The Condition of College & Career Readiness

This report looks at the achievement of the ACT®-tested 2017 graduating class relative to college and career readiness. A total of 60% of students in the 2017 US graduating class took the ACT® test, compared to 64% last year, 54% in 2013, and 42% in 2007. The growing percentage of the nation's graduates taking the ACT over the past decade has enhanced the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness.

As a research-based nonprofit organization, ACT is committed to providing information and solutions to support the following:

- Holistic view of readiness.
 - The ACT report, Broadening the Definition of College and Career Readiness: A Holistic Approach, shows academic readiness is only one of multiple domains critical in determining an individual's readiness for success in college and career. Social and emotional learning skills (SEL) are also vital. Behavioral skills, cross-cutting capabilities, and navigational skills should be measured and addressed. Together, these elements provide a comprehensive picture of student readiness for success after high school.
- Meaningful data for better decisions. ACT is focused on providing better data to students, parents, schools, districts, and states so that all can make more informed decisions to improve educational outcomes. We accomplish this goal by taking a holistic view and using consistent and reliable historical information so that individuals and institutions have a better context to make critical decisions about the journey they have undertaken.

The Condition of College & Career Readiness 2017

Virginia Key Findings

Performance

- In the Virginia graduating class of 2017, 25,518 graduates took the ACT® test, compared to 22,165 in 2013.
 - ~ In Virginia, 29 percent of 2017 graduates took the ACT, compared to 60 percent nationally.
 - In 2017, there were 3,626 African American graduates from Virginia who took the ACT (14 percent). This compares to 4,329 (17 percent) and 3,916 (18 percent) for 2016 and 2013 graduating classes, respectively.
 - In 2017, there were 14,207 White graduates from Virginia who took the ACT (56 percent). This compares to 14,629 (57 percent) and 12,913 (58 percent) for 2016 and 2013 graduating classes, respectively.
 - In 2017, there were 2,087 Hispanic graduates from Virginia who took the ACT (8 percent). This compares to 1,935 (7 percent) and 1,528 (7 percent) for 2016 and 2013 graduating classes, respectively.
- Virginia graduates of 2017 had an average Composite score of 23.8, compared to the national average of 21.0.
 - Compared to the 2017 Virginia graduating class Composite average of 23.8, Virginia graduates in 2016 and 2013 had Composite averages of 23.3 and 22.6, respectively.
- In 2017, 45 percent of Virginia graduates met all four ACT College Readiness Benchmarks. This
 compares to 43 and 37 percent of 2016 and 2013 graduates, respectively.

STEM

- In 2017, 13,692 Virginia graduates (54 percent) indicated having an interest in STEM majors and/ or careers.
- Compared to a 2017 Virginia graduating class STEM average of 23.6, graduates in 2016 and 2013 had STEM averages of 23.2 and 22.6, respectively.
- Compared to 36 percent of 2017 Virginia graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2016 and 2013 had STEM Benchmark percentages of 34 and 29, respectively.
 - For years 2013 and 2017, Virginia graduates meeting the ACT STEM College Readiness Benchmark had average science scores of 28.0 and 29.0, respectively.
 - For years 2013 and 2017, Virginia graduates meeting the ACT STEM College Readiness Benchmark had average math scores of 28.7 and 29.1, respectively.

Career Readiness

- In 2017, 11,557 Virginia graduates (45 percent) were likely to attain the Gold ACT WorkKeys® National Career Readiness Certificate® or higher, based upon ACT Composite score, compared to 538,392 (27 percent) nationally.
 - The ACT Composite scores associated with a 50% chance of earning each ACT WorkKeys NCRC® level or higher are: 13 for Bronze, 17 for Silver, 25 for Gold, and 35 for Platinum. Based on those cut scores, students who earned an ACT Composite score of less than 13 would be classified as "Needs Improvement," 13 to 16 as "Bronze," 17 to 24 as "Silver," and 25 or above as "Gold or Higher." For comparison, individual student score reports classify those who scored 12 to 13, 14 to 17, and 18 and higher as making progress toward Bronze, Silver, and Gold certificates.

