

Report on 2015 Trial Urban District Assessment (TUDA) National Assessment of Educational Progress (NAEP)

Grades 4 and 8 Reading and Mathematics

Office of Data and Accountability
October 2015

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EXECUTIVE SUMMARY

The Trial Urban District Assessment (TUDA) was started in 2002 as part of the National Assessment of Educational Progress (NAEP). In 2015, Boston Public Schools was one of twenty-one urban districts that voluntarily participated in the NAEP assessment. Boston participated in the grades 4 and 8 reading and mathematics assessments in 2003, 2005, 2007, 2009, 2011, 2013 and 2015; in the Science assessments in 2005, 2009 and 2011 (Grade 8 only); and in Writing in 2007. 2015 marked the 12th year that Boston voluntarily participated in the TUDA program.

This report examines the 2015 Reading and Mathematics results of the TUDA districts and compares their performance to each other, to public schools across the nation, and to public schools across Large Cities (LC).

Reading

Boston's Scale Score Change Between 2003 and 2015:

- Over this twelve-year period, Boston's 4th graders made a significant 13-point scale score gain, exceeding the Large City average (9-points), as well as the Nation average (5-points). Boston also made a significant 5 point gain in average scale scores since 2013, at a time when most other TUDA districts did not see significant gains.
- Boston's 8th graders also experienced a 5-point gain during this 12 year period.

Boston's Performance over Time:

- Boston's average scores in both grades 4 and 8 have continued to increase or hold steady (no statistical difference between performances from one year to the next) each year since the district first participated in NAEP/TUDA in 2003.
- Boston's 4th grade reading average score in 2015 was comparable to that of the National average and exceeded Large Cities by a margin that was statistically significant. Boston's 2015 average was also significantly higher than every administration of the assessment since 2003, except for the 2011 administration.
- In grade 8, Boston's average score in 2015 was about the same as Large Cities, but it was significantly lower than the Nation's average. Although Boston's 2015 score was significantly better than the first three previous administrations (2003, 2005, and 2007), students across the nation and in Large Cities significantly increased their scores at each of the previous administrations through the 2009 administration (after which time these average scores have not sustained significant gains).

Boston's Performance Compared to other TUDA Districts, Large Cities, and the Nation:

■ In grade 4, Boston's average score was on par with the National average for the first time. The district's performance also exceeded the performance of Large Cities across the country (with a population over 250,000) by 5 scaled score points. The average

- score for Boston's 8^{th} graders was the same as that of Large Cities and was significantly lower than the national average by 6 points.
- Compared to other TUDA districts, Boston's average scores in both grades 4 and 8
 were higher than or equal to those of 16 other districts. Only Charlotte district scored
 higher than Boston in both test grades.

Performance by Racial/Ethnic Group:

- In 4th grade, White students saw a 16-point gain; Hispanic students experienced a 13-point gain; and African American students demonstrated a 12-point gain since 2003. The gains made by Boston's 8th grade students between 2003 and 2015 are not statistically significant for any ethnic group.
- In Boston, the gaps in performance between Asian/White students and Black/Hispanic students persist in both 4th and 8th grade.
- However, Boston's African-American students performed significantly better than their peers across the nation and in Large Cities in 4th grade.
- Boston's Hispanic students in 4th grade had a significantly higher average than that of Large Cities, as well as the National average. Compared to other TUDA districts, Boston's Hispanic 4th graders performed as well as or significantly better than all other districts, with three exceptions (Hillsborough, Duval County, and Miami-Dade).

Students with Disabilities:

• In grade 4, students with disabilities (SD) in Boston outperformed their peers across the nation and in Large Cities; in grade 8, they performed on par with their peers in Large Cities as well as the national average. Compared to other TUDA districts, only three had higher average scores that Boston in both grades (Hillsborough County, Duval County, and Miami-Dade).

English Language Learners:

- Boston's English Language Learners (ELLs) in 4th grade scored higher than the national average and higher than their peers in Large Cities; none of the TUDA districts scored significantly higher than Boston.
- ELL students in 8th grade performed on par with their peers across the Nation and in Large Cities. Only Detroit's English Learners performed significantly higher than Boston in grade 8 reading.

Performance by Achievement Level:

- In 2015, 65% of Boston's 4th grade students scored at the basic level or above on the reading assessment. Only four TUDA districts had a higher percentage. Boston's performance was comparable to the National average (68%) and significantly higher than the Large Cities average (59%).
- In grade 8, the percentage of students in Boston who performed at or above Basic was 67%, statistically surpassing or equaling the rates of 17 TUDA districts and Large

- Cities (67%). However, Boston's rate was lower than that of three districts and the Nation (75%).
- In both grades, Boston made significant improvements in the percentage of students performing at or above Proficient since 2003, with a 13-point increase in grade 4 and 6-point gain in grade 8, compared to a 8-point gain for Large Cities in grade 4 and a 6-point gain in grade 8.

Performance by Percentile Rank:

• Boston's 4th graders saw a significant and steady improvement since 2003 and 2005 across all quintiles. For 8th graders, there have also been significant gains for students at the 25th and 75th quintiles since 2003 and 2005, and at the 50th quintile since 2003.

Performance of General Education Students (Neither SD Nor ELL):

- The proportion of Boston's students who were neither SD nor ELL (i.e. general education students) in the grade 8 reading test was 65%. The only district with a lower proportion of general education students is Dallas. Nevertheless, Boston has a significantly smaller population of general education students than the national sample at 83% and, the Large City rate at 78%.
- Analyzing the NAEP reading scores of these general education students revealed that at the 8th grade, Boston had one of the highest scores, demonstrating a statistical tie with Austin and San Diego. This average is significantly higher than that of Large Cities, and statistically equal to the national average.

Mathematics

Boston's Scale Score Change Between 2003 and 2015:

- Between 2003 and 2015, Boston's 4th graders experienced the third largest gain of any jurisdiction with a 16-point increase in average score; the Large City gain was 10-points, and the national average was up 6 points.
- The gain made by Boston's 8th graders since 2003 is even more impressive, totaling 19 points, surpassing the 12-point gain experienced by Large Cities, and the 5-point gain nationally. This has resulted in fully closing the gap with the Nation (281 points).

Boston's Performance over Time:

- Boston's average scores in both grades 4 and 8 have continued to increase or remain statistically constant each year since the district first participated in NAEP/TUDA in 2003.
- In 2003, Boston's 4th grade performance compared to Large Cities was significantly lower: that trend was reversed in 2005 and Boston continues to outperform Large Cities. Over the past 10 years, the performance gap with Nation is also substantially smaller (4 points), though it was statically significant.
- Boston's 8th grade students also experienced significant gains since 2003. In 2015, Boston's 8th graders had an average score significantly higher than the Large City average by 9 points, and achieved the same average scale score as the national average (281 points).

Boston's Performance Compared to other TUDA Districts, Large Cities, and the Nation:

- Of the 21 participating TUDA districts, Boston was one of only four to score significantly higher than Large Cities in grade 8.
- Compared to other TUDA districts, Boston's average score in grade 4 was higher than or equal to those of 15 other districts. In grade 8, only one district (Charlotte) scored significantly higher than Boston.

Performance by Racial/Ethnic Group:

- From 2003 to 2015, students in all racial groups made statistically significant gains in their average scores on the 4th grade test. Black students saw a 12-point gain while Asian, Hispanic, and White students experienced 16, 15, and 19-point gains respectively.
- The gains made by Boston's 8th grade students between 2003 and 2013 were also statistically significant across all ethnic groups: Asian students showed an 18 point gain, there was a 22 point gain for White students, a 19 point gain for Hispanic students, and a 18 point gain for Black students.

- Despite consistent performance gains for students of all ethnic backgrounds, the gaps in performance between Boston's Asian/White students and Black/Hispanic students persist in both 4th and 8th grade.
- However, in both grades 4 and 8, Boston's Black students significantly outperformed their peers across the Nation and in Large Cities. Importantly, Boston's Black students had the highest scale scores of all TUDA districts in 8th grade.
- Boston's Hispanic students in 4th and 8th grade also performed on par with Hispanic students across the Nation and in Large Cities. Compared to other TUDA districts, Boston's Hispanic 8th graders performed as well as or significantly better than all other districts.

Students with Disabilities:

■ In 4th grade, Boston's students with disabilities had an average score statistically comparable to the national average and that of Large Cities. While Boston's average score in grade 8 was not significantly different from the national average, it was significantly higher than that of Large Cities. In 8th grade, students with disabilities in Boston also performed better than a majority of TUDA districts; none of the districts with higher averages were statistically significant.

English Language Learners:

Boston's English Language Learners (ELLs) in 4th grade scored significantly higher than their peers across the Nation and in Large Cities. None of the 18 TUDA districts with a sufficiently large ELL student sample had significantly higher averages than Boston's in grade 8, and only one district (Dallas) scored significantly better than Boston in grade 4.

Performance by Achievement Level:

- In 2015, 78% of Boston's 4th grade students scored at the basic level or above on the math assessment. Five TUDA districts had a higher percentage; Charlotte, Duval County, Hillsborough County, Miami-Dade, and Austin. Boston's performance was not statistically significantly different than Large Cities (75%) or the Nation (81%).
- In grade 8, the percentage of students in Boston who performed at or above Basic was 67%, significantly higher than Large Cities (61%) but 3 points lower than the Nation (70%).
- The percentage of Boston students scoring at or above Proficient in 2015 in grade
 8 was significantly higher than that of Large Cities.
- In both grades Boston made significant improvements in the percentage of students performing at or above Proficient compared to the first two administrations (2003 and 2005). Boston also saw a significant improvement in grade 8 from 2007 to 2015, with a 7-point increase. Since 2003, the percentage of 4th graders who are proficient/advanced increased by 21 points, compared to 12 points for large cities; and the percentage proficient/advanced in 8th grade increased 17 points, compared to 10 points for Large Cities.

Performance by Percentile Rank:

Boston's 4th and 8th graders have experienced significant gains since 2003 across all quintiles and experienced significant gains with students in all quintiles, but the lowest (10th), between 2005 and 2015.

Performance of General Education Students (Neither SD nor ELL):

- The percentage of Boston students who took the 8th grade math test who were neither SD nor ELL was just 65%. This proportion of general education students is the 2nd smallest of any TUDA district, higher than Dallas (61%), and smaller than the Nation (82%) and Large Cities (78%).
- In addition to the high performance of Boston's students with disabilities and English Language Learners relative to other jurisdictions, the performance of Boston's general education students in grade 8 math was also impressive: their average score not only ranked the highest, but was significantly better than that of Large City, the Nation, and all other districts (Austin had statistically equivalent scores to Boston's).

OVERVIEW AND BACKGROUND

Developed in 1969, the National Assessment of Educational Progress (NAEP), also referred to as the Nation's Report Card, is the largest nationally representative assessment of what America's students know and can do. It provides a common yardstick for measuring the progress of students' education across the country. While each state has its own unique assessment, NAEP asks the same questions in every state, making state comparisons possible.

In 2001, following discussions between the National Center for Education Statistics (NCES), the National Assessment Governing Board (NAGB), and the Council of the Great City Schools (CGCS), Congress appropriated funds for district-level assessments on a trial basis, similar to the trial for state assessments that began in 1990. As a result, the NAGB passed a resolution approving the selection of urban districts for participation in the Trial Urban District Assessment (TUDA), a special project within NAEP that would make assessment results available at the district level. Representatives of the Council of Great City Schools worked with the staff of NAGB to identify districts to be invited for the trial assessment. Districts were selected based on a number of characteristics, including size, minority concentrations, federal program participation, socioeconomic conditions, and percentages of students with disabilities (SD) and English Language Learners (ELL).

In 2002, five urban school districts participated in NAEP's first Trial Urban District Assessment (TUDA) in reading and writing. In 2003, ten urban districts (including the original five) participated in the TUDA program in reading and mathematics in grades 4 and 8: Atlanta, Boston, Charlotte-Mecklenburg, Chicago, Cleveland, Houston, Los Angeles, New York City, San Diego, and Washington, D.C. (District of Columbia Public Schools-DCPS). In 2005, Austin was added to the group of school systems that participated in the reading, math and science testing. These eleven large urban school districts continued participating in TUDA in 2007. In 2009, seven more districts (Baltimore City, Detroit, Fresno Unified, Jefferson County (KY), Miami-Dade County, Milwaukee, and Philadelphia) joined the TUDA project. In 2011, twenty-one districts, with three new additions (Albuquerque, Dallas and Hillsborough County-FL), were invited by the NAGB to participate in mathematics and reading TUDA assessments at grades 4 and 8 and Science at grade 8. For 2013, these twenty-one TUDA districts continued participating in the mathematics and reading testing at grades 4 and 8. In 2015, Milwaukee was replaced by Duval County (Jacksonville, FL), hence, the NAEP 2015 TUDA was conducted in reading and mathematics at grades 4 and 8 for these twenty-one participating districts. 2015 marks the 12th year that Boston voluntarily participated in the TUDA program.

It should be noted that since 2009, in addition to public-school students, the sampled charter schools were included in the NAEP TUDA results if they were also included in a district's Adequate Yearly Progress (AYP) reports. Additionally, the "Large Cities (LC)" designation refers to public schools located in urban areas with populations of 250,000 or more (as defined by NCES). Comparisons between national, district, and large city results are limited to public school students. In NAEP reports, the category "Nation (public)" does not include Department of Defense or Bureau of Indian Education schools. It should also be noted that among the TUDA districts, eight of the twenty-one consist entirely of schools in cities with a population of 250,000 or more; thirteen of them however —

Albuquerque, Atlanta, Austin, Charlotte, Cleveland, Dallas, Duval County (FL), Fresno, Hillsborough (FL), Houston, Jefferson County, Los Angeles and Miami-Dade — also include a number of fourth and eighth grade students enrolled in surrounding suburban or rural areas. Results for these districts include data from all students, both urban and suburban/rural, a fact that must be kept in mind when comparing their performance to other districts, large cities, or the nation.

This report provides results for Boston's public school students in grades 4 and 8 from the National Assessment of Educational Progress (NAEP) assessment in Reading and in Mathematics. Results are reported by average scale score (reported on a 0-500 scale), and by achievement levels (Basic, Proficient, and Advanced).

An overview of the Reading and Math assessment frameworks is included in Appendix A.

2015 NAEP READING

READING: DEMOGRAPHIC CONTEXT

The charts below display the percentage of students who participated in the 2015 TUDA NAEP Reading test by their racial/ethnic identification, disability (SD), English Language Learner (ELL) status, and Low-Income status. The charts display not only Boston's participation rates, but also the Nation's and Large Cities'*, as well as the TUDA minimums and maximums.

Boston's percentages of Black and Hispanic students in both grades 4 and 8 fall in the middle range of the other TUDA districts. However, in 2015 Boston joined Cleveland as one of two TUDA districts to report that 100% of students received free/reduced-price lunch based on the district's 100% Community Eligibility Provision (CEP) for all schools. Compared to other TUDA districts, Boston also has very high participation rates for students with disabilities and English Language Learners; in particular, Boston has the 2nd highest participation rate for students with disabilities in grade 4 and English Language Learners in grade 8. These differences are important to consider in comparing results across jurisdictions.

