

# NAEP Mathematics and Reading Results

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

2015 Delaware Results Summary

# 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 School and Student Selection

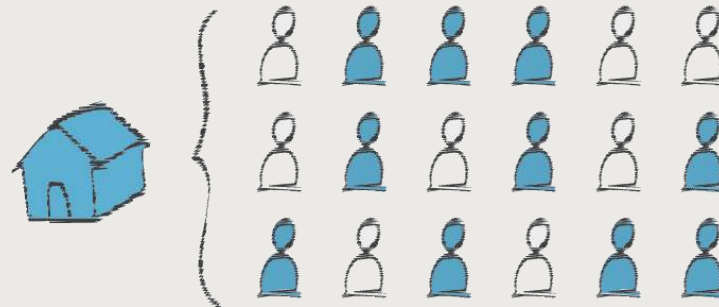
- NAEP uses a carefully designed sampling procedure for the assessment to be representative of the geographical, racial, ethnic, and socio-economic diversity of schools and students in the state.
  - First, a sample of schools is selected.
  - Then, within each chosen school students are randomly selected to participate. Each participating student represents hundreds of other similar students.

# NAEP Sample Sizes

- The results from the 2015 mathematics assessment are based on representative samples.
  - 139,900 fourth-grade students from 7,810 schools
  - 136,900 eighth-grade students from 6,150 schools

- In Delaware

- 4,700 fourth-grade students participated from 94 schools
- 4,400 eighth-grade students participated from 55 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.

# NAEP Results

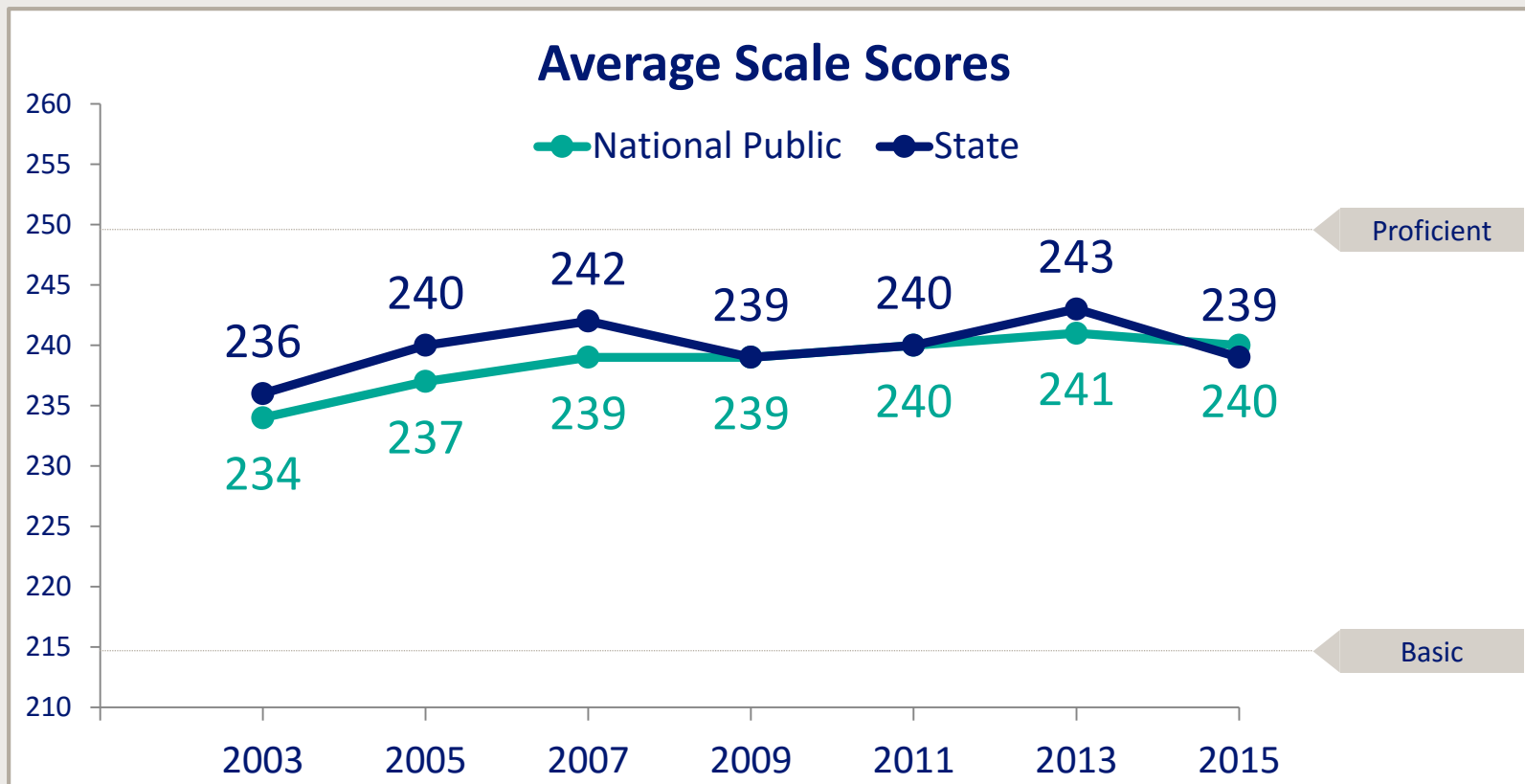
- The results of NAEP are released as *The Nation's Report Card*.
  - The report card provides national, state, and district-level results, results for different demographic groups, inclusion information, and sample questions.
- NAEP Results are reported in two formats
  - Average Scale Scores
    - » 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.

The graph above shows the trend in the National Average Scale Scores for the NAEP Mathematics test given in grade 4 from 2003-2015. The average score for students in Delaware in 2015 (239) was significantly higher than their average score in 2003 (236).





# Grade 4 Mathematics Results

## State Achievement Level Performance

■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced

2015	18	45	32	5
2013	14	44	35	7
2011	16	45	34	5
2009	16	48	31	5
2007	13	43	36	4
2005	16	44	32	4

## National Public Achievement Level Performance

■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced

2015	19	42	32	7
2013	18	41	33	8
2011	18	42	34	6
2009	19	43	32	6
2007	19	42	34	5
2005	21	44	30	5

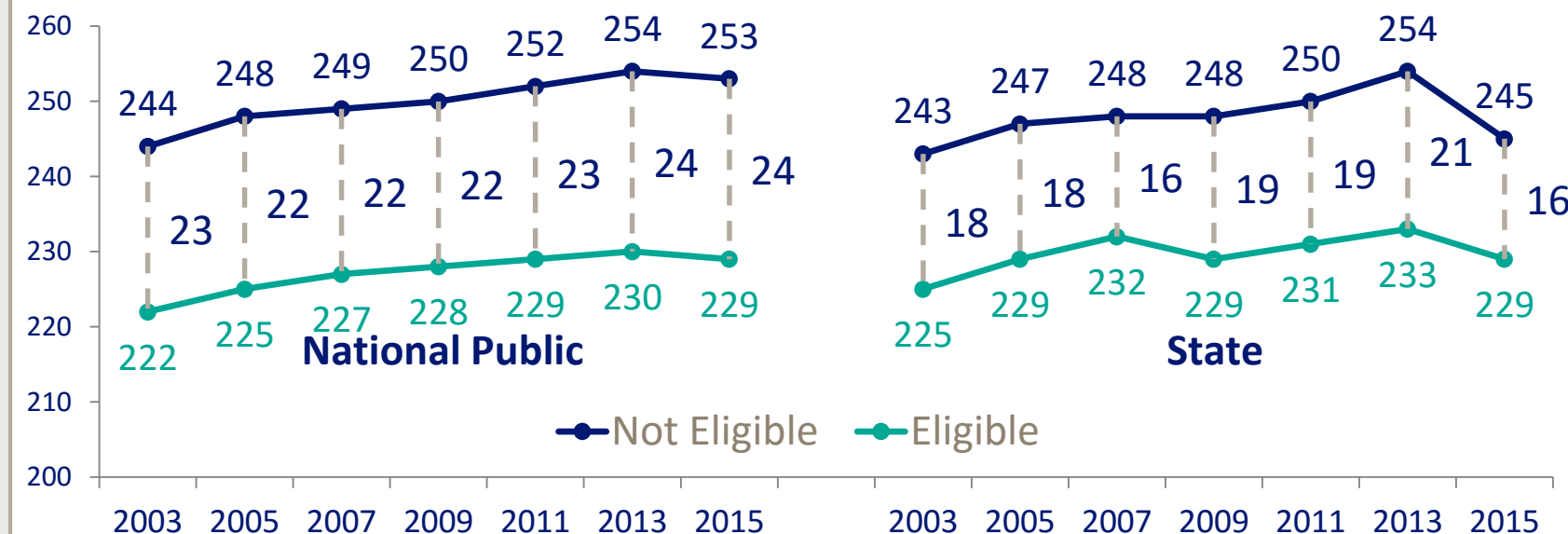
- In Delaware in fourth-grade math, 37 percent of students scored at or above Proficient (a five percentage point decline from 2013).
- Nationally in fourth-grade math, 39 percent of students scored at or above Proficient (a two percentage point decline from 2013).

NOTE: Observed differences are not necessarily statistically significant. Percentages might not sum to 100 due to rounding.



# Grade 4 Mathematics Results

## Score Gaps

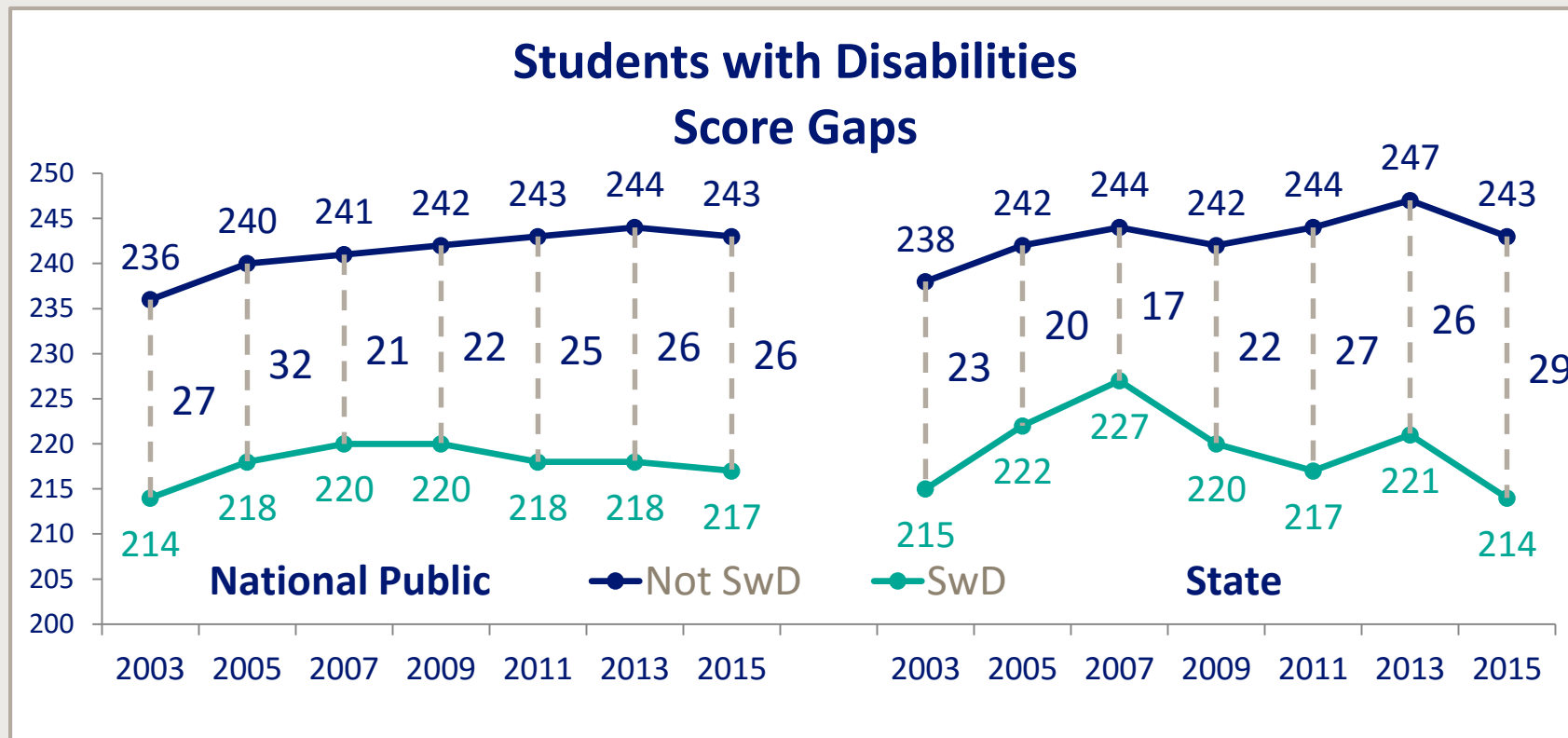


The gap between the not eligible and eligible students was reduced by five points this year due to a decline in both of the Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Mathematics Results

