701
Fall 2017	1,872	47.5	2,069	52.5	3,941
Fall 2018	2,036	43.9	2,606	56.1	4,642

Source: Office of Institutional Research, Northern Virginia Community College.
Notes: For the Fall 2014 through Fall 2016 cohorts, developmental placement was determined by the Virginia Math Placement Test (VPT-Math). For the Fall 2017 and Fall 2018 cohorts, developmental placement was determined by Multiple Measures. Total includes students in the GPS population (ages 17-24 who are first-time in college students) who were evaluated for placement.

2. Enrollment

Appropriateness of Criteria and Measures

Criteria: Enrollment is the headcount of students enrolled in credit courses; students enrolled in courses that are part of a vocational or occupational program, including those enrolled in off-campus centers; and high school students taking college courses for credit.

Measures: Measures of enrollment include the headcount of students enrolled in the fall semester, and the unduplicated headcount of students enrolled at any time during the entire 12-month academic year (i.e., summer, fall, and spring semesters).

Appropriateness: As a two-year, open-enrollment institution, access is a fundamental component of NOVA's mission. NOVA is committed to providing access to higher education for individuals in the surrounding community. NOVA's strategic plan states a commitment to supporting the community through both workforce development and academic programs that support job demand in the Northern Virginia region. NOVA serves students through both transfer and applied degree programs, accommodating students with a wide range of academic and professional goals. Based on its mission and the educational and professional demands for employment in NOVA's service area, enrollment is a suitable achievement criteria for the college's students.

Threshold of Acceptability: In 2017-18, annual enrollment will be at least 72,000. In Fall 2018, fall student enrollment will be at least 50,000.

Achievement Goals: In 2017-18, annual enrollment will be 74,500. In Fall 2018, fall student enrollment will be 52,000.

Justification of Threshold of Acceptability and Achievement Goal

The thresholds of acceptability and achievement goals for enrollment are appropriated based on NOVA's efforts to retain existing students and attract new students. Additionally, enrollment targets consider external influences such as the projected number of college-age students and the projected unemployment rate. Following several years of a steady decline in annual headcount, NOVA set targets that focus on increasing enrollment. This demonstrates the College's commitment to serving students and exhibits a best practice in enrollment management.

Programmatically, NOVA implemented several policies and practices aimed at increasing enrollment, particularly through the retention of existing students. The development of Guided Pathways and the use of Integrated Planning and Advising for Student Success (IPASS) software and other improved advising tools will help ensure that current students continue to enroll at NOVA. Enhanced advising, in addition to student services such as tutoring, can increase students' GPAs, which is linked to higher engagement and retention rates. Additionally, NOVA made improvements to NOVA Online, including adding programs and courses that use

Open Educational Resources (OER). OER benefits students by saving them money on textbook costs, which can be used to enroll in additional credit hours.

NOVA's most recent strategic plan includes directives to enhance its Workforce Development programs by developing programs that support regional job demand. By aligning programs with local industries, NOVA can position itself as an institution that prepares individuals for the needs of the regional economy and job market.

In 2018, the VCCS board adopted several policy recommendations from a blue ribbon task force aimed at stemming the enrollment decline throughout the system. The chancellor of VCCS prioritized three recommendations, including the creation of a statewide marketing campaign; the pursuit of policy changes aimed at promoting affordability; and strengthening advising and student support in VCCS colleges.[15] According to these recommendations, NOVA enacted new policies and plans such as the enhanced marketing objectives mentioned above; policies aimed at increasing awareness of the FAFSA and other financial aid; and the use of IPASS. NOVA intends to increase its enrollment through these and other initiatives.

When setting enrollment targets, NOVA considers the pool of recent high school graduates. The number of public high school graduates in Virginia is projected to increase by three percent between the 2016-17 and 2020-21 school years.[16] This increase in public high school graduates directly increases NOVA's potential student pool. NOVA plans to capitalize on this growing population through enhanced recruiting and marketing campaigns. NOVA's Office of Marketing and Creative Services has established four related goals, including a target of increasing awareness of NOVA within the communities it serves by five percent. NOVA will continue to participate in high school outreach initiatives—such as the Virginia College Application Week— in addition to promoting lucrative programs such as the ADVANCE partnership with George Mason University. Through these efforts, NOVA can increase enrollment of the growing local high school graduate population, which will help reach its overall enrollment goals by Fall 2021.

Nationally, enrollment at post-secondary institutions is expected to increase 15 percent from Fall 2012 through Fall 2023. The projected increase is based on the number of college-age individuals, disposable income, and unemployment rates.[17] Following a projected low of 3.9 percent in 2019, the unemployment rate among civilians 16 and older is expected to increase to 4.2 percent by 2021. An increase in the unemployment rate is historically related to an increase in enrollment at community colleges. Through more targeted marketing and recruiting, NOVA can help to enroll additional students, especially during times of higher unemployment when individuals are considering college as an alternative to the workforce. As such, these data help support NOVA's decision to set enrollment targets that show an increase in both fall and annual headcount by 2021.

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[15] http://www.vccs.edu/vccsblog_post/vccs-takes-action-on-lower-student-enrollments/

[16] Hussar, W. J. & Bailey, T. M. (2016, April). *Projections of education statistics to 2023*. National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubs2015/2015073.pdf

[17] https://nces.ed.gov/pubs2015/2015073.pdf

## Additional Data Supporting Enrollment Targets

See Appendix A for a list of peer institutions. See Appendix C for peer institution data supporting NOVA's thresholds of acceptability and achievement goals for college readiness.

Evaluation of Outcomes

Fall Enrollment (Figure 4): From Fall 2013 to Fall 2018, fall enrollment declined from 51,803 to 50,929. In Fall 2018, enrollment exceeded the threshold of acceptability (at least 50,000) but did not meet the achievement goal (52,000).

Figure 4. Fall Headcount Enrollment: Fall 2013 through Fall 2021
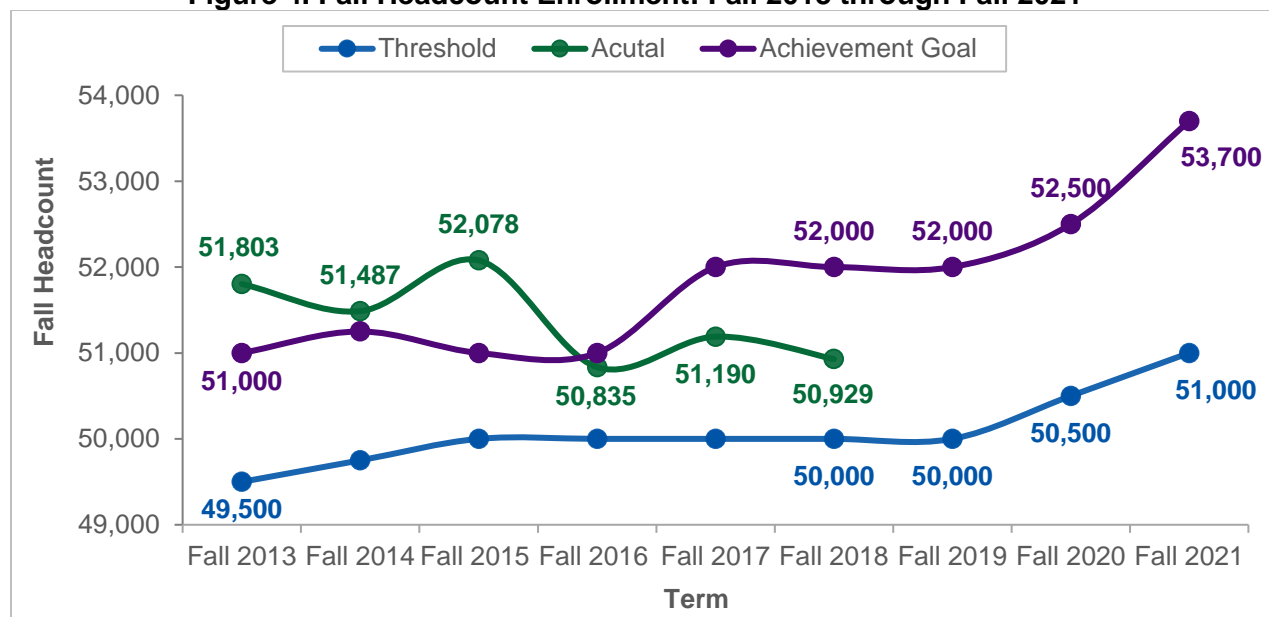
Table 3. Fall Headcount: Fall 2013 through Fall 2018

Term	Fall Headcount	
	Headcount	Growth Rate (%)
Fall 2013	51,803	---
Fall 2014	51,487	-0.6
Fall 2015	52,078	1.1
Fall 2016	50,835	-2.4
Fall 2017	51,190	0.7
Fall 2018	50,929	-0.5

Source: Office of Institutional Research, Northern Virginia Community College.
Notes: The growth rate is calculated as the percent change over the previous year.

Annual Unduplicated Headcount (Figure 5): Annual enrollment declined from 78,481 in 2013-14 to 73,657 in 2017-18. In 2017-18, annual enrollment exceeded the threshold of acceptability (at least 72,000) but did not meet the achievement goal (74,500).

Figure 5. Annual Unduplicated Headcount Enrollment: 2013-14 through 2021-22
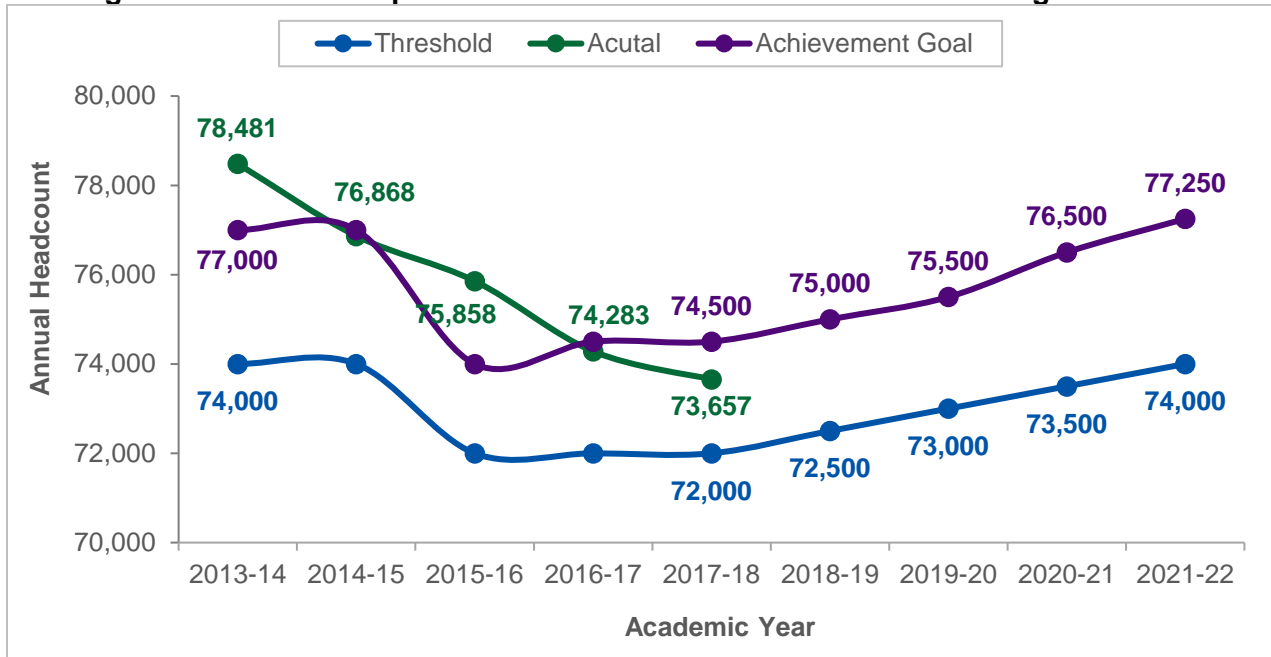
Note: 2018-19 annual unduplicated headcount was unavailable at the time of publication.

Table 4. Annual Unduplicated Headcount: 2013-14 through 2018-19

Academic Year	Annual Unduplicated Headcount	
	Headcount	Growth Rate (%)
2013-14	78,461	---
2014-15	76,868	-2.0
2015-16	75,858	-1.3
2016-17	74,283	-2.1
2017-18	73,657	-0.8

Source: Office of Institutional Research, Northern Virginia Community College.
Notes: The growth rate is calculated as the percent change over the previous year. 2018-19 annual unduplicated headcount was unavailable at the time of publication.

3. Course Success

Appropriateness of Criteria and Measures

Criteria: Course success is defined as earning a grade of 'A', 'B', 'C', 'P', or 'S'.

Measures: Measures of course success include four categories. NOVA sets thresholds of acceptability and achievement goals separately for each of these measures.
   A. The overall course success rate for all students
   B. Success in developmental English courses:
   - Developmental English course success rate
   - Progression rate of developmental English students to college-level English
   - Developmental English students' success rate in college-level English
   C. Success in developmental math courses:
   - Developmental math course success rate
   - Progression rate of developmental math students to college-level math
   - Developmental math students' success rate in college-level math
   D. Success in gatekeeper courses for first-time to NOVA students: Gatekeeper courses are five college-level courses with high enrollment that are often critical to students' future success in college:
   - ACC 211: Principles of Accounting I
   - BIO 101: General Biology I
   - ENG 111: College Composition I
   - MTH 151: Mathematics for the Liberal Arts I
   - MTH 163: Pre-Calculus I

Appropriateness: Succeeding in courses is essential to a student's ability to reach long-term educational goals, such as graduating with a degree or credential and/or transferring to a four-year institution. When students do not earn a passing grade in a course, it can delay their path toward their intended academic goals. As a measure of progress, NOVA's strategic plan includes a commitment to monitoring the percentage of associate degree-seeking students who complete a gatekeeper college-level math course and English 111: *College Composition I* within their first year of enrollment. This commitment to tracking gatekeeper enrollment and success highlights the importance of these courses to overall student achievement. Succeeding in these and other gatekeeper courses allows students to progress to other program requirements.

As a participating institution in the Achieving the Dream (ATD) network, NOVA tracks the overall course success rate for the College, as well as success trends in developmental English courses, developmental math courses, and gatekeeper courses. College stakeholders use course success rate information to make data-driven improvements to student learning and student outcomes.

A. Overall Course Success

Threshold of Acceptability: In Fall 2018, the overall course success rate will be at least 73 percent.

Achievement Goal: In Fall 2018, the overall course success rate will be 75 percent.

Justification of Threshold of Acceptability and Achievement Goal

Between Fall 2014 and Fall 2018, NOVA's course success rate has remained consistent (increasing only one percentage point between Fall 2014 and Fall 2015). NOVA's achievement goal is set at one percentage point higher than the actual course success rate in Fall 2018 and two percentage points higher for Fall 2019 onwards. This is appropriate given recent adjustments to how NOVA places students into developmental and college-level courses. In Fall 2017, NOVA implemented a multiple measures placement policy (instead of relying solely on placement tests), which more accurately assesses college readiness. By placing students into courses appropriate to their skill level, the overall course success rate is expected to increase.

Moreover, the College has a variety of student success initiatives in place to support this goal. NOVA's developmental English program includes two prerequisite courses and one co-requisite course, which supports the varying needs of developmental students. Students place into these courses in various combinations as determined by the multiple measures placement assessment results. Similarly, developmental math students complete various one-credit mathematics units into which they place based on their placement assessment results. The multiple measures placement assessment combined with pre- and co-requisite developmental courses and units is expected to more accurately assess a student's skill level. This will help developmental students to progress to and succeed in college-level courses at a higher rate. As a result, the College's overall course success rate is also expected to increase, and future achievement goals reflect these expectations.

Additionally, NOVA has enacted various student support services based on Achieving the Dream (ATD) recommendations. Based on student success research, ATD encourages member colleges to continuously monitor course success rates in order to identify areas for improvement. Such recommendations are based on best practice research regarding how to improve student success and close achievement gaps. As community colleges around the nation explore these best practices to improve course success rates, many have elected to redesign advising and student support services. One such student support service is tutoring, with numerous ATD colleges implementing new tutoring-related initiatives. Additionally, the Center for Community College Student Engagement (CCCSE) lists tutoring as one of 13 promising practices for promoting student success. CCCSE argues that tutoring is an effective way to provide students with important academic and peer support.

NOVA provides free tutoring services to all NOVA students. Each campus has at least one Tutoring Center, which offer students a variety of academic support services in addition to tutoring. For example, some tutoring centers provide students with a location at which they can access computers to complete assignments and hold study groups. Some tutoring centers also

provide academic coaching and host workshops. Each time a tutoring center delivers a service to a NOVA student, it is logged as a session in *Accudemia*, a cloud-based tracking product for academic centers.

NOVA data suggests its tutoring centers have a positive impact on a student's ability to achieve their educational goals. NOVA students who received tutoring services had higher course success rates than their non-tutored counterparts. This difference was most pronounced among part-time students. Part-time, tutored students had an average course success rate of 72 percent, compared to only 65 percent for part-time, non-tutored students.[18]

Given that the College's overall success rate is reasonably high and has stayed constant during the past five years, the overall course success rate is not expected to change substantially. However, by continuing to provide student academic support services such as tutoring, NOVA can set positive targets and expect to increase the course success rate incrementally over the next several years.

Evaluation of Outcomes

The overall course success rate for all students was 74 percent in Fall 2018. The Fall 2018 course success rate exceeded the threshold but did not meet the achievement goal.

Figure 6. Overall Course Success Rate for All Students: Fall 2014 through Fall 2021
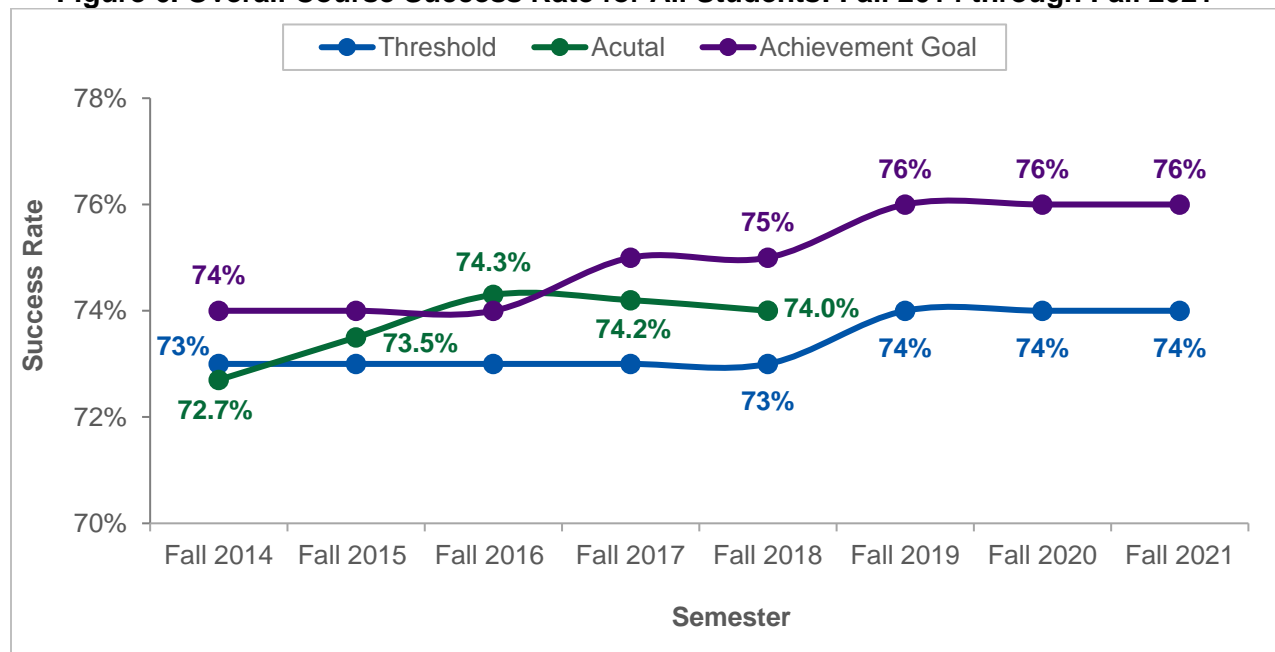
Notes: Grades of Audit, Missing, and Never Attending Student (NVRK) were excluded from the analysis. Total course enrollment is duplicated.

Table 5. Overall Course Success Rate: Fall 2014 through Fall 2018

Semester	Total Course Enrollment	Success Rate	
		#	%
Fall 2014	148,848	108,176	72.7
Fall 2015	148,622	109,214	73.5
Fall 2016	142,480	105,825	74.3
Fall 2017	141,179	104,696	74.2
Fall 2018	138,507	102,495	74.0

Source: Office of Institutional Research, Northern Virginia Community College.
Notes: Grades of Audit, Missing, and Never Attending Student (NVRK) were excluded from the analysis. Total course enrollment is duplicated.

B. Developmental English Success

Appropriateness of Criteria and Measures

Measures: Developmental English student success is measured in three ways:

1. Success rates in developmental English courses (ENF 1, ENF 2, ENF 3)
2. Progression of developmental English students to college-level English
3. Developmental English students' success in college-level English

Appropriateness: Success in the developmental English program does not end with success in developmental courses. A developmental students' progression to and success in college-level English indicates how well remediation prepared them for a college-level curriculum. As such, these three measures together reflects three important early steps in supporting developmental students ability to reach their long-term academic goals.

Threshold of Acceptability:

1. For the Fall 2018 first-time to NOVA cohort, success rates in developmental English will be at least 59 percent for ENF 1; 55 percent for ENF 2; and 72 percent for ENF 3.
2. For the Fall 2016 first-time to NOVA cohort, the rate of progression from developmental English to college-level English will be at least 88 percent.
3. For the Fall 2016 first-time to NOVA cohort, the success rate for developmental English students in college-level English will be at least 74 percent.

Achievement Goals:

1. For the Fall 2018 first-time to NOVA cohort, success rates in developmental English will be 60 percent for ENF 1; 56 percent for ENF 2; and 73 percent for ENF 3.
2. For the Fall 2016 first-time to NOVA cohort, the rate of progression from developmental English to college-level English will be 89 percent.
3. For the Fall 2016 first-time to NOVA cohort, the success rate for developmental English students in college-level English will be 76 percent.

Justification of Threshold of Acceptability and Achievement Goal

The thresholds of acceptability and achievement goals are appropriate given historical trends in developmental English success. Across the past several cohorts, the success rate in each of NOVA's three developmental English courses has decreased. Therefore, targets for future cohorts consider these trends. However, recent policy changes (described below) are reasonably expected to increase developmental English success rates, developmental progression to college-level courses, and success rates in college-level English over the next several years. Despite recent declines, these changes will help the College to meet targets by Fall 2021. Reaching the threshold of acceptability in developmental English courses requires a modest increase in the success rates by one to two percentage points over Fall 2018 levels.

