## 2018 SAT DIGEST

October 24, 2018

Department of Accountability


## ALEXANDRIA CITY PUBLIC SCHOOLS

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## 2018 SAT Facts for Alexandria City Public Schools

This digest contains a brief snapshot of trends of Alexandria City Public Schools (ACPS) student performance on the SAT. It should be noted that the College Board administered the redesigned SAT in March 2016. Thus, this report includes scores for senior test-takers who took the redesigned SAT. The College Board has concordance scores for students who took the previous SAT to allow for some comparability in data analysis; however, these scores are not included in the static file used for the purposes of this report.

Scores were reported for 694 ACPS graduating seniors who took the SAT Reasoning Test at any time during their high school years. The 694 test-takers represent the highest number of ACPS students having participated in the SAT. Using the 2017 Fall Membership count of 862 seniors, the estimated participation rate was $81 \%$. October 19,2016 was the first all-school SAT testing session at both campuses of T.C. Williams High School. Twelfth grade students were provided the opportunity to take the SAT fee-free, resulting in an estimated participation rate of $83 \%$ based on 2016 Fall Membership counts. Prior to the first all-school SAT testing session in October of 2016, the highest previous participation rate was $72 \%$ in 2007. If a student took the test more than once, the most recent score was used. Examination of the percentage of ACPS seniors, who took the SAT during their high school years, indicates that ACPS participation has fluctuated between 51 and 72 percent over the past 13 comparison years prior to school-wide testing in fall 2016 (see Figures 1 \& 2). The 2016 participation rate appears lower because the SAT changed in the spring of 2016, so data were only presented for the students taking the test prior to March 2016.

Comparison data should be interpreted with the expanded access provided to ACPS seniors and higher participation rates in mind. As participation rates increase, it is not unexpected to see a corresponding decrease in average scores.

The College Board has identified SAT College and Career Readiness Benchmarks with the release of the new SAT. "The College and Career Readiness Benchmarks predict a $75 \%$ likelihood of achieving a C or higher in related, first-semester, credit-bearing college courses." As a reminder, the current SAT combines Reading and Writing which were previously discretely reported tests. On the Evidence-based Reading and Writing (ERW), ACPS seniors had average scores exceeding the SAT College and Career Readiness Benchmark (Figure 3). On the Evidence-based Reading and Writing section, ACPS students averaged a score of 506 which exceeds the SAT College and Career Readiness Benchmark by 26 scaled score points. Compared to 2017, the average ERW scores increased by 13 scaled score points. The Math test scores were lower than Reading and Writing scores. ACPS seniors had an average score of 486 relative to the SAT College and Career Readiness Benchmark of 530 which represents a difference of 44 scaled score points. The average scores increased two scale score points from the 2017 average. Figure 4 displays these comparison data graphically.

SAT performance within racial/ethnic group results for ACPS are presented in Figures 5-6. On both ERW and Math, ACPS White students were the highest performing subgroup. White and Asian students also exceeded the ERW and Math SAT College and Career Readiness Benchmarks. On the ERW section, all major racial/ethnic subgroups saw higher average scores from 2017. On the Math section, White and Hispanic students saw an increase in scores while Black and Asian students saw a decline in average scores. An achievement gap remains between White students and other racial/ethnic subgroups for ACPS.

Gender comparisons, presented in Figures 7 - $\mathbf{8}$ reveal different patterns depending on the section. On Evidence-based Reading and Writing, ACPS female seniors outperformed male seniors by an average of 17 scale score points while on the Mathematics test, ACPS males outperformed females by an average of seven scale score points. Compared to 2017, average scores increased for both males and females on the ERW. On the Math section, average scores increased for males by seven scaled score points and decreased for females by two scaled score points compared to 2017.

Historical SAT results for ACPS, Virginia and the nation, presented in Table 1, should be interpreted with caution given the new test and also given the change within ACPS towards census participation. Performance in 2017 can serve as a baseline for future goal setting and monitoring of student outcomes. Comparison data for 2018 were not available before publication of this report.