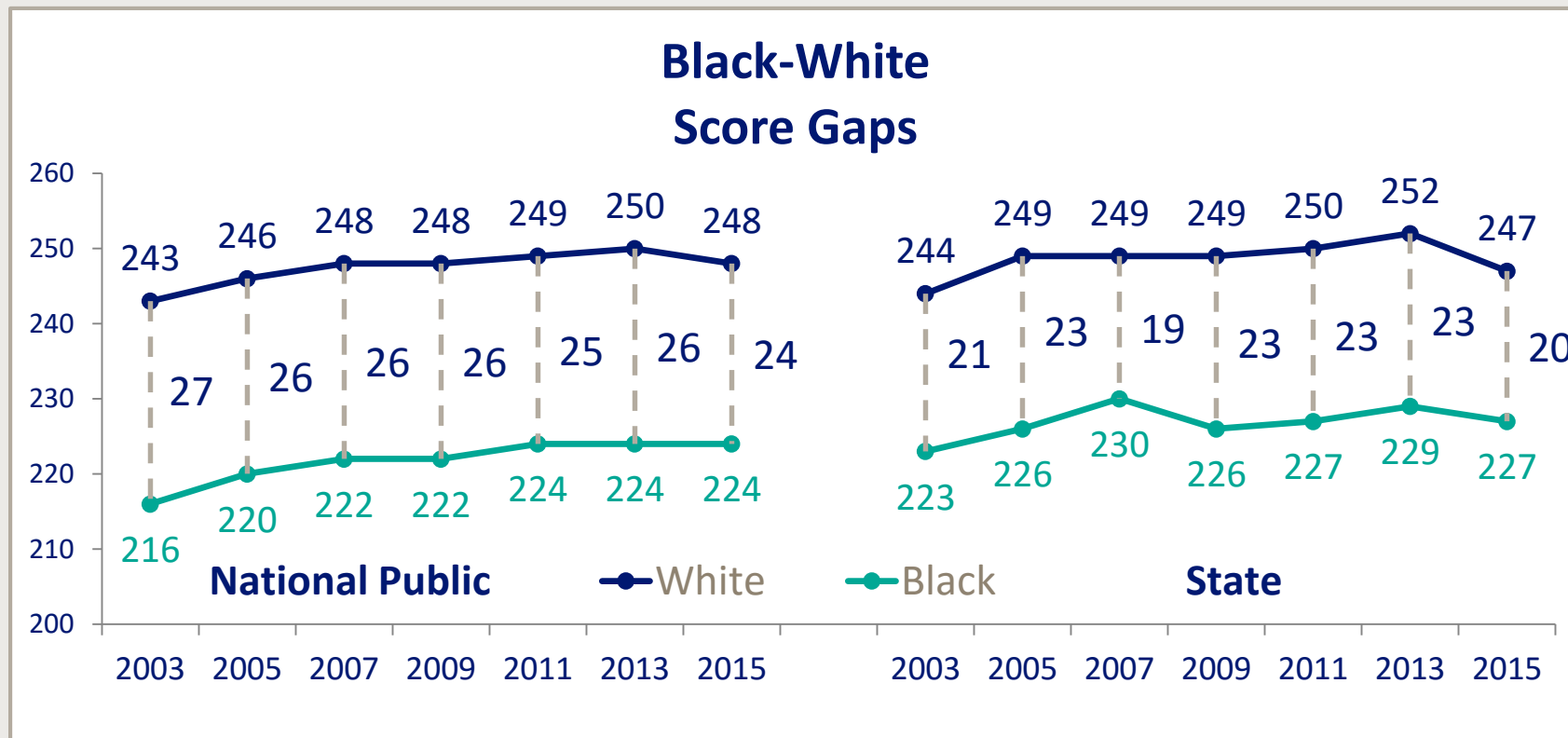


The gap between the not SwD and SwD students increased by three points this year due to a decline in both Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Mathematics Results

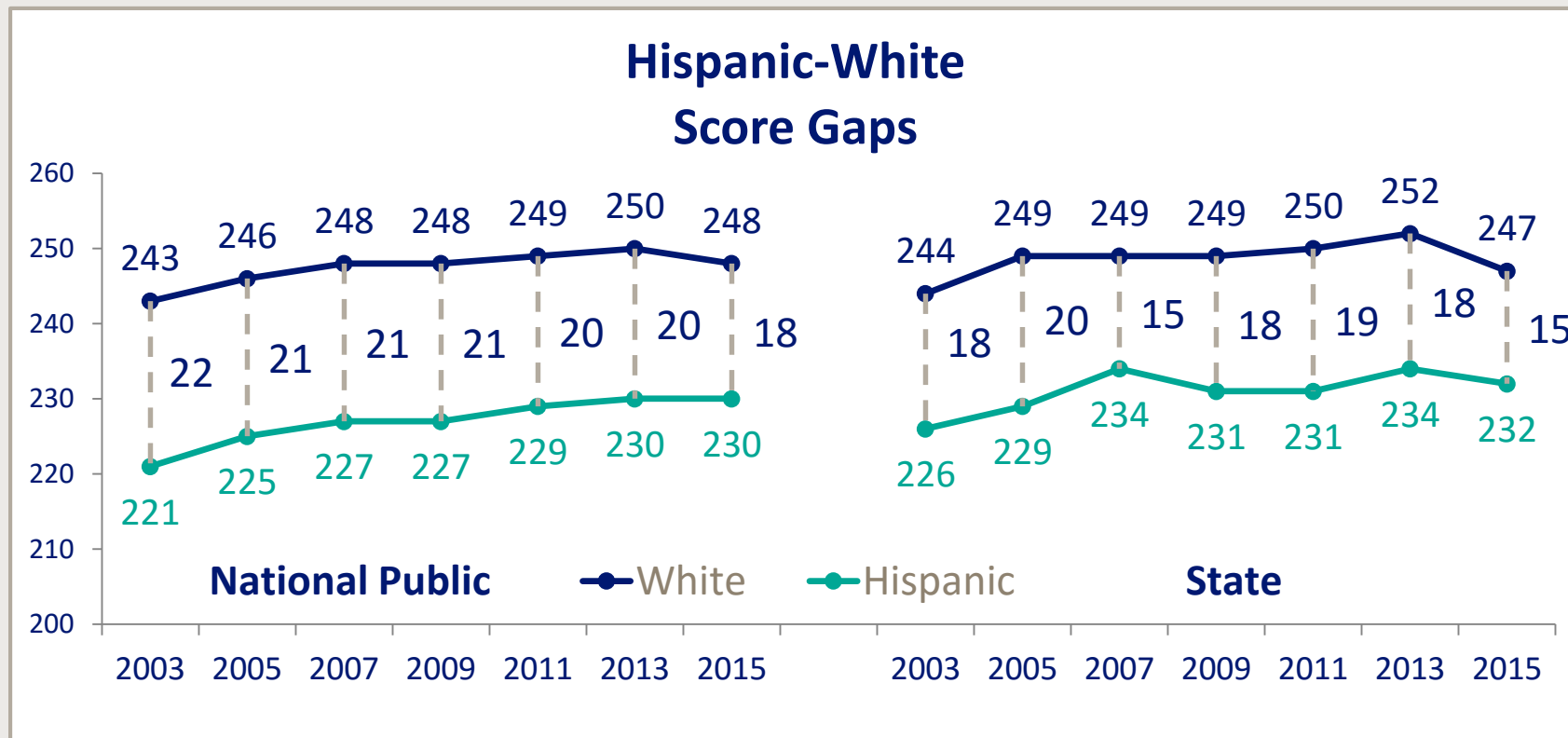


The gap between the black and white students decreased by three points this year due to a decline in both Delaware Scale Score.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Mathematics Results



The gap between the Hispanic and white students decreased by three points this year due to a decline in both the Hispanic and white Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Mathematics Results

## Score Changes Since 2013

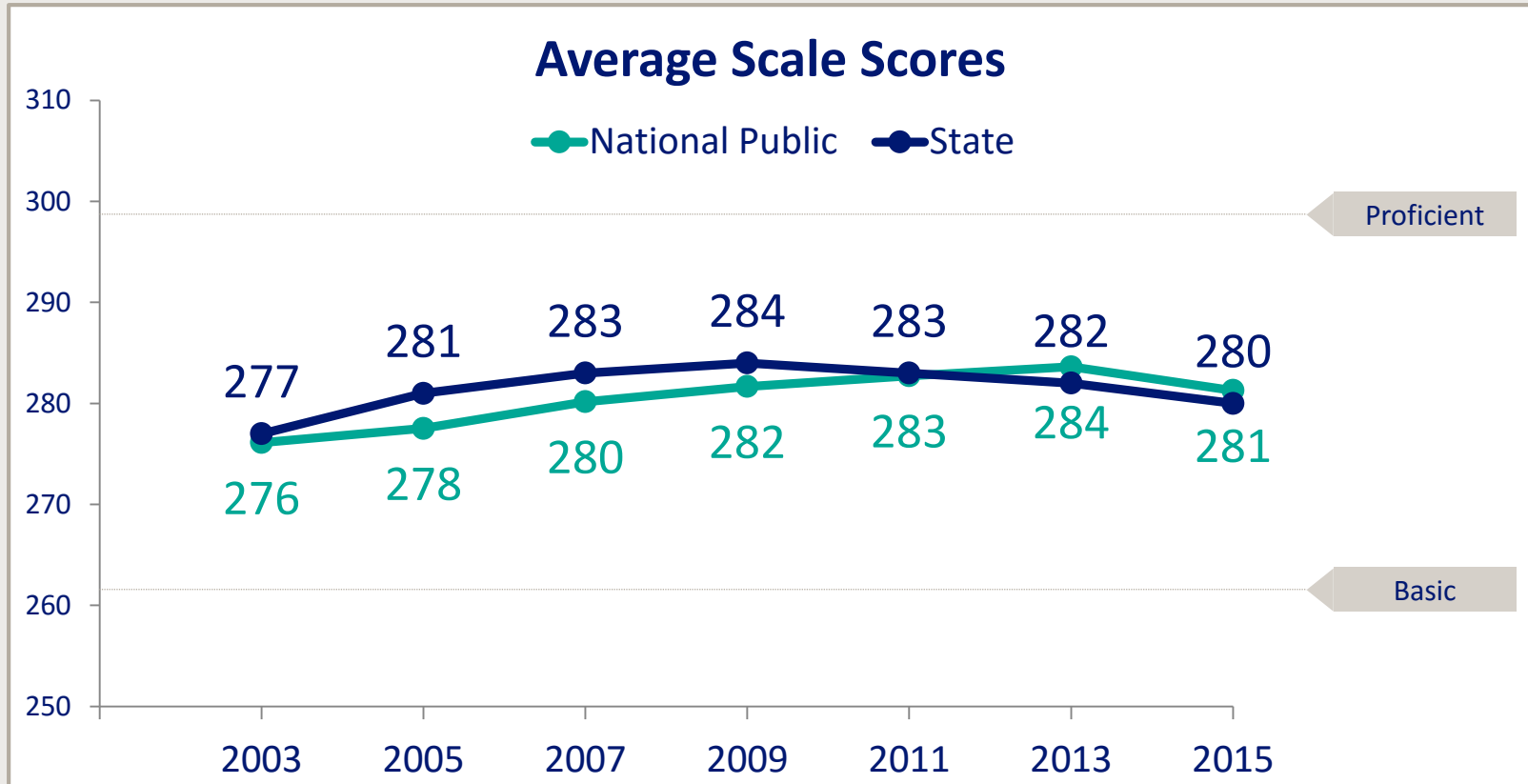


Delaware was one of fourteen states who showed a decrease in Grade 4 Mathematics Scale Score from 2013 to 2015.

