

**Report on 2017
Trial Urban District Assessment (TUDA)
National Assessment of Educational
Progress (NAEP)**

Grades 4 and 8 Reading and Mathematics

**Office of Data and Accountability
April 2018**

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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 2017, Boston Public Schools was one of twenty-seven 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, 2015 and 2017; in the Science assessments in 2005, 2009 and 2011 (Grade 8 only); and in Writing in 2007. 2017 marked the 14th year that Boston voluntarily participated in the TUDA program. It should be noted that the NAEP program in 2017 included digitally based assessments in mathematics and reading in addition to the paper-and pencil versions of the assessment. However, the results were reported based only on digitally based assessments.

This report examines the 2017 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 2017:

- Over this fourteen-year period, Boston's 4th graders made a significant 11-point scale score gain, exceeding the Large City average (9 points), as well as the Nation average (4 points). Boston's average scale score was about the same as in 2015 with 2-point decrease that was not statistically significant.
- Between 2003 and 2017, Boston's 8th graders also experienced a 9-point gain, surpassing the 4-point gains experienced by students nationwide, and on par with the Large City gain (9-point).

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 2017 was significantly higher than the first three previous (2003, 2005 and 2007) administration of the assessment. In grade 8, Boston's 2017 score also was significantly better than every previous administration of the NAEP since 2003.
- The performance of Boston's 4th grade students was comparable to their peers in Large Cities in 2003. Boston students continue to improve over the past 14 years and exceeded the Large Cities by 4 points in 2017. Since 2003, the performance gap with Nation is also substantially smaller (4-point), though it was statically significant.
- Since 2003 Boston's 8th grade performance compared to Large Cities has been significantly higher. Over the past 14 years, the performance gap with Nation is also substantially smaller (4 points), though it was statically significant.

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

- In 2017, Boston's performance exceeded the performance of Large Cities across the country (with a population over 250,000) by 4-points in grade 4 reading and by 3-points in grade 8 reading. However, the average score for Boston was significantly lower than the National average by 4 points in both grades 4 and 8.
- Compared to other TUDA districts, Boston's average score in grade 4 was higher than or equal to all but 6 districts. In grade 8, none of the TUDA districts scored significantly higher than Boston.

Performance by Racial/Ethnic Group:

- From 2003 to 2017, students in all racial groups made statistically significant gains in their average scores on the 4th grade test. Improvements ranged from 7 points for African American students, to 19 points for Asian students. The gains made by Boston's 8th grade students between 2003 and 2017 are statistically significant for all but the Asian subgroup. White students saw a 14-point gain; Hispanic students saw an 8-point gain; African American students experienced a 6-point gain, and scores for Asian students remain statistically unchanged (8 points).
- 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, Boston's Black students performed as well as their peers across the nation and in Large Cities in both test grades. Overall, only Miami-Dade's Black students significantly outperformed Boston's Black students in grade 4. Importantly, Boston's 8th grade African American students had the 2nd highest scale scores of all TUDA districts (tied with Miami-Dade) and was not significantly bested by any other districts.
- Boston's Hispanic students in 4th grade had higher average scores than Hispanic students across the Nation and in Large Cities. In grade 8, Boston's Hispanic students performed as well as their peers across the Nation and in Large Cities. Compared to other TUDA districts, Boston's Hispanic 4th and 8th graders performed as well as or significantly better than all other districts, with three exceptions in grade 4 and two exceptions in grade 8 (in grade 4: Miami-Dade, Duval County and Hillsborough County had higher averages; in grade 8: Miami-Dade and Hillsborough County had higher averages).

Low-Income/Economically Disadvantaged Students:

- In grade 4, economically disadvantaged students in Boston scored significantly higher than the Nation (by 4 points) and Large Cities (by 7 points). Boston's average was also the fourth highest among TUDA districts, and only significantly lower than Miami-Dade.

- Among 8th graders, the performance of Boston's low-income students was the second highest of all TUDA districts and was not statistically different from the highest; on par with than the Nation; and higher than the Large City average.

Students with Disabilities:

- In grade 4, students with disabilities (SWD) in Boston outperformed their peers in Large Cities and comparable to the National average; in grade 8, they performed on par with their peers across the nation and significantly higher than their peers in Large Cities.
- Compared to other TUDA districts, only three had higher average scores than Boston in grade 4 reading (Hillsborough County, Duval County, and Miami-Dade); in grade 8, none of the TUDA districts' students with disabilities scored significantly higher than Boston.

English Language Learners:

- Boston's English Language Learners (ELs) 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.
- EL students in 8th grade performed on par with their peers across the Nation and in Large Cities. Again, none of the TUDA district's English Learners performed significantly higher than Boston in grade 8 reading.

Performance by Achievement Level:

- In 2017, 29% of Boston's 4th grade students scored at or above the Proficient on the reading assessment. Of the 27 participating TUDA districts, only eight districts had a higher percentage. Boston's performance was comparable to the Large Cities average (28%) and significantly lower than the National average (35%).
- In grade 8, the percentage of students in Boston who performed at or above Proficient was 32%, statistically surpassing or equaling the rates of all TUDA districts, Large Cities (27%) and the Nation (35%).
- 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 10-point gain in grade 8, compared to an 8-point gain for Large Cities in grade 4 and an 8-point gain in grade 8.

Performance by Percentile Rank:

- Boston's 4th graders saw a significant and steady improvement since 2003 and 2005 at all except the 10th quintiles and significant improvement continued for students at the 50th, 70th, and 90th quintiles in 2007 and at the 90th quintile in 2009, though students at the 25th quintile experienced a significant 6-point drop from 2015.
- For 8th graders, there have also been significant gains for students at the 25th, 50th and 75th quintiles since 2003 and 2005. Students at the 50th and 75th continued to demonstrate significant gains during 2007, 2009, and 2011 administration. 8th graders

at the mid to lower performing levels (50th, 25th, and 10th) also saw significant gains since 2013.

Mathematics

Boston's Scale Score Change Between 2003 and 2017:

- Between 2003 and 2017, Boston's 4th graders experienced the fourth largest gains of any jurisdiction in the TUDA with a 14-point increase in average scaled scores. In fact, Boston's 4th grade gains since 2003 are significantly higher than the average gains made by large cities (8 scaled score points) in the sample, as well as the gains made at the national level (5 scaled score points).
- The gains made by Boston's 8th graders since 2003 are even more impressive, totaling 18 points, which places it amongst 6 TUDA districts who have made gains greater than 15 scaled score points since 2003. Moreover, Boston's 8th grade gains are three times those made at the national level (6 scaled score points) and surpass the gains made by large cities (12 scaled score points) by 50%. While Boston began 14 scaled score points below that of the national average in 2003, we fully closed that gap in 2015 and have maintained standing as on par with the Nation in 2017.

Boston's Performance over Time:

- In 2003, Boston's 4th grade performance compared to Large Cities was significantly lower: that trend was reversed in 2005 and Boston has performed on par or better than the Large City average ever since. Over this same period of time, Boston has reduced the performance gap with the Nation average by more than half (a gap closure which is shown to be statistically significant), as well.
- Boston's average scaled scores in 8 grade mathematics have continued to increase or remain statistically constant each year since the district first participated in NAEP/TUDA in 2003. In 2017, Boston's 8th graders had an average score significantly higher than the Large City average by 6 points, and remained on par with the average scaled scores of the national sample (i.e. there is no statistically significant difference).

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

- Compared to the other 25 TUDA districts, Boston's average score in grade 4 was higher than or equal to those of 19 other districts. In grade 8, only one district (Charlotte) scored significantly higher than Boston.
- In grade 4 mathematics, Boston scored on par with the Large City average and statistically below that of the national average in 2017. In grade 8 mathematics, Boston performed better than the Large City average and on par with the national average.

Performance by Racial/Ethnic Group:

- From 2003 to 2017, students in all racial groups made statistically significant gains in their average scores on the 4th grade mathematics assessment. Black students saw a 11-point gain while Asian, Hispanic, and White students experienced 15, 13, and 19-point gains respectively.
- The gains made by Boston's 8th grade students between 2003 and 2017 were also statistically significant across all ethnic groups: Asian students showed a 23-point gain, there was a 25-point gain for White students, a 16-point gain for Hispanic students, and a 10-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. In fact, in 2017 the gap between the average scaled scores of White and Black students grew to 53 scaled score points from 39 scaled score points in 2003 (this 14-point increase is a statistically significant growth in the gap between White and Black students).
- Notably, though, in both grades 4 and 8, Black students in Boston performed on par with or significantly outperformed their peers across the Nation and in Large Cities.
- 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 districts, but two (Miami-Dade and Chicago).

Low Income Students:

- In 2017, Boston 4th graders whose families are low income performed on par with the National average in mathematics and significantly outperformed low income students from Large Cities. In 8th grade, Boston low income students significantly outperformed both the National average and that of Large Cities; demonstrating the highest average scaled scores found to be on par with only 5 other TUDA districts.

Students with Disabilities:

- In 4th and 8th grades, Boston's students with disabilities had an average scaled score statistically comparable to the national average and significantly higher than that of Large Cities. In 8th grade, students with disabilities in Boston also performed better than all but two TUDA districts (Duval County and Austin); neither of the districts with higher averages were statistically significant, though.

English Language Learners:

- Boston's English Language Learners (ELLs) in 4th grade scored significantly higher than peers both across the Nation and in Large Cities. Only one of the 20 TUDA districts with a sufficiently large ELL student sample had significantly higher average scaled scores than Boston's in grade 8 (Dallas), and only three districts (Houston, Austin, and Dallas) scored significantly better than Boston in grade 4.

Performance by Achievement Level:

- In 2017, 30% of Boston's 4th grade students scored at the proficient level or above on the math assessment. Seven TUDA districts had a higher percentage; Duval County, Charlotte, Miami-Dade, Austin, Hillsborough County, Guilford County, and San Diego. Boston's performance was significantly below the national average (40%), but on par with the percent of students in Large Cities (30%) who are proficient or above.
- In grade 8, the percentage of students in Boston who performed at or above Proficient was 33%, significantly higher than Large Cities (26%) and on par with the National average (34%).

Performance by Percentile Rank:

- Boston's 4th and 8th graders have experienced significant gains since 2003 across all quintiles and experienced significant gains in the 90th, 75th, and 50th percentiles between 2005 and 2017.

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 (TUDA¹) 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.

¹ To be eligible for TUDA, a district must be in a city with a population of 250,000 or more, and at least half of its student population must include minority racial or ethnic groups or must be eligible for free and reduced-price lunch. For details, please refer to [Eligibility Criteria and Procedures for Selecting Districts for Participation in the National Assessment of Educational Progress - Trial Urban District Assessment - Policy Statement, National Assessment Governing Board](#).

New Developments in 2017

Expanded TUDA Program

Five new eligible districts (Clark County (NV), Denver, Fort Worth (TX), Guilford County (NC), and Shelby County (TN)) were approved by the NAGB to be part of NAEP administration starting in 2017 and, Milwaukee re-joined the TUDA groups after not participating in 2015 administration, brought the total number of TUDA districts to 27. All 27 districts participated in TUDA in mathematics and reading at grades 4 and 8 in 2017.

Dual Administrations of NAEP Assessments

In 2017, it was the first time that the NAEP program administered mathematics and reading assessments to students in grades 4 and 8 throughout the nation on NAEP-provided tablets and reported the national and public school results of digitally based collected via tablets in these two subjects. While most 4th and 8th grade students took the mathematics and reading assessments on tablets with keyboards, a subset of students took paper-and pencil versions of the assessment allowing for the NAEP to evaluate any differences in student performance due to the differences of testing mode. Importantly, the content the assessments measured was the same as in previous years. Each student was assessed in one format and one subject only.

2017 marks the 14th year that Boston voluntarily participated in the TUDA program and the 1st year of reporting of students' performance on digitally based content and delivery in mathematics and reading in grades 4 and 8.

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, eleven of the twenty-seven consist entirely of schools in cities with a population of 250,000 or more; **sixteen** of them however – Albuquerque, Atlanta, Austin, Charlotte, Clark County (NV), Cleveland, Dallas, Duval County (FL), Fresno, Guilford County (NC), Hillsborough (FL), Houston, Jefferson County, Los Angeles, Miami-Dade and Shelby County (TN) — 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.

2017 NAEP READING

READING: DEMOGRAPHIC CONTEXT

The charts below display the percentage of students who participated in the 2017 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.

In both grades 4 and 8, Boston's percentages of Black students fall slightly below the middle range of the other TUDA districts, while the percentages of Hispanic students rank slightly higher than other TUDA districts. However, 76% of 4th grade and 66% of 8th grade students in Boston are classified as economically disadvantaged**, fare larger than the national average (grade 4: 54%; grade 8: 49%) and Large Cities (grade 4: 69%; grade 8: 66%). **Compared to other TUDA districts, Boston also has very high participation rates for students with disabilities and English Language Learners at grade 4; in particular, Boston has the highest participation rate for students with disabilities.** These differences are important to consider in comparing results across jurisdictions.

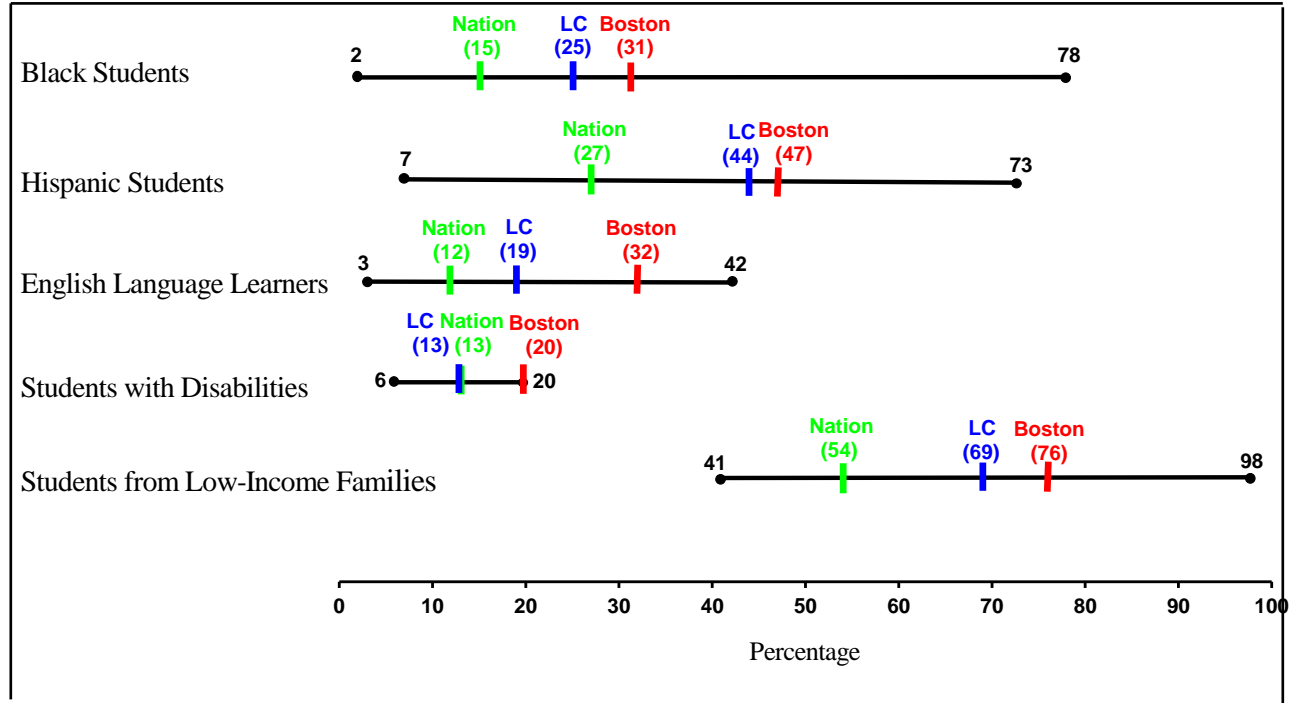
In addition, because results are based on samples rather than entire populations, examining statistical significance is essential in determining differences across groups.

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

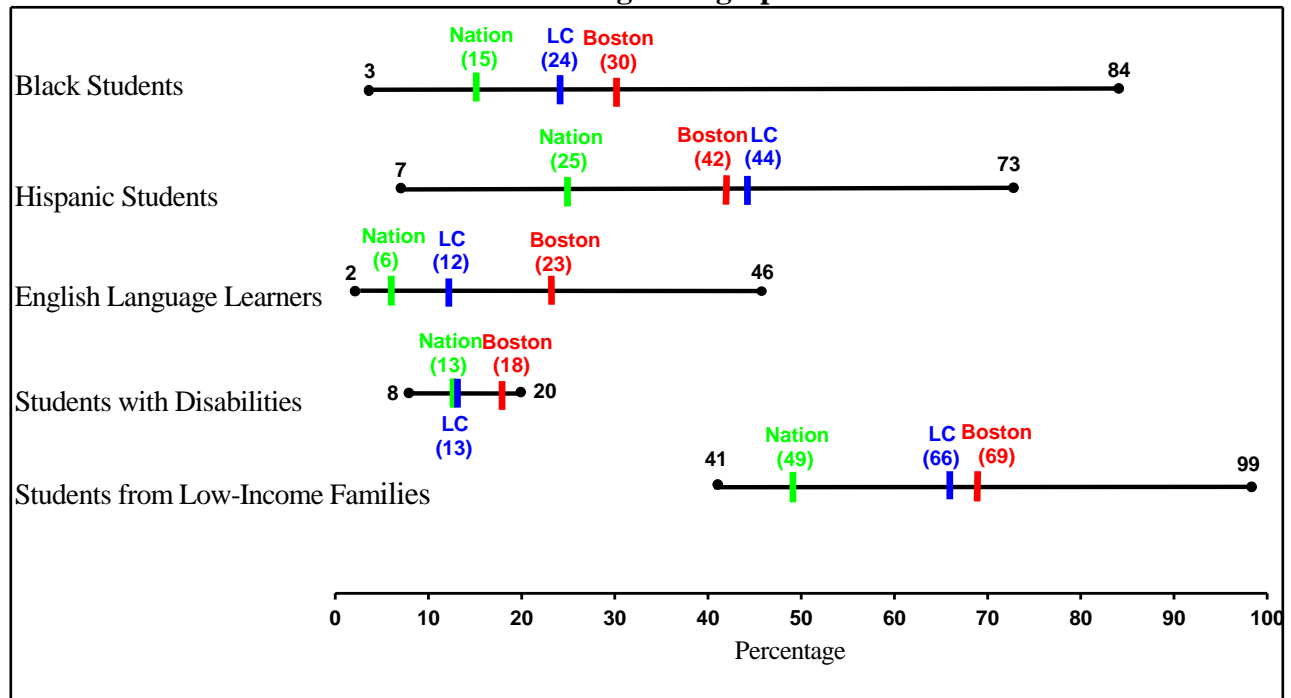
** Based on their participation in one or more of the following state-administered programs: the Supplemental Nutrition Assistance Program (SNAP); the Transitional Assistance for Families with Dependent Children (TAFDC); the Department of Children and Families' (DCF) foster care program; and MassHealth (Medicaid)

Distribution of Selected Student Groups for TUDA Districts

Grade 4 Reading Demographic Characteristics:



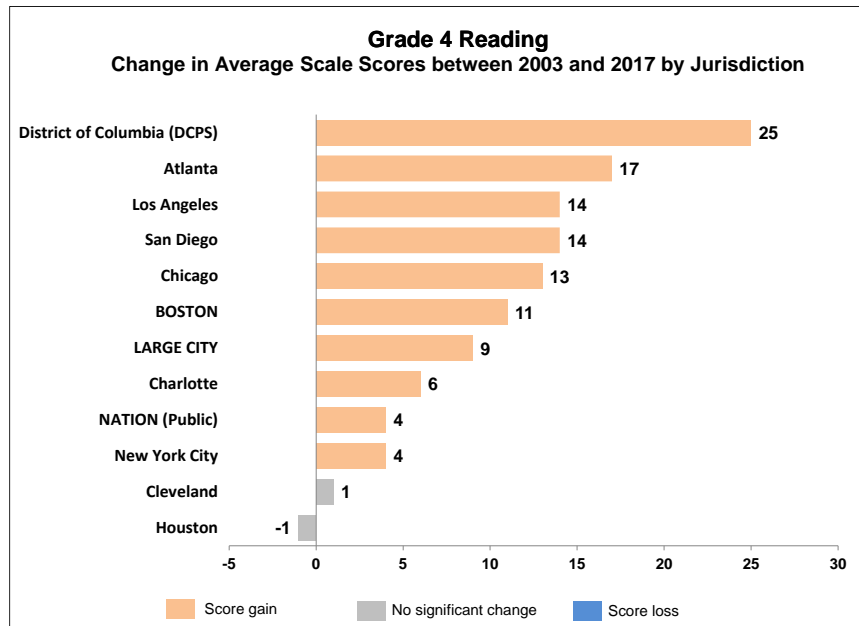
Grade 8 Reading Demographic Characteristics:



READING: ANALYSES

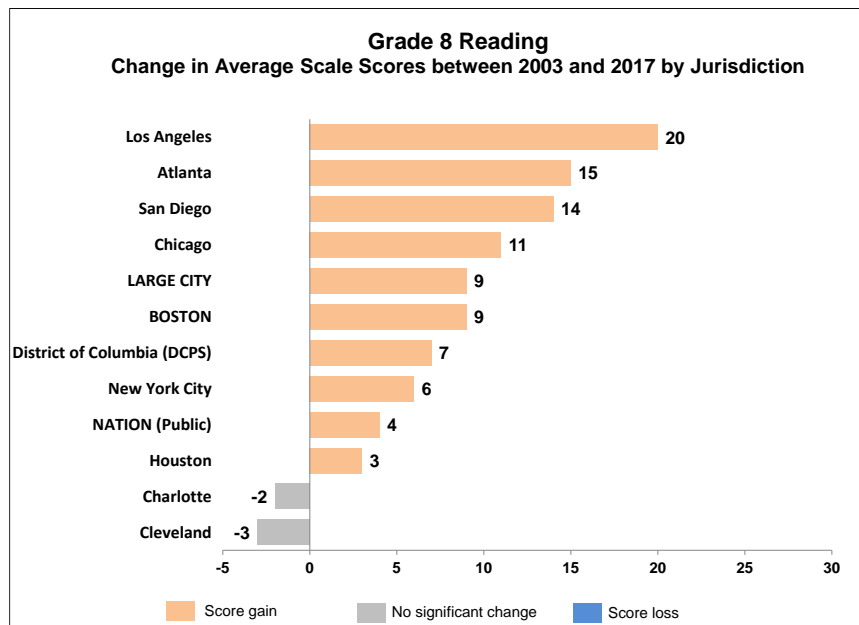
(1) Change in Reading Average Scores Between 2003 and 2017

Grade 4 Reading



- Of the 10 participating TUDA districts in 2003, Boston's 4th graders saw a significant 11-point scale score gain between 2003 and 2017. Boston's gain exceeded that of Large Cities (9-point) and surpassed the 4-point gain made by students nationwide.

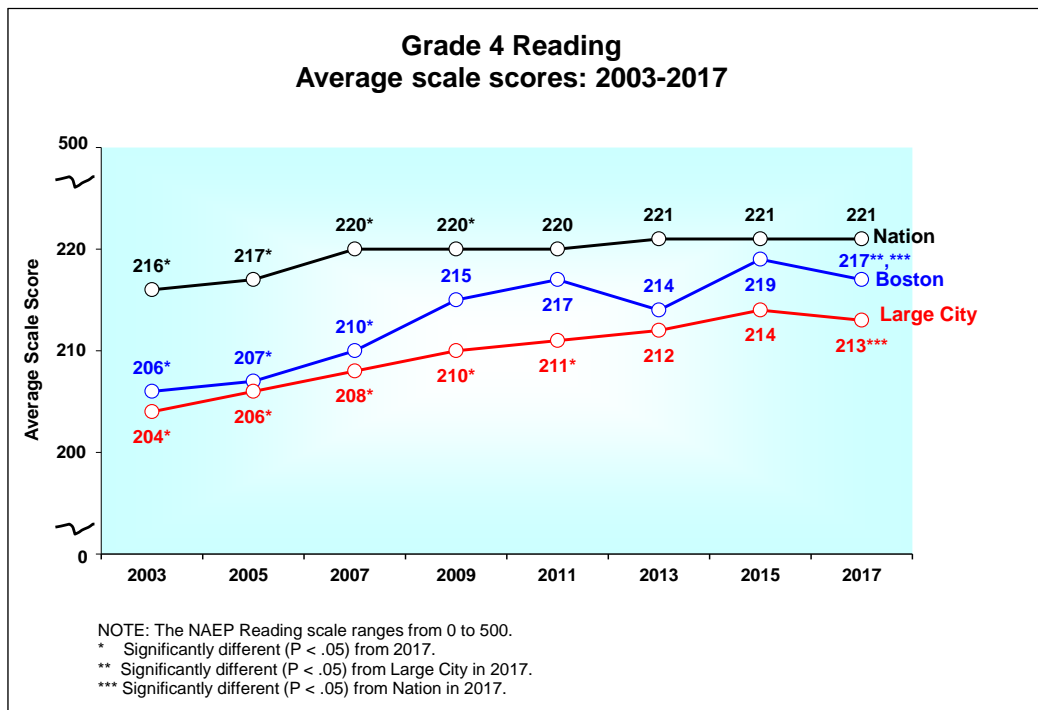
Grade 8 Reading



- Between 2003 and 2017, Boston's 8th graders experienced a significant 9-point gain in reading. The gains made by Boston were not only as great as those made by Large City (9-point), but also was larger than those made across the Nation (4-point).

