



# New York City and Other Large Cities on National Math Tests: A Comparison 2003-2009

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## **Introduction**

The National Assessment of Educational Progress (NAEP) is a measure of student achievement referred to as the “Nation’s Report Card” and proclaimed by many education experts to be the “gold standard” in educational testing. Since 2003, the United States Department of Education has been administering the Trial Urban District Assessment (TUDA) to large cities across the nation.

The release of the NAEP TUDA 2009 math test results offers new insight into the strengths and weaknesses of our nation’s schools. Using the NAEP results, comparisons can be made between cities and states across the nation, providing an essential point of reference that allows us to better understand the performance of individual cities. This report will review the performance of New York City schools on the NAEP TUDA exam, highlighting the performance of New York City schools relative to other large cities.

There are ten large cities that have been participating in the NAEP TUDA since 2003: Atlanta, Boston, Charlotte, Chicago, Cleveland, DC, Houston, Los Angeles, New York City and San Diego. These cities represent five of the ten largest cities in the United States. In 2003, New York City was ahead of many of these jurisdictions on the NAEP TUDA math exam. This report demonstrates that New York City made progress from 2003-2009 that was comparable to many other cities, preserving their standing in 4<sup>th</sup> grade math. In 8<sup>th</sup> grade math, however, New York City made minimal progress, and fell behind many of the TUDA cities as a result.

## **The Test**

NAEP is administered by the National Department of Education Statistics, which is itself a part of the U.S. Department of Education. By design, the National Assessment of Education Progress (NAEP) provides a common yardstick by which to measure the academic achievement of students across the nation.

The NAEP results are important for several reasons. First, this test provides a valuable additional perspective on student achievement. While many schools focus on preparation for state tests, it is not common practice to prepare students for NAEP tests, which, given the format of the test, many believe to be more difficult to do. Based on this fact, some argue that NAEP results are more likely to reflect actual learning rather than test preparation. Second, in contrast with state tests which change frequently, the NAEP test varies little from year to year. Unlike the New York State exams, both the content and the method of scoring has changed minimally from 2003-2009. This has led Congress and the U.S. Department of Education to rely on NAEP as the primary measure of student achievement over time.

In addition, the NAEP assessment provides insight into how well the State tests are measuring the ability of students. When comparing student performance on the NAEP test and on the New York State tests, there is a sizeable disparity between the achievement levels of students on these exams. The New York State exams place the percent of students at or above proficient in New York City at 85% in 4<sup>th</sup> grade math and

71% in 8<sup>th</sup> grade math in 2009. The NAEP exam indicates that the percentages of students at this level is dramatically smaller, with 35% at or above proficient in 4<sup>th</sup> grade math and 26% at or above proficient in 8<sup>th</sup> grade math. New York City students gained 37 points on New York State tests from 2003-2009 in 8<sup>th</sup> grade math, but only six points on national tests. The NAEP exams and the New York State tests paint very different pictures of student achievement, underscoring the need for the NAEP test as an additional measure.

### **New York City & Other Large Cities**

One of the advantages of the NAEP TUDA is that it allows for comparisons of cities across the nation over time. In this section, the performance of New York City schools on the 4<sup>th</sup> and 8<sup>th</sup> grade NAEP TUDA math exam will be considered alongside their peers in these cities across the nation. First, the performance of New York City schools will be considered in terms of achievement levels and average scores. Second, changes made from 2003-2009 in New York City will be discussed in relation to jurisdictions and race/ethnicity.

### **Achievement Level Results**

The NAEP governing board sets performance standards known as achievement levels. Achievement levels indicate what students should know and should be able to do. NAEP results are reported as percentages of students performing at or above basic level, at or above proficient level, and at advanced level. Students who have reached basic have “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.” Students with scores ranging in the proficient level have “solid academic performance” and have “demonstrated competency over challenging subject matter.”