# Grade 8 Mathematics Results



# Grade 8 Mathematics Results



NOTE: Observed differences are not necessarily statistically significant.

The graph above shows the trend in the National Average Scale Scores for the NAEP Mathematics test given in grade 8 from 2003-2015. The average score for students in Delaware in 2015 (280) was significantly higher than their average score in 2003 (277).





# Grade 8 Mathematics Results

## State Achievement Level Performance

■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced

2015	31	39	23	7
2013	29	38	25	8
2011	26	42	25	7
2009	25	43	26	6
2007	26	43	24	7
2005	28	42	25	5

- In Delaware in eighth-grade math, 30 percent of students scored at or above Proficient (a three percentage point decline from 2013).

## National Public Achievement Level Performance

■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced

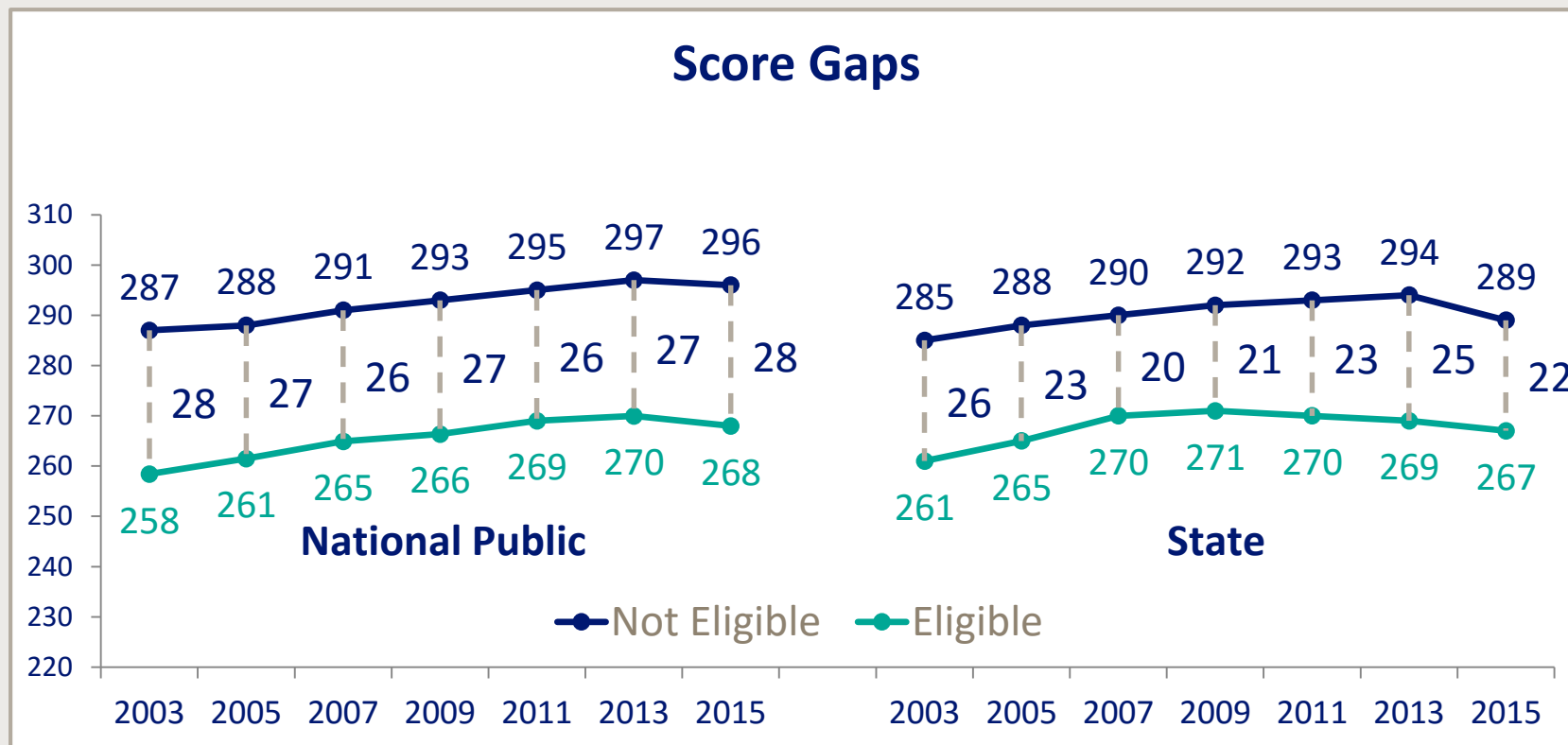
2015	30	38	24	8
2013	27	39	26	8
2011	28	38	26	8
2009	29	38	26	7
2007	30	39	24	7
2005	32	42	22	6

- Nationally in eighth-grade math, 32 percent of students scored at or above Proficient (a two percentage point decline from 2013).

NOTE: Observed differences are not necessarily statistically significant. Percentages might not sum to 100 due to rounding.



# Grade 8 Mathematics Results

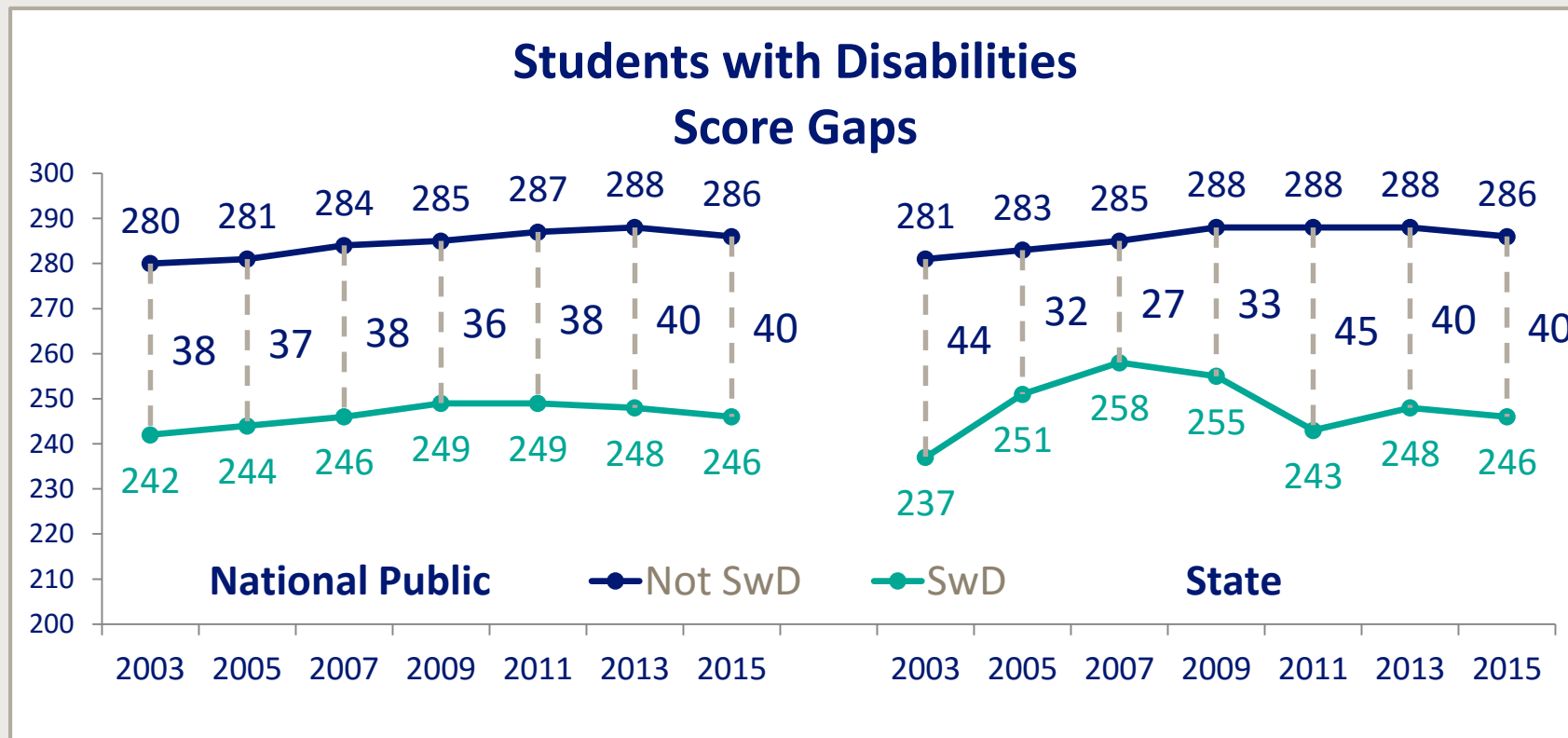


The gap between the not eligible and eligible students was reduced by three points this year due to a decline in both Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Mathematics Results

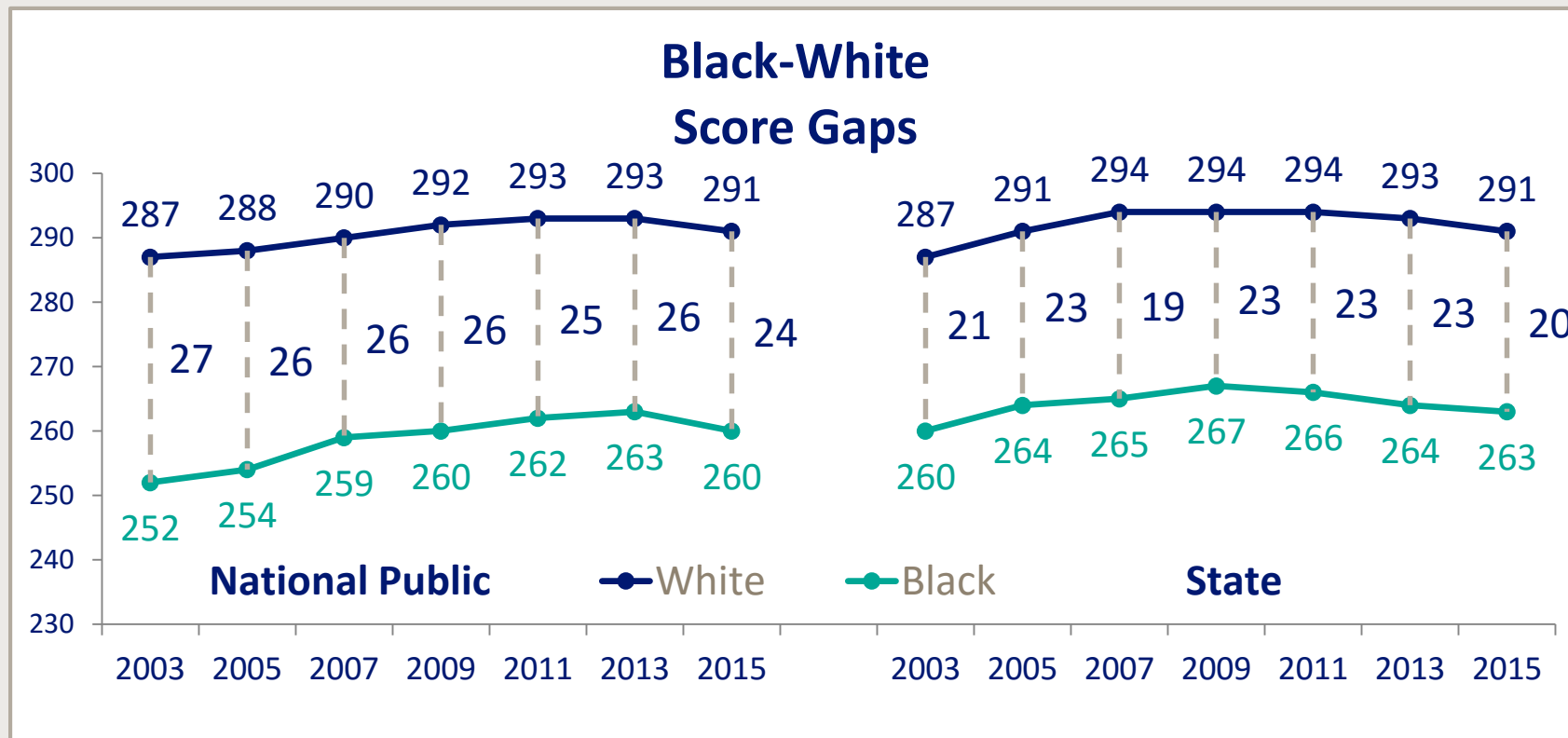


The gap between the not SwD and SwD students has remained constant at 40 points although both Delaware Scales Scores declined in 2015.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Mathematics Results