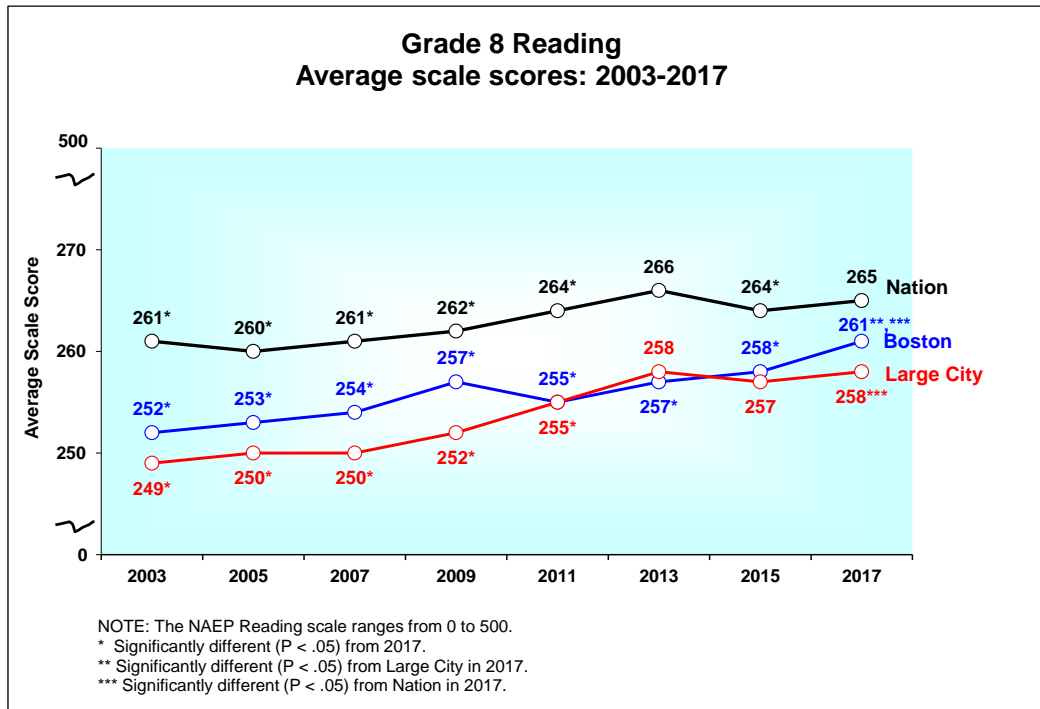
(2) Average Reading Scale Scores Over Time: 2003 - 2017

Grade 4 Reading



- Boston's 4th grade reading average score in 2017 was 2-points lower than they were in 2015, a difference that was not statistically significant. Boston's 2017 score (217) was significantly higher than that of Large Cities (213) but was significantly lower than the national average (221).
- The reading performance of Boston's 4th graders in 2017 was significantly higher than the first three previous (2003, 2005, and 2007) administration of the NAEP.
- Boston's performance has steadily improved since 2003, exceeding the Large City average and narrowing the gap compared to the national average.

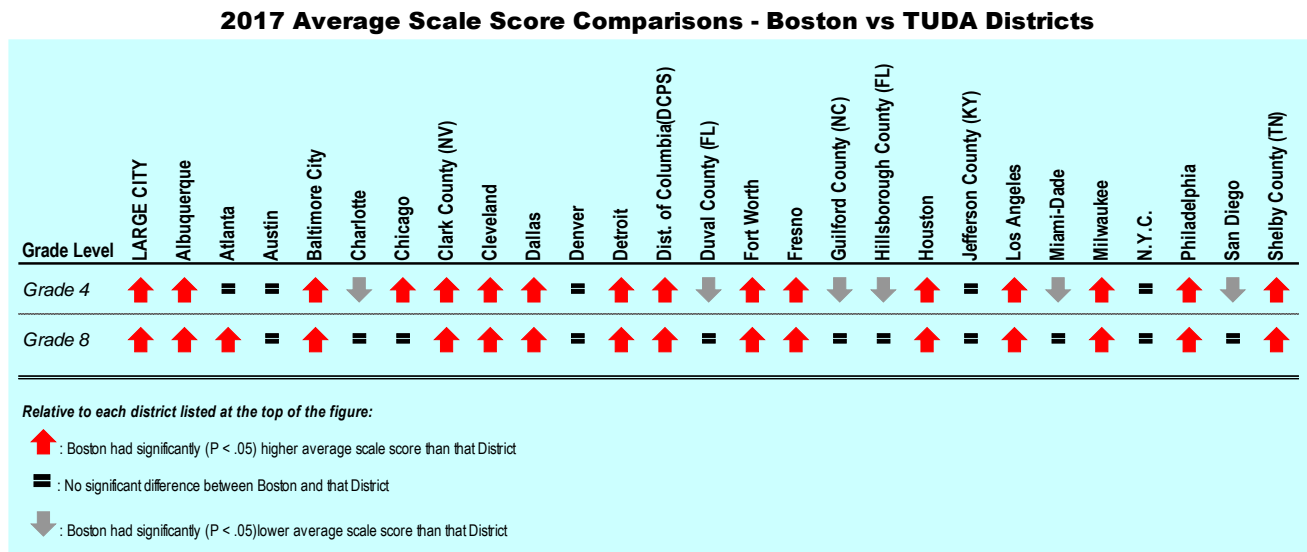
Grade 8 Reading



- In 2017, Boston's 8th grade students had an average score of 261 that was significantly higher than that of Large Cities (258); but significantly lower than the national average (by 4 points).
- Boston's 8th grade average score in 2017 was significantly higher than every previous administration; by contrast, the national and Large City averages have increased significantly at each of first five administrations since 2003.
- Since 2003, the reading performance of Boston's 8th graders increased at a rate that surpassing the Large City gains and narrowing somewhat the gap with the Nation.

(3) 2017 Reading Scale Score Comparisons Across Jurisdictions

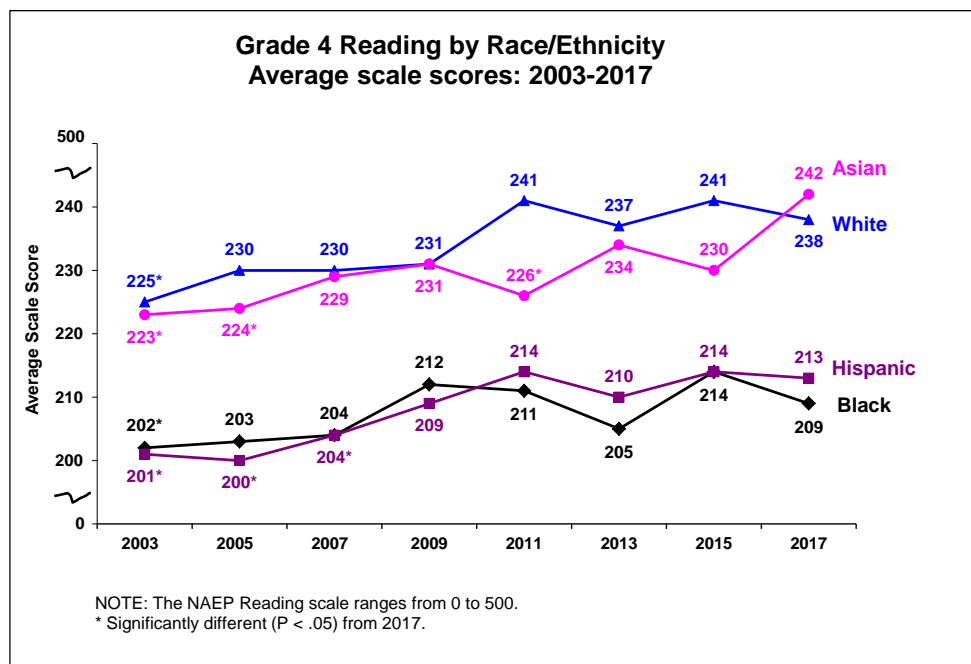
Boston vs. TUDA Districts



- Boston scored higher than or equal to 20 TUDA districts in **both** grades 4 and 8, and lower than six districts (Charlotte, Duval County, Guildford Country, Hillsborough County, Miami-Dade and San Diego) in grade 4.

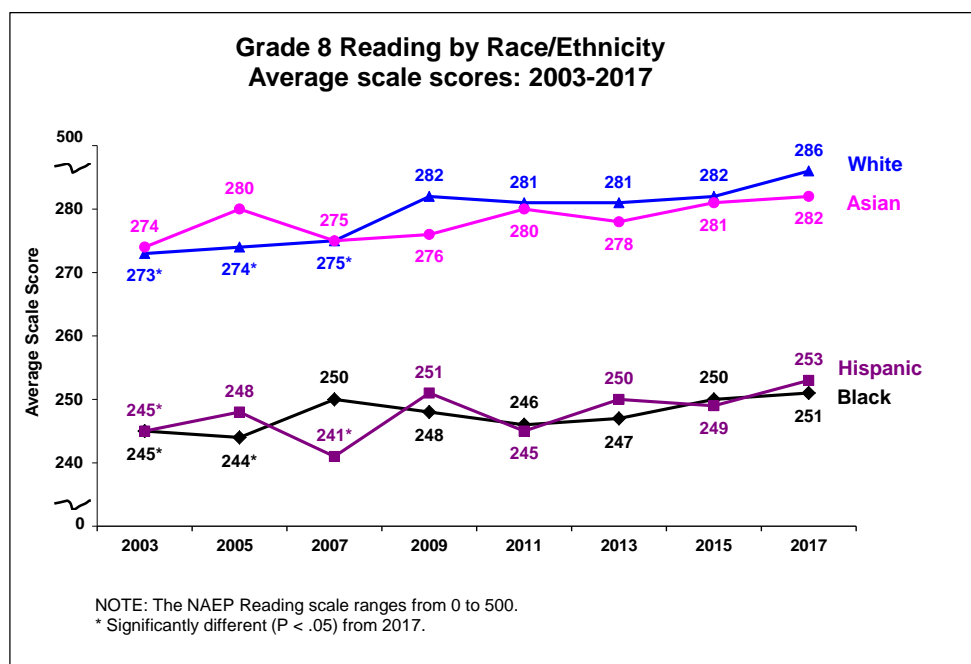
(4) Average Reading Scale Scores by Race/Ethnicity

Grade 4 Reading: 2003-2017



- In 2017, Asian students saw an 11 point gain, but this was not statistically significant. African-American, White and Hispanic students all saw score drop that were not statistically significant in terms of its difference from 2015.
- From 2003 to 2017, White, Asian, African-American, and Hispanic students have experienced statistically significant gains, with 14, 19, 7, and 11-point gains respectively.

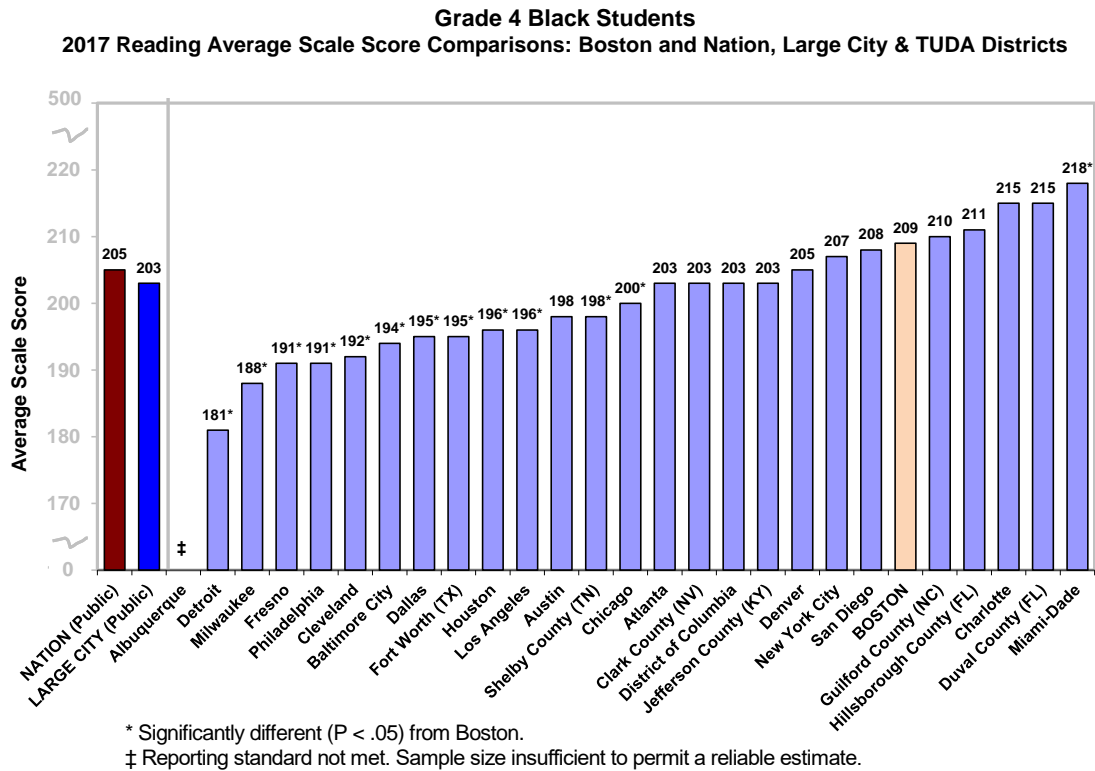
Grade 8 Reading: 2003-2017



- Reading scores for Boston's 8th grade students between 2015 and 2017 increase slightly for all ethnic groups, but none of the score gains were statistically significant. Since 2003, all except Asian group have 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.

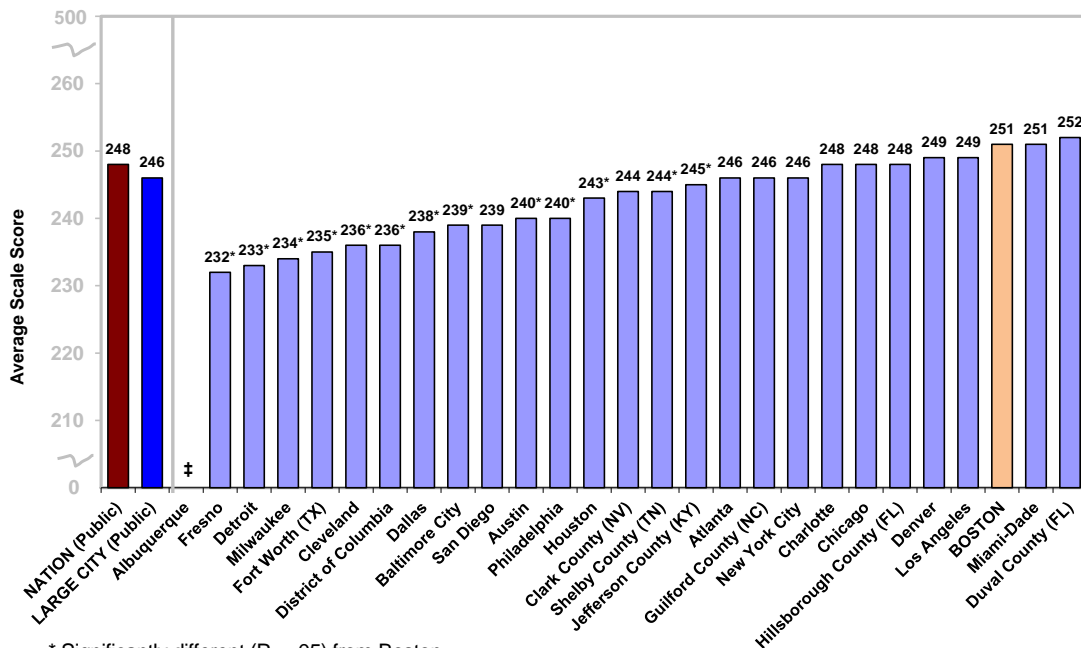
Appendix D provides detailed information on the performance of students by racial group.

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



- 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 209, which is on par with the national average (205) and that of Large Cities (203). Boston's 4th grade Black students performed as well as or significantly better than all TUDA districts except Miami-Dade.

Grade 8 Black Students
2017 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



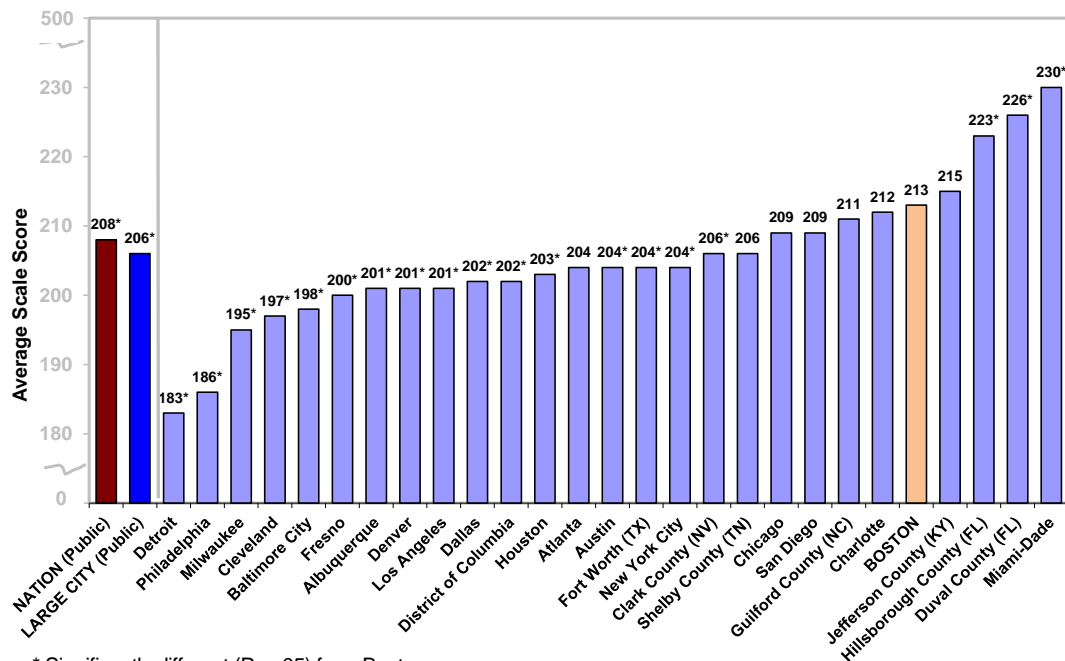
* Significantly different ($P < .05$) from Boston.

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

- In grade 8, the performance of Boston's African-American students (251) was about the same as their peers across the Nation (248) and in Large Cities (246). Boston's African-American students scored the 2nd highest (tied with Miami-Dade) among the TUDA districts and was not significantly bested by any other TUDA district.

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

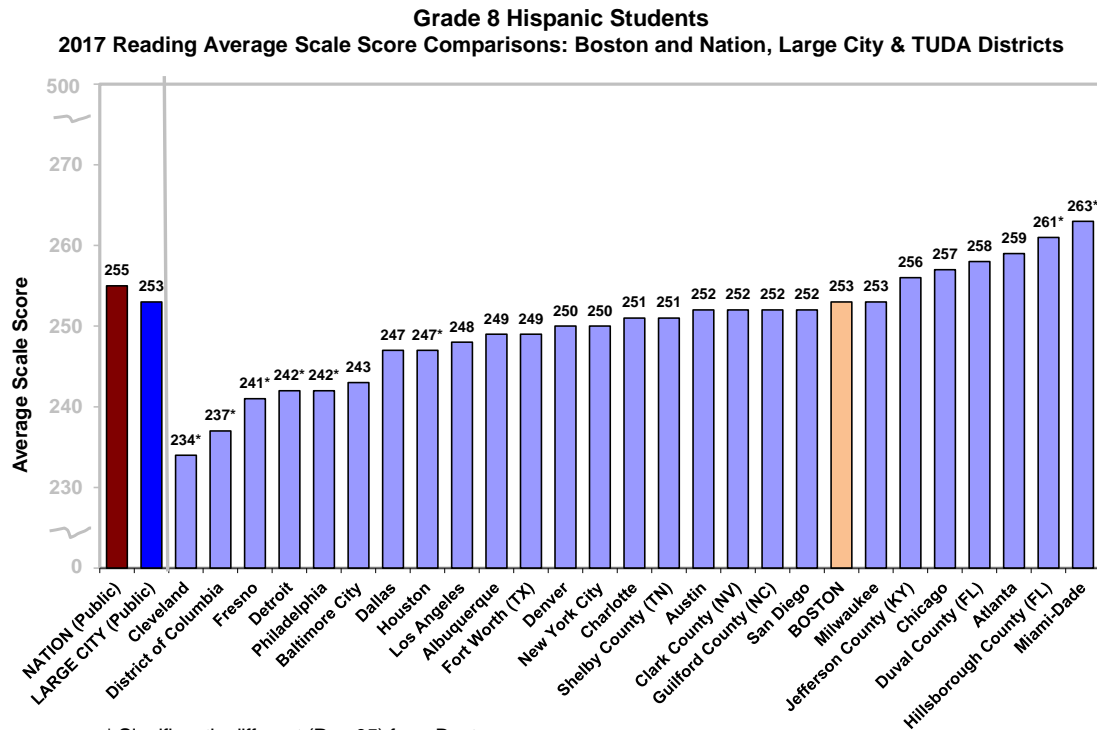
Grade 4 Hispanic Students
2017 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



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

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

- Boston's Hispanic students in 4th grade had significantly higher average scores (213) than Hispanic students in Large Cities (206), as well as the national average (208). Among the participating TUDA districts, only Hillsborough County, Duval County and Miami-Dade's Hispanic 4th graders scored significantly higher than Boston's.



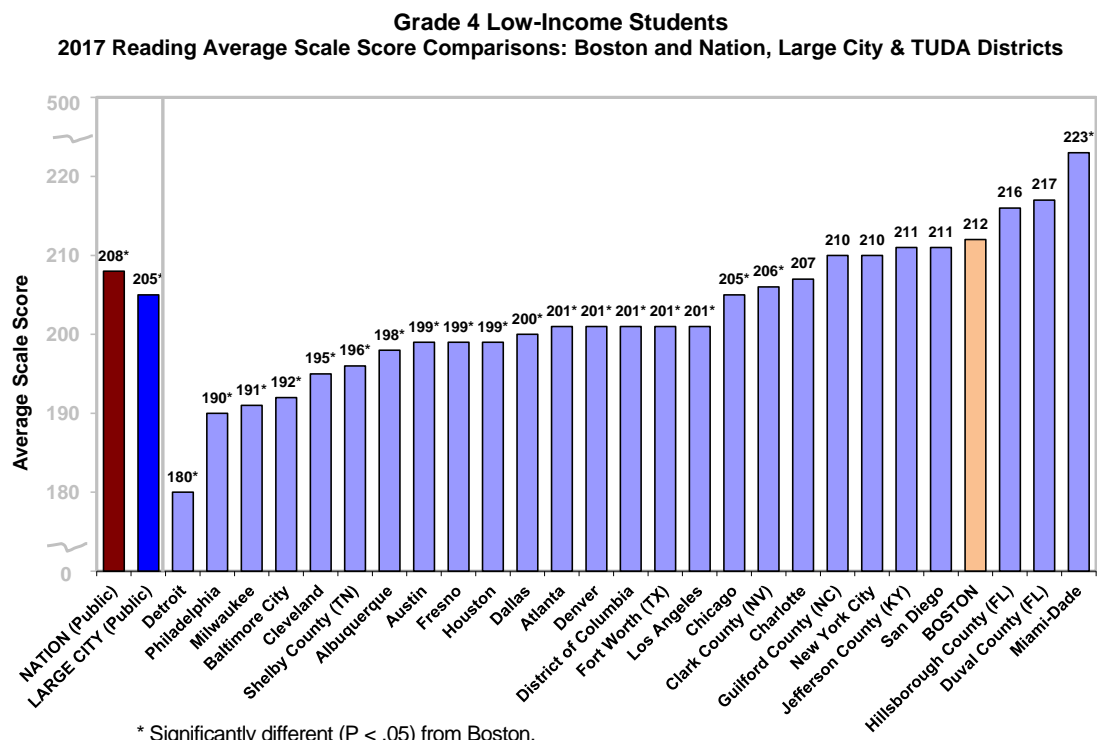
* Significantly different ($P < .05$) from Boston.

