

NAEP 2015 Mathematics and Reading Results

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

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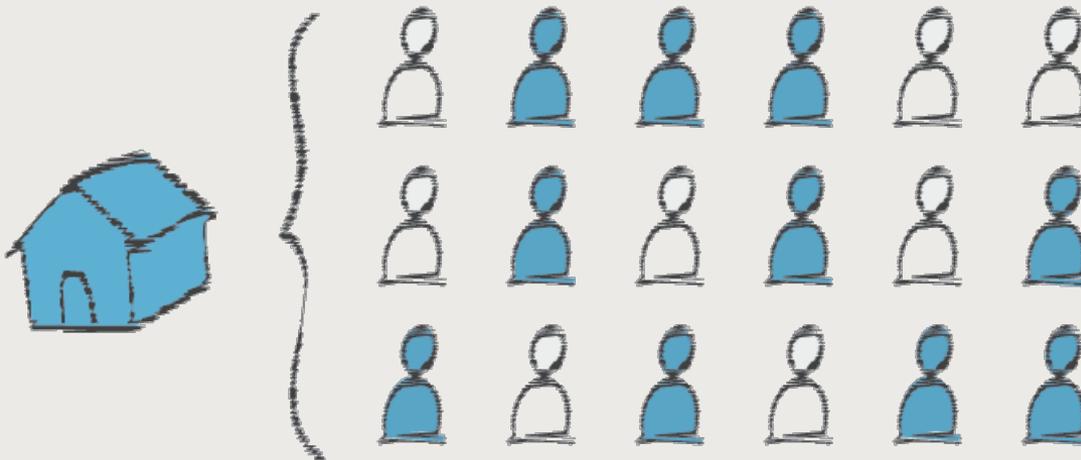
Release: October 28, 2015

What is NAEP?

- The National Assessment of Educational Progress (NAEP) is the largest continuing and nationally representative assessment of what our nation's students know and can do in core subjects.
- A survey designed to produce national, state, and select urban district level results.
 - NAEP results are for populations of students, not for individual students nor schools.
 - Measures student performance nationally and reports changes over time.
 - Allows comparisons between states and the nation.

NAEP Sample Sizes

- The results from the 2015 mathematics assessment are based on representative samples.
 - 139,900 fourth-grade students from 7,810 schools
 - » 11,300 Texas 4th graders in 480 schools
 - 136,900 eighth-grade students from 6,150 schools
 - » 11,500 Texas 8th graders in 380 schools



NAEP Administration

- NAEP is administered over a six-week period.
 - For 2015: January 26th – March 6th
 - Each student is only assessed in one subject area.
 - Students only take a small portion of the assessment.
 - Accommodations are provided as necessary for students with disabilities and English language learners.

