# **Subgroup Achievement and Gap Trends — South Carolina**

K-12 enrollment — 707,739

The raw data used to develop these state profiles, including data for additional grade levels and years before 2002, can be found on the CEP Web site at <a href="www.cep-dc.org">www.cep-dc.org</a>. Click on the link on the left labeled State Testing Data. In the list of results that appears, look for the most recent report on student achievement since 2002. Below the name of the report, click on the link for State Profiles and Worksheets. Scroll down the page until you reach the list of states. Click on the Worksheet link for proficiency data or scale score data for a particular state.

### Subgroup Achievement and Gap Trends — Key Findings

**Summary.** South Carolina introduced new tests in grades 3-8, so trend data that include 2009 are not available. Progress in narrowing achievement gaps at grade 10 was mixed. Comparable data were available for 2004-2009 at grade 10.

• **Mixed gap trends.** In reading most gaps narrowed using percentages proficient and mean (average) scores at grade 10. Gaps in 10<sup>th</sup> grade reading widening between low-income and non-low-income students as well as between boys and girls according to the percentages proficient, however, means scores for these subgroups showed more positive trends. Gap trends were also mixed in 10<sup>th</sup> grade math.

#### **Data Limitations**

Years of comparable percentage proficient data 2001 through 2008, grades 3 through 8 (new assessment in 2009)

2004 through 2009, grade 10

Years of comparable mean scale score data 2001 through 2008, grades 3 through 8 (new assessment in 2009)

2004 through 2009, grade 10

comparison groups 2001 through 2008 for grades 3 through 8 and

2004 through 2009 for grade 10

#### **Test Characteristics**

The characteristics highlighted below are for the state reading and mathematics tests used for accountability under the No Child Left Behind Act (NCLB).

Test(s) used for NCLB accountability

Palmetto Assessment of State Standards (PASS): grades 3–8 –

beginning Spring 2009

Palmetto Achievement Challenge Test (PACT), grades 3-8- last

administered Spring 2008

High School Assessment Program (HSAP), grade 10

South Carolina Alternate Assessment (SC-Alt) for students with significant cognitive disabilities in grades 3–8 and 10

Grades tested for NCLB accountability 3–8, 10

State labels for achievement levels SC uses four achievement levels: Below basic, Basic, Proficient, and

Advanced. For our analyses we treated Basic as Basic, Proficient

as Proficient, and Advanced as Advanced.

High school NCLB test also used as an exit exam? Yes

First year test used 1999 PACT; 2009 PASS

2004 HSAP

Time of test administration Spring (PACT)

Fall and spring (HSAP, with summer retest)

Major changes in testing system (2002–present) 2004: HSAP introduced

2007: New alternate assessment (SC-Alt) introduced for students with

significant cognitive disabilities, replaced previous alternate

assessments

2009: New testing system, PASS, implemented for grades 3-8

## Achievement by Subgroup — Trends at the Middle School Level

**Note:** The tables in this profile of subgroup achievement and gap trends begin with table 7. Tables 1 through 6 can be found in the companion state profile of general achievement trends.

Table SC-7. Percentages of grade 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in reading

_				Reporti	ing year				Average yearly					
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>					
·				All tested s	tudents				·					
Advanced	5%	2%	4%	6%	3%	4%	6%		NA					
Proficient-and-above	27%	21%	26%	30%	25%	25%	28%		NA					
Basic-and-above	70%	67%	73%	75%	73%	71%	71%		NA					
White														
Advanced	7%	4%	6%	9%	5%	6%	9%		NA					
Proficient-and-above	38%	30%	37%	41%	34%	34%	39%		NA					
Basic-and-above	82%	79%	84%	85%	83%	82%	82%		NA					
Basic-and-above 82% 79% 84% 85% 83% 82% 82%  African American														
Advanced	1%	0%	1%	2%	1%	1%	2%		NA					
Proficient-and-above	11%	8%	12%	14%	13%	12%	13%		NA					
Basic-and-above	53%	50%	59%	61%	60%	58%	57%		NA					
				Latin	0									
Advanced	3%	1%	2%	2%	1%	1%	2%		NA					
Proficient-and-above	20%	12%	15%	17%	17%	15%	18%		NA					
Basic-and-above	61%	48%	55%	57%	61%	60%	59%		NA					
				Asia	n									
Advanced	17%	8%	10%	14%	8%	9%	18%		NA					
Proficient-and-above	47%	35%	41%	48%	44%	47%	50%		NA					
Basic-and-above	85%	76%	85%	84%	86%	86%	84%		NA					
·				Native Am	erican <sup>2</sup>				•					
Advanced	2%	1%	3%	5%	2%	1%	7%		NA					
Proficient-and-above	23%	16%	24%	32%	24%	18%	25%		NA					
Basic-and-above	65%	63%	72%	76%	78%	67%	68%		NA					