The diversity of ACPS SAT test-takers can be again documented by examining some of the basic demographic characteristics of tested students. The percentage of ACPS non-White test takers was $70 \%$. The breakdown of ACPS test takers by race/ethnicity was as follows: $27 \%$ Hispanic; $33 \%$ Black; $22 \%$ White; 5\% Asian; 4\% Two or more races; and 8\% No Response. Figure 9 displays the demographic breakdown of test takers compared to ACPS Fall Membership enrollment data. The proportion of SAT test-takers in each racial/ethnic category indicates that Black, White, and Asian SAT test takers closely represented the demographic makeup of graduating seniors. Lower proportions of Hispanic students were represented among SAT test takers with Hispanic students representing $37 \%$ of the population and only $27 \%$ of SAT test takers. A small ( $8 \%$ ) but growing percentage of SAT test takers chose not to selfidentify racial or ethnic information. Only $3 \%$ of test takers chose not to self identify in the 2017 administration.

The College Board says . . .
This was the second year of cohort reporting on the New SAT revised in March 2016. Some of the changes to the SAT included: 1) scale range is back to 400-1600 total scale score; 2) The Evidence-Based Reading and Writing Section score is the sum of the Reading Test score and the Writing and Language Test with subscores provided to students, parents, and educators; 3) The Essay test is now optional; 4) Students can use a calculator on one part of the Math test, but not the other; 5) Rights-only scoring eliminates the penalty for guessing; and 6) Changes to accommodations for students with disabilities include replacement of cassettes with MP3 audio and the provision of extra breaks to students approved for extended time. Each student's essay was read, scored, and reported by two different professional readers (all with experience as a high school or college teacher).

Since the population of test takers is self-selected, SAT scores should not be used to 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.

Media and others often rank states, districts, and schools on the basis of SAT scores despite repeated warnings that such rankings are invalid.

Slightly less than half of all high schools experience mean score changes within each assessment area of at least 10 points up or down from one year to the next.

Mean SAT score changes are more likely at smaller schools or divisions than larger. As the proportion of students taking the test rises, in a school or state, scores tend to fall.

SAT scores should never be used alone to assess the effectiveness of school curriculums or teaching.

*The percent of graduating senior test-takers in 2016 is based on seniors who took the SAT at any time during high school, prior to March 2016. These data do not include the percent of students who took the new SAT in March 2016 onward.
†In 2016-17, ACPS initiated its first in-school, all-school SAT testing session at both T.C. Williams campuses. 12th-grade students were provided access to free tests on this day. 2017 \& 2018 participation rates are based on Fall Membership counts of 12th grade students. Prior years reported rates based on spring enrollment.


Figure 3. Average 2018 SAT ERW scores for ACPS


Figure 4. Average 2018 SAT Math scores for ACPS



Figure 6. ACPS 2017 \& 2018 SAT Math scores by Ethnicity


Figure 7. 2017 \& 2018 SAT ERW Scores by Gender


TABLE $1^{a}$
Alexandria City Public Schools
SAT Historical Results for ACPS, Virginia, and Nation: 1989-2018

