

ASSESSMENT BRIEF

PLANNING, INNOVATION, AND ACCOUNTABILITY
Office of Research and Evaluation – November 26, 2019



ACT Results for the Graduating Class of 2019

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ABSTRACT

Data and results from the ACT college readiness assessment for graduates in the Virginia Beach City Public Schools (VBCPS) Class of 2019 are described in this assessment brief. ACT data for VBCPS students are compared with state and national data, as well as with ACT results from previous VBCPS graduating classes. A total of 662 students, or 13.3 percent of the VBCPS Class of 2019, took the ACT during high school, including each of the four tests—English, math, reading, and science. The VBCPS average ACT composite score of 22.8 was 1.1 points lower than the average composite score of 2019 public school graduates in Virginia, but 2.1 points higher than the national average ACT composite score. Results for ACT test takers in the VBCPS Class of 2019 indicated 40 percent of the students met the benchmarks on the English, math, reading, and science sections. When analyzed by subject area, 75 percent of test takers met or exceeded the benchmark in English, 56 percent of the test takers met or exceeded the benchmark in math, 58 percent met or exceeded the benchmark in reading, and 51 percent met or exceeded the benchmark in science.

BACKGROUND

The first ACT test was administered in 1959 at the University of Iowa under the auspices of an education professor, E. F. Lindquist, and registrar Ted McCarrel. Unlike the much older Scholastic Aptitude Test (SAT), which focused on aptitude, the ACT assessed “academic achievement mastery of the skills and knowledge taught in schools.”¹

The current version of the ACT includes multiple-choice tests in English, math, reading, and science, plus an optional writing test. The English test focuses on mechanics (e.g., grammar, punctuation, and rhetorical skills) while the reading test focuses on things such as atmosphere, character relationships, and comprehension. Each test is designed to measure specific skills deemed to be vital for students to achieve success in college. Questions on ACT tests are aligned with high school course content.²

This brief summarizes ACT results for seniors in the Class of 2019 who took the test at least once during grades 10, 11, or 12, and indicated their intent to graduate in 2019. Data are reported for ACT test takers across the nation, Virginia, and Virginia Beach City Public Schools (VBCPS). The brief includes data from previous graduating classes for comparison purposes.

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¹ ACT, Inc., *About ACT: ACT History*, <https://www.act.org/content/act/en/about-act.html>, accessed on November 4, 2019.

² ACT, Inc., *About the ACT Test*, <http://www.act.org/content/act/en/products-and-services/the-act-educator/the-act-test.html>, accessed on November 4, 2019.

ACT PARTICIPATION

For nearly 20 years, VBCPS experienced annual increases in the number of graduates who took the ACT. Starting with the Class of 2017, this trend reversed. As shown in Table 1, the number of ACT test takers decreased for VBCPS as well as the state and national levels since 2016. From 2018 to 2019, the number of ACT test takers in VBCPS decreased by 188 students and declined by 3.2 percentage points.

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

Graduation Year	2015	2016	2017	2018	2019
VBCPS	1,011	1,073	872	850	662
Percent of VBCPS Graduates	20.7%	22.1%	17.7%	16.5%	13.3%
Virginia	25,038	25,866	25,518	21,645	19,062
Nation	1,924,436	2,090,342	2,030,038	1,914,817	1,782,820

Sources: ACT Profile Report – District, Graduating Class 2019 and VBCPS Report of Combined Term Graduates for each school year.

ACT SUBJECT AND COMPOSITE SCORES

ACT test takers receive a score from 1 to 36 on each of the four subject tests. Composite scores are calculated for test takers by averaging their subject test scores. Table 2 contains the average ACT subject test and composite scores for the last five high school graduating classes at the division, state, and national levels. The average scores for students who attended public high schools in Virginia are shown in parentheses in the table.

The average scores on all four ACT subject areas decreased slightly from the previous year for VBCPS students as well as for ACT test takers at the national level. Average scores for public school students in Virginia either remained the same or increased slightly in 2019. Virginia Beach ACT test takers had lower average scores than their public school peers across the state and all ACT test takers in Virginia. When compared to the nation, VBCPS had higher average scores in every subject area.

Table 2: Average ACT Scores - Five-Year Trends

Graduation Year	English			Mathematics			Reading			Science			Composite		
	VBCPS	VA (22.5)	Nation	VBCPS	VA (22.7)	Nation	VBCPS	VA (23.4)	Nation	VBCPS	VA (23.0)	Nation	VBCPS	VA (23.0)	Nation
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
2017	22.6	23.5 (23.3)	20.3	22.5	23.3 (23.2)	20.7	23.7	24.6 (24.4)	21.4	22.9	23.5 (23.4)	21.0	23.0	23.8 (23.7)	21.0
2018	22.7	23.8 (23.5)	20.2	22.7	23.3 (23.2)	20.5	23.7	24.7 (24.5)	21.3	23.0	23.5 (23.5)	20.7	23.1	23.9 (23.8)	20.8
2019	22.3	23.8 (23.5)	20.1	22.4	23.3 (23.3)	20.4	23.4	24.8 (24.6)	21.2	22.8	23.6 (23.7)	20.6	22.8	24.0 (23.9)	20.7

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 and State, Graduating Class 2019, Public High School Students.

