## 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

### **West Virginia** Key Findings

#### **Performance**

- In the West Virginia graduating class of 2017, 12,011 graduates took the ACT® test, compared to 11,426 in 2013.
- Compared to the 2017 West Virginia graduating class Composite average of 20.4, West Virginia graduates in 2016 and 2013 had Composite averages of 20.7 and 20.6, respectively.
- In 2017, 19 percent of West Virginia graduates met all four ACT College Readiness Benchmarks. This compares to 20 and 20 percent of 2016 and 2013 graduates, respectively.
  - In 2017, 64 percent of West Virginia graduates met the ACT English College Readiness Benchmark. This compares to 67 and 69 percent of 2016 and 2013 graduates, respectively.
  - In 2017, 30 percent of West Virginia graduates met the ACT Math College Readiness Benchmark. This compares to 32 and 33 percent of 2016 and 2013 graduates, respectively.
  - In 2017, 47 percent of West Virginia graduates met the ACT Reading College Readiness Benchmark. This compares to 46 and 45 percent of 2016 and 2013 graduates, respectively.
  - In 2017, 32 percent of West Virginia graduates met the ACT Science College Readiness
     Benchmark. This compares to 33 and 34 percent of 2016 and 2013 graduates, respectively.
  - In 2017, 31 percent of West Virginia graduates met zero ACT College Readiness Benchmarks. This compares to 28 and 27 percent of 2016 and 2013 graduates, respectively.

#### **STEM**

- In 2017, 7,045 West Virginia graduates (59 percent) indicated having an interest in STEM majors and/or careers.
- Compared to 11 percent of 2017 West Virginia graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2016 and 2013 had STEM Benchmark percentages of 12 and 11, respectively.
  - ~ For years 2013 and 2017, West Virginia graduates meeting the ACT STEM College Readiness Benchmark had average science scores of 28.0 and 28.3, respectively.
  - For years 2013 and 2017, West Virginia graduates meeting the ACT STEM College Readiness Benchmark had average math scores of 27.5 and 27.5, respectively.

#### **Career Readiness**

- In 2017, 2,184 West Virginia graduates (18 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 West 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:
  - ~ 25 more students enrolling in college.
  - 30 more students persisting to year two.
  - ~ 24 fewer students needing remedial English.
  - 51 fewer students needing remedial math.
  - ~ 34 more students persisting to year four.
  - 38 more students earning a postsecondary degree within six years.

## **Behaviors that Impact Access and Opportunity**

- In West Virginia, 2017 graduates taking the ACT two or more times had an average Composite score of 21.4, compared to 19.0 for single-time testers.
  - Of West Virginia's 2017 graduating class, 41% of students tested only once.
  - 29 percent of West Virginia's 2017 graduating class tested twice.
  - 17 percent of West Virginia's 2017 graduating class tested three times.
- Of West Virginia's 2017 graduating class, there were 433 (4 percent) African American students taking the ACT. This compares to 256,756 (13 percent) nationally.
- Of West Virginia's 2017 graduating class, there were 10,305 (86 percent) White students taking the ACT. This compares to 1,062,439 (52 percent) nationally.
- Of West Virginia's 2017 graduating class, there were 300 (2 percent) Hispanic students taking the ACT. This compares to 347,906 (17 percent) nationally.
- For West Virginia's 2017 ACT-tested graduates, the top five schools to which scores were sent were West Virginia University, Marshall University, Fairmont State University, Concord University, and West Liberty University.
  - For West Virginia's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were The Ohio State University, University of Kentucky, and Ohio University.
- Compared to 73 percent of 2017 graduates nationally, 81 percent of West Virginia graduates opted into EOS.
  - Compared to 85 percent of African American students nationally, 88 percent of West Virginia African American 2017 graduates opted into EOS.
  - Compared to 76 percent of American Indian students nationally, 63 percent of West Virginia American Indian 2017 graduates opted into EOS.
  - Compared to 69 percent of White students nationally, 81 percent of West Virginia White 2017 graduates opted into EOS.
  - Compared to 83 percent of Hispanic students nationally, 86 percent of West Virginia Hispanic 2017 graduates opted into EOS.
  - Compared to 76 percent of Asian students nationally, 75 percent of West Virginia Asian 2017 graduates opted into EOS.
  - West Virginia's 2017 graduating class sent more than 23,157 score reports to postsecondary institutions.