Table reads: The percentage of white 8<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 7% in 2002 to 9% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<sup>&</sup>lt;sup>1</sup>Averages are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table SC-8. Percentage of grade 8 students by demographic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in reading

			Average yearly												
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>						
				All tested s	tudents										
Advanced	5%	2%	4%	6%	3%	4%	6%		NA						
Proficient-and-above	27%	21%	26%	30%	25%	25%	28%		NA						
Basic-and-above	70%	67%	73%	75%	73%	71%	71%		NA						
				Low-income	students										
Advanced															
Proficient-and-above	12%	9%	12%	16%	13%	13%	14%		NA						
Basic-and-above	55%	52%	61%	63%	61%	59%	58%		NA						
asic-and-above 55% 52% 61% 63% 61% 59% 58%  Students with disabilities <sup>3</sup>															
Advanced	0%	0%	0%	0%	0%	0%	0%		NA						
Proficient-and-above	3%	2%	4%	5%	2%	2%	3%		NA						
Basic-and-above	29%	28%	36%	35%	29%	26%	26%		NA						
			E	English languag	ge learners <sup>3</sup>										
Advanced	1%	0%	1%	1%	1%	1%	2%		NA						
Proficient-and-above	5%	2%	6%	5%	8%	11%	15%		NA						
Basic-and-above	35%	12%	29%	32%	42%	50%	52%		NA						
<del>-</del>			<u> </u>	Fema	le	<u>,                                      </u>	<u> </u>								
Advanced	6%	3%	5%	8%	5%	5%	8%		NA						
Proficient-and-above	31%	25%	31%	35%	32%	31%	34%		NA						
Basic-and-above	74%	73%	79%	80%	79%	78%	77%		NA						
				Male	)										
Advanced	3%	2%	3%	4%	2%	2%	4%		NA						
Proficient-and-above	23%	16%	21%	24%	18%	19%	22%		NA						
Basic-and-above	65%	61%	68%	70%	66%	65%	65%		NA						

Table reads: The percentage of low-income 8<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 1% in 2002 to 2% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<sup>&</sup>lt;sup>1</sup>Averages are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>&</sup>lt;sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Table SC-9. Percentages of grade 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

_			_ Average yearly											
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>					
				All tested s	tudents									
Advanced	7%	6%	8%	8%	9%	7%	7%		NA					
Proficient-and-above	19%	20%	22%	23%	22%	20%	21%		NA					
Basic-and-above	62%	67%	68%	66%	65%	68%	70%		NA					
White														
Advanced														
Proficient-and-above	28%	29%	32%	34%	32%	29%	30%		NA					
Basic-and-above	75%	80%	79%	79%	77%	80%	81%		NA					
sasic-and-above 75% 80% 79% 79% 77% 80% 81%  African American														
Advanced	1%	1%	2%	2%	2%	1%	2%		NA					
Proficient-and-above	6%	7%	9%	9%	8%	7%	8%		NA					
Basic-and-above	44%	49%	51%	50%	49%	52%	55%		NA					
				Latin	0									
Advanced	5%	3%	5%	4%	5%	3%	3%		NA					
Proficient-and-above	13%	13%	15%	14%	15%	13%	14%		NA					
Basic-and-above	55%	53%	57%	55%	57%	60%	63%		NA					
<del>.</del>				Asia	n				<u> </u>					
Advanced	27%	25%	23%	21%	30%	23%	22%		NA					
Proficient-and-above	48%	44%	47%	51%	51%	47%	47%		NA					
Basic-and-above	86%	86%	89%	85%	86%	88%	89%		NA					
				Native Am	erican <sup>2</sup>									
Advanced	5%	5%	5%	8%	9%	5%	7%		NA					
Proficient-and-above	15%	17%	22%	23%	19%	16%	21%		NA					
Basic-and-above	59%	66%	65%	67%	67%	68%	67%		NA					

Table reads: The percentage of white 8<sup>th</sup> graders who scored at the advanced level on the state math test was 10% in 2002 and 11% in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<sup>&</sup>lt;sup>1</sup>Averages are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table SC-10. Percentage of grade 8 students by demographic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

