

## The Condition of College and Career Readiness

This report looks at the progress of the 2016 ACT®-tested graduating class relative to college and career readiness.

This year's report shows that **64%** of students in the 2016 US graduating class took the ACT test, up from 59% in 2015 and 49% in 2011. The increased number of test takers over the past several years enhances the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness, as well as offering a glimpse at the emerging educational pipeline.

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

- **Holistic view of readiness.** The 2014 ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, shows academic readiness is only one of four critical domains in determining an individual's readiness for success in college and career. Cross-cutting capabilities, behavioral skills, and the ability to navigate future pathways are also important factors to measure and address. Together, these elements define a clear picture of student readiness for postsecondary education.
- **Providing 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 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 2016

## Virginia Key Findings

### Performance

- A total of 25,866 students in the 2016 Virginia graduating class took the ACT (compared to 25,038 in 2015).
  - ~ Asian student participation on the ACT increased from 5.7% in 2012 to 7.4% in 2016.
  - ~ African American students comprised 17% (4,329) of the ACT-tested population, compared to 16% (4,011) in 2015. Their ACT Composite score (18.4) outpaced their national counterparts' Composite score (17.0).
  - ~ Hispanic/Latino students made up 7% (1,935) of the ACT-tested population, compared to 8% (1,937) in 2015. However, their ACT Composite score (22.4) also exceeded their national counterparts' Composite score (18.7).
  - ~ White students comprised 57% (14,629) of the ACT-tested population, comparable to 57% (14,379) in 2015. Their ACT Composite score (24.4) rose while their national counterparts' Composite score (22.2) dropped.
- Virginia's 2016 ACT Composite increased 0.2 to 23.3, while the national Composite score declined from 21.1 to 20.8.
- Virginia's ACT English, mathematics, reading, and science scores increased.
- ACT College Readiness Benchmarks
  - ~ The lower percentages of Benchmark attainment may point to an opportunity for access and exposure for underserved students. For instance, 55.5% of African American students take their first and only test as a senior.
  - ~ English—78% of Virginia 2016 graduates are ready for college English composition.
  - ~ Mathematics—59% of Virginia 2016 graduates are ready for college algebra.
  - ~ Reading—63% of Virginia 2016 graduates are ready for college social sciences.
  - ~ Science—53% of Virginia 2016 graduates are ready for college biology.

### STEM

- Virginia students are encouraged to take more rigorous courses. However, some report taking the minimum math and science courses.
  - ~ 87% of Virginia test-takers are taking more than three years of math compared to 71% nationally.
  - ~ 5% of Virginia students report taking fewer than three years of natural science courses. Their average ACT Science score is 18.1, 4.9 points below the ACT science Benchmark of 23.
  - ~ 65% of Virginia students reported taking high school science courses that include biology, chemistry, and physics. Their average ACT science score ranges between a 24.1 and 26.2, exceeding the ACT science Benchmark of 23.
- STEM Benchmark Attainment: 34% of the 2016 Virginia ACT-tested graduating class met the ACT STEM Benchmark—14% higher than the national average—and the average score was 2.3 points higher than the national average.

### Career Readiness

- This year, for the first time, ACT has provided an indicator of career readiness based on ACT composite scores. Table 3.4 in the state ACT Profile Report details how ACT-tested Virginia graduates are progressing toward the ACT National Career Readiness Certificate™ (ACT NCRC®).
- Progress toward career readiness is based on research linking ACT Composite scores to ACT NCRC levels. The ACT Composite cut score for each ACT NCRC level corresponds to a 50% chance of obtaining that level. If a student's ACT Composite score surpassed the cut score for an ACT NCRC level, they are categorized as making progress towards the next higher ACT NCRC level. Attainment of ACT NCRC levels indicates workplace employability skills that are critical to job success.
- In Virginia, 83% of ACT tested graduates are considered making progress towards at least a gold ACT NCRC level. This compares to 68% nationally.