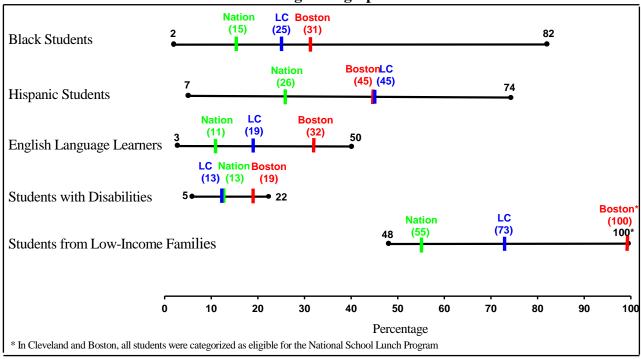
In addition, because results are based on samples rather than entire populations, examining statistical significance is essential in determining differences across groups.

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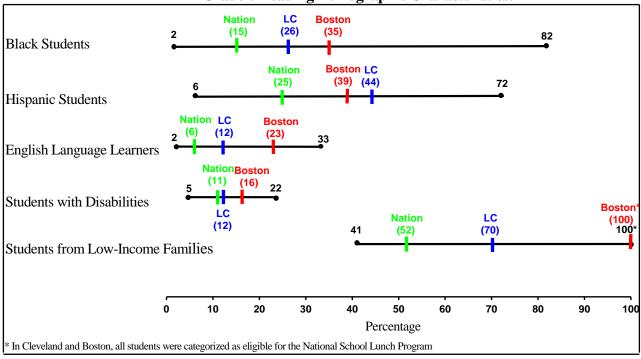
^{*} Large Cities include students from all cities in the nation with populations of 250,000 or more including the participating districts.

Distribution of Selected Student Groups for TUDA Districts

Grade 4 Reading Demographic Characteristics:

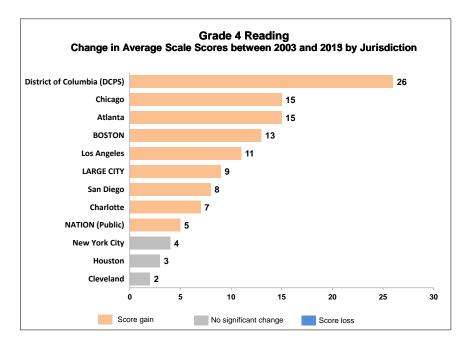


Grade 8 Reading Demographic Characteristics:



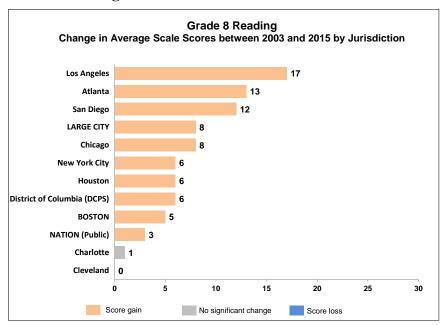
READING: ANALYSES

(1) Change in Reading Average Scores Between 2003 and 2015



 Of the 10 participating TUDA districts in 2003, Boston's 4th graders saw a significant 13-point scale score gain between 2003 and 2015. Boston's gain exceeded that of Large Cities (9-points) and surpassed the 5-point gain made by students nationwide.

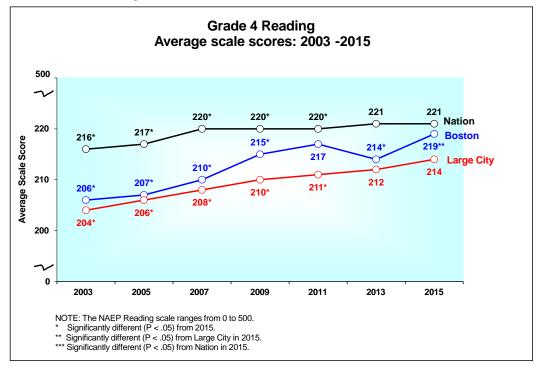
Grade 8 Reading



Between 2003 and 2015, Boston's 8th graders experienced a significant 5-point gain in reading. Therefore, the gains made by Boston were not as great as those made by Large City (8-points), but larger than those made across the Nation (3-points).

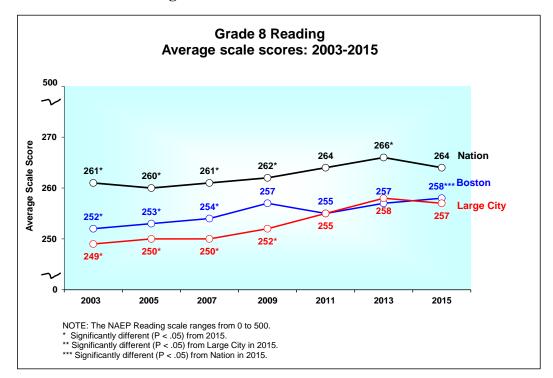
(2) Average Reading Scale Scores Over Time: 2003 - 2015

Grade 4 Reading



- Boston's 4th grade reading average score in 2015 was 5-points higher than they were in 2013, a difference that is statistically significant. Boston's 2015 score (219) was significantly higher than that of Large Cities and was for the first time on par (no statistically significant difference) with the national average (221).
- The reading performance of Boston's 4th graders in 2015 was significantly higher than every administration of the NAEP, except for 2011.

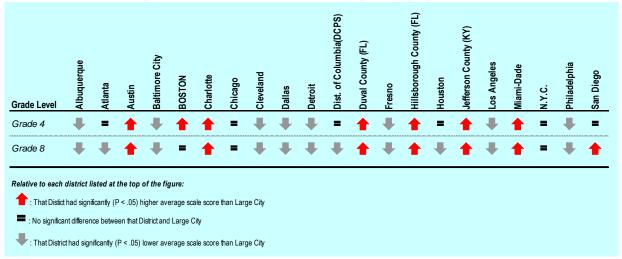
Grade 8 Reading



- In 2015, Boston's 8th grade students had an average score of 258, comparable to that of Large Cities; but significantly lower than the national average (by 6 points).
- Boston's 8th grade average score in 2015 was significantly higher than the first three previous administrations (2003, 2005, and 207); by contrast, the national and Large City averages have increased significantly at each of first four administrations since 2003.

(3) 2015 Reading Scale Score Comparisons Across Jurisdictions Large City vs. TUDA Districts

2015 Average Scale Score Comparisons - Large City (LC) vs TUDA Districts

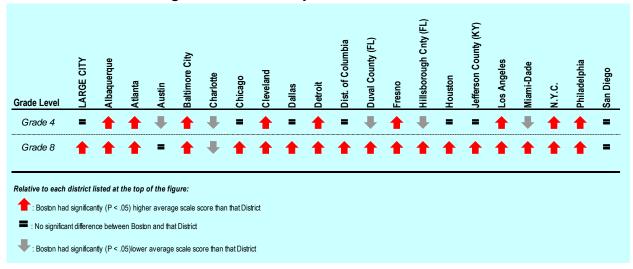


Of the 21 participating TUDA districts, Boston was one of ten to have a score significantly higher than, or equal to, that of Large Cities in both the grade 4 and grade 8 reading assessments.

Boston's scale scores for all students as well as for student subgroups are provided in Appendix B. Scale scores for all TUDA districts are provided in Appendix C.

Boston vs. TUDA Districts

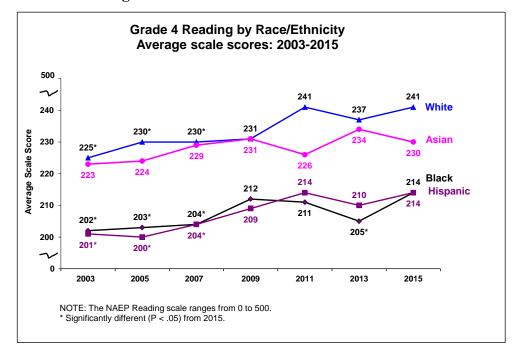
2015 Average Scale Score Comparisons - Boston vs TUDA Districts



Boston scored higher than or equal to all but Charlotte in **both** grades 4 and 8, and lower than four districts (Austin, Duval County, Hillsborough County, and Miami-Dade) in grade 4.

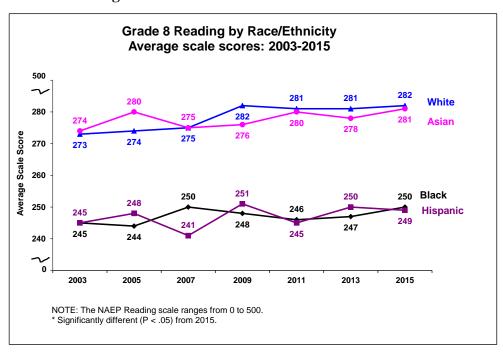
(4) Average Reading Scale Scores by Race/Ethnicity

Grade 4 Reading: 2003-2015



- In 2015, Hispanic students saw a 9 point gain that was statistically significant. African-American and White students also saw increases, but these were not statistically significant. Finally, Asian students saw a 4-point drop, but this was not statistically significant in terms of its difference from 2013.
- From 2003 to 2015, White, African-American, and Hispanic students have experienced statistically significant gains, with 16, 12, and 13-point gains respectively.

Grade 8 Reading: 2003-2015



- Reading scores for Boston's 8th grade students between 2013 and 2015 remained relatively constant for all ethnic groups, as we are not observing any statistically significant differences. Since 2003, no racial group has experienced a statistically significant gain on the 8th grade Reading test.
- The gaps in performance between Boston's White/Asian students and Black/Hispanic students persist in both 4th and 8th grade.

Appendix D provides detailed information on the performance of students by racial group.

Boston's Black Students Compared to the Nation, Large Cities, and other TUDA Districts

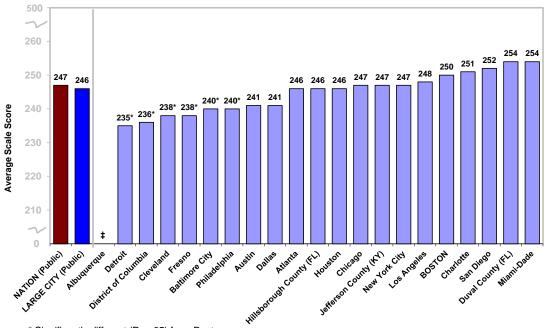
500 216 216 212 210 205* 206* 207 208 210 206* 201 202* 202* 202* 202 Average Scale Score 200 198 196* 193* 190 184* 180 170 Eatimore City District of Columbia " Contrained Men Tork City MiamiDade BOSTON ugh County FL Cleveland Philadelphia SanDiego Los Angeles Fresno Chicago Charlotte Atlanta Houston * Significantly different (P < .05) from Boston.

Grade 4 Black Students
2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts

Despite continued disparity in the performance of Black students compared to their White and Asian peers, the district's Black students had an average score of 214, which is significantly greater than the national average (206) and that of Large Cities (204). Boston's 4th grade Black students performed as well as or significantly better than all TUDA districts.

‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

Grade 8 Black Students 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



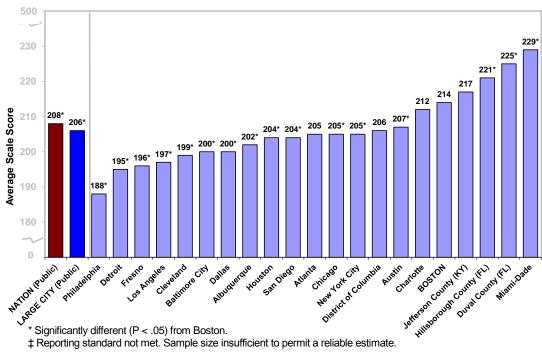
* Significantly different (P < .05) from Boston.

‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

In grade 8, the performance of Boston's African-American students (250) was about the same as their peers across the Nation (247) and in Large Cities (246). Among the TUDA districts, however, Boston's African-American students performed as well as or significantly better than all other districts.

Boston's Hispanic Students Compared to the Nation, Large Cities, and other TUDA **Districts**

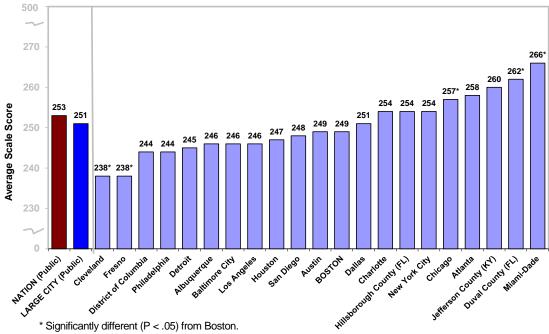
Grade 4 Hispanic Students 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

Boston's Hispanic students in 4th grade also had significantly higher average scores (214) than Hispanic students in Large Cities (206), as well as the national average (208). Among the participating TUDA districts, only Miami-Dade, Hillsborough County, and Duval County's Hispanic 4th graders scored significantly higher than Boston's.

Grade 8 Hispanic Students
2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts

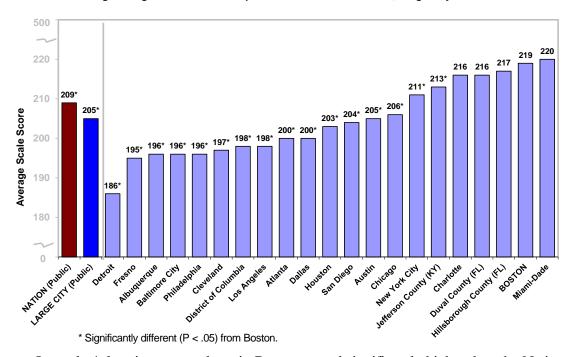


‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

• In grade 8, Boston's Hispanic students (249) performed as well as their peers in Large Cities (251) and across the Nation (253). Among TUDA districts with a sufficiently large sample of Hispanic students, three districts significantly outperformed Boston (Duval County, Miami-Dade, and Chicago).

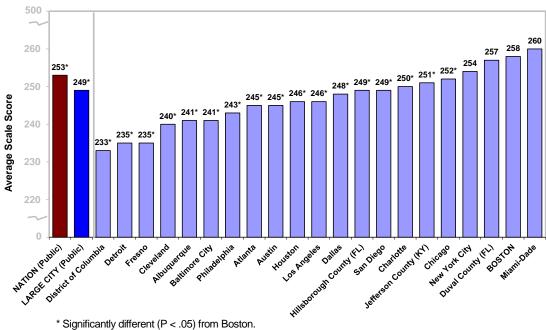
(5) Average Reading Scale Scores for Other Student Groups Students Eligible for Free/Reduced Lunch

Grade 4 Low-Income Students 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



In grade 4, low-income students in Boston scored significantly higher than the Nation (by 10 points) and Large Cities (by 14 points). Boston's average was also the second highest among the TUDA districts and was not significantly bested by any other TUDA district.

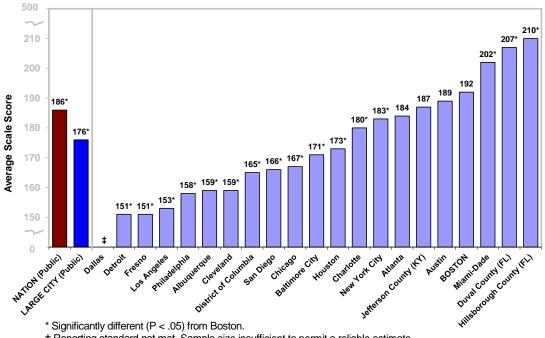
Grade 8 Low-Income Students 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



Among 8th graders, Boston's low-income students (258) performed better than their peers in Large Cities (249) and across the Nation (253). Compared to other TUDA districts, no other districts had significantly higher average performance.