New York City students began ahead of many jurisdictions in 2003 in both 4<sup>th</sup> and 8<sup>th</sup> grade math. By 2009, 4<sup>th</sup> grade students continued to improve while 8<sup>th</sup> grade students did not improve at the same rates as their peers across the nation, resulting in a decline in the standing of New York City schools relative to other TUDA cities.

In 4<sup>th</sup> grade math in New York City in 2003, 67% of students were at or above basic level, which was better than seven out of ten cities. Charlotte and Houston each had a higher percentage of students achieving at this level. Atlanta, Boston, Chicago, Cleveland, DC, Los Angeles and San Diego had a smaller percentage of students at or above basic level. San Diego, at 66%, was in near parity with New York City.

In 2009 in 4<sup>th</sup> grade math in New York City, 79% of students were performing at or above basic level, this is better than six out of the ten cities. In this year, Charlotte, Boston and Houston had a higher percentage of students at or above basic. Atlanta, Chicago, Cleveland, DC, Los Angeles and San Diego had a smaller percentage of students at or above basic. San Diego remained at near parity with New York City with 77% at this level. Thus from 2003-2009, New York City’s position relative to other cities only changed slightly, moving from a percentage of students at or above basic that

was better than seven out of the ten cities to a percentage at this level that was better than six of ten cities.

In 2003 in 4<sup>th</sup> grade math in New York City, 21% of students were at or above proficient; this is higher than eight out of ten cities. In this year, Charlotte had a considerably higher percentage of students at proficiency, with 41% at or above this level. All other cities in this study had a smaller percentage of students at or above proficient.

In 2009 in 4<sup>th</sup> grade math in New York City, 35% of students were at or above proficient. This is higher than seven out of ten cities. Charlotte and San Diego had higher percentages of students at or above proficient, with 45% and 36% respectively. All other TUDA cities had a smaller percentage of students at or above proficient. Thus from 2003-2009, New York City's position relative to other cities declined slightly, moving from a percentage of students at or above proficient that was higher than eight out of ten cities, to a percentage of students at this level that was higher than seven out of ten cities.

Achievement level results in 4th grade math				
	% at or above basic		% at or above proficient	
	2003	2009	2003	2009
Atlanta	50	63	13	21
Boston	59	81	12	31
Charlotte	84	86	41	45
Chicago	50	62	10	18
Cleveland	51	51	10	8
DC	36	57	7	19
Houston	70	82	18	30
Los Angeles	52	61	13	19
New York City	67	79	21	35
San Diego	66	77	20	36

In 8<sup>th</sup> grade math in New York City in 2003, 54% of students were at or above basic level, a percentage that is higher than eight out of the ten cities. In 2003, only Charlotte had a higher percentage of students achieving at or above basic. Atlanta, Boston, Chicago, Cleveland, DC, Houston, Los Angeles and San Diego had smaller percentages of students at or above basic, although Houston and San Diego were at near parity with New York City.

In 2009 in 8<sup>th</sup> grade math, 60% of students in New York City scored at or above basic. This is higher than five out of the ten cities. In 2009, Charlotte, Boston, Houston and San Diego all had higher percentages of students at or above basic. From 2003-2009, New York City's position relative to other cities declined considerably, moving from a percentage of students at or above basic that was higher than eight out of ten cities to a

percentage of students at this level that was higher than only five out of the ten TUDA cities.

In 8<sup>th</sup> grade math in New York City in 2003, 20% of students were at or above proficient. This is higher than eight out of the ten cities. In this year Charlotte had a higher percentage of students at this level, with 32% at or above proficient. All other cities in this study had smaller percentages of students at or above proficient.

In 2009 in 8<sup>th</sup> grade math in New York City, 26% of students were at or above proficient. This is higher than six out of the ten TUDA cities. In this year, Charlotte, Boston and San Diego had higher percentages of students at or above proficient, with 31%, 33% and 32% respectively. Houston was at near parity with 24% at or above proficient. Atlanta, Chicago, Cleveland, DC and Los Angeles had smaller percentages of students at or above proficient. Thus from 2003-2009, New York City's standing relative to other cities declined considerably, moving from a percentage of students at or above proficiency level that was better than eight out of the ten cities, to a percentage of students at or above this level that was only better than six out of ten cities.

