

ASSESSMENT BRIEF

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ACT Results for the Graduating Class of 2016

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ABSTRACT

This brief summarizes the results from the ACT college readiness assessment for graduating seniors in the Virginia Beach City Public Schools (VBCPS) class of 2016. The brief includes comparisons of ACT data at the school, division, state, and national levels. A total of 1,073 students in the VBCPS class of 2016 took the ACT during high school. These students achieved average scores on each of the four ACT subject tests that were the highest ever attained for a VBCPS senior class. The average ACT composite score of 22.8 for Virginia Beach surpassed the average ACT composite score of 2016 graduates at the national level by 2 points. The VBCPS average composite score was only three-tenths of a point below the average composite score of public school ACT examinees across Virginia. There was an increase in the percentage of VBCPS students who scored at or above each of the ACT College Readiness Benchmarks, which indicate the likelihood of success in a student's postsecondary education. At least half of the Virginia Beach test takers met the ACT benchmark in mathematics, reading, and science, while 74 percent met the English benchmark; 40 percent of the VBCPS seniors scored at or above all four benchmarks.

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BACKGROUND

The ACT college readiness assessment traces its roots back to 1959, when E. F. Lindquist, a University of Iowa education professor, developed a test that focused on achievement (i.e., information taught in schools) rather than on aptitude.¹ The content of the current ACT assessment is based on the results of a national survey “conducted every three to four years among thousands of elementary, middle, and high school teachers and instructors of first-year college courses across the United States.”²

Nationwide, nearly 2.1 million students in the graduating class of 2016 took the ACT assessment during high school. The assessment consists of four multiple-choice tests—English, mathematics, reading, and science—and a writing test that is optional for all test takers.

This brief was compiled primarily from school, district, state, and national reports provided by ACT, Inc. and includes the results of seniors in the class of 2016 who took the ACT assessment at least one time during their sophomore, junior, or senior year. Each of these students reported their intent to graduate in 2016 at the time they registered for the assessment.

ACT PARTICIPATION

For the fifth consecutive year, the number of ACT test takers across the nation was greater than the number of SAT test takers in the U.S. In the Commonwealth of Virginia and Virginia Beach City Public Schools (VBCPS), more students take the SAT; however, each year more and more students in Virginia and VBCPS decide to take the ACT assessment. Many students choose to take both the SAT and the ACT. Table 1 on the next page shows the total number of ACT test takers in the class of 2016 for the division, the state, and the nation.

Although the number of VBCPS seniors who took the ACT increased by 6.1 percent from 2015 to 2016, the increase of the number Virginia Beach ACT test takers since 2012 was 28 percent. By comparison, the number of seniors across the state who took the ACT increased by only 3.3 percent in

¹ACT, Inc., *ACT History*, <http://www.act.org/content/act/en/about-act/history.html>, accessed on August 22, 2016.

²ACT, Inc., *ACT Scores Down for 2016 U.S. Grad Class Due to Increased Percentage of Students Tested*, <http://www.act.org/content/act/en/newsroom.html>, accessed on August 22, 2016.

one year and by 19.5 percent since 2012. While the table does not show the gender breakdown of ACT test takers, it should be noted that females comprised a higher percentage of examinees than males at all levels. The proportion of female test takers was 52.5 percent nationally, 54.8 percent for the state, and 56.2 percent for the division.

Table 1
Number and Percent of Graduates Who Took the ACT – Five-Year Trends

Graduation Year	2012	2013	2014	2015	2016
VBCPS	838	847	906	1,011	1,073
Percent of VBCPS Graduates	16.7%	17.5%	18.6%	20.7%	22.1%
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

Sources: ACT Profile Report - District, Graduating Class 2016 and VBCPS Report of Combined Term Graduates for each school year.

ACT SUBJECT AND COMPOSITE SCORES

Each student receives a score on a scale of 1 to 36 for each of the ACT subject tests. The composite score is the average of the subject test scores. Table 2 includes the average ACT scores for the last five high school graduating classes at the division, state, and national levels. The average scores for public school ACT test takers in Virginia are shown in parentheses in the table.