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

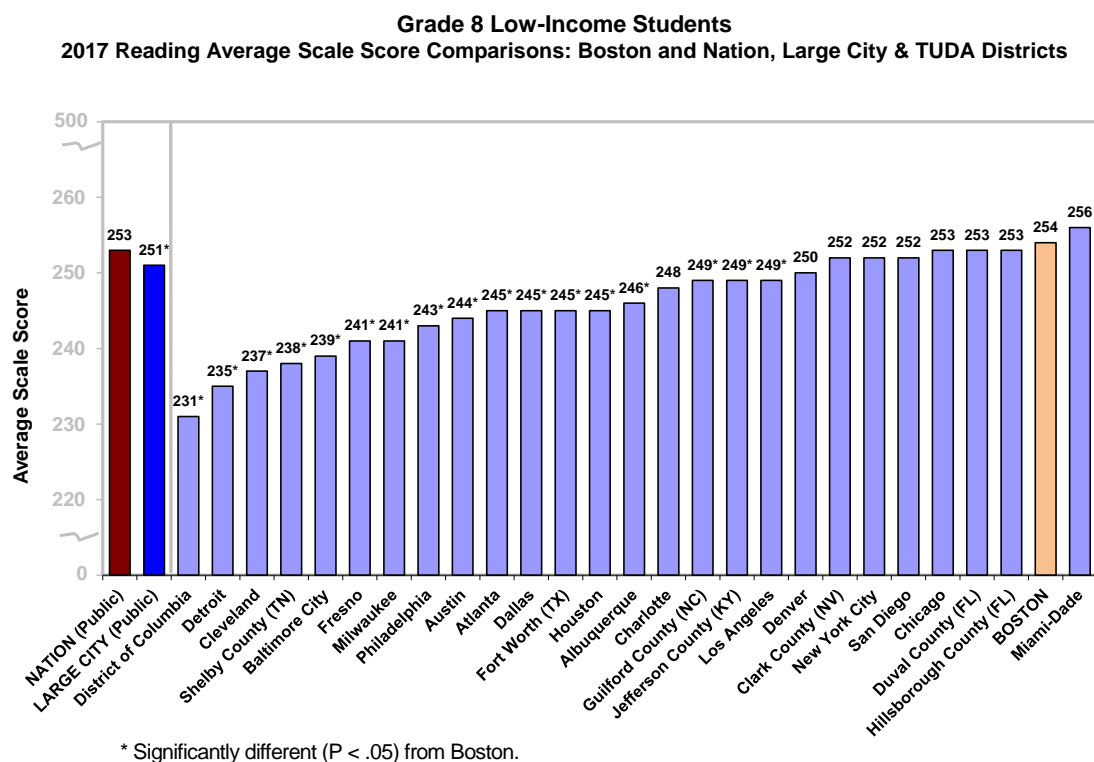
- In grade 8, Boston's Hispanic students (253) performed as well as their peers in Large Cities (253) and across the Nation (255). Among TUDA districts with a sufficiently large sample of Hispanic students, two districts significantly outperformed Boston (Miami-Dade and Hillsborough County).

(5) Average Reading Scale Scores for Other Student Groups

Students Eligible for Free/Reduced Lunch/Economically Disadvantaged Students

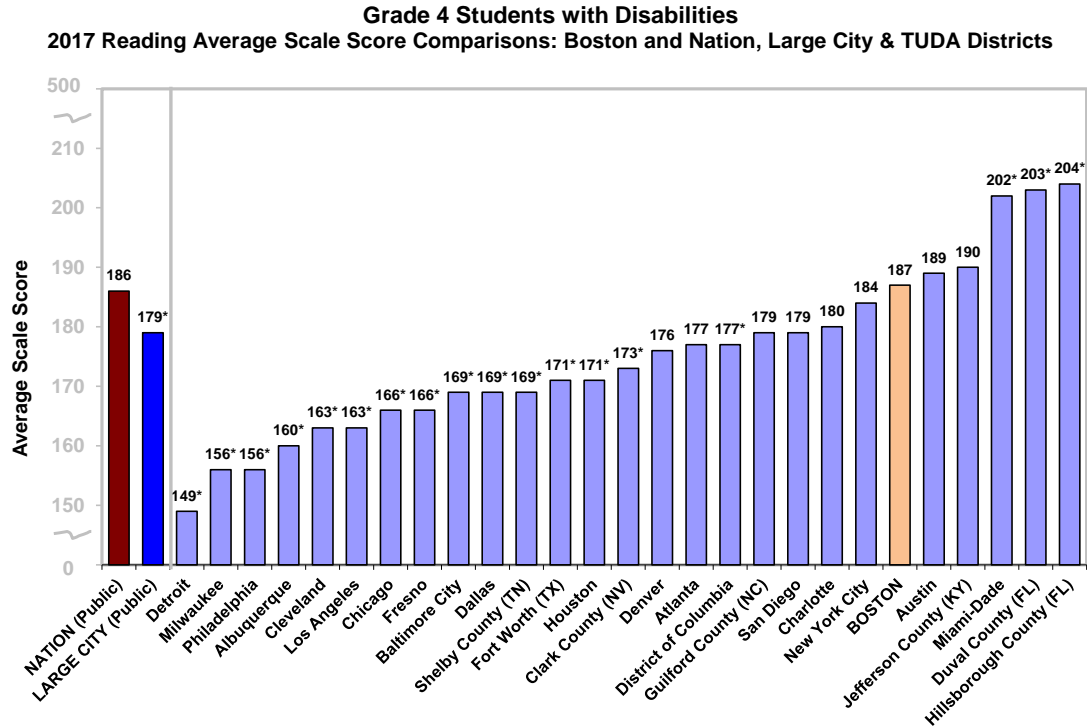


- In grade 4, economically disadvantaged students in Boston scored significantly higher than the Nation (by 4 points) and Large Cities (by 7 points). Among the TUDA districts, only Miami-Dade's average (by 10 points) was significantly higher than Boston's.



- Among 8th graders, Boston's economically disadvantaged students (254) performed significantly better than their peers in Large Cities (251) and as well as students across the Nation (253). Compared to other TUDA districts, no other districts had significantly higher average performance.

Students with Disabilities

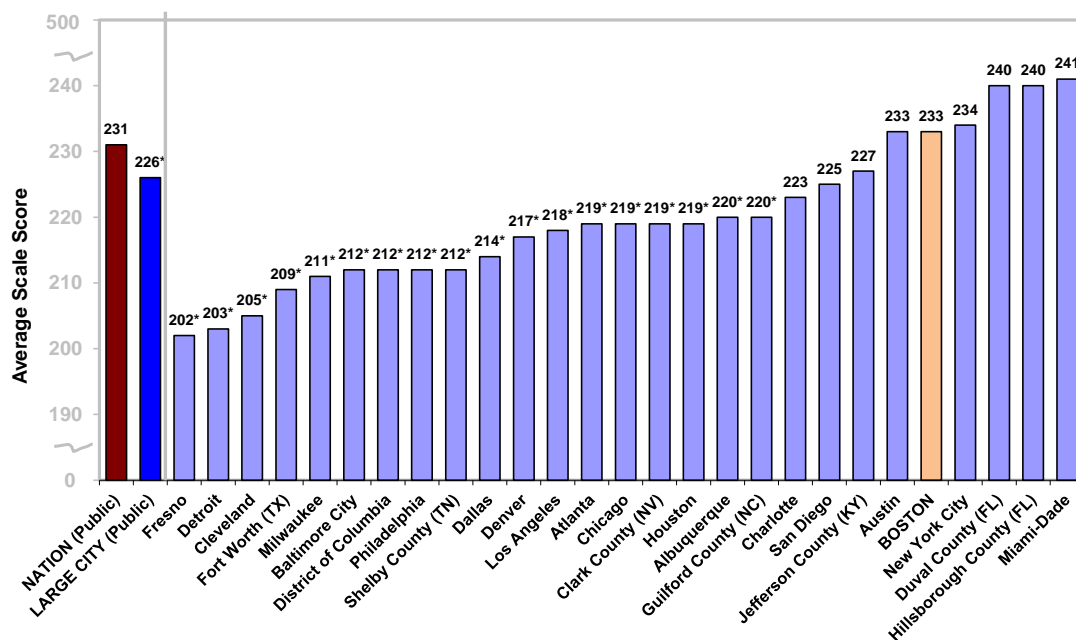


* Significantly different ($P < .05$) from Boston.

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

- In 4th grade, students with disabilities in Boston (187) outperformed their peers in Large Cities (179). Their average score was not 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
2017 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



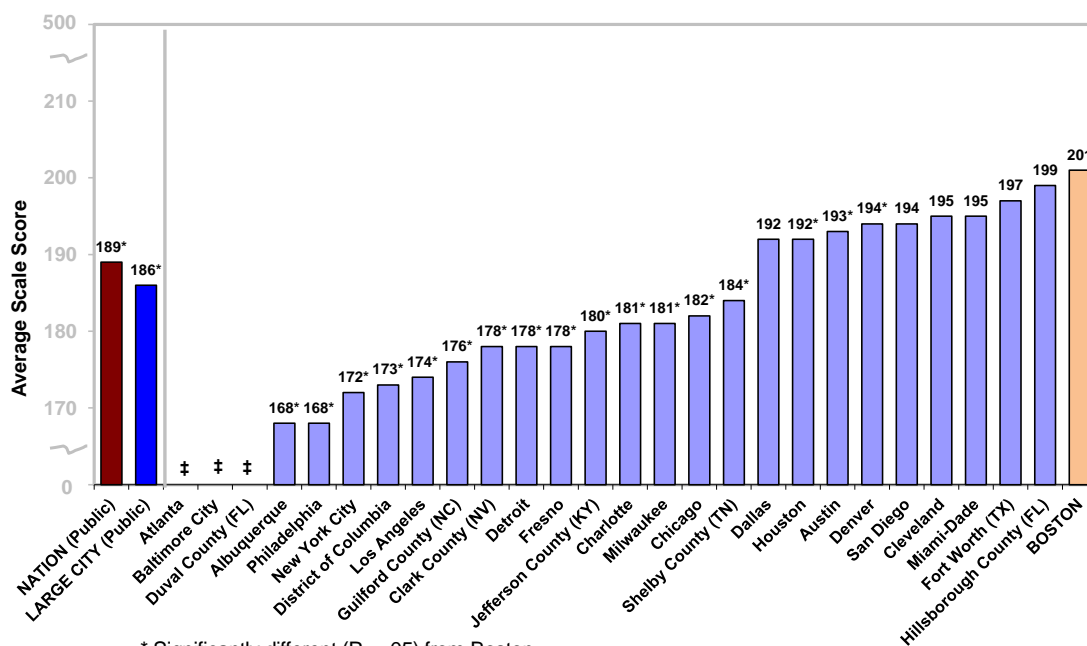
* Significantly different ($P < .05$) from Boston.

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

- In grade 8, the average score for students with disabilities in Boston (233) was significantly higher than the average for Large Cities (226), but was comparable to the national average (231). Compared to other TUDA districts, Boston's performance was as well as or significantly better than all other districts.

English Language Learners

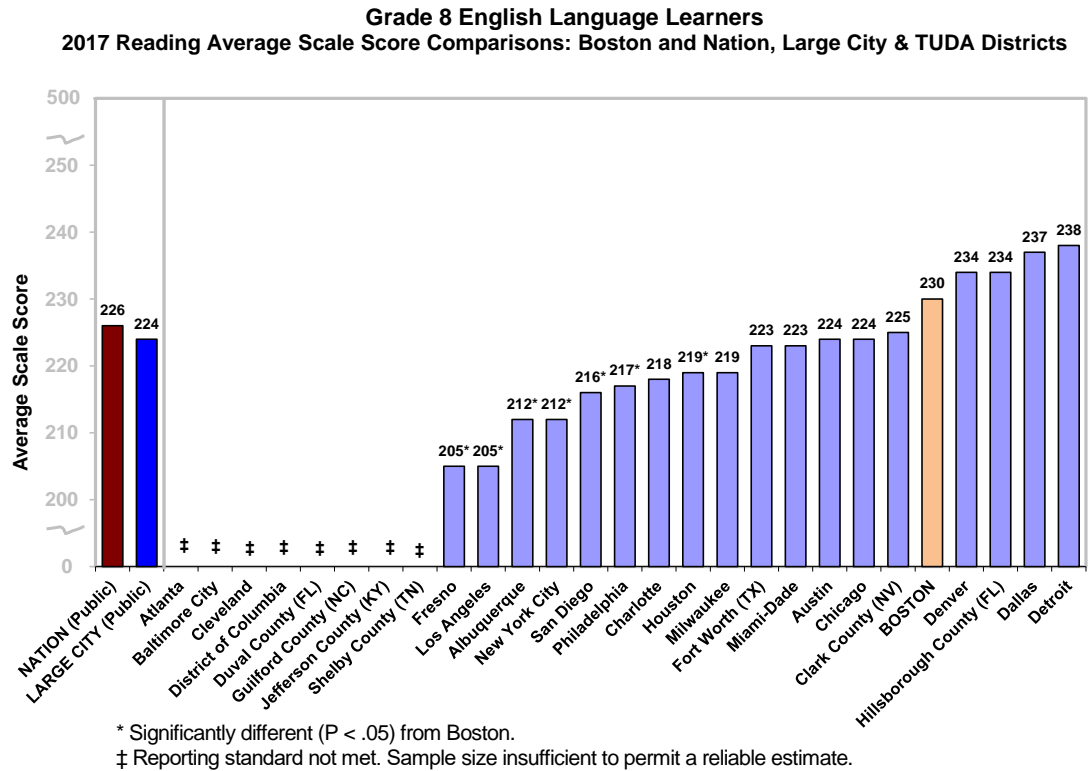
Grade 4 English Language Learners
2017 Reading Average Scale Score Comparisons: Boston and Nation, Large City & TUDA Districts



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

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

- 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 and in 2015 as well.

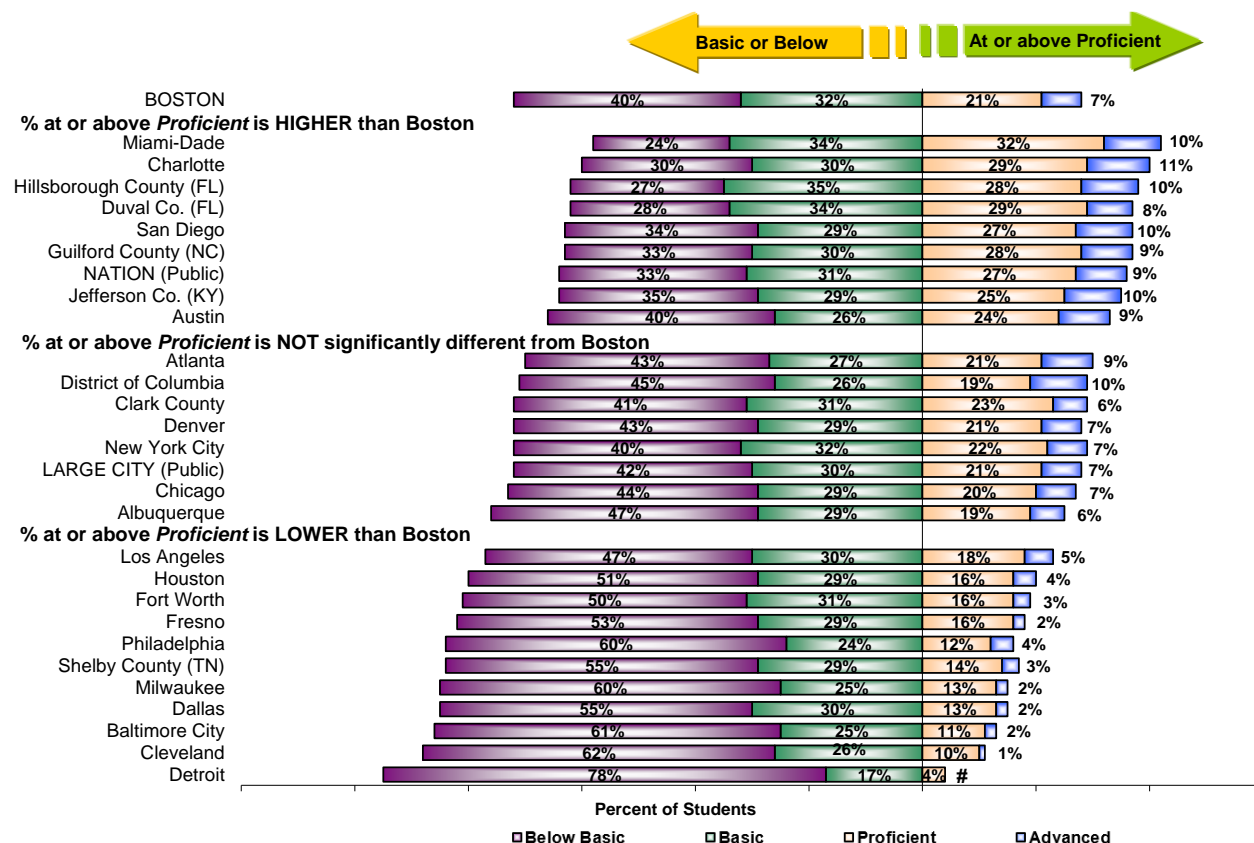


- The average score for ELL students in 8th grade was comparable to that of their peers in Large Cities and across the Nation. Boston's ELL average was statistically higher or on par with other TUDA districts.

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

2017 Reading Percentage of Students Scoring at or Above Proficient

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

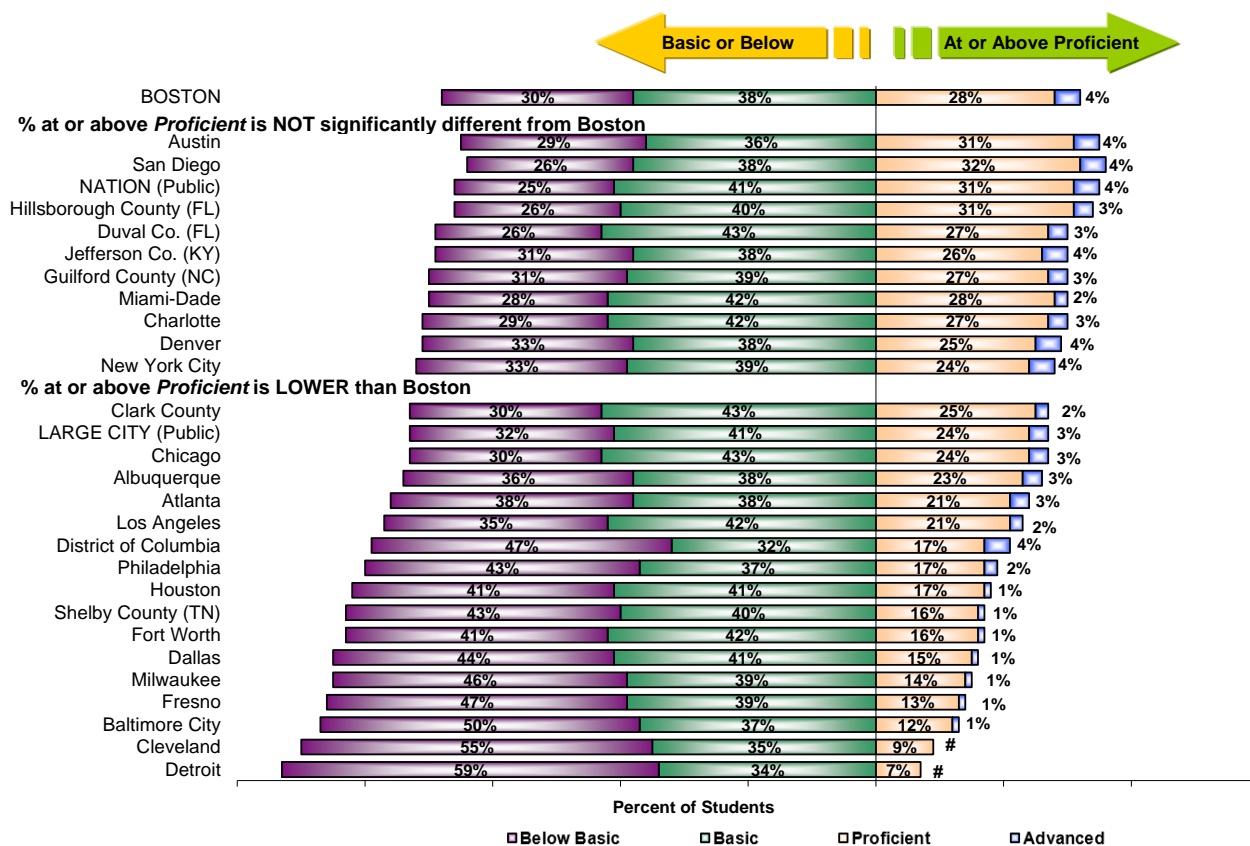


Estimate rounds to zero.

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

- In 2017, 29% of Boston's 4th grade students scored at or above the Proficient level on the Reading assessment. Boston's performance was on par with the Large Cities average (28%), and was significantly lower than the Nation (35%). Compared to all the other TUDA districts, Boston's performance was about the same as or higher than 18 districts, and lower than that of eight districts.

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



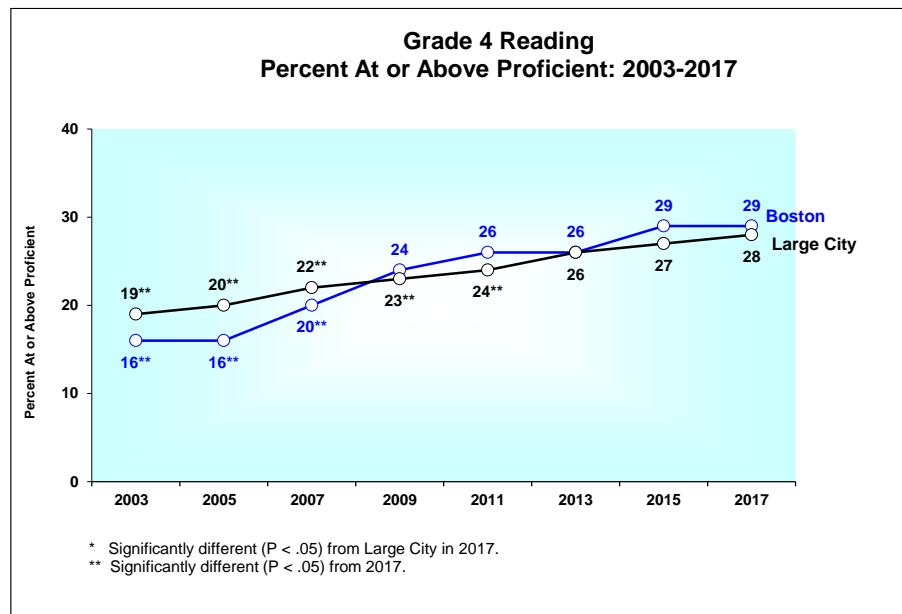
Estimate rounds to zero.

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

- In grade 8, the percentage of students in Boston who performed at or above Proficient (32%) was significantly higher than or equal to all other TUDA districts. Boston's proficient/advanced rate was significantly higher compared to Large Cities (27%) and was about the same as that of the Nation (35%).

