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## SAT Scores, 2011-12: Wake County Public School System (WCPSS)

(Revised November 2014, see page 4)

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## Background/Summary

SAT is a national college entrance exam offered by the College Board. Many colleges and universities require SAT scores for admission. The SAT test consists of three parts: mathematics, critical reading, and writing. Colleges use SAT scores, in conjunction with other tools, to measure students' potential for success at the post-secondary level. Comparisons of SAT scores and rates among districts, states and nationally should be made with caution as the total numbers of test-takers may vary greatly.

Key findings from the 2011-12 results include the following:

- 1. In 2012<sup>1</sup>, students in Wake County Public Schools (WCPSS) posted average SAT scores of 543 in mathematics and 520 in critical reading. The combined score for mathematics and critical reading was 1063, with a total average score of 1565 with writing included (see Figure 1).
- 2. Over the last 21 years, the average SAT combined score (mathematics and critical reading) for WCPSS students has risen from 1007 in 1992 to 1063 in 2012. During the same time frame, the average score for North Carolina has risen from 952 to 997, while the national average score has increased from 999 to 1010. Thus, WCPSS students have added more points to their combined score over that period than students in the state and nationally (see Table 1).

## **Abstract**

WCPSS students continue to fare well on the SAT test compared to students in the state and nation. While there was a slight decline in the overall average score in 2012 compared to the previous year, the scores continue a trend of measurable improvement over time. In addition, most major ethnic groups continue to have average scores significantly higher than comparable groups in the state and nation. In 19 of the last 21 years, the WCPSS participation rate has remained above 70%, suggesting that a large majority of WCPSS seniors are intending to continue their education by going to college. In the same 21year time frame, participation rates for the state have mostly been in the 60% range, while national rates have been in the high 40s.

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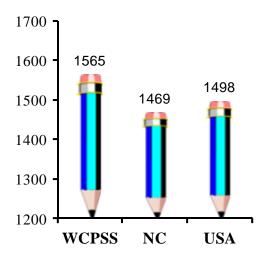


<sup>&</sup>lt;sup>1</sup> For more information about 2012 SAT statewide results, including individual school results, go to: http://www.dpi.state.nc.us/accountability/reporting/sat/2012

- 3. In 1991, WCPSS SAT scores exceeded the national average by 8 points. By 2012, the district exceeded the national average by 53 points. In 1991 WCPSS' scores exceeded the state average by 55 points, but by 2012, the difference was 66 points (see Table 1).
- 4. Since 1991, scores across the nation, state, and WCPSS have improved on the mathematics portion of the test faster than on the verbal/critical reading portion. Over the same time period, 2012 results show that students in WCPSS added 35 points to the mathematics average and 21 points to the reading score average while the nation added 14 points to the mathematics score but lost 3 points in the verbal/critical reading score. During the same period, the state added 32 points to the mathematics portion and 13 points on the verbal/critical reading average (see Table 1).
- 5. In March 2006, the Educational Testing Service re-introduced the writing portion of the SAT. In 2011-12 WCPSS students, on average, continued to outscore students in the nation and state in writing (502, 472, and 488, respectively), although scores went down for all three groups by one or two points from the prior year. Note that most of the tables and figures in this report do not include writing data.
- 6. WCPSS participation rates have been above 70% in 19 of the last 21 years (except 2009 and 2010). In 2011 and 2012, rates bounced back to above 70% (74% in 2011 and 76% in 2012). At the state level, participation has remained mostly in the 60-70% range. Nationally, the rate has consistently been rising from the low forties to 50% in 2011 and then 52% in 2012. Although students can take the SAT multiple times, students' scores are counted only once—the most recent test—no matter how often the exam is taken. Participation data are shown in Figure 3.
- 7. Table 2 shows the top 12 SAT averages among North Carolina school districts. The score shown is the total of the three sections (mathematics, critical reading, and writing). The number of test-takers included in the calculation is also shown. WCPSS students had the 4th highest average score in the state and the largest number of test-takers among that group.
- 8. Table 3 compares WCPSS SAT outcomes with those of comparable large school districts across the state. In both 2011 and 2012, WCPSS had the highest participation rates, and also outperformed all the other large school districts in math and critical reading as well as overall.
- 9. A comparison of the average performance of male and female students in the district shows that when considering the combined mathematics and critical reading scores, female students continue to lag behind their male counterparts. Figure 4 provides additional information.

- 10. Figure 5 shows the disaggregation of math and critical reading scores by race and ethnicity over time. In all three student categories, White, Black/African-American, and Hispanic/Latino, WCPSS students in 2011-12 continued to outperform their state and national counterparts. Since 2004, WCPSS White students have had an average increase of 22 points, NC White 14 points, and USA White 3 points. Over the same 9 years, WCPSS Hispanic/Latino students gained 19 points while NC Hispanic/Latino students dropped 18 points, and the nation also had a decline of 6 points for the same sub-group. In 2011-12, WCPSS Black/African American students' SAT scores were 887, compared to the state's 847 and the nation's 856. SAT scores for Black/African American students have stayed relatively flat overall since 1996.
- 11. In fall 2011-12, the NC Department of Public Instruction (NCDPI) piloted the ACT assessment statewide to 11<sup>th</sup> grade students. The NCDPI now pays for the ACT to be given to every high school junior and has adopted it as part of North Carolina's statewide accountability program as of 2012-13. Starting with the results for 2012-13, WCPSS and NC may see fewer students taking the SAT as a result. This may in turn affect overall SAT scores if the drop in SAT participation is large enough.

Figure 1
SAT Scores for WCPSS, NC, and USA, 2012



Notes: 1. Scores comprise Mathematics, Critical Reading (formerly Verbal), and Writing.

2. Data Source: Department of Public Instruction (DPI) 2012 SAT report (Districts and Schools Listings spreadsheet at: http://www.dpi.state.nc.us/accountability/reporting/sat/2012).

Table 1
WCPSS, NC, and USA SAT Scores, 1991-2012

	WCPSS				NC				USA			
Year	Total	Math	Verbal*	Rate	Total	Math	Verbal*	Rate**	Total	Math	Verbal*	Rate**
1991	1007	508	499	75	952	474	478	57	999	500	499	42
1992	1025	516	509	74	961	479	482	57	1001	501	500	42
1993	1031	521	510	76	964	481	483	60	1003	503	500	43
1994	1030	520	510	75	964	482	482	60	1003	504	499	42
1995	1039	524	515	76	970	482	488	60	1010	506	504	41
1996	1042	525	517	73	976	486	490	59	1013	508	505	41
1997	1047	529	518	74	978	488	490	59	1016	511	505	42
1998	1052	531	521	76	982	492	490	62	1017	512	505	43
1999	1059	537	522	76	986	493	493	61	1016	511	505	43
2000	1061	539	522	79	988	496	492	64	1019	514	505	44
2001	1054	534	520	79	992	499	493	65	1020	514	506	45
2002	1067	543	524	79	998	505	493	67	1020	516	504	46
2003	1067	543	524	80	1001	506	495	68	1026	519	507	48
2004	1063	539	524	77	1006	507	499	70	1026	518	508	48
2005	1075	548	527	75	1010	511	499	74	1028	520	508	49
			CR*				CR*				CR*	
2006	1066	544	522	77	1008	513	495	71	1021	518	503	48
2007	1057	538	519	79	1004	509	495	71	1017	515	502	48
2008	1059	541	518	73	1007	511	496	63	1017	515	502	45
2009	1074	548	526	64	1006	511	495	63	1016	515	501	46
2010	1067	543	524	69	1008	511	497	63	1017	516	501	47
2011	1065	544	521	+74	1001	508	493	67	1011	514	497	50
2012	1063	543	520	76	997	506	491	68	1010	514	496	52

<sup>\*</sup> The Verbal test became the Critical Reading (CR) test in March 2005, resulting in test content changes.

Notes: 1. WCPSS participation rate is the percentage of graduating students who took the SAT.

<sup>\*\*</sup> The NC and US participation rates include private and public schools (also see note 3 below).

<sup>2.</sup> In 2011, College Board changed rules for cutoff date for students tested to include students tested through June of each year (prior to 2011 data were for students tested through March).

<sup>3.</sup> Data Sources: Department of Public Instruction (DPI) 2012 SAT report (Districts and Schools Listings).

<sup>+</sup>November 21, 2014: Revised rate here and on any other references to reflect percentages of WCPSS actual graduates who took the SAT.

1100 1080 WCPSS 1060 1040 USA 1020 1000 NC 980 960 940 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 1997 1995 1996 - WCPSS 1039 1042 1047 1052 1059 1061 1054 1067 1067 1063 1075 1066 1057 1059 1074 1067 1065 1063 1026 1028 1021 1017 1016 1017 1011 1010 -O-USA 1010 1013 1016 1017 1016 1019 1020 1020 1026 1017 NC 970 976 978 982 986 988 992 998 1001 1006 1010 1008 1004 1007 1006 1008 1001 997

Figure 2 **SAT Scores, 1995-2012** 

Note: Scores do not include Writing.

Data Source: WCPSS = DPI 2012 SAT report (Districts and Schools Listings).

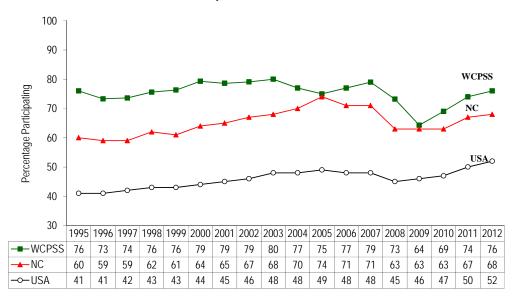


Figure 3 SAT Participation Rates, 1995-2012

Notes: 1. The NC and USA participation rates include private and public schools and WCPSS participation rate is the percentage of graduating students who took the SAT.

- 2. For display purposes, Y-axis is truncated.
- 3. Data Source: DPI 2012 SAT report (Districts and Schools Listings).

Table 2	
Top 12 NC District SAT Averages, 2012	?

	Number of	
LEA	Test-Takers	M+CR+W*
Chapel Hill-Carrboro Schools	729	1766
Watauga County Schools	223	1587
Asheville City Schools	192	1586
Wake County Schools	6602	1565
Mount Airy City Schools	59	1545
Orange County School	360	1542
Buncombe County Schools	925	1538
Carteret County Schools	335	1538
Henderson County Schools	460	1530
Davie County Schools	235	1528
Clay County Schools	49	1526
Iredell-Statesville Schools	839	1519

Notes: \*Math+Critical Reading+Writing

- 1. Average scores in smaller districts fluctuate more from year to year due to smaller numbers of test takers.
- Data Source: DPI 2012 SAT report (Districts and Schools Listings). This list does not include charter schools.

Table 3

Comparison of WCPSS SAT Scores to Similar Large North Carolina School Districts

LEA		2	012		2011				
	Total	Math	Critical Reading	Part. Rate	Total	Math	Critical Reading	Part. Rate	
Wake County	1063	543	520	76.2	1065	544	521	74.5	
Forsyth	1006	511	495	63.8	999	506	493	66.1	
Charlotte-Mecklenburg	990	503	487	67.5	1002	507	495	68.5	
Guilford	964	488	476	73.2	977	493	484	71.4	
Durham	951	477	474	72.5	951	476	475	73.1	
Cumberland	940	473	467	56.2	945	476	469	55.9	

Note: When the actual number of graduates was not known, participation rates reported by NC DPI are used. SAT participation rates reported by the College Board are based upon estimates of counts of graduating seniors compiled through national surveys. While the College Board rates are probably accurate at the state and national level, they are not accurate at the district and individual school level. The North Carolina Department of Public Instruction (NCDPI) uses 8<sup>th</sup> month twelfth-grade membership rather than actual numbers of graduates. Whenever the actual number of graduates is known, WCPSS uses that count to calculate participation rates, dividing the number of senior students who took the SAT by the size of the graduating class for the district and for each high school.

Data Source: DPI 2012 SAT report (Districts and Schools Listings).

SAT (Math + Critical Reading) → Male Female 

Figure 4
WCPSS SAT Totals by Gender, 1998-2012

Notes: 1. Writing is not included.

- 2. For display purposes, Y-axis is truncated.
- 3. Data source: 2012 College Board Seniors, SAT Data by Gender.

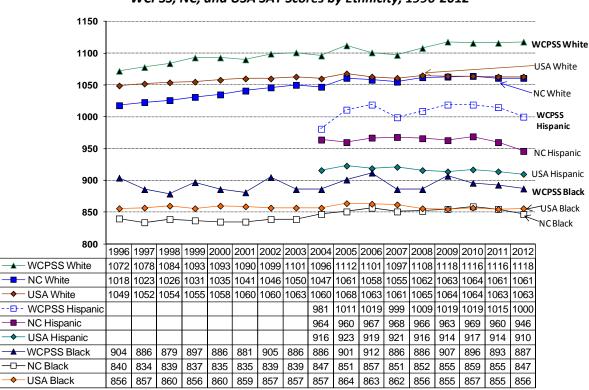


Figure 5
WCPSS, NC, and USA SAT Scores by Ethnicity, 1996-2012

Notes: 1. Writing is not included.

- 2. For display only, Y-axis is truncated.
- 3. Since some students choose not to report their racial/ethnic group to the College Board when they register to take the SAT, results should be viewed with caution.
- 4. Data source: 2012 College Board District Highlights Report.