ASSESSMENT BRIEF

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SAT Results for the Graduating Class of 2015

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ABSTRACT

This brief provides a summary of SAT results for Virginia Beach City Public Schools (VBCPS) high school seniors from the 2014-2015 school year who took the SAT at least once through June 2015. Included are data for 2014-2015 seniors who took the SAT locally, in Virginia, or at a national or international test center. After a slight decrease in the percentage of VBCPS test takers in the 2013-2014 senior class, the percentage of 2014-2015 senior examinees rebounded to 64.5 percent of the class. The changes in SAT mean scores from the previous year on all three sections were minimal. The critical reading and mathematics mean scores each decreased by one point to 507 and 504, respectively, while the writing mean score increased by one point to 484. The VBCPS mean scores exceeded the mean scores of every other school division in Hampton Roads on every section of the SAT, but were lower than the mean scores for Virginia public school students on each section. Over half of the SAT test takers in the Virginia Beach senior class of 2014-2015 met or exceeded at least one of the content area college readiness benchmark scores, and 42 percent scored at or above the overall college readiness benchmark combined SAT score of 1550.

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BACKGROUND

At the end of the 19th century, several of the top universities in the United States formed the College Entrance Examination Board to establish a means to determine whether students were adequately prepared for college. Subsequently, the precursor to the Scholastic Aptitude Test (SAT) was administered in 1901.¹ Twenty-five years later, about 8,000 students took the College Board's first multiple-choice SAT. Since that time, the SAT has seen many changes—including an official name change to its acronym in 1994²—and has been administered to millions of students both nationally and internationally.

Last year the College Board announced yet another major SAT overhaul. The redesigned test, with changes such as the elimination of the guessing penalty and "no vocab that you'll never use again," will replace the current SAT in March 2016.³ The new SAT will comprise three sections: reading, writing & language, and math. The old writing section will be replaced with an optional fourth section, the SAT Essay. There will be no changes to the 20 additional SAT Subject Tests for students to who want to "showcase achievement in specific subject areas" and "potentially place out of introductory courses," including biology, chemistry, physics, math, history, literature, and various world languages.⁴

The SAT results in this brief are exclusively from administrations of the critical reading, mathematics, and writing sections of the traditional SAT. The data were derived from *College-Bound Seniors* reports. The College Board issues annual *College-Bound Seniors* reports at the school, division, and state levels, as well as for all SAT test takers. Each report contains the most recent scores for students who took the SAT at least once during their high school careers and self-reported their intent to graduate from a specific high school during or at the end of the 2014-2015 school year.

¹College Board, *History of the Tests*, https://sat.collegeboard.org/about-tests/history-of-the-tests, accessed on October 1, 2015.

²Applebome, New York Times, *Insisting It's Nothing, Creator Says SAT, Not S.A.T.*, http://www.nytimes.com/1997/04/02/us/insisting-it-s-nothing-creator-says-sat-not-sat.html, accessed on October 1, 2015.

³College Board, *SAT*, https://collegereadiness.collegeboard.org/sat, accessed on October 1, 2015.

⁴College Board, *About SAT Subject Tests*, https://sat.collegeboard.org/about-tests/sat-subject-tests, accessed on October 1, 2015.

CHARACTERISTICS OF SAT TEST TAKERS

Table 1 provides a summary of demographic information for seniors who took the SAT and graduated in 2014-2015. Students were asked to report their gender, ethnicity, citizenship, highest level of parental education, family income, and class standing (i.e., senior, junior, sophomore, or freshman) at the time they registered for the SAT. Because self-reported data relies on each respondent's honesty and knowledge, some of the percentages in Table 1 may not be entirely accurate. In addition, a number of students chose not to respond to some questions, which may have skewed the percentages.

As shown in Table 1, more females than males in the class of 2015 took the SAT; there was a higher percentage of females in Virginia Beach City Public Schools (VBCPS) compared to the other two levels. White and African American students comprised the two largest ethnic groups of test takers at the division and state levels, while the two largest groups overall were White