## Behaviors that Impact Access and Opportunity

- Testing patterns
  - ~ 66.6% of Virginia graduates took the ACT only once—substantially higher than the national average of 55%.
  - ~ 37.1% of white students and 43.9% of Hispanic/Latino students took their first and only test as a senior.
- Below are the top five colleges and universities to which 2016 Virginia (ACT-tested) graduates sent their scores:
  1. Virginia Tech
  2. James Madison University
  3. University of Virginia
  4. Virginia Commonwealth University
  5. George Mason University
- ACT's Educational Opportunity Service (EOS) is a free service that allows students to learn about educational, scholarship, career, and financial aid opportunities from colleges, universities, financial aid and scholarship agencies, and other organizations that offer educational programs. The national rate for opting into this service is 73.1%. For Virginia, the EOS opt-in rate was 65.9%.
- The "Get Your Name is the Game" campaign provides students an opportunity to find colleges that would be a good fit and helps students who were not thinking about postsecondary education to realize that college is a possibility. Virginia colleges and universities have accessed 109,934 student names using this initiative.
- Fee Waiver Usage
  - ~ In Virginia, there were 5,389 fee waivers issued and 3,778 of those were used. This equates to a 70.1% usage rate. The national rate was 74.5%.
  - ~ 58.6%, or 944, of unused fee waivers were issued to African American students.
  - ~ ACT provides students fee waivers to provide more access and opportunity for students.

## Pipeline

- Only 4% of ACT-tested Virginia graduates expressed an interest in pursuing education as a major or career. Those students earned an average ACT Composite score of 21.4, lower than the state average of 23.3. In comparison, 16% expressed an interest in Health Sciences and Technologies.
- Aspirations matter. Students in Virginia who aspire to a higher level of postsecondary education achieve higher ACT Composite scores:
  - ~ Graduates who aspire to a graduate degree earn an average Composite score of 24.6.
  - ~ Graduates who aspire to a bachelor's degree earn an average Composite score of 21.4.
  - ~ Graduates who aspire to an associate's degree earn an average Composite score of 16.7.

## ACT Footprint

ACT Aspire® Summative	ACT Aspire® Periodic	ACT Engage®	ACT QualityCore®	PreACT™	ACT WorkKeys®
3,975	536	494	–	104*	41,207

\* PreACT refers to preorders for FY17.

*These are the number of each of these assessments delivered in the state and not reflective of the 2016 ACT-tested graduating class.*

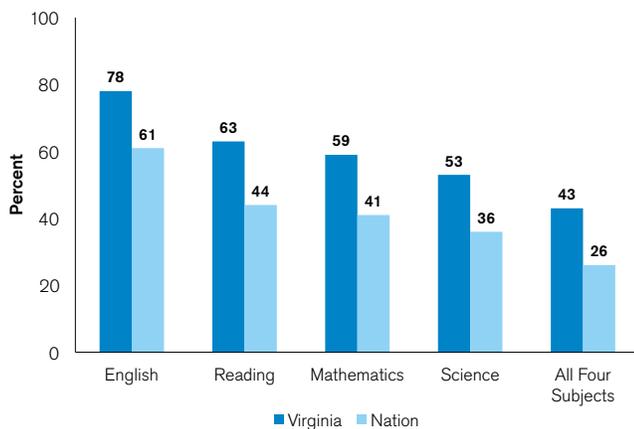
## 2016 ACT College and Career Readiness Campaign honorees

- Patrick Henry Community College
- John Champe High School
- Ahmed Woodson, Thomas Jefferson High School