_			_ Average yearly											
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>					
				All tested s	tudents									
Advanced	7%	6%	8%	8%	9%	7%	7%		NA					
Proficient-and-above	19%	20%	22%	23%	22%	20%	21%		NA					
Basic-and-above	62%	67%	68%	66%	65%	68%	70%		NA					
				Low-income	students									
Advanced	anced 2% 2% 2% 3% 3% 2% 2%													
Proficient-and-above	7%	8%	10%	11%	11%	9%	10%		NA					
Basic-and-above	46%	53%	54%	54%	53%	55%	58%		NA					
				Students with o	disabilities <sup>3</sup>									
Advanced	1%	1%	1%	1%	1%	1%	1%		NA					
Proficient-and-above	3%	3%	4%	4%	3%	2%	3%		NA					
Basic-and-above	28%	35%	33%	30%	27%	28%	31%		NA					
			E	English langua	ge learners <sup>3</sup>									
Advanced	3%	3%	4%	3%	7%	3%	3%		NA					
Proficient-and-above	10%	8%	11%	9%	15%	12%	14%		NA					
Basic-and-above	41%	31%	44%	40%	56%	54%	60%		NA					
<u> </u>				Fema	le									
Advanced	6%	5%	8%	8%	9%	6%	6%		NA					
Proficient-and-above	19%	19%	22%	23%	22%	19%	20%		NA					
Basic-and-above	63%	67%	69%	68%	67%	70%	71%		NA					
				Male	)									
Advanced	8%	7%	9%	8%	10%	7%	8%		NA					
Proficient-and-above	20%	21%	23%	24%	22%	21%	22%		NA					
Basic-and-above	62%	67%	67%	65%	64%	66%	69%		NA					

Table reads: The percentage of low-income 8<sup>th</sup> graders who scored at the advanced level on the state math test was 2% in 2002 and in 2008. The average annual percentage point gain was not calculated because the trend line ended before 2009.

<sup>&</sup>lt;sup>1</sup>Averages are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>&</sup>lt;sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

## **Achievement by Subgroup — Gap Trends (Percentages Proficient)**

### Table SC-11. Subgroup achievement trends in reading by percentages proficient

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group.

If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

			Grad	de 4				Grade	8		Grade 10					
Subgroup	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	
All tested students	02-08	34%	46%	NA		02-08	27%	28%	NA		04-09	61%	50%	-2.2		
White	02-08	46%	58%	NA		02-08	38%	39%	NA		04-09	75%	64%	-2.3		
African American	02-08	17%	28%	NA	NA	02-08	11%	13%	NA	NA	04-09	41%	31%	-2.0	L	
Latino Asian	02-08 02-08	25% 50%	33% 67%	NA NA	NA NA	02-08 02-08	20% 47%	18% 50%	NA NA	NA NA	04-09 04-09	45% 71%	38% 67%	-1.3 -0.9	L	
Native American	02-08	29%	41%	NA	NA	02-08	23%	25%	NA	NA	04-09	57%	41%	-3.1 <sup>2</sup>	S	
Not low-income	02-08	50%	63%	NA		02-08	39%	42%	NA		04-09	73%	65%	-1.5		
Low-income	02-08	19%	31%	NA	NA	02-08	12%	14%	NA	NA	04-09	41%	32%	-1.8	S	
Not disabled	06-08	45%	49%	NA		06-08	27%	30%	NA		06-09	63%	55%	-2.4		
Students with disabilities <sup>3</sup>	06-08	16%	16%	NA	NA	06-08	2%	3%	NA	NA	06-09	11%	9%	-0.5	L	
Not ELLs	06-08	42%	46%	NA		06-08	25%	28%	NA		06-09	57%	51%	-2.0		
English language learners³	06-08	25%	33%	NA	NA	06-08	8%	15%	NA	NA	06-09	36%	27%	-2.8	S	
Female	02-08	38%	52%	NA		02-08	31%	34%	NA		04-09	66%	55%	-2.2		
Male	02-08	29%	40%	NA	NA	02-08	23%	22%	NA	NA	04-09	57%	46%	-2.3	S	

Table reads: In 2002, 46% of white 4<sup>th</sup> graders and 17% of African American 4<sup>th</sup> graders scored at the proficient level on the state reading test. In 2008, 58% of white 4<sup>th</sup> graders and 28% of African American 4<sup>th</sup> graders scored at the proficient level in reading. Average annual percentage point gains were not calculated because the trend lines ended before 2009.