Students with Disabilities

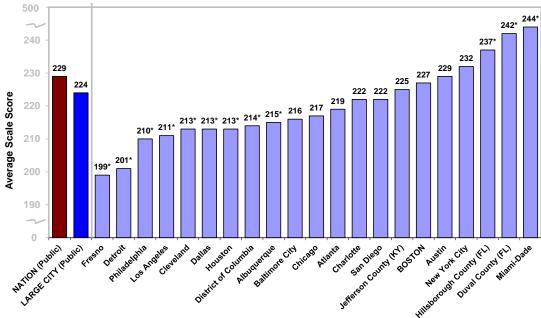
Grade 4 Students with Disabilities 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

In 4th grade, students with disabilities in Boston (192) outperformed their peers in Large Cities (176). Their average score was significantly different from the national average (186). Boston's special education students performed equally well or better than all but three other districts (Miami-Dade, Duval County, and Hillsborough County).

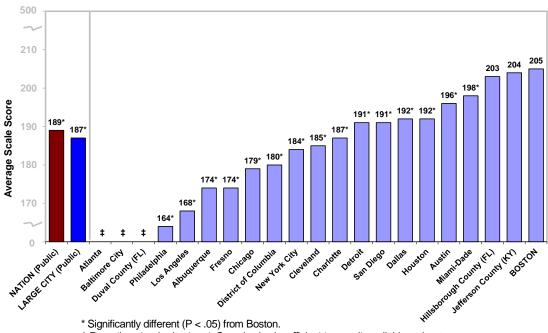
Grade 8 Students with Disabilities 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



- * Significantly different (P < .05) from Boston.
- ‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.
- In grade 8, the average score for students with disabilities in Boston (227) was comparable to the average for Large Cities (224) and the national average (229). Compared to other TUDA districts, Boston's performance was statistically lower than Hillsborough County, Duval County, and Miami-Dade.

English Language Learners

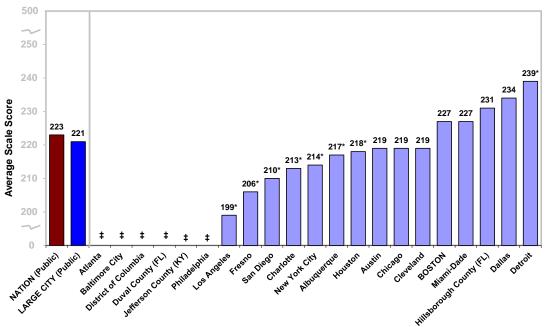
Grade 4 English Language Learners 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



- ‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

Boston's 4th grade English Language Learners (ELLs) outperformed their peers across
the Nation and in Large Cities. Compared to other TUDA districts, Boston's average
score was the highest score, as it was in 2013 as well.

Grade 8 English Language Learners
2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts

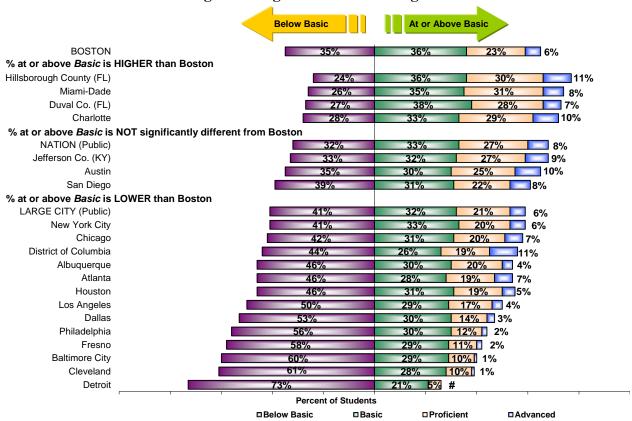


- * Significantly different (P < .05) from Boston.
- ‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.
- The average score for ELL students in 8th grade was comparable to that of their peers in Large Cities and across the Nation. Boston's ELL average was statistically lower than Detroit.

(6) Reading Performance by Achievement Level: Boston vs. Nation, Large Cities, and TUDA Districts

2015 Reading Percentage of Students Scoring at or Above Basic

Grade 4 Reading Percentage of Students Scoring at or Above Basic:

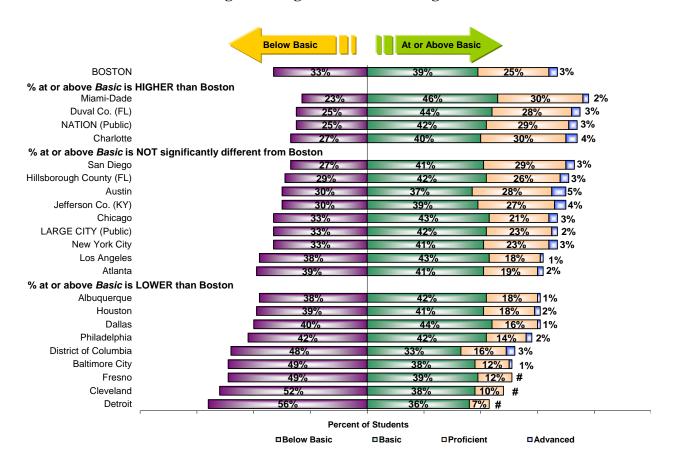


Estimate rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

• In 2015, 65% of Boston's 4th grade students scored at or above the basic level on the Reading assessment. This percentage was significantly higher than or equal to that in all but four other TUDA districts. Boston's performance was on par with the national average (68%), as there was no statistical difference between the performances of the two samples. A higher percentage of Boston students performed at the Basic level or above compared to students in Large Cities (59%) and this was statistically significant.

Grade 8 Reading Percentage of Students Scoring at or Above Basic:



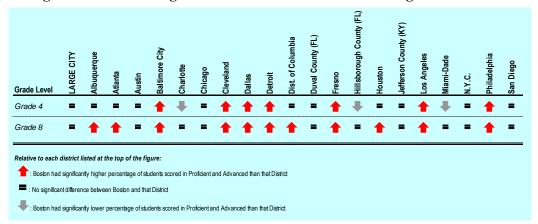
Estimate rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

■ In grade 8, the percentage of students in Boston who performed at or above Basic (67%) was significantly higher than or equal to 17 other TUDA districts and Large Cities (67%). Boston's percentage was significantly lower compared to the Nation (75%) and three other TUDA districts.

2015 Reading Percentage of Students Scoring at or Above Proficient

Percentage of Students Scoring at or Above Proficient in 2015 Reading: Boston vs. TUDA Districts



- In 2015, Boston's 4th grade proficient/advanced rate (29%) was significantly higher than that of seven TUDA districts. Boston's rate was about the same as that of Large Cities, and lower than that of three districts (Charlotte, Hillsborough and Miami-Dade).
- Boston's 8th graders performed about the same as their peers in Large Cites with a proficient/advanced rate of 28%. Compared to all the other TUDA districts, Boston's performance was higher than 11 districts and about the same as the other 9 districts.

Performance Over Time: 2003 - 2015

Percentage of Students Scoring at or Above Proficient in Reading, 2003-2015

	Grade 4							Grade 8						
	2003	2005	2007	2009	2011	2013	2015	2003	2005	2007	2009	2011	2013	2015
LARGE CITY	19**	20**	22**	23**	24**	26	27	19**	20**	20**	21**	23**	26	25
Albuquerque					24	24	24					22	23	19*
Atlanta	14**	17**	18**	22	24	27	26	11**	12**	13**	17	17	22	20*
Austin		28**	30	32	36	36	35*		27	28	30	30	31	33*
Baltimore				12	11	14	11*				10	12	16	13*
Boston	16**	16**	20**	24	26	26	29	22**	23**	22**	23**	24**	28	28
Charlotte	31**	33	35	36	36	40	39*	30	29	29	28	34	36	33*
Chicago	14**	14**	16**	16**	18**	20**	27	15**	17**	17**	17**	21	21	24
Cleveland	9	10	9	8	8	9	11*	10	10	11	10	11	11	11*
Dallas					14	16	17*					13	15	17*
Detroit				5	7	7	6*				7	7	9	7*
District of Columbia	10**	11**	14**	18**	20**	25**	30	10**	12**	12**	14**	15	18	19*
Duval County (FL)							35*							31*
Fresno				12	11	13	13*				12	12	13	13*
Hillsborough County (FL)					44	40	41*					32	35**	29
Houston	18**	21	17**	19	24	19	23	14**	17	18	18	18	19	20
Jefferson County				30	35	33	36*				26	27	29	31*
Los Angeles	11**	14**	13**	13**	15**	19	21*	11**	13**	12**	15**	16	19	20*
Miami-Dade				31**	32**	35	39*				28	28	27	32*
N.Y.C.	22**	22	25	29	29	28	26	22	20**	20**	21**	24	25	27
Philadelphia				11	13	14	14*				15	16	16	16*
San Diego	22**	22**	25	29	31	33	30	20**	23**	23**	25	27	29	32*

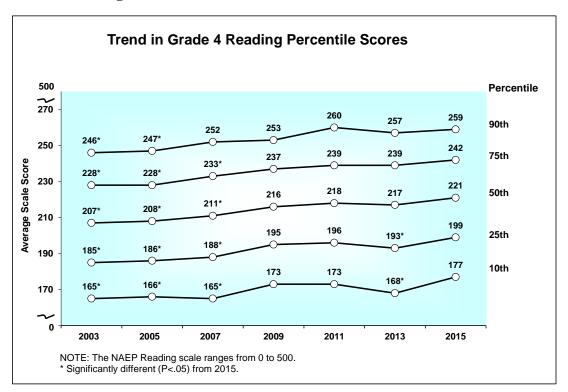
^{*} Significantly different (P < .05) from Large City in 2015.

^{**} Significantly different (P < .05) from 2015.

■ In grade 4, Boston made significant improvements in the percentage of students performing at or above Proficient since 2003 (13-point gain for Boston, compared to a 8-point gain for Large Cities). The percentage of Boston's 8th graders scoring at or above Proficient in 2015 also rose a significant 6-points compared to 2003, the same as that of Large Cities.

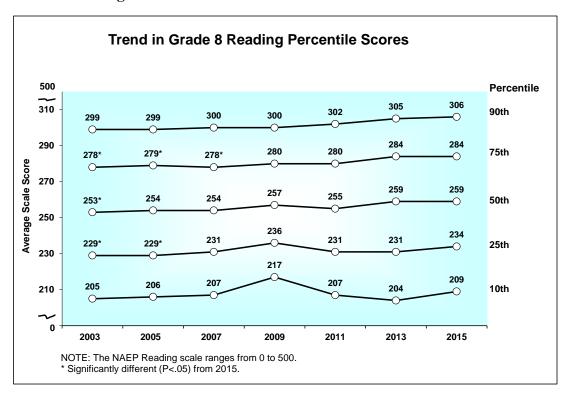
(7) Reading Performance by Percentile Rank

Grade 4 Reading



• Among Boston's 4th graders, significant improvements were observed since 2003 and 2005 for students at all quintiles. Specifically, we are seeing increases for students in the 10th and 25th quintiles since 2013.

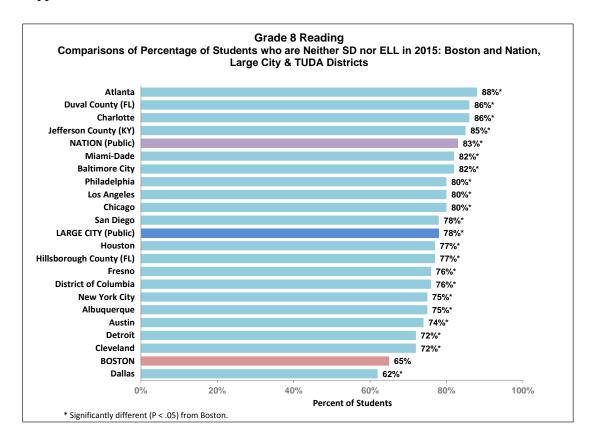
Grade 8 Reading



■ For 8th graders, there have been significant gains for students at the 75th quintiles since 2003, 2005, and 2007, at the 25th quintile since 2003 and 2005, and at the 50th quintile since 2003.

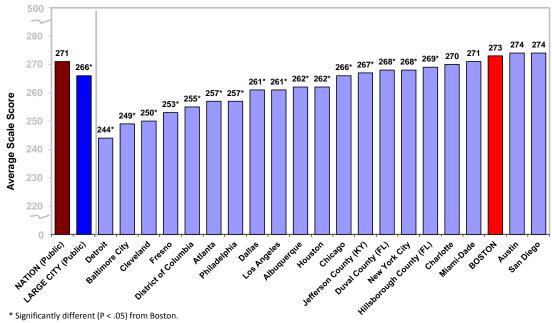
(8) Reading Performance of Students Who are Neither Students with Disabilities Nor English Language Learners

The chart below shows the comparisons of percentage of students who are neither SD nor ELL in grade 8 across all jurisdictions. Also shown is the performance of these students across all jurisdictions. The corresponding statistics for students in grade 4 are presented in Appendix E.



■ The percentage of students who were neither SD nor ELL (i.e. general education students) in Boston who took the 8th grade reading test was 65%; this rate is significantly lower than all other jurisdictions except for Dallas, ranging from 88% to 62%, with 83% for the Nation and 78% for Large City.

Grade 8 Regular Education Students 2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



* Significantly different (P < .05) from Boston.

Boston's general education students had the highest score (almost equal with Austin and San Diego), significantly higher than that of Large Cities and a majority of the TUDA districts; it also was comparable to the national average.

2015 NAEP MATHEMATICS

MATHEMATICS: DEMOGRAPHIC CONTEXT

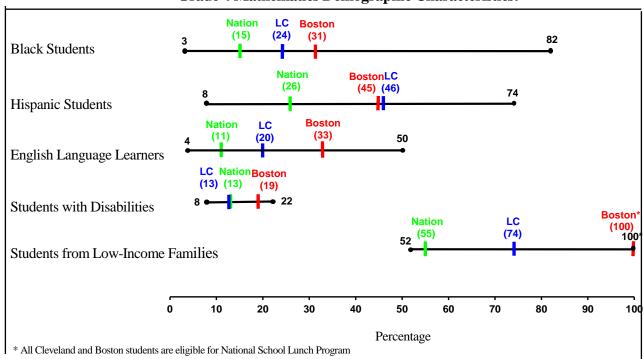
The charts below display the percentage of students who participated in the 2015 TUDA NAEP Math test by their racial/ethnic identification, disability, English Language Learner status, and Low-Income status. The charts display not only Boston's participation rates, but also the Nation's and Large Cities', as well as the TUDA minimums and maximums.

In both grades 4 and 8, Boston's percentages for Black and Hispanic students fall in the middle range of the other TUDA districts. However, in 2015 Boston joined Cleveland as one of two TUDA districts to report that 100% of students received free/reduced-price lunch based on the district's 100% Community Eligibility Provision (CEP) for all schools. Compared to other TUDA districts, Boston has the 2nd highest participation rate for students with disabilities in grade 4 and English Language Learners in grade 8. These differences are important to consider in comparing results across jurisdictions.

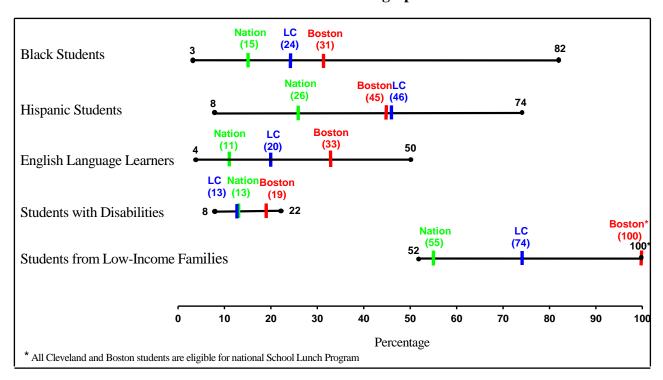
In addition, because results are based on samples rather than entire populations, examining statistical significance is essential in determining differences across groups.