As part of its participation in Achieving the Dream (ATD), NOVA redesigned its developmental English program. Redesigned courses integrate reading and writing skills, which has helped to decrease the amount of time students spend in the developmental sequence prior to progressing to college-level coursework. Additionally, NOVA adopted the new multiple measures placement policy in Fall 2017. As part of this policy, the College considers factors such as high school coursework and GPA in addition to standardized tests and placement test scores. These recent changes are expected to lead to more accurate placement of students into courses appropriate to their skill level, which will improve success rates in developmental English as well as rates of progression to and success in college-level English.

In recent years, NOVA has observed that the majority of developmental English students are placing into and enrolling in ENF 3, the most advanced developmental English course. This course serves as a co-requisite to English 111, College Composition I. With more students placing into and enrolling in ENF 3, the rate at which students' progress to college-level English coursework will increase. By setting achievement goals for developmental English courses that are higher than recent success levels, NOVA demonstrates its commitment to further improving its developmental English sequence.

Evaluation of Outcomes

B1. Success in Developmental English

ENF 1 (Figure 7, next page): From the Fall 2014 to Fall 2018 first-time to NOVA cohorts, the success rate in ENF 1 increased from 51 to 57 percent. However, among the past two cohorts, the success rate has decreased from a high of 62 percent among the Fall 2017 cohort. For the Fall 2018 cohort, the College met neither the threshold of acceptability (at least 58 percent) nor the achievement goal (60 percent) for success in ENF 1.

Figure 7. Success Rates in Developmental English (ENF 1):
Fall 2014 through Fall 2021 First-Time to NOVA Cohorts
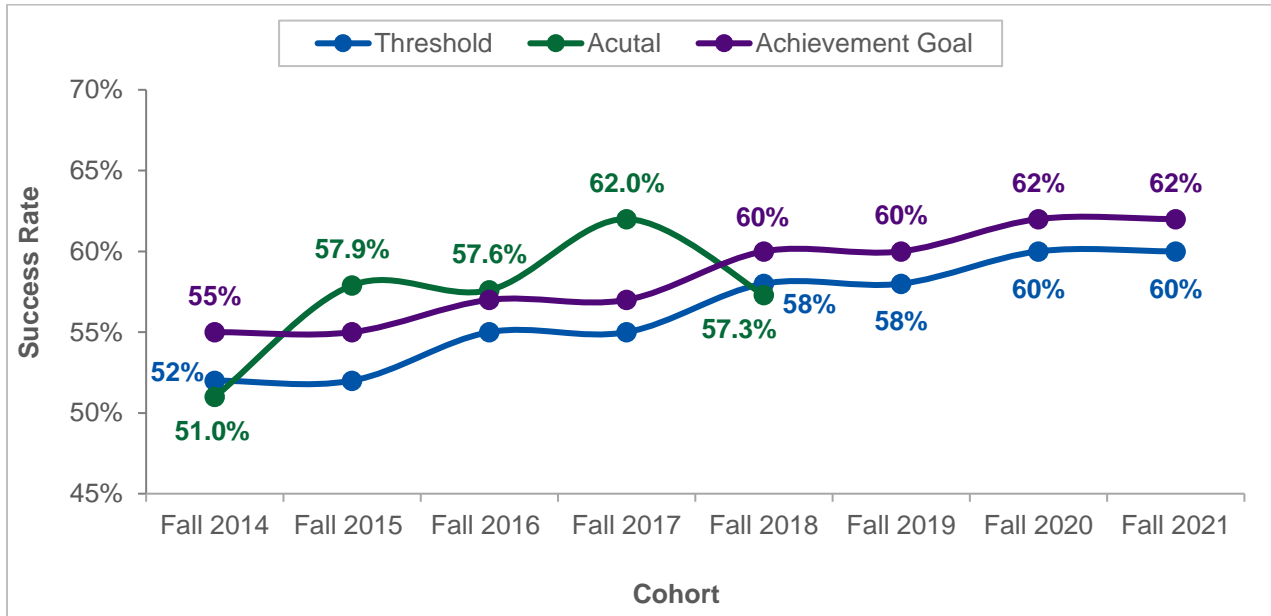
Note: ENF 1 is *Preparing for College English I*, an eight-credit course.

ENF 2 (Figure 8): From the Fall 2014 to Fall 2018 first-time to NOVA cohorts, the success rate in ENF 2 decreased from 57 to 53 percent. For the Fall 2018 cohort, the College did not meet the threshold of acceptability (at least 55 percent) or the achievement goal (56 percent) for success in ENF 2.

Figure 8. Success Rate in Developmental English (ENF 2):
Fall 2014 through Fall 2021 First-Time to NOVA Cohorts
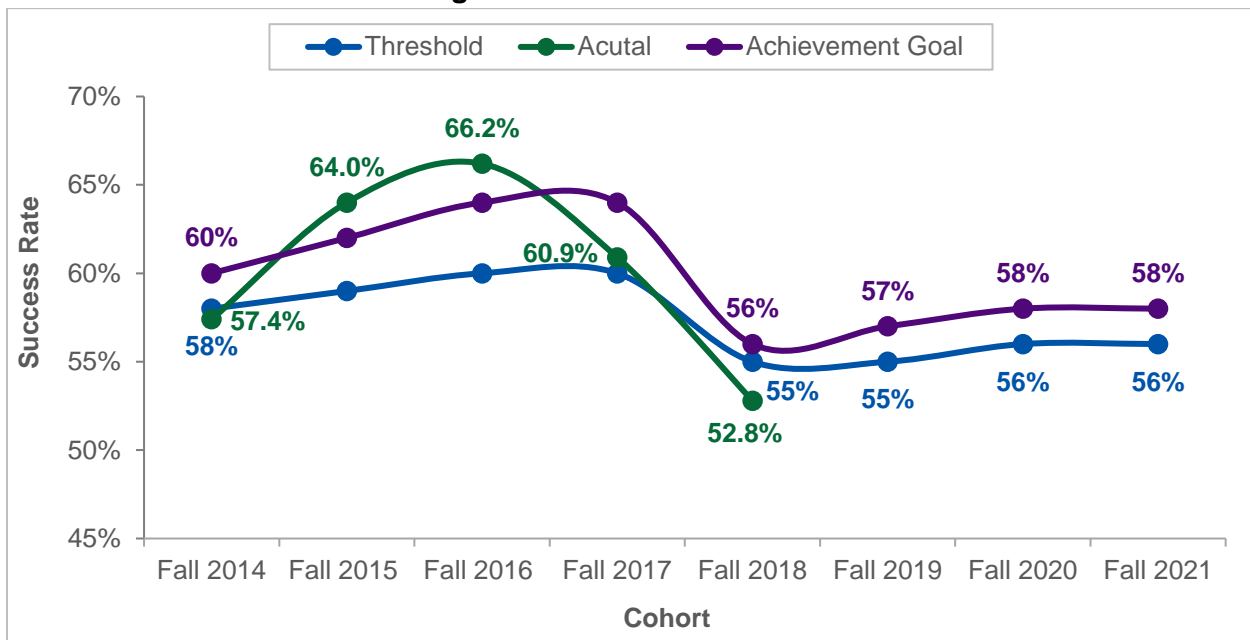
Note: ENF 2 is *Preparing for College English II*, a four-credit course.

ENF 3 (Figure 9): From the Fall 2014 to Fall 2018 first-time to NOVA cohorts, the success rate in ENF 3 decreased from 75 to 71 percent. Among the Fall 2018 cohort, the College did not meet either the threshold of acceptability (at least 72 percent) or the achievement goal (73 percent) for success in ENF 3.

**Figure 9. Success Rate in Developmental English (ENF 3):
Fall 2014 through Fall 2021 First-Time to NOVA Cohorts**
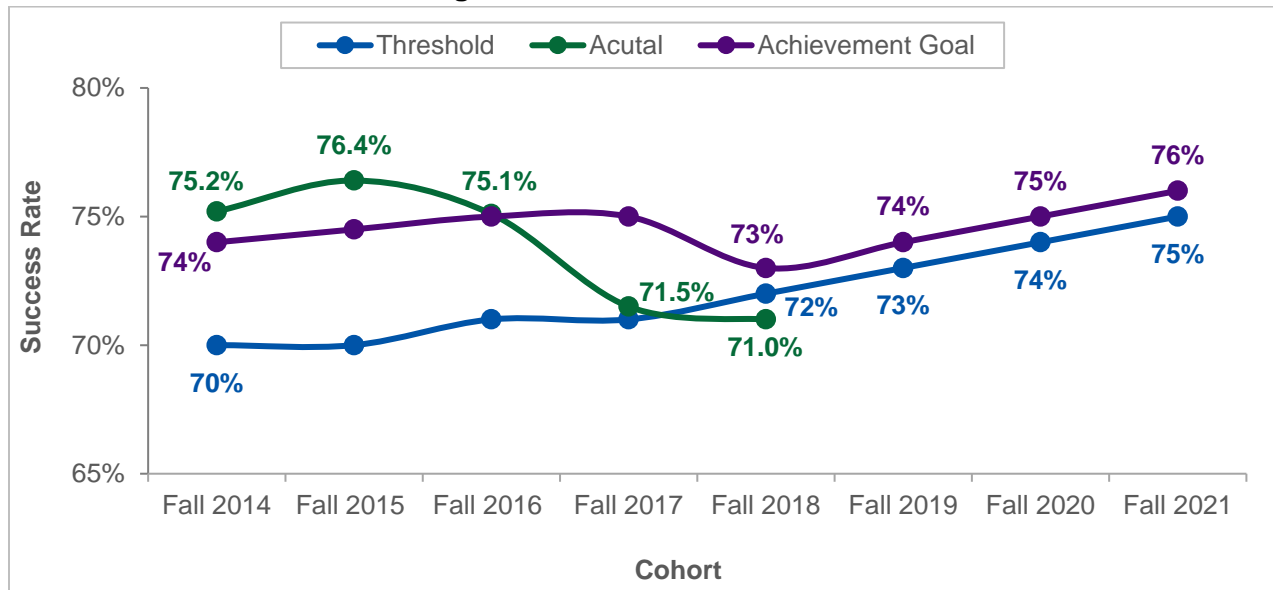
Note: ENF 3 is *Preparing for College English III*, a two-credit course that is co-enrolled with ENG 111, *College Composition I*, the entry-level college composition class.

**Table 6. Success Rates in Developmental English by Developmental English Course:
Fall 2014 through Fall 2018 First-Time to NOVA Cohorts**

Cohort	ENF 1			ENF 2			ENF 3			Total		
	N	Success		N	Success		N	Success		N	Success	
		#	%		#	%		#	%		#	%
Fall 2014	104	53	51.0	296	170	57.4	1,066	802	75.2	1,466	1,025	69.9
Fall 2015	95	55	57.9	333	213	64.0	1,000	764	76.4	1,428	1,032	72.3
Fall 2016	92	53	57.6	302	200	66.2	994	746	75.1	1,388	999	72.0
Fall 2017	92	57	62.0	279	170	60.9	829	593	71.5	1,200	820	68.3
Fall 2018	75	43	57.3	282	149	52.8	877	623	71.0	1,234	815	66.0

Note: ENF 1: *Preparing for College English I*, an eight-credit course; ENF 2: *Preparing for College English II*, a four-credit course; ENF 3: *Preparing for College English III*, a two-credit course that is co-enrolled with ENG 111: *College Composition I*, the entry-level college composition class. Grades of Audit and Missing are excluded from the analysis.

B2. Progression to College-Level English

From the Fall 2012 to Fall 2016 first-time to NOVA cohort of developmental English students, the rate of progression to college-level English increased from 76.2 to 88.6 percent. For the Fall 2016 cohort, the College exceeded the threshold of acceptability (at least 88 percent) but fell just short of the achievement goal (89 percent) for developmental English students' progression to college-level English.

Figure 10. Developmental English Student <u>Progression</u> to College-Level English: Fall 2012 through Fall 2019 First-Time to NOVA Cohorts
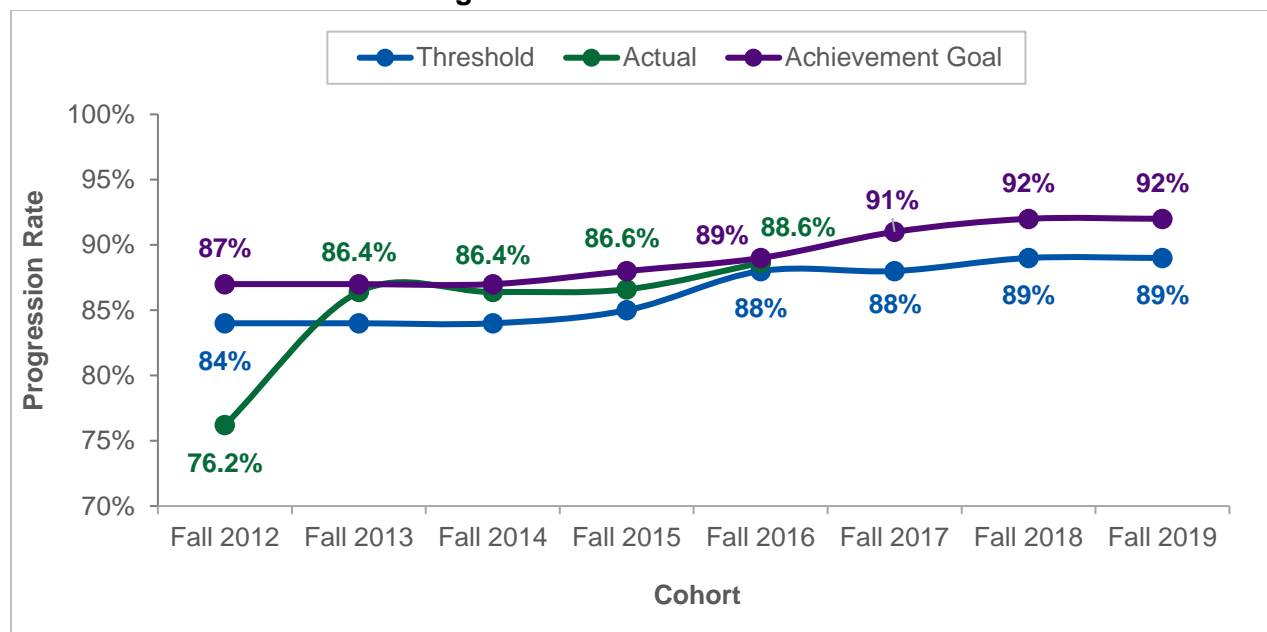
Notes: College-level English is ENG 111: *College Composition I*. Progression within two years of initial enrollment. Data include first-time to NOVA students who enrolled in developmental English during their first term of enrollment.

Table 7. Developmental English Student Progression to College-Level English: Fall 2012 through Fall 2016 First-Time to NOVA Cohorts

Cohort	N	Progressed	
		#	%
Fall 2012	2,881	2,195	76.2
Fall 2013	1,675	1,447	86.4
Fall 2014	1,468	1,269	86.4
Fall 2015	1,434	1,242	86.6
Fall 2016	1,390	1,232	88.6

Notes: College-level English is ENG 111: *College Composition I*. Progression within two years of initial enrollment. Data include first-time to NOVA students who enrolled in developmental English during their first term of enrollment.

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B3. Developmental English Student Success in College-Level English

From the Fall 2012 through Fall 2016 first-time to NOVA cohorts of developmental English students, success in ENG 111 decreased from 79 to 75 percent. Much of this decline occurred between the Fall 2012 and Fall 2013 cohorts, which represented the first cohort to use the newly implemented Virginia Placement Test (VPT). For the Fall 2016 cohort, the College exceeded the threshold of acceptability (at least 74 percent) but did not meet the achievement goal (76 percent) for developmental students' success in college-level English.

Figure 11. Developmental English Student <u>Success</u> in College-Level English: Fall 2012 through Fall 2019 First-Time to NOVA Cohorts
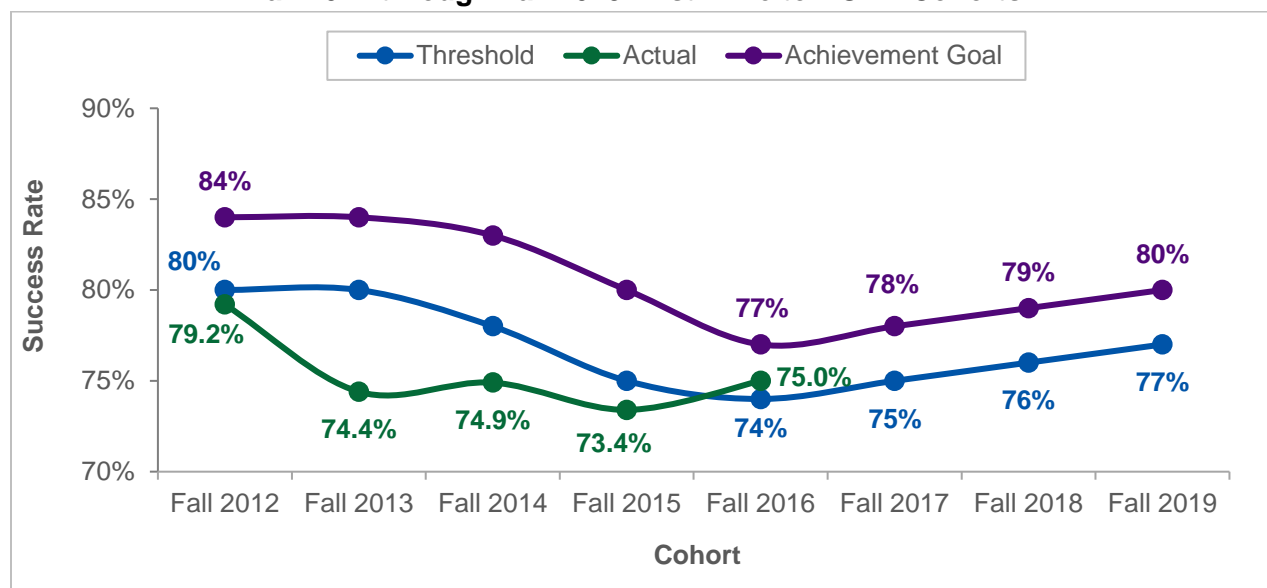
Notes: College-level English is ENG 111: *College Composition I.* Successful within two years of initial enrollment.

Table 8. Developmental English Student Success in College-Level English: Fall 2012 through Fall 2016 First-Time to NOVA Cohorts

Cohort	N	Success	
		#	%
Fall 2012	2,195	1,738	79.2
Fall 2013	1,447	1,076	74.4
Fall 2014	1,269	950	74.9
Fall 2015	1,242	912	73.4
Fall 2016	1,232	924	75.0

Notes: College-level English is ENG 111: *College Composition I.* Successful within two years of initial enrollment.

C. Developmental Math Success

Appropriateness of Criteria and Measures

Measures: Developmental math student success is measured in three ways:

1. Success rates in developmental math courses (MTT 1, MTT 2, MTT 3, MTT 4, MCR 4, and MCR 6)
2. Progression of developmental math students to college-level math (MTH 151 or 163)
3. Developmental math students' success in college-level math (MTH 151 or 163)

Appropriateness: Success in the developmental math program does not end with success in developmental courses. A developmental students' progression to and success in college-level math indicates how well remediation prepared them for a college-level curriculum. As such, these three measures together reflects three important early steps in supporting developmental students ability to reach their long-term academic goals.

Threshold of Acceptability:

1. For the Fall 2018 first-time to NOVA cohort, success rates in developmental math will be at least 44 percent for MTT 1; 25 percent for MTT 2 and MTT 3; and 18 percent for MTT For the Fall 2018 first-time to NOVA cohort, success rates in co-requisite developmental math will be at least 67 percent for MCR 4 and 53 percent for MCR 6.

2. For the Fall 2016 first-time to NOVA cohort, developmental math student progression to MTH 151 will be at least 17 percent, and developmental math student progression to MTH 163 will be at least 10 percent.

3. For the Fall 2016 first-time to NOVA cohort, the success rate of developmental math students in MTH 151 will be at least 69 percent and the success rate of developmental math students in MTH 163 will be at least 67 percent.

Achievement Goals:

1. For the Fall 2018 first-time to NOVA cohort, success rates in developmental math will be 45 percent for MTT 1; 26 percent for MTT 2 and MTT 3; and 20 percent for MTT 4. For the Fall 2018 first-time to NOVA cohort, success rates in co-requisite developmental math will be 68 percent for MCR 4 and 54 percent for MCR 6.

2. For the Fall 2016 first-time to NOVA cohort, developmental math student progression to MTH 151 will be 18 percent, and developmental math student progression to MTH 163 will be 11 percent.

3. For the Fall 2016 first-time to NOVA cohort, the success rate of developmental math students in MTH 151 will be 70 percent and the success rate of developmental math students in MTH 163 will be 68 percent.

Justification of Threshold of Acceptability and Achievement Goal

Among recent cohorts, the success rates in each of NOVA's four developmental math courses have declined. Moreover, success in developmental math is substantially lower compared to the success rates in other courses offered at NOVA, including developmental English courses. Therefore, thresholds of acceptability and achievement goals consider these trends. However, recent policy changes (described below) are reasonably expected to improve developmental math success rates. Reaching the thresholds of acceptability in each of NOVA's four developmental math courses will require a modest increase in the success rates by one to two percentage points over Fall 2018 levels.

The achievement goals for developmental student progression to MTH 151 and MTH 163 represent modest increases of two or three percentage points over Fall 2018 levels. The achievement goals for developmental student success in MTH 151 and MTH 163 are similarly set at increases of three percentage points each over the most recent cohort. These goals recognize the smaller numbers of developmental students who enroll in these college-level courses. However, College-wide changes regarding accurate placement, pathing, and advising of developmental math students are expected to improve the rate of progression of developmental math students to college-level math.

In Fall 2013, NOVA underwent a re-design of its developmental math curriculum. Redesigned courses utilize smaller unit modules that enable students to focus only on the areas in which they performed poorly upon placement. In Fall 2017, NOVA enacted the new multiple measures placement policy. This policy, adopted by all schools in the VCCS, allows students to be placed into the appropriate level math course based on high school coursework and GPA in addition to standardized tests and placement test scores. Multiple measures allows the College to more accurately place students in courses appropriate for their skill level, which often means more students are placed into college-level courses. These recent changes are expected to lead to more accurate placement, which will improve success rates in developmental English as well as rates of progression to and success in college-level English.