<sup>&</sup>lt;sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>&</sup>lt;sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

#### Table SC-12. Subgroup achievement trends in mathematics by percentages proficient

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group.

If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

			Grac	de 4				Grade	8		Grade 10					
Subgroup	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	
All tested students	02-08	36%	42%	NA		02-08	19%	21%	NA		04-09	55%	51%	-0.8		
White African	02-08	50%	56%	NA		02-08	28%	30%	NA		04-09	70%	65%	-1.0		
American	02-08	18%	22%	NA	NA	02-08	6%	8%	NA	NA	04-09	33%	31%	-0.4	L	
Latino	02-08	30%	31%	NA	NA	02-08	13%	14%	NA	NA	04-09	44%	45%	0.2	L	
Asian	02-08	64%	67%	NA	NA	02-08	48%	47%	NA	NA	04-09	81%	79%	-0.5	L	
Native American	02-08	35%	40%	NA	NA	02-08	15%	21%	NA	NA	04-09	55%	45%	-2.0 <sup>2</sup>	S	
Not low- income	02-08	53%	60%	NA		02-08	29%	32%	NA		04-09	66%	65%	-0.3		
Low-income	02-08	22%	27%	NA	NA	02-08	7%	10%	NA	NA	04-09	36%	35%	-0.3	E	
Not disabled	06-08	45%	46%	NA		06-08	24%	23%	NA		06-09	59%	56%	-0.9		
Students with disabilities <sup>3</sup>	06-08	18%	16%	NA	NA	06-08	3%	3%	NA	NA	06-09	12%	12%	0.1	L	
Not ELLS	06-08	42%	42%	NA		06-08	22%	21%	NA		06-09	53%	51%	-0.6		
English language learners <sup>3</sup>	06-08	36%	33%	NA	NA	06-08	15%	14%	NA	NA	06-09	43%	40%	-0.9	S	
Female	02-08	35%	41%	NA		02-08	19%	20%	NA		04-09	56%	51%	-0.8		
Male	02-08	37%	42%	NA	NA	02-08	20%	22%	NA	NA	04-09	55%	50%	-1.0	S	

Table reads: In 2002, 50% of white 4<sup>th</sup> graders and 18% of African American 4<sup>th</sup> graders scored at the proficient level on the state math test. In 2008, 56% of white 4<sup>th</sup> graders and 22% of African American 4<sup>th</sup> graders scored at the proficient level in math. Average annual percentage point gains were not calculated because the trend lines ended before 2009.

<sup>&</sup>lt;sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>&</sup>lt;sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

# **Achievement by Subgroup — Gap Trends (Mean Scale Scores)**

### Table SC-13. Achievement gap trends in reading by mean scale scores

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group. MSS = mean scale score. SD = standard deviation. If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