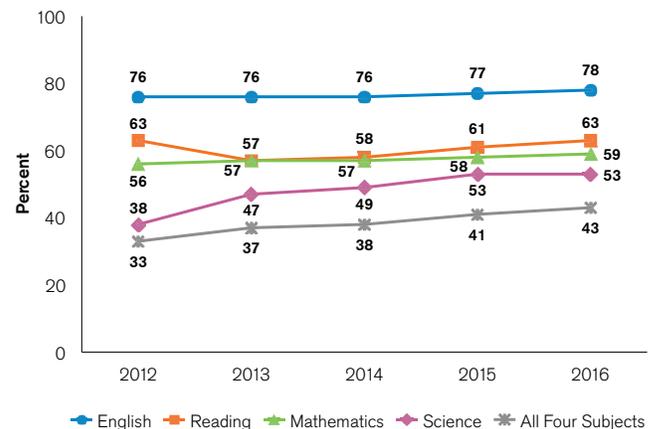
# Your State College and Career Readiness Attainment, Participation, and Opportunity

## Virginia

Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Percent of 2012–2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks\*



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

\* ACT College Readiness Benchmarks in reading and science were revised in 2013.

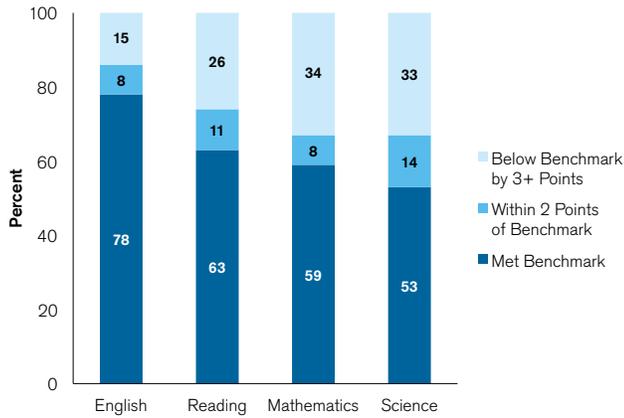
## Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Virginia increased by 19.5%.

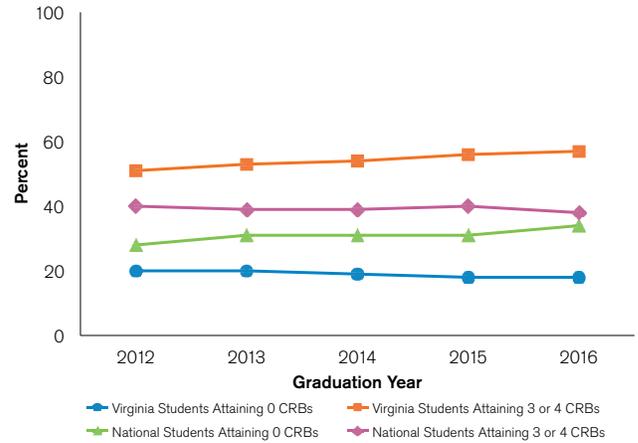
Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	Virginia	25%	26%	28%	30%	31%
	Nation	52%	54%	57%	59%	64%
N Tested	Virginia	21,647	22,165	22,977	25,038	25,866
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	Virginia	22.1	22.3	22.4	22.8	22.9
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	Virginia	22.7	23.1	23.4	23.6	24
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	Virginia	22.3	22.5	22.7	22.8	22.9
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	Virginia	21.9	22.2	22.4	22.8	23.1
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	Virginia	22.4	22.6	22.8	23.1	23.3
	Nation	21.1	20.9	21	21	20.8

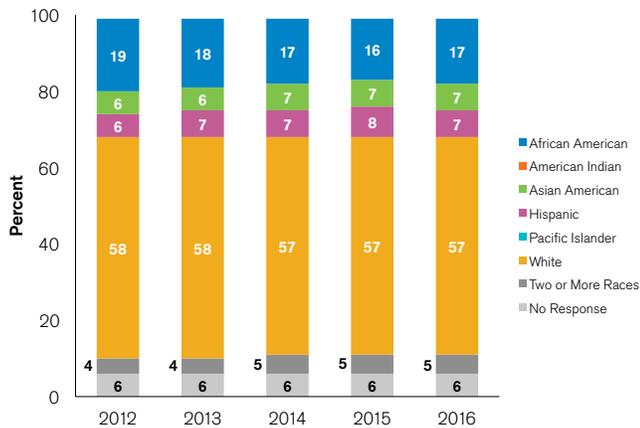
### Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



