

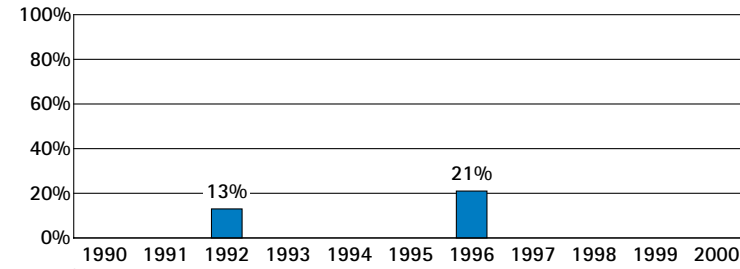
## 1. Improvement Over Time

Have North Carolina's 4th graders improved in mathematics achievement?

Yes. The percentage of North Carolina's public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 13% in 1992, to 21% in 1996.

The Goals Panel has set its performance standard at the two highest levels of achievement – Proficient or Advanced – on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 4th graders at or above Proficient on the NAEP mathematics assessment



Mathematics performance will be tested again in 2000.

## 2. State Comparisons<sup>†</sup>

How did North Carolina compare with other states in 4th grade mathematics achievement in public schools in 1996?

### 4 states had significantly higher<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

### 23 states had similar<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

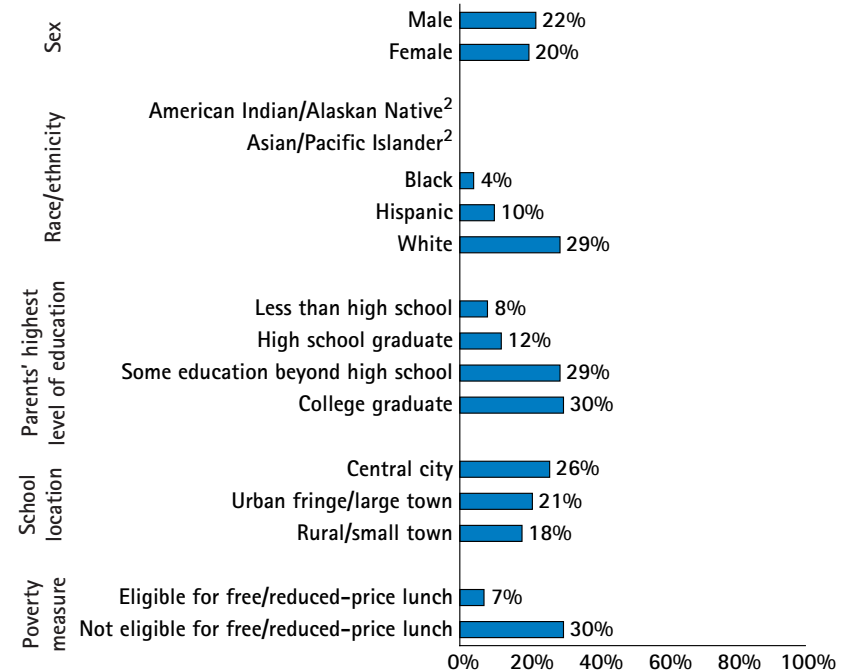
New Jersey, Texas	25%	<b>U.S.,* North Carolina,</b> Alaska, Oregon, <b>21%</b>
Indiana, Massachusetts, Nebraska, North Dakota	24%	Washington
Michigan, Utah, Vermont	23%	Missouri, New York, Pennsylvania
Colorado, Iowa, Maryland, Montana	22%	Virginia, West Virginia, Wyoming
		Tennessee <sup>2</sup>
		17%

### 17 states had significantly lower<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

Rhode Island <sup>2</sup>	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

## 3. Subgroup Performance

What percentages of public school 4th graders in different subgroups<sup>1</sup> in North Carolina were at or above Proficient on the 1996 NAEP mathematics assessment?



<sup>1</sup> Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

<sup>2</sup> Characteristics of the sample do not permit a reliable estimate.