Mathematics Exclusion Rates

Mathematics Grade 4 ELL Exclusion Rate



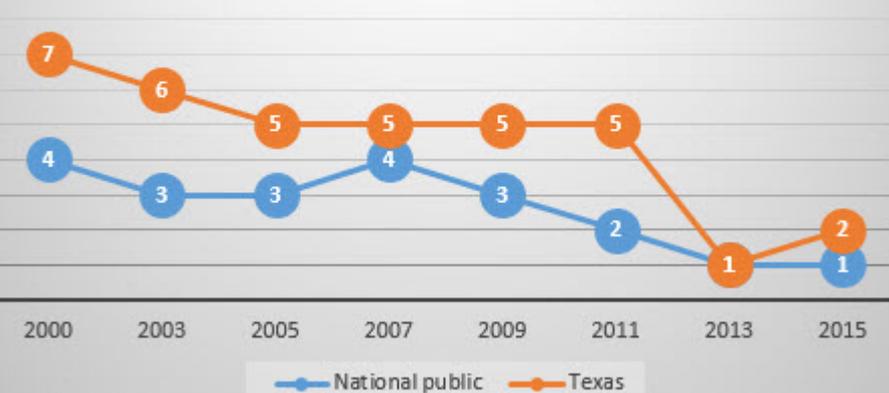
Mathematics Grade 4 SD Exclusion Rate



Mathematics Grade 8 ELL Exclusion Rate

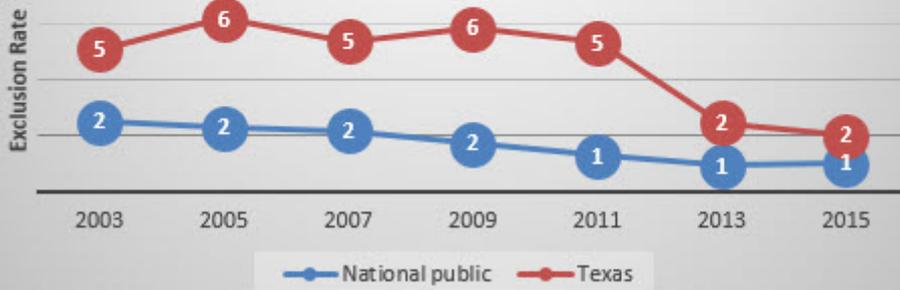


Mathematics Grade 8 SD Exclusion Rate

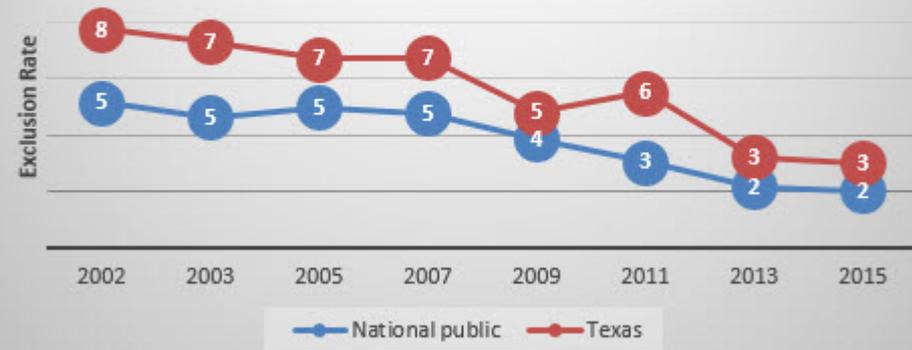


Reading Exclusion Rates

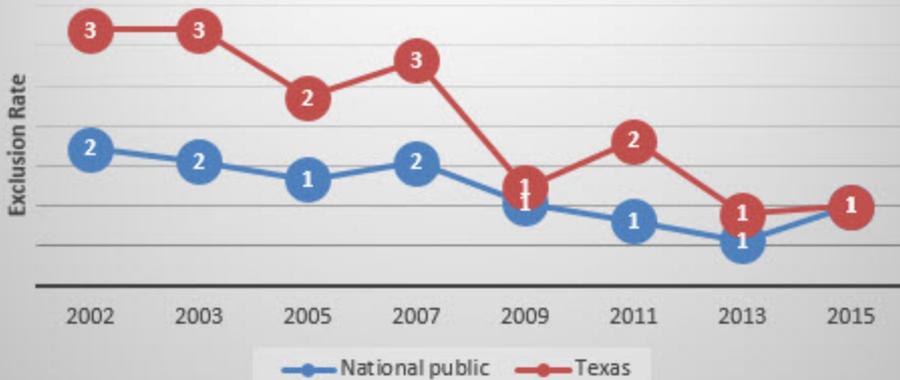
Reading Grade 4 ELL Exclusion Rate



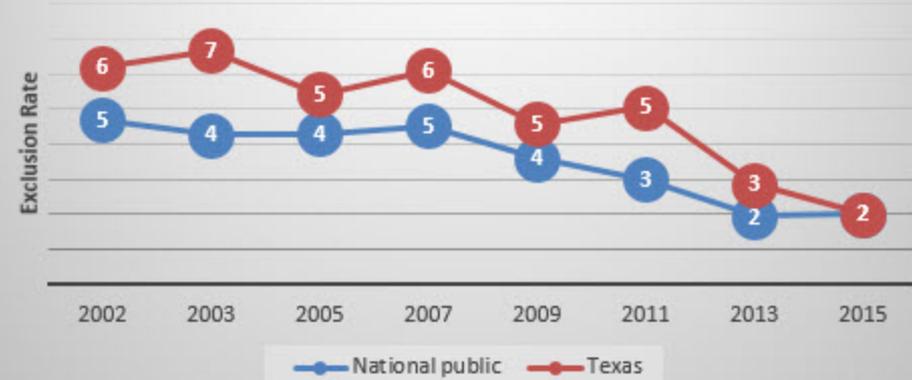
Reading Grade 4 SD Exclusion Rate



Reading Grade 8 ELL Exclusion Rate



Reading Grade 8 SD Exclusion Rate



NAEP Results

- The results of NAEP are released as *The Nation's Report Card*.
 - The report card provides national, state, and district-level results, results for different demographic groups, inclusion information, and sample questions.

- NAEP Results are reported in two formats
 - Average Scale Scores
 - » Numeric scale
 - » 0 – 500 on mathematics and reading assessments
 - » Scores cannot be compared across content areas
 - Achievement Levels
 - » Categorical scale
 - » Below *Basic*, *Basic*, *Proficient*, *Advanced*