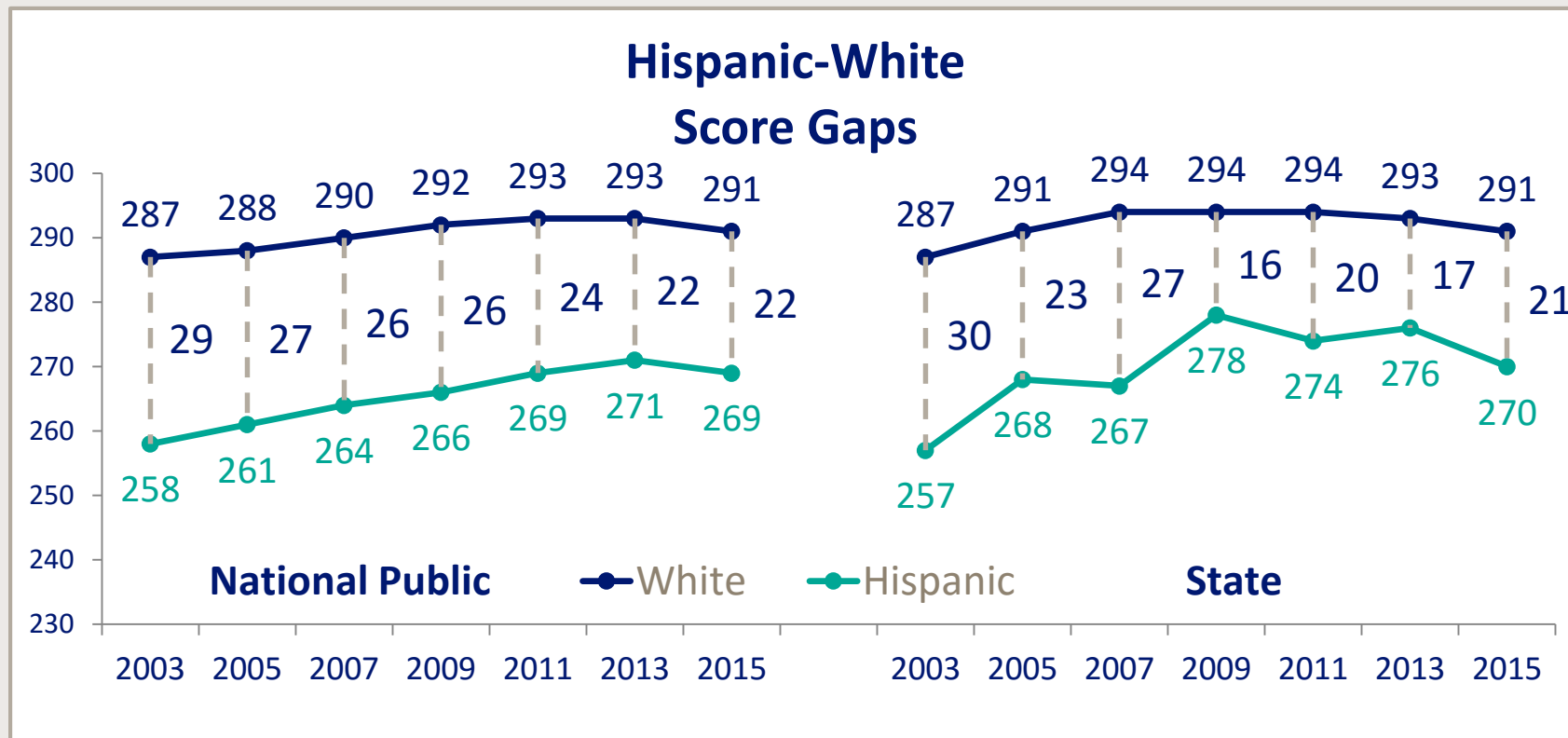


The gap between the black and white students decreased by three points this year due to a decline in both the white and black Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Mathematics Results



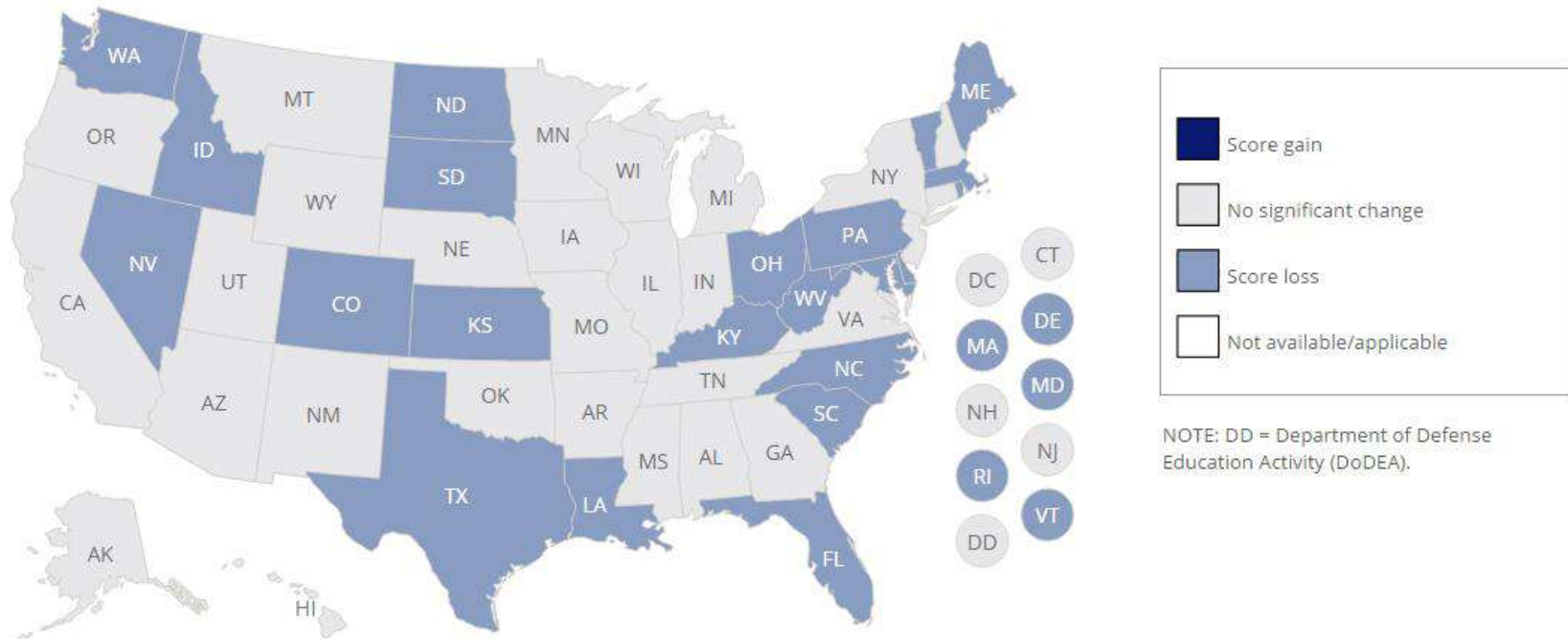
The gap between the Hispanic and white students increased by four points this year due to a decline in both the Hispanic and white Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Mathematics Results

## Score Changes Since 2013

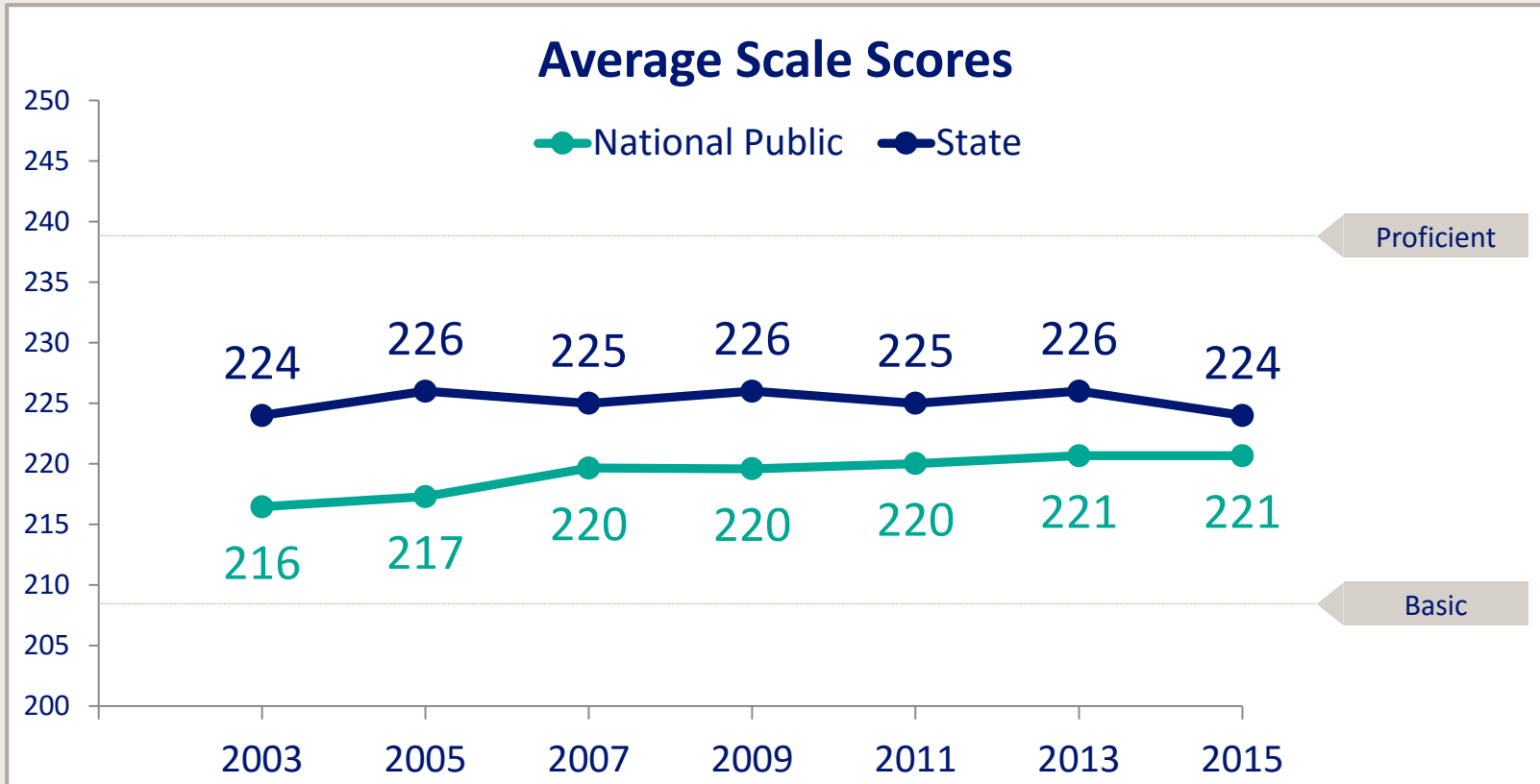
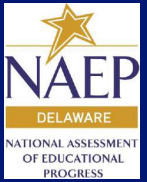


Delaware was one of twenty states who showed a decrease in Grade 8 Mathematics Scale Score from 2013 to 2015.

# Grade 4 Reading Results



# Grade 4 Reading Results



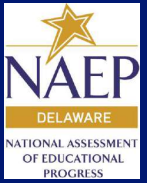
NOTE: Observed differences are not necessarily statistically significant.

**The graph above shows the trend in the National Average Scale Scores for the NAEP Reading test given in grade 4 from 2003-2015. The average score for students in Delaware in 2015 (224) was not significantly different from their average score in 2013 (226).**





# Grade 4 Reading Results



## State Achievement Level Performance

■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced

2015	30	33	28	9
2013	27	35	29	9
2011	28	36	29	7
2009	27	38	28	7
2007	27	39	27	7
2005	27	39	27	7

- In Delaware in fourth-grade reading, 37 percent of students scored at or above Proficient (a one percentage point decline from 2013).

