ASSESSMENT BRIEF

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ACT Results for the Graduating Class of 2015

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ABSTRACT

This brief summarizes results from the ACT college readiness assessment for graduating seniors in the Virginia Beach City Public Schools (VBCPS) class of 2015. Comparisons of ACT data are also included at the school, division, state, and national levels. A total of 1,011 students in the VBCPS graduating class of 2015 took the ACT while they were in high school, which was almost 21 percent of the class. For these seniors, the average scores on each of the four ACT subject tests increased from the average scores of the class of 2014. The average ACT scores for Virginia Beach seniors surpassed the average scores of seniors at the national level on all four subject tests for the sixth consecutive year. The 2015 VBCPS average composite score of 22.2 was higher than the national average composite score (21.0) but was lower than the average composite score of public school students in Virginia (23.0). There was an increase from the previous year in the percentage of Virginia Beach students who scored at or above the ACT College Readiness Benchmarks in each subject. Well over half of the seniors in the class of 2015 met the benchmark in English, reading, and mathematics, while nearly half met the science benchmark.

KEY TOPICS:

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BACKGROUND

In the midst of a dramatic enrollment surge in American colleges and universities during the 1950s and 1960s, E. F. Lindquist, an education professor at the University of Iowa, founded the American College Testing Program. Lundquist subsequently developed the first ACT test, which was administered in 1959 to approximately 75 thousand students.¹

Similar to its forerunner, today's ACT college readiness assessment focuses on information taught in schools rather than on cognitive reasoning. The current ACT assessment includes multiple-choice tests in English, mathematics, reading, and science; a writing test is optional for all examinees. The nonprofit ACT, Inc. has described the assessment as "a curriculum-based achievement exam that measures skills and knowledge taught in school and deemed important for success in college." 2

Since 2012, more students have taken the ACT than have taken the SAT.³ Over 1.9 million graduates in the class of 2015 took the ACT at least once during their high school careers. The increased popularity of the ACT is further demonstrated by the fact that well over half of all US high school graduates take the ACT, including most graduates in 30 states. The ACT was also a part of 18 statewide testing programs and administered to every public high school junior in Alabama, Colorado, Hawaii, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, North Carolina, North Dakota, South Carolina, Tennessee, Utah, Wisconsin, and Wyoming at some point in the 2014-2015 school year. Nationally, all four-year colleges and universities accept ACT scores.⁴

The majority of information in this report was obtained from the results of high school students who took the ACT and reported they expected to graduate during or at the end of the 2014-2015 school year. Only the most recent scores were used for students who tested multiple times.

¹ACT, Inc., *ACT History*, http://www.act.org/aboutact/history.html, accessed on September 16, 2015.

 $^{^2\}mbox{ACT, Inc., } \mbox{\it The ACT, } \mbox{\it http://www.act.org/newsroom/fact-sheets/the-act,} \mbox{\it accessed on September 16, 2015.}$

³ACT, Inc., *ACT History*, http://www.act.org/aboutact/history.html, accessed on September 16, 2015.

⁴ACT, Inc., *The ACT*, http://www.act.org/newsroom/fact-sheets/the-act, accessed on September 16, 2015.

ACT PARTICIPATION

The number of high school students in Virginia Beach City Public Schools (VBCPS) and across the Commonwealth of Virginia who are administered the ACT college readiness assessment continues to increase each year. The total number of ACT test takers in the class of 2015 at the division, state, and national levels are shown in Table 1. For the first time, over one thousand

students in a VBCPS graduating class took the ACT. The number of Virginia Beach ACT test takers has increased by nearly 25 percent over five years. By gender, 575 of 1,011 senior examinees were female (56.9%). This percentage was higher than the percentages of 2015 female graduates who took the ACT at both the state (55.3%) and the national (52.6%) levels.