Achievement level results in 8th grade math				
	% at or above basic		% at or above proficient	
	2003	2009	2003	2009
Atlanta	30	46	6	11
Boston	48	67	17	31
Charlotte	67	72	32	33
Chicago	42	51	9	15
Cleveland	38	42	6	8
DC	29	38	6	12
Houston	52	69	12	24
Los Angeles	32	46	7	13
New York City	54	60	20	26
San Diego	53	68	18	32

### **Achievement Level Gains**

New York City showed solid gains of twelve points in the percentage of students testing at or above basic. However, students from six of the other nine cities made similar gains. Two cities, Boston and D.C., had gains of 22 and 21 points. New York City was clustered with four other cities, Atlanta, Houston, San Diego and Chicago, whose students gained a range of 11 to 13 points.

New York City students also showed solid gains in the percentage of students who attained proficiency in 4<sup>th</sup> grade math, moving 14 points from 21% to 35%. Students

from two school districts, Boston and San Diego, had higher gains of 19 points and 16 points. Two other school districts, Houston and D.C., had gains of twelve points each.

From 2003-2009, New York City showed solid gains in 4<sup>th</sup> grade math, as did many other TUDA cities. By 2009, five of the ten TUDA cities in this study were clustered together in achievement levels. Charlotte was in first while New York City, Boston, Houston and San Diego were all within a few points of each other.

Many of the other TUDA cities had stronger gains in achievement levels in 8<sup>th</sup> grade math than New York City. Seven of the ten cities had higher gains in the percentage of students attaining basic level. While New York City students only gained six points, Boston gained 19 points, Houston gained 17 points, and Atlanta and San Diego gained sixteen and fifteen points respectively.

New York City students only gained six points in the percentage of students attaining proficient level, moving from 20% to 26% from 2003 to 2009. Three cities, Boston, Houston and San Diego, had larger gains. Three other cities, Chicago, D.C., Los Angeles, had equal gains of six.

### **Average Scores**

In 2003 in 4<sup>th</sup> grade math the average score in New York City was 226. In this year Charlotte and Houston were ahead of New York City with scores of 242 and 227, and San Diego was tied with New York City with an average score of 226. Thus in 2003, the average score in New York City was higher than six out of the ten cities. In this year, Atlanta, Boston, Chicago, Cleveland, DC and Los Angeles had lower scores.

In 4<sup>th</sup> grade math in 2009, the average score in New York City was 237. This score was higher than eight out of the ten TUDA cities. Charlotte was the only city that outperformed New York City schools with an average score of 245 in 2009. Atlanta, Boston, Chicago, Cleveland, DC, Houston, Los Angeles and San Diego had lower average scores than New York City. However, Boston and San Diego trailed New York City by only one point.

In 8<sup>th</sup> grade math in 2003, New York City was ahead of eight out of the ten cities with an average score of 266. In this year, Charlotte was the only city ahead of New York City with a score of 279. All other TUDA cities had lower average scores than New York City. In 2009, the average score in New York City was 273, a score that is higher than five out of the ten cities. Boston, Charlotte, Houston and San Diego all outperformed New York City schools with average scores of 279, 283, 277 and 280 respectively. Atlanta, Chicago, Cleveland, DC and Los Angeles had lower average scores than New York City.

From 2003-2009 in 4<sup>th</sup> grade math, New York City schools improved relative to other TUDA cities. In 2003 in 4<sup>th</sup> grade math, New York City had an average score that was lower than Charlotte and Houston and tied with San Diego. New York City made gains larger than those in Houston and San Diego, and consequently had a higher average score

on the 2009 exam. In 8<sup>th</sup> grade math, New York City schools declined relative to several other cities. From 2003-2009, Boston, Houston and San Diego made larger gains than New York City and as a result had higher average scores on the 2009 exam.