## National Public Achievement Level Performance

■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced

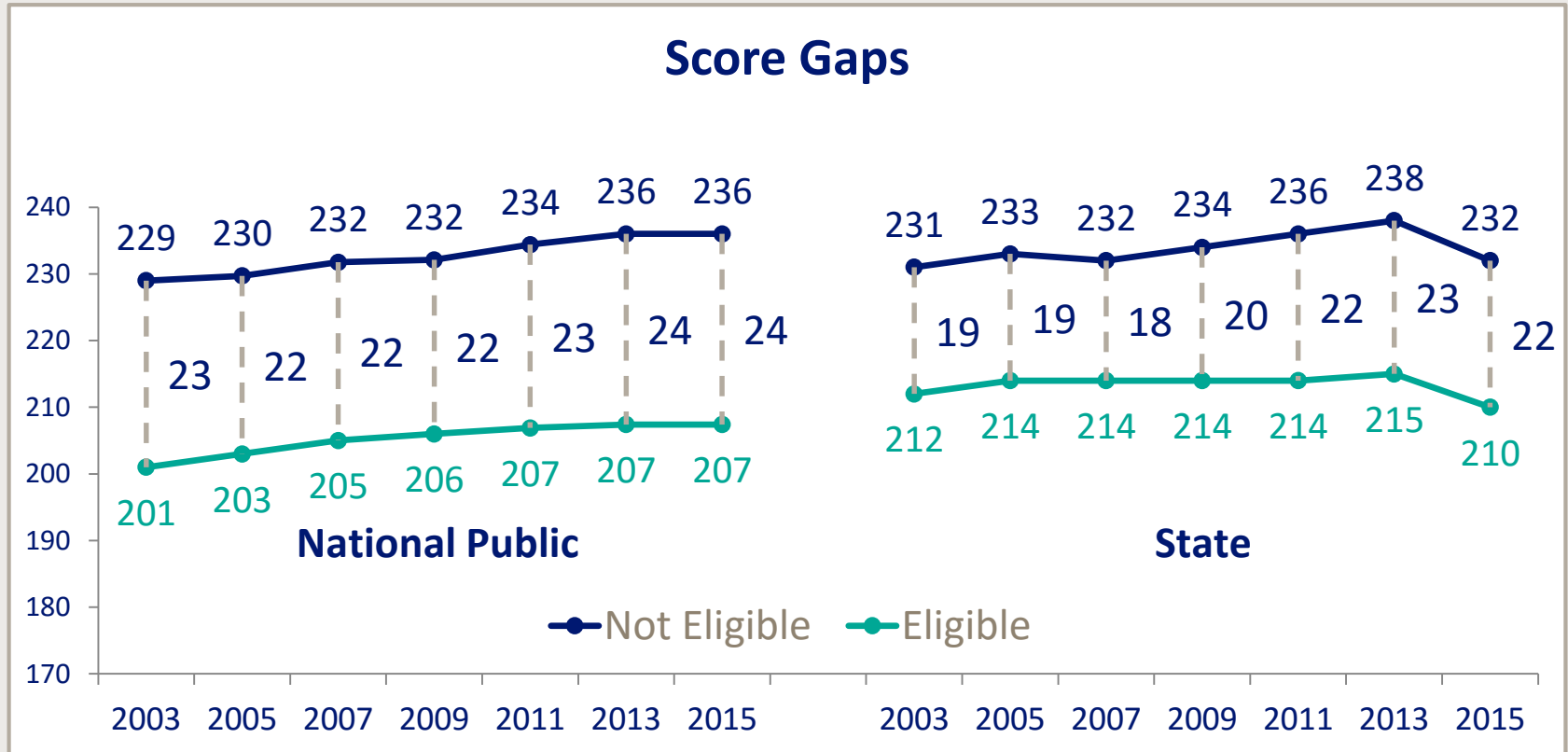
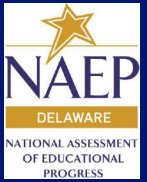
2015	32	33	27	8
2013	33	33	26	8
2011	34	34	25	7
2009	34	34	25	7
2007	34	34	25	7
2005	38	32	23	7

- Nationally in fourth-grade reading, 35 percent of students scored at or above Proficient (a one percentage point decline from 2013).

NOTE: Observed differences are not necessarily statistically significant. Percentages might not sum to 100 due to rounding.



# Grade 4 Reading Results

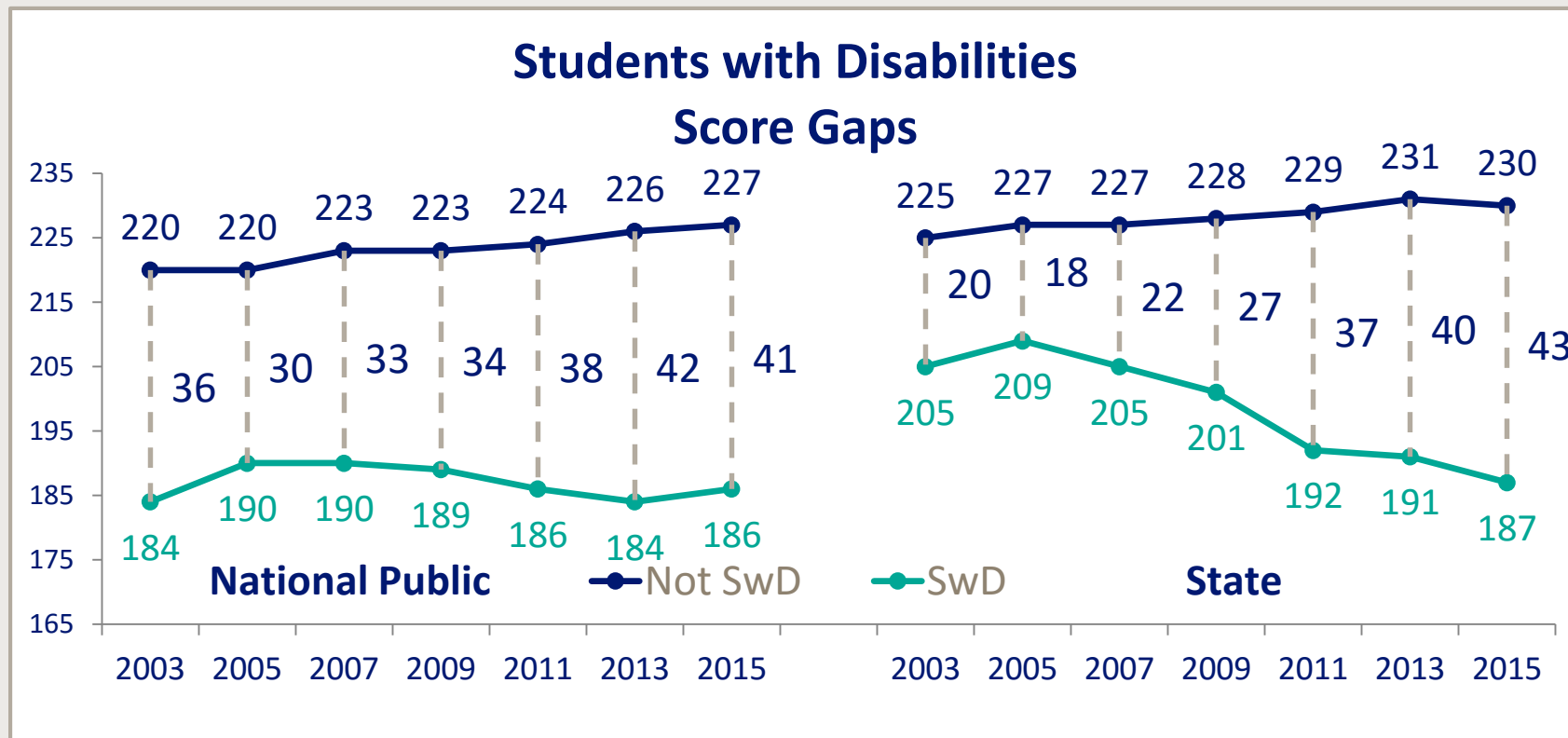


The gap in between the not eligible and eligible students was reduced by one point this year due to a decline in both the Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Reading Results

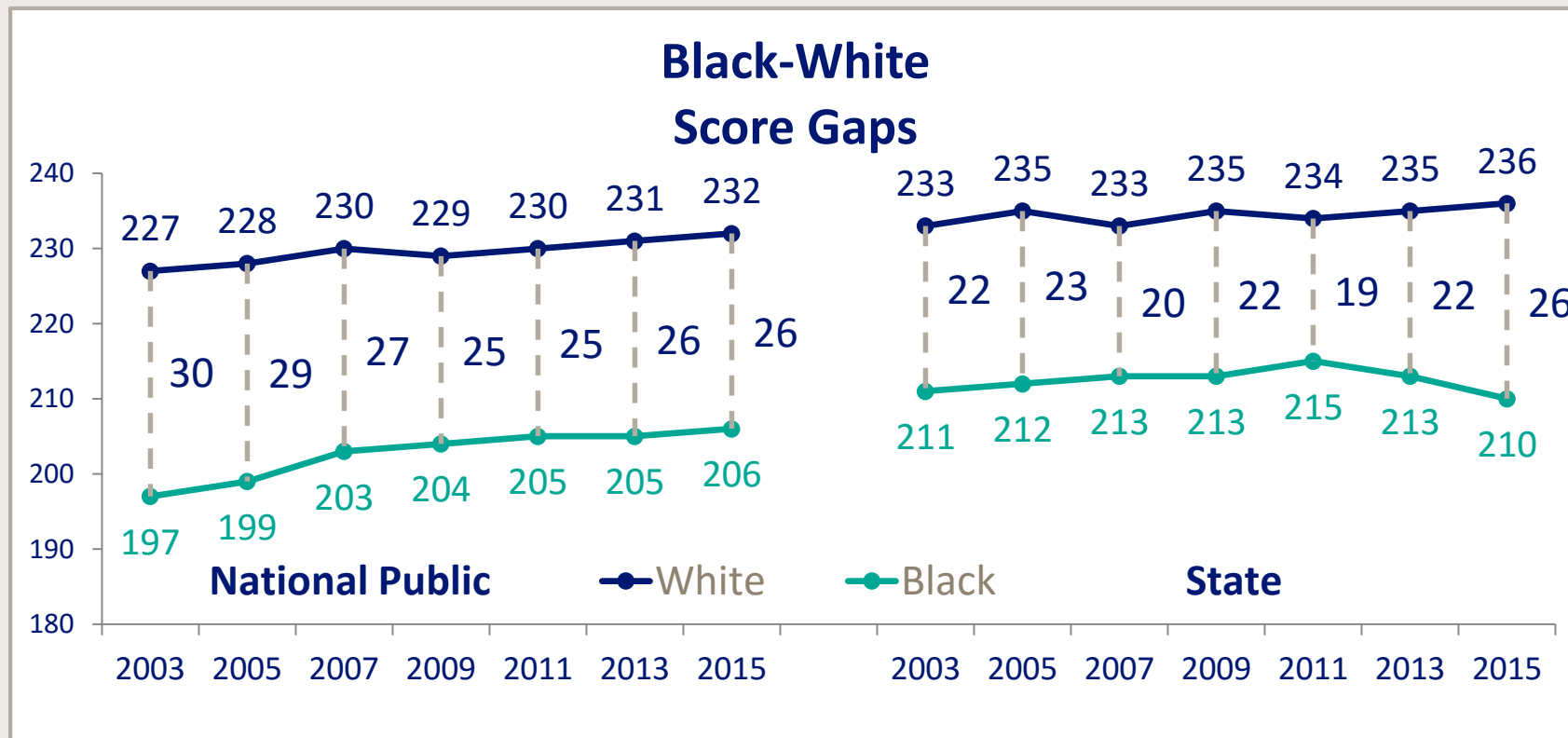


The gap between the not SwD and SwD students increased by three points this year due to a decline in both Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Reading Results