<sup>†</sup> The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

<sup>1</sup> See explanation on pp. 3-4.

<sup>2</sup> State may appear to be out of place; however, statistically, its placement is correct. See pp. 3-4.

\* Figure shown for the U.S. includes both public and nonpublic school data.

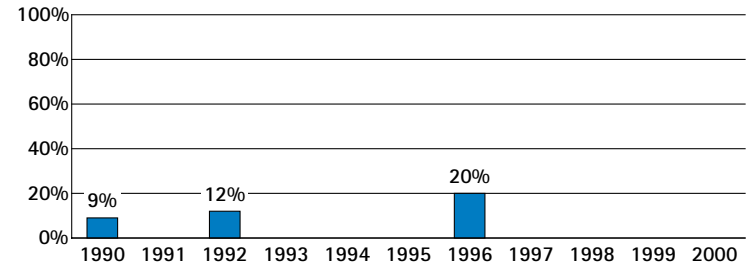
## 1. Improvement Over Time

Have North Carolina's 8th graders improved in mathematics achievement?

Yes. The percentage of North Carolina's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 9% in 1990, to 20% in 1996.

The Goals Panel has set its performance standard at the two highest levels of achievement – Proficient or Advanced – on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 8th graders at or above Proficient on the NAEP mathematics assessment



Mathematics performance will be tested again in 2000.

## 2. State Comparisons<sup>†</sup>

How did North Carolina compare with other states in 8th grade mathematics achievement in public schools in 1996?

### 15 states had significantly higher<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Massachusetts, Michigan	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%		

### 14 states had similar<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

<b>U.S.</b> , <sup>*</sup> Indiana, Maryland, Utah	<b>24%</b>	Delaware	19%
Missouri, New York, Wyoming	22%	Arizona	18%
Texas, Virginia	21%	California, Florida	17%
<b>North Carolina</b> , Rhode Island	<b>20%</b>	Georgia <sup>2</sup>	16%

### 12 states had significantly lower<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

Hawaii, <sup>2</sup> Kentucky <sup>2</sup>	16%	Alabama	12%
Tennessee	15%	Louisiana, Mississippi	7%
New Mexico, South Carolina, West Virginia	14%	Guam	6%
Arkansas	13%	District of Columbia	5%

<sup>†</sup> The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

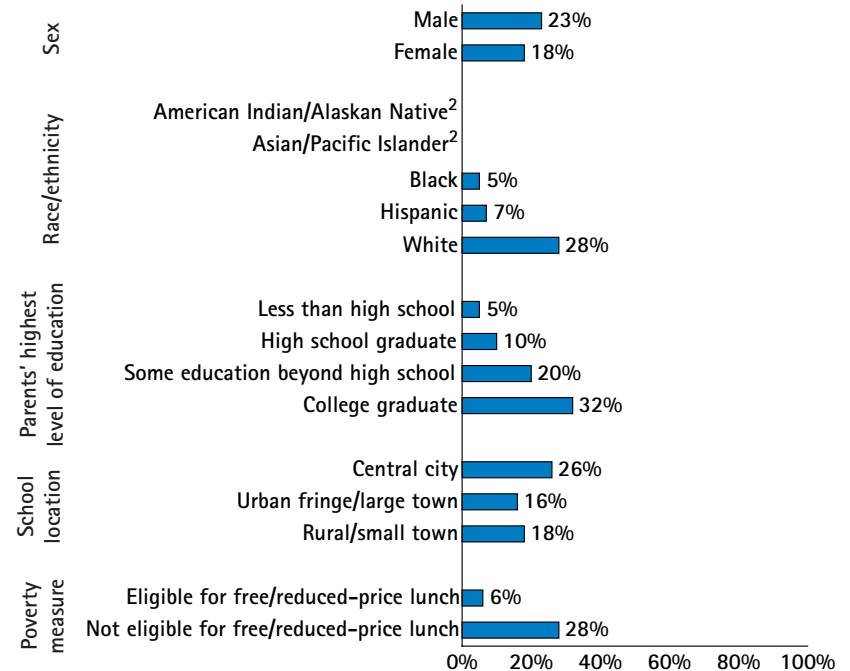
<sup>1</sup> See explanation on pp. 3-4.