Additionally, NOVA introduced new co-requisite developmental math courses in Fall 2018. These courses provide additional support to students during their developmental education sequence and streamline the progression to college-level coursework. Under the co-requisite model, students co-enroll in developmental and college-level math courses. This additional support allows students who only need one or two units of developmental math to still enroll in college-level math. The related thresholds of acceptability and achievement goals for these new courses is based on limited initial data and will be reevaluated as more data become available. However, it is expected that these courses will contribute to a higher rate of success of developmental students in college-level math.

Community colleges in Tennessee have used a similar co-requisite developmental math model. This model has shown increases in the rate at which developmental math students passed college-level math. with 51 percent of students passing college-level math under the co-

requisite model compared to 12 percent under a pre-requisite model.[19] Additional research supports the adoption of co-requisite developmental education and suggests that "students who take accelerated developmental courses typically perform about as well in gatekeeper courses as their non-accelerated peers."[20] By enrolling developmental students in co-requisite college-level math courses, NOVA can improve not only developmental math success rates, but also the rate at which students' progress to and succeed in college-level math.

NOVA shows a commitment to student success in the developmental math sequence through its implementation of multiple measures to provide more accurate placement and the introduction of co-requisite developmental math courses. These changes are expected to more accurately place students as well as provide them with opportunities to progress to and succeed in college-level math in a timelier manner. As a result, NOVA has set thresholds of acceptability and achievement goals that reflect these changes and demonstrate a commitment to continuous improvement in student success in the developmental math sequence.

Evaluation of Outcomes

C1. Success in Developmental Math

MTT 1 (Figure 12): For the Fall 2018 first-time to NOVA cohort, success rates were higher in MTT 1 (43 percent) compared to the other three developmental math courses. However, for this cohort, the College did not meet either the threshold of acceptability (at least 44 percent) or the achievement goal (45 percent) for success in MTT 1.

Figure 12. Success Rate in Developmental Math (MTT 1): Fall 2014 through Fall 2021 First-Time to NOVA Cohorts
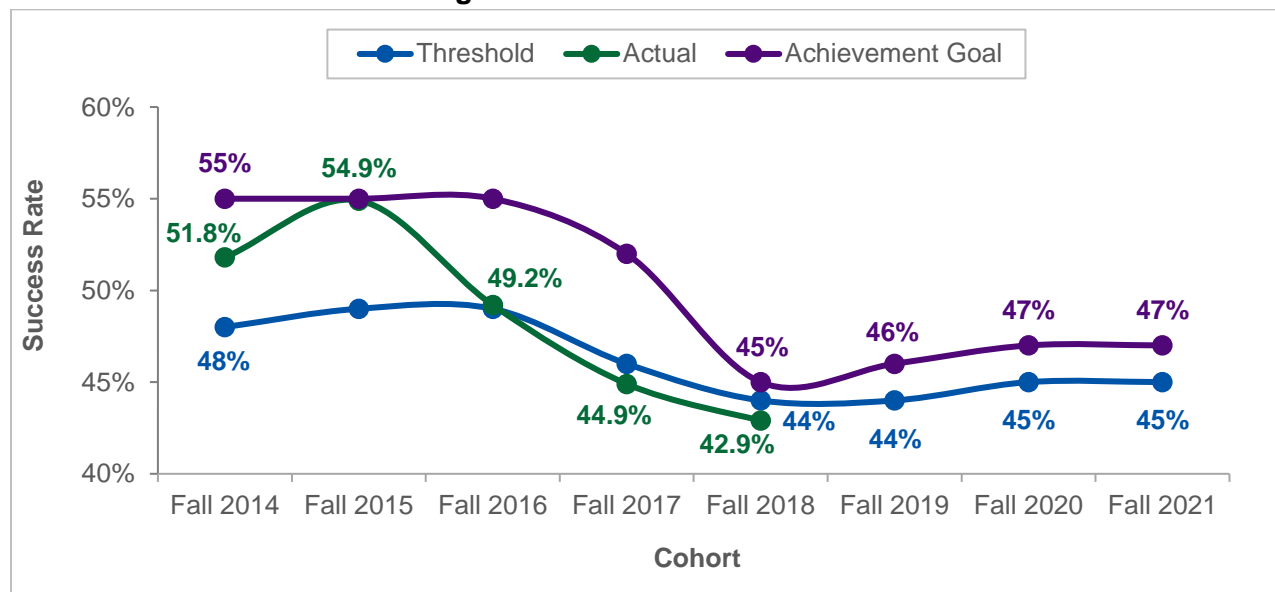
Note: MTT 1 is *Developmental Mathematics I*.

[19] https://ccrc.tc.columbia.edu/media/k2/attachments/corequisite-remediation-cost-effective-tennessee.pdf
[20] https://ccrc.tc.columbia.edu/media/k2/attachments/accelerated-developmental-education_1.pdf

MTT 2 (Figure 13): From the Fall 2014 to Fall 2018 first-time to NOVA cohorts, the success rate in MTT 2 has declined from 35 to 23 percent. For the Fall 2018 cohort, the College did not meet either the threshold of acceptability (at least 25 percent) or the achievement goal (26 percent) for success in MTT 2.

Figure 13. Success Rate in Developmental Math (MTT 2):
Fall 2014 through Fall 2021 First-Time to NOVA Cohorts
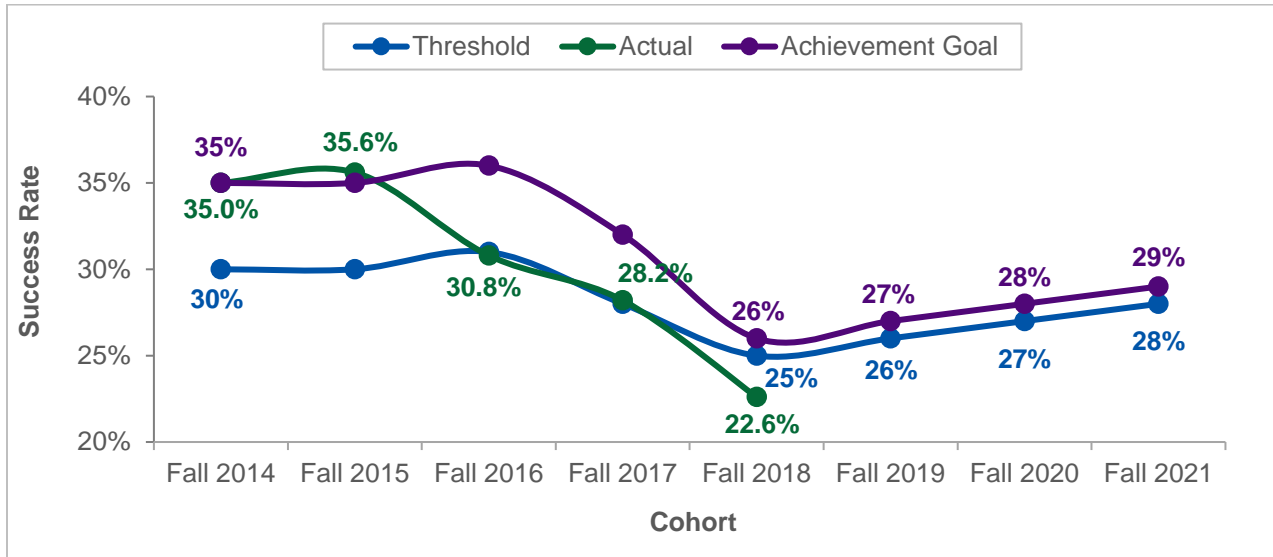
Note: MTT 2 is *Developmental Mathematics II*.

MTT 3 (Figure 14): From the Fall 2014 to Fall 2018 first-time to NOVA cohorts, the success rate in MTT 3 has fluctuated. For the Fall 2018 cohort, the College did not meet the threshold of acceptability (at least 25 percent) or the achievement goal (26 percent) for success in MTT 3.

Figure 14. Success Rate in Developmental Math (MTT 3):
Fall 2014 through Fall 2021 First-Time to NOVA Cohorts
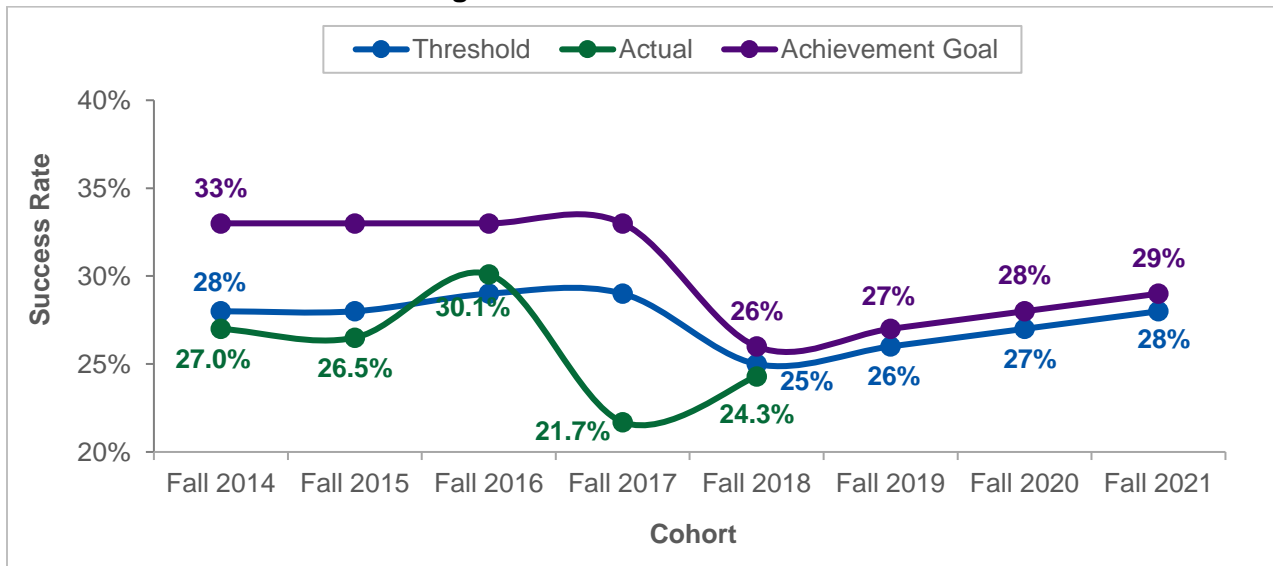
Note: MTT 3 is *Developmental Mathematics III*.

MTT 4 (Figure 15): From the Fall 2014 to Fall 2018 first-time to NOVA cohorts, the success rate in MTT 4 has fluctuated. For the Fall 2018 cohort, the College did not meet the threshold of acceptability (at least 18 percent) or the achievement goal (20 percent) for success in MTT 4.

**Figure 15. Success Rate in Developmental Math (MTT 4):
Fall 2014 through Fall 2021 First-Time to NOVA Cohorts**
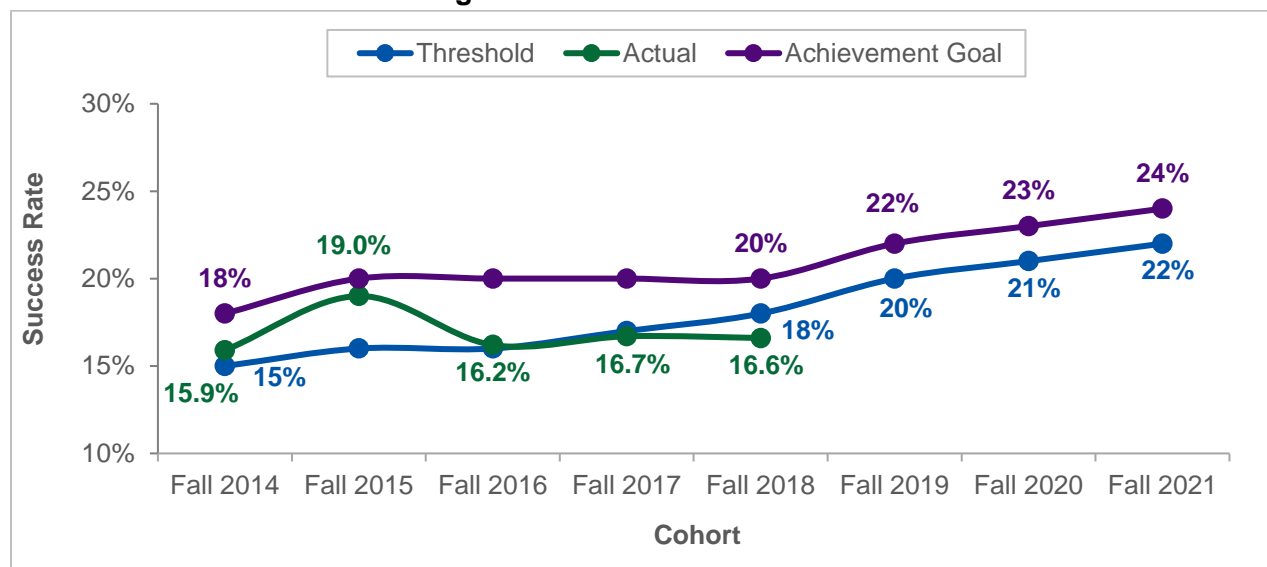
Notes: *MTT 4 is Developmental Mathematics IV*.

**Table 9. Success Rates in Developmental Math by Developmental Course:
Fall 2014 through Fall 2018 First-Time to NOVA Cohorts**

Cohort	MTT 1			MTT 2			MTT 3			MTT 4			Total		
	N	Success		N	Success		N	Success		N	Success		N	Success	
		#	%		#	%		#	%		#	%		#	%
Fall 2014	222	115	51.8	349	122	35.0	356	96	27.0	1,424	226	15.9	2,351	559	23.8
Fall 2015	164	90	54.9	295	105	35.6	411	109	26.5	1,350	256	19.0	2,220	560	25.2
Fall 2016	181	89	49.2	292	90	30.8	356	107	30.1	1,219	197	16.2	2,048	483	23.6
Fall 2017	147	66	44.9	206	58	28.2	313	68	21.7	1,058	177	16.7	1,724	369	21.4
Fall 2018	49	21	42.9	124	28	22.6	239	58	24.3	1,005	167	16.6	1,417	274	19.3

Note: MTT 1: *Developmental Mathematics I*; MTT 2: *Developmental Mathematics II*; MTT 3: *Developmental Mathematics III*; MTT 4: *Developmental Mathematics IV*. Students who are required to complete four or more units out of a possible nine units are enrolled in MTT 4, students required to complete three units are enrolled in MTT 3, and so on. Grades of Audit and Missing are excluded from the analysis.

MCR 4 (Figure 16): MCR 4 was a newly offered co-requisite developmental math course in Fall 2018. For the Fall 2018 first-time to NOVA cohort, the College did not meet the threshold of acceptability (at least 67 percent) or the achievement goal (68 percent) for success in MCR 4.

MCR 6 (Figure 16): MCR 6 was a newly offered co-requisite developmental math course in Fall 2018. For the Fall 2018 first-time to NOVA cohort, the College did not meet the threshold of acceptability (at least 53 percent) or the achievement goal (54 percent) for success in MCR 6.

Figure 16. Success Rate in Co-Requisite Developmental Math (MCR 4 and MCR 6) by Developmental Math Course: Fall 2018 First-Time to NOVA Cohort
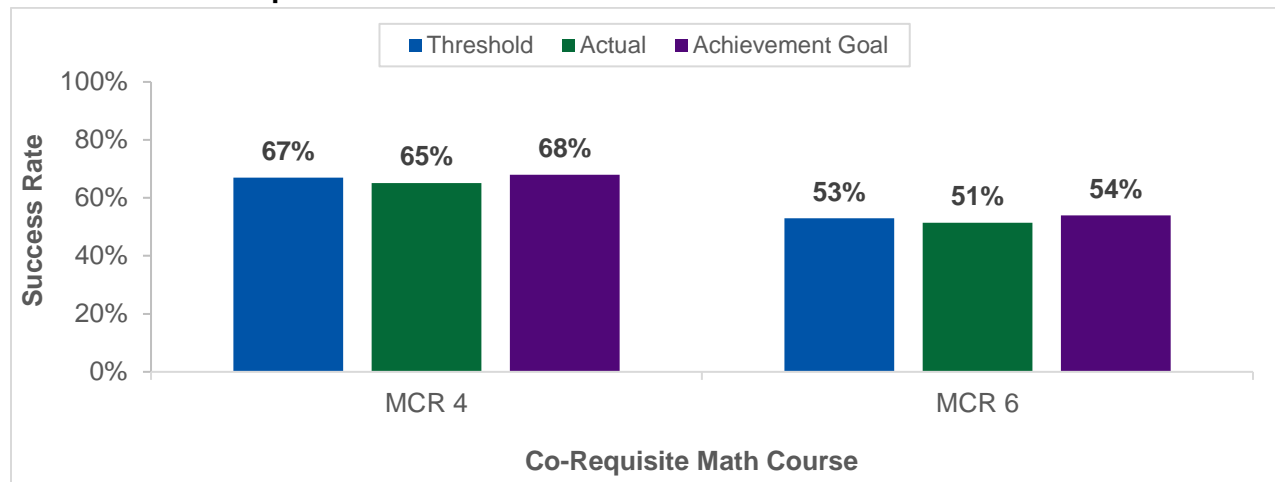
Notes: First offered in Fall 2018, co-requisite developmental math courses (MCR 4 and MCR 6) are co-enrolled with college-level math courses. Courses are for students who need one or two units of developmental math to satisfy course requirements.

Table 10. Success Rates in Co-Requisite Developmental Math by Co-Requisite Developmental Math Course: Fall 2018 First-Time to NOVA Cohort

Co-Requisite Developmental Math Course	Fall 2018		
	N	Success	
		#	%
MCR 4	109	71	65.1
MCR 6	74	38	51.4
Total	**183**	**109**	**59.6**

Note: First offered in Fall 2018, co-requisite developmental math courses (MCR 4 and MCR 6) are co-enrolled with college-level math courses. These courses are for students who need one or two units of developmental math to satisfy the course requirements.

C2. Progression to College-Level Math

Progression to MTH 151 (Figure 17): From the Fall 2012 to Fall 2016 first-time to NOVA cohorts, the percentage of developmental students who progressed to MTH 151 decreased from 17 to 15 percent. For the Fall 2016 cohort, the College did not meet the threshold of acceptability (at least 17 percent) or the achievement goal (18 percent) for developmental math students' progression to MTH 151.

Figure 17. Developmental Math Student Progression to College-Level Math (MTH 151): Fall 2012 through Fall 2019 First-Time to NOVA Cohorts
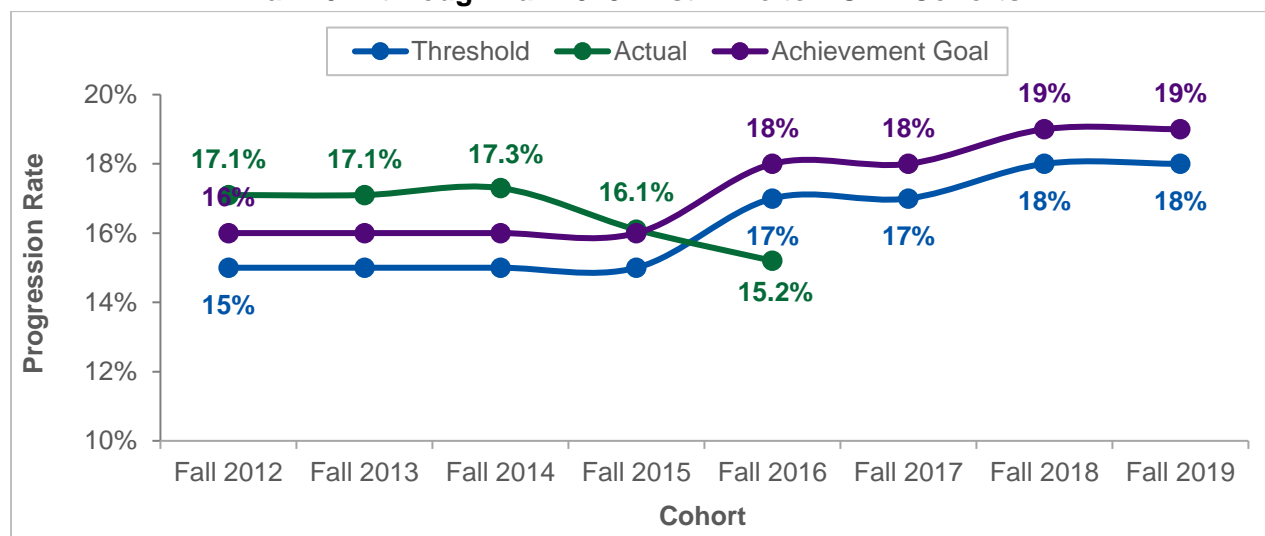
Notes: MTH 151 is *Mathematics for the Liberal Arts I*. Progression within two years of initial enrollment. Data include first-time to NOVA students enrolled in developmental math during their first term of enrollment.

Table 11. Developmental Math Student Progression to College-Level Math (MTH 151): Fall 2012 through Fall 2016 First-Time to NOVA Cohorts

Cohort	N	Progressed to MTH 151	
		#	%
Fall 2012	1,796	307	17.1
Fall 2013	1,785	306	17.1
Fall 2014	2,318	400	17.3
Fall 2015	2,192	352	16.1
Fall 2016	2,025	308	15.2

Notes: MTH 151 is *Mathematics for the Liberal Arts I*. Progression within two years of initial enrollment. Data include first-time to NOVA students enrolled in developmental math during their first term of enrollment.

Progression to MTH 163 (Figure 18): From the Fall 2013 to Fall 2016 first-time to NOVA cohorts, the percentage of developmental students who progressed to MTH 163 increased from 8 to 9 percent. For the Fall 2016 cohort, the College did not meet the threshold of acceptability (at least 10 percent) or the achievement goal (11 percent) for progression from developmental math to MTH 163.