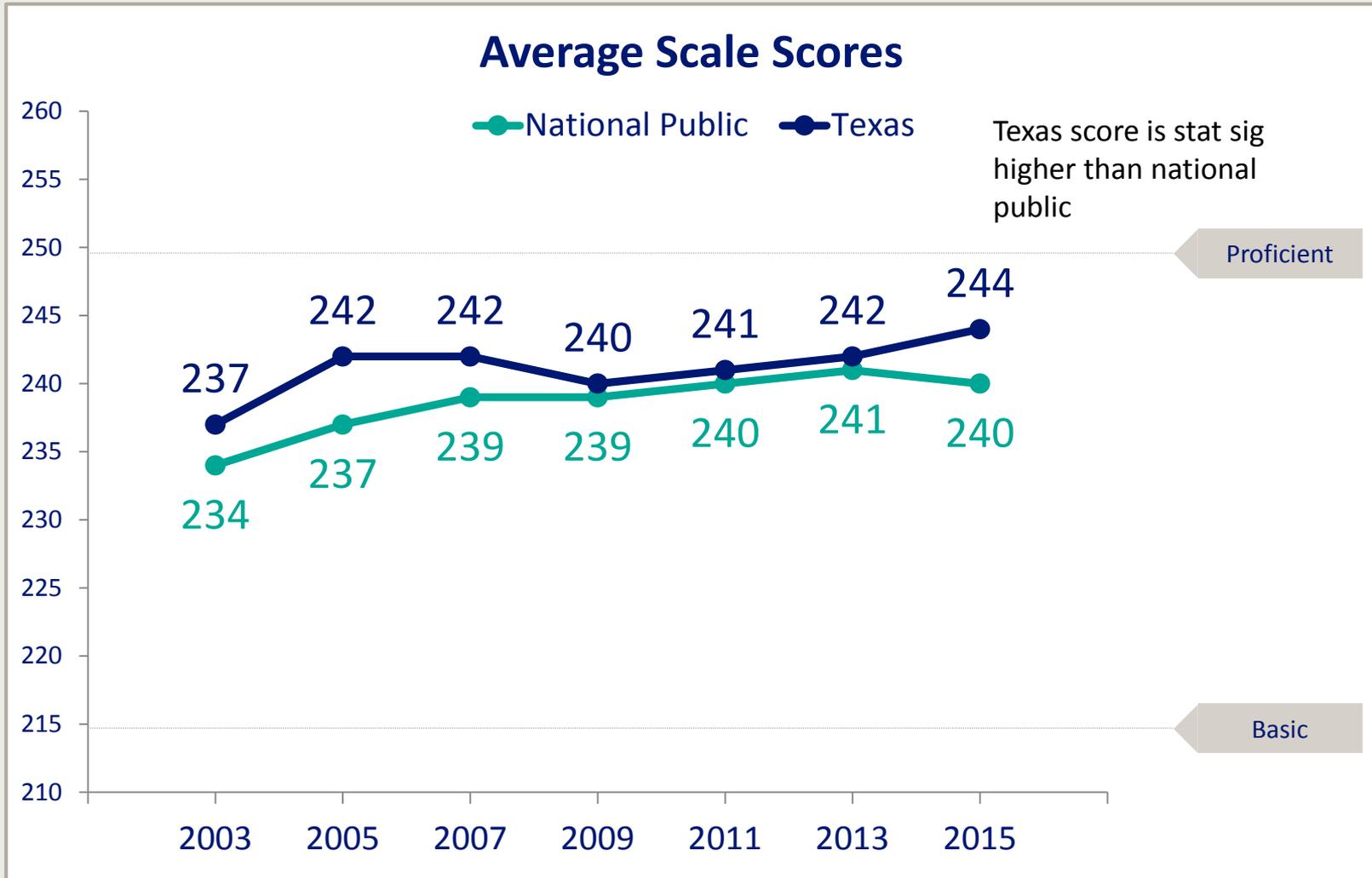




Grade 4
Mathematics
Results



Grade 4 Mathematics Results



NOTE: Observed differences are not necessarily statistically significant.

Grade 4 Mathematics Results

Texas rank overall - 11th

2013 – 27th

Ethnicity

Year	Jurisdiction	White	African American	Hispanic	Asian/Pacific Island	American Indian
2015	National Public	248	224	230	256	228
	Texas	255 ¹ (4th)	233 ¹ (2nd)*	239 ¹ (4th)	271 ¹	‡
2013	National Public	250	224	230	258	228
	Texas	255 (6th)	231 (5th)	235 (14th)	272	‡

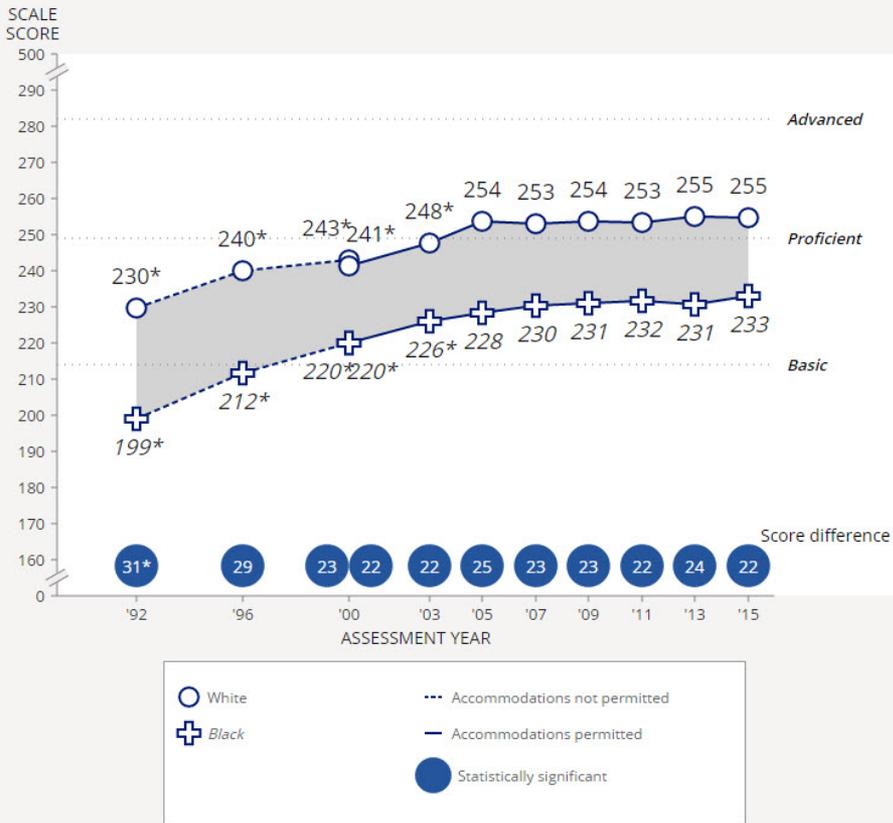
¹ Statistically significantly higher than 2015 national public

‡ Reporting standards not met.

* Second to the DOD (Department of Defense Schools)

Grade 4 Mathematics Score Gaps

Trend in fourth-grade NAEP mathematics average scores and score gaps in Texas, by race/ethnicity



Trend in fourth-grade NAEP mathematics average scores and score gaps in Texas, by race/ethnicity