The average scores on all four ACT subject tests increased from the previous year for the division and for all examinees across the Commonwealth of Virginia. In contrast, each average score for the subject tests decreased from 2015 at the national level. One reason for the national score decline was that “close to two-thirds (64 percent) of 2016 graduating seniors—nearly 2.1 million students—took the ACT, an all-time high.”³ Average test scores tend to decrease as the number of test takers increases, but this trend was reversed for ACT results in VBCPS and Virginia. The one-year gains for VBCPS seniors resulted in the highest ACT average composite score ever recorded for the division. Composite score gains at the state level were more modest.

Table 2
Average ACT Scores – Five-Year Trends

Graduation Year	English			Mathematics			Reading			Science			Composite		
	VBCPS	VA	Nation												
2012	21.5	22.1 (21.8)	20.5	22.2	22.3 (22.2)	21.1	22.2	22.7 (22.5)	21.3	21.9	21.9 (21.8)	20.9	22.1	22.4 (22.2)	21.1
2013	21.4	22.3 (22.0)	20.2	22.0	22.5 (22.4)	20.9	22.1	23.1 (22.9)	21.1	21.6	22.2 (22.1)	20.7	21.9	22.6 (22.4)	20.9
2014	21.1	22.4 (22.0)	20.3	21.9	22.7 (22.5)	20.9	22.4	23.4 (23.1)	21.3	21.7	22.4 (22.3)	20.8	21.9	22.8 (22.6)	21.0
2015	21.7	22.8 (22.5)	20.4	22.0	22.8 (22.7)	20.8	22.5	23.6 (23.4)	21.4	22.2	22.8 (22.7)	20.9	22.2	23.1 (23.0)	21.0
2016	22.2	22.9 (22.5)	20.1	22.3	22.9 (22.7)	20.6	23.5	24.0 (23.8)	21.3	22.6	23.1 (23.0)	20.8	22.8	23.3 (23.1)	20.8

Note: Virginia and national scores are for public, private, and homeschooled students, except the scores for Virginia public school students shown in parentheses. Sources: ACT Profile Report - District, Graduating Class 2016 (Tables 1.2 and 1.3) and Virginia Department of Education, VDOE News, August 24, 2016.

ACT SCORES BY RACIAL/ETHNIC GROUP

A five-year comparison of the average ACT composite scores for the largest racial/ethnic groups in Virginia Beach is included in Table 3 on the following page, along with the average composite scores for the same groups of test takers at the state and national levels. The table shows that there were increases in the number of ACT examinees from the previous year for every VBCPS group.

In general, VBCPS average ACT composite scores tend to be higher than national average ACT composite scores and lower than state average composite scores for every major racial/ethnic group. This tendency was true for the VBCPS class of 2016 with one notable exception. The average ACT composite score for Hispanic/Latino students in Virginia Beach surpassed the average scores of their counterparts at both the state and national levels.

After a decrease in the average composite scores for the VBCPS Black/African American and White student groups from 2014 to 2015, the scores of these two groups rebounded for the VBCPS class of 2016 to within two-tenths of a point of the average ACT

³Ibid.

composite scores for their peers at the state level. The average composite scores for VBCPS Asian students also increased from the previous year, while the average scores for students who reported belonging to two or more races decreased.

Table 3
Average ACT Composite Scores by Race/Ethnicity – Five-Year Trends

Group	2012		2013		2014		2015		2016		2016 Virginia	2016 Nation
	n	Score	n	Score	n	Score	n	Score	n	Score		
Black/African American	187	17.9	170	17.8	209	18.2	184	17.8	202	18.2	18.4	17.0
White	424	23.7	448	23.5	451	23.8	532	23.4	551	24.2	24.4	22.2
Hispanic/Latino	63	21.4	89	21.0	84	20.2	94	21.3	95	22.8	22.4	18.7
Asian	48	24.3	43	23.4	43	24.2	59	24.5	66	24.9	26.1	24.0
Two or more races	63	22.4	58	21.7	82	21.2	87	22.8	94	22.1	23.2	21.0
Prefer not to respond/ No response	44	22.0	35	23.2	34	22.9	48	23.6	55	23.5	24.3	21.0
All Students	838	22.1	847	21.9	906	21.9	1,011	22.2	1,073	22.8	23.3	20.8

Notes: n = number tested. Only racial/ethnic groups with 10 or more VBCPS test takers for each year are included in the table. The numbers in the n columns do not add up to the totals in the "All Students" row due to the omission of the racial/ethnic groups with fewer than 10 test takers.