Impact

- Based on the actual test volume and ACT score distributions of 2016 ACT-tested Virginia high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2017 graduating class would result in:
 - 46 more students enrolling in college.
 - 56 more students persisting to year two.
 - 33 fewer students needing remedial English.
 - 67 fewer students needing remedial math.
 - 66 more students persisting to year four.
 - 76 more students earning a postsecondary degree within six

Behaviors that Impact Access and Opportunity

- In Virginia, 2017 graduates taking the ACT two or more times had an average Composite score of 25.5, compared to 22.9 for single-time testers.
 - Of Virginia's 2017 graduating class, 63 percent of students tested only once.
 - 27 percent of Virginia's 2017 graduating class tested twice.
 - 8 percent of Virginia's 2017 graduating class tested three
 - 2 percent of Virginia's 2017 graduating class tested more than three times.
- Of Virginia's 2017 graduating class, there were 3,626 (14 percent) African American students taking the ACT. This compares to 256,756 (13 percent) nationally.
- Of Virginia's 2017 graduating class, there were 14,207 (56 percent) White students taking the ACT. This compares to 1,062,439 (52 percent) nationally.
- Of Virginia's 2017 graduating class, there were 2,087 (8 percent) Hispanic students taking the ACT. This compares to 347,906 (17 percent) nationally.
- For Virginia's 2017 ACT-tested graduates, the top five schools to which scores were sent were Virginia Tech, James Madison University, University of Virginia, Virginia Commonwealth University, and George Mason University.
 - For Virginia's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were University of North Carolina at Chapel Hill, University of South Carolina-Columbia, and West Virginia University.
- Compared to 73 percent of 2017 graduates nationally, 65 percent of Virginia graduates opted into EOS.
 - Compared to 85 percent of African American students nationally, 83 percent of Virginia African American 2017 graduates opted into EOS.
 - Compared to 69 percent of White students nationally, 60 percent of Virginia White 2017 graduates opted into EOS.
 - Compared to 83 percent of Hispanic students nationally, 77 percent of Virginia Hispanic 2017 graduates opted into EOS.
- Virginia's 2017 graduating class sent more than 39,661 score reports to postsecondary institutions.
- ACT issued 5,574 ACT fee waivers to qualified Virginia students. However, 1,938 students (35 percent) did not take advantage of this opportunity to test for free. This compares to 656,061 issued nationally, of which 181,092 (28 percent) did not take advantage. This represents a great opportunity for high schools within the state to increase the socio-economic diversity of their students tested. Note: This is the number of fee waivers issued for the state, not specific to this graduating class.

Pipeline

- In the Virginia graduating class of 2017, 1,849 (7 percent) had parents who did not attend college.
- In the Virginia graduating class of 2017, 6,696 (26 percent) aspired to attain a professional degree. They had an average Composite score of 25.4.
- In the Virginia graduating class of 2017, 6,784 (27 percent) aspired to attain a graduate degree. They had an average Composite score of 25.3
- In the Virginia graduating class of 2017, 9,078 (36 percent) aspired to attain a bachelor's degree. They had an average Composite score of 22.0.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 Virginia graduates were: Undecided; Medicine (Pre-Medicine); Nursing, Registered (BS/RN); Biology, General; and Business Administration and Management, General.
 - In the Virginia graduating class of 2017, 4,664 (18 percent) indicated being undecided about their college major. They had an average Composite score of 24.3.
 - In the Virginia graduating class of 2017, 891 (3 percent) indicated planning on majoring in education. They had an average Composite score of 21.8.

ACT Footprint

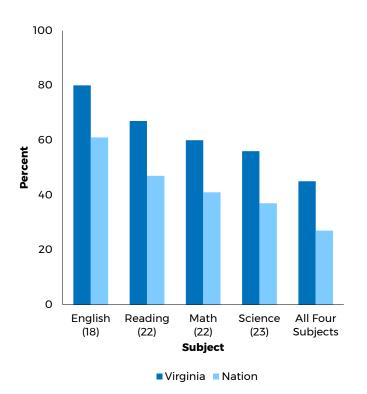
- Number of administrations:
 - ACT Aspire® Summative: 5,088
 - ACT Aspire Periodic: 6,701
 - ACT Engage®: 3,611
 - PreACT®: 858
 - ACT WorkKeys: 56,942

Additional Points

- According to the US Department of Labor's Bureau of Labor Statistics, the fastest-growing careers in Virginia requiring education beyond high school are: Occupational Therapy Assistant, Personal Financial Planner, and Nurse Practitioner.
- Halifax, Henry, and Pittsylvania counties and the city of Martinsville are recognized as ACT Work Ready Communities. Nearly 200 employers and businesses in these communities recognize the value of a Virginia resident holding an ACT NCRC certificate. A sample of employers includes: Eastman Chemical, Goodyear Tire and Rubber Company (Danville), Dominion-Clover Power Station, Nautica, Goodwill Industries of South Central Virginia, and Dollar General Distribution-South Boston.