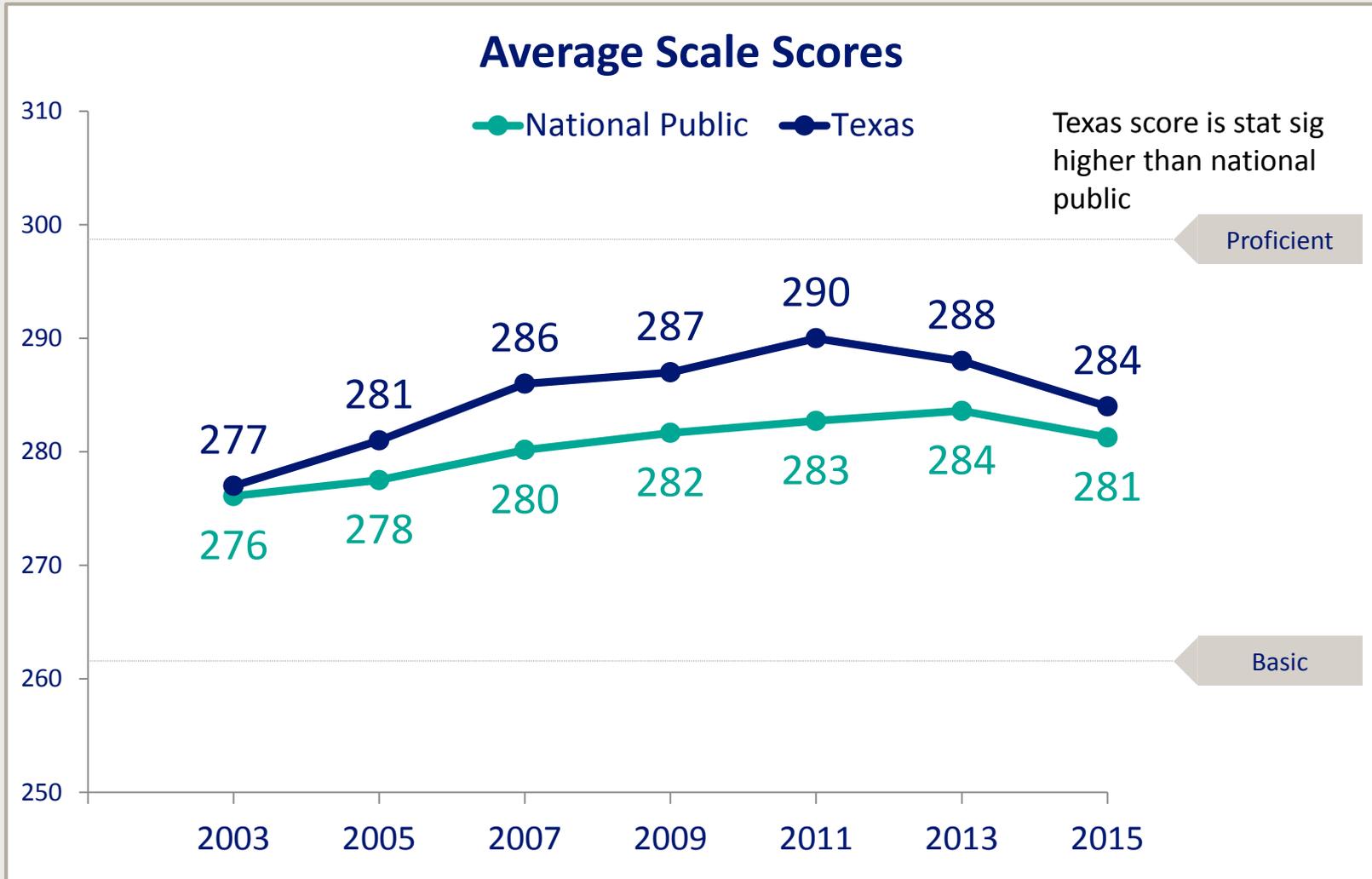




Grade 8
Mathematics
Results



Grade 8 Mathematics Results



NOTE: Observed differences are not necessarily statistically significant.



Grade 8 Mathematics Results

Texas rank overall – 23rd
2013 – 16th

Ethnicity

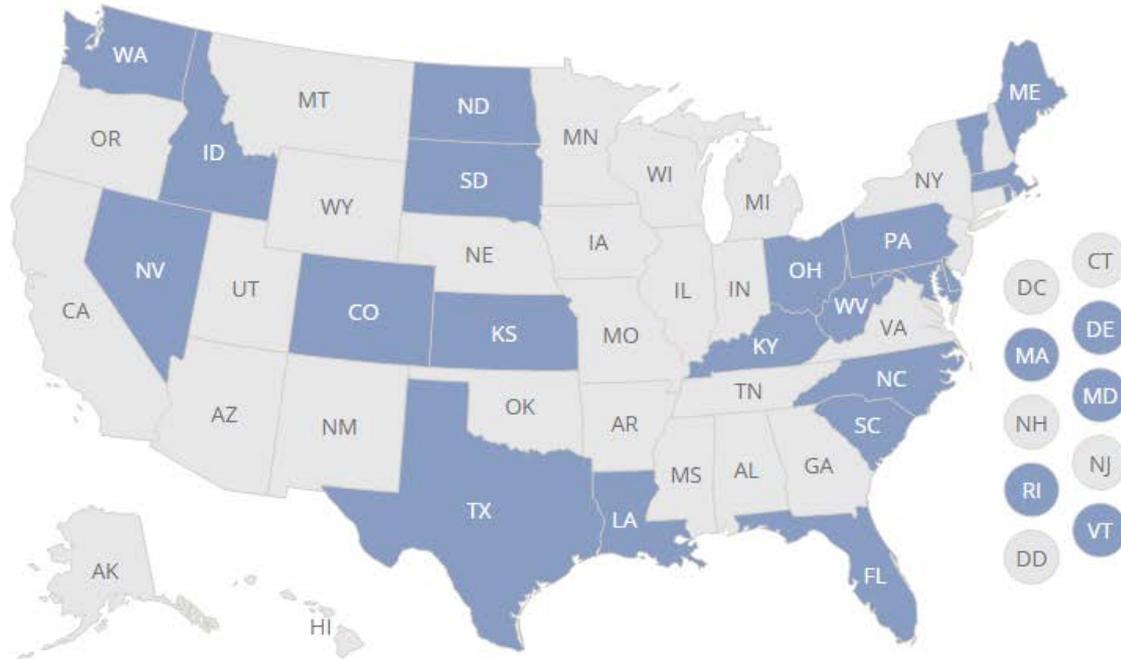
Year	Jurisdiction	White	African American	Hispanic	Asian/Pacific Island	American Indian
2015	National Public	291	260	269	305	267
	Texas	298 ¹ (6th)	267 ¹ (6th)	277 ¹ (4th)	312	‡
2013	National Public	293	263	271	306	270
	Texas	300 (5th)	273 (4th)	281 (4th)	319	‡

¹ Statistically significantly higher than 2015 national public
‡ Reporting standards not met.