<sup>2</sup> State may appear to be out of place; however, statistically, its placement is correct. See pp. 3-4.

\* Figure shown for the U.S. includes both public and nonpublic school data.

## 3. Subgroup Performance

What percentages of public school 8th graders in different subgroups<sup>1</sup> in North Carolina were at or above Proficient on the 1996 NAEP mathematics assessment?



<sup>1</sup> Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

<sup>2</sup> Characteristics of the sample do not permit a reliable estimate.

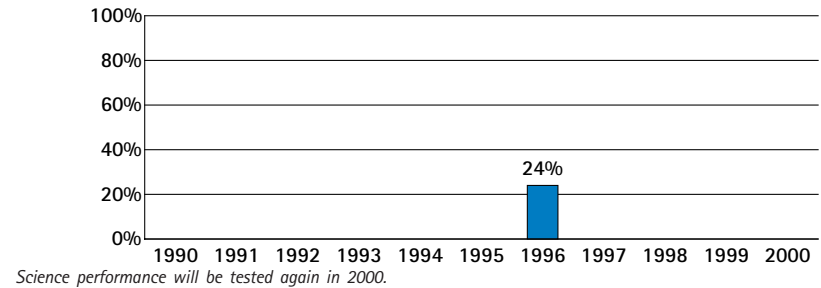
## 1. Improvement Over Time

Have North Carolina's 8th graders improved in science achievement?

In 1996, 24% of North Carolina's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

The Goals Panel has set its performance standard at the two highest levels of achievement – Proficient or Advanced – on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 8th graders at or above Proficient on the NAEP science assessment



## 2. State Comparisons<sup>†</sup>

How did North Carolina compare with other states in 8th grade science achievement in public schools in 1996?

### 17 states had significantly higher<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Vermont, Wyoming	34%
Wisconsin	39%	Colorado, Michigan, Oregon, Utah	32%
Massachusetts, Minnesota	37%	Alaska	31%
Connecticut, Iowa	36%	Indiana	30%
Nebraska	35%	<b>U.S.*</b>	<b>29%</b>

### 16 states had similar<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

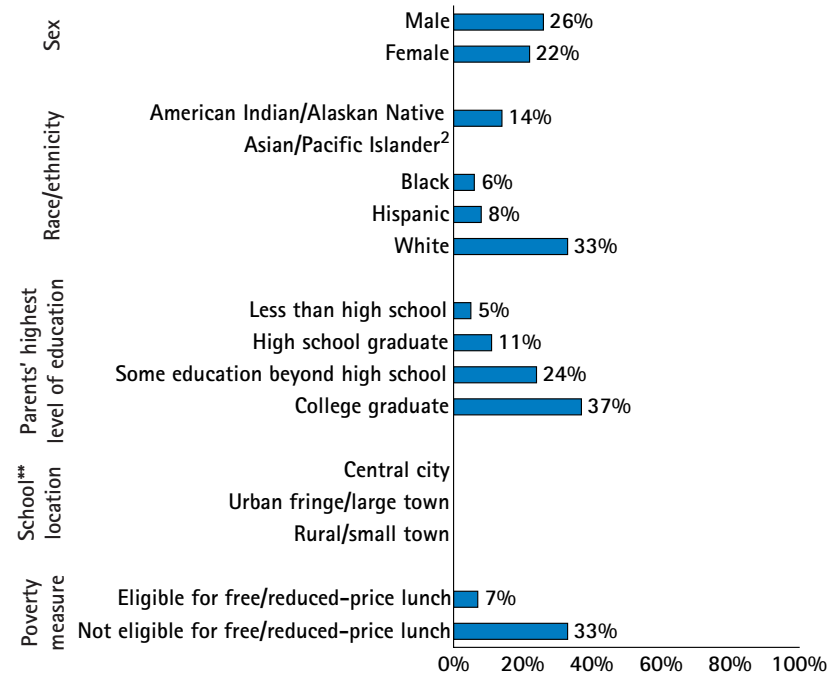
Missouri	28%	Arizona, Kentucky, Texas	23%
New York, Virginia, Washington	27%	Arkansas, Tennessee	22%
Rhode Island	26%	Delaware, Florida, Georgia,	21%
Maryland	25%	West Virginia	
<b>North Carolina</b>	<b>24%</b>	California	20%