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

Graduation Year @	2011	2012	2013	2014	2015
VBCPS	811	838	847	906	1,011
Percent of VBCPS Graduates	16.1%	16.7%	17.5%	18.6%	20.7%
Virginia	20,526	21,647	22,165	22,977	25,038
Nation	1,623,112	1,666,017	1,799,243	1,845,787	1,924,436

 $Sources: \textit{ACT Profile Report - District, Graduating Class 2015} \ and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Report of Combined Term Graduates} \ for each school year and \textit{VBCPS Repor$

ACT SUBJECT AND COMPOSITE SCORES

For each ACT subject test, students receive a score on a scale of 1 to 36. A student's composite score is calculated by averaging the four subject test scores. Table 2 below shows the average ACT scores for the last five graduating classes in Virginia Beach, the state, and the nation. The average scores for public school ACT test takers across the state appear in parentheses. These students comprised about 85 percent of the approximately 25 thousand students who took the ACT and graduated from a public school in Virginia during or at the end of the 2014-2015 school year.

There was an increase in every average ACT score for 2015 from the previous year at the division, state, and national levels with two exceptions. The only average scores that did not improve were the mathematics and composite averages for the nation. The greatest average score gains for the VBCPS class of 2015 were in English and science, with increases of six-tenths and five-tenth of a point, respectively. The Virginia Beach 2015 average ACT composite score of 22.2 was an improvement of three-tenths of a point from the average composite score for the VBCPS graduating class of 2014.

Similar to previous years, the average ACT scores at the division level were higher than all of the average scores at the national level. The gaps between VBCPS and the nation for 2015 ranged from 1.1 to 1.3 points. All of Virginia Beach's average scores were lower than the average ACT scores at the state level, a trend dating back to 2013. The 2015 gaps between VBCPS average scores and average ACT scores for Virginia public school students were all within one-tenth of a point of last year's gaps except for reading, which increased from a gap of seven-tenths of a point to gap of nine-tenths of a point.

Table 2
Average ACT Scores - Five-Year Trends

Graduation	English			Mathematics			Reading				Science		Composite		
Year	VBCPS	VA	Nation	VBCPS	VA	Nation	VBCPS	VA	Nation	VBCPS	VA	Nation	VBCPS	VA	Nation
2011	21.7	22.1 (21.8)	20.6	22.1	22.2 (22.1)	21.1	22.3	22.7 (22.5)	21.3	21.9	21.8 (21.8)	20.9	22.1	22.3 (22.2)	21.1
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

Note: Virginia and national scores are for public, private, and homeschooled students, except scores for Virginia public school students in parentheses. Sources: ACT Profile Report - District, Graduating Class 2015 (Tables 1.2 and 1.3) and Virginia Department of Education, VDOE News, August 26, 2015.

ACT SCORES BY RACIAL/ETHNIC GROUP

Table 3 shows a five-year comparison of the average ACT composite scores for the largest VBCPS racial/ethnic groups along with the scores for the same groups of ACT examinees across the state and nation. The score variance from year to year for some groups is due in part to the annual fluctuation in the number of test takers for these groups. As shown in the table, the average composite score increased from the previous year for students in every group except for the largest two groups of ACT test takers, Black/African American students and White students, which each saw a decrease of four-tenths of a point.

The average ACT composite score for every Virginia Beach group surpassed the average composite score of the corresponding groups at the national level. Conversely, the VBCPS average composite score was below the average composite score of their counterparts at the state level, including both public and nonpublic school students. With the exception of the Black/African American group, the number of ACT examinees in all of the VBCPS racial/ethnic groups increased from 2014 to 2015.

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

Group	20	11	20	12	20	13	20	14	20	15	2015	2015
Group	n	Score	n	Score	n	Score	n	Score	n	Score	Virginia	Nation
Black/African American	183	17.8	187	17.9	170	17.8	209	18.2	184	17.8	18.3	17.1
White	442	23.8	424	23.7	448	23.5	451	23.8	532	23.4	24.2	22.4
Hispanic/Latino	45	21.4	63	21.4	89	21.0	84	20.2	94	21.3	22.1	18.9
Asian	59	24.4	48	24.3	43	23.4	43	24.2	59	24.5	25.7	23.9
Two or more races	49	21.0	63	22.4	58	21.7	82	21.2	87	22.8	23.3	21.2
Prefer not to respond/ No response	27	21.6	44	22.0	35	23.2	34	22.9	48	23.6	24.2	20.6
All Students	811	22.1	838	22.1	847	21.9	906	21.9	1,011	22.2	23.1	21.0

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, State, and National, Graduating Class 2015 (Table 1.5).