Virginia College and Career Readiness Attainment, **Participation, and Opportunity**

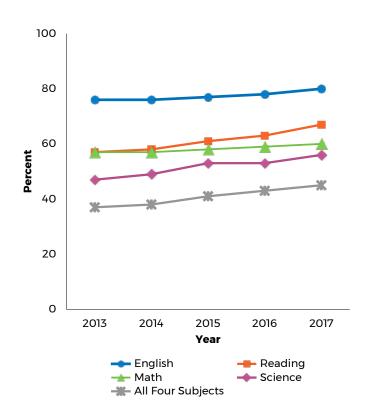
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
Virginia	80	67	60	56	45
Nation	61	47	41	37	27

Percent of 2013-2017 ACT-Tested High School Graduates **Meeting ACT College Readiness Benchmarks**

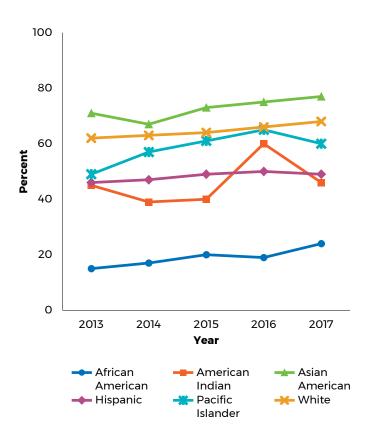


Data from graph above:

Subject	2013	2014	2015	2016	2017
English	76	76	77	78	80
Reading	57	58	61	63	67
Math	57	57	58	59	60
Science	47	49	53	53	56
All Four Subjects	37	38	41	43	45

^{*} The ACT College Readiness Benchmarks are scores on the ACT subject area tests that represent the level of achievement required for students to have a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. Throughout this report, benchmark attainment corresponds with students meeting or exceeding score values in parentheses ().

Percent of 2013-2017 ACT-Tested High School Graduates Meeting Three or More ACT College Readiness Benchmarks by Race/Ethnicity*



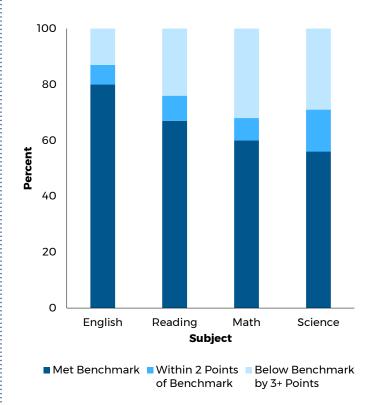
Data from graph above:

Race	2013	2014	2015	2016	2017
African American	15	17	20	19	24
American Indian	45	39	40	60	46
Asian American	71	67	73	75	77
Hispanic	46	47	49	50	49
Pacific Islander	49	57	61	65	60
White	62	63	64	66	68

 $[\]ensuremath{^{*}}$ Percentages for groups with insufficient counts will be missing.

Percent of 2017 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject

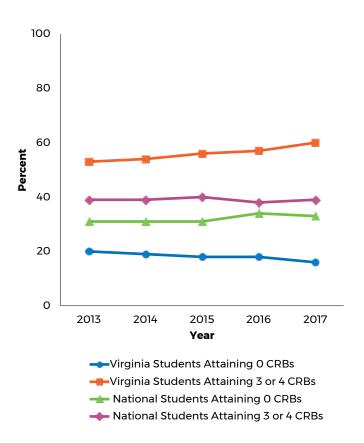
Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	80	67	60	56
Within 2 Points of Benchmark	7	9	8	15
Below Benchmark by 3+ Points	13	24	32	30

Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained

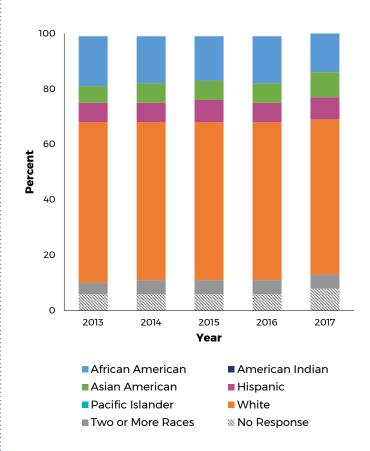


Data from graph above:

Attainment	2013	2014	2015	2016	2017
Virginia Students Attaining 0 CRBs	20	19	18	18	16
Virginia Students Attaining 3 or 4 CRBs	53	54	56	57	60
National Students Attaining 0 CRBs	31	31	31	34	33
National Students Attaining 3 or 4 CRBs	39	39	40	38	39

Percent of 2013-2017 ACT-Tested High School Graduates by Race/Ethnicity

Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



Data from graph above:

Race	2013	2014	2015	2016	2017
African American	18	17	16	17	14
American Indian	0	0	0	0	0
Asian American	6	7	7	7	9
Hispanic	7	7	8	7	8
Pacific Islander	0	0	0	0	0
White	58	57	57	57	56
Two or More Races	4	5	5	5	5
No Response	6	6	6	6	8

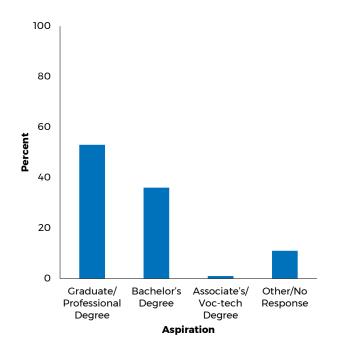
Virginia: Between 2013 and 2017, the number of students taking the ACT in Virginia increased by 3,353 students (15 percent).

Student Data Trends: 2013-2017, State vs. Nation

Outcome	Cohort	2013	2014	2015	2016	2017
Percent	Virginia	26	28	30	31	29
Tested	Nation	54	57	59	64	60
N. Tootool	Virginia	22,165	22,977	25,038	25,866	25,518
N Tested	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average	Virginia	22.3	22.4	22.8	22.9	23.5
English Score	Nation	20.2	20.3	20.4	20.1	20.3
Average	Virginia	23.1	23.4	23.6	24.0	24.6
Reading Score	Nation	21.1	21.3	21.4	21.3	21.4
Average Math	Virginia	22.5	22.7	22.8	22.9	23.3
Score	Nation	20.9	20.9	20.8	20.6	20.7
Average	Virginia	22.2	22.4	22.8	23.1	23.5
Science Score	Nation	20.7	20.8	20.9	20.8	21.0
Average	Virginia	22.6	22.8	23.1	23.3	23.8
Composite Score	Nation	20.9	21.0	21.0	20.8	21.0

Percent of 2017 ACT-Tested High School Graduates by Educational Aspirations

Note: Percents in this graph may not sum to 100% due to rounding.



There is good news in that 89% of Virginia's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 90% of Virginia's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 85% who actually did enroll. If we fully closed the aspirational gap, an additional 1,113 of the 2016 ACT-tested graduates from Virginia would have enrolled in postsecondary education.

Data from graph

Aspiration	Percent
Graduate / Professional Degree	53
Bachelor's Degree	36
Associate's / Voc-tech Degree	1
Other / No Response	11



Virginia State Exemplar

2017 ACT College and Career Readiness Campaign

Natalie Balbuena

Gar-Field Senior High School, Prince William County Schools

"I'm aware I still have a long path of hard work ahead of me. However, I'm very much willing to take the hard route on the way to success."

Natalie comes from a family that has little experience with the college-going process, but she was able to complete her applications through her own initiative while also taking upper-level classes to ensure that she is academically prepared. She will graduate high school with an International Baccalaureate diploma and has participated in a diversity leadership program at Princeton University and a women's engineering outreach program at Lockheed Martin.

Though Natalie is not yet sure where she will be attending college, she plans to work in a scientific field such as biomedicine or engineering after graduation.