Sources: ACT Profile Reports – District, Graduating Class 2016 (Table 1.5), and State, Graduating Class 2016 (Table 2.5).

ACT COLLEGE READINESS BENCHMARKS

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.”⁴ The corresponding college courses and subject tests are as follows:

- English Composition – ACT English test
- Algebra – ACT mathematics test
- Social Sciences – ACT reading test
- Biology – ACT science test

Table 4
Percent of Virginia Beach Students Meeting or Exceeding ACT College Readiness Benchmark Scores – Five-Year Trends

Graduation Year	Number Tested	English (18)	Math (22)	Reading (22)	Science (23)	Met Each Benchmark
2012	838	71%	53%	59%	38%	33%
2013	847	73%	54%	51%	42%	34%
2014	906	70%	52%	51%	42%	33%
2015	1,011	72%	55%	55%	48%	36%
2016	1,073	74%	57%	60%	50%	40%
2016 VA Public	21,824	76%	58%	61%	52%	42%
2016 Virginia All	25,866	78%	59%	63%	53%	43%
2016 Nation All	2,090,342	61%	41%	44%	36%	26%

Notes: Benchmark scores are shown in parentheses. In 2013, the reading benchmark score was changed from 21 to 22.

Sources: ACT Profile Reports - District and State, Graduating Class 2015 (Table 1.1) and VDOE News, August 24, 2016.

Table 4 shows the percentage of test takers who scored at or above the ACT benchmarks. Percentages are listed for 2016 graduates at the division, state, and national levels, as well as for VBCPS seniors in the classes of 2012 through 2015. The VBCPS class of 2016 had a higher percentage of students reach each benchmark than previous classes, including 40 percent who met every ACT benchmark.

At least half of the VBCPS students who took the ACT and graduated in 2016 met one or more ACT College Readiness Benchmarks; nearly three-fourths of this group scored at or above the benchmark in English. Similar to prior comparisons across levels, the VBCPS results fell between the state and national percentages. Nonetheless, in just two years ACT test takers in Virginia Beach have reduced the benchmark gap in each subject to within 1-2 percentage points of public school ACT examinees in Virginia.

ACT RESULTS BY HIGH SCHOOL

Table 5 on the next page shows the average scores and number of ACT test takers by high school for VBCPS seniors in the classes of 2015 and 2016. The table also includes the average scores and number of examinees for the division, the state, and the nation. Due to of the relatively small and sometimes varying numbers of test takers at each high school, definitive conclusions cannot be

⁴ACT, Inc., ACT College Readiness Benchmarks, <http://www.act.org/content/act/en/education-and-career-planning/college-and-career-readiness-standards/benchmarks.html>, accessed on August 24, 2016.

drawn when making comparisons between the schools. Additionally, high schools with advanced academic programs tend to have higher ACT scores due in part to the high admission standards for students accepted to these programs.

The number of 2016 graduates who took the ACT in Virginia Beach ranged from 42 students at Kempsville High School to 136 students at Cox High School. Only four high schools saw decreases in the number of AP examinees from 2015 to 2016. The average ACT composite scores at all but two high schools increased from the previous year. It should be noted that the average scores at Princess Anne and Ocean Lakes high schools exceeded the average scores of every other VBCPS high school as well as the overall state scores. Also worth mentioning is the 35 percent increase in the number of ACT test takers at Green Run High School from the previous year, attained in tandem with improved average scores of at least one-half point on each subject test.