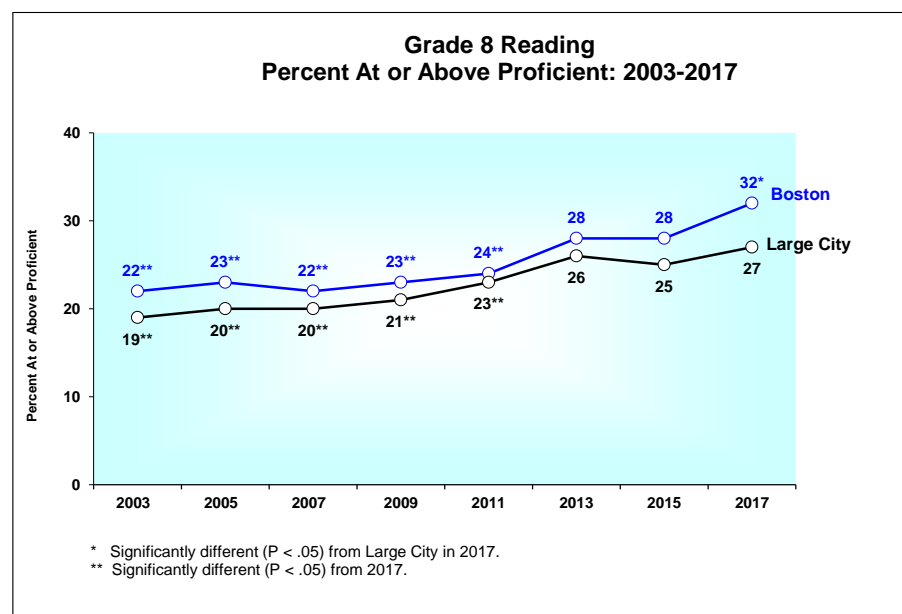
2017 Reading Percentage of Students Scoring at or Above Proficient Over Time: 2003 – 2017

Percentage of Grade 4 Students Scoring at or Above Proficient in Reading, 2003-2017



- 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 an 8-point gain for Large Cities).

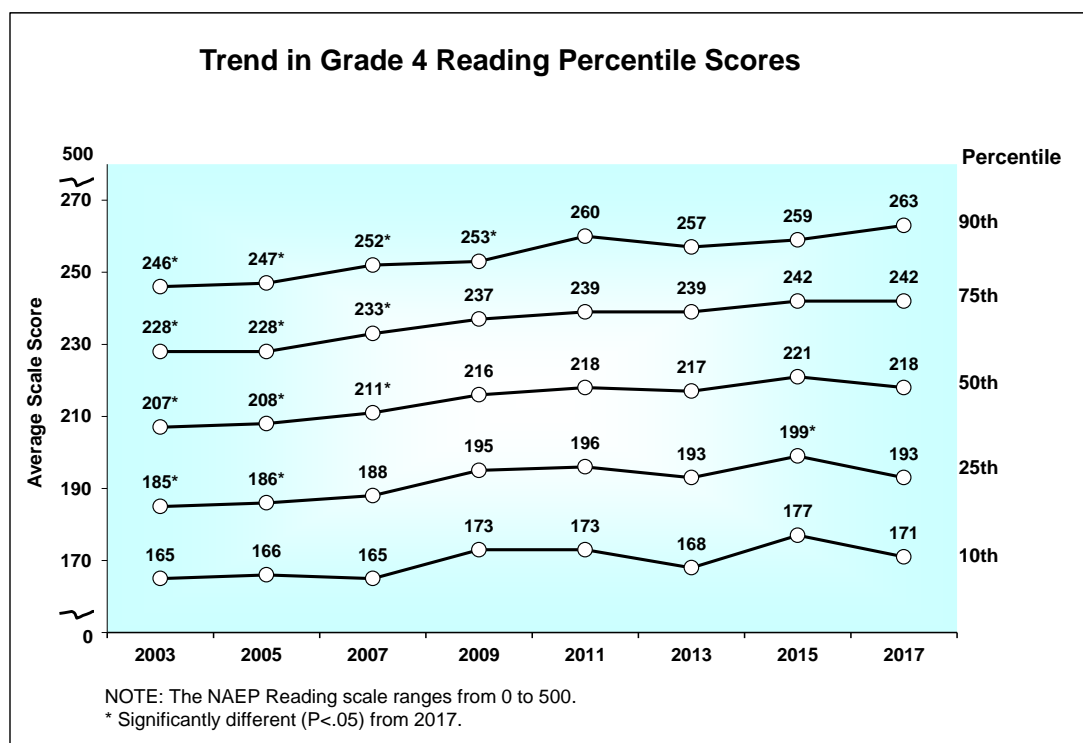
Percentage of Grade 8 Students Scoring at or Above Proficient in Reading, 2003-2017



- The percentage of Boston's 8th graders scoring at or above Proficient in 2017 reading assessment was significantly high than that of Large Cities. Compare to 2003, the Proficient/Advanced rate of Boston's 8th graders rose a significant 10-point, while Large Cities saw a 8-point gain.

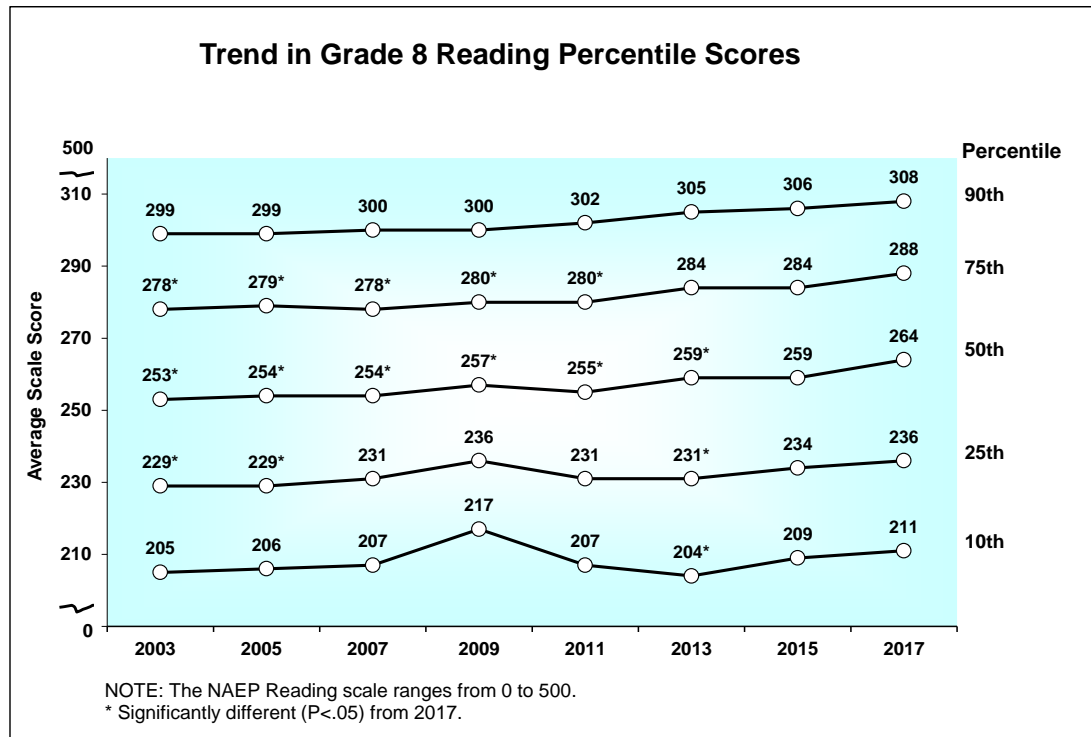
(7) Reading Performance by Percentile Rank

Grade 4 Reading



- Among Boston's 4th graders, significant improvements were observed since 2003 and 2005 for students at all except the 10th quintiles. Significant improvement continued for the mid to high performing students in 2007 administration and for students at the 90th quintile in 2009 administration. However, we are seeing significant decline for students in the 25th quintiles by 6-point since 2015.

Grade 8 Reading



- For 8th graders, there have been significant gains for students at all except the 90th quintiles. Specifically, significant increases can be seen at the 75th quintiles since 2003, 2005, 2007, 2009 and 2011; at the 50th quintile for all except 2015 administration; at the 25th quintile since 2003, 2005, and 2013; and most markedly, at the 10th quintile since 2013 with a 7-point gain.

2017 NAEP MATHEMATICS

MATHEMATICS: DEMOGRAPHIC CONTEXT

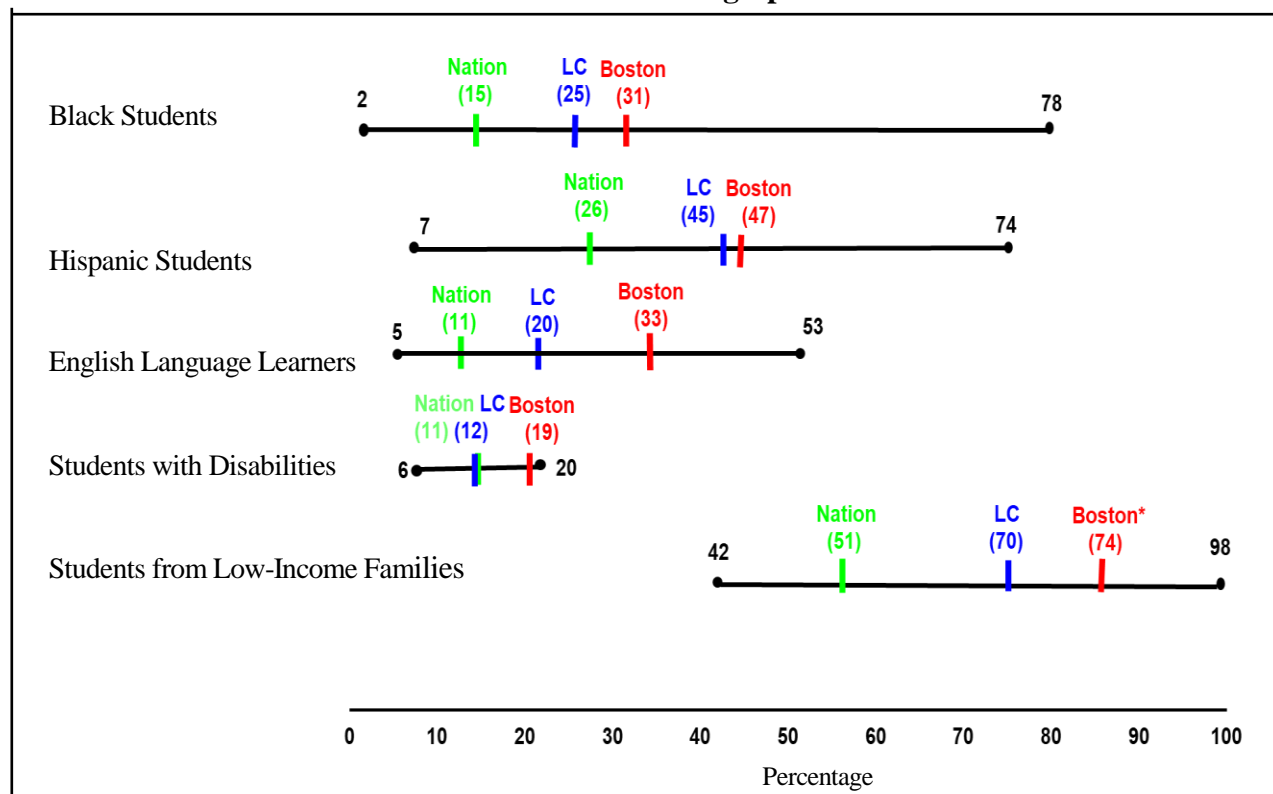
The charts below display the percentage of students who participated in the 2017 TUDA NAEP Math test by their racial/ethnic identification, disability, English Language Learner status, and Low-Income status. The charts display not only Boston's participation rates, but also the Nation's and Large Cities', 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. Boston's percentages of English Learners and students from low-income families are relatively high for TUDA districts. **Compared to other TUDA districts, Boston has the 2nd highest participation rate for students with disabilities in grade 4 and the 3rd highest participation rate for English Learners in grade 8.** These differences are important to consider in comparing results across jurisdictions.

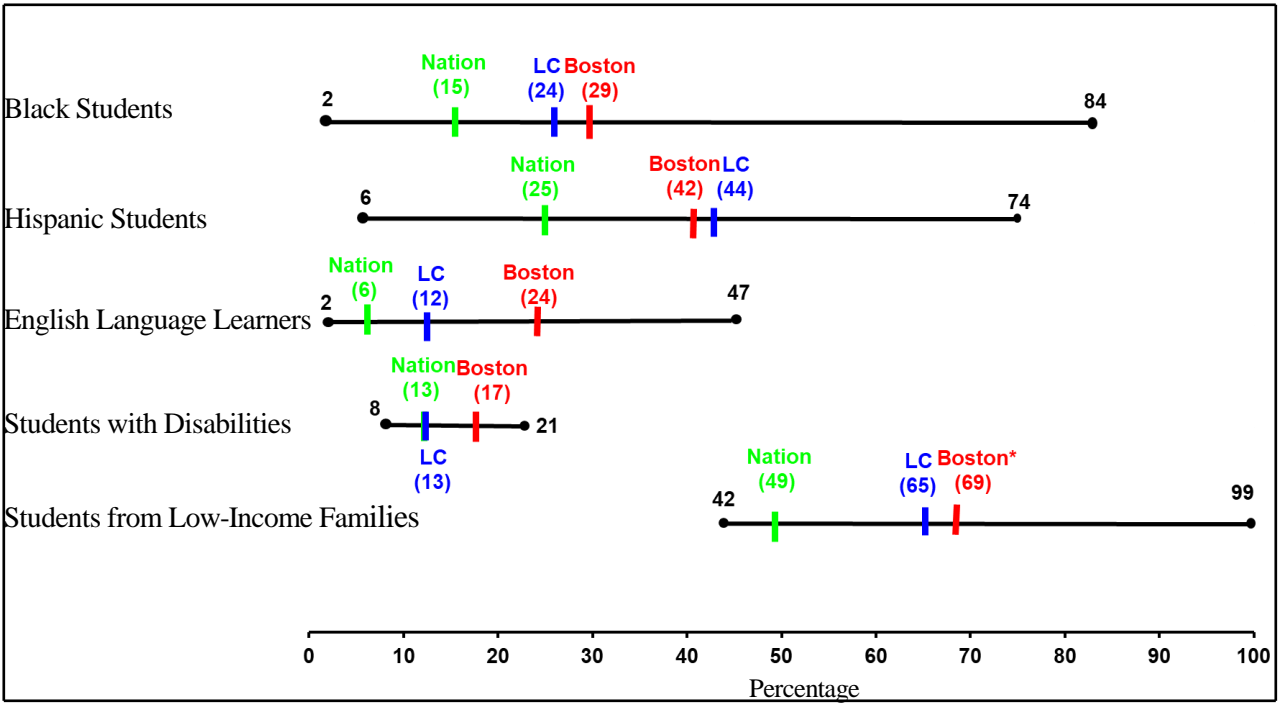
In addition, because results are based on samples rather than entire populations, examining statistical significance is essential in determining differences across groups.

Distribution of Selected Student Groups for TUDA Districts

Grade 4 Mathematics Demographic Characteristics:



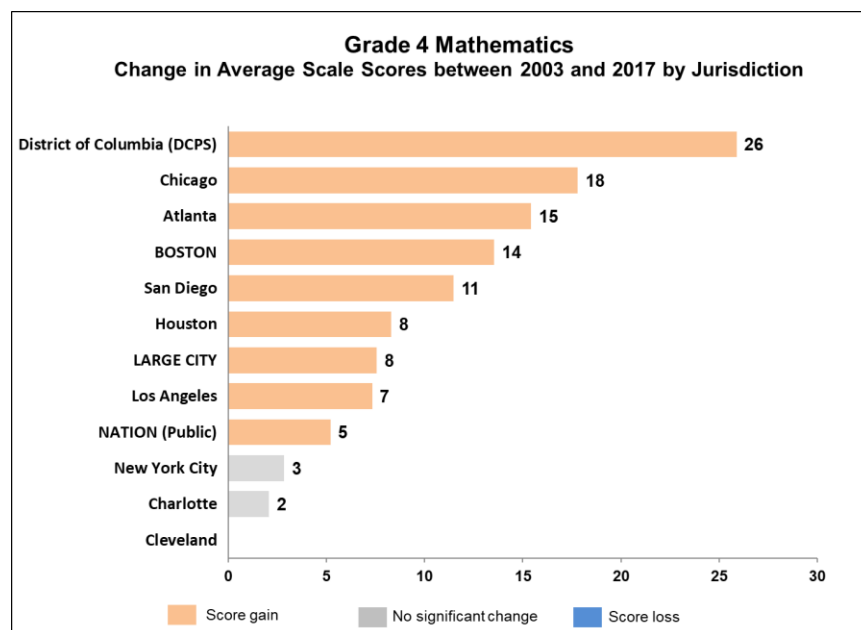
Grade 8 Mathematics Demographic Characteristics:



MATHEMATICS: ANALYSES

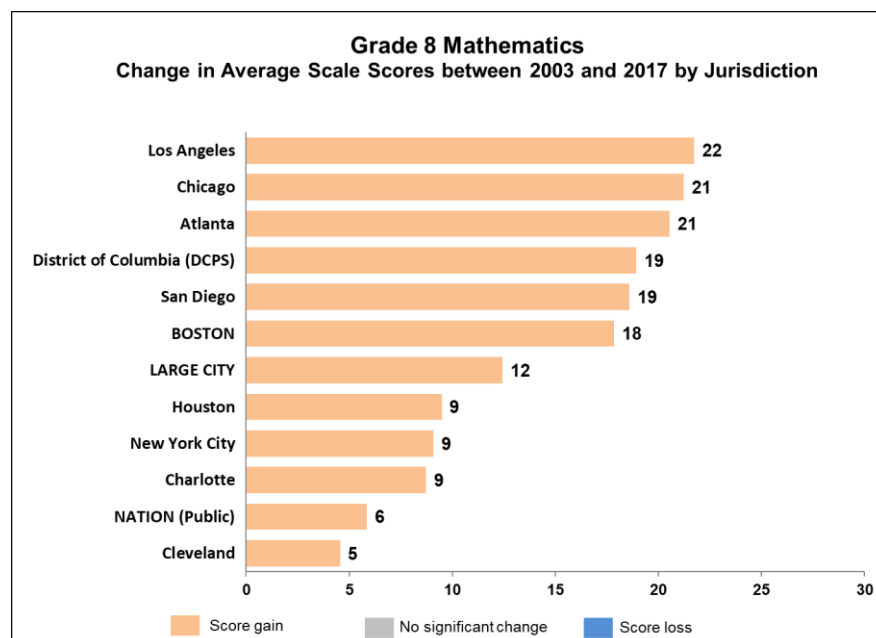
(1) Change in Mathematics Average Scores Between 2003 and 2017

Grade 4 Mathematics



- Of the 10 participating TUDA districts since 2003, Boston's 4th graders made the fourth largest gain - 14 points - since 2003. By contrast, 4th graders across the Nation and in the Large Cities only gained 5 and 8 points, respectively, during this 14-year period.

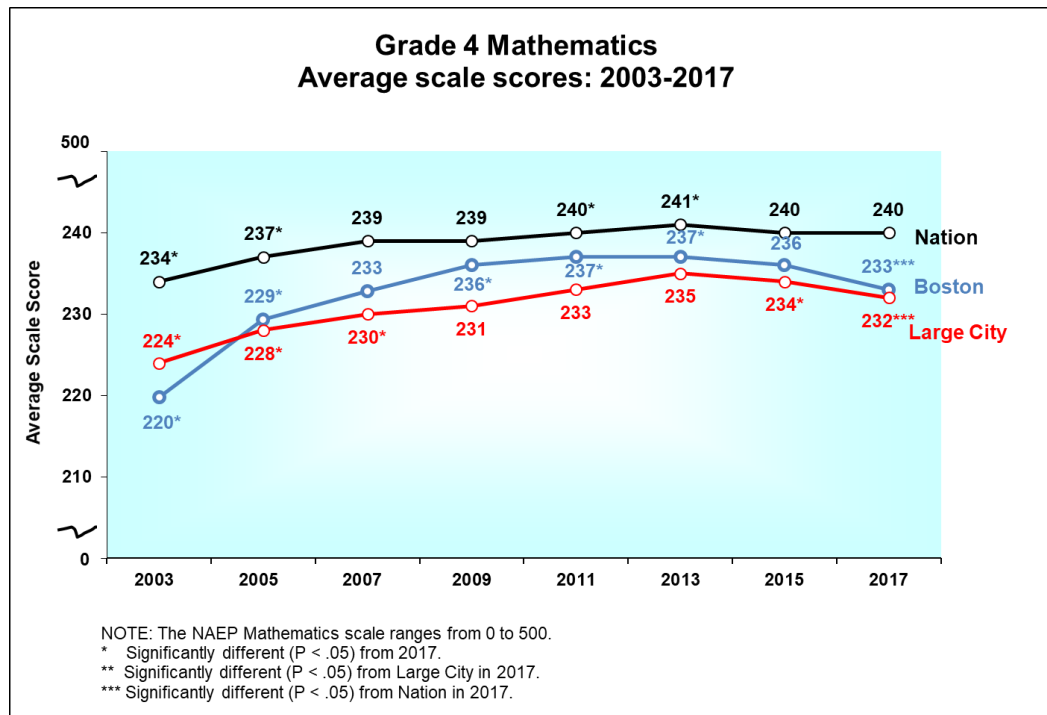
Grade 8 Mathematics



- Between 2003 and 2017, Boston's 8th graders saw a significant gain of 18 points in mathematics. Boston's gain was 6 points higher than that of Large Cities and was three times greater than the gain made by students across the Nation (6 points).