				Gra	de 4				Grad	e 8				Grade 1	0	
Subgroup	Statistic	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group
All tested students	MSS	02-08	404.7	407.1	NA	1 0 1	02-08	803.4	804.2	NA	1 0 1	04-09	226.3	222.3	-0.8	1 0
	SD	02-08	12.2	14.5			02-08	14.2	14.3			04-09	23.6	23.4		
White	MSS	02-08	408.5	411.2	NA		02-08	807.9	808.5	NA		04-09	233.9	229.4	-0.9	
vviille	SD	02-08	408.5 11.8	13.7	NA		02-08	13.2	13.6	NA		04-09	233.9	229.4	-0.9	
African American	MSS	02-08	399.7	401.2	NA	NA	02-08	797.0	798.5	NA	NA	04-09	21.5	212.9	-0.5	L
, in odi , , in on odi	SD	02-08	10.7	13.3	IVA	IVA	02-08	13.1	12.8	IVA	IVA	04-09	21.9	21.2	-0.5	L
Latino	MSS	02-08	402.0	402.0	NA	NA	02-08	799.9	798.9	NA	NA	04-09	217.5	214.9	-0.5	L
	SD	02-08	12.2	15.3			02-08	14.8	15.8			04-09	24.8	23.7		
Asian	MSS	02-08	410.5	414.2	NA	NA	02-08	811.2	811.4	NA	NA	04-09	234.4	232.6	-0.4	L
	SD	02-08	12.5	14.4			02-08	14.6	15.3			04-09	26.0	24.7		
Native American	MSS	02-08	403.9	403.1	NA	NA	02-08	801.5	800.9	NA	NA	04-09	225.3	219.7	-1.12	S
	SD	02-08	13.7	14.2			02-08	12.6	13.4			04-09	21.9	22.4		
Not low-income	MSS	02-08	400 /	410.0	NIA		02-08	000.1	000 5	NIA		04-09	222.7	220.2	0.5	
Not low-income	SD	02-08	409.6 11.7	412.8 13.3	NA		02-08	808.1 13.3	809.5 13.5	NA		04-09	232.7 21.9	230.3 22.0	-0.5	
Low-income	MSS	02-08	400.4	402.2	NA	NA	02-08	797.4	799.0	NA	NA	04-09	21.9	213.2	-0.5	E
LOW INCOME	SD	02-08	10.9	13.7	IVA	IVA	02-08	13.0	13.2	IVA	INA	04-09	22.3	213.2	-0.5	L
		02 00	10.7	13.7			02 00	13.0	13.2			0107	22.5	21.3		
Not disabled	MSS	06-08	408.3	408.8	NA		06-08	804.9	805.8	NA		06-09	229.0	225.9	-1.0	
	SD	06-08	12.8	13.3			06-08	12.6	13.4			06-09	20.1	21.2		
Students with disabilities <sup>3</sup>	MSS	06-08	396.1	393.4	NA	NA	06-08	788.7	788.1	NA	NA	06-09	195.2	195.1	0.0	L
	SD	06-08	13.7	16.1			06-08	13.2	13.4			06-09	21.9	21.3		
Not ELLs	MSS	06-08	407.2	407.4	NA		06-08	803.8	804.5	NA		06-09	225.1	222.7	-0.8	
NOT LLLS	SD	06-08	13.3	407.4 14.4	IVA		06-08	13.2	14.2	NA		06-09	225.1	23.3	-0.8	
English language learners <sup>3</sup>	MSS	06-08	400.8	401.6	NA	NA	06-08	794.9	796.6	NA	NA	06-07	213.8	208.9	-1.6	S
English language learners	SD	06-08	14.7	15.8	INA	IVA	06-08	16.6	16.1	IVA	IVA	06-09	25.9	23.4	-1.0	3
				10.0				10.0	10.1				20.7	20.7		
Female	MSS	02-08	406.4	409.4	NA		02-08	805.4	806.9	NA		04-09	229.4	225.1	-0.9	
	SD	02-08	11.9	13.9			02-08	13.7	13.7			04-09	22.1	22.3		
Male	MSS	02-08	403.0	404.8	NA	NA	02-08	801.5	801.7	NA	NA	04-09	223.4	219.5	-0.8	L
	SD	02-08	12.2	14.7			02-08	14.4	14.5			04-09	24.5	24.1		

Table reads: In 2002, the mean scale score on the state 4<sup>th</sup> grade reading test was 408.5 for white students and 399.7 for African American students. In 2008, the mean scale score in 4<sup>th</sup> grade reading was 411.2 for white students and 401.2 for African American students. Average annual mean scale score gains were not calculated because the trend lines ended before 2009.

Note: The Palmetto Achievement Challenge Test (PACT) for grade 4 is scaled with a mean of 400 and the PACT for grade 8 is scaled with a mean of 800. The High School Assessment Program (HSAP) for grade 10 is scored on a scale of 100-320.

<sup>&</sup>lt;sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>&</sup>lt;sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

#### Table SC-14. Achievement gap trends in mathematics by mean scale scores

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group. MSS = mean scale score. SD = standard deviation. If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