Grade 8 Mathematics Results

Score Changes Since 2013



NOTE: DD = Department of Defense Education Activity (DoDEA).

Grade 8 Mathematics Score Gaps

Trend in eighth-grade NAEP mathematics average scores and score gaps in Texas, by race/ethnicity

Trend in eighth-grade NAEP mathematics average scores and score gaps in Texas, by race/ethnicity





Summary

Change in average mathematics scores between 2013 and 2015 for public school students, by state/jurisdiction

		GRADE 4 ↑ Score increase	GRADE 4 ◇ No change in scores	GRADE 4 ↓ Score decrease
		Grade 4		
GRADE 8 ↑ Score increase				
GRADE 8 ◇ No change in scores	Grade 8	District of Columbia Mississippi DoDEA	Alabama Alaska Arizona California Illinois Indiana Iowa Michigan Missouri Nebraska New Jersey New Mexico Oklahoma Oregon Tennessee Utah Virginia Wisconsin Wyoming	Arkansas Connecticut Georgia Hawaii Minnesota Montana New Hampshire New York
GRADE 8 ↓ Score decrease			Florida Idaho Kentucky Louisiana Massachusetts Nevada North Carolina Ohio Pennsylvania South Carolina South Dakota Texas Washington West Virginia	Nation (public) Colorado Delaware Kansas Maine Maryland North Dakota Rhode Island Vermont

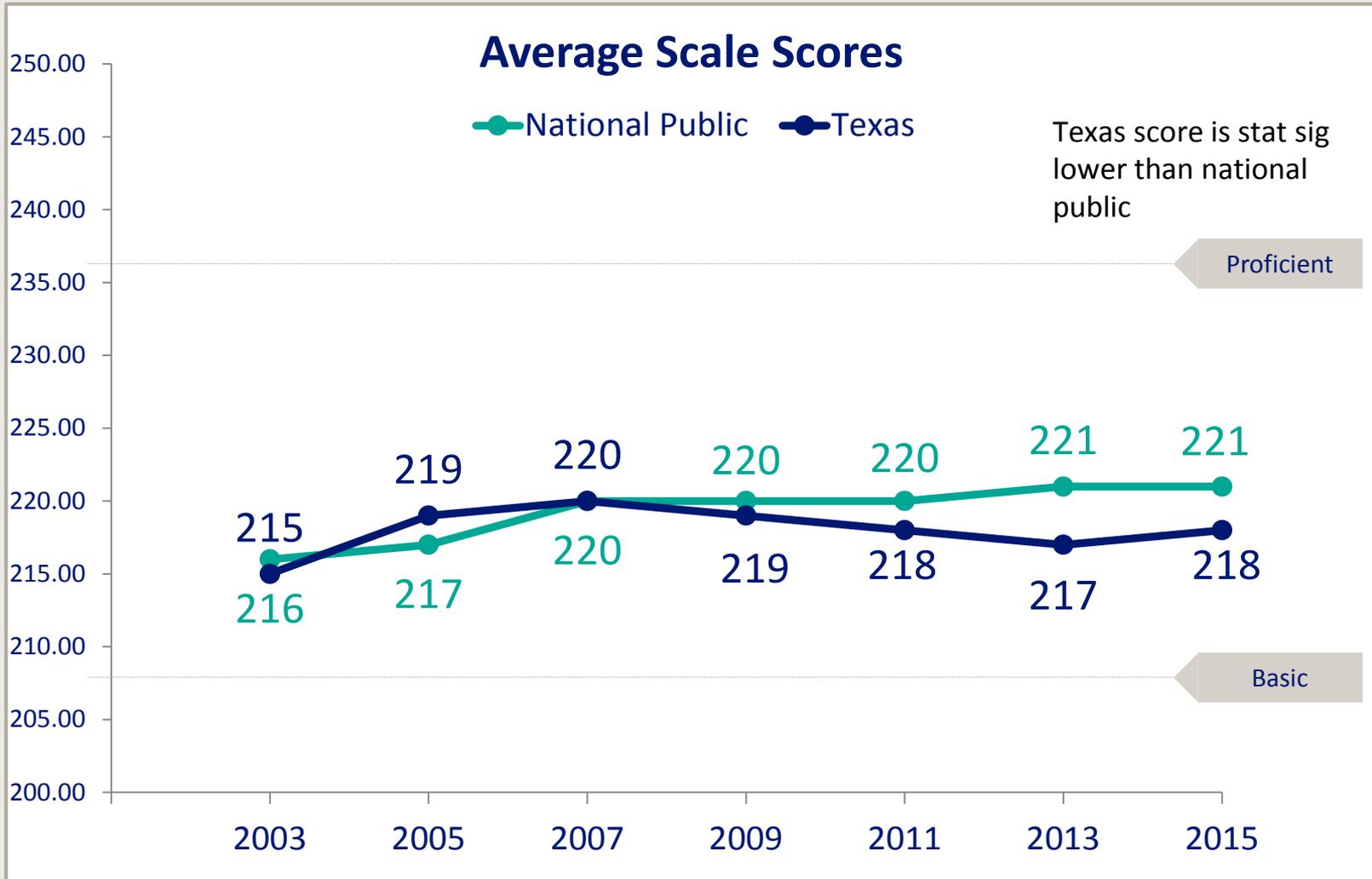
DoDEA = Department of Defense Education Activity.
NOTE: A blank cell indicates that no state/jurisdiction fell within that category.