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

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
2011	811	74%	54%	57%	35%	30%
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%
2015 VA Public	21,189	76%	57%	60%	52%	41%
2015 Virginia All	25,038	77%	58%	61%	53%	41%
2015 Nation All	1,924,436	64%	42%	46%	38%	28%

Note: In 2013, the reading benchmark score changed from 21 to 22 and the science benchmark changed from 24 to 23. Sources: *ACT Profile Reports - District and State, Graduating Class 2015* (Table 1.1) and *VDOE News*, August 26, 2015.

corresponding credit-bearing first-year college courses." The courses and subject tests they correspond with are as follows:

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

Table 4 shows the percentage of seniors in the last five VBCPS graduating classes who scored at or above the ACT benchmarks. The percentages for 2015 seniors at the state and the national levels are also presented, with percentages for Virginia public school seniors shown in a separate row. The percentage of VBCPS students in the class of 2015 who met

⁵ACT, Inc., *ACT College Readiness Benchmarks?*, http://www.act.org/solutions/college-career-readiness/college-readiness-benchmarks, accessed on September 22, 2015.

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the ACT benchmark scores increased from the previous year by at least 3 percentage points in every test. Out of 1,011 ACT test takers, 72 percent met the benchmark score of 18 on the English test. On the mathematics and reading tests, 55 percent attained scores at or above the benchmark scores of 22. The highest ACT benchmark score was 23 on the science test, which 48 percent of Virginia Beach's 2015 ACT test-taking seniors met. More than one-third, or 36 percent, of the Virginia Beach ACT examinees reached or surpassed the benchmarks on all four subjects.

Benchmark comparisons with data for the state and the nation were analogous to the ACT comparisons described in previous sections, with the VBCPS percentages falling between the state and national percentages. It should be noted, however, that the percentage point gaps between Virginia Beach students and Virginia public school students were smaller—ranging from 3 to 5 points—than the gaps between the national and VBCPS percentages, which ranged from 8 to 13 percentage points.

ACT RESULTS BY HIGH SCHOOL

The average scores for seniors who took the ACT and graduated from a VBCPS high school in 2014 or 2015 are included in Table 5. The table also includes the number of ACT test takers at the schools as well as average scores and number of test takers for the division, the state, and the nation. Definitive conclusions cannot be drawn when comparisons are made between high schools because of the relatively small and varying numbers of examinees. Also, schools that house advanced academic programs tend to have higher ACT scores due partly to the high admission standards for students accepted to these programs.

The number of students in the graduating class of 2015 who took the ACT during high school ranged from 43 students at Green Run High School to 134 students at First Colonial High School. All but three Virginia Beach high schools experienced an increase in the number of AP examinees from the class of 2014 to the class of 2015. Two of the schools with decreased numbers, Princess Anne High School and Ocean Lakes High School, saw their average ACT scores improve on all four subject tests. Consequently, these two high schools maintained their positions as the VBCPS schools with the highest average ACT scores. Kellam High School and Tallwood High School increased both the number of AP test takers *and* the average scores on each subject test from the previous year. Kellam joined Princess Anne and Ocean Lakes as the only schools that did as well or better than public high school graduates in Virginia on the ACT composite.