				Gra	de 4				Grad	e 8		Grade 10					
Subgroup	Statistic	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	
All tested students	MSS	02-08	409.3	411.8	NA	' - '	02-08	804.7	806.5	NA	1 0 1	04-09	223.2	223.6	0.1	1 0 1	
	SD	02-08	16.3	16.7			02-08	14.1	12.7			04-09	26.7	29.5			
White	MSS	02-08	414.8	417.4	NA		02-08	809.1	810.4	NA		04-09	231.9	232.8	0.2		
	SD	02-08	15.0	15.4			02-08	13.6	12.5			04-09	25.9	29.6			
African American	MSS	02-08	401.8	403.8	NA	NA	02-08	798.2	801.1	NA	NA	04-09	210.3	210.5	0.1	S	
	SD	02-08	14.8	15.2			02-08	12.2	10.7			04-09	21.6	23.6			
Latino	MSS	02-08	407.0	407.9	NA	NA	02-08	802.0	803.7	NA	NA	04-09	217.5	219.0	0.3	L	
	SD	02-08	16.1	16.0			02-08	13.3	11.8			04-09	22.5	26.9			
Asian	MSS	02-08	419.7	422.0	NA	NA	02-08	816.1	816.1	NA	NA	04-09	244.4	247.7	0.7	L	
	SD	02-08	16.2	15.8			02-08	14.7	13.4			04-09	31.1	33.5			
Native American	MSS	02-08	408.3	408.8	NA	NA	02-08	803.4	803.7	NA	NA	04-09	224.5	221.5	$-0.6^{2}$	S	
	SD	02-08	16.5	16.5			02-08	12.2	12.6			04-09	28.6	28.8			
Not low-income	MSS	02-08	415.7	418.8	NA		02-08	809.3	811.0	NA		04-09	230.0	233.2	0.6		
	SD	02-08	15.2	15.2			02-08	13.8	12.6			04-09	26.5	29.9			
Low-income	MSS	02-08	403.6	406.1	NA	NA	02-08	798.9	802.1	NA	NA	04-09	211.5	212.5	0.2	S	
	SD	02-08	15.0	15.7			02-08	12.4	11.2			04-09	22.6	24.8			
Not disabled	MSS	06-08	413.1	413.9	NA		06-08	807.6	807.7	NA		06-09	227.5	227.5	0.0		
	SD	06-08	15.2	15.7			06-08	13.7	12.4			06-09	25.3	28.0			
Students with disabilities <sup>3</sup>	MSS	06-08	400.3	398.5	NA	NA	06-08	794.6	795.2	NA	NA	06-09	193.1	193.7	0.2	L	
	SD	06-08	16.5	17.0			06-08	10.5	10.1			06-09	21.8	22.4			
Not ELLs	MSS	06-08	411.6	412.0	NA		06-08	806.6	806.7	NA		06-09	223.4	223.8	0.1		
	SD	06-08	15.9	16.7			06-08	13.9	12.7			06-09	27.3	29.5			
English language learners <sup>3</sup>	MSS	06-08	405.6	408.3	NA	NA	06-08	801.2	803.1	NA	NA	06-09	218.6	216.5	-0.7	S	
	SD	06-08	16.6	16.6			06-08	13.7	12.2			06-09	27.0	26.9			
Female	MSS	02-08	409.1	411.9	NA		02-08	804.8	806.5	NA		04-09	223.5	223.8	0.1		
	SD	02-08	16.0	16.2	14/1		02-08	13.7	12.2	14/1		04-09	24.6	28.1	0.1		
Male	MSS	02-08	409.6	411.8	NA	NA	02-08	804.7	806.7	NA	NA	04-09	223.4	223.4	0.0	S	
	SD	02-08	16.6	17.2	14/1	14/1	02-08	14.6	13.1	1 47 1	1471	04-09	28.6	30.9	0.0	9	

Table reads: In 2002, the mean scale score on the state 4<sup>th</sup> grade math test was 414.8 for white students and 401.8 for African American students. In 2008, the mean scale score in 4<sup>th</sup> grade math was 417.4 for white students and 403.8 for African American students. Average annual mean scale score gains were not

calculated because the trend lines ended before 2009.

Note: The Palmetto Achievement Challenge Test (PACT) for grade 4 is scaled with a mean of 400 and the PACT for grade 8 is scaled with a mean of 800. The High School Assessment Program (HSAP) for grade 10 is scored on a scale of 100-320.

<sup>&</sup>lt;sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>&</sup>lt;sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>&</sup>lt;sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Table SC-15. Numbers of test-takers