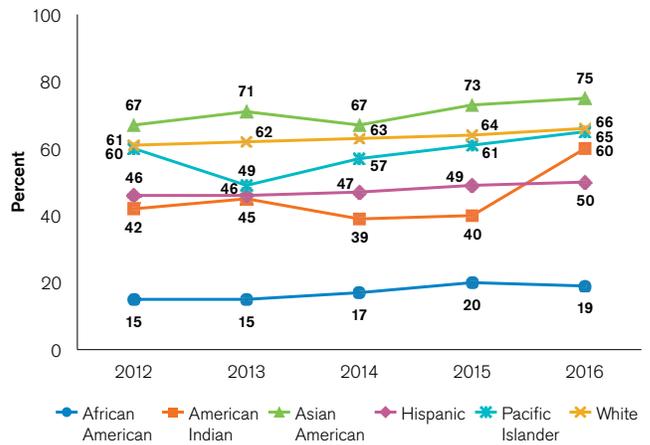
### Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained



### Percent of 2012–2016 ACT-Tested High School Graduates by Race/Ethnicity

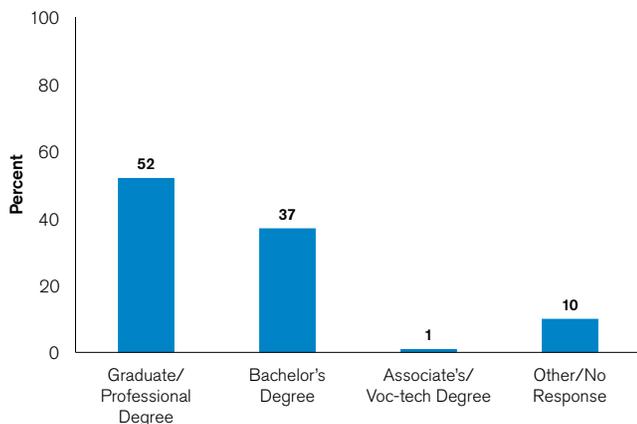


### Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity



Note: Values less than 0.5% will not appear.

### Percent of 2016 ACT-Tested High School Graduates by Educational Aspirations



There is good news in that 90% of Virginia's 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 88% of Virginia's 2015 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 760 of the 2015 ACT-tested graduates from Virginia would have enrolled in postsecondary education.

## What You Need to Know

At ACT, we are inspired every day to make a positive difference. Here are a few ways we are making an impact each day in the lives of students, teachers, education, policy makers, and workforce leaders.

### The ACT<sup>®</sup>

- Enhancements to ACT Score Reports starting in September 2016
- Introduction of ACT Kaplan Online Prep Live in September 2016
- New Score Reports

### Pre-ACT<sup>™</sup>

- Affordable cost—\$12 per student tested for schools, districts, and states
- Flexible administration—Schools, districts, and/or states may administer on any date between September 1, 2016 and June 1, 2017
- Structured test environment—Similar to what the student will experience when taking the ACT test

### Online Prep Live

#### ACT<sup>®</sup> KAPLAN

- A virtual classroom experience that delivers all the benefits of ACT Online Prep, plus an interactive teaching experience
- Live learning experiences available at no cost to students who register for the ACT using a fee waiver
- Recorded sessions available on demand to provide maximum flexibility to students

### ACT<sup>®</sup> Aspire<sup>®</sup>

- New Performance Level Descriptors coming in August 2016
- More than 5 million ACT Aspire online assessments administered to US students since January 2016, a major milestone for the program and up by more than 130% compared to the previous year
- New Score Reports