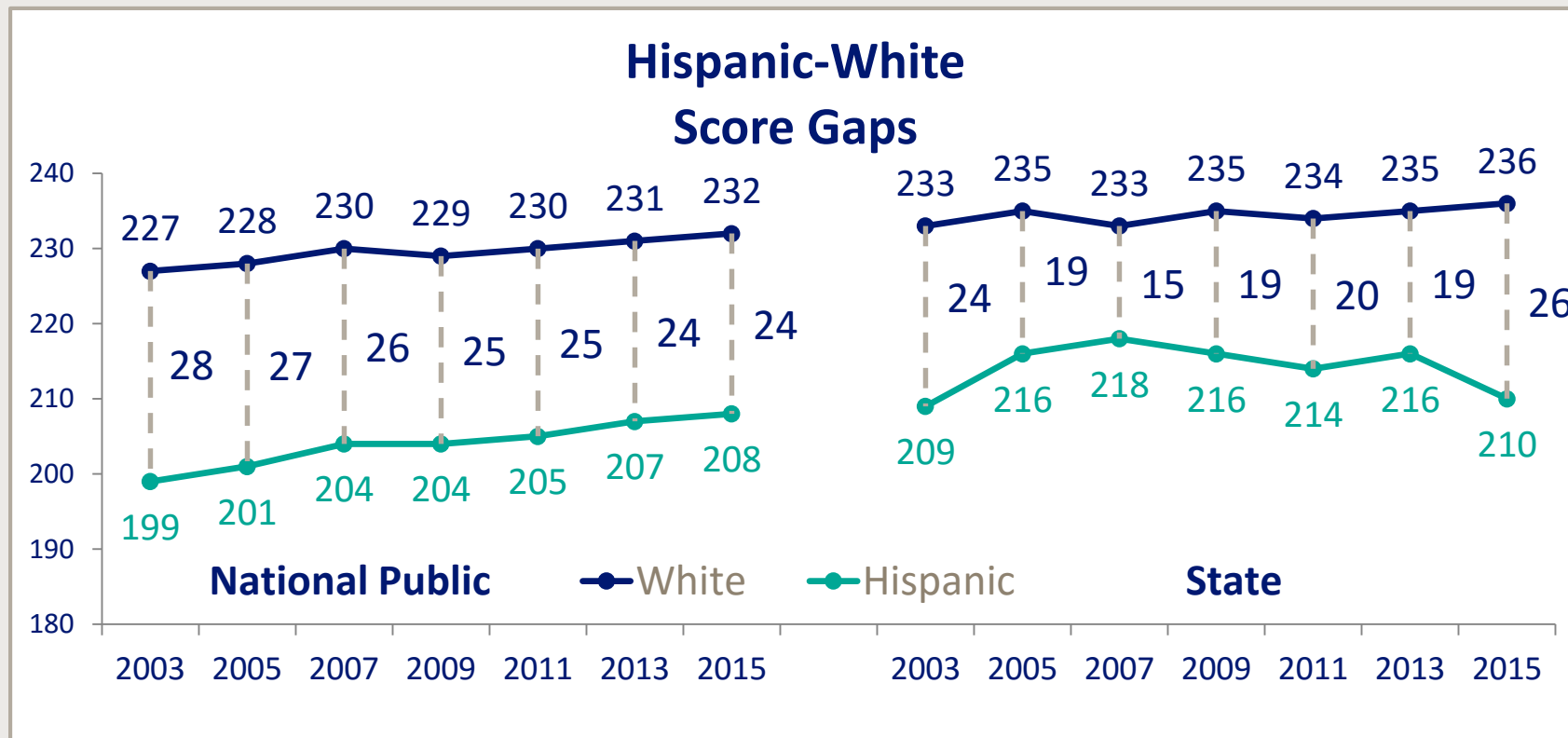


The gap between the black and white students increased by four points this year due to an increase in the white and a decline in the black Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Reading Results



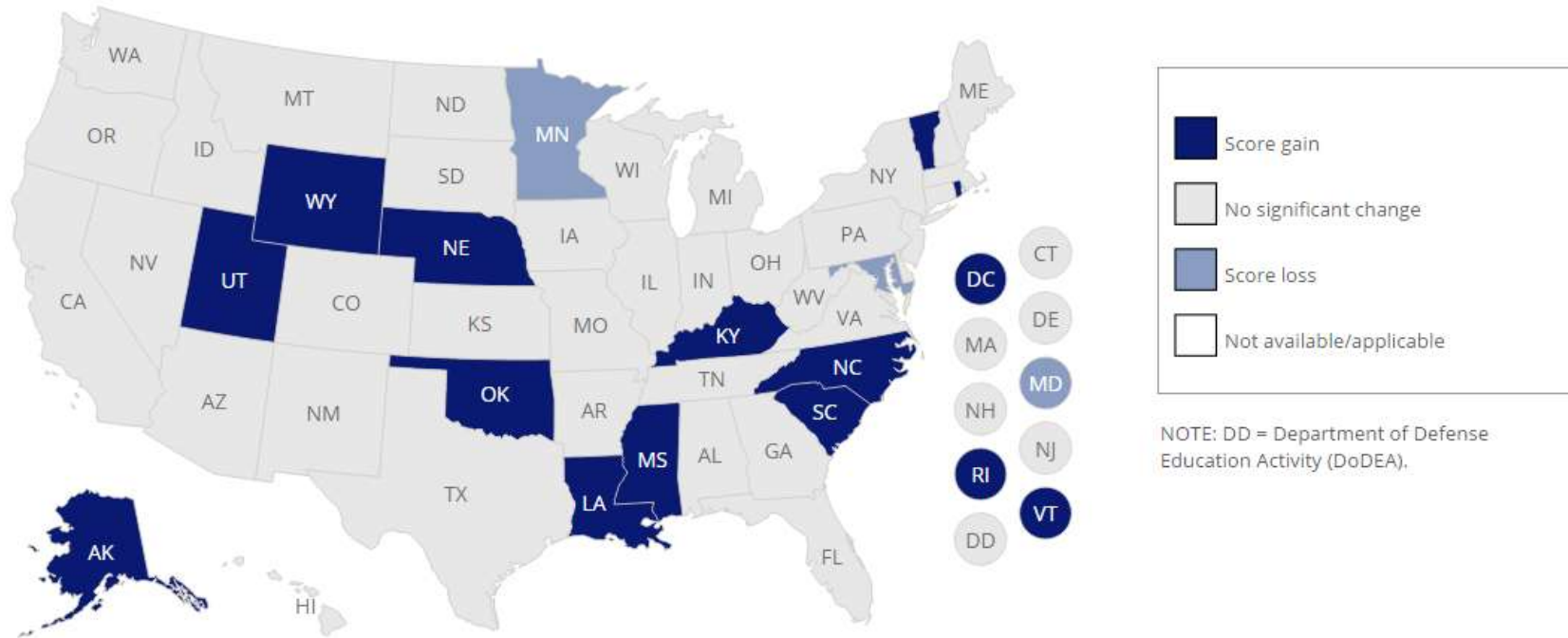
The gap between the Hispanic and white students increased by seven points this year due to a decline in the Hispanic and an increase in the white Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 4 Reading Results

## Score Changes Since 2013

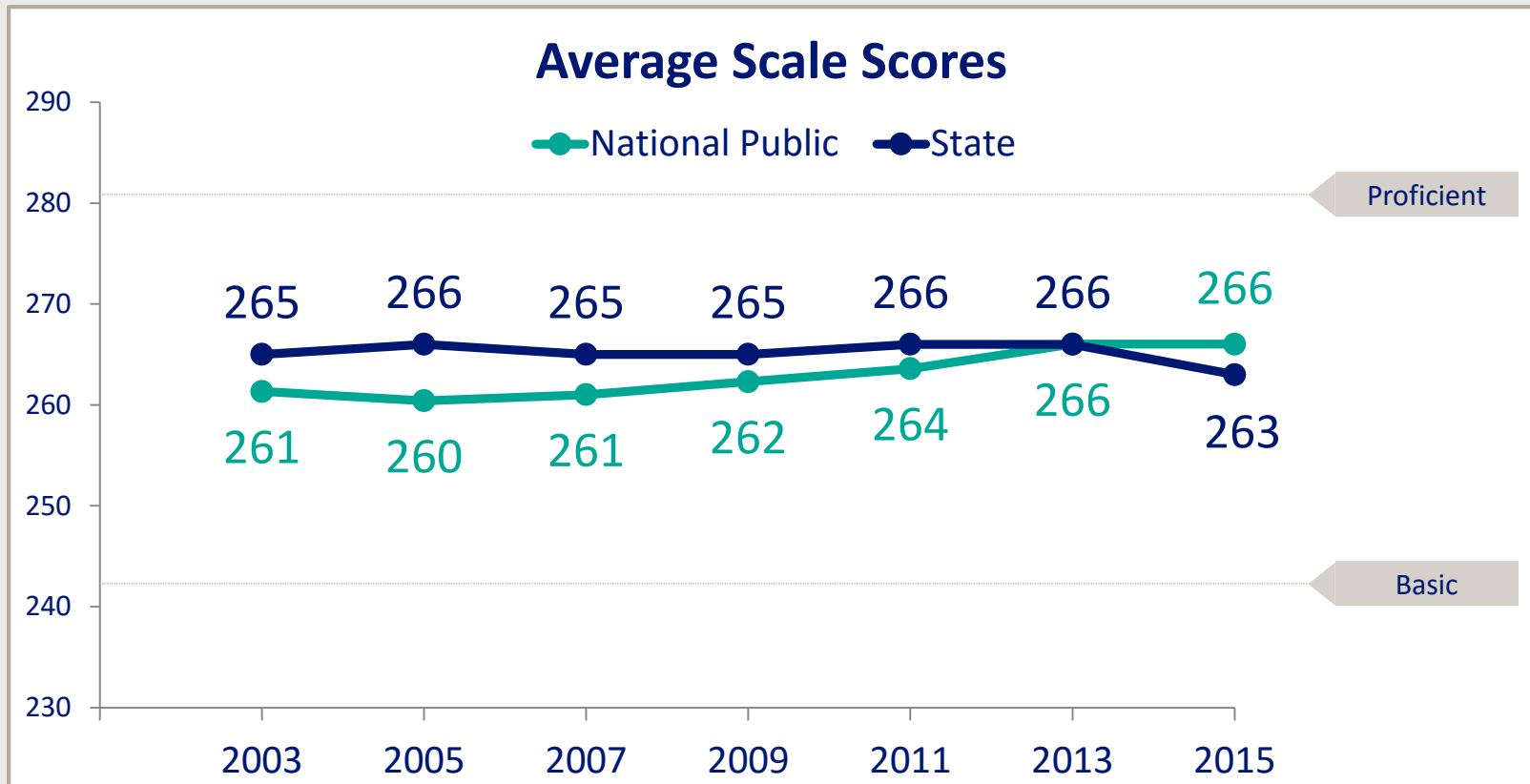


Delaware was one of thirty-seven states who showed no significant change in Grade 4 Reading Scale Score from 2013 to 2015.

# Grade 8 Reading Results



# Grade 8 Reading Results



NOTE: Observed differences are not necessarily statistically significant.

The graph above shows the trend in the National Average Scale Scores for the NAEP Reading test given in grade 8 from 2003-2015. The average score for students in Delaware in 2015 (263) was lower than their average score in 2013 (266).

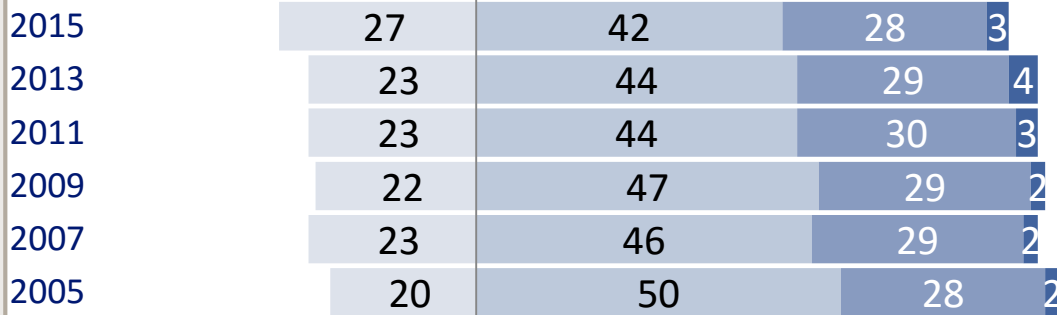




# Grade 8 Reading Results

## State Achievement Level Performance

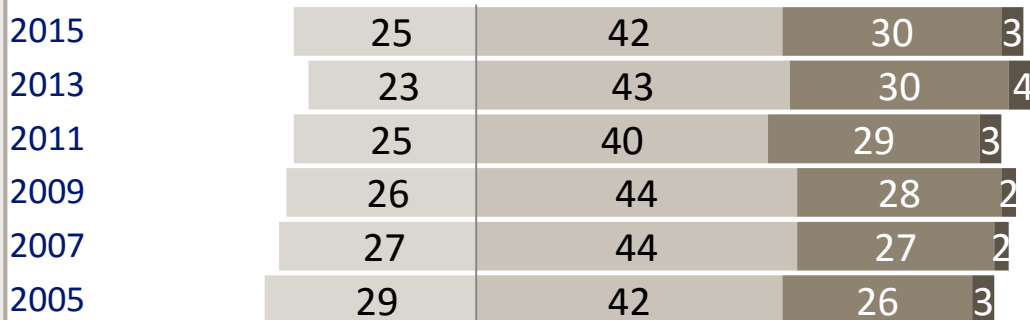
■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced



- In Delaware in eighth-grade reading, 31 percent of students scored at or above Proficient (a two percentage point decline from 2013).