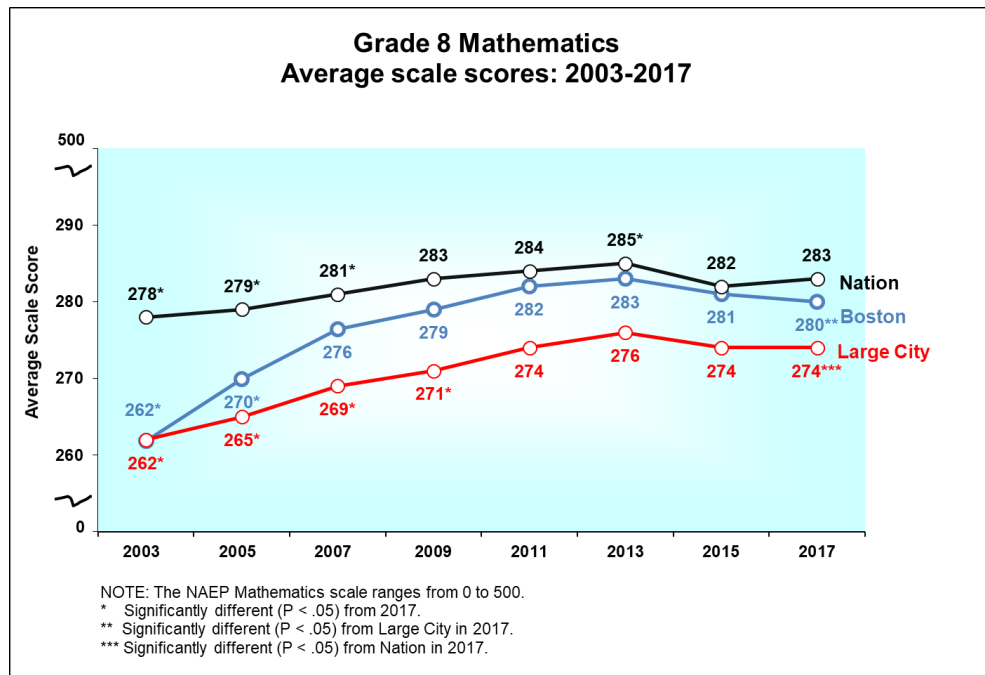
(2) Average Mathematics Scale Scores Over Time: 2003 - 2017

Grade 4 Mathematics



- Boston's average score in 2017 was **significantly higher than the 2003 and 2005 administrations** of the NAEP.
- Boston's performance in 2017 statistically equal to that of Large Cities and 7 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.**

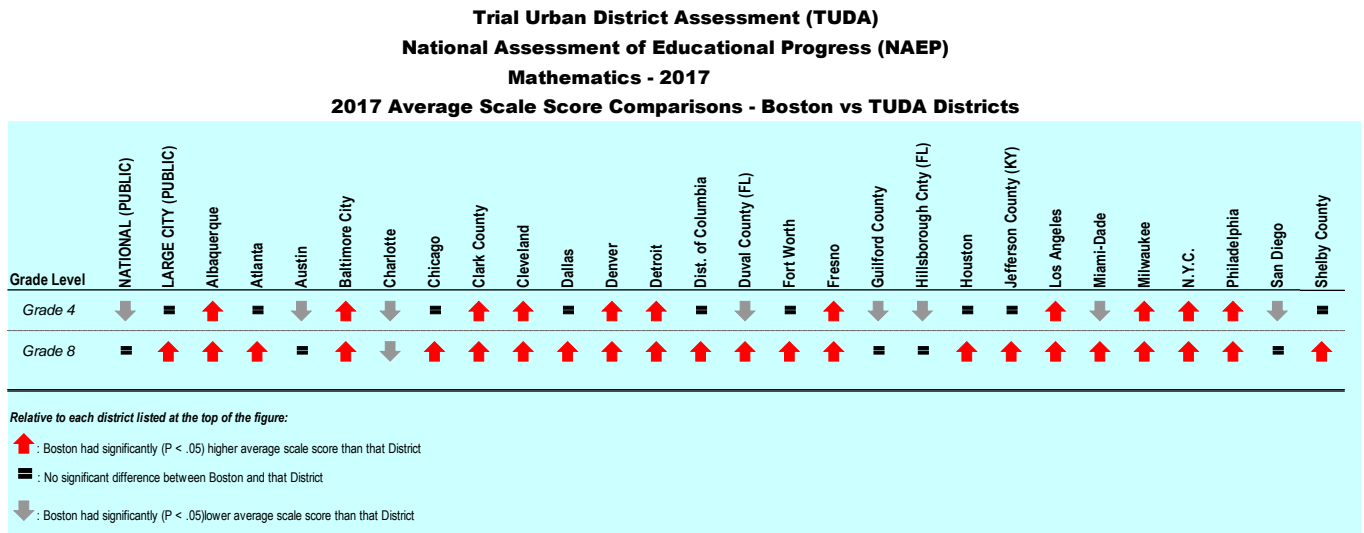
Grade 8 Mathematics



- In 2017, Boston's 8th grade students had an average score **significantly higher (by 6 points) than the average for Large Cities and statistically equivalent to that of the Nation (283 points)**.
- Boston's 8th grade average score in 2017 was significantly higher than in the first two administrations in 2003 and 2005.
- Since 2003, the math performance of Boston's 8th graders increased at a rate that surpassed the Large City gains and eliminated a gap of any statistical significance with the Nation

(3) 2017 Mathematics Scale Score Comparisons Across Jurisdictions

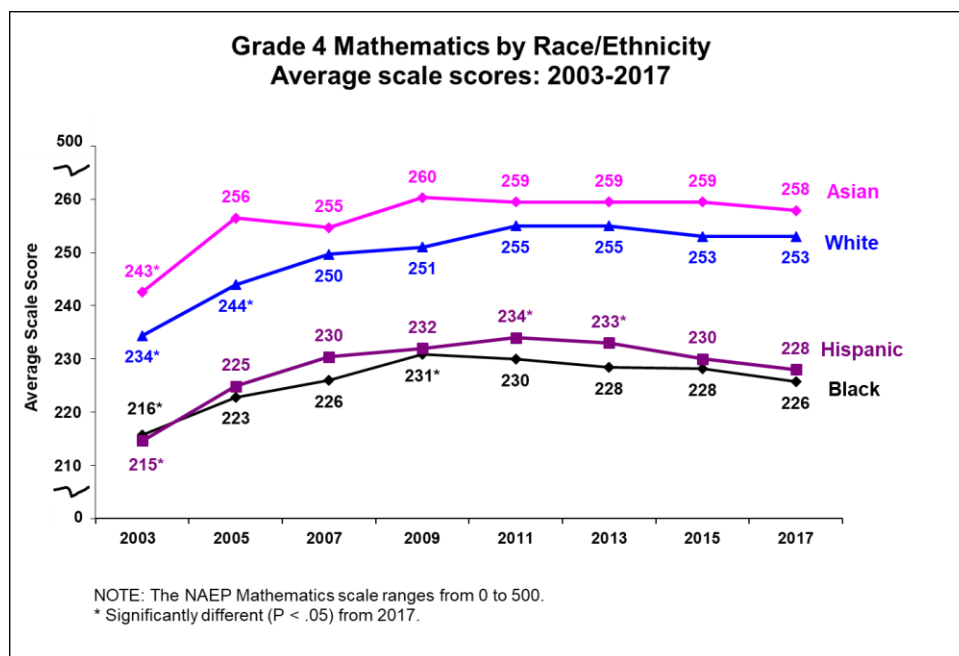
Boston vs. TUDA Districts



- As compared to the National average and that of Large Cities, Boston's average scaled scores were comparable to or higher in all cases except for being significantly lower than the National average in grade 4 mathematics.
- In grade 4, Boston's average scale scores were higher than or equal to all but seven TUDA districts (Austin, Charlotte, Duval County, Guilford County, Hillsborough County, Miami-Dade, and San Diego).
- Boston's performance in grade 8 was even more impressive, with only Charlotte scoring higher.

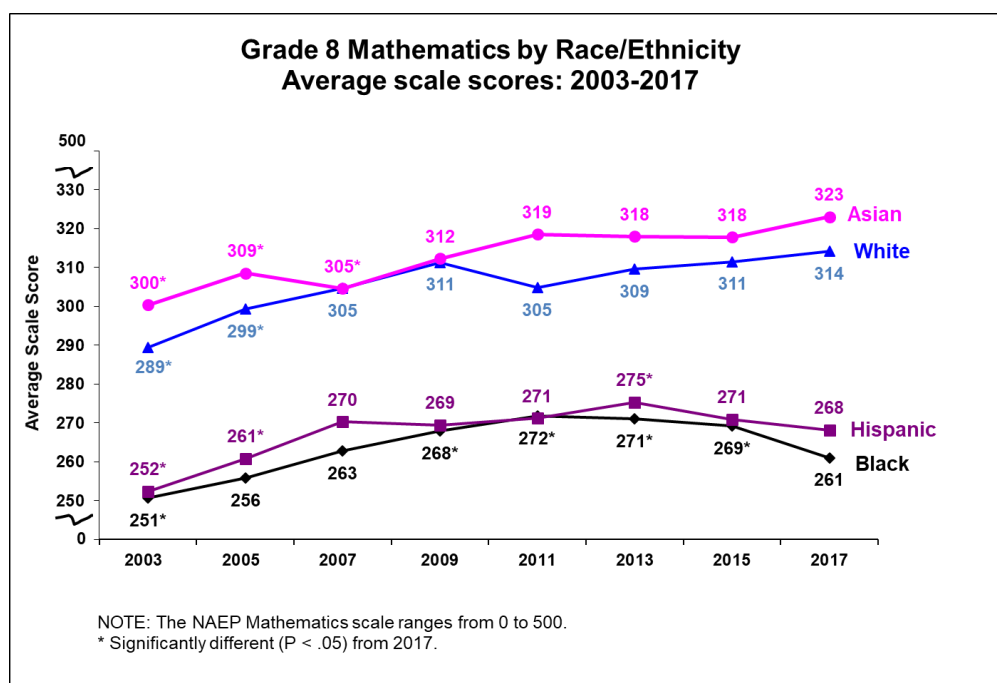
(4) Average Mathematics Scale Scores by Race/Ethnicity

Grade 4 Mathematics: 2003-2017



- From 2003 to 2017, students in all racial groups made statistically significant gains in their average scores on the 4th grade test. Black students saw a 10-point gain, while Asian, Hispanic, and White students experienced 15, 13, and 19-point gains respectively. The performance gaps between Asian/White and Hispanic/Black students however remain unchanged.

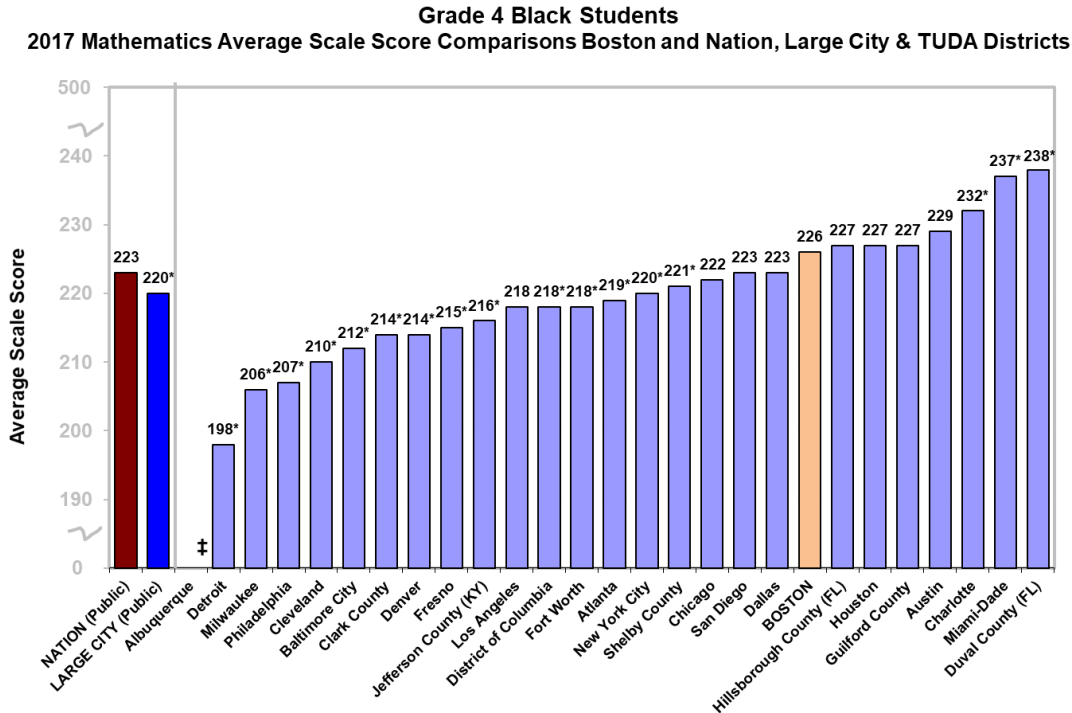
Grade 8 Mathematics: 2003-2017



- Gains made by Boston's 8th grade students between 2003 and 2017 were also statistically significant across all ethnic groups: improvements ranged from 23 points for Asian students, to 16 points for Hispanic students, and 10 points for Black students.

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

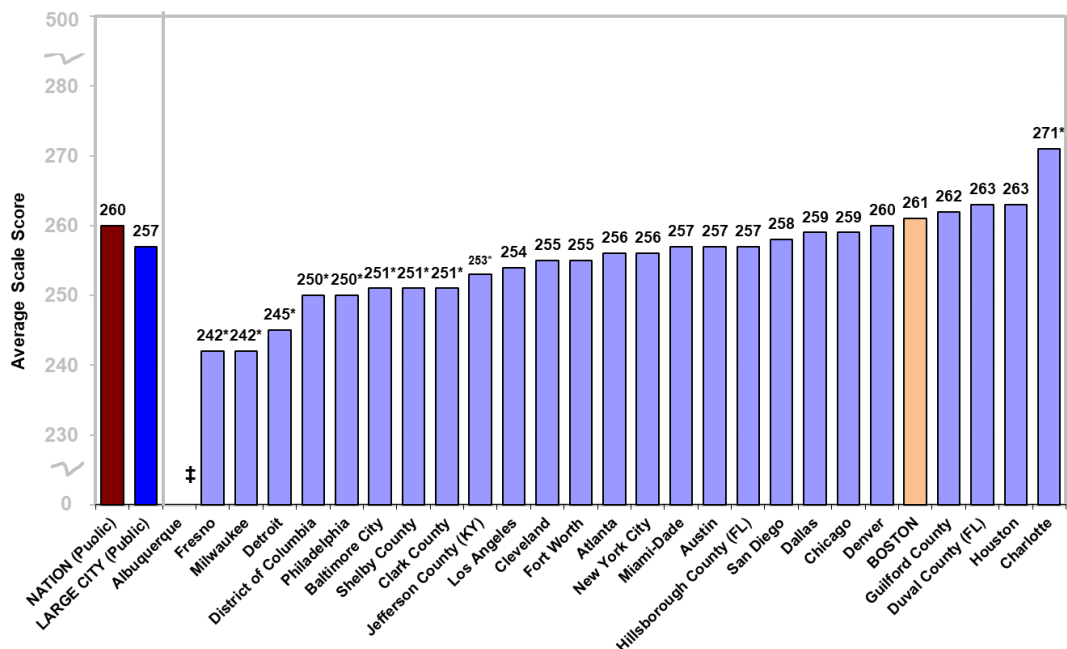


* Significantly different ($P < .05$) from Boston.

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

- 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 226, compared to the national average of 223. 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 a few exceptions (Charlotte, Miami-Dade, and Duval County).

Grade 8 Black Students
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



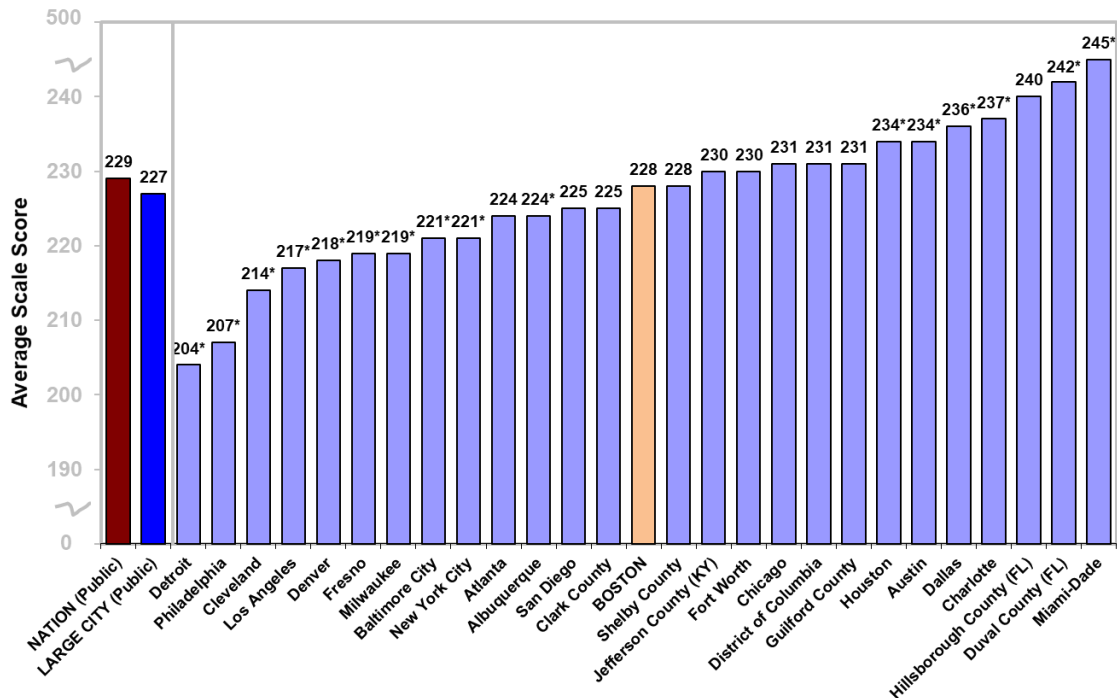
* Significantly different ($P < .05$) from Boston.

† 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, but the scaled score differences were not statistically significant. The average scaled scores of Boston's Black students in 8th grade were on par with or higher than all districts in the TUDA except for Charlotte.

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

Grade 4 Hispanic Students
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts

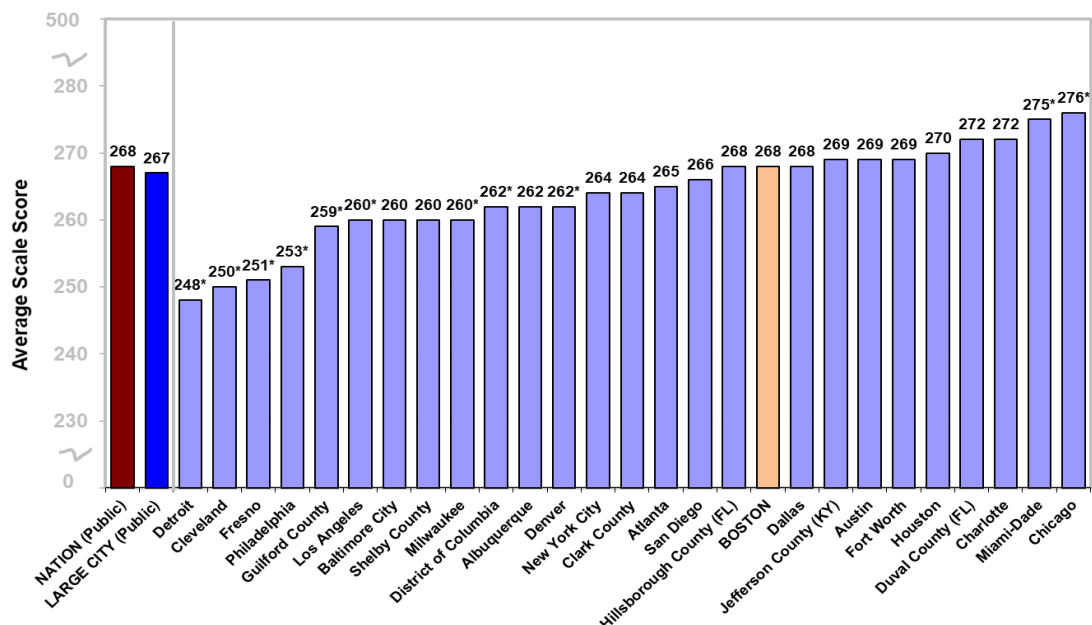


* Significantly different ($P < .05$) from Boston.

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

- Boston's Hispanic students in 4th grade performed on par (228 points) with Hispanic students across the Nation (229) and in Large Cities (227). 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
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



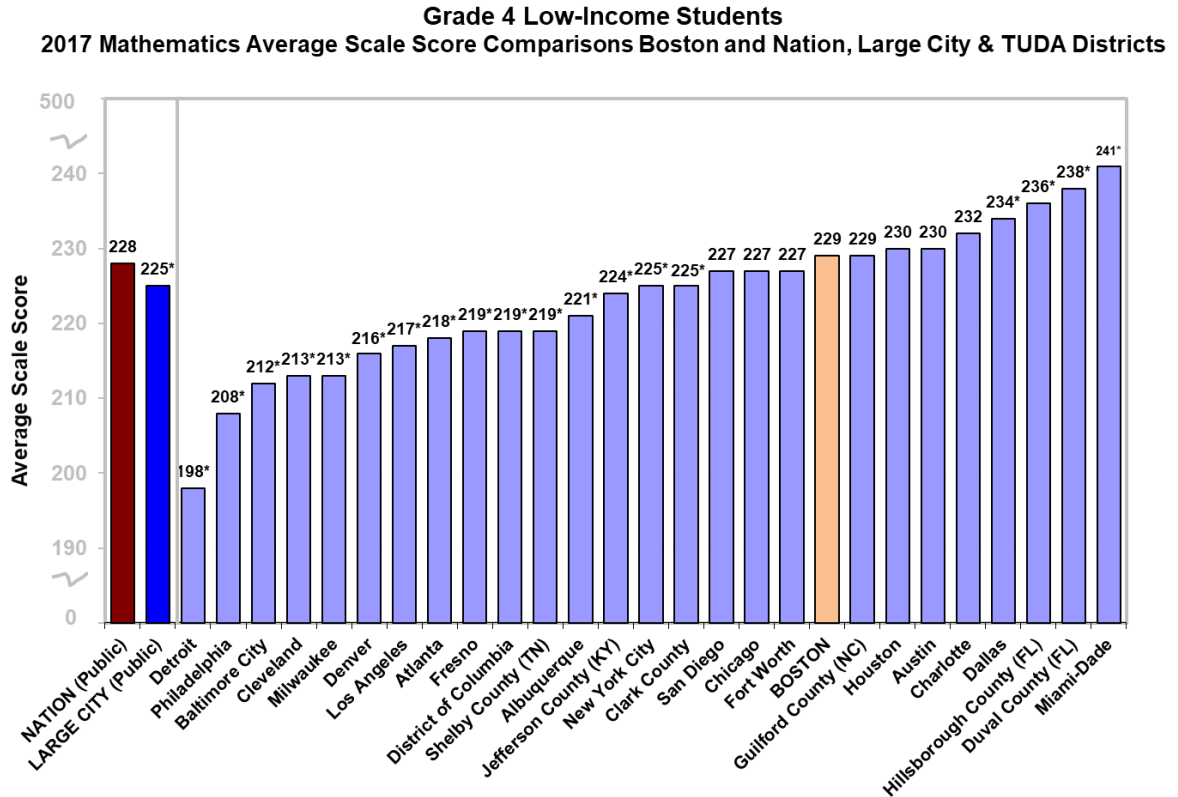
* Significantly different ($P < .05$) from Boston.

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

- In Grade 8, Boston's 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 2 districts demonstrating performance significantly better than that of Boston.

(5) Average Mathematics Scale Scores for Other Student Groups

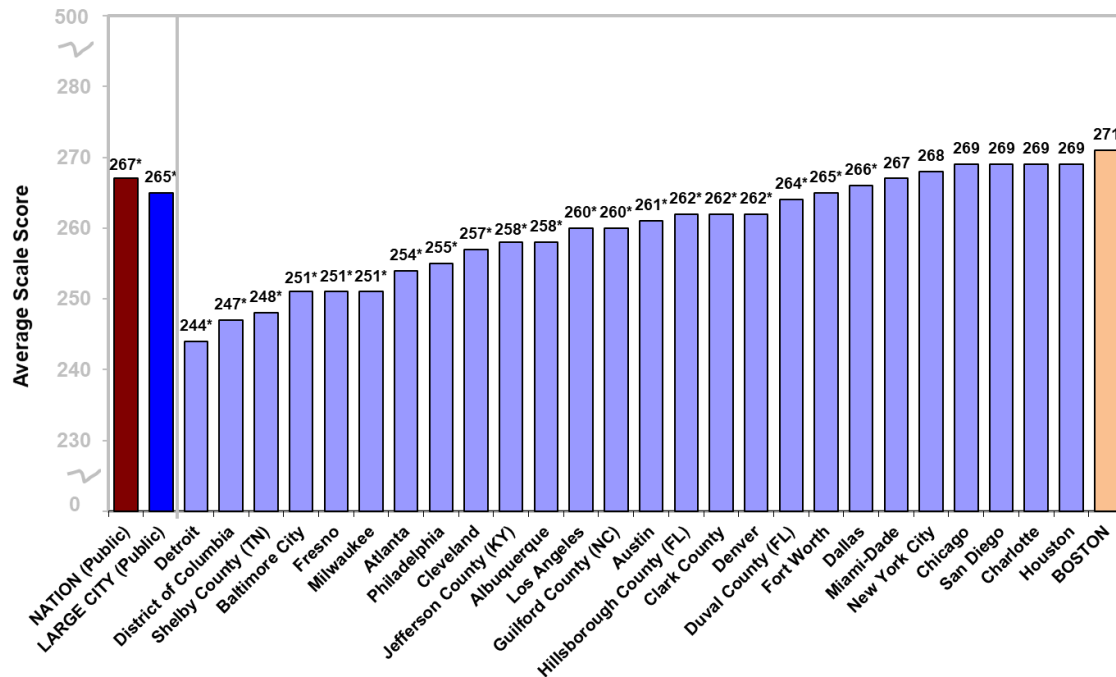
Students eligible for Free/Reduced Lunch



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

- In grade 4, low-income students in Boston scored significantly higher than Large Cities (by 4 points). Boston's average was also amongst the higher performers as compared to all TUDA districts.