Table 1
Demographic Summary of 2014-2015 Senior SAT Test Takers

Characteristic	VBCPS	Virginia	All					
Total Number of Test Takers	3,156	59,621	1,698,521					
Gender		l						
Male	44%	47%	47%					
Female	56%	53%	53%					
Ethnicity								
American Indian or Alaska Native	1%	1%	1%					
Asian, Asian American, or Pacific Islander	10%	10%	12%					
Black or African American	21%	19%	13%					
Hispanic	7%	8%	19%					
White	53%	57%	47%					
Other	5%	4%	4%					
No Response	3%	2%	4%					
Citizenship		ľ	1					
U.S. Citizen / U.S. National	97%	93%	83%					
U.S. Permanent Resident or Refugee	2%	3%	3%					
Citizen of Another Country	0.5%	1%	7%					
Other, Unknown, or No Response	0.5%	3%	7%					
Highest Level Parental Education			T					
No High School Diploma	2%	3%	6%					
High School Diploma	27%	24%	26%					
Associate Degree	11%	8%	7%					
Bachelor's Degree	34%	32%	28%					
Graduate Degree	22%	29%	23%					
No Response	4%	5%	10%					
Family Income								
Less than \$40,000	15%	14%	18%					
\$40,000 to less than \$80,000	24%	17%	16%					
\$80,000 to less than \$120,000	19%	16%	13%					
\$120,000 and above	16%	20%	14%					
No Response	26%	34%	40%					
Year SAT Test Last Taken								
Senior	74%	69%	65%					
Junior	26%	31%	34%					
Sophomore	0.3%	0.2%	0.3%					
Freshman	< 0.1%	< 0.1%	< 0.1%					

Note: The percentages for each characteristic at each level may not add up to 100 due to decimal rounding error. Sources: 2015 College-Bound Seniors District Profile Report (Tables 3, 8, 9, 10, 11), 2015 College-Bound Seniors State Profile Report (Tables 3, 9, 10, 11, 12), 2015 College-Bound Seniors Total Group Profile Report (Tables 3, 8, 9, 10, 11).

and Hispanic students. College Board ethnicity data is different from the federal ethnic and racial reporting guidelines implemented in 2010. The federal guidelines ask individuals to choose "Hispanic or Latino" or "Not Hispanic or Latino," and individuals may select more than one racial category (e.g., Asian, Black, White). This allows Hispanic persons to select a racial category, and multiracial people may choose two or more categories to accurately reflect their heritage. Because the College Board has not adopted the federal guidelines, students must select a single ethnicity when they register for the SAT.

The *College-Bound Seniors Total Group Profile Report* includes data for every student in the senior class of 2014-2015 who took the SAT, regardless of where the test was administered. The number of last year's seniors who took the SAT outside of the United States was over 150 thousand. Out of all of the test takers, 83 percent reported they were U.S. citizens or U.S. nationals. Not surprisingly, the percentage of Americans were much higher in Virginia Beach and Virginia.

A comparison of family income data for SAT test takers shows that a higher percentage of all students came from lower income families (i.e., less than \$40,000). About one quarter of the 2015 graduating VBCPS seniors who took the SAT were in the \$40,000 to \$80,000 annual income range, while one-fifth of the examinees across the state reported an annual family income of \$120,000 or higher. Of all the demographic questions, the family income question had the highest percentages students who chose not to respond.

As seen in Table 1, most of last year's graduating seniors took the SAT for the last time—or only time—during their last year in high school. The percentage of junior test takers who took the test

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for the final time was lower in Virginia Beach than for Virginia junior test takers and all juniors. According to the College Board, "Most students take the SAT during their junior or senior year of high school. At least half of all students take the SAT twice—in the spring as a junior and in the fall as a senior." 5

SAT PARTICIPATION

After two consecutive years of declining SAT enrollment among VBCPS seniors, the number and percentage of SAT examinees increased for graduating class of 2015. Approximately 13 of every 20 graduates in the Virginia Beach class of 2015 took the

SAT while they were in high school. The number of SAT test takers across the Commonwealth of Virginia decreased for the fourth straight year, but SAT enrollment at the national and international level has been increasing since 2013.

Table 2
Number and Percent of Graduates Who Took the SAT – Five-Year Trends

Graduation Year @	2011	2012	2013	2014	2015
VBCPS	3,232	3,323	3,122	3,110	3,156
Percent of VBCPS Graduates	64.0%	66.2%	64.5%	63.8%	64.5%
Virginia	61,398	61,655	60,640	59,906	59,621
All	1,647,123	1,664,479	1,660,047	1,672,395	1,698,521

Sources: College-Bound Seniors District Profile Report (Table 1), College-Bound Seniors State Profile Report (Tables 1 and 4), and VBCPS Report of Combined Term Graduates for each school year.