## National Public Achievement Level Performance

■ % Below Basic ■ % Basic ■ % Proficient ■ % Advanced

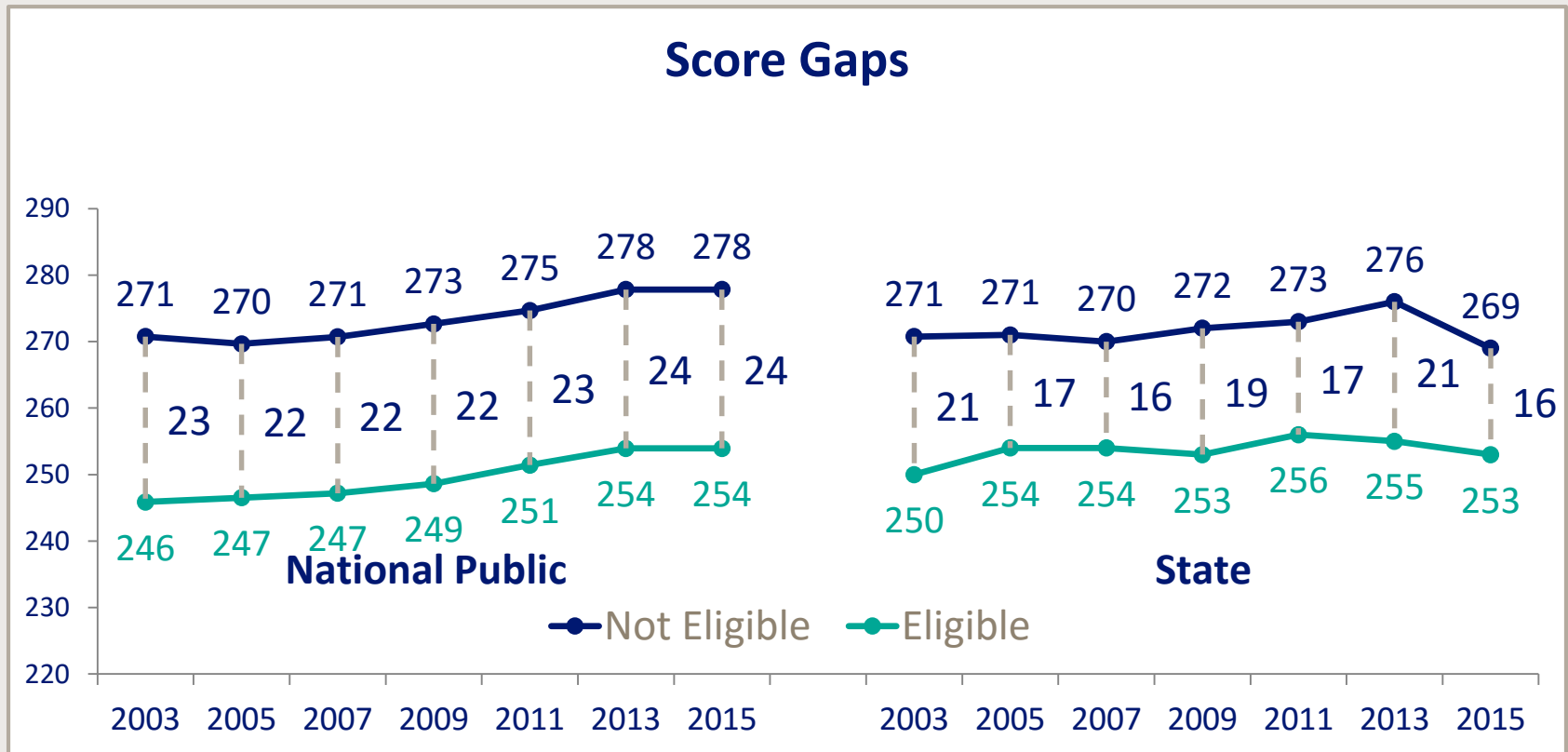
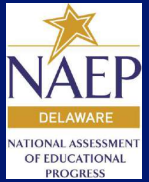


- Nationally in eighth-grade reading, 33 percent of students scored at or above Proficient (a one percentage point decline from 2013).

NOTE: Observed differences are not necessarily statistically significant. Percentages might not sum to 100 due to rounding.



# Grade 8 Reading Results

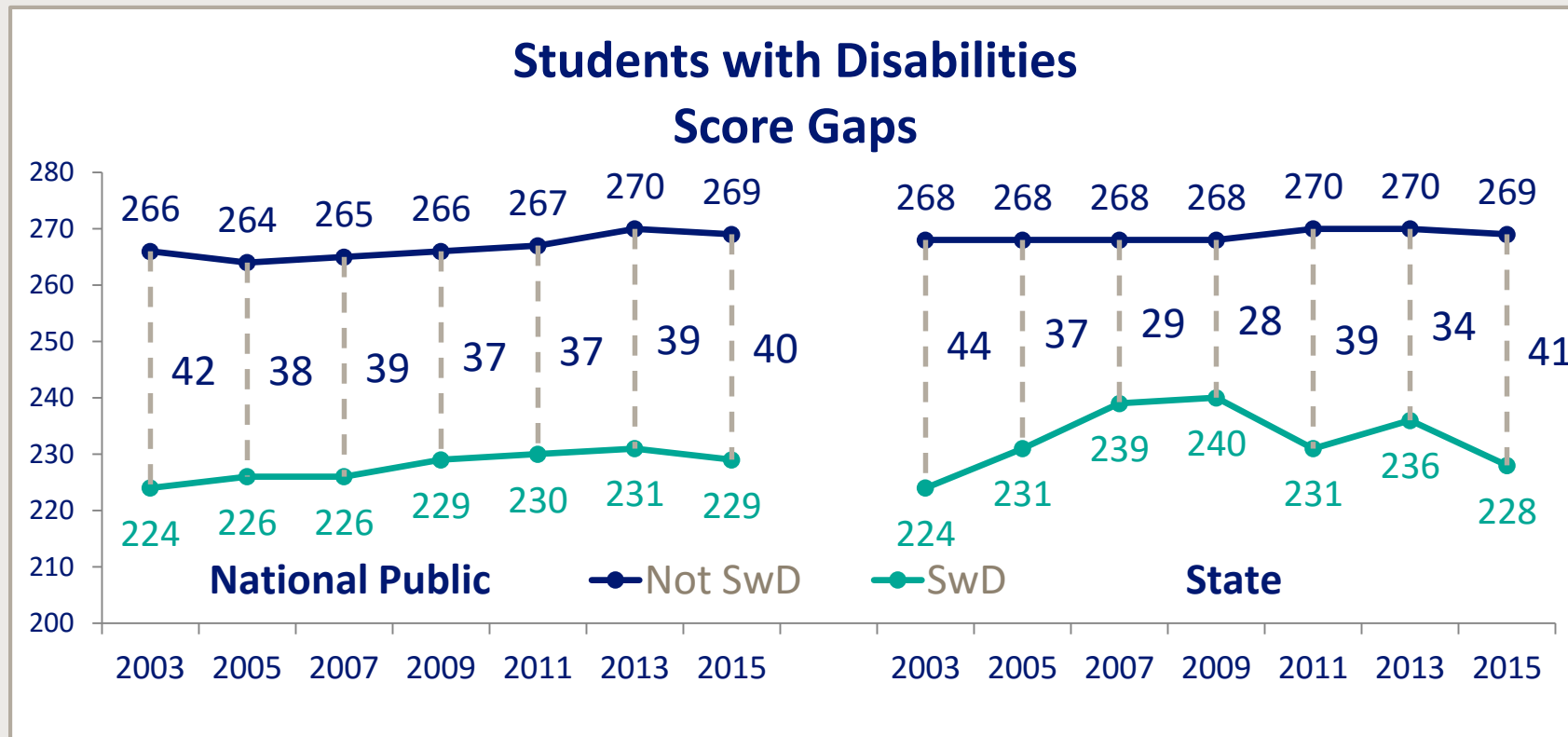


The gap in between the not eligible and eligible students was reduced by five points this year due to a decline in both the Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Reading Results

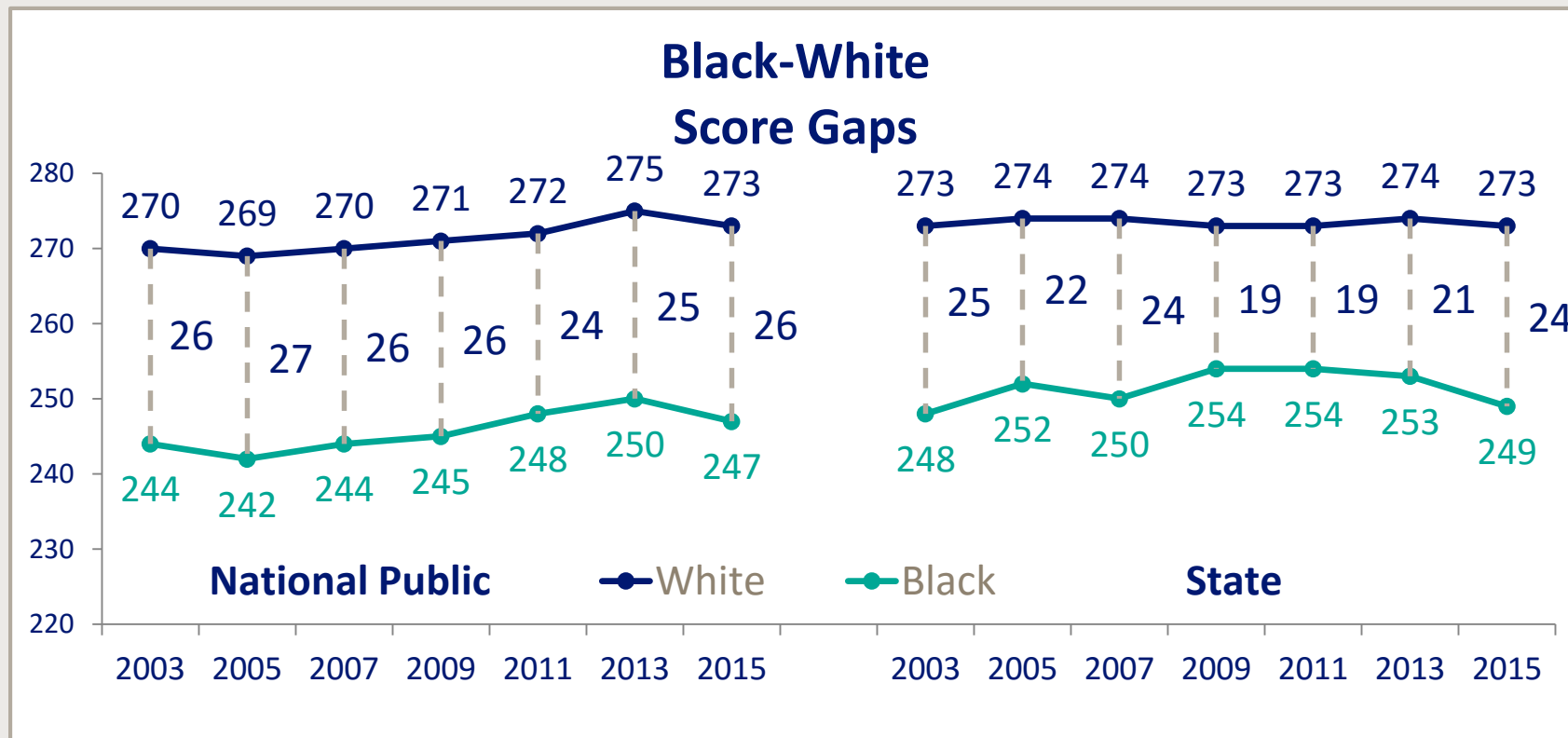


The gap between the not eligible and eligible students was reduced by five points this year due to a decline in both the Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Reading Results