ACT SCORES BY RACIAL/ETHNIC GROUP

Five-year comparisons of average ACT composite scores for the largest racial/ethnic groups in Virginia Beach are shown in Table 3. Additionally, the table provides the average ACT composite scores for the same racial/ethnic groups in Virginia and the nation.

The average ACT composite score trends for racial/ethnic groups in Table 3 are similar to the score trends in Table 2. VBCPS average scores for student groups represented in Table 3 are consistently higher than the national averages, but lower than the average scores for Virginia public schools and all ACT test taker in Virginia.

Conclusions from the data in Table 3 should be made carefully. Most of the VBCPS racial/ethnic groups are relatively small, so a few extremely high or low scores can skew a group’s average score. Furthermore, ACT test takers comprise samples that are self-selected and are not necessarily representative of the larger populations from which they are drawn.

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

Group	2015		2016		2017		2018		2019		2019 Virginia Public	2019 Virginia All	2019 Nation All
	n	Score	n	Score	n	Score	n	Score	n	Score			
Black/African American	184	17.8	202	18.2	160	18.5	158	18.9	147	18.6	19.0	19.1	16.8
White	532	23.4	551	24.2	463	24.6	444	24.3	308	24.7	24.9	24.9	22.1
Hispanic/Latino	94	21.3	95	22.8	89	22.0	68	22.0	60	21.9	22.6	22.8	18.7
Asian	59	24.5	66	24.9	56	24.8	57	25.0	58	24.8	27.3	27.2	24.6
Two or more races	87	22.8	94	22.1	70	22.9	83	24.0	50	23.5	23.9	24.2	21.0
Prefer not to respond/ No response	48	23.6	55	23.5	28	24.1	35	24.5	32	22.2	24.6	24.8	19.7
All Students	1,011	22.2	1,073	22.8	872	23.0	850	23.1	662	22.8	23.9	24.0	20.7

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 2019.

ACT COLLEGE READINESS BENCHMARKS

According to ACT, Inc., the ACT College Readiness Benchmarks are “scores on the ACT subject tests that represent the level of achievement required for students to have a 50 percent chance of obtaining a B or higher or about a 75 percent chance of obtaining a C or higher in corresponding credit-bearing first-year college courses.”³ The following college courses that correspond with ACT subject tests are:

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

Table 4 shows the percent of test takers at the division, state, and national levels who met or exceeded an ACT benchmark. For the VBCPS Class of 2019, 75 percent of ACT test takers met or exceeded the college readiness benchmark in English, 56 percent of test takers met or exceeded the benchmark in math, 58 percent met or exceeded the benchmark in reading, and 51 percent met or exceeded the benchmark in science. The percentages represented a decrease for each subject area when compared to the prior year. The percent of students who met or exceeded the benchmark in all four areas was maintained at 40 percent. While the VBCPS percentages were all lower than the state percentages, they were noticeably higher than the national percentages. On the four subject tests, the gap between VBCPS graduates and Virginia public high school graduates in 2019 ranged from 3 to 8 percentage points. The range between VBCPS and the nation was 13 to 17 percentage points.

³ ACT, Inc., *Why Scores on the ACT® Test Are Scores You Can Trust*, <http://www.act.org/content/act/en/research/scores-you-can-trust.html>, accessed on November 4, 2019.

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

Graduation Year	Number Tested	English (18)	Math (22)	Reading (22)	Science (23)	Met Each Benchmark
2015	1,011	72%	55%	55%	48%	36%
2016	1,073	74%	57%	60%	50%	40%
2017	872	79%	55%	64%	50%	40%
2018	850	76%	58%	60%	54%	40%
2019	662	75%	56%	58%	51%	40%
2019 VA Public	15,665	78%	60%	66%	57%	46%
2019 Virginia All	19,062	80%	60%	67%	57%	46%
2019 Nation All	1,782,820	59%	39%	45%	36%	26%

Note: The benchmark scores for each subject test are shown in parentheses.

Sources: *ACT Profile Reports - District, State, and National, Graduating Class 2019.*

ACT RESULTS BY HIGH SCHOOL

Table 5 shows the number of ACT test takers and average scores for seniors in the classes of 2018 and 2019 for each VBCPS high school, the division, state, and nation. Similar to using data in Table 3, caution should be exercised when using data in Table 5 to make comparisons or draw conclusions. Sample sizes at many schools are quite small, and the number of ACT test takers at most of the schools fluctuates annually. Moreover, schools with advanced academic programs, primarily Ocean Lakes High School and Princess Anne High School, tend to have higher ACT scores due in part to the rigorous admission standards for students accepted to the advanced academic programs and the greater likelihood of those students opting to take the ACT.