Table 5

School	Number Tested		English		Mathematics		Reading		Science		Composite	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Bayside	95	110	19.0	21.0	19.9	20.7	20.2	22.2	19.9	21.4	19.9	21.5
Cox	125	136	21.8	23.1	22.4	23.5	22.4	24.4	21.8	23.2	22.2	23.7
First Colonial	134	105	22.3	22.4	21.8	22.5	22.8	24.0	21.9	22.6	22.3	23.0
Green Run	43	58	16.5	17.3	18.7	19.3	18.1	18.6	18.8	19.3	18.1	18.8
Kellam	106	132	22.7	21.7	22.6	21.4	23.5	22.9	22.5	22.0	23.0	22.1
Kempsville	45	42	20.9	21.1	21.4	22.3	21.0	22.9	22.1	23.2	21.5	22.6
Landstown	89	81	18.9	20.4	21.1	21.0	19.9	21.4	20.5	21.0	20.2	21.0
Ocean Lakes	121	108	23.2	24.8	24.3	25.2	24.3	26.4	24.7	25.7	24.2	25.6
Princess Anne	99	130	26.0	25.9	24.9	25.0	26.1	27.2	25.2	25.2	25.6	26.0
Salem	66	84	20.3	21.3	20.9	21.2	22.2	22.7	21.7	21.6	21.4	21.8
Tallwood	88	86	22.1	20.0	21.2	20.3	22.9	21.6	21.9	20.9	22.2	20.8
VBCPS	1,011	1,073	21.7	22.2	22.0	22.3	22.5	23.5	22.2	22.6	22.2	22.8
Virginia Public	21,189	21,824	22.5	22.5	22.7	22.7	23.4	23.8	22.7	23.0	23.0	23.1
Virginia All	25,038	25,866	22.8	22.9	22.8	22.9	23.6	24.0	22.8	23.1	23.1	23.3
Nation All	1,924,436	2,090,342	20.4	20.1	20.8	20.6	21.4	21.3	20.9	20.8	21.0	20.8

Sources: ACT Profile Reports - District and High School, Graduating Class 2016 (Table 1.2) and VDOE News, August 24, 2016.

ACT OPTIONAL WRITING TEST SCORES

Due to last year’s somewhat controversial and confusing revisions to the optional ACT writing test as well as the reporting of results,⁵ only the scores of students who took the writing test before September 2015 appeared in the 2016 ACT reports. The 2016 “Number Tested” column in Table 6 reflects the limited data provided by ACT, Inc. Consequently, meaningful conclusions about the performance of 2016 graduates who took the ACT writing test cannot be made. It is evident from the data, however, that the majority of ACT examinees in Virginia Beach and across the state wait until their senior year to take the writing test.

Table 6
ACT Optional Writing Test Results – Five-Year Trends

Level	2012			2013			2014			2015			2016		
	Number Tested	Essay	English/ Writing Combined	Number Tested	Essay	English/ Writing Combined	Number Tested	Essay	English/ Writing Combined	Number Tested	Essay	English/ Writing Combined	Number Tested	Essay	English/ Writing Combined
VBCPS	545	7.0	21.3	570	7.0	21.2	588	7.3	21.4	647	7.2	21.7	253	7.4	23.0
VA	15,186	7.1	21.9	15,514	7.2	22.2	15,869	7.4	22.4	16,768	7.4	22.9	5,792	7.5	24.1
Nation	931,148	7.1	20.7	942,769	7.0	20.5	976,031	7.1	20.6	1,108,908	6.9	20.2	754,169	6.2	18.6

Sources: ACT Profile Reports - District and State, Graduating Classes 2012–2016 (Table 5.2).

⁵PrepScholar, *Think Your New ACT Writing Score Is Wrong? Recent Issues, Explained*, <http://blog.prepscholar.com/new-act-writing-score-low-wrong-late>, accessed on August 25, 2016.

SUMMARY

The students in the class of 2016 who took the ACT achieved the highest average scores ever on this assessment for a senior class in Virginia Beach. The average scores on the subject tests for these seniors were all at least three-tenths of a point higher than the average ACT scores of the class of 2015, resulting in an improvement of six-tenths of a point in the VBCPS average composite score from the previous year. In addition, the ACT average composite scores increased by four-tenths of a point or more at nine of the eleven comprehensive high schools in Virginia Beach. With these positive results, the gap was narrowed between the VBCPS average composite score (22.8) and the state average composite score, and the ACT gap was broadened between Virginia Beach and the nation. The 2016 average composite score for Virginia public school students was 23.1, while the national ACT average composite score was 20.8.