Average Scores in 4th Grade Math		
	2003	2009
Atlanta	216	225
Boston	220	236
Charlotte	242	245
Chicago	214	222
Cleveland	215	213
DC	205	220
Houston	227	236
Los Angeles	216	222
New York City	226	237
San Diego	226	236

Average Scores in 8th Grade Math		
	2003	2009
Atlanta	244	259
Boston	262	279
Charlotte	279	283
Chicago	254	264
Cleveland	253	256
DC	243	251
Houston	264	277
Los Angeles	245	258
New York City	266	273
San Diego	264	280

### Changes from 2003-2009 by Race/ Ethnicity and Jurisdiction

This section looks at gains in average scores not just by jurisdiction but also by race and ethnicity. By looking at gains made from 2003-2009, we can get a clear picture of how students and subgroups of students are progressing irrespective of their starting points in 2003.

#### Fourth Grade Math

From 2003-2009, New York City students increased from an average score of 226 to 237, an increase of eleven points. Two cities had larger gains than New York City, making New York City third of ten in terms of gain made from 2003-2009. Boston and DC experienced larger gains of sixteen and fifteen respectively. All other cities experienced gains smaller than New York City, Boston and DC.

From 2003-2009 in New York City in 4<sup>th</sup> grade math, black students increased from an average score of 219 to a score of 227, an increase of eight. Gains made by black students were higher in two other cities, making New York City third of ten cities in gains from 2003-2009. Black students in DC and Boston made larger gains of ten and 16 respectively, and black students in San Diego tied New York City students with a gain of eight. Black students in Atlanta, Charlotte, Chicago, Houston and LA all had smaller gains, and black students in Cleveland decreased during this time.

From 2003-2009 in New York City, Hispanic students increased from an average score of 220 to 230, an increase of ten. Gains made by Hispanic students were higher in two other cities, making New York City third of ten in gains made from 2003-2009. Hispanic students in Boston and DC made larger gains of 16 and 22 respectively. Hispanic students in Charlotte, Chicago, Houston, Los Angeles, and San Diego had smaller gains.

Hispanic students in New York City were tied for third highest score in 2003, and were fourth in 2009.

From 2003-2009, white students in New York City increased from an average score of 244 to 254, an increase of ten points. Gains made by white students were higher in two of the other jurisdictions, making New York City third of ten for gains made by white students from 2003-2009. White students in Boston, San Diego had higher gains of 17 and 12 respectively. White students in Atlanta, Charlotte, Chicago, DC, Houston and Los Angeles all experienced smaller gains and Cleveland decreased during this time.

From 2003-2009 in New York City, Asian students increased from an average score of 247 to 258, an increase of eleven. In one jurisdiction Asian students experience larger gains than New York City, making New York City second of five cities. Asian students in Boston experienced a larger increase of seventeen points. Asian students in Charlotte, Los Angeles and San Diego all had smaller increases.

	Overall	Hispanic	Black	Asian	White
Atlanta	216	*	211	*	258
Boston	220	216	215	243	234
Charlotte	242	233	229	252	257
Chicago	214	217	207	*	235
Cleveland	215	220	210	*	233
D.C.	205	205	202	*	262
Houston	227	226	221	*	254
Los Angeles	216	211	208	241	241
New York City	226	220	219	247	244
San Diego	226	216	216	239	243

	Overall	Hispanic	Black	Asian	White
Atlanta	225	222	218	*	266
Boston	236	232	231	260	251
Charlotte	245	235	231	257	263
Chicago	222	226	212	255	242
Cleveland	213	217	209	*	228
D.C.	220	227	212	*	270
Houston	236	235	227	264	260
Los Angeles	222	218	209	248	245
New York City	237	230	227	258	254
San Diego	236	224	222	247	255

\* Reporting standards not met

### **Eighth Grade Math**

From 2003-2009 in New York City the average score increased from 266 to 273, an increase of seven points. Seven cities had higher gains than New York City, making New York City eighth out of ten in gains made from 2003-2009. Atlanta, Boston, Chicago, DC, Houston, Los Angeles and San Diego all experienced larger gains of 12, 17, ten, eight and 13 respectively. Charlotte and Cleveland experienced gains smaller than New York City.