Grade 8 Low-Income Students
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts

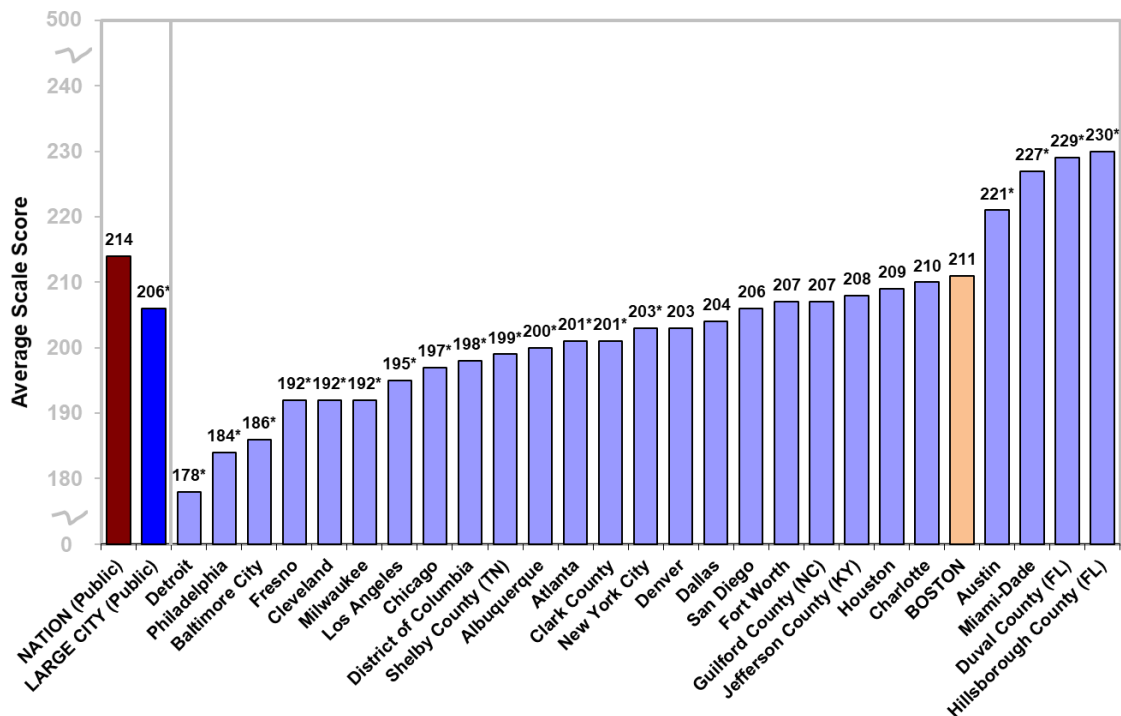


* Significantly different ($P < .05$) from Boston.

- 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

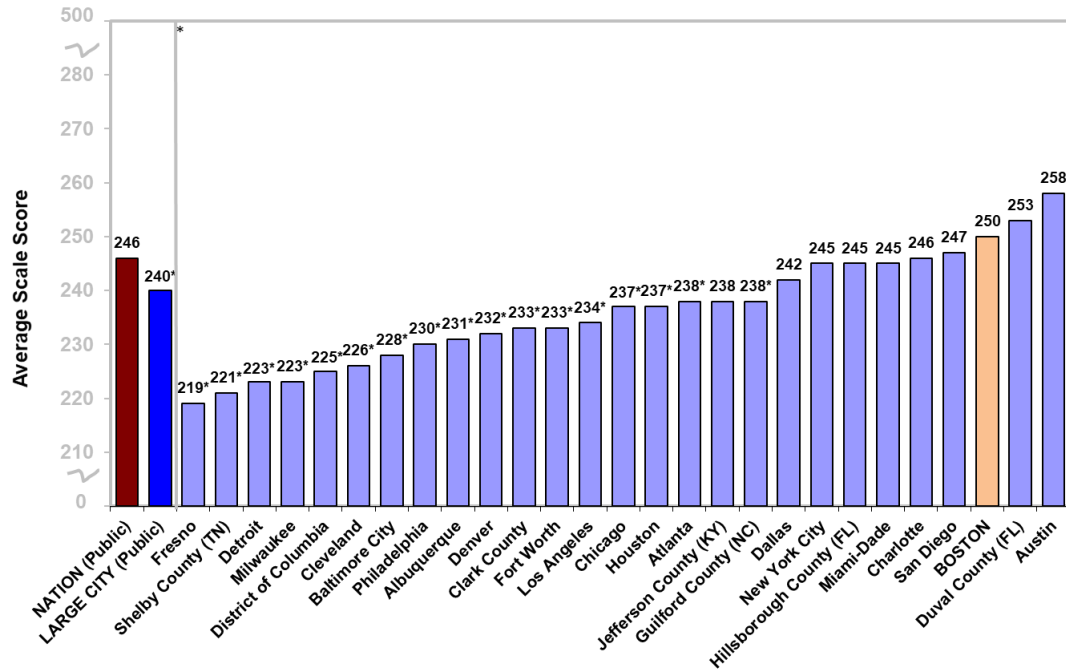
Grade 4 Students with Disabilities
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



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

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

Grade 8 Students with Disabilities
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts

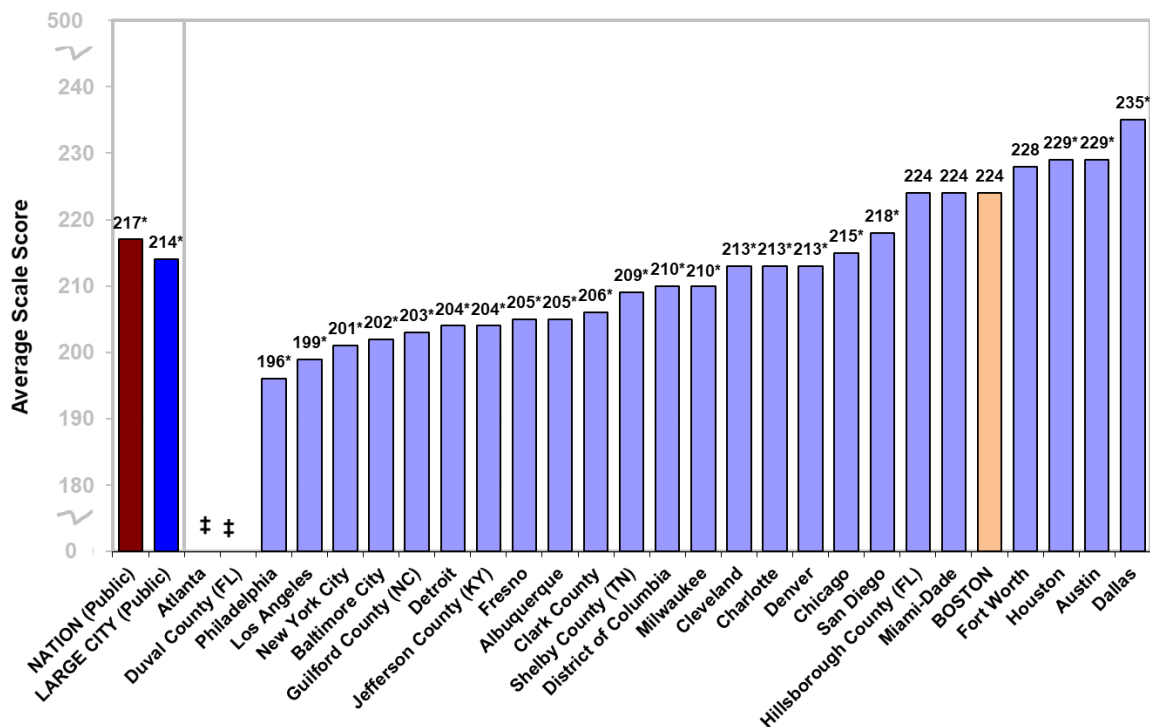


* Significantly different (P < .05) from Boston.

- In 8th grade, students with disabilities in Boston again performed (250 scaled score points) on par with the National average (246 points) and significantly outperformed peers in Large Cities (240 points). Boston's average for special education students was also the third highest among the TUDA district, but not significantly different from Duval County or Austin (whose average scores were slightly higher).

English Language Learners

Grade 4 English Language Learners
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts

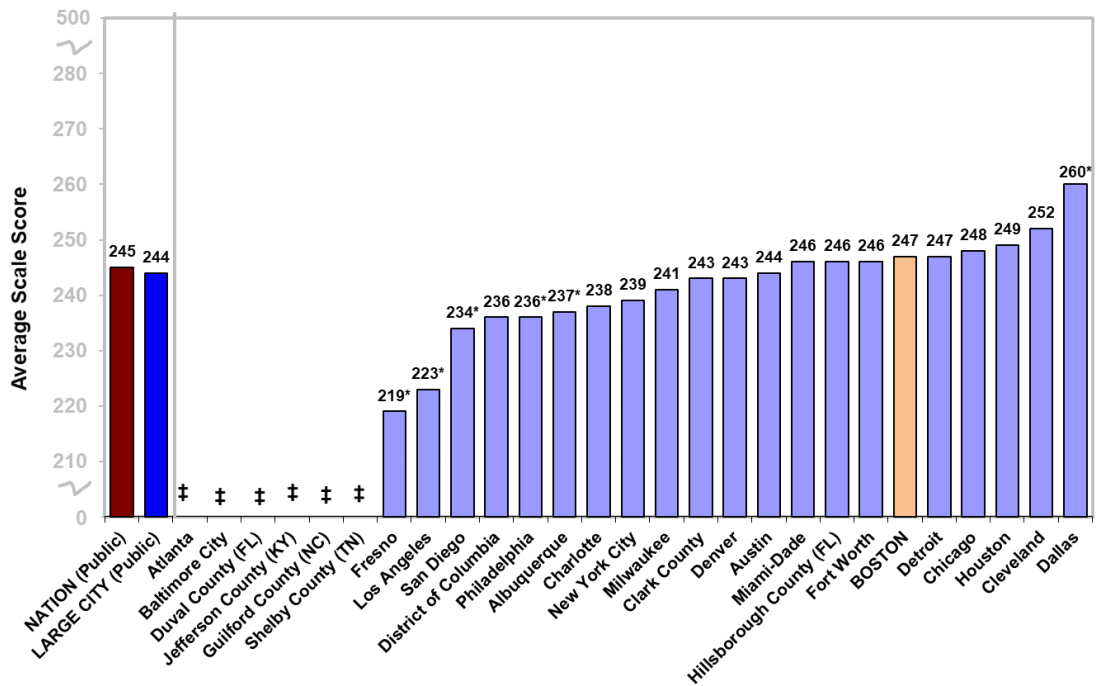


* Significantly different ($P < .05$) from Boston.

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

- Boston's 4th grade English Language Learners (ELLs) had an average scale score (224 points) significantly higher than the national average (217 points) and that of their peers in Large Cities (214 points). Compared to other TUDA districts, three (Houston, Austin, and Dallas) of the 18 districts with a sufficiently large ELL sample had a significantly higher average score than Boston.

Grade 8 English Language Learners
2017 Mathematics Average Scale Score Comparisons Boston and Nation, Large City & TUDA Districts



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

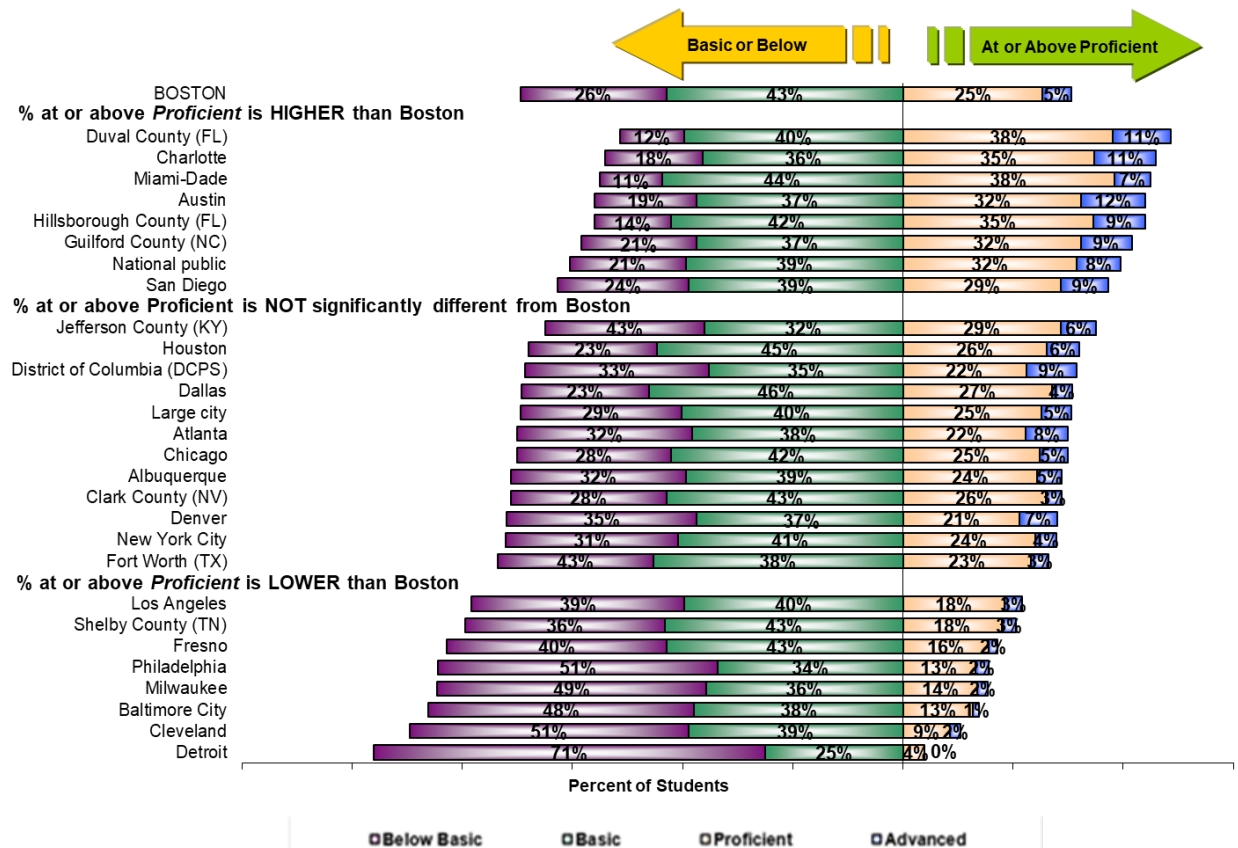
† Reporting standard not met. Sample size insufficient to permit a reliable estimate.

- 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 3 districts whose average scores fell below that of Boston and 1 district whose scores were significantly higher (Dallas).

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

2017 Mathematics Percentage of Students Scoring at or Above Proficient

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

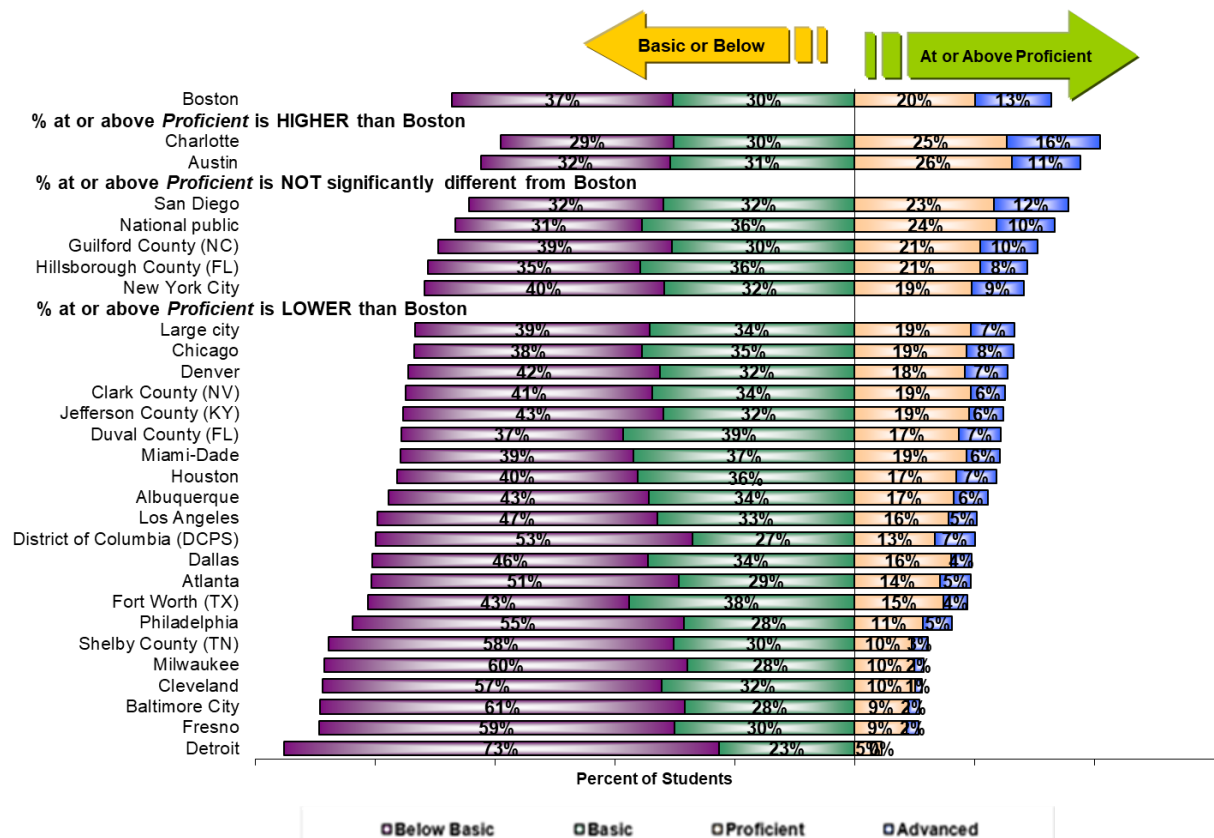


Estimate rounds to zero.

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

- In 2017, 30% of Boston's 4th grade students scored at the proficient level or above on the math assessment. This percentage was significantly higher than or equal to that of all but seven other TUDA districts, as well as the National average (40% of students were proficient or above nationally). Boston's performance, however, was not significantly different from the percent of students that performed at the Proficient level or above in Large Cities (30%).

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



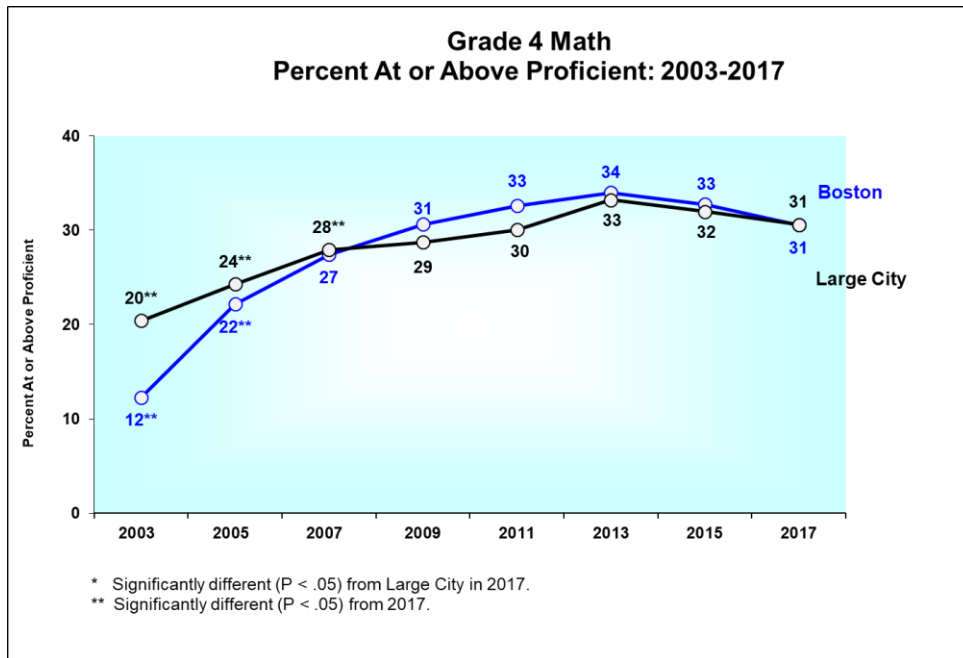
Estimate rounds to zero.

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

- In grade 8, the percentage of students in Boston who performed at or above Proficient (33%) was significantly higher as compared to 20 other TUDA districts, as well as Large Cities (26%). Boston's percentage was statistically on par with the National average (34%). Only Charlotte and Austin, however, had a significantly higher proportion of students at Proficient or Above in grade 8 math.

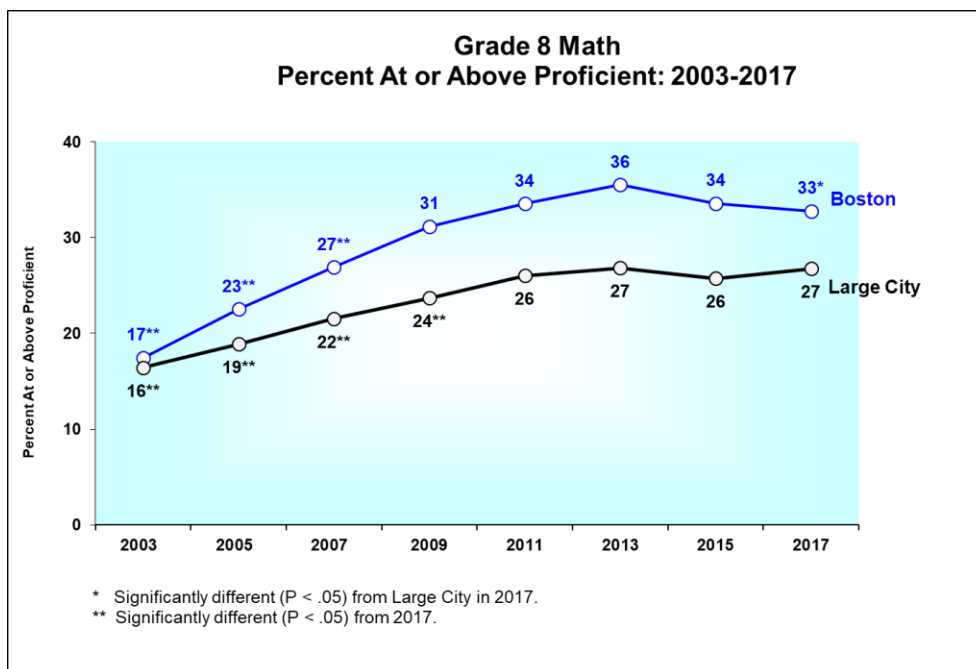
2017 Mathematics Percentage of Students Scoring at or Above Proficient Over Time: 2003 – 2017

Percentage of Grade 4 Students Scoring at or Above Proficient in Mathematics, 2003-2017



- In grade 4, Boston made significant improvements in the percentage of students performing at or above Proficient since 2003 (19-point gain for Boston, compared to an 11-point gain for Large Cities).

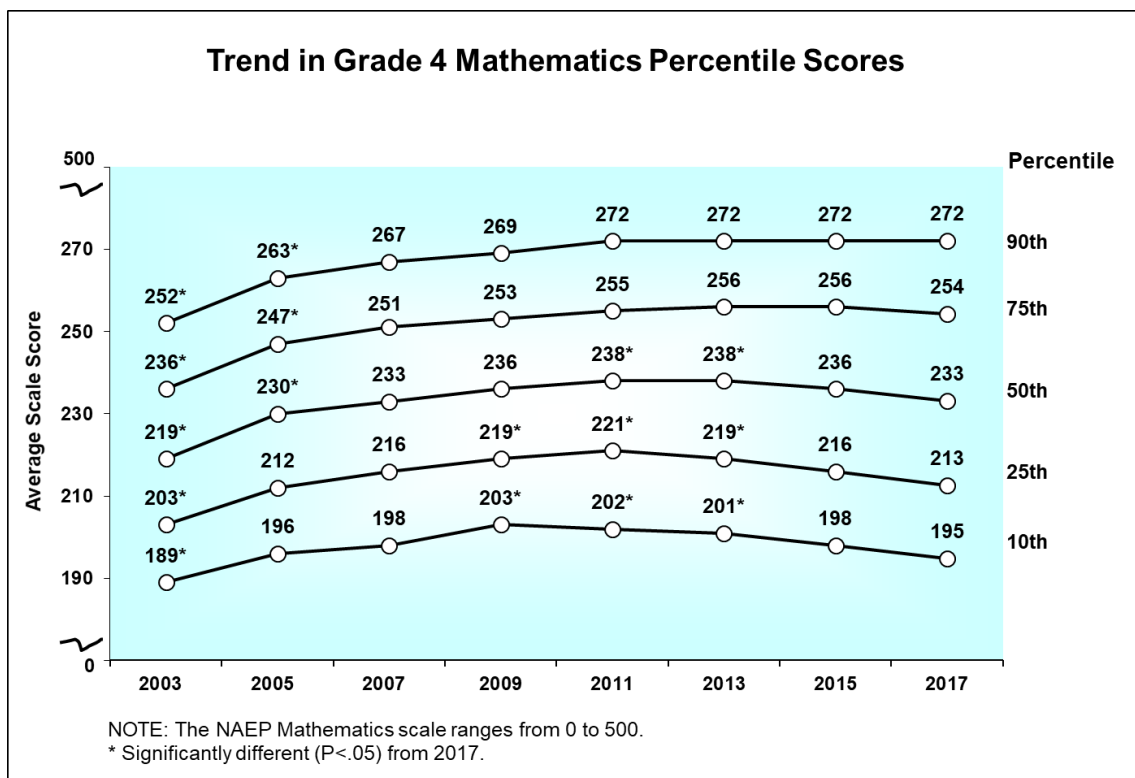
Percentage of Grade 8 Students Scoring at or Above Proficient in Mathematics, 2003-2017



- The percentage of Boston's 8th graders scoring at or above Proficient in 2017 reading assessment was significantly higher than that of Large Cities. Compare to 2003, the Proficient/Advanced rate of Boston's 8th graders rose a significant 16-points, while Large Cities saw an 11-point gain.