Information and products for further review

	Knowledge & Skills	Social & Emotional				
	ACT Aspire®	ACT Tessera™				
Assessments	PreACT®	ACT Engage®				
Assessments	The ACT® Test					
	ACT WorkKeys®					
	Condition of College & Career Readiness	A Rosetta Stone for				
	ACT® National Curriculum Survey®	Noncognitive Skills				
Research	The Forgotten Middle	Tessera Comprehensive				
	Rigor at Risk	Theory of Action				
	ACT Holistic Framework™					
	PLDs Learning Description Review	Tessera Teacher Playbook				
Doggurgos	Curriculum Review Worksheets					
Resources	OpenEd Learning Resources					
	Test Prep					
	Professional Learning Sessions					
Training	College & Career Readiness Workshops					
	Holistic Framework Webinars					

We are more than just the ACT test. ACT products and services encompass a variety of researchand assessmentbased solutions.

As research leaders, we continue to innovate education and workforce solutions to help guide individuals to education and career success.

Find out more at www.act.org.

Key ACT Research

As students navigate their education and career journeys, it is critical for them to be ready for college and career success. College and career readiness is supported by the ACT Holistic Framework, a research-based, multidimensional model for understanding the essential knowledge and skills needed for success, and the solutions that can meet students' navigation needs. Visit act.org/condition2017 to access key reports listed below.

- Serving students' navigation needs from kindergarten to career requires a holistic approach:
 - ~ Beyond Academics: A Holistic Framework for Enhancing Education and Workplace Success
 - The Importance of Behavioral Skills and Navigation Factors for Education and Workforce Success
- The ACT Holistic Framework is supported by prolific research:
 - ~ Core Academic Skills:
 - 2017 State and National Condition Reports
 - Profiles of STEM Students: Persisters, Joiners, Changers, and Departers
 - ACT Composite Score by Parental Education Level, 2012-2016
 - Comparisons of Student Achievement Levels by District Performance and Poverty
 - ~ Behavioral Skills (also called Social and Emotional Learning):
 - The Development of Behavioral Performance Level Descriptors
 - ~ Cross-Cutting Capabilities:
 - ACT National Curriculum Survey 2016
 - Student journeys continue into postsecondary education and
 - Higher Education Research Digest
 - Predicted Attainment of ACT National Career Readiness Certificates for the 2016 ACT-tested High School Cohort

Recommendations

- 1. Use a holistic assessment model for school accountability that measures student readiness for college and career across multiple domains. While it is essential to measure students' academic achievement in assessing college and career readiness, it is not enough. Social and emotional learning skills are important and measurable, and they can be impacted. Assessment models should take into account core academic skills, behavioral skills, cross-cutting capabilities, and education and career navigation skills to provide an integrated picture of college and work readiness.
- 2. Make special efforts to ensure that underrepresented students have equal access and opportunity to pursue postsecondary education. According to ACT research, most underrepresented students want to continue their education after high school, but they face many barriers. Ensuring they have access to the same rigorous core curriculum as others is just one step. Many also lack the resources, information, and familial and peer support they need to prepare for success after high school. Special efforts must be made to level the playing field for underrepresented students so they have equal opportunity to succeed.
- 3. Increase emphasis on STEM readiness initiatives, measures, and programs. With technology advancing rapidly, the importance of STEM readiness is only increasing. The threat of robotic and computer-assisted technologies eliminating jobs is growing while the remaining and emerging jobs will likely require higher-level skills. ACT data continue to show that many graduates are not ready. Without improvement in STEM readiness, far too many will be ill-prepared for the future workforce.
- 4. Focus on fewer, higher, and clearer learning standards in K-12 schools. Far too many students continue to graduate from high school without all of the core skills they will need to ably succeed at the next level. Many will struggle, and many will likely fail to realize their aspirations. The push toward raising the bar on learning standards and focusing on the essential skills necessary for success must continue.
- 5. Begin assessing learning and implementing intervention strategies early. Early assessment and intervention are critical to improving educational outcomes. If students are not on track for college and career readiness by the time they reach middle school, it may be too late. Assessing learning and implementing intervention strategies to help students get on the right path for college and career readiness must begin in elementary school.