Over half of the VBCPS ACT test takers were 2019 graduates from First Colonial, Kellam, Ocean Lakes, and Princess Anne high schools. Average scores on all four subject tests increased for 2019 graduates at Princess Anne High School and Green Run Collegiate; four additional high schools (Cox, First Colonial, Green Run, and Kempsville) increased their average composite score when compared to scores from 2018. When scores were compared to test takers in Virginia public schools, all test takers in Virginia, and the nation, Cox, Ocean Lakes, and Princess Anne high schools had higher average scores in each subject area.

Table 5: Virginia Beach ACT Results by High School - 2018 and 2019

School	Number Tested		English Score		Math Score		Reading Score		Science Score		Composite Score	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Bayside HS	76	71	21.0	19.4	21.0	19.6	21.8	21.3	21.6	20.1	21.5	20.2
Cox HS	98	51	24.0	24.3	23.8	24.2	25.4	25.1	23.7	24.6	24.4	24.7
First Colonial HS	89	81	22.7	23.3	22.4	22.5	24.3	24.0	23.0	23.1	23.2	23.4
Green Run Collegiate	12	12	19.0	22.6	19.5	22.8	21.5	24.9	19.8	23.4	20.0	23.7
Green Run HS	24	23	17.3	18.4	19.3	18.6	16.9	19.6	17.8	19.1	18.0	19.0
Kellam HS	122	89	23.5	21.9	22.8	22.3	24.1	22.6	23.5	22.9	23.6	22.6
Kempsville HS	24	17	20.8	20.6	20.8	21.9	22.0	21.9	21.0	21.9	21.3	21.7
Landstown HS	72	70	20.6	20.4	22.0	21.1	21.2	21.0	21.4	21.1	21.4	21.1
Ocean Lakes HS	105	84	25.7	24.6	25.7	25.3	26.2	26.3	26.0	25.5	26.0	25.5
Princess Anne HS	102	85	26.5	27.0	24.6	25.7	27.0	27.2	25.5	25.9	26.0	26.6
Salem HS	46	32	20.7	19.0	21.9	19.2	22.8	21.0	21.4	20.1	21.8	20.0
Tallwood HS	80	47	19.0	19.3	19.8	19.2	20.5	20.0	20.4	19.9	20.0	19.6
VBCPS	850	662	22.7	22.3	22.7	22.4	23.7	23.4	23.0	22.8	23.1	22.8
Virginia Public	17,876	15,665	23.5	23.5	23.2	23.3	24.5	24.6	23.5	23.7	23.8	23.9
Virginia All	21,645	19,062	23.8	23.8	23.3	23.3	24.7	24.8	23.5	23.6	23.9	24.0
Nation All	1,914,817	1,782,820	20.2	20.1	20.5	20.4	21.3	21.2	20.7	20.6	20.8	20.7

Note: The number tested column for 2018 does not add up to the VBCPS total due to the omission of one Renaissance Academy student who took the ACT.

Sources: ACT Profile Reports - High School, District, and State, Graduating Class 2019.

ACT WRITING TEST SCORES

Table 6 contains average ACT writing scores for VBCPS, Virginia, and the nation. Of the 662 VBCPS graduates in the Class of 2019 who took the ACT, 202 (approximately 31%) opted to take the writing test. The percent of ACT writing test takers across the state was comparable at 32 percent. At the national level, 44 percent of ACT test takers in the Class of 2019 took the writing test.

Table 6: 2019 Average ACT Writing Test Scores by Race/Ethnicity

Group	n		VBCPS		Virginia		Nation	
	2018	2019	2018	2019	2018	2019	2018	2019
Black/African American	57	52	6.2	6.3	6.5	6.4	5.6	5.5
White	165	94	7.6	7.9	7.6	7.6	6.8	6.7
Hispanic/Latino	22	17	7.2	7.8	7.4	7.5	6.4	6.3
Asian	23	19	8.1	7.6	8.0	8.2	7.5	7.5
Two or more races	34	12	7.3	6.5	7.6	7.6	6.7	6.6
Prefer not/No response	13	8	7.3	8.8	7.5	7.7	6.3	6.2
All Students	316	202	7.3	7.4	7.5	7.5	6.5	6.5

Notes: n = number tested. The n column does not add up to the VBCPS total due to the omission of the racial/ethnic groups with fewer than 10 test takers.

Sources: ACT Profile Reports - District and State, Graduating Classes 2019.

The number of VBCPS graduates who took the ACT writing test dropped from 316 in 2018 to 202 in 2019. Overall, the VBCPS average writing score increased slightly. When examined by student group, Black/African American, White, Hispanic/Latino, and the no response student groups increased their average scores from the prior year. VBCPS had a higher average score (7.4) when compared to the nation (6.5) but had a slightly lower score than the state (7.5).

SUMMARY

Overall, 662 Virginia Beach students or 13 percent of the graduating Class of 2019 took the ACT. Average scores for each subject area assessed on the ACT decreased slightly for VBCPS students. When subject area average scores were compared to public school students and all ACT test takers in Virginia, the VBCPS scores were lower in all subject areas. However, VBCPS had higher average scores than the ACT test takers at the national level. This general pattern was also found for the percentage of ACT test takers in VBCPS who met or exceeded college readiness benchmarks.

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November 2019