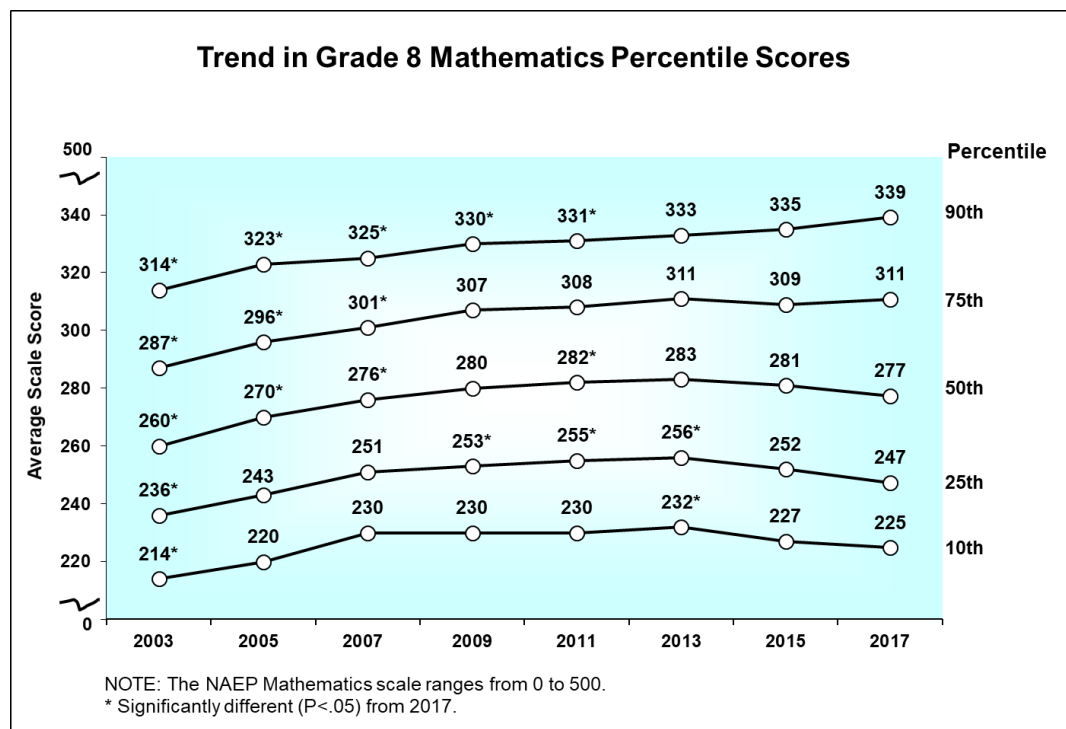
(7) Mathematics Performance by Percentile Rank

Grade 4 Mathematics



- Among Boston's 4th graders, significant improvements continued since 2003 and 2005 at almost all performance levels. Fourth graders at the 10th, 25th, and 50th percentiles have shown significant declines in average scaled score performance since 2011, dropping 5 scaled score points or more in each case. Performance for students at the 75th and 90th percentiles have stayed fairly steady since 2009.

Grade 8 Mathematics



- Among Boston's 8th graders, significant improvements have been demonstrated since 2003 and 2005 in almost all performance levels. Eighth graders at the higher-performing levels (90th, 75th, and 50th percentiles) also saw significant gains since 2007. Since 2015, students at the 75th and 90th percentiles made average scaled score gains, but they were not found to be statistically significant. Students at the 25th and 10th percentiles have shown significant declines since 2013 (9 and 7 scaled score points respectively).

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 reading framework for NAEP 2017 is the same framework that has been used since the 2009 reading assessments at grades 4 and 8. 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' understanding of how the text influences the meaning of the word. The framework also includes three cognitive targets, or behaviors and skills, for items from both literary and informational texts: Locate/Recall, Integrate/Interpret, and Critique/Evaluate. To measure these cognitive skills, students respond to both multiple-choice and constructed-response items.

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 2017 NAEP mathematics framework, which defines the content and format for the 2017 assessment, is the same framework that has been used since 2005 for grades 4 and 8. Hence, main NAEP trend lines from the early 1990s can continue at fourth and eighth grades for the 2017 assessment.

The framework for the NAEP Mathematics Assessment is anchored in these same five broad areas of mathematics content: 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 this is required for students to answer each question correctly) – 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. Students in the assessment respond to both multiple-choice and

constructed-response questions (short or extended) designed to assess the framework objectives.

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). So that SD and ELL students can demonstrate their content knowledge and skills on NAEP, beginning in 2002, SD and ELL students who require accommodations have been permitted to use them in NAEP, unless a particular accommodation would alter the skills and knowledge being tested.

The accommodations allowed on NAEP and those allowed in states are often similar, but there may be some differences. Sometimes these differences result from the way that the subject being measured is defined in the NAEP frameworks. For example, NAEP does not allow read-aloud of any part of the NAEP reading test except the instructions, because decoding words is part of what the NAEP framework is measuring. See [NAEP 2017 Massachusetts-Specific Guidelines Summary for English Language Learners \(ELL\)](#) and [NAEP 2017 Massachusetts-Specific Guidelines Summary for Students with Disabilities \(SD\)](#) to learn more about state of Massachusetts specific inclusion policy for ELL and SD students for NAEP assessment.

For ease of understanding, the many accommodations available in NAEP can be grouped into 4 categories: (1) Standard NAEP Practice, for SD and ELL students; (2) Other accommodations for SD students, (3) Other accommodations for ELL students, and (4) Universal Design Elements available for all students in Technology-Based Assessments. For a list of the NAEP permitted accommodations by subject area, visit https://nces.ed.gov/nationsreportcard/about/accom_table.aspx.

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 National 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 2017 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 70 schools at grade 4 and 40 schools at grade 8 participated in the 2017 NAEP assessments. A total of 2,300 students were assessed in mathematics (1,300 at grade 4 and 1,000 at grade 8), and a total of 2,200 students were assessed in Reading (1,300 at grade 4 and 900 at grade 8).

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Appendix B

2017 NAEP Results by Student Group: Grade 4 <i>Scale Scores and Percents of Students at Each Achievement Level</i>										
	Boston					Large Cities				
	Scale Score	Percent of Students			% Students Assessed	Scale Score	Percent of Students			% Students Assessed
		<i>Proficient & above</i>	<i>Basic & above</i>	<i>Below Basic</i>			<i>Proficient & above</i>	<i>Basic & above</i>	<i>Below Basic</i>	
READING										
All Students	217	29	60	40	100	213	28	58	42	100
Student Status										
Students with Disabilities	186	6	23	77	20	176	8	23	77	13
English Language Learners	201	12	41	59	32	186	6	28	72	19
Gender										
Female	221	31	64	36	50	216	29	61	39	49
Male	214	26	56	44	50	210	26	55	45	51
Race/Ethnicity										
African American / Black	209	17	52	48	31	203	16	47	53	25
Asian / Pacific Islander	242	57	83	17	7	229	44	74	26	7
Hispanic	213	23	56	44	47	206	20	51	49	44
White	238	57	81	19	13	234	50	79	21	20
Free/Reduced-Price Lunch Eligible	212	22	56	44	76	205	19	50	50	69
MATHEMATICS										
All Students	233	31	74	26	100	232	31	71	29	100
Student Status										
Students with Disabilities	210	8	40	60	19	204	9	35	65	12
English Language Learners	224	18	64	36	33	214	13	51	49	20
Gender										
Female	231	28	73	27	50	231	29	70	30	48
Male	235	33	74	26	50	232	32	71	29	52
Race/Ethnicity										
African American / Black	226	20	67	33	31	220	16	58	42	25
Asian / Pacific Islander	258	67	90	10	8	248	51	85	15	7
Hispanic	228	23	70	30	47	227	24	67	33	45
White	253	59	90	10	13	250	55	87	13	20
Free/Reduced-Price Lunch Eligible	229	24	70	30	74	225	22	65	35	70
#	<i>Estimate rounds to zero.</i>									

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2017 Reading and Mathematics Assessments.

2017 NAEP Results by Student Group: Grade 8
Scale Scores and Percent of Students at Each Achievement Level

	Boston					Large Cities				
	Scale Score	Percent of Students			% Students Assessed	Scale Score	Percent of Students			% Students Assessed
		<i>Proficient</i> & above	<i>Basic</i> & above	<i>Below Basic</i>			<i>Proficient</i> & above	<i>Basic</i> & above	<i>Below Basic</i>	
READING										
All Students	261	32	70	30	100	258	27	68	32	100
Student Status										
Students with Disabilities	232	7	35	65	18	223	6	29	71	13
English Language Learners	230	4	36	64	23	224	3	30	70	12
Gender										
Female	266	37	73	27	51	263	31	73	27	49
Male	257	27	66	34	53	253	23	64	36	51
Race/Ethnicity										
African American / Black	251	20	60	40	30	246	15	57	43	24
Asian / Pacific Islander	282	54	88	12	12	273	45	80	20	9
Hispanic	253	21	63	37	42	253	20	64	36	44
White	286	60	89	11	15	276	47	84	16	20
Free/Reduced-Price Lunch										
Eligible	254	24	64	36	69	251	19	61	39	66
MATHEMATICS										
All Students	280	33	63	37	100	274	27	61	39	100
Student Status										
Students with Disabilities	246	8	27	73	17	238	5	20	80	13
English Language Learners	247	6	31	69	24	244	5	28	72	12
Gender										
Female	281	34	65	35	48	274	27	61	39	49
Male	278	32	62	38	52	274	27	60	40	51
Race/Ethnicity										
African American / Black	261	15	48	52	29	257	11	44	56	24
Asian / Pacific Islander	323	73	96	4	11	301	54	82	18	9
Hispanic	268	20	55	45	42	267	19	55	45	44
White	314	70	89	11	15	296	49	82	18	20
Free/Reduced-Price Lunch										
Eligible	271	24	58	42	69	265	17	52	48	65
# Estimate rounds to zero.										

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2017 Reading and Mathematics Assessments.

APPENDIX C: Summary of Average Scale Score of TUDA Districts

2017 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	Clark County (NV)**	Cleveland	Dallas	Denver**	Detroit	District of Columbia (DCPS)	Duval County (FL)	Fort Worth (TX)**	Fresno	Guilford County (NC)**	Hillsborough County (FL)	Houston	Jefferson County (KY)	Los Angeles	Miami-Dade	Milwaukee***	New York City	Philadelphia	San Diego	Shelby County (TN)**
Reading Grade 4	213	207	214	217	197	217	225	211	213	196	201	214	182	213	226	206	203	222	227	205	221	207	229	195	214	197	222	203
Reading Grade 8	258	255	254	263	243	261	260	259	258	237	246	258	235	246	263	248	244	260	265	249	261	254	261	245	258	248	264	248
Math Grade 4	232	230	231	243	215	233	244	232	230	214	234	229	200	231	248	230	221	240	245	235	233	223	245	216	229	214	237	225
Math Grade 8	274	270	265	283	255	280	287	276	272	257	268	272	246	262	275	269	255	276	277	273	271	267	274	254	275	260	283	257

* Large City (LC): Nation-wide schools in cities with a population of 250,000 or more as defined by National Center for Education Statistics (NCES)

** District participate in TUDA for the first time in 2017

*** Milwaukee Public Schools joined the TUDA project in 2009 and was withdrew in 2015, but rejoins the program in 2017

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Appendix D

Grade 4 Reading: 2002 – 2017

2017 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 race/ethnicity categories and jurisdiction: Various years, 2002–17

Race/ethnicity and jurisdiction	Average scale score										Percentage of students									
	2002	2003	2005	2007	2009	2011	2013	2015	2017	2017	At or above Basic									
White																				
Nation (public)	227 ***	227 ***	228 ***	230 ***	230 ***	231	232	232	231 *	231 *	74 ***	74 ***	75 ***	77	77	77	79	79	78	78
Large city ¹	224 ***	226 ***	228 ***	231	231	232	232	235	234 **	234 **	70 ***	72 ***	74 ***	78	79	78	81	81	79	79
Albuquerque	—	—	—	—	—	231	232	235	230	230	—	—	—	—	77	77	77	76	74	74
Austin	250	250	253	253	253	251	252	251	251 ***	251 ***	86	81	86	95	93	95	94	95	88 ***	88 ***
Baltimore City	—	—	—	—	—	239	244	246	249	248	—	—	86	90	84	82	83	82	84	83 ***
Boston	—	—	—	—	—	220	221	223	219 ***	219 ***	—	—	86	90	84	82	83	82	84	83 ***
Charlotte	—	—	—	—	—	231	241	241	238 *	238 *	—	—	79	77	77	80	83	85	81	81
Chicago	221 ***	231 ***	244 ***	244 ***	244 ***	238	244	246	246	246	64 ***	70	70	74	77	81	91	91	82	80 ***
Clark County (NV)	—	—	—	—	—	228	229	239	239	239	—	—	—	—	—	—	—	—	—	—
Cleveland	—	—	—	—	—	228	228	228	228	228	—	—	—	—	—	—	—	—	—	—
Dallas	—	—	—	—	—	210	213 **	213 **	213 **	213 **	—	—	54	61	53	52	50	54	59 **	59 **
Denver	—	—	—	—	—	237	231	240	241 *	241 *	—	—	—	—	—	—	—	—	—	—
Detroit	—	—	—	—	—	255	260	262	258 ***	258 ***	—	—	—	—	—	—	—	—	—	—
District of Columbia (DCPS)	248 ***	254	252	253	257	255	260	262	258 ***	258 ***	91	90	92	96	95	93	96	95	85 **	85 **
Duval County (FL)	—	—	—	—	—	236	238	238	238	238	—	—	—	—	—	—	—	—	—	—
Fort Worth	—	—	—	—	—	231	231	231	231	231	—	—	—	—	—	—	—	—	—	—
Fresno	—	—	—	—	—	218	218	220	224 ***	224 ***	—	—	—	—	—	—	—	—	—	—
Guilford County (NC)	—	—	—	—	—	242	237	242	241 ***	241 ***	—	—	—	—	—	—	—	—	—	—
Hillsborough County (FL)	—	—	—	—	—	242	237	242	241 ***	241 ***	—	—	—	—	—	—	—	—	—	—
Houston	233	235	245	241	243	243	238	246	242 **	242 **	79	82	88	86	88	84	88	88	86	86
Jefferson County (KY)	—	—	—	—	—	230	233	232	235 **	235 **	—	—	—	—	—	—	—	—	—	—
Los Angeles	223 ***	217 ***	229	228 ***	228 ***	222	225	237	235 **	235 **	70	60 ***	71	79	70	75	84	85	80	81 ***
Miami-Dade	—	—	—	—	—	238	240	239	239	239	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	223	216	223	218 **	218 **	—	—	—	—	—	—	—	—	—	—
New York City	226	231	226	232	235	235	231	233	234 *	234 *	71	77	75	77	81	80	77	76	80	82 ***
Philadelphia	—	—	—	—	—	215	217	214	216	216	—	—	—	—	—	—	—	—	—	—
San Diego	—	—	—	—	—	243	240	240	243 **	243 **	—	—	—	—	—	—	—	—	—	—
Shelby County (TN)	—	—	—	—	—	231	226 ***	234	232	232	—	—	—	—	—	—	—	—	—	—
Black																				
Nation (public)	198 ***	197 ***	198 ***	203 ***	204	205	205	206	205 *	205 *	39 ***	39 ***	41 ***	46 ***	47	49	50	51	50 *	50 *
Large city ¹	192 ***	193 ***	196 ***	199 ***	201	202	202	204	203 **	203 **	33 ***	35 ***	38 ***	41 ***	44	45	46	48	47 **	47 **
Albuquerque	—	—	—	—	—	203	204	202	203	203	—	—	—	—	—	—	—	—	—	—
Austin	—	—	—	—	—	200	201	203	198	198	—	—	—	—	—	—	—	—	—	—
Baltimore City	—	—	—	—	—	200	201	203	198	198	—	—	—	—	—	—	—	—	—	—
Boston	—	—	—	—	—	200	201	203	198	198	—	—	—	—	—	—	—	—	—	—
Charlotte	—	—	—	—	—	200	201	203	198	198	—	—	—	—	—	—	—	—	—	—
Chicago	185 ***	193 ***	190 ***	193 ***	194	197	198	205	200 **	200 **	25 ***	33 ***	31 ***	34 ***	36 ***	40	42	50	45	45
Clark County (NV)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cleveland	—	—	—	—	—	187	185	183	182 ***	182 ***	—	—	—	—	—	—	—	—	—	—
Dallas	—	—	—	—	—	204	201	202	196 **	196 **	—	—	—	—	—	—	—	—	—	—
Denver	—	—	—	—	—	205	205	206	205	205	—	—	—	—	—	—	—	—	—	—
Detroit	—	—	—	—	—	186	188	184	181 **	181 **	—	—	—	—	—	—	—	—	—	—
District of Columbia (DCPS)	188 ***	184 ***	187 ***	192 ***	195 ***	191 ***	192	202	203	203	28 ***	27 ***	29 ***	33 ***	38 ***	46	48	48	48	48
Duval County (FL)	—	—	—	—	—	212	215	212	215 **	215 **	—	—	—	—	—	—	—	—	—	—
Fort Worth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fresno	—	—	—	—	—	183	187	186	191 **	191 **	—	—	—	—	—	—	—	—	—	—
Guilford County (NC)	—	—	—	—	—	218	214	216	211 **	211 **	—	—	—	—	—	—	—	—	—	—
Hillsborough County (FL)	—	—	—	—	—	218	214	216	211 **	211 **	—	—	—	—	—	—	—	—	—	—
Houston	200	201	207	205	210	207	204	208	208	208	40	43	49	48	53	60	61	54	54	54
Jefferson County (KY)	—	—	—	—	—	203	208	203	208	208	—	—	—	—	—	—	—	—	—	—
Los Angeles	186	187	187	186	195	198	204	202	198	198	26 ***	30	28	37	36	30	40	47	45	45
Miami-Dade	—	—	—	—	—	205	210	200	218 ***	218 ***	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	187	180	180	185 **	185 **	—	—	—	—	—	—	—	—	—	—
New York City	197 ***	201	206	206	209	210	206	206	208	208	37 ***	43	49	51	52	53	54	51	50	51
Philadelphia	—	—	—	—	—	191	185	186	191 **	191 **	—	—	—	—	—	—	—	—	—	—
San Diego	—	—	—	—	—	189	189	189	189	189	—	—	—	—	—	—	—	—	—	—
Shelby County (TN)	—	—	—	—	—	205	205	205	205	205	—	—	—	—	—	—	—	—	—	—

See notes at end of table.

National Center for Education Statistics

2017 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, 2002–17

Race/ethnicity and jurisdiction	Average scale score										Percentage of students									
	2002	2003	2005	2007	2009	2011	2013	2015	2017	2017	At or above Basic									
White																				
Nation (public)	271 ***	270 ***	269 ***	270 ***	271 ***	272 ***	273 ***	273 ***	274 ***	83	83	83	83	84	85 ***	84	85 ***	84	85 ***	83
Large city ¹	270 ***	270 ***	270 ***	271 ***	272 ***	273 ***	275 ***	276 ***	277 ***	80	80	83	83	83	85	84	85	86	84	82
Albuquerque	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Atlanta	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Baltimore	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Boston	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Butte	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Charlotte	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Chicago	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Cleveland	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Clark County (NV)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Dallas	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Denver	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
District of Columbia (DCPS)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Dual County (FL)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Fort Worth	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Fresno	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Guilford County (NC)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Harris County (TX)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Hillborough County (FL)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Jefferson County (KY)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Los Angeles	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Miami-Dade	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Milwaukee	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
New York City	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
San Diego	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Shelby County (TN)	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	275 ***	276 ***	276 ***	84	84	83	83	83	85	84	85	86	84	82
Black																				
Nation (public)	244 ***	244 ***	242 ***	243 ***	245 ***	248 ***	250 ***	247 ***	248 ***	54 ***	54 ***	56 ***	58 ***	58 ***	60 ***	58 ***	60 ***	58 ***	59 ***	57 ***
Large city ¹	240 ***	240 ***	240 ***	240 ***	243 ***	245 ***	246 ***	246 ***	246 ***	49 ***	49 ***	49 ***	49 ***	49 ***	50 ***	49 ***	50 ***	49 ***	50 ***	49 ***
Albuquerque	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Austin	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Baltimore	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Boston	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Charlotte	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Chicago	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Cleveland	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Clark County (NV)	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Dallas	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Denver	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Detroit	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
District of Columbia (DCPS)	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Dual County (FL)	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Fort Worth	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Fresno	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Guilford County (NC)	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Hillborough County (FL)	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Houston	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Jefferson County (KY)	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Los Angeles	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Miami-Dade	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Milwaukee	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
New York City	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Philadelphia	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
San Diego	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***
Shelby County (TN)	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	253 ***	39 ***	39 ***	44 ***	44 ***	44 ***	45 ***	44 ***	45 ***	44 ***	45 ***	44 ***

See notes at end of table.