Grade 4
Reading
Results



Grade 4 Reading Results



NOTE: Observed differences are not necessarily statistically significant.



Grade 4 Reading Results

Texas rank overall – 40th

2013 – 41st

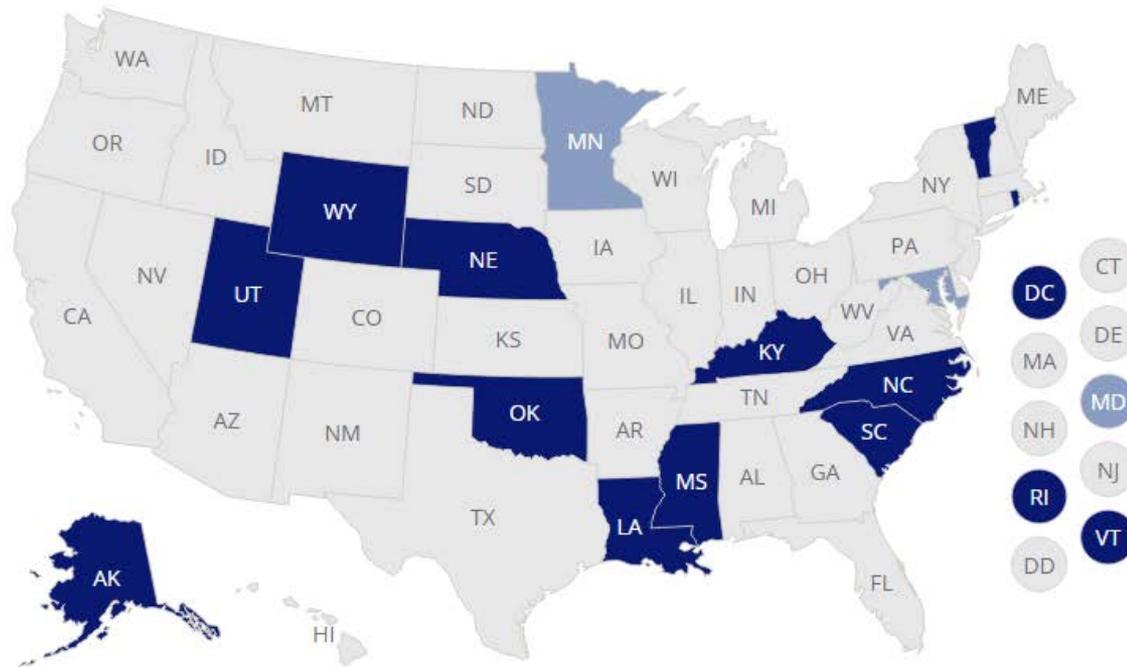
Ethnicity						
Year	Jurisdiction	White	African American	Hispanic	Asian/Pacific Island	American Indian
2015	National Public	232	206	208	238	206
	Texas	235 (12th)	205 (23rd)	210 (23rd)	248	‡
2013	National Public	231	205	207	235	206
	Texas	233 (12th)	209 (14th)	206 (35th)	252	‡

‡ Reporting standards not met.



Grade 4 Reading Results

Score Changes Since 2013



NOTE: DD = Department of Defense Education Activity (DoDEA).

Grade 4 Reading Score Gaps

Trend in fourth-grade NAEP reading average scores and score gaps in Texas, by race/ethnicity



Trend in fourth-grade NAEP reading average scores and score gaps in Texas, by race/ethnicity



* Significantly different ($p < .05$) from 2015.

NOTE: Results are not shown for data points where the state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting. Prior to 2003, state participation in the NAEP mathematics and reading assessments was voluntary. See more information about the history of state participation at <https://nces.ed.gov/nationsreportcard/about/state.aspx>.

* Significantly different ($p < .05$) from 2015.