 ACT issued 6,585 ACT fee waivers to qualified West Virginia students. However, 1,521 students (23 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 West Virginia graduating class of 2017, 2,712 (23 percent) had parents who did not attend college.
- In the West Virginia graduating class of 2017, 2,667 (22 percent) aspired to attain a professional degree. They had an average Composite score of 22.7.
- In the West Virginia graduating class of 2017, 1,407 (12 percent) aspired to attain a graduate degree. They had an average Composite score of 22.6.
- In the West Virginia graduating class of 2017, 6,452 (54 percent) aspired to attain a bachelor's degree. They had an average Composite score of 19.6.
- In the West Virginia graduating class of 2017, 698 (6 percent) aspired to attain an associate's degree. They had an average Composite score of 16.8.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 West Virginia graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Criminology; and Elementary Education.
  - In the West Virginia graduating class of 2017, 1,814 (15 percent) indicated being undecided about their college major. They had an average Composite score of 20.3.
  - In the West Virginia graduating class of 2017, 871 (7 percent) indicated planning on majoring in education. They had an average Composite score of 19.3.

#### **ACT Footprint**

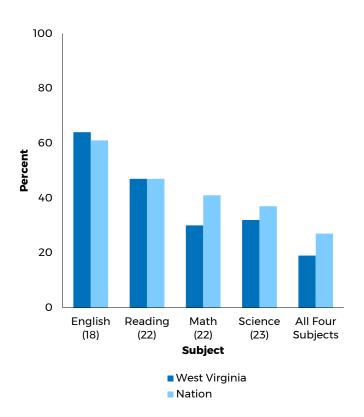
- Number of administrations:
  - ACT Aspire® Summative: 170
  - ~ ACT Aspire Periodic: 0
  - ~ ACT Engage®: 0
  - PreACT®: 330
  - ACT WorkKeys: 4,348

#### **Additional Points**

 According to the US Department of Labor's Bureau of Labor Statistics, the fastest-growing careers in West Virginia requiring education beyond high school are: Occupational Therapy Assistant, Diagnostic Medical Sonographer, Statistician, and Health Specialties Teacher-Postsecondary.

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

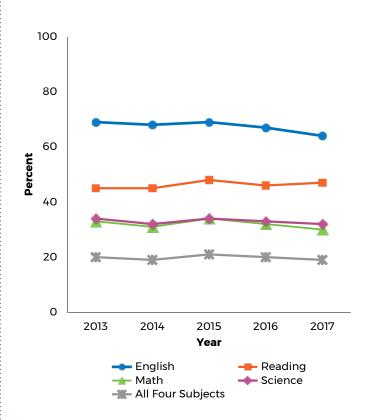
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks\* by Subject



#### Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
West Virginia	64	47	30	32	19
Nation	61	47	41	37	27

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

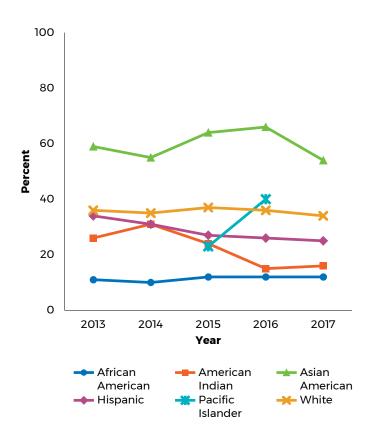


#### Data from graph above:

Subject	2013	2014	2015	2016	2017
English	69	68	69	67	64
Reading	45	45	48	46	47
Math	33	31	34	32	30
Science	34	32	34	33	32
All Four Subjects	20	19	21	20	19

<sup>\*</sup> 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\*



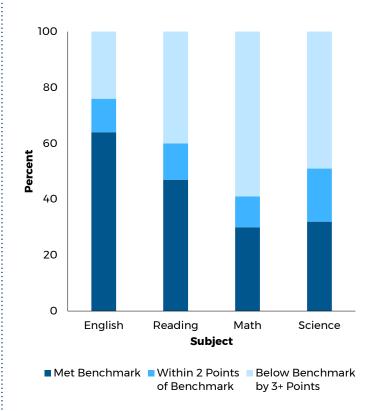
#### Data from graph above:

Race	2013	2014	2015	2016	2017
African American	11	10	12	12	12
American Indian	26	31	24	15	16
Asian American	59	55	64	66	54
Hispanic	34	31	27	26	25
Pacific Islander			23	40	
White	36	35	37	36	34