Grade 8 Reading: 2002 - 2017 (Continued)

National Center for Education Statistics

2017 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, 2002–17—Continued

Race/ethnicity and jurisdiction	Average scale score										Percentage of students																			
	2002-2007					2009-2011					2013-2015					2017-2019					At or above Basic					At or above Proficient				
	2002	2003	2005	2007	2009	2011	2013	2015	2017	2019	2002	2003	2005	2007	2009	2011	2013	2015	2017	2019	2002	2003	2005	2007	2009	2011	2013	2015	2017	2019
Hispanic																														
Nation (public)	245	245	244	245	246	248	251	255	253	255	56	54	55	57	59	63	67	65	66	66	14	14	14	14	16	18	21	20	20	22
Large city	242	241	243	243	245	249	249	253	254	253	52	51	53	53	56	60	61	65	62	62	12	12	13	12	14	16	19	14	14	20
Albuquerque	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	63	71	70	70	+	+	+	+	+	20	23	27	27	28
Alaska	+	+	243	244	251	251	251	254	249	250	+	+	62	63	62	63	62	60	62	62	+	13	15	18	18	19	17	15	17	16
Baltimore City	—	—	—	—	+	+	+	240	243	243	—	54	57	62	64	65	61	59	63	63	14	10	13	15	15	21	18	21	18	21
Boston	—	245	248	248	251	246	250	249	253	253	—	59	60	62	64	65	61	59	63	63	15	16	17	18	18	21	18	21	18	21
Chicago	246	246	249	251	255	249	255	256	257	257	61	61	62	60	59	68	60	71	66	66	12	15	16	20	17	21	21	24	24	24
Clark County (NV)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cleveland	+	+	248	249	237	241	238	234	234	234	+	+	57	58	45	50	52	49	42	42	+	10	16	11	9	12	12	12	12	12
Dallas	—	—	—	—	246	246	251	250	247	247	230	230	230	230	230	230	230	230	230	230	6	6	6	6	6	6	6	6	6	6
Denver	—	—	—	—	232	242	245	240	240	240	51	51	59	56	62	63	59	56	52	52	11	11	16	19	22	14	20	17	19	19
Director of Columbia (DCPS)	240	240	247	249	242	249	232	247	245	247	53	51	59	56	62	63	59	56	52	52	+	+	+	+	+	+	+	+	+	+
Dual County (FL)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fort Worth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fresno County (CA)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hillborough County (CA)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Houston	243	242	245	246	250	249	250	247	247	247	52	51	56	57	63	62	62	58	57	57	13	10	12	13	15	13	15	15	15	15
Jefferson County (KY)	230	228	235	236	239	241	245	246	248	248	36	37	43	46	50	50	56	58	60	60	5	6	9	8	11	11	13	14	16	16
Los Angeles	—	—	—	—	239	240	242	245	246	246	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Miami-Dade	—	—	—	—	240	242	243	246	248	253	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New York City	247	247	247	241	244	243	246	249	244	244	+	57	57	51	53	57	60	64	62	62	+	17	14	13	13	17	18	22	18	21
Philadelphia	—	238	—	241	239	241	239	243	244	244	—	46	50	46	53	57	60	54	57	57	—	9	12	11	14	15	18	11	13	13
San Diego	—	—	—	235	242	245	247	248	248	251	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Shelby County (TN)	255	255	268	268	270	273	275	279	279	279	75	78	79	79	82	82	85	85	85	85	34	38	39	40	46	50	42	44	44	44
Shelby County (TN) - other	256	256	269	268	268	263	268	273	271	273	65	68	69	76	74	77	79	82	79	80	26	34	35	34	38	41	43	45	45	45
Nation (public)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Large city	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Albuquerque	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atlanta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Austin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Baltimore City	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Boston	—	274	280	275	276	280	278	281	282	282	—	83	85	81	88	87	84	86	88	88	—	44	55	46	50	53	59	64	60	60
Charlotte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Chicago	+	268	277	277	280	284	284	278	281	281	+	78	88	88	91	91	85	81	84	81	—	35	44	44	47	53	59	64	60	60
Clark County (NV)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cleveland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Denver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Detroit	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Director of Columbia (DCPS)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dual County (FL)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fort Worth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guilford County (NC)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hillborough County (FL)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Houston	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Los Angeles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Miami-Dade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New York City	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Philadelphia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Shelby County (TN)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Shelby County (IN)	—
— Not available. District did not participate.	

* Reporting standards not met. Sample size insufficient to permit a reliable estimate.

* Significantly different ($p < .05$) from large city in 2017.

Significantly different ($p < .05$) from nation (public) in 2001

**** Significantly different ($p < .05$) from 2017.

Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.

NOTE: Beginning with the 2017 assessment, NAEP reading results are from a paper-and-pencil based assessment. Beginning in 2020, results for charter schools are excluded from the TUDA results if they are not included in the school district's Adequate Yearly 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 Hispanic origin. DCPS = District of Columbia Public Schools. 2002-17 Reading Assessments

National Center for Education Statistics

2017 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, 2003–17

Race/ethnicity and jurisdiction	Average scale score								Percentage of students									
	2003-2009				2011-2017				At or above Basic					At or above Proficient				
	2003	2005	2007	2009	2011	2013	2015	2017	2003	2005	2007	2009	2011	2013	2015	2017		
White	Nation (public)	243 ***	246 ***	248 ***	249 ***	248 ***	248 ***	248 ***	87	88 ***	91 ***	90 ***	91 ***	91 ***	90 ***	88		
	Large city	243 ***	247 ***	248 ***	250 ***	251 ***	250 ***	250 ***	86	88 ***	90 ***	92 ***	90 ***	90 ***	91 ***	91 ***		
	Atlanta	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Austin	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Baltimore	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Boston	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Charlotte	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Chicago	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Cleveland	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Dallas	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Denver	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Detroit	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	District of Columbia (DCPS)	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Dual County (FL)	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Fort Worth	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Fresno	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Guilford County (NC)	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Hillsborough County (FL)	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Houston	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
	Jefferson County (KY)	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***		
Los Angeles	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***			
Miami-Dade	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***			
Milwaukee	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***			
New York City	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***			
Philadelphia	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***			
San Diego	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***			
Shelby County (TN)	250 ***	253 ***	256 ***	259 ***	254 ***	253 ***	253 ***	89	96 ***	98 ***	96 ***	98 ***	98 ***	98 ***	98 ***			
Black	Nation (public)	216 ***	220 ***	222 ***	224 ***	224 ***	224 ***	223 ***	54 ***	60 ***	63 ***	63 ***	66 ***	66 ***	65 ***	63 ***		
	Large city	212 ***	217 ***	219 ***	221 ***	222 ***	223 ***	220 ***	47 ***	55 ***	58 ***	58 ***	63 ***	64 ***	61 ***	58 ***		
	Albuquerque	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Atlanta	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Austin	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Baltimore	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Boston	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Charlotte	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Chicago	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Clark County (NV)	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Cleveland	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Dallas	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Denver	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Detroit	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	District of Columbia (DCPS)	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Dual County (FL)	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Fort Worth	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Fresno	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Guilford County (NC)	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
	Hillsborough County (FL)	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***		
Houston	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
Jefferson County (KY)	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
Los Angeles	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
Miami-Dade	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
Milwaukee	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
New York City	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
Philadelphia	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
San Diego	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
Shelby County (TN)	211 ***	215 ***	217 ***	218 ***	219 ***	220 ***	219 ***	46 ***	51 ***	55 ***	57 ***	58 ***	63 ***	55 ***	53 ***			
Notes are at end of table.																		

Shelby County (IN)
See notes at end of table.

Grade 4 Mathematics: 2003 - 2017 (Continued)

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2017 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, 2003–17—Continued

Geography and jurisdiction	Average scale score							Percentage of students									
	2003	2005	2007	2009	2011	2013	2015	2017	2003	2005	2007	2009	2011	2013	2015	2017	
Hispanic																	
Nation (public)	221 ***	225 ***	227 ***	229 ***	230 ***	229 *	230 ***	229 *	69	67 ***	69	70	72	73 ***	73 ***	70 *	
Large city	219 ***	223 ***	224 ***	226 ***	228 ***	229 ***	230 ***	229 ***	66	69	69	71 ***	71 ***	72 ***	72 ***	67 **	
Albuquerque	+	+	223	220	223 ***	225	224 **	224 **	229	71 ***	71 ***	70 ***	71 ***	75 ***	66	65	
Atlanta	+	223	233	237	237	237	234 ***	234 ***	80	80	80	82	80	80	78 ***	78 ***	
Austin	+	234	233	237	227	223	221 **	221 **	+	+	+	+	+	65	67	62	
Baltimore City	+	+	+	234 ***	233 ***	233 ***	238 ***	228 ***	70	77	80 ***	79 ***	79 ***	74	70	74	
Boston	215 ***	225	230	232	234 ***	233 ***	240 ***	237 **	81	81	82	82	87	86	86	80 ***	
Charlotte	233	234	236	240	242	243	243	237 **	80	80	80	82	87	86	86	80 ***	
Chicago	217 ***	217 ***	219 ***	226 ***	223 ***	230	231 **	231 **	60	55	60 ***	70	66 ***	72	72	63 **	
Clark County (NV)	+	+	+	225	225	225	225	225	53	53	53	56	58	62	61	58	
Colorado	220	224	215	217	218	221	221	216 ***	81	81	81	80	80	84	84	80 ***	
Dallas	+	+	+	224	224	226	228	228	68	68	68	70	70	72	72	68	
Denver	+	+	+	218	218	218	218	218	59	59	59	61	61	61	61	59	
Detroit	+	+	+	216	216	216	216	216	55	55	55	51	51	55	51	58 ***	
District of Columbia (DCPS)	205 ***	215 ***	220 ***	227	223 ***	214	215 ***	204 ***	39	63	63	60	63	68	74	70	
Dual County (FL)	+	+	+	219	219	219	219	219	55	55	55	51	51	55	51	58 ***	
Fort Worth	+	+	+	216	216	216	216	216	55	55	55	51	51	55	51	58 ***	
Fresno	+	+	+	216	216	216	216	216	55	55	55	51	51	55	51	58 ***	
Gulfport County (NC)	+	+	+	216	216	216	216	216	55	55	55	51	51	55	51	58 ***	
Hillsborough County (FL)	228 ***	232	234	236	238	238	237	240 ***	82	82	82	80	80	82	82	84 ***	
Houston	+	+	+	235	235	235	235	235	82	82	82	80	80	82	82	84 ***	
Jefferson County (KY)	211 ***	216	217	218	220	224	224	217 ***	55	55	55	59	59	60	60	59	
Los Angeles	+	+	+	218	218	218	218	218	55	55	55	59	59	60	60	59	
Miami-Dade	+	+	+	218	218	218	218	218	55	55	55	59	59	60	60	59	
Miami-Dade	+	+	+	218	218	218	218	218	55	55	55	59	59	60	60	59	
Milwaukee	+	+	+	218	218	218	218	218	55	55	55	59	59	60	60	59	
New York City	220	226	230	230	227	228 ***	226 ***	219 ***	71 ***	71 ***	71 ***	60	70	72 ***	68 ***	58 **	
Philadelphia	216 ***	222	223	224	223	217	211	207 ***	60	60	60	64	64	64	64	47	
San Diego	+	+	+	220	220	220	222	225 **	64	64	64	66	66	66	66	42 ***	
Shelby County (TN)	+	+	+	223	223	223	228	228	63	63	63	66	66	66	66	42 ***	
Asian/Pacific Islander																	
Nation (public)	246 ***	251 ***	254 ***	255	256	258	256 ***	258 *	91	91	91	91	91	90	90	90 *	
Large city	246	247	251	253	249	256 ***	251	248 **	89	90	89	90	86	90	88	85 **	
Albuquerque	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atlanta	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Boston	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Boston	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Boston	243 ***	256	260	269	269	269	259	263 *	91	94	95	95	95	95	95	90	
Charlotte	252	256	263	257	268	265	268	262 *	96	93	93	93	93	94	94	94	
Chicago	+	+	249	255	247	266	264	257	92	96	97	98	97	98	97	92	
Clark County (NV)	+	+	+	+	+	+	+	247 **	+	+	+	+	+	+	+	86	
Cleveland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Dallas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Denver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Detroit	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
District of Columbia (DCPS)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Dual County (FL)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fort Worth	+	+	+	220	223	221	220	225 ***	+	+	+	+	+	+	+	+	
Gulfport County (NC)	+	+	+	+	+	+	+	225 ***	+	+	+	+	+	+	+	+	
Hillsborough County (FL)	+	+	+	+	+	282	+	265	+	+	+	+	+	+	+	+	
Houston	+	+	265	264	264	+	+	+	100	98	97	+	+	+	+	+	
Jefferson County (KY)	241 ***	246	246 ***	248	251	251	254	257 *	92	87	90	89	92	92	94 *	38 ***	
Los Angeles	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Miami-Dade	+	+	+	+	+	+	+	+	93	77 ***	71	78	91	78	91	72 **	
Milwaukee	+	253	257 ***	231	230	234 ***	253	247 **	89	88	88	93	87	88	87	87	
New York City	+	+	+	+	+	+	+	+	93	87	86	83	83	83	83	86	
Philadelphia	238 ***	245	247	246	246	246	246	246	88	86	86	87	86	86	86	86	
San Diego	+	+	+	247	247	246	243	254	87	88	88	89	88	89	88	88	

Shelby County (TN)	—
— Not available. District did not participate.	

Not available. District did not participate.

[†]Significantly different ($p < .05$) from large city in 2017.^{††} Significantly different ($p < .05$) from nation (public) in 2017.

ⁱⁱⁱ Significantly different ($p < .05$) from 2017.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment prior to 2017, results are from a paper-based assessment. Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.

district's Adequate Yearly 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 Hispanic origin. DCP3 = District of Columbia Public Schools.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2003–17 Mathematics Assessments.

National Center for Education Statistics

2017 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 eighth-grade public school students, by selected race/ethnicity categories and jurisdiction. Various years, 2003–2017

Race/ethnicity and jurisdiction	Average scale score								Percentage of students														
	2003	2005	2007	2009	2011	2013	2015	2017	2003	2005	2007	2009	2011	2013	2015	2017	At or above Proficient						
White																							
Nation (public)	287 ***	288 ***	290 ***	292	293	293	291	292 *	79 ***	79 ***	81 ***	82 ***	83 ***	83 ***	81	80 *	36 ***	37 ***	41 ***	43	44	42	43 *
Large city ¹	285 ***	288 ***	292 ***	294	295	295	296	296	83 ***	83 ***	84 ***	85	84	83	83	82 *	36 ***	39 ***	44 ***	46	47	49	49 ***
Albuquerque	268 ***	—	+	+	301	305	309	311	312	312	313	314	314	314	314	314	54	—	+	44	48	40	50
Austin	—	305	308	312	313	312	313	312	—	—	90	91	94	95	94	95	—	61	65	70	69	70	72
Baltimore City	—	—	—	280	286	286	281	288	—	—	83	84	86	86	86	86	—	—	—	31	39	30	36
Boston	289 ***	299 ***	305	311	305	309	311	314	77 ***	83	89	93	88	86	90	89 *	48 ***	54 ***	58	67	61	66	70
Charlotte	301 ***	304 ***	308 ***	311	313	312	314	314	91 ***	90	90	91	93	93	91	94	55 ***	60	62	68	68	67	70
Chicago	276 ***	281 ***	287 ***	289	290	294	317	300	68 ***	71 ***	79	76	84	81	95	89	25 ***	33	35	47	49	72	56 **
Clark County (NV)	—	—	—	—	265	269	273	289	—	—	64	67	—	—	63	77 ***	14	17	12	21	25	—	41 ***
Cleveland	268	265	269	275	277	285	273	269	63	54	64	67	66	66	63	56 ***	—	—	—	18	23	—	21 ***
Dallas	—	—	—	300	304	—	304	304	—	—	—	—	91	88	—	88	—	—	—	65	60	—	58 ***
Denver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68 ***
District of Columbia (DCPS)	+	317	+	+	322	315	314	318	+	94	+	+	97	92	91	93	+	69	+	78	72	72	72
Durham County (FL)	—	—	—	—	—	—	295	299	—	—	—	—	—	—	76	76	—	—	—	—	32	36 *	
Fort Worth	—	—	—	—	—	—	294	—	—	—	—	—	—	—	80	80	—	—	—	—	—	46	
Fresno	—	—	282	281	279	281	279	278	—	—	70	68	70	71	71	65	—	—	38	34	30	33	
Guilford County (NC)	—	—	—	293	296	296	290	292	—	—	—	—	82	85	80	81	—	—	—	44	49	43	
Hillsborough County (FL)	263 ***	294 ***	308	311	309	312	313	315	80 ***	85	94	94	93	92	93	91	47 ***	50 ***	63	67	66	70	
Houston	—	—	—	284	285	285	285	285	—	—	75	79	74	73	74	73	—	33	34	36	38	37	
Jefferson County (KY)	277 ***	280 ***	285	287	283	285	288	288	67 ***	68 ***	73	74	77	80	73	81	29 ***	40	41	44	48	38	
Los Angeles	—	—	—	281	285	286	289	284	—	—	84	78	83	87	81	86	—	—	40	39	46	51	
Miami-Dade	—	—	—	284	285	286	289	284	—	—	84	78	83	87	81	86	—	—	40	39	46	51	
Milwaukee	—	—	—	281	284	285	287	284	—	—	84	78	83	87	81	86	—	—	40	39	46	51	
New York City	280	288	289	295	292	287	291	294	76	77	77	77	84	80	87	80	36	39	47	44	55	46	
Philadelphia	—	—	—	282	287	284	281	282	—	—	71	70	76	80	76	87	—	—	35	32	34	31	
San Diego	284 ***	292 ***	294 ***	301	302	300	302	300	78 ***	83	85	88	88	86	88	88	35 ***	42 ***	55	58	53	58 ***	
Shelby County (TN)	—	—	—	—	—	—	302	279	—	—	—	—	—	—	—	84	—	—	—	—	—	—	
Black																							
Nation (public)	252 ***	254 ***	259	260	262 ***	263 ***	260	260 *	39 ***	41 ***	47	49 ***	50 ***	51 ***	47	46	7	8	11	12	12	13	
Large city ¹	247 ***	250 ***	254 ***	256	261 ***	261 ***	258	257 *	34 ***	36 ***	41	44	49 ***	49 ***	45	44	5	7	9	10	13	11	
Albuquerque	—	—	—	—	+	+	+	+	26 ***	28 ***	38	42	50 ***	48 ***	43	40	+	+	+	+	+	+	
Austin	241 ***	242 ***	253	255	262 ***	261 ***	258	257 *	26 ***	28 ***	38	42	50 ***	48 ***	43	40	3	4	8	7	11	10	
Baltimore City	—	262	265	267	265	267	260	257	—	52	57	62	63	53	55	49	—	12	14	21	17	11	
Boston	251 ***	255	263	268	272 ***	271 ***	269	261	36 ***	45	51	57	61 ***	61 ***	58	49	—	12	14	21	17	9	
Charlotte	258 ***	264 ***	267	270	283	288	284	271	47	54	58	60	58	62	57	48	6 ***	9	12	18	22	18	
Chicago	245 ***	246 ***	248	252	250	259	262	259	29 ***	28 ***	35	38	41	43	44	40	4	3	6	7	10	11	
Clark County (NV)	—	—	—	—	260	265	269	275	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cleveland	249	244 ***	253	262	240	249	240	240	32 ***	29 ***	41	38	31	31	34	43	5	3	5	6	7	6	
Dallas	—	—	—	294	294	293	291	290	—	—	—	—	52	52	47	49	5	—	—	12	13	10	
Denver	—	—	—	—	294	294	291	290	—	—	—	—	—	—	—	—	—	—	—	—	—	14	
District of Columbia (DCPS)	—	—	—	237	244	239	242	245	26 ***	27 ***	31	32	37	36	40	37	3	4	6	3	4	5	
Durham County (FL)	240 ***	241 ***	245	244	249	253	248	250	26 ***	27 ***	31	32	36	40	37	36	3	4	6	9	9	9	
Fort Worth	—	—	—	—	—	—	294	293	—	—	—	—	—	—	52	50	—	—	—	—	11	12	
Fresno	—	—	—	246	243	247	242	242	—	—	32	29	34	25	27	40	—	—	—	7	6	7	
Guilford County (NC)	—	—	—	—	—	—	262	262	—	—	—	—	—	—	46	—	—	—	—	—	—	5	
Hillsborough County (FL)	—	—	—	263	264	260	263	263	—	—	—	—	54	54	53	50	—	—	—	10	13	10	
Houston	259	257	265	266	271 ***	271	260	263	47	47	58	56	64	63	55	50	7 ***	7	13	17	18	11	
Jefferson County (KY)	—	—	—	252	257	256	252	253	21 ***	21 ***	28	34	42	44	38	40	2	—	—	7	10	13	
Los Angeles	234 ***	238 ***	245	250	250	250	250	250	21 ***	21 ***	28	34	42	44	38	40	2	—	—	7	10	13	
Milwaukee	—	—	—	260	265	265	265	267	—	—	—	—	48	47	40	40	—	—	—	12	9	10	
New York City	—	—	—	244	246	247	250	246	—	—	28	30	31	31	29	31	—	—	—	3	5	4	
Philadelphia	253	257	268	261	262	263	261	256	40	44	45	40	50	51	48	42	9	10	12	12	13	13	
San Diego	—	—	—	256	260	260	257	250	40	44	45	40	50	51	48	42	9	10	12	12	13	13	
Shelby County (TN)	252	253	258	263	256	260	261	251	39	40	48	50	42	46	43	34	7	8	11	16	8	10	
	—	—	—	—	—	—	251	251	—	—	—	—	42	42	52	47	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—							

See notes at end of table.

National Center for Education Statistics

2017 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 eighth-grade public school students, by selected race/ethnicity categories and jurisdiction. Various years, 2003–17—Continued

Race/ethnicity and jurisdiction	Average scale score								Percentage of students													
	2003	2005	2007	2009	2011	2013	2015	2017	2003	2005	2007	2009	2011	2013	2015	2017	2017	At or above Proficient				
Hispanic																						
Nation (public)	258 ***	261 ***	264 ***	266 ***	269 ***	271 ***	269	268	47 ***	50 ***	54	56	60 ***	62 ***	60	57	60	17 ***	20	21	19	20
Large city ¹	256 ***	258 ***	261 ***	264	267	269	268	267	43 ***	46 ***	50 ***	54	58	60 ***	57	55	55	13 ***	16	19	20	18
Albuquerque	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atlanta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Austin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Baltimore City	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Boston	252 ***	261 ***	270	269	271	275 ***	271	268	38 ***	51	60	61	62	66 ***	60	55	7	17	19	20	21	18
Charlotte	262 ***	262 ***	264 ***	272	279	276	272	268	46	53	50	63	70	66 ***	60	55	4	16	17	18	20	15
Chicago	259 ***	263 ***	265 ***	268 ***	271	270 ***	275	276	48 ***	52	55	59	64	61	66	64	8 ***	11 ***	12 ***	24	20	24
Clark County (NV)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cleveland	249	251	258	259	268	272	268	267	35	33	44	35	44	39	44	55	2	7	6	4	11	9
Dallas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Denver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
District of Columbia (DCPS)	246 ***	252	251 ***	253	253	262	253	262	33 ***	39	38	56	40	52	52	50	3 ***	9	9	7	16	8
District of Columbia (FL)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fort Worth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fresno	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guilford County (NC)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guilford County (FL)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hillsborough County (FL)	261 ***	265 ***	270	275 ***	278 ***	279 ***	266	268	270	49 ***	56	62	70	72 ***	64	58	9 ***	12 ***	15 ***	21	24	25
Houston	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Los Angeles	240 ***	245 ***	253	254 ***	255 ***	258	259	260	26 ***	32 ***	40 ***	41 ***	43	48	47	47	3 ***	6 ***	9 ***	8 ***	10	17
Miami-Dade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Milwaukee	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New York City	260	259	262	261	263	267	264	261	48	47	52	50	50	54	57	51	15	12	14	12	13	18
Philadelphia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
San Diego	248 ***	258 ***	259 ***	263	260	266	266	266	34 ***	49	48	54	52	49	47	38	6 ***	11 ***	13	14	15	17
Shelby County (TN)	—	—	—	—	—	—	—	260	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Asian/Pacific Islander																						
Nation (public)	289 ***	294 ***	296 ***	300 ***	302 ***	306	305	310	77 ***	81 ***	82 ***	85	87	86	86	86	42 ***	46 ***	49 ***	53 ***	60	58
Large city ¹	281 ***	289 ***	291 ***	299	296	299	300	301	71 ***	76 ***	78	83	82	83	84	82	33 ***	40 ***	44 ***	52	49	53
Albuquerque	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atlanta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Austin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Baltimore City	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Boston	300 ***	309 ***	305 ***	312	319	318	318	323	87	92	91	92	93	92	92	96	57 ***	61	57	68	71	
Charlotte	293 ***	—	—	—	—	—	—	—	81	88	83	85	88	85	88	85	43 ***	—	56	61	61	
Chicago	296	292	301	296	305	305	304	312	78	83	88	82	86	86	86	86	36	38	—	54	50	
Clark County (NV)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cleveland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dallas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dallas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Denver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Detroit	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
District of Columbia (DCPS)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
District of Columbia (FL)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Fort Worth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Fresno	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Guilford County (NC)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hillsborough County (FL)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Houston	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Jefferson County (KY)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Miami-Dade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Milwaukee	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
New York City	286 ***	295	299	309	304	304	303	305	74	79	83	89	85	84	84	86	38 ***	50	53	64	57	
Philadelphia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
San Diego	278 ***	282 ***	289 ***	292	293	293	292	301	69 ***	74	77	81	78	82	80	84	28 ***	31 ***	40 ***	45	46	
Shelby County (TN)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

— Not available. District did not participate.

* Reporting standards not met. Sample size insufficient to permit a reliable estimate.

† Significantly different ($p < .05$) from large city in 2017.

*** Significantly different ($p < .05$) from 2017.

¹ Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment. Prior to 2017, results were from a paper-and-pencil based assessment. Beginning in 2009, results for charter schools are excluded from the TUDA results if they are not included in the school district's Adequate Yearly 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 Hispanic origin. DCPS = District of Columbia Public Schools.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2003–17 Mathematics Assessments.