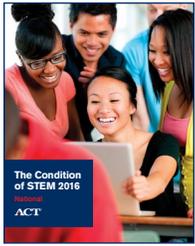
### ACT<sup>®</sup> Engage<sup>®</sup>

- Helps schools face the challenge of preparing students for success after high school. Read the latest white paper, *Identifying Skills to Succeed in School, at Work, and in the "Real World."*
- New Score Reports

### ACT<sup>®</sup> WorkKeys<sup>®</sup>

- Updated versions of the ACT National Career Readiness Certificate (ACT NCRC) assessments and credential coming in summer 2017
- Fully updated ACT WorkKeys curriculum and test prep available in summer 2017 to support the updated ACT NCRC assessments
- Will include a new test delivery platform that will introduce features and functionality important to ACT WorkKeys customers

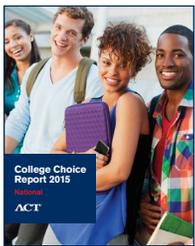
## Key ACT Research



### **The Condition of STEM 2016— Releasing November 2016**

This report provides national and state data about the 2016 graduating class in

the context of STEM-related fields (Science, Technology, Engineering, Mathematics) to determine student interest levels in specific STEM fields and, more importantly, readiness in math and science of those interested in STEM careers.



### **College Choice Report 2015**

This report follows the ACT-tested high school graduating class of 2015, focusing on specific testing behaviors that

may expand college opportunities available to students. This is an important topic for enrollment managers and admissions officers to consider, as students' participation in these testing behaviors have implications for colleges' chances to recruit, advise, and place these prospective students.

## Recommendations

### **1. Create an assessment model that measures a variety of skill domains and competencies required for college and career success.**

Historically, college and career readiness assessments have focused only on academic skills. ACT research has clearly established areas of competency important for college and career readiness success. While our research shows that ACT solutions independently measure key components of college AND career readiness, we and others have begun to realize that no single solution can measure the full breadth of this readiness, nor should it. Simply put, the ACT alone is not enough to measure the full breadth of career readiness. A more holistic assessment model, incorporating multiple domains and specific skills associated with career clusters or occupations, will typically be most appropriate for describing and evaluating student readiness for college and career.

### **2. Optimize opportunities to influence awareness and engagement of underserved learners.**

Initiatives designed to aid underserved learners are only as effective as they are visible. We must inform advocates and ALL underserved learners about the available and effective programs designed for this purpose. For example, in the 2015–2016 academic year, approximately 730,000 students registered to take the ACT using fee waivers valued at more than \$36 million. Yet, not all eligible students took advantage of this offer. Similarly, institutions must use data to inform intervention strategies if they are going to help underserved students be prepared for postsecondary success.

### **3. Take the guesswork out of STEM.**

It is critically important to align STEM initiatives to capitalize on performance, measured interest, and expressed interest. Essential to this effort is expanding and nurturing interest in STEM, which will impact the emerging pipeline of STEM majors, teachers, and workers. This requires capturing a wider range of students and employing concrete measures to inform intervention and programming. To do so, states and districts must look for partnering opportunities from K–12 to postsecondary education to the workplace.

### **4. Focus on the implementation of fewer, higher, clearer, standards in K–12 classrooms to raise the bar for all students.**

No matter the adopted standards, proper implementation must focus on the most critical component for increasing readiness—effective, high-quality teaching. This requires investment in postsecondary teaching programs, professional development, and state-level collaboration among K–12 and higher education.

### **5. Don't over test students.**

When states, schools, and districts build an assessment strategy that recognizes the limits and promise of test scores, they will reduce the likelihood of over testing. Used ethically and appropriately, assessments can inform decisions at individual and institutional levels. Misunderstood, misused, or abused, assessments cause confusion, can be perceived as punitive, or result in ill-conceived strategies. To quote ACT founder E.F. Lindquist, "Assessment is valuable to the extent it bridges teaching and learning."