### 8 states had significantly lower<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

New Mexico	19%	Louisiana	13%
Alabama	18%	Mississippi	12%
South Carolina	17%	Guam	7%
Hawaii	15%	District of Columbia	5%

## 3. Subgroup Performance

What percentages of public school 8th graders in different subgroups<sup>1</sup> in North Carolina were at or above Proficient on the 1996 NAEP science assessment?



<sup>†</sup> The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

<sup>1</sup> See explanation on pp. 3-4.

\* Figure shown for the U.S. includes both public and nonpublic school data.

<sup>1</sup> Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

<sup>2</sup> Characteristics of the sample do not permit a reliable estimate.

\*\* No school location data for science in 1996.

## Mathematics Grade 8

Forty-one nations<sup>†</sup> participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in North Carolina participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

### 21 nations<sup>†</sup> would be expected to perform significantly higher:<sup>1</sup>

(Australia)	Japan
(Austria)	Korea
Belgium – Flemish <sup>2</sup>	(Netherlands)
(Belgium – French) <sup>2</sup>	Russian Federation
(Bulgaria)	Singapore
Canada	Slovak Republic
Czech Republic	(Slovenia)
France	Sweden
Hong Kong	(Switzerland)
Hungary	(Thailand)
Ireland	

### 15 nations<sup>†</sup> would be expected to perform similarly:<sup>1</sup>

Cyprus	(Lithuania)
(Denmark)	New Zealand
(England)	<b>North Carolina</b>
(Germany)	Norway
(Greece)	(Romania)
Iceland	(Scotland)
(Israel)	Spain
(Latvia – LSS) <sup>3</sup>	<b>United States</b>

### 5 nations<sup>†</sup> would be expected to perform significantly lower:<sup>1</sup>

(Colombia)	Portugal
Iran, Islamic Republic	(South Africa)
(Kuwait)	

<sup>†</sup> The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

<sup>1</sup> See explanation on pp. 3–4.

<sup>2</sup> The Flemish and French educational systems in Belgium participated separately.

<sup>3</sup> Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

## Science Grade 8

Forty-one nations<sup>†</sup> participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in North Carolina participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

### 10 nations<sup>†</sup> would be expected to perform significantly higher:<sup>1</sup>

(Austria)	Japan
(Bulgaria)	Korea
Czech Republic	(Netherlands)
(England)	Singapore
Hungary	(Slovenia)

### 17 nations<sup>†</sup> would be expected to perform similarly:<sup>1</sup>

(Australia)	Norway
Belgium – Flemish <sup>2</sup>	Russian Federation
Canada	(Scotland)
(Germany)	Slovak Republic
Hong Kong	Spain
Ireland	Sweden
(Israel)	(Switzerland)
New Zealand	(Thailand)
<b>North Carolina</b>	<b>United States</b>

### 14 nations<sup>†</sup> would be expected to perform significantly lower:<sup>1</sup>

(Belgium – French) <sup>2</sup>	Iran, Islamic Republic
(Colombia)	(Kuwait)
Cyprus	(Latvia – LSS) <sup>3</sup>
(Denmark)	(Lithuania)
France	Portugal
(Greece)	(Romania)
Iceland	(South Africa)

<sup>†</sup> The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

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