				Grade	e 4				Grade	e 8		Grade 10					
Subgroup	Subject	Year span	# of test- takers start year	# of test- takers end year	Change in # of test- takers over time	% of test- takers in subgroup in end year	Year span	# of test- takers start year	# of test- takers end year	Change in # of test- takers over time	% of test- takers in subgroup in end year	Year span	# of test- takers start year	# of test- takers end year	Change in # of test- takers over time	% of test- takers in subgroup in end year	
All tested	Reading	02-08	49,845	50,234	0.8%	100.0%	02-08	48,112	50,395	4.7%	100.0%	04-09	43,779	47,329	8.1%	100.0%	
students	Math	02-08	50,854	51,806	1.9%	100.0%	02-08	48,263	50,654	5.0%	100.0%	04-09	43,629	47,291	8.4%	100.0%	
White	Reading	02-08	27,427	27,537	0.4%	54.8%	02-08	27,523	27,483	-0.1%	54.5%	04-09	25,008	25,817	3.2%	54.5%	
	Math	02-08	27,944	28,201	0.9%	54.4%	02-08	27,579	27,559	-0.1%	54.4%	04-09	24,876	25,742	3.5%	54.4%	
African	Reading	02-08	20,589	18,040	-12.4%	35.9%	02-08	19,013	19,282	1.4%	38.3%	04-09	16,626	18,612	11.9%	39.3%	
American	Math	02-08	21,008	18,754	-10.7%	36.2%	02-08	19,092	19,372	1.5%	38.2%	04-09	16,404	18,614	13.5%	39.4%	
Latina	Reading	02-08	944	2,665	182.3%	5.3%	02-08	726	2,116	191.5%	4.2%	04-09	880	1,908	116.8%	4.0%	
Latino	Math	02-08	962	2,789	189.9%	5.4%	02-08	734	2,176	196.5%	4.3%	04-09	870	1,932	122.1%	4.1%	
Acien	Reading	02-08	436	586	34.4%	1.2%	02-08	438	577	31.7%	1.1%	04-09	493	647	31.2%	1.4%	
Asian	Math	02-08	449	603	34.3%	1.2%	02-08	440	595	35.2%	1.2%	04-09	493	651	32.0%	1.4%	
Native	Reading	02-08	118	112	-5.1%	0.2%	02-08	95	94	-1.1%	0.2%	04-09	76	148	94.7%	0.3%	
American	Math	02-08	121	119	-1.7%	0.2%	02-08	96	95	-1.0%	0.2%	04-09	77	150	94.8%	0.3%	
Low-income	Reading	02-08	26,363	27,231	3.3%	54.2%	02-08	21,222	25,269	19.1%	50.1%	04-09	16,217	21,989	35.6%	46.5%	
Low-income	Math	02-08	27,051	28,461	5.2%	54.9%	02-08	21,349	25,469	19.3%	50.3%	04-09	16,062	21,989	36.9%	46.5%	
Students w/	Reading	06-08	5,248	5,543	5.6%	11.0%	06-08	4,228	4,467	5.7%	8.9%	06-09	5,379	5,509	2.4%	11.6%	
disabilities	Math	06-08	6,599	6,924	4.9%	13.4%	06-08	4,595	4,638	0.9%	9.2%	06-09	5,499	5,482	-0.3%	11.6%	
English	Reading	06-08	1,921	2,522	31.3%	5.0%	06-08	1,356	1,650	21.7%	3.3%	06-09	983	1,317	34.0%	2.8%	
language learners	Math	06-08	2,137	2,672	25.0%	5.2%	06-08	1,498	1,741	16.2%	3.4%	06-09	978	1,349	37.9%	2.9%	
Female	Reading	02-08	24,994	24,740	-1.0%	49.2%	02-08	24,447	25,000	2.3%	49.6%	04-09	22,236	23,766	6.9%	50.2%	
	Math	02-08	25,208	25,251	0.2%	48.7%	02-08	24,428	25,063	2.6%	49.5%	04-09	22,075	23,821	7.9%	50.4%	
Male	Reading	02-08	24,601	25,434	3.4%	50.6%	02-08	23,385	25,307	8.2%	50.2%	04-09	21,083	23,546	11.7%	49.7%	
IVIAIC	Math	02-08	25,349	26,491	4.5%	51.1%	02-08	23,547	25,499	8.3%	50.3%	04-09	20,886	23,453	12.3%	49.6%	

Table reads: In 2002, 27,427 students in the white subgroup took the state 4<sup>th</sup> grade reading test. By 2008, the number of white test-takers had risen to 27,537 students, an increase of 0.4%. In 2008, the white subgroup made up 54.8% of the 50,234 4<sup>th</sup> graders taking the reading test that year.

Note: **Bold** type indicates that the number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data.

### **Key Terms**

Percentage proficient (and above) — The percentage of students in a group who score at or above the cut score for "proficient" performance on the state test used to determine progress under NCLB. The Act requires states to report student test performance in terms of at least three achievement levels: basic, proficient, and advanced. Adequate yearly progress determinations are based on the percentage of students scoring at the proficient level and above.