<sup>\*</sup> 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

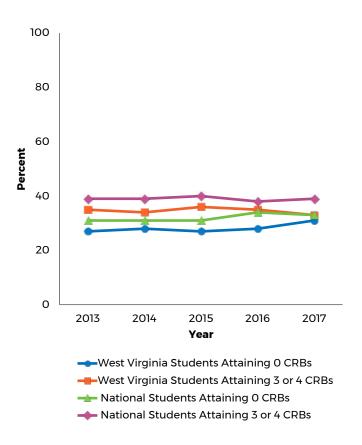
Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



#### Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	64	47	30	32
Within 2 Points of Benchmark	12	13	11	19
Below Benchmark by 3+ Points	24	40	60	50

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

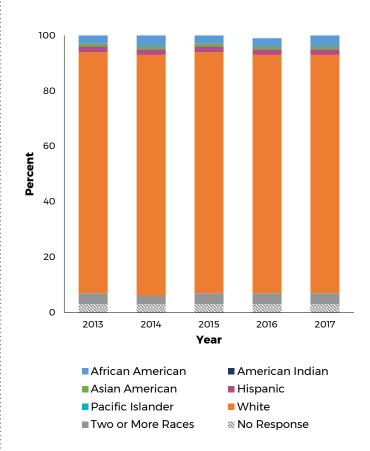


#### Data from graph above:

Attainment	2013	2014	2015	2016	2017
West Virginia Students Attaining 0 CRBs	27	28	27	28	31
West Virginia Students Attaining 3 or 4 CRBs	35	34	36	35	33
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	4	4	3	3	4
American Indian	0	0	0	0	0
Asian American	1	1	1	1	1
Hispanic	2	2	2	2	2
Pacific Islander	0	0	0	0	0
White	87	87	87	86	86
Two or More Races	4	3	4	4	4
No Response	3	3	3	3	3

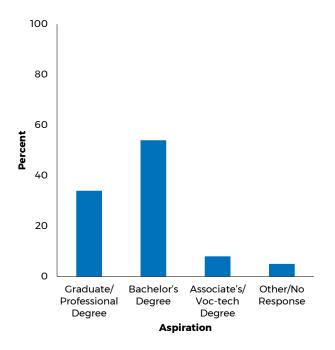
West Virginia: Between 2013 and 2017, the number of students taking the ACT in West Virginia increased by 585 students (5 percent).

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

Outcome	Cohort	2013	2014	2015	2016	2017
Percent	West Virginia	63	65	66	67	69
Tested	Nation	54	57	59	64	60
Marked	West Virginia	11,426	11,191	11,289	11,682	12,011
N Tested	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average	West Virginia	20.5	20.4	20.6	20.5	20.0
English Score	Nation	20.2	20.3	20.4	20.1	20.3
Average	West Virginia	21.3	21.4	21.5	21.5	21.2
Reading Score	Nation	21.1	21.3	21.4	21.3	21.4
Average Math	West Virginia	19.5	19.5	19.7	19.6	19.4
Score	Nation	20.9	20.9	20.8	20.6	20.7
Average	West Virginia	20.6	20.6	20.7	20.7	20.5
Science Score	Nation	20.7	20.8	20.9	20.8	21.0
Average	West Virginia	20.6	20.6	20.8	20.7	20.4
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 95% of West Virginia's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 95% of West Virginia's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 69% who actually did enroll. If we fully closed the aspirational gap, an additional 3,059 of the 2016 ACT-tested graduates from West Virginia would have enrolled in postsecondary education.

#### Data from graph

Aspiration	Percent
Graduate / Professional Degree	34
Bachelor's Degree	54
Associate's / Voc-tech Degree	8
Other / No Response	5



#### West Virginia State Exemplar 2017 ACT College and Career Readiness Campaign

#### **Erin Dodd**

South Charleston High School, Kanawha County Schools

"I meet each challenge with the hardest work I can possibly produce, and eventually, as I've learned, I can find a solution on my own."

Erin has worked independently to succeed academically in high school, taking relevant classes and participating in extracurriculars such as student government, a civic engagement organization, and working as a page for the state legislature.

Though Erin's parents did not graduate from high school, she is determined to earn not only her bachelor's degree but also a law degree. She plans to focus on the latter goal during her undergraduate years by interning with law firms and studying for the Law School Admission Test.

#### Information and products for further review

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

We are more than just the ACT test. ACT products and services encompass a variety of researchand assessment-based 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.