Figure 18. Developmental Math Student Progression to College-Level Math (MTH 163): Fall 2012 through Fall 2019 First-Time to NOVA Cohorts
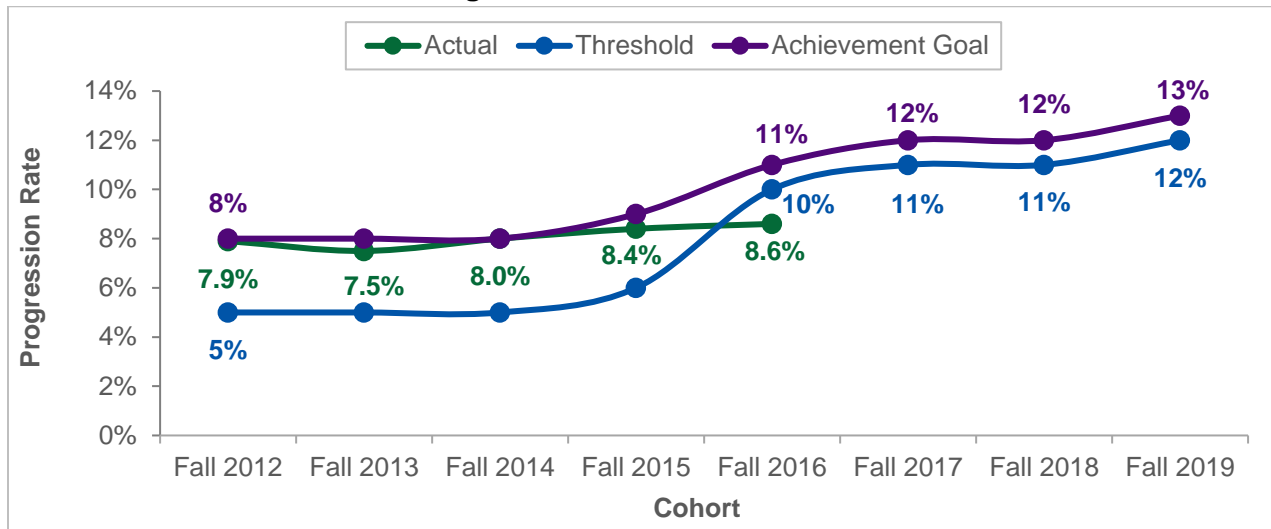
Notes: MTH 163 is *Pre-Calculus I*. Progression within two years of initial enrollment. Data include first-time to NOVA students enrolled in developmental math during their first term of enrollment.

Table 12. Developmental Math Student Progression to College-Level Math (MTH 163): Fall 2012 through Fall 2016 First-Time to NOVA Cohorts

Cohort	N	Progressed to MTH 163	
		#	%
Fall 2012	1,796	142	7.9
Fall 2013	1,785	133	7.5
Fall 2014	2,318	185	8.0
Fall 2015	2,192	185	8.4
Fall 2016	2,025	175	8.6

Notes: MTH 163 is *Pre-Calculus I*. Progression within two years of initial enrollment. Data include first-time to NOVA students enrolled in developmental math during their first term of enrollment.

C3. Developmental Math Student Success in College-Level Math

Success in MTH 151 (Figure 19): From the Fall 2012 to Fall 2016 first-time to NOVA cohorts, the success rate of developmental students in MTH 151 decreased from 73 to 67 percent. For the Fall 2016 cohort, the College did not meet the threshold of acceptability (at least 69 percent) or the achievement goal (70 percent) for developmental math student success in MTH 151.

Figure 19. Developmental Math Student Success in College-Level Math (MTH 151): Fall 2012 through Fall 2019 First-Time to NOVA Cohorts
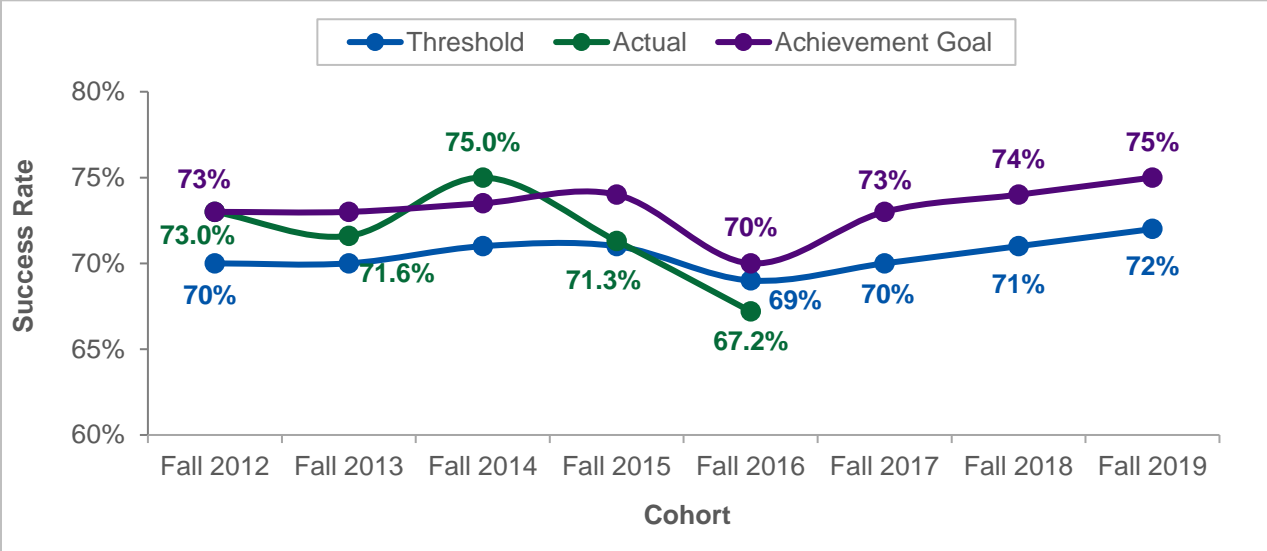
Notes: MTH 151 is *Mathematics for the Liberal Arts I*. Successful within two years of initial enrollment.

Table 13. Developmental Math Student Success in College-Level Math (<u>MTH 151</u>): Fall 2012 through Fall 2016 First-Time to NOVA Cohorts

Cohort	N	Success in MTH 151	
		#	%
Fall 2012	307	224	73.0
Fall 2013	306	219	71.6
Fall 2014	400	300	75.0
Fall 2015	352	251	71.3
Fall 2016	308	207	67.2

Notes: MTH 151 is *Mathematics for the Liberal Arts I*. Successful within two years of initial enrollment.

Success in MTH 163 (Figure 20): From the Fall 2012 to Fall 2016 first-time to NOVA cohorts, the success rate of developmental students in MTH 163 increased from 61 to 65 percent. For the Fall 2016 cohort, the College did not meet the threshold of acceptability (at least 67 percent) or the achievement goal (68 percent) for developmental math student success in MTH 163.

Figure 20. Developmental Math Student Success in College-Level Math (MTH 163): Fall 2012 through Fall 2019 First-Time to NOVA Cohorts
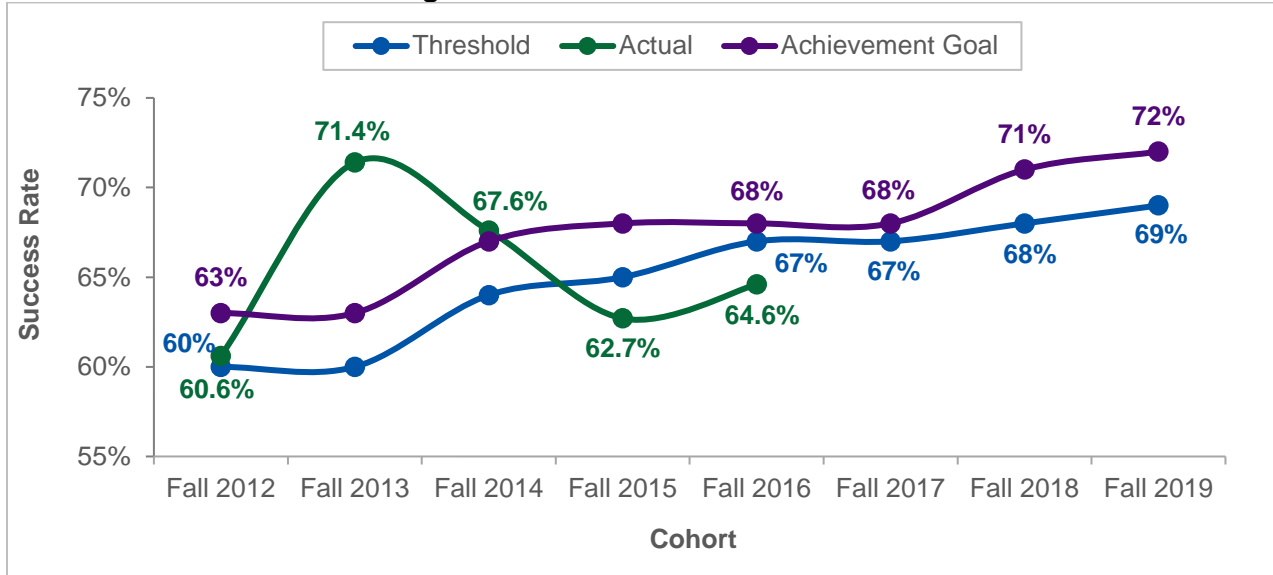
Notes: MTH 163 is *Pre-Calculus I*. Successful within two years of initial enrollment.

Table 14. Developmental Math Student Success in College-Level Math (MTH 163): Fall 2012 through Fall 2016 First-Time to NOVA Cohorts

Cohort	N	Success in MTH 163	
		#	%
Fall 2012	142	86	60.6
Fall 2013	133	95	71.4
Fall 2014	185	125	67.6
Fall 2015	185	116	62.7
Fall 2016	175	113	64.6

Notes: MTH 163 is *Pre-Calculus I*. Successful within two years of initial enrollment.

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Measures: Success in gatekeeper courses is measured by the success rates in five college-level courses with high enrollment that are often critical to students' future success in college:

- ACC 211: Principles of Accounting I
- BIO 101: General Biology I
- ENG 111: College Composition I
- MTH 151: Mathematics for the Liberal Arts I
- MTH 163: Pre-Calculus I

Thresholds of Acceptability: For the Fall 2017 first-time to NOVA cohort, the success rate of students enrolled in gatekeeper courses will be at least 63.5 percent for ACC 211; 73 percent for BIO 101; 73.5 percent for ENG 111; 68 percent for MTH 151; and 55.5 percent for MTH 163.

Achievement Goals: For the Fall 2017 first-time to NOVA cohort, the success rates of students enrolled in gatekeeper courses will be 65 percent for ACC 211; 79 percent for BIO 101; 77.5 percent for ENG 111; 71.5 percent for MTH 151; and 60.5 percent for MTH 163.

Justification of Threshold of Acceptability and Achievement Goal

For its five gatekeeper courses, NOVA sets thresholds of acceptability and achievement goals that demonstrate a commitment to continued improvement in student learning and success. Gatekeeper courses are often required credits toward graduation and/or are pre-requisites for other program requirements, which means succeeding in gatekeeper courses allows students to progress in their curriculum. For example, BIO 101 is an important gatekeeper into subsequent STEM courses, and ENG 111, MTH 151, and MTH 163 serve as gatekeepers into other English and math requirements. Therefore, failing a gatekeeper course can delay the time it takes for a student to reach their long-term academic goals, such as graduating with a degree or credential from NOVA and/or transferring to a four-year institution. As such, NOVA recognizes that success in gatekeeper courses is important for students to stay on track, and the College strives to improve its success rates in each gatekeeper course over the coming years.

NOVA's success rates in the five gatekeeper courses have historically remained consistent from year to year. However, the thresholds of acceptability and achievement goals reflect the College's aim for gradual improvement through Fall 2021. It is expected that the new multiple measures placement policy will improve success rates in the related gatekeeper courses (ENG 111, MTH 151, and MTH 163) through a more accurate placement of students into developmental or college-level English and math courses.

The implementation of the Virginia Integrated Program of Planning and Advising for Student Success (VIP-PASS) will help ensure NOVA is able to meet its targets in the five gatekeeper courses. VIP-PASS is modeled after Achieving the Dream's (ATD) Integrated Planning and Advising for Student Success (iPASS) strategy. VIP-PASS provides students with proactive

advising and support through a Guided Pathways approach, particularly early in a student's academic career. This enables advisors to ensure students are enrolled in courses that meet their academic abilities and goals, as well as identify struggling students before they are at risk of failing a course. VIP-PASS and Guided Pathways will improve program pathing and, as a result, student success in gatekeeper courses.

Evaluation of Outcomes

ACC 211 (Figure 21): From the Fall 2013 to Fall 2017 first-time to NOVA cohorts, success in ACC 211 has fluctuated. For the Fall 2017 cohort, the College exceeded the threshold of acceptability (64 percent) and met the achievement goal (65.5 percent).

Figure 21. Success Rate in ACC 211: Principles of Accounting I Fall 2013 through Fall 2020 First-Time to NOVA Cohorts
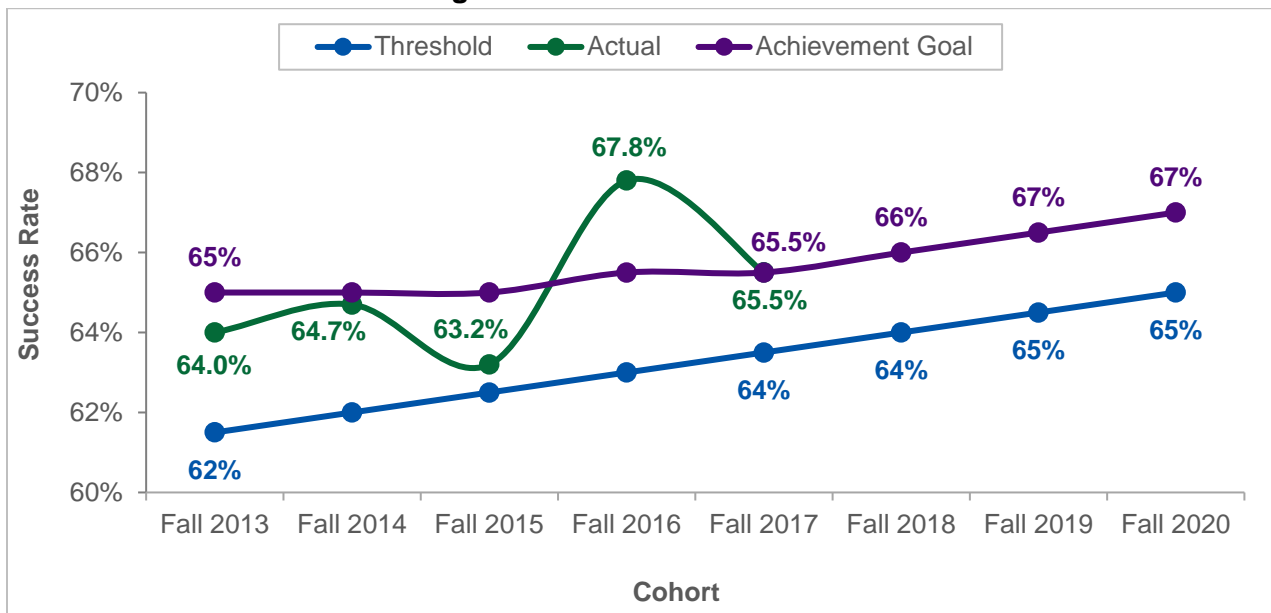
Notes: Data include first-time to NOVA students enrolled in ACC 211 who were successful within one year of initial enrollment.

BIO 101 (Figure 22): From the Fall 2013 to Fall 2017 first-time to NOVA cohorts, success in BIO 101 has increased from 70 to 76 percent. For the Fall 2017 cohort, the College exceeded the threshold of acceptability (at least 73 percent) but did not meet the achievement goal (79 percent) for success in BIO 101.

Figure 22. Success Rate in BIO 101: General Biology I
Fall 2013 through Fall 2020 First-Time to NOVA Cohorts
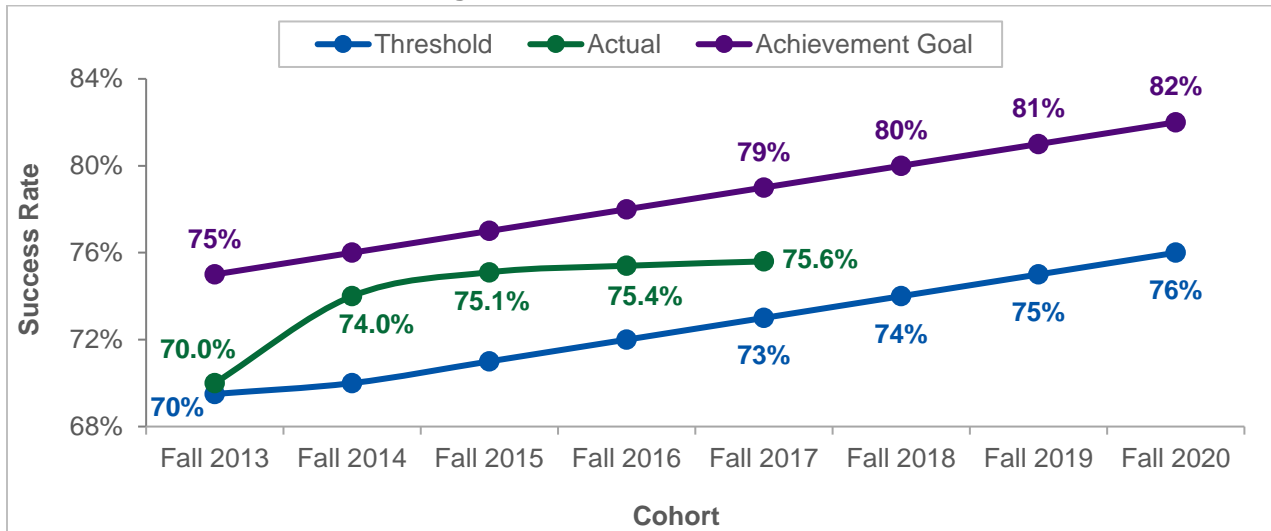
Notes: Data include first-time to NOVA students enrolled in BIO 101 who were successful within one year of initial enrollment.

ENG 111 (Figure 23): Success in ENG 111 has declined from a high of 79 percent for the Fall 2014 cohort to 74 percent for the Fall 2017 cohort. For the Fall 2017 cohort, the College exceeded the threshold of acceptability (at least 73.5 percent) but did not meet the achievement goal (77.5 percent) for success in ENG 111.

Figure 23. Success Rate in ENG 111: College Composition I
Fall 2013 through Fall 2020 First-Time to NOVA Cohorts
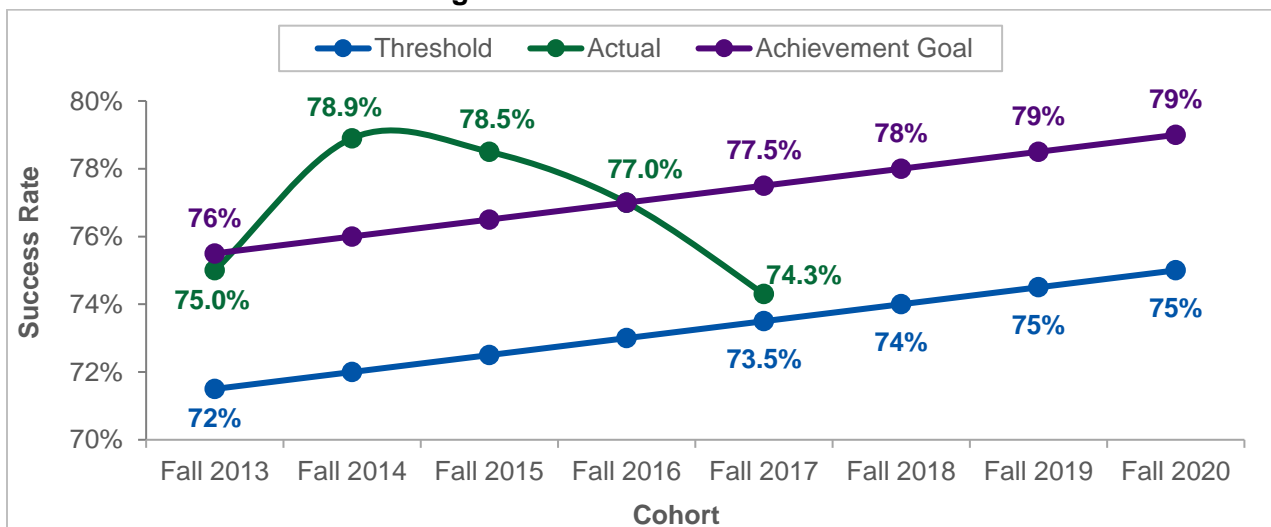
Notes: Data include first-time to NOVA students enrolled in ENG 111 who were successful within one year of initial enrollment.

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MTH 151 (Figure 24): Success in MTH 151 has declined from a high of 73 percent for the Fall 2014 cohort to 66 percent for the Fall 2017 cohort. For the Fall 2017 cohort, the College did not meet either the threshold of acceptability (at least 68 percent) or the achievement goal (71.5 percent) for success in MTH 151.

Figure 24. Success Rate in MTH 151: Mathematics for the Liberal Arts I Fall 2013 through Fall 2020 First-Time to NOVA Cohorts
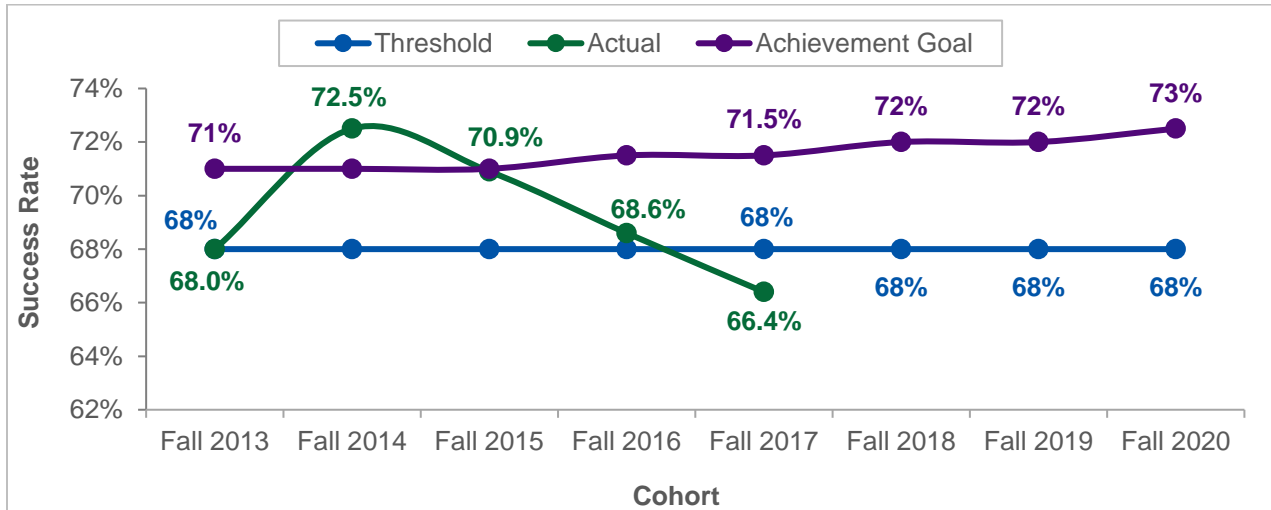
Notes: Data include first-time to NOVA students enrolled in MTH 151 who were successful within one year of initial enrollment. In Fall 2018, MTH 154: *Quantitative Reasoning* will replace MTH 151: *Mathematics for the Liberal Arts I.*

MTH 163 (Figure 25): From the Fall 2013 to Fall 2017 cohorts, success in MTH 163 has fluctuated. For the Fall 2017 cohort, the College exceeded the threshold of acceptability (at least 55.5 percent) but did not meet the achievement goal (60.5 percent) for success in MTH 163.