From 2003-2009 in New York City, black students increased from an average score of 253 in 2003 to 261 in 2009, an increase of eight points. Gains made by black students were higher in five of the other jurisdictions, making New York City sixth of ten for gains made by black students from 2003-2009. Black students in Boston, Atlanta, Charlotte, Los Angeles and San Diego all experienced larger gains of 17, 14, 13, 12 and 11 points respectively. Black students in Chicago, Cleveland, DC and Houston experienced gains smaller than New York City.

From 2003-2009 in New York City, Hispanic students increased from 260 to 261, a gain of one point. This one point gain is tied for the smallest increase for Hispanic students in any of the TUDA cities. From 2003-2009, average scores in Cleveland and New York City increased by one point. All other cities in this study experienced larger increases during this time.

From 2003-2009 in New York City, white students increased from an average score 289 to 295, an increase of six points. Five other cities had higher gains, making New York City seventh of eight for gains made by white students from 2003-2009. White students in Boston, Chicago, Houston, Los Angeles and San Diego all had higher scores of 22, 13, 18, 10, and seven respectively. White students in Cleveland were tied with New York City with a gain of six points, while white students in Charlotte had smaller gains.

Asian students in New York City increased from an average score of 286 in 2003 to 309 in 2009, an increase of 23 points. Asian students in New York City had higher gains than all other TUDA cities.

	Overall	Hispanic	Black	Asian	White
Atlanta	244	*	241	*	*
Boston	262	252	251	300	289
Charlotte	279	262	258	*	301
Chicago	254	259	245	286	276
Cleveland	253	249	249	*	269
D.C.	243	246	240	*	*
Houston	264	261	259	*	293
Los Angeles	245	240	234	275	277
New York City	266	260	253	286	289
San Diego	264	248	252	278	294

Average Scores in 8th Grade Math in 2009 by Jurisdiction and Race/Ethnicity					
	Overall	Hispanic	Black	Asian	White
Atlanta	259	*	255	*	*
Boston	279	269	268	312	311
Charlotte	283	272	270	*	304
Chicago	264	268	252	301	289
Cleveland	256	250	252	*	275
D.C.	251	263	244	*	*
Houston	277	275	266	*	311
Los Angeles	258	254	247	291	287
New York City	273	261	261	309	295
San Diego	280	265	263	292	301

\*Reporting standards not met

### **NAEP TUDA & The Achievement Gap**

The achievement gap measures the disparity in average scores between white students and their black and Hispanic peers. By measuring the achievement gap with reference to average scores, the NAEP results are able to capture precisely how certain groups of students are performing relative to their peers. The NAEP exam therefore allows for comparisons between different subgroups of students within a given jurisdiction, but also between subgroups of students across the country.

### **Fourth Grade Math**

In 2003 in New York City, the white-black achievement gap was 25 points. This gap is smaller than seven out of ten cities. Boston and Cleveland had smaller gaps, with a black-white achievement gap of 19 and 24 respectively. Atlanta, Charlotte, Chicago, DC, Houston, Los Angeles and San Diego all had larger score gaps.

In 2009 in New York City, the black-white score gap was 26. In this year, black students in New York City had an average score closer to their white peers than seven out of ten cities. Boston and Cleveland had smaller gaps, with a black-white score gap of 20 and 19 respectively. Atlanta, Chicago, Charlotte, DC, Houston, Los Angeles and San Diego all had larger score gaps.

In 2003 in New York City, the white-Hispanic score gap was 24. This is smaller than four of the nine cities for which scores are available. Boston, Chicago and Cleveland had smaller gaps of 20, 19 and 14 respectively. In Charlotte, the score gap was also 24. DC, Houston, Los Angeles and San Diego all had larger score gaps.

In 2009 in New York City the white-Hispanic score gap was 23, which is smaller than six out of the ten cities. Boston, Chicago and Cleveland all had lower score gaps of 19, 17 and 11 respectively. Atlanta, Charlotte, DC, Houston, Los Angeles and San Diego all had larger score gaps.

From 2003-2009 the black-white achievement gap increased by one point in New York City. During this time black-white score gaps decreased in Cleveland, DC and Houston. From 2003-2009 in New York City, the white-Hispanic achievement gap decreased by one point. While this one point decrease is positive, cities such as DC, Los Angeles, Houston and Charlotte experienced larger score gap reductions.

### **Eighth Grade Math**

In 2003 in New York City the black-white achievement gap was 36, which is smaller than five out of ten cities. Chicago, Cleveland, Houston and San Diego all had smaller score gaps with scores of 31, 20, 34 and 33 respectively. Atlanta, Boston, Charlotte and Los Angeles had larger score gaps.

In 2009 in New York City the black-white score gap was 34. This gap is smaller than six of the eight cities for which scores are available. The only city where the score gap was smaller was Cleveland, with a black-white achievement gap of 22. All other cities, Boston, Charlotte, Chicago, Houston, Los Angeles and San Diego had larger score gaps.

In 2003 in New York City the white-Hispanic achievement gap 29, this is smaller than five out of seven cities. Chicago and Cleveland had smaller gaps of 17 and 20 respectively. Boston, Charlotte, Houston, Los Angeles and San Diego all had larger score gaps.

In 2009 in New York City the white-Hispanic achievement gap was 35. This is smaller than three out of eight cities. Charlotte, Chicago, Cleveland and Los Angeles all had smaller score gaps of 32, 20, 24 and 33 respectively. Boston, Houston and San Diego all had larger score gaps.

From 2003-2009 New York City closed the black-white achievement gap by two points in 8<sup>th</sup> grade math. During this time, the disparity between black and white students in Charlotte and Los Angeles was also reduced, by a larger margin of eight and three points respectively. The white-Hispanic gap widened considerably from 2003-2009 in New York City, while cities such as Charlotte and Los Angeles experienced smaller disparities in 2009 than in 2003.

Average Score Gaps by Race/ethnicity				
	4th grade math		8th grade math	
white-black	2003	2009	2003	2009
Atlanta	47	48	57	*
Boston	19	20	39	43
Charlotte	28	32	43	35
Chicago	29	31	31	36
Cleveland	24	19	20	22
DC	60	58	*	*
Houston	33	32	34	45
Los Angeles	33	35	43	40
New York City	25	26	36	34
San Diego	27	33	33	38

Average Score Gaps by Race/ethnicity				
	4th grade math		8th grade math	
	2003	2009	2003	2009
white-Hispanic				
Atlanta	*	45	*	*
Boston	20	19	37	42
Charlotte	24	28	40	32
Chicago	19	17	17	20
Cleveland	14	11	20	24
DC	57	43	*	*
Houston	28	25	32	36
Los Angeles	30	26	37	33
New York City	24	23	29	35
San Diego	27	31	36	36

\* Reporting standards not met

### **New York State and National Results**

The results for New York State and the Nation on the 2009 NAEP Mathematics exam provide additional information that allows us to better contextualize the performance of New York City schools on this test. In this section, the National and New York State results will be presented alongside the New York City results. This data will be presented in relation to both average scores and achievement level results for 2003 and 2009.

#### **4<sup>th</sup> Grade Math**

In 2003, the average score for New York State students was 236, the national average was 235 and the average score for New York City students was 226. In 2009, New York State students had an average score of 241. In 2009 the National average increased to 240, and the New York City average increased to 237.

In 2003, the percentage of students at or above basic in 4<sup>th</sup> grade math in New York State was 79%. The percentage of students at or above basic in this year in the Nation was 77%. In New York City the percentage of students at or above basic in 2003 was 67%. In 2009, the percentage of students at or above basic was 83% in New York State, 82% in the Nation and 79% in New York City.