| Year | Alexandria |  |  |  | Virginia |  |  |  | Nation |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Readin | riting | Math | Total | Readin | riting | Math | Total | Readin | riting | Math | Total |
| 2018 | 506 |  | 486 | 992 |  |  |  |  |  |  |  |  |
| $2017{ }^{\text {a }}$ | 493 |  | 484 | 977 | 558 |  | 538 | 1095 | 527 |  | 517 | 1044 |
| $2016{ }^{\text {b }}$ | 496 | 482 | 480 | 1458 | 520 | 498 | 517 | 1535 | 494 | 482 | 508 | 1484 |
| 2015 | 481 | 474 | 478 | 1433 | 518 | 499 | 516 | 1533 | 495 | 484 | 511 | 1490 |
| 2014 | 490 | 476 | 485 | 1451 | 518 | 497 | 515 | 1530 | 497 | 487 | 513 | 1497 |
| 2013 | 485 | 473 | 476 | 1434 | 516 | 498 | 514 | 1528 | 496 | 488 | 514 | 1498 |
| 2012 | 485 | 474 | 477 | 1436 | 510 | 495 | 512 | 1517 | 496 | 488 | 514 | 1498 |
| 2011 | 477 | 469 | 473 | 1419 | 512 | 495 | 509 | 1516 | 497 | 489 | 514 | 1500 |
| 2010 | 482 | 475 | 479 | 1436 | 511 | 496 | 511 | 1518 | 500 | 491 | 515 | 1506 |
| 2009 | 482 | 482 | 472 | 1436 | 510 | 496 | 510 | 1516 | 499 | 492 | 514 | 1505 |
| $2009{ }^{\text {c }}$ | 482 | 482 | 472 | 1436 | 510 | 496 | 510 | 1516 | 499 | 492 | 514 | 1505 |
| 2008 | 496 | 493 | 493 | 1482 | 511 | 499 | 512 | 1522 | 502 | 494 | 515 | 1511 |
| 2007 | 490 | 481 | 491 | 1462 | 511 | 498 | 511 | 1520 | 502 | 494 | 515 | 1511 |
| 2006 | 512 | 509 | 509 | 1530 | 512 | 500 | 513 | 1525 | 503 | 497 | 518 | 1518 |
| 2005 | 482 |  | 481 | 963 | 516 |  | 514 | 1030 | 508 |  | 520 | 1028 |
| 2004 | 483 |  | 474 | 957 | 515 |  | 509 | 1024 | 508 |  | 518 | 1026 |
| 2003 | 493 |  | 495 | 988 | 514 |  | 510 | 1024 | 507 |  | 519 | 1026 |
| 2002 | 485 |  | 491 | 976 | 510 |  | 506 | 1016 | 504 |  | 516 | 1020 |
| 2001 | 478 |  | 485 | 963 | 510 |  | 501 | 1011 | 506 |  | 514 | 1020 |
| 2000 | 477 |  | 476 | 953 | 509 |  | 500 | 1009 | 505 |  | 514 | 1019 |
| 1999 | 481 |  | 480 | 961 | 508 |  | 499 | 1007 | 505 |  | 511 | 1016 |
| 1998 | 475 |  | 478 | 953 | 507 |  | 499 | 1006 | 505 |  | 512 | 1017 |
| 1997 | 476 |  | 488 | 964 | 506 |  | 497 | 1003 | 505 |  | 511 | 1016 |
| 1996 | 501 |  | 505 | 1006 | 507 |  | 496 | 1003 | 505 |  | 508 | 1013 |
| 1995 | 496 |  | 494 | 990 | 504 |  | 494 | 998 | 504 |  | 506 | 1010 |
| 1994 | 491 |  | 490 | 981 | 501 |  | 495 | 996 | 499 |  | 504 | 1003 |
| 1993 | 477 |  | 481 | 958 | 502 |  | 495 | 997 | 500 |  | 503 | 1003 |
| 1992 | 494 |  | 499 | 993 | 501 |  | 494 | 995 | 500 |  | 501 | 1001 |
| 1991 | 510 |  | 500 | 1010 | 501 |  | 493 | 994 | 499 |  | 500 | 999 |
| 1990 | 515 |  | 521 | 1036 | 501 |  | 496 | 997 | 500 |  | 501 | 1001 |
| 1989 | 522 |  | 516 | 1038 | 507 |  | 498 | 1005 | 504 |  | 502 | 1006 |

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Figure 9. 2018 ACPS SAT Participation \& Enrollment by Race/Ethnic Group


[^0]:    ${ }^{a}$ The College Board administered a newly designed SAT in March 2016, the 2017 figures represent the seniors who took the post-March 2016 SAT. The new SAT has an Evidence-Based Reading \& Writing Section and a Math Section.
    ${ }^{\mathrm{b}}$ The 2016 figures represent the seniors who took the pre-March 2016 SAT.
    ${ }^{\text {c }}$ Beginning in 2009, figures represent the change in College Board reporting protocol to report all seniors who took the SAT in any point in high school through June of their senior year. Prior years display all seniors who took the SAT by March of their senior year.