SAT SCORES BY RACIAL/ETHNIC GROUP

Table 3 shows the SAT mean scores for the four largest ethnic groups of Virginia Beach, the state, and all test takers for the past three graduating classes. SAT mean scores are shown at the bottom of the table for the division, the state, and all seniors who

Table 3
Number of Senior SAT Test Takers and SAT Mean Scores by Ethnicity

Race	Group	2012-2013			2013-2014				2014-2015				
Kace	Group	n	Reading	Math	Writing	n	Reading	Math	Writing	n	Reading	Math	Writing
Asian, Asian American, or Pacific	VBPCS	305	508	540	493	332	520	535	497	327	520	533	497
	Virginia	5,420	540	587	535	5,756	539	585	534	5,757	539	585	534
Islander	All	196,030	521	597	527	206,564	523	598	530	211,238	523	598	530
	VBPCS	695	448	447	433	688	448	438	424	657	445	441	424
Black or African American	Virginia	12,008	440	432	424	11,799	442	435	423	11,603	442	435	423
	All	210,151	431	429	418	212,524	431	429	418	219,018	431	429	418
Mexican or Mexican American; Puerto	VBPCS	222	502	491	486	219	485	484	464	232	501	489	477
Rican; Other Hispanic, Latino,	Virginia	4,136	496	492	479	4,186	495	493	476	4,535	496	492	478
or Latin American (combined)	All	284,261	450	461	443	300,357	451	459	443	322,873	449	456	439
	VBPCS	1,699	529	533	509	1,660	533	531	507	1,666	527	525	506
White	Virginia	35,162	540	534	521	34,535	543	535	519	33,976	543	535	519
	All	834,933	527	534	515	822,821	529	534	513	800,236	529	534	513
	VBPCS	3,122	505	509	487	3,110	508	505	483	3,156	507	504	484
All Test Takers	Virginia	60,640	516	514	498	59,906	518	515	497	59,621	518	516	499
	All	1,660,047	496	514	488	1,672,395	497	513	487	1,698,521	495	511	484

Notes: n = number tested. Only racial/ethnic groups with 200 or more VBCPS test takers for each year are included in the table.

Sources: College-Bound Seniors District Profile Report (Tables 1, 4, and 7), College-Bound Seniors State Profile Report (Table 8), College-Bound Seniors Total Group Profile Report (Table 7) for each school year, and Virginia Department of Education, VDOE News (September 26, 2013; October 7, 2014; and September 3, 2015).

⁵College Board, Register for the SAT, https://sat.collegeboard.org/register, accessed on October 2, 2015.

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took the SAT during high school. In general, the scores of smaller samples (e.g., combined Hispanic group) tend to fluctuate more from year to year than the scores for larger groups (e.g., all test takers).

As shown in Table 3, Black/African American seniors in Virginia Beach have continued to outperform their counterparts across the state and nation on every section of the SAT. The mean scores for VBCPS Hispanic seniors on each section increased from the 2013-2014 school year to the 2014-2015 school year. These Virginia Beach students did better as a group in critical reading and mathematics than the Hispanic group at the state and national levels, and the VBCPS writing mean was just one point below the state writing mean for Hispanic students. The other two VBCPS ethnic groups shown in Table 3 (i.e., White and Asian/Asian American/Pacific Islander) scored lower compared to their peers statewide and all test takers in the same groups. The SAT mean scores for all students in the class of 2015 across Virginia were well above the mean scores for VBCPS graduates in 2015. Although the Virginia Beach mean reading score was 12 points higher than the mean for all SAT test takers across the nation and internationally, the VBCPS mean math score was 7 points lower than the mean math score for the total group of test takers. Virginia Beach's mean writing score was the same as the national/international mean writing score.

COLLEGE AND CAREER READINESS BENCHMARKS

Based on "extensive research to develop a fair and appropriate indicator of expected college performance," the College Board developed the SAT College and Career Readiness Benchmark. The College Board asserts that students who attain a combined

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

Graduation Year	Number Tested	Reading (500)	Math (500)	Writing (500)	Overall (1550)
2011	3,232	51%	54%	52%	40%
2012	3,323	50%	53%	54%	41%
2013	3,122	53%	54%	55%	43%
2014	3,110	53%	52%	52%	41%
2015	3,156	54%	52%	52%	42%
2015 Virginia Public	52,362	56%	55%	47%	45%
2015 All Test Takers	1,698,521	49%	54%	44%	42%

Sources: College and Career Readiness Report, Virginia Beach City Public Schools Class of 2015 (Figure 2); College and Career Readiness Report, Virginia Public Schools Class of 2015 (Figures 1 and 2); Cale Golden (cgolden@collegeboard.org), "RE: one more request," email message, October 23, 2015.

score of 1550 or higher on all three SAT sections have "a 65 percent likelihood of achieving a B– average or higher during the first year of college." 6 Content area benchmarks—500 for each section—offer additional information about a student's preparedness for college-level reading, writing, and math coursework.