Figure 25. Success Rate in MTH 163: Pre-Calculus I Fall 2013 through Fall 2020 First-Time to NOVA Cohorts
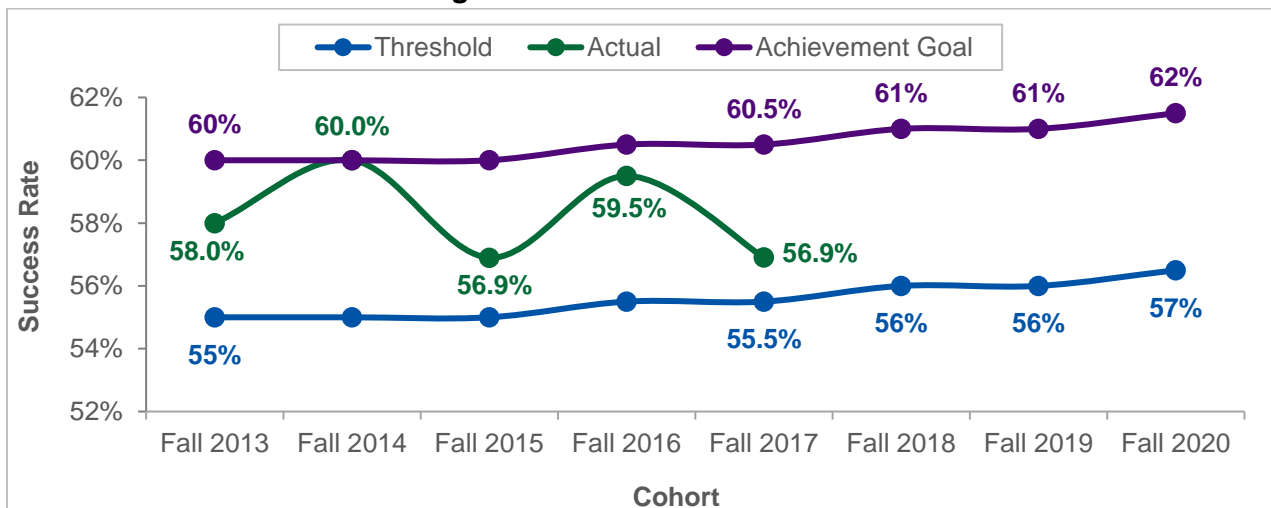
Notes: Data include first-time to NOVA students enrolled in MTH 163 who were successful within one year of initial enrollment. In Fall 2018, MTH 163: *Pre-Calculus I* will be re-classified as MTH 161: *Pre-Calculus I.*

Table 15. Success Rate in ACC 211: Principles of Accounting I:
Fall 2013 through Fall 2017 First-Time to NOVA Cohorts

Cohort	ACC 211		
	N	Succeeded	
		#	%
Fall 2013	660	422	63.9
Fall 2014	617	399	64.7
Fall 2015	674	426	63.2
Fall 2016	537	364	67.8
Fall 2017	449	294	65.5

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Successful within one year of initial enrollment.

Table 16. Success Rate in BIO 101: General Biology I:
Fall 2013 through Fall 2017 First-Time to NOVA Cohorts

Cohort	BIO 101		
	N	Succeeded	
		#	%
Fall 2013	2,163	1,506	69.6
Fall 2014	1,862	1,377	74.0
Fall 2015	1,744	1,309	75.1
Fall 2016	1,595	1,202	75.4
Fall 2017	1,327	1,003	75.6

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Successful within one year of initial enrollment.

Table 17. Success Rate in ENG 111: College Composition I:
Fall 2013 through Fall 2017 First-Time to NOVA Cohorts

Cohort	ENG 111		
	N	Succeeded	
		#	%
Fall 2013	6,556	4,941	75.4
Fall 2014	8,747	6,902	78.9
Fall 2015	8,236	6,464	78.5
Fall 2016	6,857	5,280	77.0
Fall 2017	6,505	4,835	74.3

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Successful within one year of initial enrollment.

Table 18. Success Rate in MTH 151: Math for the Liberal Arts I:
Fall 2013 through Fall 2017 First-Time to NOVA Cohorts

Cohort	MTH 151		
	N	Succeeded	
		#	%
Fall 2013	1,314	888	67.6
Fall 2014	1,283	930	72.5
Fall 2015	1,148	814	70.9
Fall 2016	939	644	68.6
Fall 2017	977	649	66.4

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Successful within one year of initial enrollment.

Table 19. Success Rate in MTH 163: Pre-Calculus I:
Fall 2013 through Fall 2017 First-Time to NOVA Cohorts

Cohort	MTH 163		
	N	Succeeded	
		#	%
Fall 2013	1,594	924	58.0
Fall 2014	1,762	1,057	60.0
Fall 2015	1,867	1,062	56.9
Fall 2016	1,920	1,143	59.5
Fall 2017	1,790	1,019	56.9

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Successful within one year of initial enrollment.

4. Retention

Appropriateness of Criteria and Measures

Criteria: The College tracks the fall-to-spring retention rate and the fall-to-fall retention rate of first-time in college, program placed students.

Measures:

- The fall-to-spring retention rate is the percentage of first-time, program placed (degree/certificate-seeking) students who enter in fall and either re-enroll or successfully complete their program by the subsequent spring semester.
- The fall-to-fall retention rate is the percentage of first-time, program placed (degree/certificate-seeking) students who enter in fall and either re-enroll or successfully complete their program by the following fall semester.

Appropriateness: First-time in college, program placed students have indicated an intent to pursue a degree or credential from NOVA, which would require continued enrollment at the College. Therefore, tracking retention for this population provides the College with a more accurate understanding of its retention efforts and initiatives. Compared to all enrolled students, this population is less likely to be influenced by external factors that are beyond the College's control, such as the local economy and job market. Moreover, this cohort is less likely to include individuals who may be taking one or two courses for workforce development or personal enrichment (and therefore do not intend to return for subsequent semesters). Improving the retention rate of this population of students is critical to supporting students with longer-term academic goals, such as graduating from NOVA or transferring to a four-year institution.

Threshold of Acceptability: For the Fall 2017 cohort of first-time in college, program placed students, the fall-to-spring retention rate will be at least 79 percent and the fall-to-fall retention rate will be at least 64 percent.

Achievement Goals: For the Fall 2017 cohort of first-time in college, program placed students, the fall-to-spring retention rate will be 81 percent and the fall-to-fall retention rate will be 66 percent.

Justification of Threshold of Acceptability and Achievement Goal

For the Fall 2013 through Fall 2017 cohorts, the fall-to-spring and fall-to-fall retention rates of first-time, program placed students at NOVA were higher than the retention rate of students at all VCCS colleges. Despite relatively high retention rates, both the fall-to-spring and fall-to-fall retention rates of NOVA students have declined slightly from the Fall 2016 to Fall 2017 cohorts. However, NOVA is implementing numerous strategies aimed at increasing the retention rate of students over the next several academic years. Thresholds of acceptability and achievement goals for both measures of retention reflect the College's goal of continued improvement in supporting the success of its students.

Numerous College-wide programs and initiatives will help NOVA to meet its thresholds and goals related to retention. Research shows that clearly defined paths to reach longer-term goals—such as graduation or transfer to a four-year institution—can improve the chance a student will re-enroll for subsequent semesters. Therefore, it is expected that students will be more likely to return to campus when they have a clear and articulated plan of study at NOVA, support from engaged advisors, and an understanding of how their credits will transfer to a four-year institution. NOVA's Transfer Pathways provide students with readily available information regarding the courses they need for their intended NOVA degree program, as well as how these courses are aligned with transfer requirements of popular four-year institutions across Virginia.[21] These pathways help students to understand which courses are required to meet their academic goals, which improves the chances they will re-enroll for subsequent semesters.

In 2018, NOVA partnered with its main transfer institution, George Mason University (GMU), to create the ADVANCE initiative.[22] ADVANCE streamlines the process of enrolling at NOVA and transferring to GMU through coordinated curricula, dedicated advisors, and guaranteed admission to GMU for students who meet minimum requirements. This partnership is expected to improve retention rates by retaining participating students for their first two years of study while also providing additional supports in their transition to GMU. Students who participate in ADVANCE can be sure that their NOVA courses are transferrable and aligned with their eventual degree pursuits once they transfer.

Additionally, NOVA is implementing a new, comprehensive advising model that will assign each student an advisor. The College expects that this initiative will improve student retention, particularly among its first-time in college students, by ensuring that every NOVA student has clear academic goals, a plan to accomplish them, and access to advisors and online resources. Moreover, the College is exploring the use of predictive modeling to identify at-risk students. NOVA's Office of Institutional Research (OIR) will compute the predicted probability of retention for first-time in college, program placed students. Students with a low predicted probability of persisting will be categorized as "at-risk." The list of at-risk students will be provided to the College so that they can be contacted for intervention by dedicated advisors. These improved advising practices will help NOVA to reach its thresholds and goals related to retention.

Additional Data Supporting Goals and Thresholds

Appendix D for VCCS comparison data supporting NOVA's thresholds of acceptability and achievement goals for retention.

Evaluation of Outcomes

Fall-to-Spring Retention (Figure 26, next page): From the Fall 2013 to Fall 2017 first-time in college, program placed cohorts, the fall-to-spring retention rate increased by over three percentage points. For the Fall 2017 cohort, the College exceeded the threshold of acceptability

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[21] https://www.nvcc.edu/transfer/index.html
[22] https://www.nvcc.edu/advance/

(at least 79 percent) but fell just short of the achievement goal (81 percent) for fall-to-spring retention.

Figure 26. Fall-to-Spring Retention Rate: Fall 2013 through Fall 2020 First-Time in College, Program Placed Cohorts
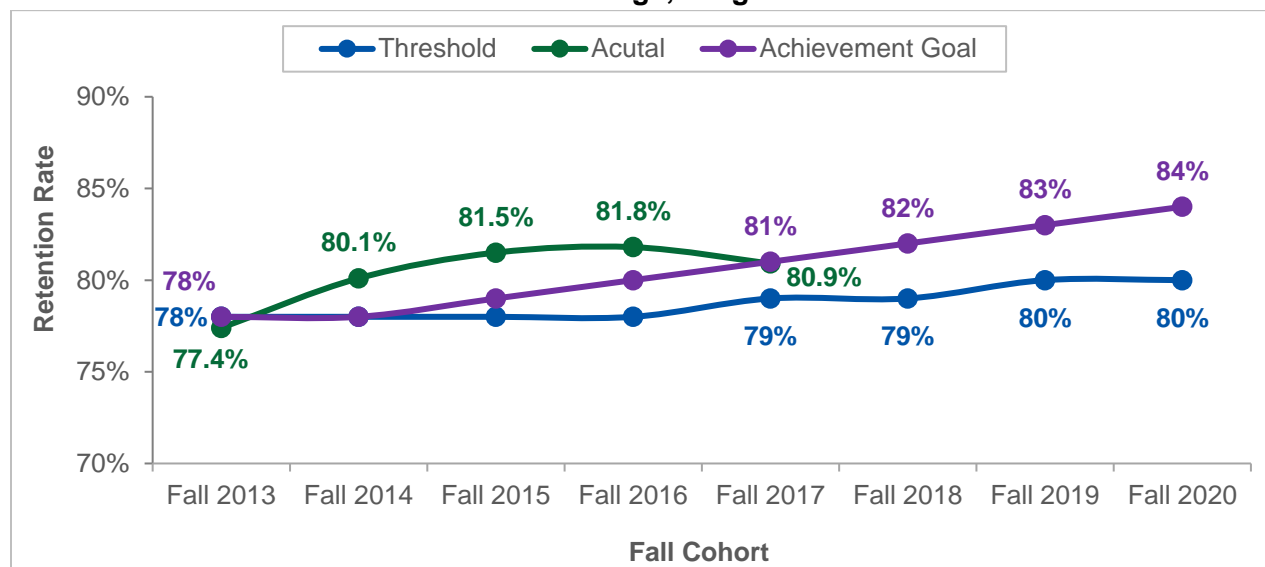
Note: Fall-to-spring retention is the percentage of first-time in college, program placed students who enter in the fall and either re-enroll or successfully complete their program by the following spring semester.

Table 20. Fall-to-Spring Retention Rates: Fall 2013 through Fall 2017 First-Time in College, Program Placed Cohorts

Cohort	Fall-to-Spring Retention		
	N	Retained	
		#	%
Fall 2013	9,128	7,063	77.4
Fall 2014	9,141	7,325	80.1
Fall 2015	9,330	7,606	81.5
Fall 2016	8,884	7,269	81.8
Fall 2017	8,619	6,971	80.9

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Fall-to-spring retention is the percentage of first-time in college, program placed students who enter in the fall and either re-enroll or successfully complete their program by the following spring semester.

Fall-to-Fall Retention (Figure 27, next page): From the Fall 2013 to Fall 2017 first-time in college, program placed cohorts, the fall-to-fall retention rate increased by four percentage points. For the Fall 2017 cohort, the College exceeded the threshold of acceptability (at least 64 percent) but did not meet the achievement goal (66 percent) for fall-to-fall retention.

Figure 27. Fall-to-Fall Retention Rate: Fall 2013 through Fall 2020 First-Time in College, Program Placed Cohorts
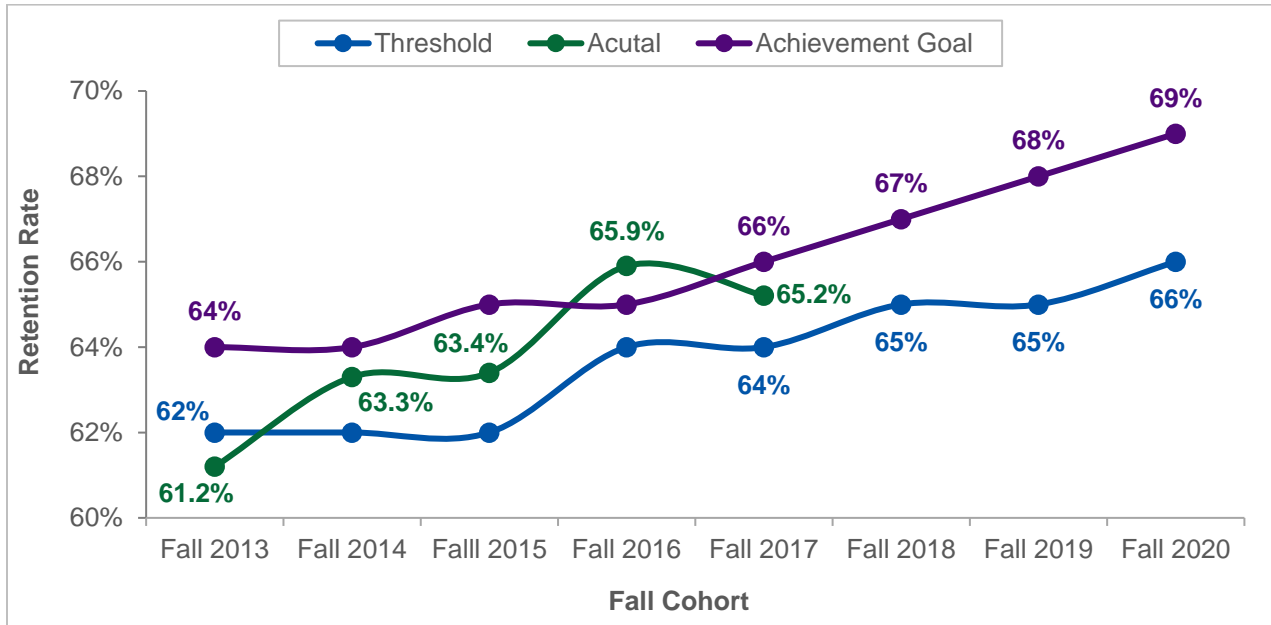
Note: Fall-to-fall retention is the percentage of first-time in college, program placed students who enter in the fall and either re-enroll or successfully complete their program by the following fall semester.

Table 21. Fall-to-Fall Retention Rates: Fall 2013 through Fall 2017 First-Time in College, Program Placed Cohorts

Cohort	Fall-to-Fall Retention		
	N	Retained	
		#	%
Fall 2013	9,128	5,586	61.2
Fall 2014	9,141	5,787	63.3
Fall 2015	9,330	5,913	63.4
Fall 2016	8,884	5,851	65.9
Fall 2017	8,619	5,621	65.2

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Fall-to-fall retention is the percentage of first-time in college, program placed students who enter in the fall and either re-enroll or successfully complete their program by the following fall semester.

5. Graduation

Appropriateness of Criteria and Measures

Criteria: The College tracks the graduation of its students in two ways:

1. The total number of annual graduates
2. The graduation rate of first-time in college, full-time, program placed students

Measures: The total number of annual graduates include all students who earned a degree or credential from NOVA at any point in an academic year. The graduation rate is the percentage of first-time in college, full-time, program placed (degree/certificate-seeking) students who completed their program within 150 percent of normal time.

Appropriateness: Completion of an academic program is a key goal for students at any institution of higher education. Tracking the annual number of NOVA graduates and the graduation rate of a cohort of students allows institutions to understand the number and percentage of students who are reaching their long-term academic goals.

Thresholds of Acceptability: In 2017-18, the total number of annual graduates will be at least 6,545. For the Fall 2015 cohort of first-time in college, full-time, program placed students, the graduation rate will be at least 25 percent.

Achievement Goals: In 2017-18, the total number of annual graduates will be 6,700. For the Fall 2015 cohort of first-time in college, full-time, program placed students, the graduation rate will be 28 percent.

Justification of Thresholds of Acceptability and Achievement Goals

Among the Fall 2015 cohort of first-time in college, full-time, program placed students, NOVA's graduation rate was two percentage points lower than the graduation rate at all VCCS colleges. Similarly, it was three percentage points lower than all two-year institutions in the United States. Despite relatively lower graduation rates and a recent decline in the annual number of graduates between 2015-16 and 2017-18, the College is focusing on several initiatives with the goal of improving its outcomes on both measures of graduation. As such, the College has increased future thresholds of acceptability and achievement goals to reflect its commitment to continual improvement in the graduation of its students.

One such initiative is NOVA's ADVANCE partnership with George Mason University. Through this program, students co-enroll at both institutions, complete a degree at NOVA first, then transfer seamlessly to GMU to complete a bachelor's degree.[23] As a large transfer institution, many NOVA students choose to transfer to a four-year institution without first earning a degree or credential at NOVA. Therefore, this partnership will help guide students through the process of taking two years of transferrable credits and earning a degree at NOVA first before they enroll

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[23] https://www.nvcc.edu/advance/

at a four-year institution. As a result, the program is expected to increase both the annual number of graduates each year as well as the graduation rate.

NOVA's comprehensive new advising model is also expected to improve the annual number of graduates and graduation rate. One element of the new model is assigning every new student an advisor. This will facilitate graduation by ensuring that every student has a clear academic goal and a plan to accomplish it, as well as advisors and online resources to keep them on track. Another element of the new model is the incorporation of "nudging" as a tactic for guiding students through the college experience.[24] Nudge theory posits that students may benefit from reminders—for example, in the form of text messages that prompt them to take actions such as submitting admissions applications, applying for financial aid, taking placement exams, attending orientation, scheduling advising meetings, registering for coursework, declaring a program or major, identifying a transfer school, and applying for graduation.[25] By helping students to stay on track throughout their entire academic career, it is more likely a student will reach their long-term academic goals, such as graduating from NOVA.

NOVA also offers graduation-centric initiatives that target specific student populations, such as its Pathway to the Baccalaureate program (Pathway). The Pathway Program provides support to students starting in high school, as well as support during the transition to enrollment at NOVA and transfer to George Mason University or another four-year institution. The Pathway Program is designed to assist at-risk and historically underrepresented student populations, such as minority or low-income students. The program provides counseling, workshops on college placement testing and financial planning, personalized assistance with financial aid applications, early placement testing, and comprehensive summer orientation programs.[26] With additional individualized support to help guide students through the college experience, it is expected to positively impact the graduation of NOVA students.

Additionally, NOVA's Guided Pathways are a set of clear associate degree plans through which students can earn a degree at NOVA before transferring to popular four-year institutions in Virginia.[27] This will improve graduation rates by helping students to understand how they can save money by taking more courses at NOVA and earning a degree before transferring, with the assurance that their credits will transfer to their intended plan of study at a four-year school.

Additional Data Supporting Graduation Targets

See Appendix E for VCCS and peer institution comparison data.

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[24] Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness.* New Haven, CT: Yale University Press.

[25] Office of Institutional Effectiveness and Student Success. (2018). *Nudging students to success: Guiding students from application to graduation.* Retrieved from https://www.nvcc.edu/oir/_files/27-18Nudging_Students_to_Success.pdf

[26] https://www.nvcc.edu/pathway/index.html

[27] https://www.nvcc.edu/transfer/index.html

Evaluation of Outcomes

Annual Number of Graduates (Figure 28): From the 2013-14 to 2015-16 academic years, the annual number of NOVA graduates increased. However, the number of graduates declined in the subsequent two academic years to a five-year low of 6,347 graduates. In 2017-18, the College did not meet the threshold of acceptability (at least 6,545) nor the achievement goal (6,700) for annual number of graduates.