Percentage basic (and above) — The percentage of students in a group who score at or above the cut score for "basic" performance on the state test used to determine progress under NCLB.

Percentage advanced — The percentage of students in a group who reach or exceed the cut score for "advanced" performance on the state test used to determine progress under NCLB.

Moderate-to-large gain — For the percentage basic, proficient, or advanced, an average gain of 1 or more percentage points per year. For effect size, an average gain of 0.02 or greater per year.

Slight gain — For the percentage basic, proficient, or advanced, an average gain of less than 1 percentage point per year. For effect size, an average gain of less than 0.02 per year.

*Moderate-to-large decline* — For the percentage basic, proficient, or advanced, an average decline of 1 or more percentage points per year. For effect size, an average decline of 0.02 or greater per year.

Slight decline — For the percentage basic, proficient, or advanced, an average decline of less than 1 percentage point per year. For effect size, an average decline of less than 0.02 per year.

Effect size — A statistical tool that conveys the amount of difference between test results using a common unit of measurement which does not depend on the scoring scale for a particular test.

Accumulated annual effect size — The cumulative gain in effect size over a range of years.

*Mean scale score* — The arithmetical average of a group of test scores, expressed on a common scale for a particular state's test. The mean is calculated by adding the scores and dividing the sum by the number of scores.

Standard deviation — A measure of how much test scores tend to deviate from the mean—in other words, how spread out or bunched together test scores are. If students' scores are bunched together, with many scores close to the mean, then the standard deviation will be small. If scores are spread out, with many students scoring at the high or low end of the scale, then the standard deviation will be large.

## **Cautions and Explanations**

Different labels for achievement levels — For consistency, all of the state profiles developed for this report use a common set of labels (basic, proficient, and advanced) for the main achievement levels required by NCLB. In practice, however, some states may use different labels, such as "meets standard" instead of proficient, and some states have established additional achievement levels beyond those required by NCLB.

Different names for subgroups — For the sake of consistency and ease of data tabulation, all of the state profiles developed for this report use a common set of names for the major student subgroups. In practice, however, states use various names for subgroups that may differ from those used here (such as using "Hispanic" instead of "Latino," or "special education students" instead of "students with disabilities"). Moreover, a few states separately track the performance of subgroups not included in the analyses for this report.

Special caution for students with disabilities and English language learners — Trends for students with disabilities and English language learners should be interpreted with caution because changes in federal guidance and state accountability plans may have altered which students in these subgroups are tested for accountability purposes, how they are tested, and when their test scores are counted as proficient under NCLB. These factors could affect the year-to-year comparability of test results.

Inclusion of former English language learners — In many states, the subgroup of English language learners (also known as limited English proficient students) includes students who were formerly English language learners but who have achieved English language proficiency or fluency in the last two years. Federal NCLB regulations permit states to include these formerly ELL students (sometimes referred to as "redesignated fluent English proficient" students) in the ELL subgroup for up to two years for purposes of NCLB accountability.

Limitations of percentage proficient measure — The percentage proficient, the main gauge of student performance under NCLB, can be easily understood and gives a snapshot of how many students have met their state's performance expectations. But it also has several limitations as a measure of student achievement. Users of percentage proficient data should keep in mind these limitations, particularly the following:

- \* "Proficient" means different things across different states. States vary widely in curriculum, learning expectations, and tests, and state tests different considerably in their difficulty and cut scores for proficient performance.
- \* Although this study has taken steps to avoid comparing test data where there have been "breaks" in comparability resulting from new tests, changes in content standards, revised cut scores, or other major changes in testing programs, the year-to-year comparability of test results in the same state may still be affected by less obvious policy and demographic changes.
- \* Changes in student performance may occur that are not reflected in percentage proficient data, such as an increase in the number of students reaching performance levels below and above proficient (such as the basic or advanced levels).
- \* The size of the achievement gaps between various subgroups depends in part on where a state sets its cut score for proficiency. For example, if a proficiency cut score is set so high that almost nobody reaches it or so low that almost everyone reaches it, there will be little apparent achievement gap. By contrast, if the cut score is closer to the mean test score, the gaps between subgroups will be more apparent.

Difficulty of attributing causes — Although the tables in this profile show trends in test scores since the enactment of NCLB, one cannot assume that these trends have occurred because of NCLB. It is always difficult to determine a cause-and-effect relationship between test score trends and any specific education policy or program due to the many federal, state, and local reforms undertaken in recent years and due to the lack of an appropriate "control" group of students not affected by NCLB.