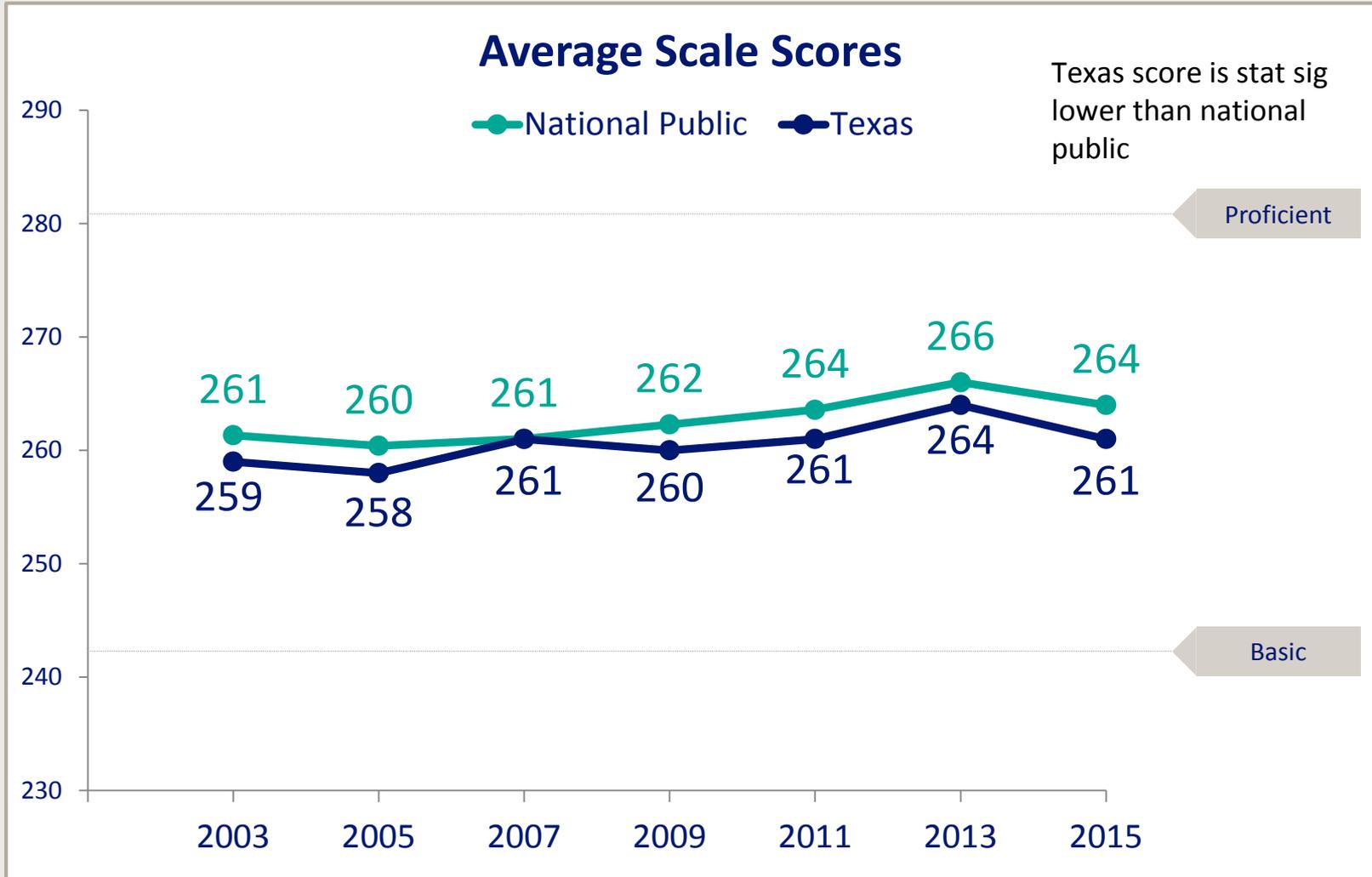
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Grade 8
Reading
Results



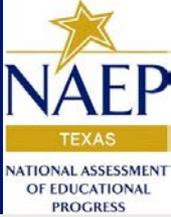
Grade 8 Reading Results



NOTE: Observed differences are not necessarily statistically significant.



Grade 8 Reading Results



Texas rank overall – 39th

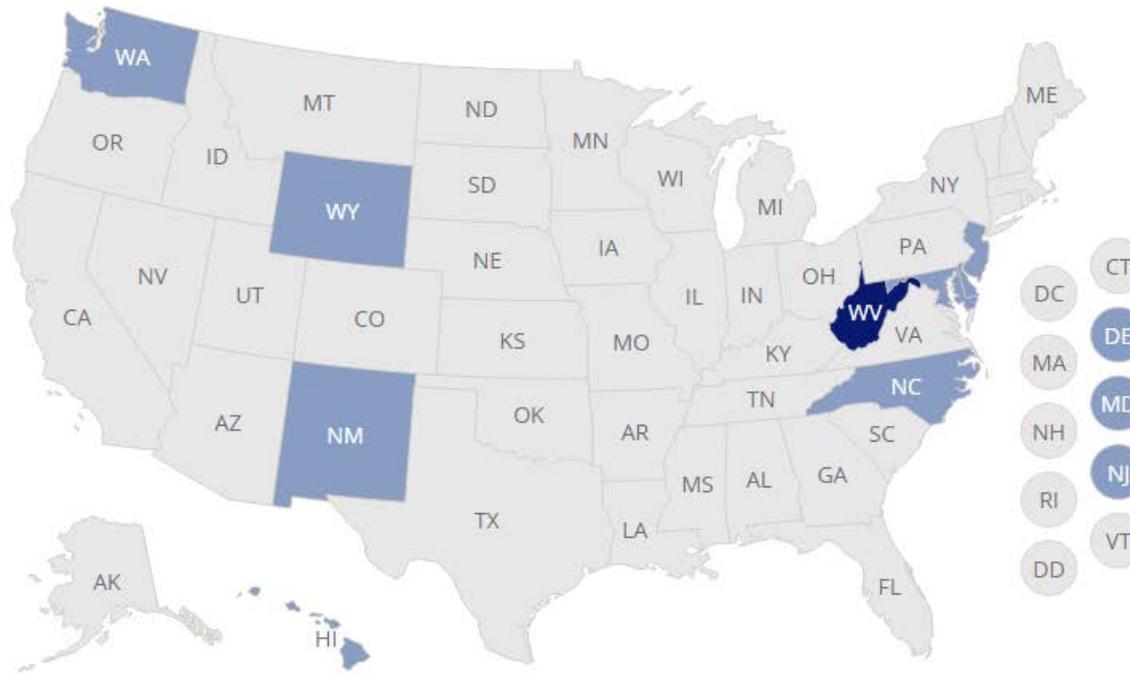
2013 – 38th

Ethnicity						
Year	Jurisdiction	White	African American	Hispanic	Asian/Pacific Island	American Indian
2015	National Public	273	247	253	279	253
	Texas	274 (21st)	251 (9th)	252 (35th)	283	‡
2013	National Public	275	250	255	279	252
	Texas	279 (9th)	253 (14th)	255 (29th)	285	‡
‡ Reporting standards not met.						