Table 5
Virginia Beach ACT Results by High School – 2014 and 2015

Cabaal	Numbe	r Tested	English		Mathe	Mathematics		ding	Scie	ence	Composite	
School	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Bayside	71	95	18.9	19.0	20.0	19.9	20.3	20.2	19.5	19.9	19.8	19.9
Cox	108	125	22.1	21.8	22.9	22.4	23.4	22.4	22.6	21.8	22.9	22.2
First Colonial	99	134	21.9	22.3	22.2	21.8	22.9	22.8	22.2	21.9	22.4	22.3
Green Run	47	43	16.6	16.5	18.9	18.7	19.6	18.1	19.0	18.8	18.6	18.1
Kellam	87	106	21.3	22.7	21.9	22.6	21.9	23.5	21.8	22.5	21.8	23.0
Kempsville	42	45	21.2	20.9	22.6	21.4	22.3	21.0	22.2	22.1	22.2	21.5
Landstown	77	89	19.2	18.9	21.1	21.1	21.3	19.9	20.2	20.5	20.5	20.2
Ocean Lakes	126	121	22.9	23.2	23.5	24.3	23.5	24.3	23.3	24.7	23.4	24.2
Princess Anne	115	99	23.7	26.0	23.2	24.9	24.3	26.1	23.4	25.2	23.8	25.6
Salem	56	66	19.9	20.3	20.9	20.9	21.6	22.2	20.4	21.7	20.9	21.4
Tallwood	78	88	19.2	22.1	20.8	21.2	21.6	22.9	20.7	21.9	20.7	22.2
VBCPS	906	1,011	21.1	21.7	21.9	22.0	22.4	22.5	21.7	22.2	21.9	22.2
Virginia Public	19,491	21,189	22.0	22.5	22.5	22.7	23.1	23.4	22.3	22.7	22.6	23.0
Virginia All	22,977	25,038	22.4	22.8	22.7	22.8	23.4	23.6	22.4	22.8	22.8	23.1
Nation All	1,845,787	1,924,436	20.3	20.4	20.9	20.8	21.3	21.4	20.8	20.9	21.0	21.0

Sources: ACT Profile Reports - District and High School, Graduating Class 2015 (Table 1.2) and VDOE News, August 26, 2015.

ACT OPTIONAL WRITING TEST SCORES

Each year across the division, the state, and the nation, a growing number students have been taking the optional ACT writing test. Nationally, over 1.1 million seniors in the class of 2015 opted to take the test. Two scores are reported for the ACT writing test. Essays receive a subscore on a scale from 2 to 12, and the combined English/writing scores—obtained by combining English test scores and essay subscores—are reported using the same 1-36 range as the ACT subject tests. As shown in Table 6, the Virginia Beach average essay subscore decreased by one-tenth of a point from the previous year. On the other hand, the VBCPS average English/writing score increased by three-tenths of a point. This was due to the large increase of the average English score for the Virginia Beach class of 2015 from the average English score of the VBCPS class of 2014 (see Table 2). Once again, the Virginia Beach average scores were noticeably higher than the national averages but lower than the state averages. The state and national data in the Table 6 are derived from all ACT test takers, including private, public, and homeschooled students.

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

		2011	[2012			2013	3		2014		2015		
Level	Number Tested	Essay	English/ Writing Combined												
VBCPS	511	7.1	21.4	545	7.0	21.3	570	7.0	21.2	588	7.3	21.4	647	7.2	21.7
VA	13,919	7.2	22.1	15,186	7.1	21.9	15,514	7.2	22.2	15,869	7.4	22.4	16,768	7.4	22.9
Nation	905,035	7.1	20.8	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

Sources: ACT Profile Reports - District and State, Graduating Classes 2011-2015 (Table 5.1).

SUMMARY

The number of seniors who took the ACT and graduated from a Virginia Beach high school during the 2014-2015 school year increased by more than 100 students from the senior class of 2013-2014. For the first time, over 20 percent of a VBCPS graduating class took the ACT at some point while they were in high school. The average ACT composite score increased by three-tenths of a point from the previous year because the average ACT scores on all four subject tests also increased from 2014 to 2015.

The percentage of VBCPS students who met or surpassed the ACT College Readiness Benchmarks in English, mathematics, and reading indicated that the majority of ACT test-taking seniors in the class of 2014-2015 were adequately prepared for college courses in corresponding subjects during their freshman year. In science, nearly half of the Virginia Beach's ACT test takers scored at or above the college readiness benchmark. The percentage of VBCPS graduates who met the benchmarks on all four subject area tests was 36 percent.

Compared with ACT results for seniors in the graduating class of 2015 across the nation, Virginia Beach's ACT results were much better and in many cases, quite impressive. Despite the positive gains made on the ACT by the most recent VBCPS graduating class, the division's average ACT scores still lagged somewhat behind the average ACT scores at the state level.