Figure 28. Annual Number of Graduates: 2013-14 through 2020-21
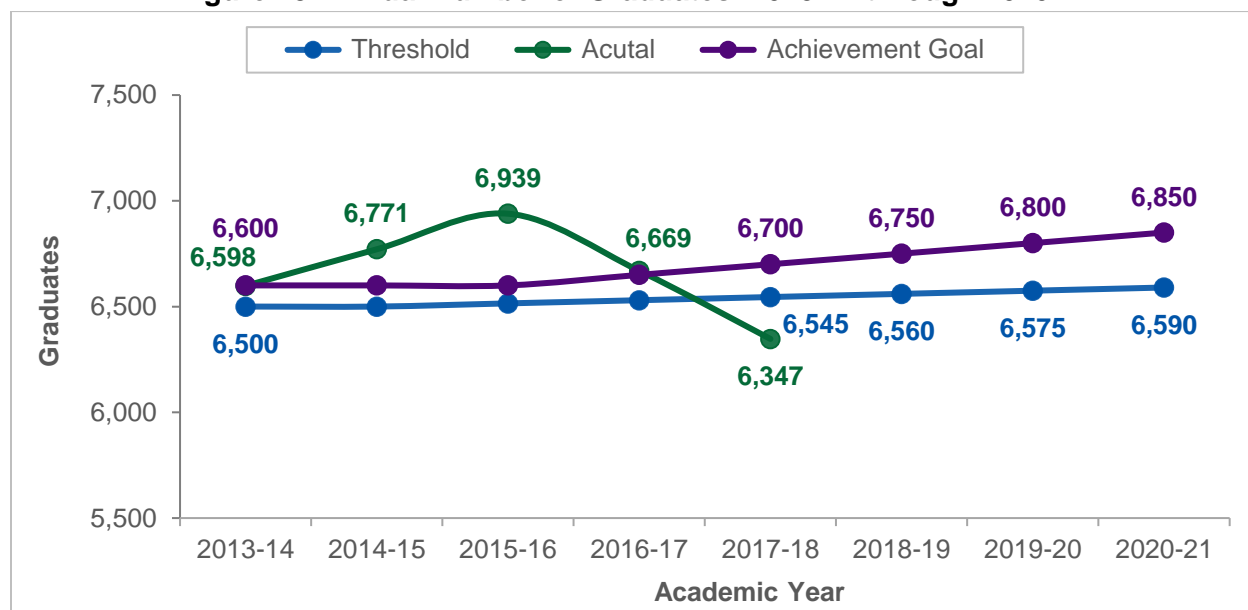
Table 22. Annual Number of Graduates: 2013-14 through 2017-18

Academic Year	Graduates	Growth Rate (%)
2013-14	6,598	--
2014-15	6,771	2.6
2015-16	6,939	2.5
2016-17	6,669	-3.9
2017-18	6,347	-4.8

Source: Office of Institutional Research, Northern Virginia Community College.
Notes: The growth rate is calculated as the percent change over the previous year.

Graduation Rate (Figure 29): From the Fall 2011 to Fall 2015 first-time to NOVA, full-time, program placed cohorts, the graduation rate increased from 23 to 26. For the Fall 2015 cohort, the College exceeded the threshold of acceptability (at least 25 percent) but did not meet the achievement goal (28 percent) for graduation rate.

Figure 29. Graduation Rate: Fall 2011 through Fall 2018
First-Time in College, Full-Time, Program Placed Cohorts
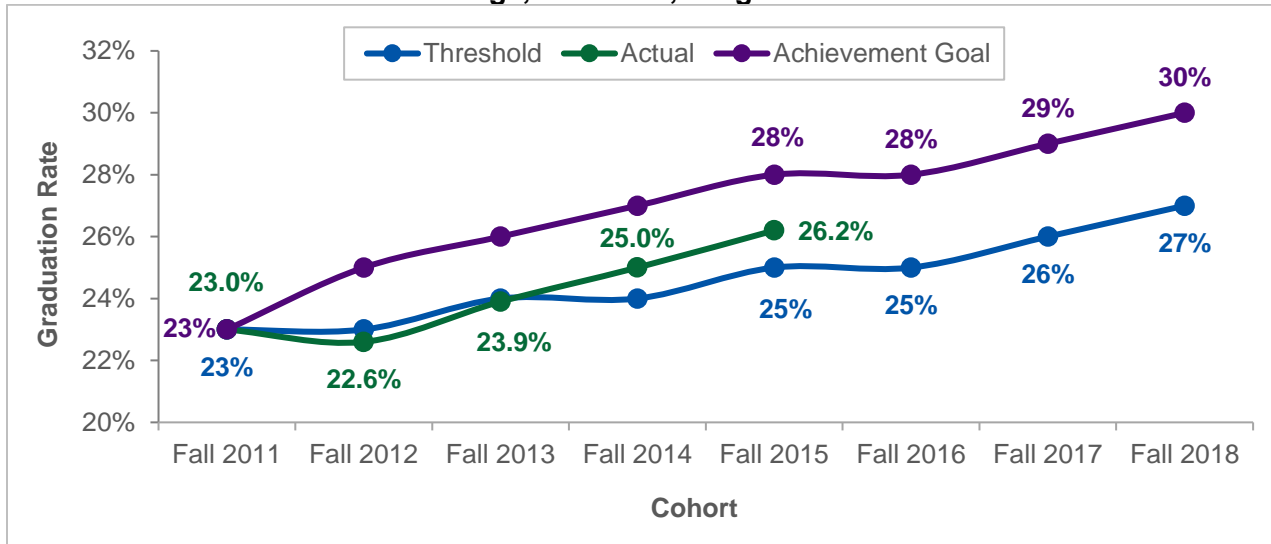
Notes: Data include first-time in college, full-time program placed students who graduated within 150 percent of normal time to program completion, including summer.

Table 23. Graduation Rate: Fall 2011 through Fall 2015
First-Time in College, Full-Time, Program Placed Cohorts

Cohort	N	Graduates	Graduation Rate (%)
Fall 2011	4,848	1,115	23.0
Fall 2012	5,137	1,159	22.6
Fall 2013	5,819	1,389	23.9
Fall 2014	5,815	1,456	25.0
Fall 2015	5,881	1,543	26.2

Sources: Office of Institutional Research, Northern Virginia Community College.
Notes: Data include first-time in college, full-time program placed students who graduated within 150 percent of normal time to program completion, including summer.

6. Transfer

Appropriateness of Criteria and Measures

Criteria: The College tracks transfer in two ways:

1. The annual number of students who transfer to four-year institutions
2. The transfer-out rate of first-time in college, full-time, program placed students transferring within 150 percent of normal time to program completion

Measures: The annual number of transfers refers to NOVA students who transferred to a four-year institution each year, regardless of when they were last enrolled at NOVA. The transfer-out rate is the percentage of first-time in college, full-time, program placed (degree/certificate-seeking) students who transferred to a four-year institution within 150 percent of normal time to program completion. The transfer-out rate excludes students who earned a degree or credential from NOVA prior to transferring, as they are included in the graduation criteria.

Appropriateness: Academic goals often extend beyond the two-year college level. For many community college students, enrollment at a two-year school allows them to complete basic credits at a lower cost, as well as acclimate to the college experience prior to pursuing longer-term goals. However, many community college students intend to eventually enroll at a four-year institution to complete a bachelor's degree. Therefore, NOVA recognizes that a comprehensive understanding of student success includes an evaluation of its transfer trends.

Thresholds of Acceptability: For the Fall 2015 cohort of first-time in college, full-time, program placed students, the transfer-out rate will be at least 16 percent. In 2017-18, the annual number of students transferring to four-year institutions will be at least 10,750.

Achievement Goals: For the Fall 2015 cohort of first-time in college, full-time, program placed students, the transfer-out rate will be 19 percent. In 2017-18, the annual number of students transferring to four-year institutions will be 12,250.

Justification of Threshold of Acceptability and Achievement Goal

Retention, graduation, and transfer are sometimes seen as competing priorities for community colleges.[28] However, NOVA uses all three criteria to measure the success of its students in achieving their academic goals. Transferring to a four-year institution to pursue a bachelor's degree is a goal for many NOVA students, and the College understands that many students will transfer without first earning an associate degree. As such, NOVA aims to improve its annual number of transfers as well as its transfer-rate incrementally each year in support of a holistic understanding of student success that includes transfer as a successful outcome. Modest increases in the thresholds of acceptability and achievement goals for both measures of transfer demonstrates NOVA's commitment to continuous improvement.

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[28] Ekal, D., & Krebs, P. M. (2011, June 19). Reverse-transfer programs reward students and colleges alike. *Chronicle of Higher Education.* Retrieved from https://www.chronicle.com/article/Reverse-Transfer-Programs/127942

Thresholds and goals also consider NOVA's transfer-out rate in relation to other VCCS colleges, all public, two-year institutions in the United States, and a group of peer institutions. Among the Fall 2015 cohort, NOVA's transfer-out rate was nearly three percentage points higher than other VCCS colleges and one percentage point higher than all public, two-year institutions in the United States. However, NOVA's transfer-out rate was six percentage points lower than the median of its peer institutions for this cohort.

Several programs and initiatives will help NOVA to reach its thresholds of acceptability and achievement goals related to transfer. NOVA's Guided Pathways are a set of clear associate degree plans through which students can earn transferrable credits that are aligned with degree programs at popular four-year institutions in Virginia.[29] Students who have a clear plan of study at NOVA, support from engaged advisors, and an understanding of how their credits will transfer to their intended bachelor's degree program should be more likely to enroll at a four-year institution.

Additionally, the ADVANCE partnership with George Mason University will be a key factor in increasing NOVA's annual number of transfers. The goal of the ADVANCE partnership is for students to enroll for two years at NOVA and earn an associate degree prior to a facilitated transfer to George Mason University. As such, the program should have no impact on NOVA's transfer-out rate (which does not include College graduates) but is expected to increase the annual number of transfers each year at NOVA. In addition to the ADVANCE partnership, NOVA has Guaranteed Admission Agreements (GAAs) with over 50 four-year institutions. The College is working with several of the major transfer institutions in Virginia to expand GAAs to guaranteed *transfer* agreements, which aim to substantively minimize credit loss and increase alignment in curricula. These agreements help facilitate the transfer process and, as a result, are expected to increase the annual number of transfers from NOVA to four-year schools.

Additionally, NOVA's new comprehensive advising model is also expected to contribute to increases in the annual number of transfers as well as the transfer-out rate. One component of the new model is assigning every student an advisor. This will ensure that every student has a clear academic goal and a plan to accomplish it, as well as advisors and online resources to keep them on track. As a result, students who aim to ultimately pursue a bachelor's degree will have the support they need to earn credits at NOVA before transferring to a four-year institution.

Also, NOVA has seen an increase in its dual enrolled students in recent years. Dual enrolled students are high school students enrolled at NOVA for concurrent credit. Many students who participate in dual enrollment while in high school will enroll directly in a four-year institution upon high school graduation. When evaluating the recent increase in the annual number of students who transfer to four-year institutions, some of this increase can be contributed to the increase in students who were dual enrolled and then entered a four-year institution upon graduation from high school. As NOVA's dual enrollment population continues to increase each academic year, it is expected the College will continue to observe increases in its annual number of transfers.

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[29] https://www.nvcc.edu/transfer/index.html

Additional Data Supporting Transfer Targets

See Appendix F for VCCS and peer institution comparison data.

Evaluation of Outcomes

Annual Number of Transfers (Figure 30): From 2013-14 through 2017-18, there was considerable growth in the annual number of transfers to four-year institutions. In 2013-14, 8,638 NOVA students transferred to a four-year institution, which increased to 11,215 transfers in 2017-18. In 2017-18, the College exceeded the threshold of acceptability (10,750) but did not meet the achievement goal (12,250) for annual number of transfers to four-year institutions.

Figure 30. Annual Number of Transfers to Four-Year Institutions: 2013-14 through 2020-21
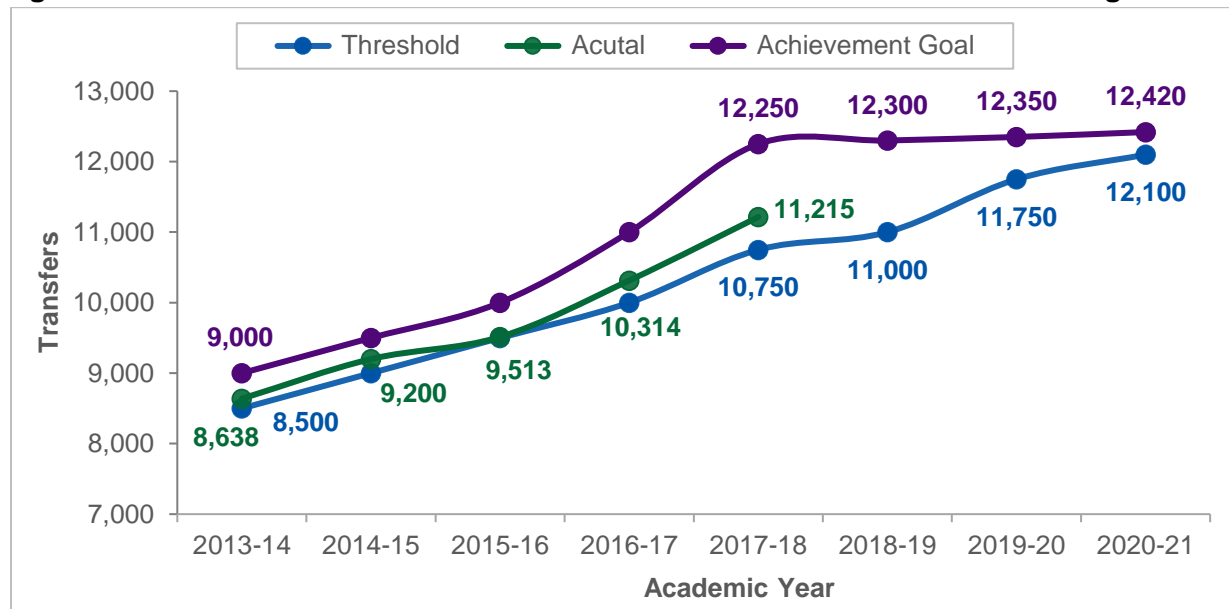
Note: Data include students who previously attended NOVA within the prior eight years, e.g., for 2017-18, data include students who attended NOVA between 2010-11 and 2017-18 and transferred to a four-year institution during the 2017-18 academic year (regardless of when they were last enrolled at NOVA).

Table 24. Annual Number of Transfers to Four-Year Institutions: 2013-14 through 2017-18

Academic Year	Transfers	Growth Rate (%)
2013-14	8,638	--
2014-15	9,200	6.5
2015-16	9,513	3.4
2016-17	10,314	8.4
2017-18	11,215	8.7

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Data include students who previously attended NOVA within the prior eight years, e.g., for 2017-18, data include students who attended NOVA between 2010-11 and 2017-18 and transferred to a four-year institution during the 2017-18 academic year (regardless of when they were last enrolled at NOVA). The growth rate is calculated as the percent change over the previous year.

Transfer-Out Rate (Figure 31): From the Fall 2011 to Fall 2015 first-time in college, full-time, program placed cohorts, the transfer-out rate increased from 15 to 16 percent. For the Fall 2015 cohort, the College fell just short of the threshold of acceptability (at least 16 percent) and did not meet the achievement goal (19 percent) for transfer-out rate.

Figure 31. Transfer-Out Rate: Fall 2011 through Fall 2018
First-Time in College, Full-Time, Program Placed Cohorts
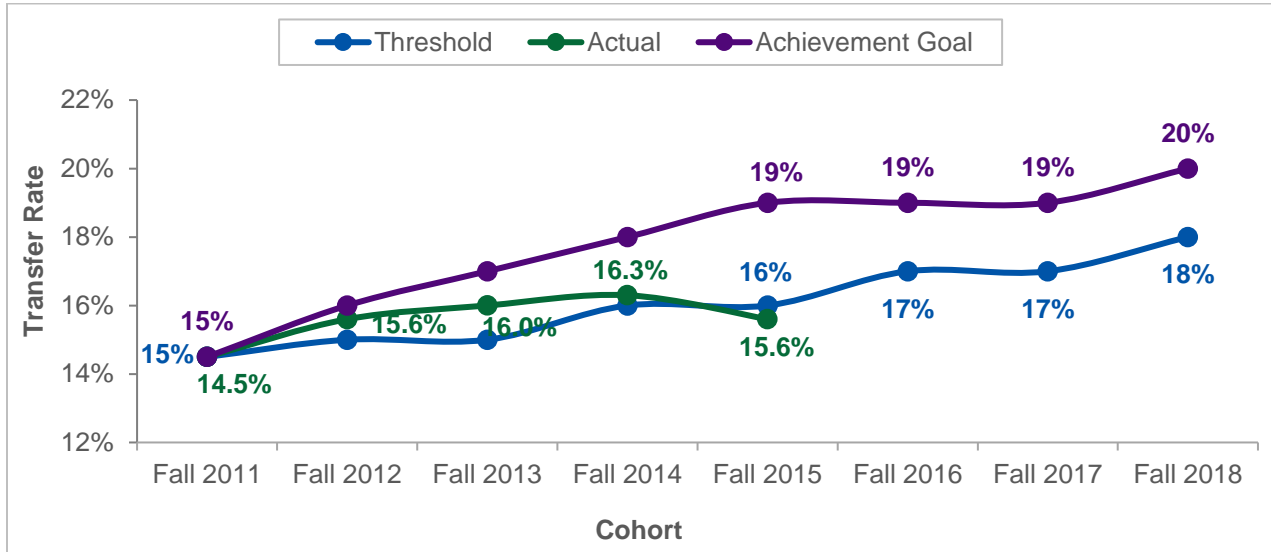
Note: Data include first-time in college, full-time, program placed students who transferred out of NOVA to another two- or four-year institution within 150 percent of normal time to program completion, including summer, but does not include students who graduated from NOVA prior to transferring.

Table 25. Transfer-Out Rate: Fall 2011 through Fall 2015
First-Time in College, Full-Time, Program Placed Cohorts

Cohort	N	Transfers	Transfer-Out Rate (%)
Fall 2011	4,848	703	14.5
Fall 2012	5,137	799	15.6
Fall 2013	5,819	932	16.0
Fall 2014	5,815	948	16.3
Fall 2015	5,881	919	15.6

Source: Office of Institutional Research, Northern Virginia Community College.
Note: Data include first-time in college, full-time, program placed students who transferred out of NOVA to another two- or four-year institution within 150 percent of normal time to program completion, including summer, but does not include students who graduated from NOVA prior to transferring.

7. Job Placement

Appropriateness of Criteria and Measures

Criteria: The College uses employment data from the Virginia Employment Commission (VEC) to track the job placement rates of its recent graduates.

Measures: The job placement rate is the percentage of graduates who are employed in the Commonwealth of Virginia within one year of graduation from NOVA.

Appropriateness: In 2015-16, the VCCS established a new six-year plan, Complete 2021.[30] One of the primary tenets of the plan is a focus on Virginia's hiring challenge and supplying graduates who meet the demand for a skilled workforce in the Commonwealth. As part of the VCCS, NOVA is focused on supplying the Northern Virginia region with an educated population and a globally competitive workforce, as stated in NOVA's most recent strategic plan. Additionally, NOVA's Strategic Plan outlines specific objectives aimed at refocusing and prioritizing NOVA's workforce development programs and further developing academic programs that support regional job demand, such as cybersecurity and healthcare fields. These programmatic efforts show the importance NOVA places on job placement and skilled regional employment in its student success efforts.

Threshold of Acceptability: The job placement rate of 2016-17 NOVA graduates will be at least 65 percent.

Achievement Goals: The job placement rate of 2016-17 NOVA graduates will be 67 percent.

Justification of Threshold of Acceptability and Achievement Goal

Thresholds of acceptability and achievement goals for NOVA's job placement rate consider the influence of a number of institutional and external factors such as programs offered; student interests and career goals; the stability of the local economy; in-demand skillsets; and regional unemployment rates. By 2024, employment in Virginia is projected to grow 9.3 percent, which exceeds the national growth rate of 6.5 percent.[31] Additionally, researchers project an increase in the demand for postsecondary credentials. In particular, "jobs in the District of Columbia will require the highest concentration of post-secondary education in 2020" at 76 percent with Maryland (69 percent) and Virginia (67 percent) also higher than the national average of 65 percent.[32] To meet this demand, NOVA is focused on a number of initiatives aimed at increasing the College's job placement rate, primarily through a focus on increasing the number of NOVA students who enter the workforce with valued postsecondary credentials.

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[30] https://www.vccs.edu/wp-content/uploads/2019/05/Complete-2021-Strategic-Plan-for-Inclusion-in-Grant-Proposals-10-19-2015.pdf

[31] Virginia Employment Commission. (n.d.). *Virginia job outlook: Projected to 2024.* Retrieved from https://www.vec.virginia.gov/sites/default/files/documents/2024-Jobs-Outlook.pdf

[32] Carnevale, A. P., Smith, N., & Strohl, J. (2013). *Recovery: Job growth and education requirements through 2020,* p. 3. Georgetown Public Policy Institute Center on Education and the Workforce. Retrieved from https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/2014/11/Recovery2020.FR_.Web_.pdf

In addition to NOVA's use of VEC data to track its graduates' employment, the College also surveys its graduates regarding several aspects of their educational experiences, including their current employment status. This provides the College with additional data with which to set job placement targets. Most recently, NOVA surveyed its 2016 graduating class. Overall, 69 percent of survey respondents were employed. Around 16 percent of respondents were unemployed and seeking employment. A.A.A. or A.A.S. degree programs had the highest proportion of respondents who were employed full-time (64 percent). Conversely, A.A. or A.S. degree programs had the smallest proportion of respondents working full-time (30 percent); these students were almost equally likely to be working part-time (29 percent).[33] This is not unusual given the higher likelihood that A.A. and A.S. degree graduates will pursue additional education, such as a bachelor's degree, in lieu of entering the workforce. As such, NOVA's job placement targets consider that some graduates will spend several more years enrolled in higher education before seeking employment and, thus, will not be captured in the job placement rate.

As stated in NOVA's Strategic Plan, the College "lag[s] in comparison to benchmark national and state community colleges in the production of STEM graduates, particularly those attaining degrees and/or certificates in non-transfer programs that allow them to enter the workforce directly."[34] Initiatives aimed at increasing the number of STEM graduates are expected to improve the job placement rate by providing a skilled workforce aligned with regional job demand. For example, the regional Department of Labor–NOVA Credentials to Careers joint initiative is a partnership between NOVA, nonprofit workforce development organizations, and local IT employers to provide high performing education and training programs leading to credentials and careers in IT for Trade Adjustment Assistance (TAA)-affected workers and other adult workers (unemployed or underemployed, low-wage, dislocated, military or veteran). Led by a large regional cluster of Information Technology (IT) contractors, Northern Virginia's employers have a massive demand for skilled IT professionals—demand that exceeds the current IT talent workforce. To meet the need for educated and prepared employees, the Department of Labor–NOVA Credentials to Careers Consortium has come together to build the gateway of IT and STEM careers.[35]

Additionally, NOVA's Career Services Center further assists students with exploring, developing, and setting goals related to their educational and academic needs. These services include career assessments, occupational information, goal setting, planning, and employment resources. Additionally, the Guided Pathways initiative provides students with structured programs and coursework that help students align career goals with workforce demand and NOVA programs and courses. NOVA's career planning system, FOCUS 2, helps students select a program/major based on their interests and aspirations; discover occupations matching their personal preferences and attributes; map out their career plans, present and future; and make informed career decisions. This increased focus on structured pathways and enhanced advising should enable NOVA to improve its job placement rate for its graduates.

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[33] Office of Institutional Effectiveness and Student Success Initiatives. (2016, December). *Graduate survey report: Class of 2016.* Research report no. 87-16. Retrieved from https://www.nvcc.edu/oir/_files/87-16GraduateSurvey%20Report%202016.pdf
[34] https://www.nvcc.edu/about/mission/
[35] https://www.nvcc.edu/c2c/

Additional Data Supporting Job Placement Targets

See Appendix G for additional data supporting job placement thresholds and goals.