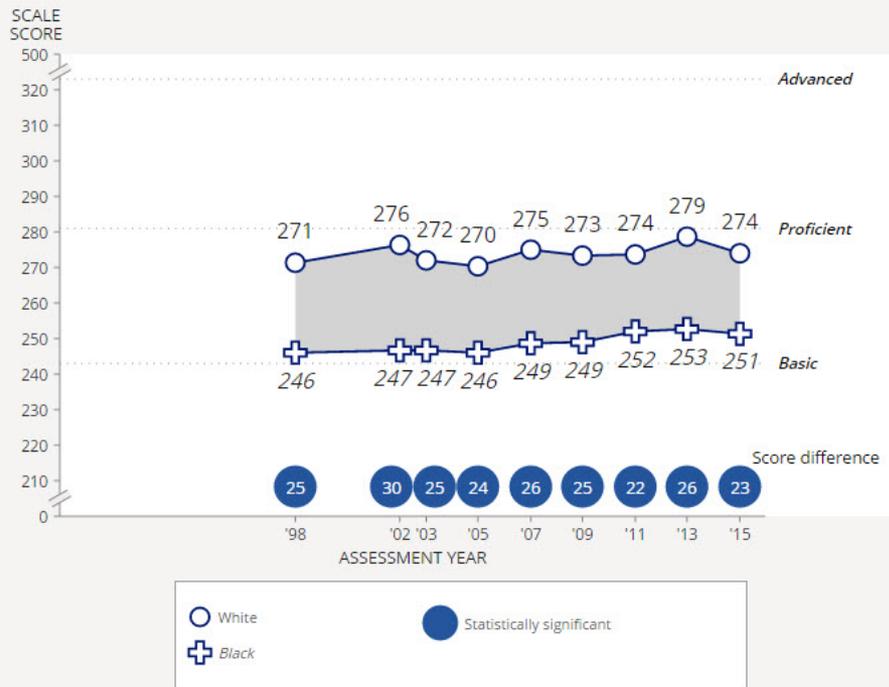
Grade 8 Reading Results

Score Changes Since 2013



Grade 8 Reading Score Gaps

Trend in eighth-grade NAEP reading average scores and score gaps in Texas, by race/ethnicity



Trend in eighth-grade NAEP reading average scores and score gaps in Texas, by race/ethnicity



* Significantly different ($p < .05$) from 2015.

NOTE: Results are not shown for data points where the state/jurisdiction did not participate or did not meet the minimum participation guidelines for reporting. Prior to 2003, state participation in the NAEP mathematics and reading assessments was voluntary. See more information about the history of state participation at <https://nces.ed.gov/nationsreportcard/about/state.aspx>.



Reading Summary

Change in average reading scores between 2013 and 2015 for public school students, by state/jurisdiction

	GRADE 4 ↑ Score increase	GRADE 4 ◆ No change in scores	GRADE 4 ↓ Score decrease
	Grade 4		
GRADE 8 ↑ Score increase		West Virginia	
GRADE 8 ◆ No change in scores	Alaska District of Columbia Kentucky Louisiana Mississippi Nebraska Oklahoma Rhode Island South Carolina Utah Vermont	Alabama Arizona Arkansas California Colorado Connecticut Florida Georgia Idaho Illinois Indiana Iowa Kansas Maine Massachusetts Michigan Missouri Montana Nevada New Hampshire New York North Dakota Ohio Oregon Pennsylvania South Dakota Tennessee Texas Virginia Wisconsin DoDEA	Minnesota
GRADE 8 ↓ Score decrease	North Carolina Wyoming	Nation (public) Delaware Hawaii New Jersey New Mexico Washington	Maryland

DoDEA = Department of Defense Education Activity.
NOTE: A blank cell indicates that no state/jurisdiction fell within that category.

National Takeaways

- Results described as “historic”
- First time in NAEP history, 3 out of the 4 grade/subject combinations declined
- First decline in mathematics results since 1990
- Performed extensive quality control analysis to ensure data validity

Trial Urban District Assessment (TUDA) Results

The Trial Urban District Assessment (TUDA) is designed to explore the feasibility of using National Assessment of Educational Progress (NAEP) to report on the performance of public school students at the district level.



Trial Urban District Assessment (TUDA) Mathematics

Change in average mathematics scores between 2013 and 2015 for public school students, by participating district

	GRADE 4 Score increase ↑	GRADE 4 No change in scores ◇	GRADE 4 Score decrease ↓
	Grade 4		
GRADE 8 Score increase ↑		Chicago	
GRADE 8 No change in scores ◇	Grade 8 District of Columbia (DCPS) Miami-Dade	Large City Austin Boston Charlotte Cleveland Detroit Fresno Jefferson County (KY)	Albuquerque Atlanta Baltimore City Los Angeles New York City Philadelphia San Diego
GRADE 8 Score decrease ↓	Dallas	Hillsborough County (FL) Houston	Nation (public)

NOTE: A blank cell indicates that no district fell within that category.

Trial Urban District Assessment (TUDA) Reading

Change in average reading scores between 2013 and 2015 for public school students, by participating district

	GRADE 4 ↑ Score increase	GRADE 4 ◇ No change in scores	GRADE 4 ↓ Score decrease
	Grade 4		
GRADE 8 ↑ Score increase		Miami-Dade	
GRADE 8 ◇ No change in scores	Grade 8	Boston Chicago Cleveland District of Columbia (DCPS)	Large City Atlanta Austin Charlotte Dallas Detroit Fresno Houston Jefferson County (KY) Los Angeles New York City Philadelphia San Diego
GRADE 8 ↓ Score decrease			Nation (public) Albuquerque Hillsborough County (FL)

NOTE: A blank cell indicates that no district fell within that category.