Distribution of Selected Student Groups for TUDA Districts

Grade 4 Mathematics Demographic Characteristics:



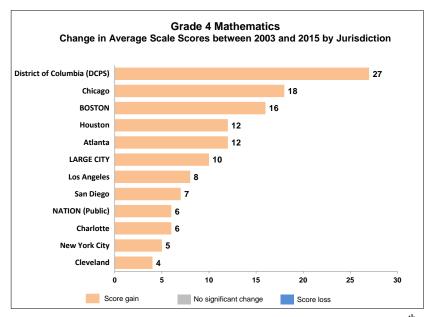
Grade 8 Mathematics Demographic Characteristics:



MATHEMATICS: ANALYSES

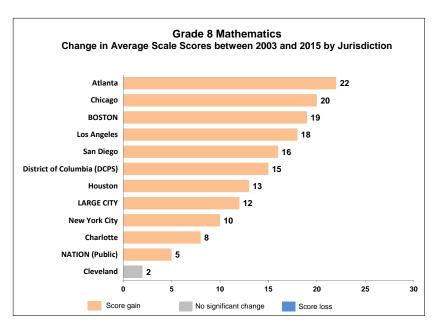
(1) Change in Mathematics Average Scores Between 2003 and 2015

Grade 4 Mathematics



Of the 10 participating TUDA districts in 2003, Boston's 4th graders made the third largest gain - 16 points - since 2003. By contrast, 4th graders across the Nation and in the Large Cities only gained 6 and 10 points, respectively, during this 12 year period.

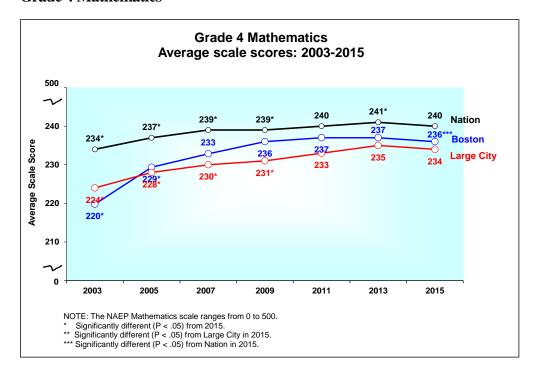
Grade 8 Mathematics



■ Between 2003 and 2015, Boston's 8th graders saw a significant gain of 19 points in mathematics. Boston's gain was 7 points higher than that of Large Cities and was almost four times greater than the gain made by students across the Nation (5 points).

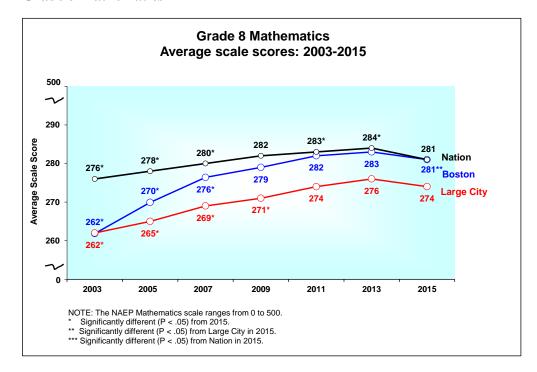
(2) Average Mathematics Scale Scores Over Time: 2003 - 2015

Grade 4 Mathematics



- Boston's average score in 2015 was significantly higher than the 2003 and 2005 administrations of the NAEP.
- Boston's performance in 2015 statistically equal to that of Large Cities and 4 points below the national average.
- Boston's performance has steadily improved since 2003, catching up with the Large City average and narrowing the gap compared to the national average.

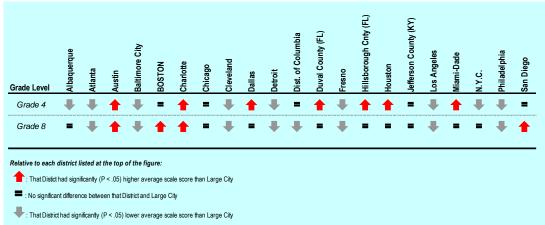
Grade 8 Mathematics



- In 2015, Boston's 8th grade students had an average score significantly higher (by 7 points) than the average for Large Cities and equal to that of the Nation (281 points).
- Boston's 8th grade average score in 2015 was significantly higher than in the first three administrations, from 2003 to 2007.
- Since 2003, the math performance of Boston's 8th graders increased at a rate that surpassing the Large City gains and completely eliminated the gap with the Nation.

(3) 2013 Mathematics Scale Score Comparisons Across Jurisdictions Large City vs TUDA Districts

2015 Average Scale Score Comparisons - Large City (LC) vs TUDA Districts

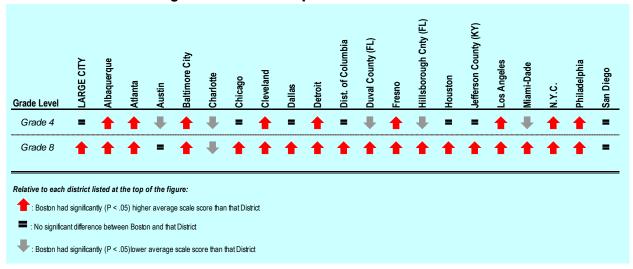


 Of the 21 participating TUDA districts, Boston was one of 11 to score equal to or higher than the Large City average at both grade levels.

Boston's scale scores for all students as well as for student subgroups are provided in Appendix B. Scale scores for all TUDA districts are provided in appendix C.

Boston vs. TUDA Districts

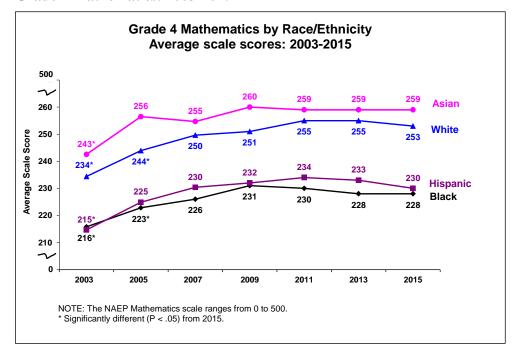
2015 Average Scale Score Comparisons - Boston vs TUDA Districts



• In addition to its higher or comparable scores compared to Large Cities, Boston's performance stands out in comparison to other TUDA districts in both grades 4 and 8. In grade 4, Boston's average scale scores were higher than or equal to all but five districts (Austin, Charlotte, Duval County, Hillsborough County, and Miami-Dade). Boston's performance in grade 8 was even more impressive, with only Charlotte scoring higher.

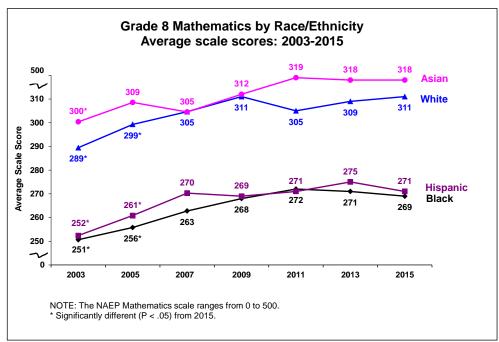
(4) Average Mathematics Scale Scores by Race/Ethnicity

Grade 4 Mathematics: 2003-2015



■ From 2003 to 2015, students in all racial groups made statistically significant gains in their average scores on the 4th grade test. Black students saw a 12-point gain, while Asian, Hispanic, and White students experienced 16, 15, and 19-point gains respectively. The performance gaps between Asian/White and Hispanic/Black students remain unchanged.

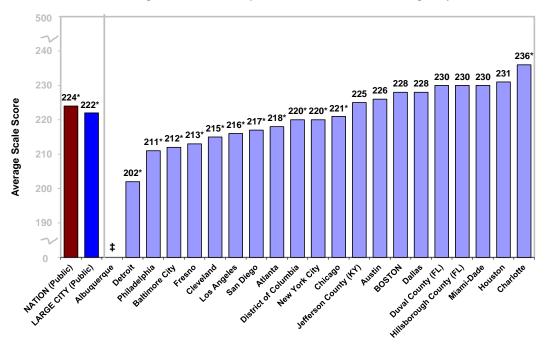
Grade 8 Mathematics: 2003-2015



■ Gains made by Boston's 8th grade students between 2003 and 2015 were also statistically significant across all ethnic groups: improvements ranged from 18 points for Asian and African-American students, to 22 points for White students.

Boston's Black Students Compared to the Nation, Large Cities, and other TUDA Districts

Grade 4 Black Students
2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts

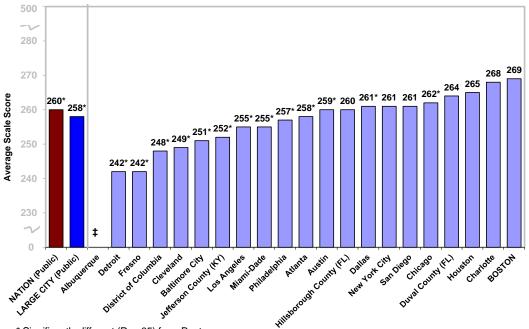


^{*} Significantly different (P < .05) from Boston.

Despite continued disparity in the performance of Black students compared to their White and Asian peers, the district's Black students outperformed their peers across the nation: 4th graders in Boston had an average score of 228, compared to the national average of 224. Similarly, Black students in Boston had an average score 6 points higher than the average for Large Cities. Compared to the TUDA districts, Boston's Black students performed equally well or better than all other districts, with only one exception (Charlotte).

[‡] Reporting standard not met. Sample size insufficient to permit a reliable estimate.

Grade 8 Black Students 2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



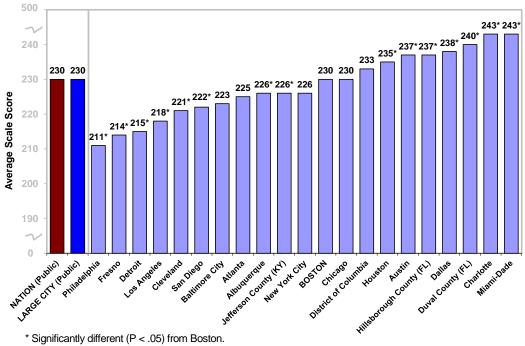
* Significantly different (P < .05) from Boston.

‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

In Grade 8, Boston's Black students again outperformed their peers across the Nation and in Large Cities. Importantly, Boston's Black students had the highest scale score of any TUDA district.

Boston's Hispanic Students Compared to the Nation, Large Cities, and other TUDA **Districts**

Grade 4 Hispanic Students 2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts

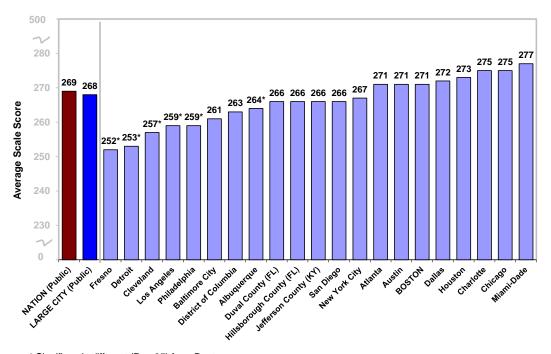


* Significantly different (P < .05) from Boston.

‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.

Boston's Hispanic students in 4th grade performed on par (233 points) with Hispanic students across the Nation (230) and in Large Cities (230). Compared to other TUDA districts, Boston's Hispanic 4th graders performed as well as or significantly better than most other districts, with only 7 TUDA districts showing significantly higher scores.

Grade 8 Hispanic Students
2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



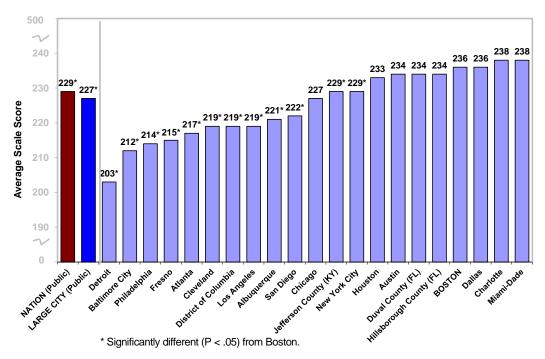
^{*} Significantly different (P < .05) from Boston.

• In Grade 8, Boston's Hispanic students performed on par with their national peers and Hispanic students in Large Cities. Hispanic students in most TUDA districts, performed comparably to Boston with only 6 districts demonstrated performance significantly below that of Boston.

[‡] Reporting standard not met. Sample size insufficient to permit a reliable estimate.

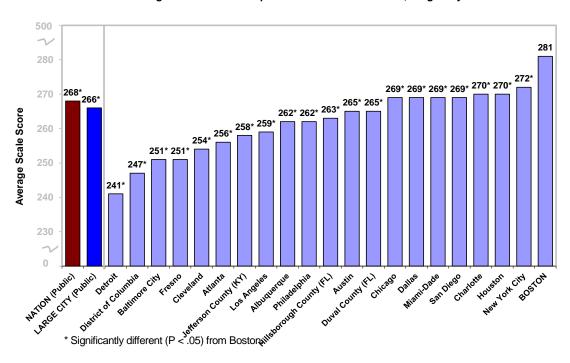
(5) Average Mathematics Scale Scores for Other Student Groups Students eligible for Free/Reduced Lunch

Grade 4 Low-Income Students
2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



• In grade 4, low-income students in Boston scored significantly higher than the Nation (by 7 points) and Large Cities (by 9 points). Boston's average was also statistically one of the highest among all TUDA districts.

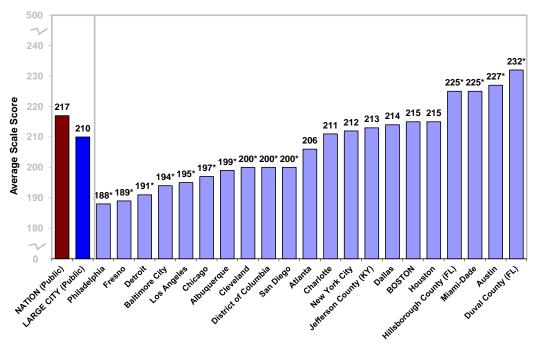
Grade 8 Low-Income Students
2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



Among 8th graders, the performance of Boston's low-income students was not only significantly higher than the national and Large City averages, but was also higher than all TUDA districts.

Students with Disabilities

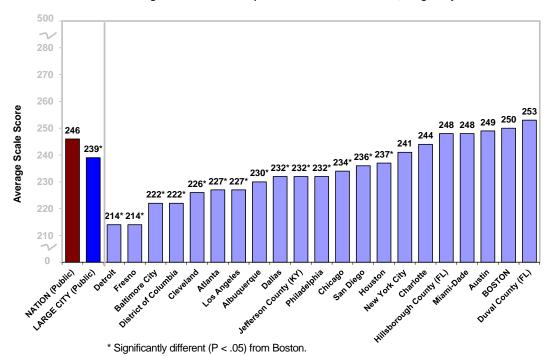
Grade 4 Students with Disabilities
2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



^{*} Significantly different (P < .05) from Boston.

■ In 4th grade math, the average score for students with disabilities in Boston was comparable to that of their peers in Large Cities and the Nation. Boston's special education students also performed better than a fair number of TUDA districts, with only four demonstrating a statistically higher score.