Evaluation of Outcomes

The Virginia Employment Commission (VEC) maintains data as required by the Bureau of Labor Statistics for all Virginia businesses covered by unemployment insurance. These data cover more than 95 percent of Virginia's labor force. Excluded from these data are the following groups within the workforce: military personnel, federal civilian employees, and self-employed individuals (including independent contractors and workers for small agricultural and fishing businesses).

Among graduates from 2013-14 to 2017-18, NOVA's overall job placement rate increased from 64 to 67 percent. Among 2016-17 graduates, the job placement rate exceeded the threshold of acceptability (at least 65 percent) but fell just short of the achievement goal (67 percent) for the job placement rate of graduates in the Commonwealth of Virginia.

Figure 32. Job Placement Rate of NOVA Graduates: 2013-14 through 2020-21
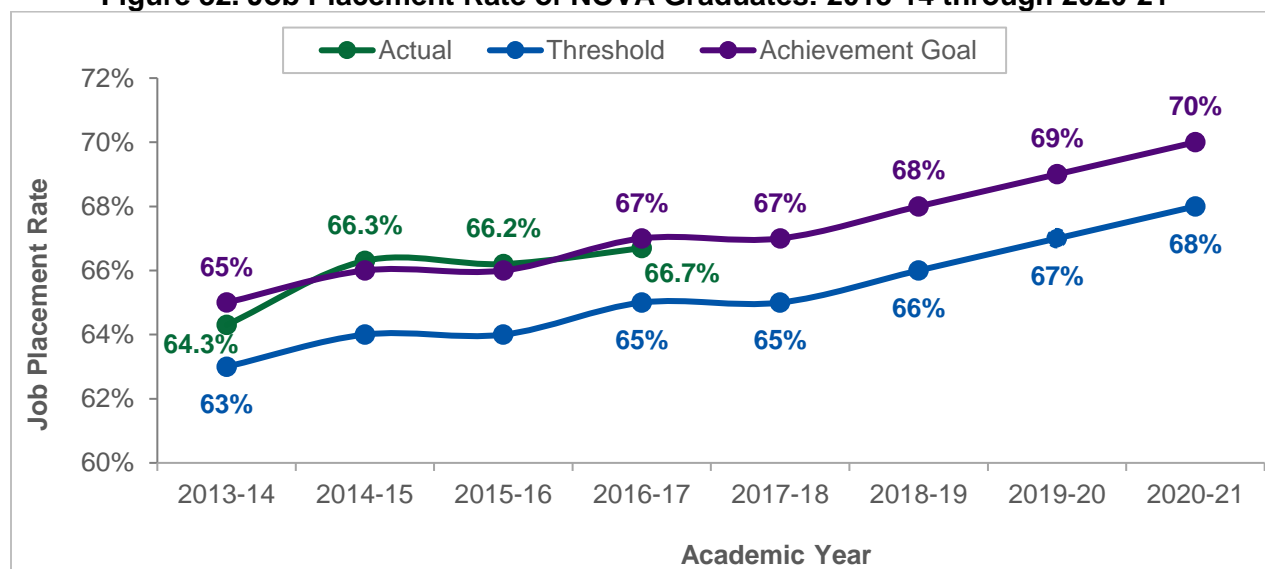
Notes: Data include students who were employed in the Commonwealth of Virginia within one year of graduation from NOVA. Data exclude military personnel, federal civilian employees, and self-employed individuals.

Table 26. Job Placement Rate of NOVA Graduates: 2013-14 through 2016-17

Academic Year	N	Employed	
		#	%
2013-14	6,598	4,240	64.3
2014-15	6,771	4,490	66.3
2015-16	6,939	4,596	66.2
2016-17	6,669	4,450	66.7

Source: Office of Institutional Research, Northern Virginia Community College and Virginia Employment Commission (VEC).
Notes: Data include students who were employed in the Commonwealth of Virginia within one year of graduation from NOVA. Data exclude military personnel, federal civilian employees, and self-employed individuals.

Appropriateness of Criteria and Measures

Criteria: Passing a licensing exam demonstrates the level of knowledge and skill required to succeed in a profession, occupation, or role.

Measures: The licensing exam pass rate is the percentage of graduates from programs with corresponding national or state licensing exams who pass the exam following graduation from NOVA.

Appropriateness: In 2015-16, the VCCS established a new six-year plan, Complete 2021.[36] One of the primary tenets of the plan is a focus on Virginia's hiring challenge and supplying graduates who meet the demand for a skilled workforce in the Commonwealth. As part of the VCCS, NOVA is focused on supplying the Northern Virginia region with an educated population and a globally competitive workforce, as stated in NOVA's most recent strategic plan. An important component of supplying an educated population and a globally competitive workforce is preparing students to pass state and national licensing exams so they can seek and earn employment in their intended field. These exams provide third-party assessments of student achievement and demonstrate the career readiness of NOVA graduates.

Threshold of Acceptability: In 2017, the licensing exam pass rate will be at least 90 percent for each program for which there is a corresponding national or state licensing exam.

Achievement Goals: In 2017, the licensing exam pass rate will be 100 percent for each program for which there is a corresponding national or state licensing exam.

Justification of Threshold of Acceptability and Achievement Goal

Of the 13 NOVA programs that have an associated state or national licensing exam, the average pass rate of these exams in 2017 was 93 percent. The College considers a 90 percent pass rate to be an acceptable threshold but aims to have every student pass the licensing exam associated with their degree program. Passing a licensing exam indicates the ability of a program to prepare students for employment in the workforce, and NOVA's goal is for every student to be able to seek employment with their NOVA credentials.

NOVA's Veterinary Technology program requires the largest improvement in its pass rate. The Committee on Veterinary Technician Education and Activities "has mandated that a program's three-year mean rolling Veterinary Technician National Exam (VTNE) pass percentage for first-time test takers must be 50 percent or higher" by Fall 2020. NOVA's program complies with this objective and performed above the national benchmark data in 2017, but the College would like to see this program's pass rate reach 90 percent by Fall 2021.

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[36] https://www.vccs.edu/wp-content/uploads/2019/05/Complete-2021-Strategic-Plan-for-Inclusion-in-Grant-Proposals-10-19-2015.pdf

NOVA seeks to grow and expand its nursing program, which is expected to positively influence its pass rate. For example, students in the nursing program benefit from both a dedicated Nursing Lab and a state-of-the-art simulation lab at NOVA's Medical Education Campus. As a result of these resources, NOVA aims to increase its National Council Licensing Examination (NCLEX) pass rate to 100 percent by Fall 2021. While the program's 2017 pass rate for the exam was 89 percent, the statewide average in the Commonwealth of Virginia was 78 percent.[37] Nationally, the first-time NCLEX pass rate for Registered Nurses was 83 percent in 2017,[38] so NOVA has a targeted pass rate that is higher than both the state and national averages.

Evaluation of Outcomes

In 2017, five of NOVA's programs with licensing exams had pass rates of 100 percent, reaching the achievement goal. Three additional programs had rates above 90 percent, meeting the minimum threshold of acceptability. Five programs had exam pass rates below the threshold of acceptability in 2017, indicating room for improvement: Nursing, Paramedic, Radiography, EMT – Basic, and Veterinary Technology.

Figure 33. National and State Licensing Examination Pass Rates: 2017
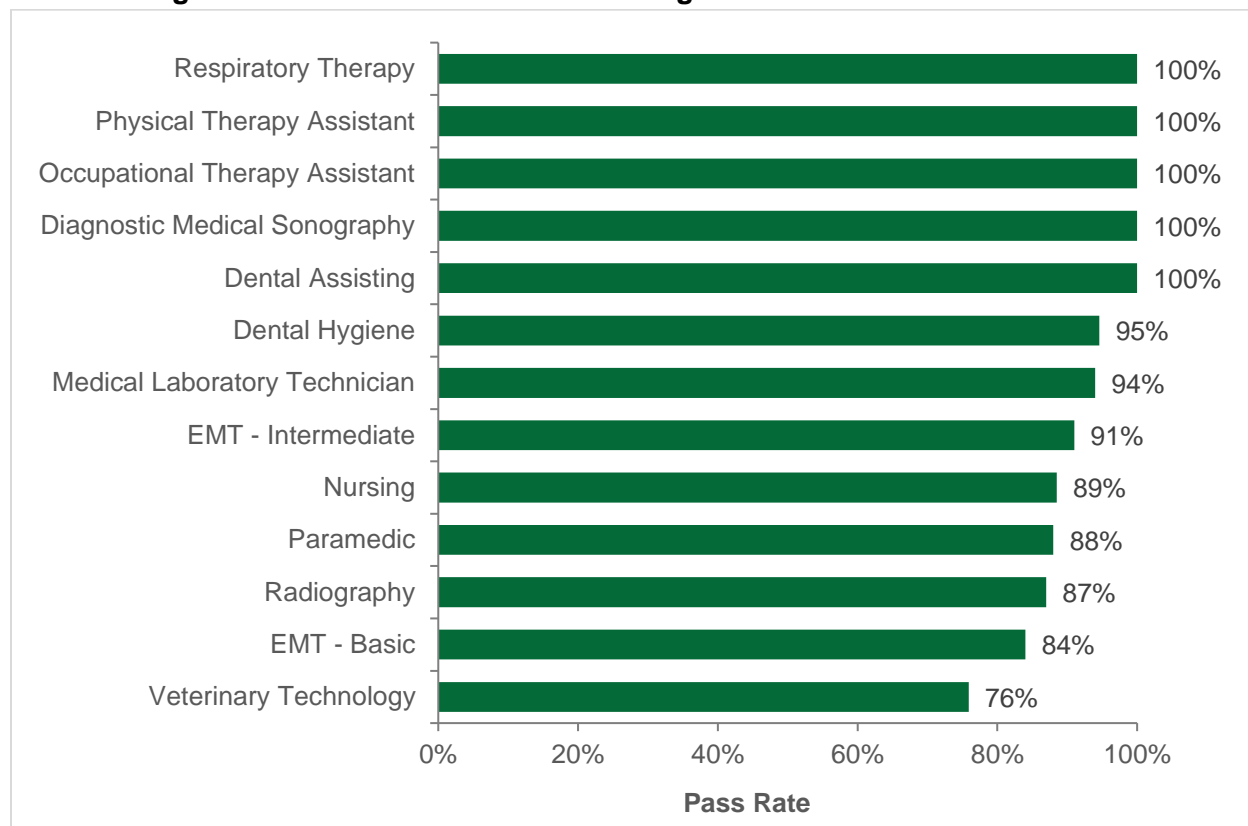
Notes: Data include all program graduates who took the licensing exam for their program in the indicated year, regardless of the year in which they graduated from NOVA. Data may include more than one exam attempt or students retaking the exam.

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[37] Virginia Department of Health Professions Board of Nursing (2019). *Test pass rates by program: NCLEX pass rates for the past 5 years Excel.* Retrieved from https://www.dhp.virginia.gov/Boards/Nursing/PublicResources/EducationPrograms/
[38] NCLEX Examinations. (2019). *Quarterly examination statistics: Volume, pass rates, and first-time internationally educated candidates' countries.* Retrieved from https://www.ncsbn.org/2017_NCLEX_Fact_Sheet.pdf

Table 27. National and State Licensing Examination Pass Rate of NOVA Graduates by Program: 2014 through 2017

NOVA Program	2014		2015		2016		2017	
	Exam Takers	Pass Rate (%)	Exam Takers	Pass Rate (%)	Exam Takers	Pass Rate (%)	Exam Takers	Pass Rate (%)
Dental Assisting	--	--	--	--	8	100.0	13	100.0
Dental Hygiene	32	100.0	37	91.4	34	94.2	35	94.6
Diagnostic Medical Sonography	10	100.0	8	100.0	13	100.0	13	100.0
EMT – Basic	31	85.0	14	90.0	19	84.0	10	84.0
EMT – Intermediate	24	87.0	34	90.0	22	91.0	15	91.0
Medical Laboratory Technician	13	94.0	16	100.0	17	87.0	17	94.0
Nursing	175	82.0	148	91.0	156	88.0	158	88.5
Occupational Therapy Assistant	--	--	12	100.0	11	100.0	16	100.0
Paramedic	16	81.0	19	93.0	26	95.0	8	88.0
Physical Therapist Asst.	26	92.9	29	92.9	29	100.0	26	100.0
Radiography	36	92.0	30	85.0	43	80.0	33	87.0
Respiratory Therapy	16	100.0	21	100.0	9	100.0	17	100.0
Veterinary Technology	49	89.5	46	81.4	52	78.5	46	75.9

Source: Office of Institutional Research, Northern Virginia Community College.
Notes: Exam Takers includes all program graduates who took the licensing exam for their program in the indicated year, regardless of the year in which they graduated from NOVA. Data may include more than one exam attempt or students retaking the exam. Campus indicated is the campus at which the program is offered. The Dental Assisting program had its first graduates in 2016. The Occupational Therapy Assistant program had its first graduates in 2015.

IV. Conclusion

This document provides several years of detailed data for each of NOVA's eight primary student achievement criteria: college readiness, enrollment, course success, retention, graduation, transfer, job placement, and licensing exam pass rates. For each criteria, this report provides information regarding the measures used to assess each criteria; the thresholds of acceptability and achievement goals for the most recent cohort, term or year; justifications for current and future thresholds and achievement goals; and an evaluation of outcomes of the most recent five years of data.

Student success is of primary importance at Northern Virginia Community College (NOVA). As an Achieving the Dream (ATD) Leader College for the last nine years, NOVA has worked diligently to integrate "evidence-based decision making," one of ATD's core principles, into the culture of the College to promote student success. To that end, the above-mentioned student success criteria are monitored on an ongoing basis, and strategic decisions are made based on the outcomes of those criteria. This report provides stakeholders at all levels of the College with the data with which to make these informed decisions in support of continuous improvement in the area of student success.

These student achievement measures are regularly reviewed by stakeholders and appropriate targets are set for the ensuing periods. The Office of Institutional Research plays a lead role in this process by analyzing and providing data and by recommending appropriate targets. Student success remains an ongoing priority for the College, and NOVA is dedicated to its continual improvement.

Table A1. List of NOVA's IPEDS Peer Institutions

Peer Institution	Location
Austin Community College District	Austin, TX
Central Piedmont Community College	Charlotte, NC
City College of San Francisco	San Francisco, CA
Community College of Allegheny County	Pittsburgh, PA
Community College of Denver	Denver, CO
Cuyahoga Community College District	Cleveland, OH
Houston Community College	Houston, TX
Lone Star College System	The Woodlands, TX
Miami Dade College	Miami, FL
Montgomery College	Rockville, MD
Pima Community College	Tucson, AZ
Portland Community College	Portland, OR
Tidewater Community College	Norfolk, VA
Valencia College	Orlando, FL

Appendix B. Additional Data Supporting College Readiness Targets

Table B1. Virginia Placement Test Results of
NOVA Service Area Public High School Graduates: Fall 2018

Placement Test	Test Participants	Placed into Developmental		College-Level Ready	
		#	%	#	%
VPT-English	3,325	983	29.6	2,342	70.4
VPT-Math	4,045	1,600	39.6	2,445	60.4

Source: The Virginia Community College System.
Notes: Students who were deemed college-level ready in math were proficient in basic college-level math (MTH 150 and up). Includes all graduates from public high schools in the Northern Virginia service area who took the placement test(s) and enrolled in a VCCS college in Fall 2018. While most students from the NOVA service area who enrolled in a VCCS college enrolled at NOVA, data may include students who enrolled at other VCCS colleges.

Table B2. Virginia Placement Test Results
by Public High Schools in the NOVA Service Area: Fall 2018

NOVA Service Area Jurisdiction	Public High School	VPT-English			VPT-Math		
		Test Participants (N)	College-Level English Ready		Test Participants (N)	College-Level Math Ready*	
			#	%		#	%
Alexandria City	T.C. Williams High	97	61	62.9	103	37	35.9
Arlington County	Arlington Community High	6	4	66.7	6	3	50.0
Arlington County	Wakefield High	72	53	73.6	81	55	67.9
Arlington County	Washington-Lee High	45	31	68.9	51	40	78.4
Arlington County	Yorktown High	21	16	76.2	36	20	55.6
Fairfax County	Annandale High	99	73	73.7	101	73	72.3
Fairfax County	Bryant Alternative High	12	5	41.7	14	7	50.0
Fairfax County	Centreville High	72	53	73.6	93	65	69.9
Fairfax County	Chantilly High	65	48	73.8	88	57	64.8
Fairfax County	Edison High	79	63	79.7	104	72	69.2
Fairfax County	Fairfax County Adult High	3	0	0.0	4	2	50.0
Fairfax County	Fairfax High	64	43	67.2	91	66	72.5
Fairfax County	Falls Church High	65	44	67.7	82	53	64.6
Fairfax County	Hayfield Secondary	69	48	69.6	88	47	53.4
Fairfax County	Herndon High	76	53	69.7	81	55	67.9
Fairfax County	Justice High	62	41	66.1	69	35	50.7
Fairfax County	Lake Braddock Secondary	77	56	72.7	99	58	58.6
Fairfax County	Langley High	26	23	88.5	34	26	76.5
Fairfax County	Lee High	88	67	76.1	105	61	58.1
Fairfax County	Madison High	14	10	71.4	31	19	61.3
Fairfax County	Marshall High	41	30	73.2	65	50	76.9
Fairfax County	McLean High	21	18	85.7	26	18	69.2
Fairfax County	Mount Vernon High	48	23	47.9	66	28	42.4
Fairfax County	Mountain View Alt. High	27	15	55.6	29	15	51.7
Fairfax County	Oakton High	30	23	76.7	39	17	43.6
Fairfax County	Robinson Secondary	86	68	79.1	101	77	76.2
Fairfax County	South County High	79	54	68.4	100	69	69.0

NOVA Service Area Jurisdiction	Public High School	VPT-English			VPT-Math		
		Test Participants (N)	College-Level English Ready		Test Participants (N)	College-Level Math Ready*	
			#	%		#	%
Fairfax County	South Lakes High	58	35	60.3	83	48	57.8
Fairfax County	Thomas Jefferson High	0	--	--	0	--	--
Fairfax County	West Potomac High	55	40	72.7	69	36	52.2
Fairfax County	West Springfield High	45	40	88.9	58	34	58.6
Fairfax County	Westfield High	71	49	69.0	100	72	72.0
Fairfax County	Woodson High	70	54	77.1	80	53	66.3
Falls Church City	George Mason High	10	6	60.0	10	5	50.0
Loudoun County	Briar Woods High	26	22	84.6	32	23	71.9
Loudoun County	Broad Run High	29	25	86.2	31	25	80.6
Loudoun County	Dominion High	49	35	71.4	68	50	73.5
Loudoun County	Freedom High (Loudoun)	37	25	67.6	49	26	53.1
Loudoun County	Heritage High	27	19	70.4	29	21	72.4
Loudoun County	Loudoun County High	21	11	52.4	22	11	50.0
Loudoun County	Loudoun Valley High	24	18	75.0	20	11	55.0
Loudoun County	Park View High	76	56	73.7	75	49	65.3
Loudoun County	Potomac Falls High	65	46	70.8	83	48	57.8
Loudoun County	Riverside High	16	10	62.5	21	13	61.9
Loudoun County	Rock Ridge High	51	35	68.6	61	40	65.6
Loudoun County	Stone Bridge High	26	19	73.1	30	17	56.7
Loudoun County	Tuscarora High	20	17	85.0	28	15	53.6
Loudoun County	Woodgrove High	24	16	66.7	36	25	69.4
Manassas City	Osbourn High	83	58	69.9	72	33	45.8
Manassas Pk. City	Manassas Park High	25	10	40.0	32	13	40.6
Prince William Co.	Battlefield High	88	62	70.5	108	56	51.9
Prince William Co.	Brentsville District	38	32	84.2	40	27	67.5
Prince William Co.	C.D. Hylton High	100	77	77.0	124	90	72.6
Prince William Co.	Charles J. Colgan High	42	32	76.2	49	30	61.2
Prince William Co.	Forest Park High	79	53	67.1	96	61	63.5
Prince William Co.	Freedom High (PW)	83	53	63.9	111	57	51.4
Prince William Co.	Gar-Field High	117	77	65.8	127	62	48.8
Prince William Co.	Osbourn Park High	76	60	78.9	95	57	60.0
Prince William Co.	Patriot High	106	79	74.5	129	75	58.1
Prince William Co.	Potomac High	65	39	60.0	78	31	39.7
Prince William Co.	Stonewall Jackson High	89	50	56.2	102	49	48.0
Prince William Co.	Woodbridge High	90	59	65.6	110	57	51.8
College-Ready Total from NOVA Service Area		**3,325**	**2,342**	**70.4**	**4,045**	**2,445**	**60.4**

Source: The Virginia Community College System.

Notes: Students who were deemed college-level ready in math were proficient in basic college-level math (MTH 150 and up). Includes all graduates from public high schools in the Northern Virginia service area who took the placement test(s) and enrolled in a VCCS college in Fall 2018. While most students from the NOVA service area who enrolled in a VCCS college enrolled at NOVA, data may include students who enrolled at other VCCS colleges.

Appendix C. Additional Data Supporting Enrollment Targets

Table C1. Annual Unduplicated Headcount at VCCS Colleges: 2013-14 through 2017-18

VCCS College	Annual Unduplicated Headcount				
	2013-14	2014-15	2015-16	2016-17	2017-18
Blue Ridge Community College	6,293	6,039	5,834	5,591	5,685
Central Virginia Community College	6,731	6,414	6,144	5,692	5,652
Dabney S Lancaster Community College	1,872	1,848	1,806	1,879	1,670
Danville Community College	6,041	5,554	5,007	4,812	4,260
Eastern Shore Community College	1,142	1,131	987	929	836
Germanna Community College	10,131	10,012	9,520	9,135	9,077
J Sargeant Reynolds Community College	18,408	17,742	16,236	15,028	13,875
John Tyler Community College	13,980	13,753	14,135	13,930	14,329
Lord Fairfax Community College	9,613	9,427	9,236	9,129	9,112
Mountain Empire Community College	3,834	3,620	3,671	3,695	3,560
New River Community College	7,038	6,617	6,605	6,406	6,385
Northern Virginia Community College	78,461	76,868	75,858	74,283	73,657
Patrick Henry Community College	4,490	3,783	3,322	3,059	2,958
Paul D. Camp Community College	2,026	1,813	2,114	2,036	1,898
Piedmont Virginia Community College	7,800	7,673	7,595	7,473	7,420
Rappahannock Community College	4,887	4,616	4,690	4,654	4,321
Southside Virginia Community College	8,249	7,350	6,271	5,301	4,712
Southwest Virginia Community College	3,668	3,566	3,545	3,269	3,150
Thomas Nelson Community College	16,212	15,122	13,966	13,121	12,210
Tidewater Community College	42,442	39,531	37,428	34,396	32,982
Virginia Highlands Community College	3,394	3,315	3,022	3,138	3,007
Virginia Western Community College	12,849	12,798	11,850	10,802	10,130
Wytheville Community College	4,594	4,305	3,916	3,654	3,483
VCCS Total	**274,155**	**262,897**	**252,758**	**241,412**	**234,369**

Sources: Office of Institutional Research, Northern Virginia Community College; and the Virginia Community College System.