In 2003, the percentage of students at or above proficient in New York State was 33%. In this year the percentage of students at this level in the Nation was 32% and the percentage of students at this level in New York City was 21%. In 2009 the percentage of students at or above proficient was 40% in New York State, 39% in the Nation and 35% in New York City.

Average Scores & Achievement Level Results in 4th Grade Math						
	Average Scores		% at or above basic		% at or above proficient	
	2003	2009	2003	2009	2003	2009
New York City	226	237	67	79	21	35
New York	236	241	79	83	33	40
Nation	235	240	77	82	32	39

### 8<sup>th</sup> Grade Math

The average score in 8<sup>th</sup> grade math in New York State in 2003 was 280. The average score in this year for the Nation and New York City was 278 and 266 respectively. In 2009, the New York State average increased to 283, the National average increased to 283, and the average score in New York City increased to 273.

In 2003 in New York State the percentage of students at or above basic was 71%. In this year the percentage of students at this level in Nation was 68% and the percentage of students at this level in New York City was 54%. In 2009, the percentage of students at or above basic in New York State was 73% and percentage of students at this level in the Nation was 73%. In this year New York City trailed the State and National averages considerably with only 60% at or above basic.

In 2003 in New York State the percentage of students at or above proficient was 32%. In this year the percentage of students at this level in the Nation was 29% and the percentage of students at this level in New York City was 20%. In 2009, the percentage of students at or above proficient in New York City increased to 34% in New York State, 34% in the Nation and 26% in New York City.

Average Scores & Achievement Level Results in 8th Grade Math						
	Average Scores		% at or above basic		% at or above proficient	
	2003	2009	2003	2009	2003	2009
New York City	266	273	54	60	20	26
New York	280	283	71	73	32	34
Nation	278	283	68	73	29	34

### Conclusion

This report considered several different measures of student performance including average scores, proficiency rates, gains made from 2003-2009 by race/ ethnicity and jurisdiction, as well as the achievement gap. Taken together, these different measures of student achievement provide a clear picture of how well our school districts are serving our children.

An examination of these measures indicate that New York City schools started out ahead of many other TUDA cities in 2003 in 4<sup>th</sup> and 8<sup>th</sup> grade math. By 2009, New York City had fallen behind in many of these jurisdictions in 8<sup>th</sup> grade math. This is true for both

average test scores and achievement levels. With regard to gains made from 2003-2009, improvements in New York City in 4<sup>th</sup> grade math are on par with other TUDA cities. In 8<sup>th</sup> grade math, however, New York City students were not keeping stride with their peers across the country, resulting in a decline of their standing relative to these other cities.

These results are alarming for several reasons. First, the middle school years are critical indicators for high school graduation and college preparation. By Chancellor Klein's own admission, "a child's academic performance in middle school is the strongest predictor of whether he will graduate from high school ready for college." Very weak gains on national math tests for New York City's 8<sup>th</sup> graders between 2003 and 2009 indicate that New York City students are falling behind their peers across the country.

Second, staggering differences between performance of New York City and State students on national math tests versus their performance on New York State's own tests should force political leaders and education officials to rethink New York's exams. The New York State tests place the percentage of students at or above proficient at 85% in 4<sup>th</sup> grade math and 71% in 8<sup>th</sup> grade math in 2009. The NAEP TUDA place the percentage of students performing at or above proficient at 50 points lower than the New York State tests indicate in 4<sup>th</sup> grade math and 45 points lower than New York State tests in 8<sup>th</sup> grade math in 2009.

This report is the seventh in a series of education reports issued by Mr. Brennan's office. Each of these reports examined the New York City school system from 2003, the year that Mayor Bloomberg implemented his reforms, to 2009. This and several other reports demonstrate that, while New York City schools have made gains from 2003-2009, they were largely ahead of many other cities and districts in 2003. Further, the NAEP scores suggest that New York City students are not performing at the levels that New York State scores indicate.