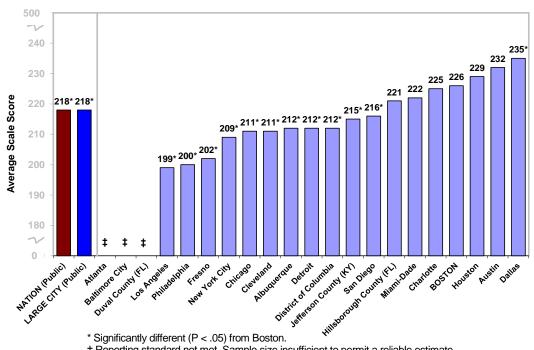
Grade 8 Students with Disabilities 2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



In 8th grade, students with disabilities in Boston outperformed their peers in Large Boston's average score was not significantly different form the national average. Boston's average for special education students was also the second highest among the TUDA districts and not significantly different from Duval County.

English Language Learners

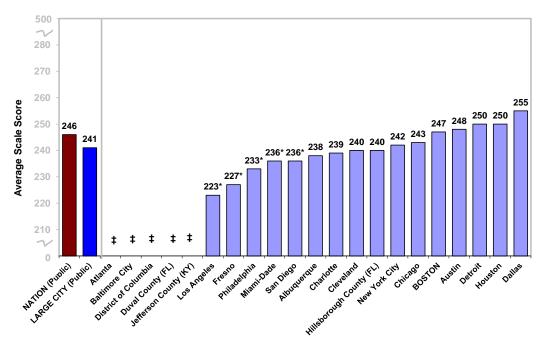
Grade 4 English Language Learners 2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



[‡] Reporting standard not met. Sample size insufficient to permit a reliable estimate.

Boston's 4th grade English Language Learners (ELLs) had an average scale score higher than the national average and that of their peers in Large Cities. Compared to other TUDA districts, only one (Dallas) of the 18 districts with a sufficiently large ELL sample had a significantly higher average score than Boston.

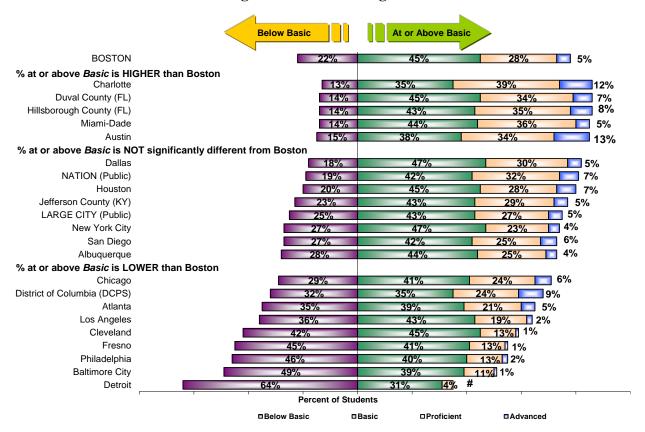
Grade 8 English Language Learners
2015 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



- * Significantly different (P < .05) from Boston.
- ‡ Reporting standard not met. Sample size insufficient to permit a reliable estimate.
- ELL students in 8th grade had an average score that was statistically on par with that of their ELL peers across the nation and in Large Cities. Boston's ELL average was statistically equivalent to most TUDA districts, except 5 districts whose average scores fell below that of Boston.

(6) Mathematics Performance by Achievement Level: Boston vs. Nation, Large Cities, and TUDA Districts

Grade 4 Mathematics Percentage of Students Scoring at or Above Basic:

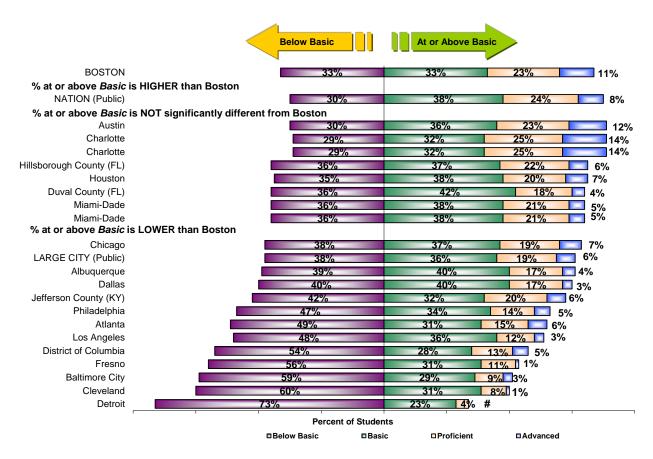


Estimate rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

■ In 2015, 78% of Boston's 4th grade students scored at the basic level or above on the math assessment. This percentage was significantly higher than or equal to that of all but five other TUDA districts. Boston's performance was not significantly different from the Nation overall (81%) or the percent of students that performed at the Basic level or above in Large Cities (75%).

Grade 8 Mathematics Percentage of Students Scoring at or Above Basic:



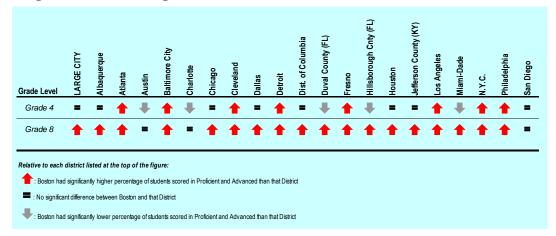
Estimate rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

• In grade 8, the percentage of students in Boston who performed at or above Basic (67%) was significantly higher compared to 12 other TUDA districts, as well as Large Cities (61%). Boston's percentage was significantly lower than the Nation's average (70%). No other TUDA district, however, had a significantly higher proportion of students at Basic or Above in grade 8 math.

2015 Mathematics Percentage of Students Scoring at or Above Proficient

Percentage of Students Scoring at or Above Proficient in 2015 Mathematics: Boston vs. TUDA Districts



- In 2015, Boston's 4th grade proficient/advanced rate (33%) was significantly higher than that of 8 TUDA districts. Boston's rate was about the same as that of Large Cities.
- Boston's 8th graders performed significantly better than students in Large Cities, with a proficient/advanced rate of 34%. Compared to all the other TUDA districts, Boston's performance was significantly better than all districts except for three. In these three cases, Austin, Charlotte, and San Diego, the difference between the other district and Boston was not statistically significant.

Performance Over Time: 2003 - 2015

Percentage of Students Scoring at or Above Proficient in Mathematics, 2003-2015

_				Grade 4	l						Grade 8	3		
	2003	2005	2007	2009	2011	2013	2015	2003	2005	2007	2009	2011	2013	2015
LARGE CITY	20**	24**	28**	29**	30	33	32	16**	19**	22**	24	26	27	26
Albaquerque					34**	34**	28					26	26**	21*
Atlanta	13**	17**	20**	21**	25	31**	26*	6**	7**	11**	11**	16	17	20*
Austin		40**	40**	38**	46	46	47*		33	34	39**	38	35	35*
Baltimore				13	17**	19**	12*				10	13	13	12*
Boston	12**	22**	27	31	33	34	33	17**	23**	27**	31	34	36	34*
Charlotte	41**	44**	44**	45**	48	50	51*	32**	33**	34**	33**	37	40	39*
Chicago	10**	13**	16**	18**	20**	28	30	9**	11**	13**	15**	20	20	25
Cleveland	10	13	10	8**	11	13	13*	6**	6**	7	8	10	9	9*
Dallas					25**	30	34					22	23	20*
Detroit				3	3	4	5				4	4	3	4*
District of Columbia	7**	10**	14**	19**	23**	30**	33	6**	7**	8**	12**	15	17	17*
Duval County (FL)							41*							22*
Fresno				14	15	15	14*				15	13	12	12*
Hillsborough Cnty (FL)					43	43	43*					32	34**	27
Houston	18**	26**	28**	30	32	32	36	12**	16**	21**	24	27	28	27
Jefferson County				31	32	33	34				22	25	25	26
Los Angeles	13**	18	19	19	20	25	22*	7**	11**	14	13	16	18	15*
Miami-Dade				33**	33**	34**	41*				22	22	24	26
N.Y.C.	21**	26	34**	35**	32**	34**	26*	20**	20**	22	26	24	25	27
Philadelphia				16	20	19	15*				17	18	19	20*
San Diego	20**	29	35	36	39**	42**	31	18**	22**	24**	32	31	31	32*

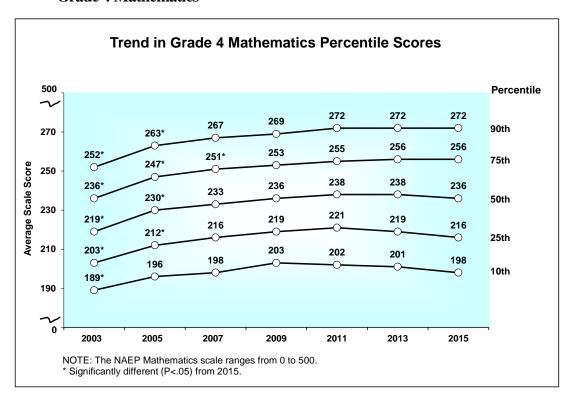
^{*} Significantly different (P < .05) from Large City in 2015.

^{**} Significantly different (P < .05) from 2015.

- The percentage of students scoring at or above Proficient in mathematics in 2015 for Boston was significantly higher than Large Cities in grade 8.
- In grade 4, Boston made significant improvements in the percentage of students performing at or above Proficient since 2003 and 2005. In grade 8, Boston made significant improvements in the percentage of students performing at or above Proficient since 2003, 2005, and 2007. Since 2003, the percentage of 4th graders who are proficient/advanced increased by 21 points, compared to 12 points for large cities; and the percentage of proficient/advanced in 8th grade increased 17 points for Boston, compared to 10 points for Large Cities.

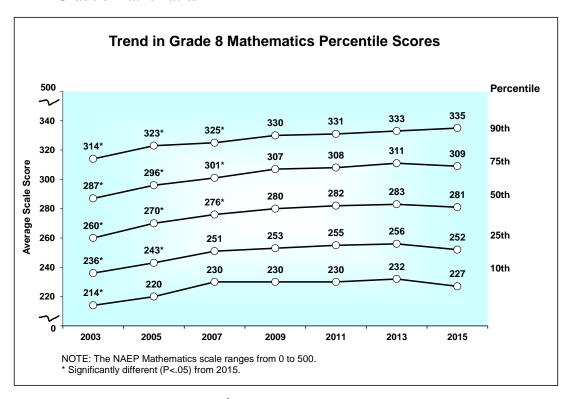
(7) Mathematics Performance by Percentile Rank

Grade 4 Mathematics



Among Boston's 4th graders, significant improvements continued since 2003 and 2005 at almost all performance levels. Fourth graders at the 75th percentile also saw significant gains since 2007, with a 5-point increase. Although there were improvements since 2009 for students at the high-performing levels (at the 75th and 90th percentiles), the increases were not statistically significant.

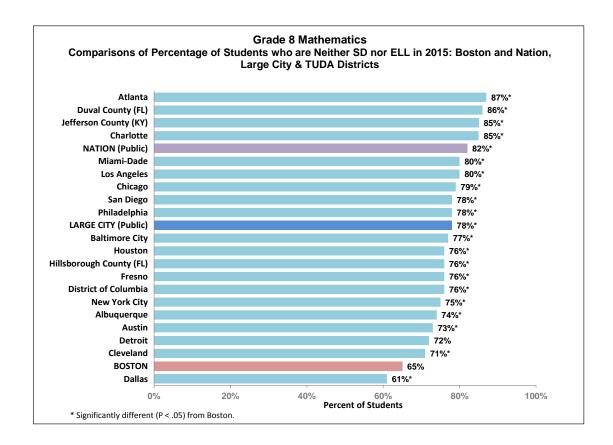
Grade 8 Mathematics



■ Among Boston's 8th graders, significant improvements have been demonstrated since 2003 at all performance levels. Eighth graders at the higher-performing levels (90th, 75th, and 50th percentile) also saw significant gains since 2007.

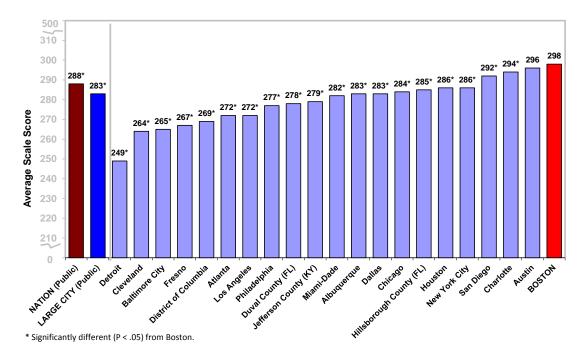
(8) Mathematics Performance of Students Who are Neither Students with Disabilities Nor English Language Learners

The chart below shows the comparisons of percentage of students who are neither SD nor ELL in grade 8 across all jurisdictions. Also shown is the performance of these students across all jurisdictions. The corresponding statistics for students in grade 4 are presented in Appendix E.



■ The percentage of students who were neither SD nor ELL (i.e. general education students) in Boston who took the 8th grade math test was 65%; this rate is significantly lower than all other jurisdictions, which ranged from 61% to 87%, with 82% for the Nation and 78% for Large City.

Grade 8 Regular Education Students
2015 Mathematics Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



Boston's general education students had the highest score in 8th grade math, significantly better than the Large City and national averages.

APPENDIX A: Assessment Framework

The content for each NAEP assessment is determined by the National Assessment Governing Board (NAGB). The framework, which incorporates ideas and input from subject area experts, school administrators, policymakers, teachers, parents, and others, documents the specific knowledge and skill areas to be measured, and sets guidelines for the types of texts and questions to be used, as well as how the questions should be designed and scored.

Reading

The 2015 NAEP reading assessment uses the same framework used in 2009. The reading framework includes two types of texts on the assessment: literary texts and informational texts. The framework also specifies that vocabulary knowledge will be assessed in the context of a passage. Vocabulary items function both as a measure of passage comprehension and as a test of readers' specific knowledge of the word's meaning as intended by the passage author. The framework includes three cognitive targets, or behaviors and skills, for items from both literary and informational texts: Locate/Recall, Integrate/Interpret, and Critique/Evaluate.

The 2009 NAEP Reading Framework replaced the previous reading framework that was used from 1992 through 2007. Compared to the previous framework, the 2009 reading framework includes more emphasis on literary and informational texts, a redefinition of reading cognitive processes, a new systematic assessment of vocabulary knowledge, and the addition of poetry to grade 4.

Results from special analyses determined the 2009 reading assessment results could be compared with those from earlier assessment years. A summary of these special analyses and an overview of the differences between the previous framework and the 2009 framework are available on the Web at http://nces.ed.gov/nationsreportcard/reading/trend_study.asp.

Mathematics

The 2015 NAEP mathematics framework, which defines the content and format for the 2015 assessment, reflects changes from 2005 in grade 12 only; mathematics content objectives for grades 4 and 8 have not changed. Therefore, main NAEP trend lines from the early 1990s can continue at fourth and eighth grades for the 2015 assessment.

The mathematics framework calls for the assessment to include questions based on five mathematics content areas: 1) Number Properties and Operations; 2) Measurement; 3) Geometry; 4) Data Analysis, Statistics, and Probability; and 5) Algebra. In addition, the framework specifies that each question should measure one of three levels of mathematical complexity (refers to the cognitive demands of the item) – low, moderate, and high. By considering these two criteria (mathematical content and mathematical complexity) for each question, the framework ensures that NAEP assesses an appropriate balance of content along with a variety of ways of knowing and doing mathematics.