Note: Institutions are sorted alphabetically.

**Table C2. Annual Unduplicated Headcount at NOVA, All Public,
Two-Year Institutions, and Peer Institutions (Median): 2012-13 through 2017-18**

Academic Year	NOVA		All Public, Two-Year Institutions		Peer Institutions	
	Headcount	Percent Change	Headcount	Percent Change	Headcount	Percent Change
2012-13	78,635	--	10,207,913	--	46,063	--
2013-14	78,461	-0.2	9,889,555	-3.1	42,997	-6.7
2014-15	76,868	-2.0	9,616,480	-2.8	40,252	-6.4
2015-16	75,858	-1.3	8,985,322	-6.6	38,630	-4.0
2016-17	74,283	-2.1	8,721,791	-2.9	35,528	-8.0
2017-18	73,657	-0.8	8,305,186	-4.8	37,210	4.7

Source: The Integrated Postsecondary Education Data System (IPEDS).

Notes: Percent change over previous year. 2017-18 national data was not yet available at the time of publication.

Table C3. Fall Headcount at VCCS Colleges: Fall 2013 through Fall 2017

VCCS College	Annual Unduplicated Headcount				
	Fall 2013	**Fall 2014**	**Fall 2015**	**Fall 2016**	**Fall 2017**
Blue Ridge Community College	4,437	4,388	4,192	4,131	4,200
Central Virginia Community College	4,730	4,519	4,433	4,125	4,128
Dabney S. Lancaster Community College	1,312	1,257	1,236	1,373	1,260
Danville Community College	4,280	3,982	3,561	3,405	3,101
Eastern Shore Community College	857	839	745	705	644
Germanna Community College	7,379	7,282	6,993	6,701	6,688
J. Sargeant Reynolds Community College	12,454	11,861	10,889	10,375	9,334
John Tyler Community College	10,103	9,875	10,035	10,021	10,380
Lord Fairfax Community College	7,238	6,996	7,002	6,868	6,891
Mountain Empire Community College	2,924	2,718	2,718	2,737	2,684
New River Community College	4,808	4,585	4,477	4,456	4,626
Northern Virginia Community College	51,803	51,487	52,078	50,835	51,190
Patrick Henry Community College	3,163	2,853	2,594	2,405	2,263
Paul D. Camp Community College	1,392	1,259	1,473	1,480	1,404
Piedmont Virginia Community College	5,630	5,554	5,438	5,550	5,608
Rappahannock Community College	3,555	3,569	3,566	3,463	3,229
Southside Virginia Community College	5,784	5,352	4,439	3,958	3,611
Southwest Virginia Community College	2,630	2,546	2,563	2,481	2,304
Thomas Nelson Community College	11,033	10,436	9,316	8,897	8,286
Tidewater Community College	28,999	27,646	25,927	23,945	22,776
Virginia Highlands Community College	2,484	2,505	2,365	2,491	2,328
Virginia Western Community College	8,654	8,632	7,932	7,719	7,271
Wytheville Community College	3,468	3,302	2,915	2,745	2,676
VCCS Total	**189,117**	**183,443**	**176,887**	**170,866**	**166,882**

Sources: Office of Institutional Research, Northern Virginia Community College; and the Virginia Community College System.
Note: Institutions are sorted alphabetically.

**Table C4. Fall Headcount at NOVA, All Public, Two-Year Institutions,
and Peer Institutions (Median): 2012-13 through 2017-18**

	NOVA		All Public, Two-Year Institutions		Peer Institutions	
Term	**Headcount**	**Percent Change**	**Headcount**	**Percent Change**	**Headcount**	**Percent Change**
Fall 2013	51,864	--	6,848,796	--	29,541	--
Fall 2014	51,803	-0.1	6,678,474	-2.5	27,858	-5.7
Fall 2015	51,487	-0.6	6,456,755	-3.3	26,404	-5.2
Fall 2016	52,078	1.1	6,283,390	-2.7	24,472	-7.3
Fall 2017	50,835	-2.4	5,902,040	-6.1	25,323	3.5

Source: The Integrated Postsecondary Education Data System (IPEDS).
Note: Percent change over previous year.

Table D1. Fall-to-Spring Retention Rates at NOVA and VCCS Colleges:
Fall 2013 through Fall 2017 First-Time in College, Program Placed Cohorts

Cohort	NOVA				VCCS Colleges			
	N	Retained		Percent Change	N	Retained		Percent Change
		#	%			#	%	
Fall 2013	9,128	7,063	77.4	--	31,707	23,780	75.0	--
Fall 2014	9,141	7,325	80.1	2.7	30,108	22,786	75.7	0.7
Fall 2015	9,330	7,606	81.5	1.4	28,413	22,139	77.9	2.2
Fall 2016	8,884	7,269	81.8	0.3	27,910	21,808	78.1	0.2
Fall 2017	8,619	6,971	80.9	-0.9	27,343	20,982	76.7	-1.4

Sources: Office of Institutional Research, Northern Virginia Community College; and the Virginia Community College System.

Table D2. Fall-to-Fall Retention Rates at NOVA and VCCS Colleges:
Fall 2013 through Fall 2017 First-Time in College, Program Placed Cohorts

Cohort	NOVA				VCCS Colleges			
	N	Retained		Percent Change	N	Retained		Percent Change
		#	%			#	%	
Fall 2013	9,128	5,586	61.2	--	31,707	17,442	55.0	--
Fall 2014	9,141	5,787	63.3	2.1	30,108	16,770	55.7	0.7
Fall 2015	9,330	5,913	63.4	0.0	28,413	16,081	56.6	0.9
Fall 2016	8,884	5,851	65.9	2.4	27,910	16,226	58.1	1.5
Fall 2017	8,619	5,621	65.2	-0.6	27,343	15,540	56.8	-1.3

Sources: Office of Institutional Research, Northern Virginia Community College; and the Virginia Community College System.

Table D3. Fall-to-Fall Retention Rates at VCCS Colleges by Enrollment Status:
Fall 2012 through Fall 2016 First-Time in College, Program Placed Cohorts

VCCS College	Retention Rate (%)				
	Fall 2012 Cohort	Fall 2013 Cohort	Fall 2014 Cohort	Fall 2015 Cohort	Fall 2016 Cohort
Full-Time Students					
Northern Virginia Community College	**70**	**69**	**72**	**73**	**73**
Germanna Community College	61	66	68	63	70
Southside Virginia Community College	63	70	62	61	70
Piedmont Virginia Community College	63	70	65	70	69
Lord Fairfax Community College	70	67	67	66	69
New River Community College	57	60	61	62	67
Wytheville Community College	60	65	62	62	66
Blue Ridge Community College	66	67	64	65	66
Dabney S Lancaster Community College	61	61	65	68	65
Central Virginia Community College	55	60	56	60	64
Virginia Western Community College	59	60	65	66	64

VCCS College	Retention Rate (%)				
	Fall 2012 Cohort	Fall 2013 Cohort	Fall 2014 Cohort	Fall 2015 Cohort	Fall 2016 Cohort
Mountain Empire Community College	62	62	64	61	64
J Sargeant Reynolds Community College	61	59	59	60	63
Southwest Virginia Community College	59	64	64	60	63
Virginia Highlands Community College	66	69	57	64	63
Danville Community College	63	62	60	57	63
John Tyler Community College	58	57	60	63	63
Patrick Henry Community College	59	61	63	65	62
Tidewater Community College	60	59	60	60	61
Thomas Nelson Community College	60	60	57	61	60
Paul D Camp Community College	54	48	46	59	60
Rappahannock Community College	56	56	64	63	60
Eastern Shore Community College	49	58	63	69	56
Part-Time Students					
Northern Virginia Community College	**45**	**48**	**49**	**48**	**52**
Germanna Community College	42	43	44	49	52
Eastern Shore Community College	37	48	44	48	51
Piedmont Virginia Community College	43	46	42	50	50
Virginia Western Community College	43	39	44	38	48
John Tyler Community College	38	42	36	45	48
Rappahannock Community College	41	42	42	45	47
New River Community College	38	42	37	54	46
Central Virginia Community College	43	39	42	39	43
Wytheville Community College	40	38	27	44	43
Blue Ridge Community College	37	40	43	44	43
Lord Fairfax Community College	42	46	45	43	43
J Sargeant Reynolds Community College	39	37	40	39	41
Thomas Nelson Community College	38	39	40	40	40
Virginia Highlands Community College	37	33	30	44	40
Tidewater Community College	36	37	38	36	38
Mountain Empire Community College	26	27	41	28	38
Danville Community College	41	49	32	40	37
Paul D Camp Community College	25	23	36	20	34
Southside Virginia Community College	38	41	38	37	34
Southwest Virginia Community College	37	40	38	33	33
Patrick Henry Community College	41	38	37	43	31
Dabney S Lancaster Community College	38	33	32	41	26

Source: The Integrated Postsecondary Education Data System (IPEDS).
Note: Institutions are sorted in descending order based on Fall 2016 values.

Appendix E. Additional Data Supporting Graduation Targets

Table E1. Graduation Rates at NOVA and VCCS: Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts

Cohort	NOVA				VCCS Colleges			
	N	Completers		Percent Change	N	Completers		Percent Change
		#	%			#	%	
Fall 2011	4,848	1,115	23.0	--	18,742	4,051	21.6	--
Fall 2012	5,137	1,159	22.6	-0.4	17,530	4,129	23.6	1.9
Fall 2013	5,819	1,389	23.9	1.3	19,347	5,093	26.3	23.3
Fall 2014	5,815	1,456	25.0	1.1	18,383	4,959	27.0	-2.6
Fall 2015	5,881	1,543	26.2	-0.1	17,553	5,020	28.6	1.2

Sources: Office of Institutional Research, Northern Virginia Community College; and the Virginia Community College System.

Table E2. Graduation Rates at VCCS Colleges: Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts

VCCS College	Graduation Rate (%)				
	Fall 2011 Cohort	Fall 2012 Cohort	Fall 2013 Cohort	Fall 2014 Cohort	Fall 2015 Cohort
Wytheville Community College	32	34	42	43	47
Mountain Empire Community College	35	38	37	37	42
D. S. Lancaster Community College	28	21	28	34	40
Lord Fairfax Community College	35	40	36	39	39
Piedmont Virginia Community College	19	26	32	31	38
Rappahannock Community College	29	28	32	36	35
Germanna Community College	25	28	31	32	33
Virginia Western Community College	23	22	27	28	33
Southwest VA Community College	35	37	33	35	33
Eastern Shore Community College	21	16	19	30	33
Virginia Highlands Community College	24	31	32	26	33
Blue Ridge Community College	28	35	35	31	32
Southside Virginia Community College	35	36	41	40	32
Patrick Henry Community College	29	25	50	38	32
New River Community College	19	21	29	30	32
Central Virginia Community College	29	28	30	32	32
Danville Community College	25	28	31	33	32
Paul D Camp Community College	14	26	21	29	27
John Tyler Community College	12	19	20	23	26
Northern Virginia Community College	23	23	24	25	26
Tidewater Community College	13	16	19	20	23
J. S. Reynolds Community College	13	17	16	18	20
Thomas Nelson Community College	16	17	19	19	20

Source: The Integrated Postsecondary Education Data System (IPEDS).
Note: Institutions are sorted in descending order based on Fall 2015 values.

Table E3. Comparison of Graduation Rates at NOVA, All Public Two-Year Institutions, and NOVA's Peer Institutions (Median): Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts

Cohort	NOVA	All Public, 2-Year	Peer Institutions (Median)
Fall 2011	23	22	12
Fall 2012	23	24	14
Fall 2013	24	25	16
Fall 2014	25	27	17
Fall 2015	26	29	20

Sources: Office of Institutional Research, Northern Virginia Community College; and the Integrated Postsecondary Education Data System (IPEDS).

**Table E4. Graduation Rates at NOVA and Peer Institutions:
Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts**

Peer Institution	Graduation Rate (%)				
	Fall 2011 Cohort	Fall 2012 Cohort	Fall 2013 Cohort	Fall 2014 Cohort	Fall 2015 Cohort
City College of San Francisco	27	32	33	32	38
Northern Virginia Community College	23	23	24	25	26
Tidewater Community College	13	16	19	20	23
Montgomery College	14	18	17	23	22
Portland Community College	15	15	16	15	21
Houston Community College	12	13	15	18	20
Cuyahoga Community College District	5	9	13	15	19
Central Piedmont Community College	11	13	16	17	18
Pima Community College	11	14	13	16	18
Lone Star College System	10	8	10	12	18
Community College of Allegheny County	11	12	14	14	15

Sources: Office of Institutional Research, Northern Virginia Community College; and the Integrated Postsecondary Education Data System (IPEDS).
Note: Peer institutions are sorted in descending order based on Fall 2015 data.

Appendix F. Additional Data Supporting Transfer Targets

Table F1. Transfer-Out Rates at NOVA and VCCS: Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts

Cohort	NOVA				VCCS Colleges			
	N	Transfers		Percent Change	N	Transfers		Percent Change
		#	%			#	%	
Fall 2011	4,848	703	14.5	---	18,742	2,483	13.2	---
Fall 2012	5,137	799	15.6	13.7	17,530	2,373	13.5	-4.4
Fall 2013	5,819	965	16.6	20.8	19,347	2,551	13.2	7.5
Fall 2014	5,815	951	16.4	-1.5	18,383	2,411	13.1	-5.5
Fall 2015	5,881	917	15.6	-3.6	17,553	2,262	12.9	-6.2

Sources: Office of Institutional Research, Northern Virginia Community College; and the Virginia Community College System.

Table F2. Transfer-Out Rate of VCCS Colleges: Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts

VCCS College	Transfer-Out Rate (%)				
	Fall 2011 Cohort	Fall 2012 Cohort	Fall 2013 Cohort	Fall 2014 Cohort	Fall 2015 Cohort
Thomas Nelson Community College	16	19	18	16	17
Northern Virginia Community College	15	16	16	16	16
Paul D Camp Community College	18	11	10	12	16
Virginia Western Community College	13	14	11	15	15
New River Community College	10	12	10	8	15
John Tyler Community College	16	15	14	12	14
Eastern Shore Community College	15	12	12	17	14
Tidewater Community College	17	15	14	14	13
Germanna Community College	12	13	10	10	13
Central Virginia Community College	11	13	11	12	12
J. S. Reynolds Community College	16	15	13	16	11
Blue Ridge Community College	9	9	8	12	11
D. S. Lancaster Community College	15	15	14	11	10
Patrick Henry Community College	9	12	8	10	10
Rappahannock Community College	9	8	11	9	9
Piedmont Virginia Community College	12	12	11	10	9
Danville Community College	11	9	10	8	8
Lord Fairfax Community College	8	10	11	10	8
Virginia Highlands Community College	14	9	10	10	8
Wytheville Community College	5	6	5	6	7
Southwest Virginia Community College	7	6	7	6	7
Southside Virginia Community College	7	7	6	6	5
Mountain Empire Community College	4	4	6	3	5

Source: The Integrated Postsecondary Education Data System (IPEDS).

Note: Institutions are sorted in descending order based on Fall 2015 values.

Table F3. Comparison of Transfer-Out Rates at NOVA, All Public Two-Year Institutions, and NOVA's Peer Institutions (Median): Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts

Cohort	Transfer-Out Rate (%)		
	NOVA	All Public, Two-Year Institutions	Peer Institutions (Median)
Fall 2011	15	16	18
Fall 2012	16	15	21
Fall 2013	16	15	21
Fall 2014	16	15	22
Fall 2015	16	15	21

Sources: Office of Institutional Research, Northern Virginia Community College; and the Integrated Postsecondary Education Data System (IPEDS).

Table F4. Transfer-Out Rates at NOVA and Peer Institutions: Fall 2011 through Fall 2015 First-Time in College, Full-Time, Program Placed Cohorts

Peer Institution	Transfer-Out Rate (%)				
	Fall 2011 Cohort	Fall 2012 Cohort	Fall 2013 Cohort	Fall 2014 Cohort	Fall 2015 Cohort
Central Piedmont Community College	31	35	29	30	34
Cuyahoga Community College District	20	27	27	29	25
Community College of Allegheny Co.	24	24	28	24	25
Montgomery College	22	25	24	23	22
Houston Community College	22	24	23	22	21
Lone Star College System	19	21	23	21	21
Pima Community College	17	20	18	22	19
Portland Community College	15	15	17	20	18
Northern Virginia Community College	15	16	16	16	16
Tidewater Community College	17	15	14	14	13
City College of San Francisco	15	12	10	11	8
Austin Community College District	30	36	39	42	--
Valencia College	13	12	15	15	--
Miami Dade College	10	10	3	7	--
Community College of Denver	10	13	16	10	--

Sources: Office of Institutional Research, Northern Virginia Community College; and the Integrated Postsecondary Education Data System (IPEDS).
Notes: Peer institutions are sorted in descending order based on Fall 2015 data. Data for some colleges were not available for the Fall 2015 cohort.

Table G1. Job Placement Rate of NOVA Graduates
by Degree Type: 2013-14 through 2016-17

NOVA Degree Type	2013-14			2014-15			2015-16			2016-17		
	N	Employed		N	Employed		N	Employed		N	Employed	
		#	%		#	%		#	%		#	%
A.A.	472	300	63.6	446	290	65.0	445	300	67.4	421	264	62.7
A.S.	3,917	2,506	64.0	4,024	2,665	66.2	4,168	2,766	66.4	3,847	2,600	67.6
A.A.A./A.A.S	946	626	66.2	940	620	66.0	918	619	67.4	1,011	672	66.5
Certificate	1,263	808	64.0	1,361	915	67.2	1,408	911	64.7	1,390	914	65.8
Total	**6,598**	**4,240**	**64.3**	**6,771**	**4,490**	**66.3**	**6,939**	**4,596**	**66.2**	**6,669**	**4,450**	**66.7**

Sources: OIR; VEC.
Note: Job placement rate = employed in the commonwealth of Virginia within one year of graduation from NOVA.

Table G2. Job Placement Rates of Career and Technical Education Graduates at NOVA
and VCCS: 2014-15 through 2017-18[39]

	Job Placement Rate (%)			
	2014-15	2015-16	2016-17	2017-18
Target[40]	68.0	69.0	69.5	70.0
90 percent of Target	61.2	62.1	62.3	63.0
NOVA	63.7	65.9	59.4	61.6
VCCS	72.5	71.7	69.3	69.2

Sources: VCCS; VEC and Wage Record Interchange System (WRIS2).
Note: Job placement rate is a measure of the percentage of graduates who are employed 6 months after graduation. Data from the VEC and WRIS2 do not include self-employment, employment with the military, or employment in states that do not participate in WRIS2. Therefore, verifiable rates tend to be lower in areas with military bases or large federal employers. Includes students who were employed during the September-December time period following graduation.

Table G3. Local Area Unemployment Rate: 2008 through 2017

Year	NOVA	Virginia	United States
2008	2.9	3.9	5.8
2009	4.9	6.7	9.3
2010	5.2	7.1	9.6
2011	4.8	6.6	8.9
2012	4.5	6.1	8.1
2013	4.4	5.7	7.4
2014	4.2	5.2	6.2
2015	3.6	4.5	5.3
2016	3.2	4.1	4.9
2017	3.0	3.7	4.4

Source: VEC Community Profile, Economic Information & Analytics, Local Area Unemployment Statistics.

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[39] https://cte.ed.gov/legislation/about-perkins-iv
[40] The Virginia Department of Education is the recipient of certain federal funding, called Perkins IV, specifically for career and technical education in the Commonwealth. The VCCS receives 15 percent of the grant to administer the postsecondary component of the program. The VCCS is expected to meet established targets each year and to report on the results of the performance measures. Employment data is one of the measures. Institutions are considered to have met the target if they are within 90 percent of the target.

PATHWAY TO THE AMERICAN DREAM—NOVA'S STRATEGIC PLAN 2017-2023

THE NOVA COMMITMENT

As its primary contributions to meeting the needs of the Commonwealth of Virginia, the Northern Virginia Community College pledges to advance the social and economic mobility of its students while producing an educated citizenry for the 21st Century.

THE STRATEGIC PLAN GOALS AND OBJECTIVES

To deliver on this commitment NOVA will focus its creativity and talent, its effort and energy, and its resources and persistence, on achieving three overarching goals—success, achievement, and prosperity. It will strive to enable **Every Student to Succeed, Every Program to Achieve,** and **Every Community to Prosper.**

To advance the completion agenda described above, thereby promoting students' success and enhancing their social mobility, ensuring that programs achieve, and producing an educated citizenry for the 21st Century, the following goals and objectives are adopted:

GOAL 1: Every Student Succeeds
- **Objective 1:** Develop a College-wide approach to advising that ensures all students are advised and have access to support throughout their time at NOVA
- **Objective 2:** Implement VIP-PASS System as the foundational technology based on NOVA Informed Pathways for student self-advising, assignment and coordination of advisors, and course registration

GOAL 2: Every Program Achieves
- **Objective 3:** Develop comprehensive, fully integrated Informed Pathways for every program to ensure seamless transitions from high school and other entry points to NOVA, and from NOVA to four-year transfer institutions or the workforce
- **Objective 4:** Develop effective processes and protocols for programmatic College-wide collective decisions that include consistent, accountable leadership and oversight of each academic program with designated "owners," active advisory committees, clear student learning outcomes and assessments, and program reviews in all modalities of instruction
- **Objective 5:** Align NOVA's organizational structures, position descriptions, and expectations for accountability with its overarching mission to support student engagement, learning, success and institutional effectiveness

GOAL 3: Every Community Prospers
- **Objective 6:** Enhance the prosperity of every community in Northern Virginia by refocusing and prioritizing NOVA's workforce development efforts
- **Objective 7:** Further develop NOVA's IT and Cybersecurity programs to support regional job demand and position NOVA as the leading IT community college in the nation
- **Objective 8:** Re-envision workforce strategies and integrate workforce development into a NOVA core focus
- **Objective 9:** Plan to expand the breadth and reach of NOVA's healthcare and biotechnology programs, and prioritize future programs to support regional economic development goals economic development goals

NOVA

Northern Virginia
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