The percentage of seniors in the last five graduating classes in Virginia Beach with scores at or above the SAT benchmarks is shown in Table 4. Percentages are also given for SAT test takers in the class of 2015 who attended public schools in Virginia as well as for the entire group of test-taking 2015 graduates, regardless of the type of school they attended.

Forty-two percent of VBCPS seniors met or exceeded the overall SAT benchmark score of 1550. This was

the same as the percentage for all 2015 graduates but lower than the percentage for 2015 public school graduates across the Virginia. The Virginia Beach percentages were somewhat lower than those of Virginia public school students in reading and mathematics, but the percentage of VBCPS graduates who met the writing benchmark was 5 points above the state percentage.

PSAT EXPERIENCE AND SAT SCORES

To help them prepare for the SAT, the College Board offers the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) to students. Table 5 shows that a large percentage of SAT test takers in the VBCPS class of 2014-2015 reported taking the PSAT/NMSQT, and SAT mean scores for seniors who took the PSAT/NMSQT more than one time are higher than for students who took the preliminary assessment only once or not at all. It should be noted Virginia Beach pays

Table 5
PSAT/NMSQT Experience and SAT Mean Scores of 2014-2015 Seniors in Virginia Beach Schools

High School Year PSAT/NMSQT Taken	Percent	Reading	Math	Writing
As a Junior and as a Sophomore or Younger	59.8%	524	521	502
As a Sophomore or Younger	16.5%	501	498	478
As a Junior	12.5%	473	469	448
Did Not Take the PSAT	6.7%	445	437	429
No Response	4.6%	479	486	458

Source: 2015 College-Bound Seniors District Profile Report (Table 10).

http://media.collegeboard.com/digitalServices/pdf/sat/12b 6661 SAT Benchmarks PR 120914.pdf, accessed on October 19, 2015.

⁶College Board, The SAT® College and Career Readiness Benchmark: User Guidelines

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for all sophomores and juniors to take the PSAT/NMSQT at every high school in the fall of each school year. This the most probable reason 95.5 percent of VBCPS graduates in the class of 2015 students who took the SAT reported that they took the PSAT/NMSQT. Although it is not shown in the table, the percentages of 2015 graduates who took both the SAT and the PSAT/NMSQT in Virginia and across all SAT test takers were significantly lower—81.7 percent and 68.4 percent, respectively.

SAT RESULTS BY HIGH SCHOOL

In the *Guidelines on the Uses of College Board Test Scores and Related Data*, the College Board states that educators and the media should not "rank or rate teachers, educational institutions, districts or states solely on aggregate scores derived from tests that are intended primarily as a measure of individual students." Although comparisons between schools and school divisions are inevitable, it is not the intent of this report to rank order these institutions based on their SAT mean scores. All students in Virginia Beach and the Commonwealth of Virginia who choose to take the SAT comprise one or more self-selected samples that represent the larger groups of which they are a part (e.g., their ethnic group, their school, their school division). Just as each student is uinique, each high school and school division has its own merits and challenges.

Table 6 provides the number of senior SAT test takers and the mean scores by section for the past three school years for the 11 comprehensive high schools in Virginia Beach. Overall data for VBCPS, the state, and all test takers are also included in the table. Although the number of VBCPS test takers increased from the previous senior class, over half of the schools experienced a decrease in SAT enrollment. Ocean Lakes High School and Kellam High School had the greatest number of 2015 graduates who took the SAT, each accounting for at least 350 examinees. Kellam saw a 20 percent increase in SAT enrollment from the

Table 6
Number of Senior SAT Test Takers and SAT Mean Scores by High School

Number of Senior SAT Test Takers and SAT Mean Scores by High School												
Cabaal	Nu	mber Tes	ted	Cri	itical Reading Mathematics Writ			Writing				
School	2012-2013	2013-2014	2014-2015	2012-2013	2013-2014	2014-2015	2012-2013	2013-2014	2014-2015	2012-2013	2013-2014	2014-2015
Bayside	213	218	238	488	481	478	478	467	464	474	462	454
Cox	356	321	313	530	519	518	544	523	525	519	502	502
First Colonial	299	319	334	505	522	522	513	512	510	493	495	490
Green Run	192	177	175	459	451	446	462	453	449	441	420	428
Kellam	338	291	350	505	509	516	503	509	506	483	486	500
Kempsville	223	224	202	502	501	496	502	499	498	475	464	467
Landstown	309	322	340	485	488	488	494	496	493	459	461	459
Ocean Lakes	331	358	356	535	535	522	542	542	537	510	506	501
Princess Anne	298	316	287	546	549	552	549	542	540	533	534	538
Salem	269	264	269	479	499	493	488	490	488	461	470	467
Tallwood	289	297	288	491	493	503	485	480	493	475	464	484
VBCPS	3,122	3,110	3,156	505	508	507	509	505	504	487	483	484
Virginia Public	53,072	52,591	52,362	512	515	515	511	512	513	494	493	495
Virginia	60,640	59,906	59,621	516	518	518	514	515	516	498	497	499
All Test Takers	1,660,047	1,672,395	1,698,521	496	497	495	514	513	511	488	487	484

Sources: College-Bound Seniors High School Profile Reports (Table 1); College-Bound Seniors District Profile Report (Tables 1 and 4); College and Career Readiness Report, Virginia Public Schools (Figure 1) for each school year; and Virginia Department of Education, VDOE News (September 26, 2013; October 7, 2014; and September 3, 2015).

⁷College Board, *Guidelines on the Uses of College Board Test Scores and Related Data*, http://media.collegeboard.com/digitalServices/pdf/research/guidelines-on-uses-of-college-board-test-scores-and-data.pdf, accessed on October 21, 2015.

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previous year's graduating class. The largest increases in SAT mean scores from the previous year were for Tallwood High School's senior class of 2014-2015. These gains were in double digits for each section and included an exceptional 20-point increase in the writing mean score for Tallwood.

The critical reading mean scores for five high schools—Cox, First Colonial, Kellam, Ocean Lakes, and Princess Anne—were above the critical reading mean score for public school students across the state. On the SAT math section, the mean scores for Cox, Ocean Lakes, and Princess Anne surpassed the math mean scores for public school graduates as well as all Virginia graduates who took the test. The writing mean scores for Cox, Kellam, Ocean Lakes, and Princess Anne high schools exceeded both writing mean scores at the state level.

COMPARISON WITH LOCAL SCHOOL DIVISIONS

The mean scores for Virginia Beach seniors have been higher on all three sections of the SAT than the mean scores of seniors in every other school division in Hampton Roads for at least ten years. As shown in Figure 1 below, the VBCPS mean scores for

2014-2015 seniors were once again higher in comparison with the mean scores of 2014-2015 seniors from other school divisions in the Hampton Roads area. The seven Hampton Roads area school divisions consist of Chesapeake Public Schools, Hampton City Schools, **Newport News City Public** Schools, Norfolk Public Schools, Portsmouth Public Schools, Suffolk Public Schools, and Virginia Beach City Public Schools.

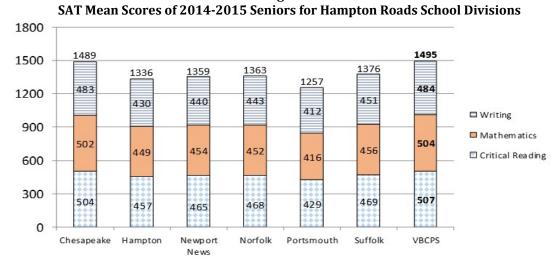


Figure1

Source: College Board, Virginia Public Schools, Summary by District: SAT®, SAT Subject Tests™, AP®, PSAT/NMSQT®.

SUMMARY

Although the number of senior SAT test takers in the Commonwealth of Virginia decreased for the third consecutive year, the 2014-2015 school year saw an increase from the previous year in the number of VBCPS seniors who took the SAT. Virginia Beach's mean scores for the three SAT sections continued to lag behind the mean scores of public school students across the state; however, the VBCPS critical reading mean score (507) was 12 points higher than the reading mean score for all of the seniors who were administered the SAT at a domestic or foreign test center. Compared with the two other SAT mean scores of the total group, the Virginia Beach mathematics mean score (504) was 4 points lower and the writing mean score was the same (484).

Approximately 54 percent of VBCPS graduates in the class of 2015 scored at or above the SAT college readiness benchmark in critical reading, while 52 percent met the mathematics benchmark and another 52 percent reached the benchmark in writing. The proportion of VBCPS students who met or surpassed the overall SAT College and Career Readiness Benchmark, indicating a 65 percent chance of first-year college success—was 42 percent.