NAEP Permitted Accommodations and Inclusion Policy

It is NAEP's intent to assess all selected students from the target population, including students with disabilities (SD) and English language learners (ELL). Beginning in 2002, students with disabilities and English language learners who require accommodations have been permitted to use them in NAEP, unless a particular accommodation would alter the skills and knowledge being tested. For example, calculators are not permitted on non-calculator sections of the NAEP mathematics test for students who would otherwise require non-standard accommodations provided on state assessment. The table below shows the accommodations used for the most recent NAEP assessments.

NAEP Accommodations for SD/ELL Students

Accommodations	Math	Reading
Standard Accommodations for SD/ELL Students:	Man	Reading
	X 7	37
Extended time	Yes	Yes
Small group, or one-on-one	Yes	Yes
One-on-one	Yes	Yes
Directions only read aloud in English	Yes	Yes
Test items read aloud in English – occasional or most/all	Yes	No
Breaks during test	Yes	Yes
Writes directly in the booklet	No	No
Other Accommodations for SD students:		
Calculator version of the test FN3	Yes FN3	No
Must have an aide present in the testing room	Yes	Yes
Responds orally to a scribe	Yes	Yes
Large print version of the test	Yes	Yes
Magnification	Yes	Yes
Uses template/special equipment/preferential seating	Yes	Yes
Cueing to stay on task	Yes	Yes
Presentation in Braille	Yes	Yes
Response in Braille	Yes	Yes
Presentation in Sign Language	Yes	No
Response in Sign Language	Yes	Yes
Other Accommodations for FLL students:	105	105
	X 7	
Bilingual dictionary without definitions in any language	Yes	No
Directions only read aloud in Spanish	Yes	Yes
Spanish/English version of the test (not g12)	Yes	No
Test items read aloud in Spanish (not g12 Math)	Yes	No

To help to ensure that NAEP results accurately reflect the educational performance of all students in the target population, and can continue to serve as a meaningful measure of U.S. students' academic achievement over time, in March 2010, the Governing Board adopted a new policy, NAEP Testing and Reporting on Students with Disabilities and English Language Learners. The policy defines specific inclusion goals for NAEP samples. At the national, state, and district levels, the goal is to include 95 percent of all students selected for the NAEP samples, and 85 percent of those in the NAEP sample who are identified as SD or ELL.

Population Tested

Results from the biennial Trial Urban District Assessment from 2003 to 2015 are reported for the participating districts for public-school students at grades 4 and 8. The TUDA assessment employed larger-than-usual samples within the districts, making reliable district-level data possible. The samples were also large enough to provide reliable estimates on subgroups within the districts, such as female students or Hispanic students. Because students were sampled, all analyses are examined for statistical significance.

In Boston, students from about 50 schools at grade 4 and 40 schools at grade 8 participated in the 2015 NAEP assessments. A total of 2,100 students were assessed in mathematics (1,100 at grade 4 and 1,000 at grade 8), and a total of 2,000 students were assessed in Reading (1,000 at grade 4 and 1,000 at grade 8).

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Appendix B

		20.05 0	Boston	·	ents at Each	12		Large Cit	ies	
	Scale		nt of Stude		% Students	Scale		nt of Stude	ents	% Students
	Score	Proficient & above	Basic & above	Below Basic	Assessed	Score	Proficient & above	Basic & above	Below Basic	Assessed
READING										
All Students	219	29	65	35	100	214	27	59	41	100
Student Status										
Students with Disabilities	192	8	31	69	19	176	8	23	77	13
English Language Learners	205	13	48	52	32	187	7	30	70	19
Gender						_				
Female	224	33	72	28	48	217	30	63	37	49
Male	215	25	60	40	52	210	25	56	44	51
Race/Ethnicity										
African American / Black	214	21	59	41	31	204	16	48	52	25
Asian / Pacific Islander	230	42	77	23	9	231	46	76	24	8
Hispanic	214	22	60	40	45	206	19	53	47	45
White	241	57	86	14	15	235	51	81	19	19
Free/Reduced-Price Lunch										
Eligible	219	29	65	35	100	205	18	51	49	73
MATHEMATICS										
All Students	236	33	78	22	100	234	32	75	25	100
Student Status										
Students with Disabilities	215	11	50	50	19	210	11	44	56	13
English Language Learners	226	21	68	32	33	218	14	56	44	20
Gender										
Female	236	31	79	21	49	234	31	75	25	49
Male	235	34	76	24	51	234	33	74	26	51
Race/Ethnicity								,		
African American / Black	228	22	70	30	31	222	16	61	39	24
Asian / Pacific Islander	259	70	95	5	8	251	56	88	12	8
Hispanic	230	24	74	26	45	230	26	72	28	46
White	253	58	93	7	15	251	56	91	9	19
Free/Reduced-Price Lunch										
Eligible	236	33	78	22	100	227	23	69	31	74

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2015 Reading and Mathematics Assessments.

		2015 NAI	EP Result	ts by St	udent Grou	p: Grad	e 8			
S	cale Sco	ores and I	Percent c	of Stude	nts at Each	Achiev	ement Le	vel		
			Boston					Large Cit	ies	
	G 1	Perce	nt of Stude	ents	0/ 0/ 1	G 1	Perce	nt of Stude	ents	0/ 0/ 1
	Scale Score	Proficient & above	Basic & above	Below Basic	% Students Assessed	Scale Score	Proficient & above	Basic & above	Below Basic	% Students Assessed
READING			ee assive	Busic			20 40 5 7 5		Destre	
All Students	258	28	67	33	100	257	25	67	33	100
Student Status										
Students with Disabilities	227	4	29	71	18	224	6	30	70	13
English Language Learners	227	4	35	65	23	221	3	27	73	12
Gender										
Female	262	32	72	28	49	261	29	72	28	49
Male	254	24	62	38	51	252	21	63	37	51
Race/Ethnicity										
African American / Black	250	17	62	38	35	246	14	56	44	26
Asian / Pacific Islander	281	56	86	14	11	271	42	79	21	8
Hispanic	249	18	59	41	39	251	19	62	38	44
White	282	58	87	13	14	277	48	86	14	20
Free/Reduced-Price Lunch										
Eligible	258	28	67	33	100	249	17	60	40	70
					1	l				
MATHEMATICS										
All Students	281	34	67	33	100	274	26	62	38	100
Student Status	201		0.		100			02		100
Students with Disabilities	250	9	34	66	17	239	5	24	76	13
English Language Learners	247	7	32	68	24	241	4	27	73	12
Gender		,	02				•		, 0	12
Female	285	36	70	30	49	275	26	63	37	50
Male	278	31	64	36	51	273	26	61	39	50
Race/Ethnicity					-					
African American / Black	269	18	58	42	35	258	11	45	55	26
Asian / Pacific Islander	318	70	92	8	11	300	54	84	16	8
Hispanic	271	24	60	40	40	268	18	57	43	44
White	311	69	90	10	14	296	49	83	17	19
Free/Reduced-Price Lunch				-	-					
Eligible	281	34	67	33	100	266	17	54	46	71

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2015 Reading and Mathematics Assessments.

Estimate rounds to zero.

APPENDIX C: Summary of Average Scale Score of TUDA Districts

2015 NAEP Average Scale Scores by Subject and Grade level for Large City and TUDA Districts

Subject / Grade Level	LARGE CITY*	Albuquerque	Atlanta	Austin	Baltimore City	BOSTON	Charlotte	Chicago	Cleveland	Dallas	Detroit	District of Columbia (DCPS)	Duval County (FL)**	Fresno	Hillsborough County (FL)	Houston	Jefferson County (KY)	Los Angeles	Miami-Dade	New York City	Philadelphia	San Diego
Reading Grade 4	214	207	212	220	199	219	226	213	197	204	186	214	225	199	230	210	222	204	226	214	201	216
Reading Grade 8	257	251	252	261	243	258	263	257	240	250	237	245	264	242	261	252	261	251	265	258	248	262
Math Grade 4	234	231	228	246	215	236	248	232	219	238	205	232	243	218	244	239	236	224	242	231	217	233
Math Grade 8	274	271	266	284	255	281	286	275	254	271	244	258	275	257	276	276	272	263	274	275	267	280

^{**} Distict participate in TUDA for the first time in 2015

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Appendix D

Grade 4 Reading: 2002 - 2015

2015 Reading TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achievement Levals and Percentiles for Districts and Jurisdictions

National Center for Education Statistics

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															Perce	Percentage of students	shits						
	0000		1000	Average	Average scale score	7700	5740		0000		200	At or above Basic	Pasic			0000		1000	At or abo	At or above Proficient			2000
nnicity and junisdiction	2002	2002	2002	2002	5002	1102	2012	elu2	Znnz	ZUUS	2000	700	102 50	707	6102	2002	2003	2002	7007	5002	1102	2013	2015
Nation (public)	227	227	228	230	555	230	231	232 *	74	74 ***	52	44	:				39	39	42	14	42	45	. 46
Large city ¹	224 ***	226 ***	228 ***	231 ***	233			235 ***	02	72	22	:					38	40	44	47	47	20	: 15
Albuquerque	1	ı	1	1	1			227 *	· 1	! !	: 1					_	; 1	: 1	1	: 1	4	4	43
Atlanta	250	250	253	253	253			251	98	16	98						68	74	71	76	71	74	73
Austin	ı	ı	239	244				248 "."	ı	ı	98						ı	54	8	64	89	2	02
Bailtimore City	ı	ı	ı	ı				217 :	ı		ı							ı	ı	32	35	9	28
Boston	ı	225	230	230				241	ı	69	79						37	40	42	46	27	25	22
Charlotte	1 5	237	240	244	243	244	245	245	1 2	1 83	38	37	89 91	:	90 92	92	. 22	999	9 6	28	99	ខម	25 6
Cleveland	į 1	208	208	215				210	ŧ 1		2 25						17	17	3 5	; ¢	; ≃	8 8	23
Dallas	ı	ļ	1	<u> </u>				240	ı	; 1	; 1						: 1	: 1	: 1	: 1	2 5	4	. 99
Detroit	ı	ı	ı	ı	**	**		**	ı	ı	1						ı	ı	ı	**	**	**	**
District of Columbia (DCPS)	248	254 ***	252	258	257	255	260	262 "."	9	06	32					_	02	70	74	75	12	78	82
Duval County (FL)	ı	ı	ı	ı	ı	I	ı	236	ı	ı	ı	1					ı	ı	ı	ı	ı	ı	20
Fresno	ı	ı	ı	ı	217	216	218	220	ı	ı	ı	1					ı	ı	ı	53	56	<u>~</u>	33
Hillsbarough County (FL)	1 8	Ιģ	1 5	1 3	1 5	242	237	242	1 8	18	18	1 8	ة 1				1 9	La	18	18	8	នេះ	57
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New York City	226	231	226	232	235	235	231	233	71	77	75	77	31 86	2			45	36	45	9 4	6	44	46
Philadelphia	1	1	1	1	215	217	214	216	1	: 1	1	1	50 64	4			1	1	1	28	27	183	27
San Diego	ı	231	226	234	236	240	240	240 ***	ı	79	69	80	85 84	8			43	39	49	51	22	26	99
Black																L							
Nation (public)	198	197	199	203	204	205	205	206 "		39		94	47 4.		51		12	12	14	15	16	17	18 .
Large city¹	192	193	196	199	201	202		204	33	35	38				48		10	=	12	5	14	15	91
Albuquerque	1 8	ΙŞ	1 3	١٤	ا و	++ §		+ 5	1 8	1 7	1 2	15			++ (_	1 9	15	1 9	13	++;	++ ;	++;
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Bailmore City		1 1	B 1	į l	200	198		196		1 1	2 I	; I			37	_		2	= 1	2 9	9 0	2 =	+ 0
Boston	ı	202	203	204	212	211		214	ı		45				65	_	11	=======================================	13	9	17	16	21
Charlotte	ı	205	206	206	211	211		216	1	84	- 49	:			9	_	14	16	15	ē	9	25	27
Chicago	182	26.	B 5	55 5	134	197		502	S			3 5			2 2	_	1 9	,	2 4	2 "	= "	5	200
Dallas	1	<u>.</u> I	<u>2</u> I	<u> </u>	<u> </u>	204		202	ı ı	8 1	ş I				44		-	- 1	· I	, I	, =	2	
Detroit	ı	ı	ı	ı	186	190		184	ı		ı				24	_	ı	ı	ı	ıo	ø	7	
District of Columbia (DCPS)	188	184	187	192	195	191		202	82	27	67	33			46		2	80	6	=	=	13	17
Duval County (FL)	ı	I	ı	ı	I	I		212	ı	ı	ı				57		ı	ı	ı	ı	I	ı	16
Fresho	ı	ı	ı	ı	193	<u>6</u>		186	ı	ı	ı				21.2	_	ı	ı	ı	60	ω ;	۲- ;	- ;
Hillsborough County (FL)	1 8	Ιğ	1 100	١٤	1 5	218		216	1 5	15	1 9	1 9			56		1 \$	1 5	1.7	9	8 3	2 5	27 0
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Los Angeles	186	187 ***	187	1 95	195	196		202	52	 1 R		34				9	[®]	6	1 12	1 2	9 00	2 9	4 2 2
Mlami-Dade	ı	ı	ı	ı	205	210		210	ı	ı	ı	1				1	ı	ı	ı	5	92	19	17
Milwaukee	ı	I	ı	ı	187	187		ı	ı	ı	ı					1	ı	ı	ı	9	7	6	ı
New York City	197	201	206	206	208	209		206	37	43	49					σ	5	16	15	17	20	6	16
Philadelphia	ı	Ιş	Ιĝ	Ιş	191	195	196	198	ı	I å	LS	1 3	34	37	40 39	ا ا	١٩	ış	1 \$	ю _ф	on ţ	= ≎	on g
See notes at end of table.	1	180	180	B	5ho	500		107	,	S	3						n	2	2	2	=	0	2

Grade 4 Reading: 2002 - 2015 (Continued)

National Center for Education Statistics

2015 Reading TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achievement Leveis, and Percentiles for Districts and Jurisdictions

Average scores and achievement-level results in NAEP reading for fourth-grade public school students, by selected racelethnicity categories and jurisdiction: Various years, 2002-15—Continued

			age sc	-			1				At or above Basic	ove basic							At or abov	At or above Proficient			
2003 20	-61	2005 2007	07 2009		2011 20	2013 20	2015 20	2002	2003	2005	2007	2009	2011	2013	2015	2002	2003	2005	2002	2009	2011	2013	2015
661	CÝ.	201 20	204 20	204	205 2	207	208	43	43	77	67	48	09	25	B	14	14	12	17	16	18	19	21
461	+	198 *** 19	199 203	202	203 2	204	206	38	07	07	44	45	47	49	ß	12	13	13	14	14	91	17	9
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90	189 *** 19	190 *** 19	190 *** 19.	193			197	97	30	31	33	38	40	44	43	2	2	. 6			Ξ	13	14
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Grade 4 Reading: 2002 - 2015 (Continued)

National Center for Education Statistics

2015 Reading TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achievement Levels, and Percentiles for Districts and Jurisdictions

Average scores and achievement-level results in NAEP reading for fourth-grade public school students, by selected racelethnicity categories and jurisdiction: Various years, 2002–15—Continued

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National Center for Education Statistics

2015 Reading TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achlevement Levels, and Percentiles for Districts and Jurisdictions

Average soores and achievement-level results in NAEP reading for eighth-grade public school students, by selected racelethnicity categories and jurisdiction: Various years, 2002–15

