

# MEASURING UP

WAKE COUNTY PUBLIC SCHOOLS

EVALUATION AND RESEARCH DEPARTMENT

## 1999-2000 Scholastic Assessment Test (SAT) Results

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### ABOUT THE SAT

The SAT is a national examination, offered through the College Board, designed to assess a student's chances of success at the college level. Nationwide, 1,260,278 students in the 2000 graduating class took the SAT I prior to graduation - a 3.3% increase from 1999. In Wake County, the number of seniors taking the SAT I rose to 3,853 in 1999-00 from 3,496 in 1998-99, a 10.5% increase.

There are two types of SAT exams: SAT I and SAT II. The SAT I is a reasoning assessment of students' verbal and mathematical skills. The SAT II tests students in specific subject areas. This bulletin summarizes national, state, and county SAT I data.

In April 1995, the College Board *recentered* the score scales for students taking the SAT to reflect the contemporary test-taking population. Recentering allows for easier interpretation of scores and simple comparisons between students' verbal and mathematical abilities.

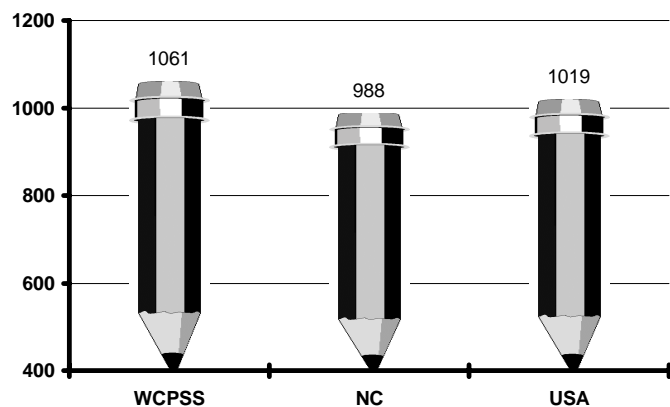
To permit comparisons with previous years, the College Board has provided conversions of old scores to the new scale. Conversions and new scales are used throughout this bulletin.

### DISTRICTWIDE RESULTS

The average SAT score for Wake County Public School System (WCPSS) seniors in 1999-00 was 1061 and was second highest in the state. Chapel Hill-Carrboro led with 1175 and Buncombe County followed WCPSS with 1059.

The average score for WCPSS students increased by 2 points over 1998-99 - the sixth consecutive year of rising scores. This increase paralleled the 2 point gain for the state and 3 point gain for the nation. A comparison of WCPSS, NC and the United States is shown below.

**Figure 1: Average Total SAT Score**



While scores were up, participation of the WCPSS senior class also reached a new high at 79.2%, rising from 75.6% in 1998-99. US participation rose one point to 44%, and NC participation rose three points to 64%.

The participation rate in WCPSS was calculated by dividing the number of senior students who took the SAT by the size of the 12th grade class at the end of the eighth month of the senior year. Participation rates remained stable at or near the 75% mark for 10 years, and increased this year to 79%. The average WCPSS senior taking the test scored 25 points higher on the math test and 17 points higher on the verbal test than the average senior across the country. WCPSS average math scores have increased 41 points in the last 11 years (see Table 1); average verbal scores increased 21 points

As shown in Table 1, the WCPSS total score increase of 62 points over 11 years greatly exceeds both the national increase of 18 points and the NC increase of 40 points. It is also notable that over the past 11 years there has been a steady increase in WCPSS scores except for a one-point decline in 1994.

**Table 1: WCPSS, NC, and USA Scores Over Time**

Year	WCPSS				NC				USA			
	Total	Math	Verbal	Part.	Total	Math	Verbal	Part.	Total	Math	Verbal	Part.
2000	1061	539	522	79.3	988	496	492	64.0	1019	514	505	44.0
1999	1059	537	522	76.3	986	493	493	61.0	1016	511	505	43.0
1998	1052	531	521	75.6	982	492	490	62.0	1017	512	505	43.0
1997	1047	529	518	73.6	978	488	490	59.0	1016	511	505	42.0
1996	1042	525	517	73.3	976	486	490	59.0	1013	508	505	41.0
1995	1039	524	515	76.0	970	482	488	60.0	1010	506	504	41.0
1994	1030	520	510	75.0	964	482	482	60.0	1003	504	499	42.0
1993	1031	521	510	76.0	964	481	483	60.0	1003	503	500	43.0
1992	1025	516	509	74.0	961	479	482	57.0	1001	501	500	42.0
1991	1007	508	499	75.0	952	474	478	57.0	999	500	499	42.0
1990	999	498	501	73.0	948	470	478	55.0	1001	501	500	40.0

The score for the average WCPSS student compared well to students in other similar large school districts in other states as illustrated in Table 2. While WCPSS exceeded several districts, the average score was lower than the average score in Fairfax County, Virginia.

**Table 2: Comparison of Wake to Similar Large Urban/Suburban Districts**

1999-00 SAT Scores	Verbal	Math	Total	Part. Rate
Wake County, NC	522	539	1061	79.3
Charlotte-Mecklenburg, NC	492	497	989	71.9
Gwinnett County, GA	504	522	1026	72.0
Anne Arundel County, MD	520	531	1051	50.0
Fairfax County, VA	542	556	1098	76.0
Virginia Beach, VA	502	493	995	65.0
Cobb County, GA	516	516	1032	79.0

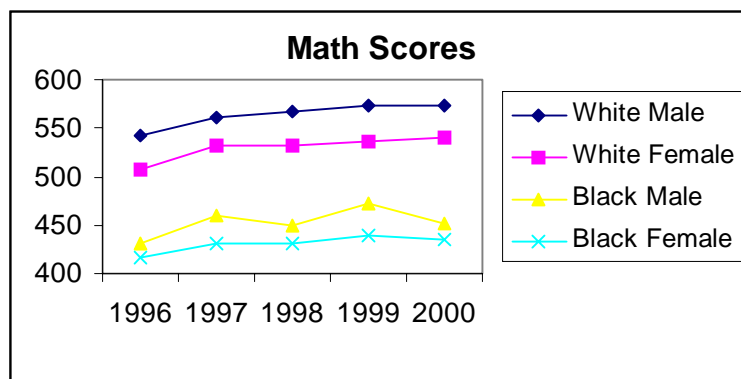
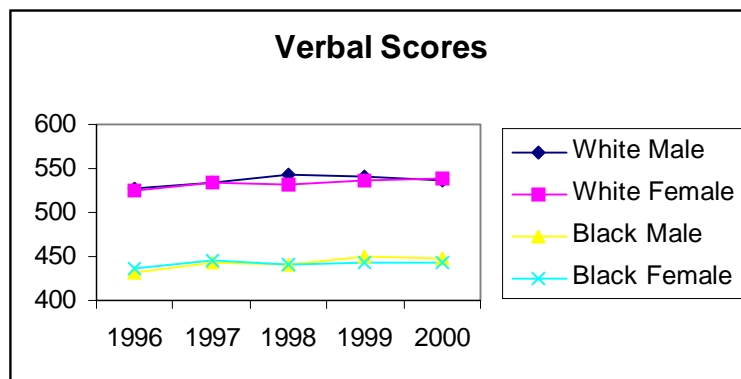
Last year, WCPSS had the third highest score of districts across the state. This year WCPSS ranked second. Chapel Hill-Carrboro continues to lead NC districts with a score of 1175.

**Table 3: Top NC District Scores**

System	2000	1999
Asheville City	1038	1069
Buncombe County	1059	1056
Chapel Hill	1175	1059
Hickory	1058	1034
WCPSS	1061	1059

SAT information can be disaggregated in many ways as shown in Tables 7 and 8 in the appendix to this report. Tables 4 and 5 show that significant gaps continue to exist between the average scores of males and females and Black and White students. The pattern can be seen nationally, statewide, countywide, and at each WCPSS high school. As shown in Figure 2, the gap between Black and White students has changed little during the past five years. While there is almost no difference between male and female scores on the Verbal test, scores on the mathematics test show a persistent pattern of average scores for males exceeding average scores for females.

**Figure 2: Disaggregated WCPSS SAT Scores Over Time**



**Table 4: 1999-2000 Disaggregated Average SAT Scores for Large Urban Districts**

SYSTEM	TOTAL			BLACK			WHITE			FEMALE			MALE			
	%	V	M	T	V	M	T	V	M	T	V	M	T	V	M	T
USA	44	505	514	1019	434	426	860	528	530	1058	504	498	1002	507	533	1040
NC	64	492	496	988	419	416	835	515	520	1035	492	484	976	493	512	1005
Wake County	79.2	522	539	1061	444	442	886	538	555	1093	521	524	1045	523	558	1081
Durham	75.5	494	500	994	430	431	861	541	546	1087	489	484	973	499	517	1016
Guilford	73.8	495	504	999	433	428	861	523	532	1055	496	492	988	494	517	1011
Winston-Salem/Forsyth	68.9	501	502	1003	428	427	855	530	533	1063	501	490	991	500	516	1016

**Table 5: WCPSS Disaggregated Results by School**

SCHOOL	%	TOTAL			ETHNICITY						GENDER					
		V	M	T	BLACK			WHITE			MALE			FEMALE		
		V	M	T	V	M	T	V	M	T	V	M	T	V	M	T
Apex	85.9%	526	551	1077	434	465	899	530	554	1084	531	572	1103	523	535	1058
Athens	82.8%	523	550	1073	450	449	899	538	562	1100	523	567	1090	524	534	1058
Broughton	78.6%	526	551	1077	468	443	911	534	564	1098	536	572	1108	517	533	1050
Cary	79.4%	525	544	1069	481	461	942	543	554	1097	522	562	1084	528	528	1056
East Wake	68.7%	470	487	957	404	430	834	486	504	990	452	488	940	485	487	972
Enloe	88.1%	580	577	1157	476	454	930	612	612	1224	580	592	1172	581	565	1146
Fuquay	71.1%	497	505	1002	391	396	787	518	524	1042	496	520	1016	499	493	992
Garner	64.5%	488	500	988	419	413	832	511	528	1039	499	528	1027	481	481	962
Leesville	86.9%	539	557	1096	445	451	896	545	561	1106	536	579	1115	541	535	1076
Millbrook	76.2%	515	530	1045	449	449	898	544	563	1107	516	554	1070	513	510	1023
Sanderson	82.5%	518	552	1070	447	461	908	544	567	1111	516	576	1092	519	535	1054
SE Raleigh	73.8%	500	509	1009	434	448	882	551	553	1104	507	520	1027	494	499	993
Wake Forest	76.4%	500	517	1017	449	435	884	514	534	1048	503	523	1026	496	509	1005
USA	44.0%	505	514	1019	434	426	860	528	530	1058	507	533	1040	504	498	1002
NC	64.0%	492	496	988	419	416	835	515	520	1035	493	512	1005	492	484	976
Wake County	79.2%	522	539	1061	444	442	886	538	555	1093	523	558	1081	521	524	1045

V= Verbal, M= Math, T= Total, %= of Senior Class Taking Test

**Table 6: Wake County Public School System School-by-School SAT 1997-2000 Scores**

	1999-00				1998-99				1997-98				1996-97			
	Part.	Verbal	Math	Total	Part.	Verbal	Math	Total	Part.	Verbal	Math	Total	Part.	Verbal	Math	Total
USA	44.0%	505	514	1019	43.0%	505	511	1016	43.0%	505	512	1017	42.0%	505	511	1016
NC	64.0 %	492	496	988	61.0%	493	493	986	62.0%	490	492	982	59.0%	490	488	978
Wake County	79.2%	522	539	1061	76.3%	522	537	1059	75.6%	521	531	1052	73.6%	518	529	1047
Apex	85.9%	526	551	1077	83.1%	530	552	1082	78.6%	541	558	1099	78.6%	531	546	1077
Athens	82.8%	523	550	1073	79.0%	515	535	1050	76.5%	513	537	1050	72.4%	503	520	1023
Broughton	78.6%	526	551	1077	81.7%	528	549	1077	82.7%	534	550	1084	82.3%	529	543	1072
Cary	79.4%	525	544	1069	83.1%	524	541	1065	76.2%	522	528	1050	75.5%	515	518	1033
East Wake	68.7%	470	487	957	67.0%	476	486	962	67.9%	470	485	955	67.1%	480	490	970
Enloe	88.1%	580	577	1157	86.9%	581	585	1166	86.7%	562	565	1127	81.9%	569	567	1136
Fuquay	71.1%	497	505	1002	62.0%	494	496	990	54.4%	489	489	978	68.8%	490	501	991
Garner	64.5%	488	500	988	58.1%	482	501	983	57.4%	492	506	998	54.3%	487	500	987
Leesville	86.9%	539	557	1096	83.6%	536	549	1085	85.7%	538	545	1083	81.3%	528	545	1073
Millbrook	76.2%	515	530	1045	74.7%	513	519	1032	73.1%	502	509	1011	72.7%	518	523	1041
Sanderson	82.5%	518	552	1070	80.8%	514	554	1068	78.6%	514	525	1039	75.6%	518	543	1061
SE Raleigh	73.8%	500	509	1009	66.4%	492	505	997	NA	NA	NA	NA	NA	NA	NA	NA
Wake Forest	76.4%	500	517	1017	79.5%	511	517	1028	72.7%	517	522	1039	76.6%	508	516	1024

Part. signifies participation rate.

As shown above, total scores for eight of Wake County’s high schools improved over the 1998-99 scores, while scores at five schools fell. There were six schools that gained 10 or more points over 1998-99; Athens High School led this group with an increase of 23 points. Participation rates increased at ten schools and declined at three.

Appendix  
1999-00 SAT Scores  
School System Report  
Verbal

Table 7

	SYSTEM			U.S.		GAP	
	N	Average	%	Average	%	From U.S.	
<b>All Students</b>	3860	522	100	505	100	17	
<b>Family Income</b>							
Less Than \$10,000	34	427	1	425	4	2	
\$10,000-\$20,000	115	454	4	447	8	7	
\$20,000-\$30,000	205	471	7	471	10	0	
\$30,000-\$40,000	269	487	9	490	12	-3	
\$40,000-\$50,000	251	503	9	503	10	0	
\$50,000-\$60,000	278	519	9	511	11	8	
\$60,000-\$70,000	294	528	10	517	9	11	
\$70,000-\$80,000	319	541	11	524	8	17	
\$80,000-\$100,000	466	539	16	536	10	3	
More than \$100,000	703	551	24	558	16	-7	
No Response	926						
<b>Parent Education Level</b>							
No High School Diploma	28	410	1	413	4	-3	
High School Diploma	752	478	22	472	33	6	
Associate's Degree	291	497	9	488	9	9	
Bachelor's Degree	1299	522	39	525	29	-3	
Graduate Degree	1001	567	30	558	25	9	
<b>High School Grade Point Average</b>							
A+	346	626	10	610	7	16	
A	467	581	14	567	16	14	
A-	510	551	15	540	17	11	
B	1464	502	43	482	47	20	
C	590	446	17	428	12	18	
D,E, or F	25	403	1	405	0	-2	
No Response	458						
<b>High School Rank</b>							
Top Tenth	512	614	17	589	22	25	
Second Tenth	562	556	19	528	23	28	
Second Fifth	785	519	26	493	27	26	
Third Fifth	931	478	31	455	23	23	
Fourth Fifth	173	454	6	425	4	29	
Fifth Fifth	33	394	1	408	1	-14	
No Response	864						

<sup>1</sup>Participation rate is calculated by dividing the number of students who took the SAT by the size of the 12<sup>th</sup> grade class at the end of the eighth month of the senior year.

Appendix  
1999-00 SAT Scores  
School System Report  
Math

Table 8

	SYSTEM			U.S.		GAP	
	N	Average	%	Average	%		From U.S.
<b>All Students</b>	3860	539	100	514	100		25
<b>Family Income</b>							
Less Than \$10,000	34	462	1	447	4		15
\$10,000-\$20,000	115	473	4	460	8		13
\$20,000-\$30,000	205	488	7	478	10		10
\$30,000-\$40,000	269	496	9	493	12		3
\$40,000-\$50,000	251	515	9	505	10		10
\$50,000-\$60,000	278	530	9	515	11		15
\$60,000-\$70,000	294	538	10	522	9		16
\$70,000-\$80,000	319	557	11	530	8		27
\$80,000-\$100,000	466	560	16	543	10		17
More than \$100,000	703	578	24	571	16		7
No Response	926						
<b>Parent Education Level</b>							
No High School Diploma	28	449	1	442	4		7
High School Diploma	752	494	22	477	33		17
Associate's Degree	291	505	9	491	9		14
Bachelor's Degree	1299	541	39	533	29		8
Graduate Degree	1001	588	30	566	25		22
<b>High School Grade Point Average</b>							
A+	346	659	10	628	7		31
A	467	609	14	582	16		27
A-	510	580	15	553	17		27
B	1464	518	43	486	47		32
C	590	445	17	426	12		19
D,E, or F	25	402	1	406	0		-4
No Response	458						
<b>High School Rank</b>							
Top Tenth	512	650	17	608	22		42
Second Tenth	562	584	19	543	23		41
Second Fifth	785	539	26	500	27		39
Third Fifth	931	486	31	453	23		33
Fourth Fifth	173	439	6	419	4		20
Fifth Fifth	33	409	1	401	1		8
No Response	864						

<sup>1</sup>Participation rate is calculated by dividing the number of students who took the SAT by the size of the 12<sup>th</sup> grade class at the end of the eighth month of the senior year.