													1			Percentage of students	f students							
Race/ethnicity and jurisdiction	2002	2003	2005	2007	Average scale score 007 2009	2011	2013	2015	2002	2003	2005	2007 2009	2009	2011	2013	2015 2	2002 2	2003	2005 2	2007 2009		2011	2013	2015
_																								
Nation (public)	271	270	269	270	271	272	275 ***		83	85	18	:	83	84	58		39	39	37	38	66	41	74	45 "
Large city ¹	270 ***	268	270	271	272 ***	273	276	277 **	08	62	. 18	28	83	83	85	: 98	07	37	38	39	42	43	47	: 8
Albuquerque	1	۱ ۰	1 '	L	1 ;	271	275	267	L	L	L	L	1:	8	92	. 62	1!	۱ ۰	L	L	11	육 :	9 1	8
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Baltimore City			6 1	ţ	707	267	275	268			3 1	- I	R ++	192	82	. 2			3 1	8 1	3 +	8 25	42	3 %
Boston	ı	273	274	275	282			282 ***	ı	79	18	80	8	82	87	87	ı	44	46	48	55	18	z	285
Charlotte	ı	278	278	279	276 ***			284 "	ı	88	87	88	87	16	92	76	ı	49	49	52	48	98	29	26
Chicago	266 ***	265	270	266	272 ***			289	75	79	6	77	84	80	96	06	31	30	41	38	40	41	51	8
Cleveland	ı	250	255	262 ***	258	260	250	251 ::-	ı	62	99	08	72	73	62		ı	14	20	26	23	55	19	16
Dallas	ı	ı	ı	ı	ı	276	++	++	ı	ı	ı	ı	ı	87	++	++	ı	ı	ı	ı	ı	46	++	++
Detroit	1	1.	L	1	**	**;	**;		1.	1	1 3	1	++ -	** ;	**;	***	1 '	1.	Li	1 '	**	**;	**;	**
District of Columbia (DCPS)	++	++	301	+	+	290	301	299	+	++	36	++	+	8	25	8	++	+	74	++	+	2	78	
Duval County (FL)	1 1	1 1	1 1	1 1	Ιű	757	765	272	1 1		1 1	1 1	1 2	1 %	ΙE	: 22	1 1	1 1	1 1	1 1	۱۶	18	1 8	4 % :
Hillsborningh County (E)					3	376	24.5	. 224					t	8 8	8 8						70	3 4	3 4	3 5
Houston Houston	976	270	280	281	280	283	284	280	81	1 %	1 8	1 2	1 5	8 8	8 5	2 6	47	1 5	1 22	1 %	1 29	7 15	F 12	2 62
County (ICV)	; 1	2 1	3 1	į 1	267	269	271	27.1	; I	3 1	3 1	3 1	3 5	: 6	, <u>c</u>	. 52	;	}	3 1	;	1 2	3 15	5 8	2 6
	264	266	261 ***	272	27.1	273	276	273	73	76	69	26	8	83	84	83	23	36	31	14	38	17	8	45
Mlami-Dade	ı	ı	ı	ı	273	275	278	279	ı	ı	ı	ı	18	83	98	88	ı	ı	ı	ı	43	4	49	5
Milwaukee	ı	ı	ı	ı	265	255	262	ı	ı	ı	ı	ı	78	29	74	ı	ı	ı	ı	ı	33	56	53	ı
New York City	ı	270	269	270	27.1	271	274	276	ı	42	80	80	18	82	84	92	ı	42	38	41	41	88	44	46
Philadelphia	ı	1	L	L	266	264	261	263	ı	L	1 3	1 3	76	7	72	74	ı	1 :	1:	L	g:	37	54	138
san Diego	ı	593	273	Z/1	273	275	281	283	ı	- 6/	28		78	8	5	5	ı	3/	4	42	54	6	25	2
black Nation (public)	244	244	242 ***	244 ***	245 ***	248	250 ***	247	55	::	15	3	99	28	09	89	13	12	:	12	13	1	16	5
Large city ¹	240	241 ***	240	240	243		246	246	67	67	- 48	67	S	55	26	26	01	01	10	01	=======================================	3	4	14
Albuquerque	ı	ı	ı	ı	ı		++	++	ı	ı	ı	ı	ı	++	**	++	ı	ı	ı	ı	1	++	++	++
Atlanta	233	237	237	242	246	249	249	246	39	77	43	89	22	9	59	88			. 6	. 6	12	12	15	13
Austin	ı	ı	242	238	247	246	245	241	ı	ı	25	46	22	25 5	22	9 9	ı	ı	무	무	4 0	12	7 ;	= 5
Baltimore City	ı	1 ;	ı	I	243	242	249	240	I	l (1 8	1 5	3 5	S :			ı	١;	1 ;	1 3	on ;	ю;	£ ;	: P !
Charlotte	1 1	245	244	246	248	253	253	251	1 1	2 10	2 15	2 15) E	8 19	9 10	2 12	1 1	2 7	2 5	2 7	ā ř	4 ¢	2 5	2 6
Chicago	245	243	240 ***	240	243	245	244	247	25	52	8	8	B	83	54	99	무	무	무	6	=	5	Ξ	ņ
Cleveland	ı	238	236	243	239	234		238	ı	45	77	51	48	9	45	. 77	ı	00	00	7	7	7	o i	
Defroit			1	ı	1 %	244		241					1 5	. ·	8 4	: :					۱,	יו ת	2 «	:
District of Columbia (DCPS)	238	236	235	238	33	231	237	236	46	45	42	45	3 43	9	46		80	00	o	6	- on	. p	o 01	· =
Duval County (FL)	ı	ı	ı	ı	ı	ı		254	ı	ı	ı	ı	ı	ı	ı	99	ı	ı	ı	ı	ı	ı	ı	9
Fresno	ı	ı	ı	ı	232	230	236	238	ı	ı	ı	ı	37	36	42	45	ı	ı	ı	ı	œ	6	80	œ
Hillsborough County (FL)	ı	ı	ı	ı	ı	247	252	246	L	I	1	ı	ı	99	8	25	1	1	1	1	1	12	17	12
Houston	247	244	242	249	243	247	245	246	9	S	ß	62	98	28	99	25	5	12	=	12	Ξ	12	12	12
Jefferson County (KY)	1 200	1 2	1 20	1 8	245	245	243	247	1 9	1 3	1 9	1 8	3 9	8 5	9 9	20	l °	۱,	۱°	l "	₽;	12	ç Ç	to s
Los Angeles	222	202	407	677	657	242	240	240	3	4	9	99	6 4	5 H	0 1		0	,	0	o	- 1	2 0	7 0	2 4
Milwaukee		1 1	1 1	1 1	233	232	232	t 1	1 1	1 1	1 1	1 1	o 4	88	8 8	'nΙ	1 1			1 1	2 9	2 0	2 1	۱ ≏
New York City	ı	245	241	240	246	248	253	247	ı	26	49	20	99	65	. 29	26	ı	5	무	F	. 27	9	Ф	5
Philadelphia	ı	ı	ı	I	241	244	244	240	ı	ı	1	ı	48	25	25	-:- 67	ı	1	1	1	6	5	12	:
San Diego	ı	236	242	240	239	238	244	252	1	46	S	48	67	20	57	. 02	ı	7	12	10	00	=	13	9
See notes at end of table.																								

Grade 8 Reading: 2002 - 2015 (Continued)

Mational Center for Education Statistics

015 Reading TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achievement Levels, and Jurisdictions

Average scores and achievement-level results in NAEP reading for eighth-grade public school students, by selected race-ethnicity categories and jurisdiction: Various years, 2002–15—Continued

	_														1									
				Average scale score	sale score							At or above Basic	Basic						¥	At or above Proficient	oficient			-
Race/ethnicity and jurisdiction	2002	2003	2005	2007	2009	2011	2013	2015	2002	2003 2	2005 20	2007 20	2009 20	2011 2	2013 2	2015 2	2002 20	2003 20	2005 20	2007 20	2009 20	2011 2	2013 2	2015
Hispanic																								
Nation (public)	245	244	245	246 ***	248	251	255 ***	253 *	95	:	99	22	65	æ	29	. 99	71	41	71	14	91	9	21	20
Large city ¹	242 ***	241	243	243	245 ***	249	253	251	25	19	53	83	99	8	65	29	12	12	13	12	71	9	19	19
Albuquerque	ı	ı	ı	ı	ı	248	250 ***	246	ı	ı	ı	ı	ı	22	61	57	ı	ı	ı	ı	ı	14	17	14 :-
Atlanta	++	++	++	**	++	++	254	258	++	++	++		**	++	63	71	++	++		++	++	++	20	23
Austin	ı	ı	243	244	251	251	251	249 **	ı	ı	52	55	62	8	62	: 09	ı	1	13	15	18	92	5	17
Baltimore City	ı	ı	ı	ı	++	++	++	246	ı	ı	ı	1	++	**	++	55	1	1	1	1	++	++	**	17
Boston	ı	245	248	241	251	245	250	249	ı	25	57	52	64	83	61	: 69	ı	7	16	01	13	15	21	92
Charlotte	ı	244	248	251	254	256	259	254	ı	52	58	65	64	89	70	65	ı	4	19	20	18	24	27	25
Chicago	248 ***	249	251	255	249	255	255	257	19	19	29	69	29	89	69	71 :	12	15	91	20	17	21	21	. 57
Cleveland	ı	**	248	249 ***	237	241	241	238	ı	++	57	58	45	20	25	49	ı	**	10	16	=	6	12	12
Dallas	ı	1	ı	ı	ı	246	253	251	ı	1	ı	ı	ı	28	99	62	1	1	ı	1	1	12	16	17
Detroit	ı	ı	ı	ı	232	244	242	245 ***	ı	ı	ı	ı	38	22	51	51 :	ı	ı	ı	1	9	12	80	16
District of Columbia (DCPS)	240	240	247	249	249	232 ***	247	244 **	S	51	59	56	62	43	56	26	F	=	18	19	22	4	20	17
Duval County (FL)	ı	ı	ı	ı	ı	ı	ı	262	ı	ı	ı	ı	ı	ı	ı	72.	ı	ı	ı	1	ı	ı	ı	30 ·
Fresno	ı	ı	ı	ı	235		241	238	ı	ı	ı	ı	44	42	20	.: 48	ı	ı	ı	1	00	σι	F	P
Hillsborough County (FL)	ı	ı	ı	ı	ı	258	263 ***	254	ı	ı	ı	ı	ı	70	74	65	ı	ı	ı	1	ı	24	30	21
Houston	243	242	245	246	250		250	247	25	51	56	57	83	62	62	: . 89	13	무	12	13	15	13	15	15
Jefferson County (KY)	ı	ı	ı	ı	++	++	258	. 500	ı	ı	ı	ı	++	++	69	70	1	ı	ı	1	++	++	25	29
Los Angeles	230	228	235	236 ***	239	241 ***	245	246	: 98	37	43	45	05	05	26	: 89	: 50	9	. 6	:	=	F	5	14
Mlami-Dade	ı	ı	ı	ı	261	262	261	266	ı	ı	ı	ı	75	74	73	78	1	1	1	1	29	30	59	33
Milwaukee	ı	ı	ı	ı	249	243	253	ı	ı	ı	ı	ı	62	83	54	1	ı	1	ı	1	15	1	ē	, I
New York City	ı	247	247	241	243 ***	246	249	254	ı	22	57	51	::	57	9	4	ı	17	14	13	13	17	92	22
Philadelphia	ı	ı	ı	ı	241	239	243	244	ı	ı	ı	ı	51	46	54	22	ı	1	ı	1	6	6	12	:-
San Diego	1	238	241	235	242	245	247	248	ı	46	20	45	S	22	27	9	ı	. 6	12	=	14	5	5	92

National Genter for Education Statistics

2015 Reading TUDA Assessment Report Card. Summary Data Tables with Additional Detail for Average Scores, Achievement Levels, and Percentiles for Districts and Jurisdictions

Average scores and achievement-level results in NAEP reading for eighth-grade public school students, by selected race/ethnicity categories and jurisdiction: Various years, 2002-15—Continued

								_								Percentage of students	of Students							
				Average scale score	cale score							At or above Basic	e Basic							At or above Proficient	Proficient			
Race/ethnicity and jurisdiction	2002	2003	2005	2007	2009	2011	2013	2015	2002	2003	2005	2007	2009	2011	2013	2015	2002	2003	2005	2007	2009	2011	2013	2015
Aslan/Pacific Islander																								
Nation (public)	592	268	270	269	273 ***	275	279	279	75	87	62	62	82	82	92	. 68	34	38	39	04	. 44	46	20	. 09
Large city ¹	256 ***	260 ***	266	263	268	270	273	27.1	99	69	76	74	77	79	82	67	52	30	35	z	38	4	43	42
Albuquerque	ı	ı	I	ı	ı	++	++	**	ı	ı	ı	ı	ı	++	++	++	ı	ı	ı	ı	ı	++	**	++
Atlanta	++	++	**	++	++	++	++	++	++	++	++	**	++	++	++	++	++	++	**	++	++	++	++	++
Austin	ı	ı	++		++	++	++	++	ı	ı	++	++	++	++	++	++	ı	ı		++	++	++	++	++
Baltimore City	ı	ı	ı	ı	++	++	**	**	ı	ı	ı	ı	++	++	++	++	ı	ı	ı	ı	++	++	++	++
Boston	ı	274	280	275	276	280	278	281	ı	83	85	18	68	87	84	98	ı	44	55	46	45	8	S	99
Charlotte	ı	++	**	**	++	264	++	**	ı	++	++	++	++	72	++	++	ı	++	**	++	++	37	++	++
Chicago	++	268	277	++	++	264	278	++	++	78	88	++	++	74	85	++	++	35	44	++	++	38	53	++
Cleveland	ı	++	++	++	++	++	++	++	ı	++	++	++	++	++	++	++	ı	++	++	++	++	++	++	++
Dallas	ı	ı	ı	ı	ı	++	++	++	ı	ı	ı	ı	ı	++	++	++	ı	ı	ı	ı	ı	++	++	++
Detroit	ı	ı	ı	ı	++	++	++	++	ı	ı	ı	ı	++	++	++	++	ı	ı	ı	ı	++	++	++	++
District of Columbia (DCPS)	++	++	**	**	++	++	**	++	++	++	++	**	++	++	++	++	++		**	**	++	++	**	++
Duval County (FL)	ı	ı	ı	ı	ı	ı	ı	**	ı	ı	ı	ı	ı	ı	ı	++	ı	ı	ı	ı	ı	ı	ı	++
D Fresno	ı	ı	ı	ı	241	241	247	251	ı	ı	ı	ı	48	48	28	09	ı	ı	ı	ı	10	12	5	20
 Hillsborough County (FL) 	ı	ı	ı	ı	ı	++	**	**	ı	ı	ı	ı	ı	++	++	++	ı	ı	ı	ı	ı	++	**	++
Houston	++	++	++	289	++	277	283	++	++	++	++	16	++	25	89	++	++	++	++	19	++	88	22	++
Jefferson County (KY)	ı	ı	ı	ı	++	++	**	**	ı	ı	ı	ı	++	++	++	++	ı	ı	ı	ı	++	++	**	**
Los Angeles	259	255	262 ***	264	265	267	27.1	274	7.3	49	73	76	76	77	84	18	52	27	30	32	35	38	33	46
Mlami-Dade	ı	ı	ı	I	++	++	++	++	ı	ı	ı	I	++	++	++	++	ı	I	I	ı	++	++	**	++
Milwaukee	ı	ı	I	ı	++	248	++	ı	ı	ı	ı	ı	++	19	++	ı	ı	ı	ı	ı	++	16	**	ı
New York City	ı	264	271	268	270	273	271	270	ı	72	8	79	79	19	80	78	ı	35	42	37	40	46	43	14
Philadelphia	ı	ı	ı	ı	270	258	265	276	ı	ı	ı	ı	78	29	75	84	ı	ı	ı	ı	39	28	39	44
San Diego	ı	260	265	265	264	267	266	592	ı	71	76	78	77	78	79	75	ı	27	31	SS.	32	38	36	40
Not available. District did not participate. Benoches chard and not reason to participate action to permit a reliable actionate.	participate.	a of feelough to a	sidellar e diman	octimate .																				
Significantly different to < .05) from Jaroe etty in 2015.	Trom large of	ty in 2015.		- COUNTY OF THE																				
"Significantly different (p < .05) from nation (public) in 2015.	from nation	(public) in 20	15.																					
 Significantly different to < .05) from 2015. Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts. 	m all office in	w up nation w	th population:	5 of 250,000 c	or more Inclu	ding the part	icipating dist	ricts.																
INTE-Balantan in 900 azeitt for mater cahant cahant cahant canant in azeitt if they are an included in the cohort detect of Avoran Democre (AVO) same the Artestive Balantan in Falusation Bland included Balantan and Daville letands included Usafue Estation Base asteorities awained	e for obsider	a are alread	wollings from	the TIIDs rec	or the Mithaus	ra not include	od in the colo	ani dichinte An	acay atemas	A Dronners A	AVD) report to	in the II of De	and months:	Schooling RIS	and included	African Ameri	Alcoholic Acc	te Lagrange Lag	ford bac only	in lelander in	outles Mathe	nellewell a	sonaten anes	rioc avoluda

NOTE: Espining in 2003, results for charter schools are excluded from the TUDA results if they are not included in the school district's Adequate Yeary Progress (AYP) report to the U.S. Department of Education. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Schools.

SOURCE.U.S. Department of Education, Institute of Education Sciences, National Categories, National Assessment of Educational Assessment of Education Assessment of Education Assessment of Education Assessment of E

National Genter for Education Statistics

2015 Mathematics TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achievement Levels, and Percentiles for Districts and Jurisdictions

Average scores and achievement-level results in NAEP mathematics for fourth-grade public school students, by selected race/ethnicity categories and jurisdiction: Various years, 2003–15

							_							Percentage of students	of students						_
			- 1	Average scale score	Score		1				le Ba			1			П.	At or above Proncient	ien		
Racelemnicity and junspiction	2003	2002	7007	2003	1102	2013	SUI2	2003	5002	7007	5002	1102	2013	eluz	2003	5005	7007	2009	1102	2013	chis
Nation (nublic)	243	246 ***	248	248	249	050	. 870	28	g	5	6	i	:	6	CF	47	īc	5	8	75	
l arna ciltu	243	247	240	250	S S	9	i Ž	: 5	8 8	; 8	2 6	5 5	6	3 5	1 2	05	. 2	8 8	1 13	5 6	:
Albiniamia	}	į	}	}	25.0	Ş	240	3 1	3 1	۱ ۱	۱ ۱	; 8	; 8	. 8	<i>‡</i>	3 1	3 1	3 1	3 2	3 6	3 18
Atlanta	258	263	266	266	569	363		8	96	g	86	18	g	: 86	20	72	5	97	28	88	:
Austin	1	262	263	262	266	264	598	1	6	8	26	g	8	26	1	75	92	74	80	77	
Baltimore City	١	I	ı	240	244	59	232	ı	: 1	: 1	8	18	98	73	ı	: 1	: 1	ন	4	15	
Boston	234	244 ***	250	251	255	256	8	44	88	8	35	8	8	8	35	43	25	83	8	8	88
Charlotte	257	261	261	263	264	564		8	26	88	25	26	26	96	99	5	7.5	72	76	76	9/
Chicago	235	243	244	242	246	261	262	: 23	88	28	83	18	3.		1	43	47	44	25	89	72
Cleveland	233	233	233	228	232	233	233	8	₩	8	73	92	76	78	27	25	52	17	28	34	
Dallas		I	ı	1	258	**	259	: 1	1	: 1	: 1	26	**		1	1	1	1	6	**	. 3
Defroit	١	ı	ı	+	+	+	+	ı	١	١	+	+	+	+	١	ı	١	+	+	+	+
District of Columbia (DCPS)	262	266 ***	595	270	272	277	275	25	66	16	66	98	8			78	73	18	8	8	:
Duval County (FL)	١	ı	ı	ı	ı	ı	: 757	ı	ı	ı	ı	ı	ı		ı	ı	ı	ı	ı	ı	: 8
Fresno	١	ı	ı	237	238	241	235	ı	ı	١	79	8	88	74	ı	ı	ı	Ж	39	39	18
Hilsborough County (FL)	ı	I	ı	ı	253	250	53	ı	ı	ı	ı	S	S		ı	I	ı	ı	65	28	88
Houston	254	262	363	260	259	261	386	8	25	8	6	8	8	: 86	8	73	79	7.1	99	7.1	92
Jefferson County (KY)	1		ı	243	243	245	245	: 1	1	: 1	8	87	88	. 98	: 1	: 1	: 1	4	4	48	47
Los Angeles	241	247	247	245	243	254	247	8	87	8	87	18	88		4	49	8	8	45	61	<u>0</u>
Mani-Dade		١	١	523	255	52	257	: 1	: 1	: 1	96	8	8		:	: 1	!	19	9	25	: 18
Minaukee	١	I	ı	242	239	246		ı	ı	ı	98	ω Ε	87		١	ı	١	4	88	46	: 1
New York City	244	245	576	254	248	251	242	88	87	5	. 75	87	8		42	46	8	: 89	200	25	 98
Philadelphia	; 1	ļ	1	239	243	237	235	: 1	; I	; 1	80	2	8	92	!	: 1	1	32	43	18	.:
San Diego	243	249	252	255	258	260	3	28	8	8	8	S	8	. 26	17	8	g	23	199	7.1	. 19
Black																					
Nation (public)	216	220	222	222	224	224	. 727	33	09	8	8	19	8	. 8	01	13	15	15	17	49	19.
Large city ¹	212 ***	217 ***	219	219 ***	222	223	222	47		88	69	ß	3	19	60		13.	14	9	17	91
Albuquerque	ı	ı	ı	ı	++	++	++	ı	ı	ı	ı	++	++		ı	ı	ı	ı	++	++	++
Atlanta	211	215	217	218	219	222	218	12	5	ß	27	g	8		7	ō	F	Ŧ.	F	ŧ,	:. =
Austin	ı	228	28	226	232	238	23	ı	74	8	7.	29	72	71	ı	9	17	ņ	22	21	9
Baltimore City	ı	ı	ı	220	223	28	212	ı	ı	ı	19	8	69	47	ı	ı	ı	10	4	15	10.
Boston	216	223	23	231	230	528	:.	: :8:	99	7	78	92	23	. 02	9	£	9	R	5	22	
Changte	 	230	538	231	232	88	S	2 22	74	6 d	12	8 8	E 6		R 1	21	, i	त्र इ	\$ \$	2 13	; ;
of section 2	200	200	2 6	717	170	177	1 2 2	9 3	- 6	g ų	9 7	8 4	g y		7 11	0 0	0 4	n u	2 4	≥ 1	
Ceverally	2	2	2	E03	225	2 6		‡ I	8 I	3 1	;	3.5	9 6	3.5	ا د	o I	9	9	οç	- 10	
Detroit	١	I	١	901	100	204	202	١	ı	ı	20	i m	F 18		١	ı	١	m		m	
District of Columbia (DCPS)	202	207	508	212	212	218	220	1 2	14		49	18	88	188	1	19	8	:	12	φ Φ	
Duval County (FL)	١	I	ı	ı	ı	ı	230	ı	ı	ı	ı	ı	ı		ı	ı	ı	١	ı	ı	5
Fresno	١	I	ı	213	214	211	213	ı	ı	ı	46	ş	4		ı	ı	ı	12	F	9	6
Hillsborough County (FL)	١	I	ı	ı	228	227	230	ı	ı	ı	ı	2	7	75	ı	I	ı	ı	20	20	23
Houston	221	224	22	227	229	227	231		29	8	72	25	2		12	7	16	17	20	20	ន
Jefferson County (KY)	ı	I	ı	216	52	230	22	ı	ı	ı	54	25	8		ı	ı	ı	Ţ.	5	4	17
Los Angeles	208	209	216	209	215	223	216	42	42	z	41	ß	ß		ø	σ	ņ	무	F	5	77
Mlami-Dade	١	I	ı	222	225	227	230	ı	ı	ı	64	29	72	75	ı	I	ı	15	17	9	23
Miwaukee	1 8	Ιş	1 8	211	211	98	1 8	18	L	۱۱	9 6	9 6	æ (L	1 9	L	18	- 2	ωç	ωį	15
New YORK CITY	513	777	77	177	977	9 5	37	8	2	7,	2 2	8 8	16		7	4	R	17	2 9		.:.
San Diego	216	23.1	3 1	222	32	238	217	1 23	1 6	1 12	# Z	8 12	76		«	1 15	1 2	ā fā	2 ¢	7.5	. 2
See notes at end of table.																					

Grade 4 Mathematics: 2003 - 2015 (Continued)

Mational Genter for Education Statistics

2015 Mathematics TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achlevement Levels, and Percentiles for Districts and Jurisdictions

Average scores and achievement-level results in NAEP mathematics for fourth-grade public school students, by selected racelethnicity categories and jurisdiction: Various years, 2003–15—Continued

														Percentage of students	of students						
			- 1	Average scale soore	soore						At or above Basic			1			- 1	At or above Proficient	clent		
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San Diego	238	245	247	247	38	32.5	38	25	87	8	: 8	3 6	3 88	:	S	8	8	; R	3 (3	38	::
 Not available. District did not participate. 	participate.	and project in	1	de configuration																	

[†] Reporting standards and met. Sample size insufficient to permit a reliable estimate.

* Supporting standards and met. Sample size insufficient (p < .65) from hardon (public) in 2015.

* Supporting standards and met. Sample size in 2015.

* Supporting standards and met. Sample size in 2015.

* Supporting standards and met. Sample size in 2015.

* Large beginned in 2015.

* Large beginned in 2015.

* Large beginned in 2015.

* Nationard and size in the nation with populations of 250,000 or more including the participation of standards are evidenced from the TUDA results if they are not included in the standard standards. Adequate Yearly Progress (AYP) report to the U.S. Department of Education. Black includes Afficien American, Hispanic Includes Latino, and Pacific Science. National Assessments.

**Supporting in 2015.

**Large Supporting in 2015

National Center for Education Statistics

2015 Mathematics TUDA Assessment Report Card: Summary Data Tables with Additional Detail for Average Scores, Achievement Leveis, and Percentilies for Districts and Jurisdictions

Average scores and achievement-level results in NAEP mathematics for eighth-grade public school students, by selected racelethricity categories and jurisdiction: Various years, 2003–15

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Average scores and abtevement-level results in NAEP mathematics for eighth-grade public school students, by selected racelethnicity categories and jurisdiction: Various years, 2003–15—Confirmed

														Percentage of students	if students						
				Average scale score	score					Ato	At or above Basic							At or above Proficient			
Race/ethnicity and jurisdiction	2003	2005	2002	2009	2011	2013	2015	2003	2005	2007	2009	011	2013	2015	2003 2	3002	2007	2009	-	2013	2015
nispanic Nation (public)	258	261 ***	264 ***	599	269	77.1	269	47	8	24	: 95	8	62	09	=======================================	13	15	17	8	23	6
Large city1	529	258 ***	261 ***	264	267	269	268	43	46	09	3	89	09	27	01		13	16	6	2	18
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District of Columbia (DCPS)	546	252	251	g	53	262	: 263	33	8	98	88	9	25	25	m	5	6	17	12	8	ē (
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Charlotte	: :	**	305	**	304	312	314 "	18	++	88	++	8	83	88	43	++	S	++	19	19	29
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Jefferson County (KY)	ı	L	L	**;	++;	**	**	I	L	L	++;	++;	++;	++;	ı	L	1	++;	++;	++;	++;
Los Angeles	275	291	292	ģ	532	80	536		22	85	92	8	98	8	18	43	8	44	48	47	49
Mami-Dade	ı	ı	ı		÷		++	ı	ı	ı		↔ 8		++	ı	ı	ı		+ + €		++
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 Not available. District did not participate. 	articipate.				ı																
+ Reporting standards not met 3	aris eliums	neufficient to	normit a rel	ahle estima	g																

[#] Reporting standards not met. Sample size insufficient to permit a reliable estimate.

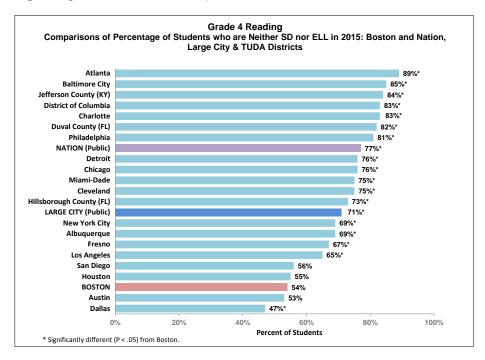
Significantly different (p. <.165) from large only in 2015.
Significantly different (p. <.165) from nation plots (p. 2015).
Significantly different (p. <.165) from nation plots (p. 2015) and plots (p. 2015).
Significantly different (p. <.165) from nation plots (p. 2015).
Large of the nation with populations of 250,000 or more including the participating districts.

**Large of thinking is added to the nation with populations of 250,000 or more including the participating districts. Adequate Yearly Progress (AYP) report to the U.S. Department of Education Black Includes African American, Hispanic Includes Latino, and Pacific Shools.

**Source Construction Plants (P. 2015).
**Sour

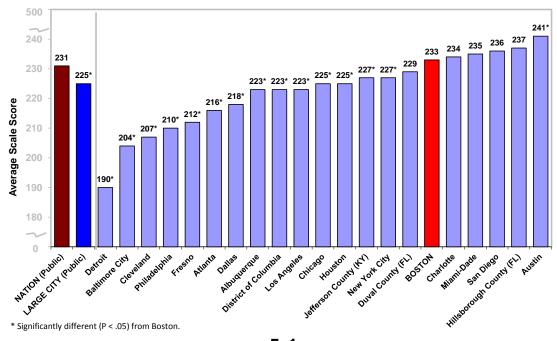
APPENDIX E: Performance of Grade 4 Students who are Neither SD Nor ELL Grade 4 Reading

Comparisons of Percentage of Students who are Neither SD nor ELL in 2015: Boston and Nation, Large City & TUDA Districts, 2015



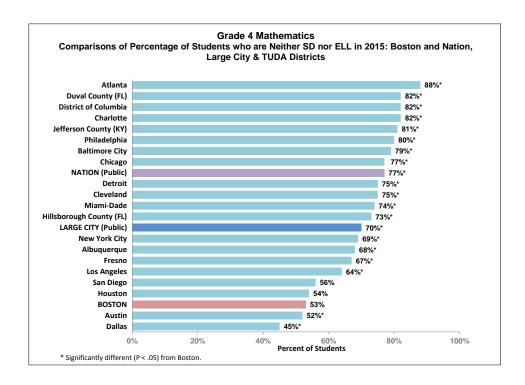
Comparisons of 2015 Average Scale Score of Students Who are Neither Students with Disabilities Nor English Language Learners

Grade 4 Regular Education Students
2015 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



Grade 4 Mathematics

Comparisons of Percentage of Students who are Neither SD nor ELL in 2015: Boston and Nation, Large City & TUDA Districts, 2015



Comparisons of 2015 Average Scale Score of Students Who are Neither Students with Disabilities Nor English Language Learners

Grade 4 Regular Education Students 2015 Mathematics Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts