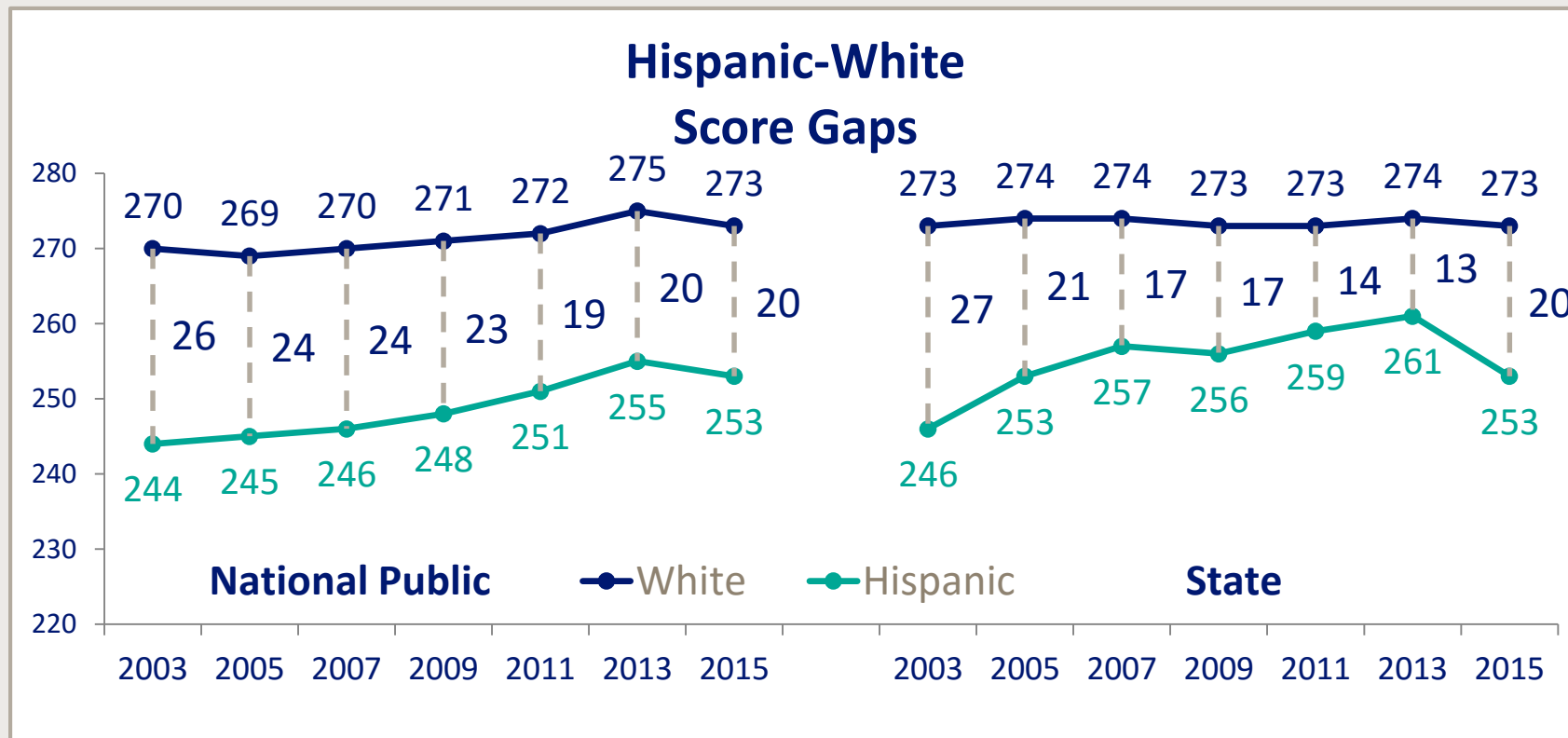


The gap between the black and white students decreased by three points this year due to a decline in both the Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Reading Results



The gap between the Hispanic and white students increased by seven points this year due to a decline in both the Hispanic and white Delaware Scale Scores.

NOTE: Observed differences are not necessarily statistically significant. Score gaps are calculated based on differences between unrounded average scale scores.



# Grade 8 Reading Results

## Score Changes Since 2013



Delaware was one of eight states who showed a decrease in Grade 8 Reading Scale Score from 2013 to 2015.



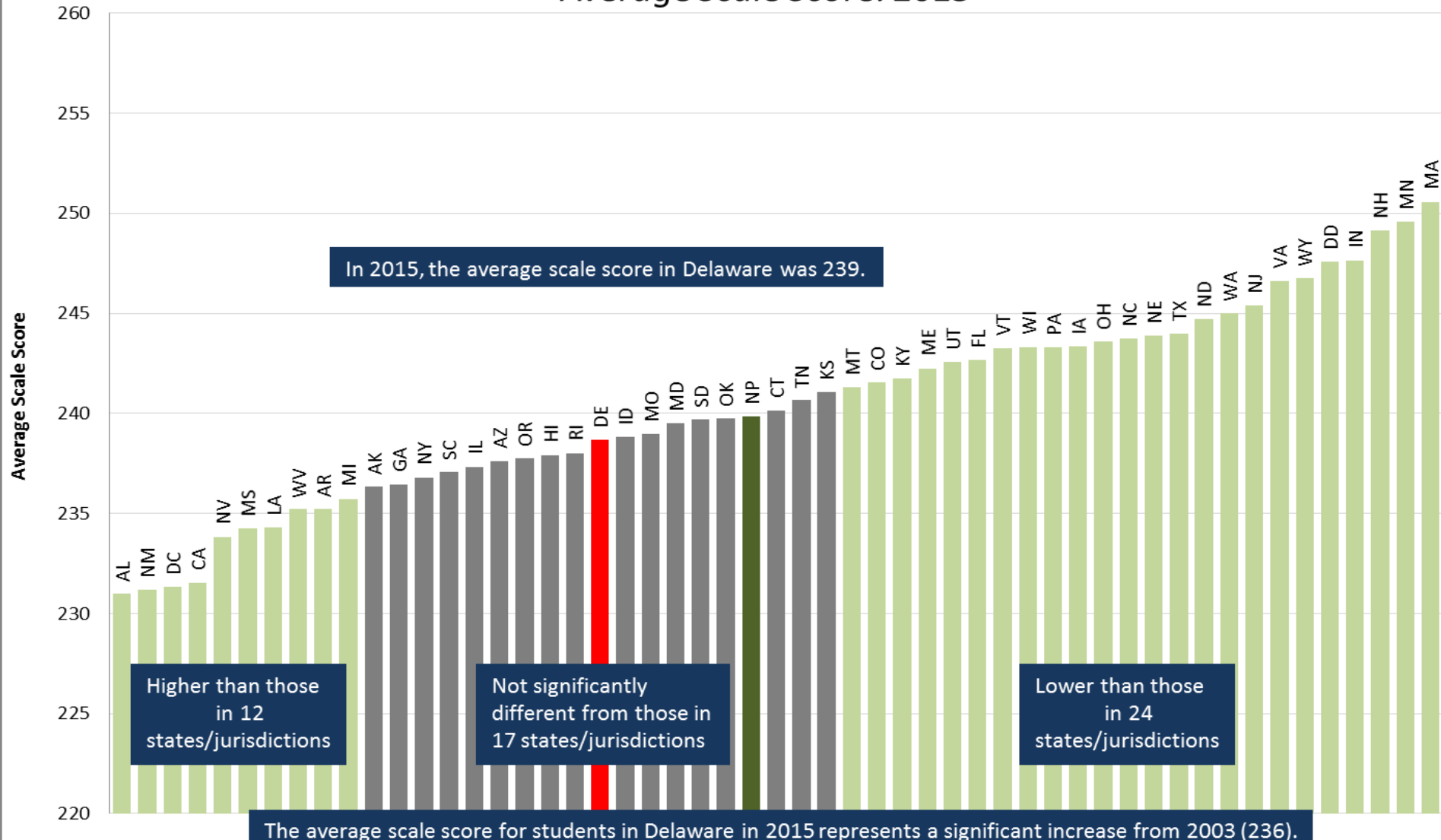
# Appendix

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS



## NAEP Mathematics Grade 4 – Overall

*Average Scale Score: 2015*



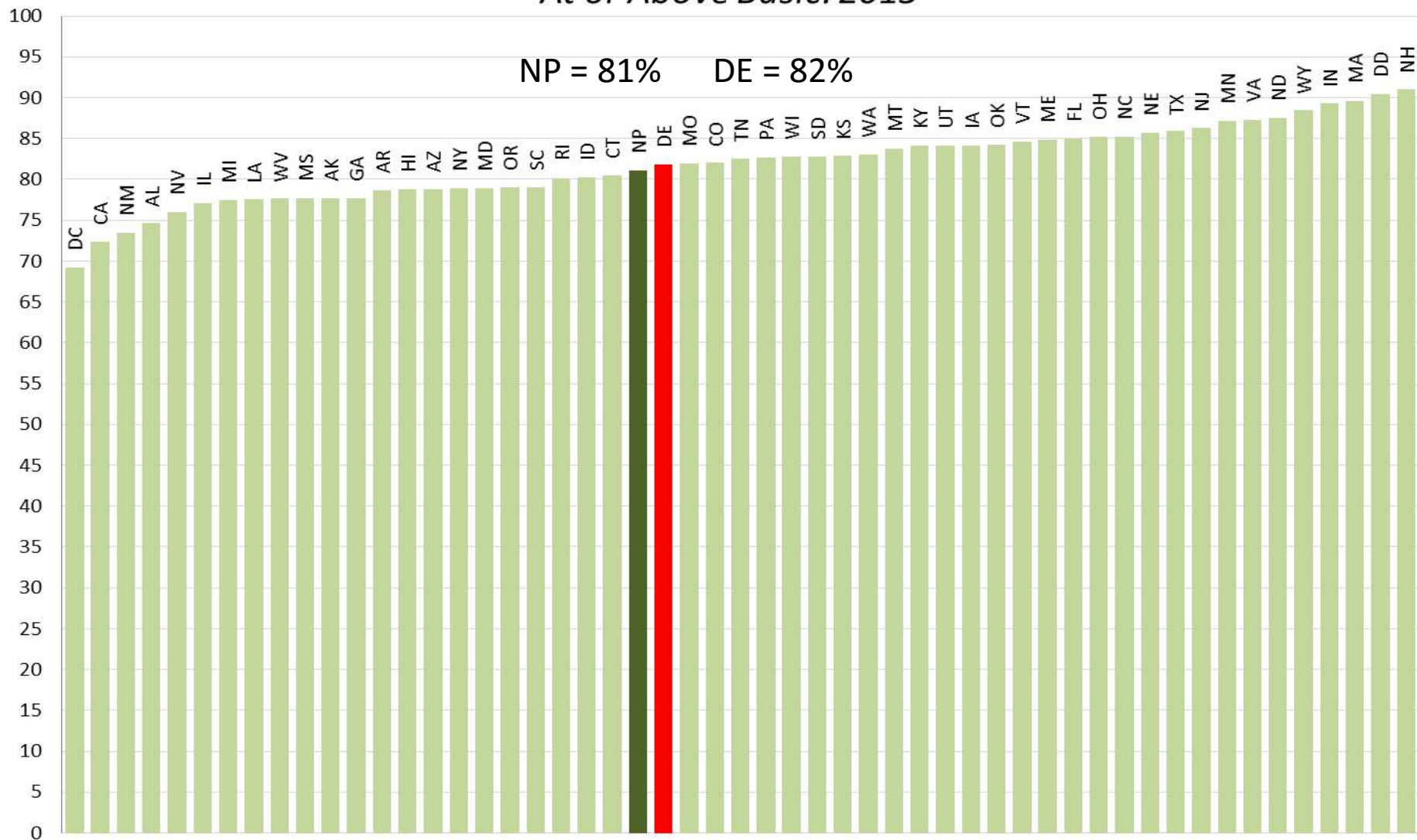




## NAEP Mathematics Grade 4 – Overall

*At or Above Basic: 2015*

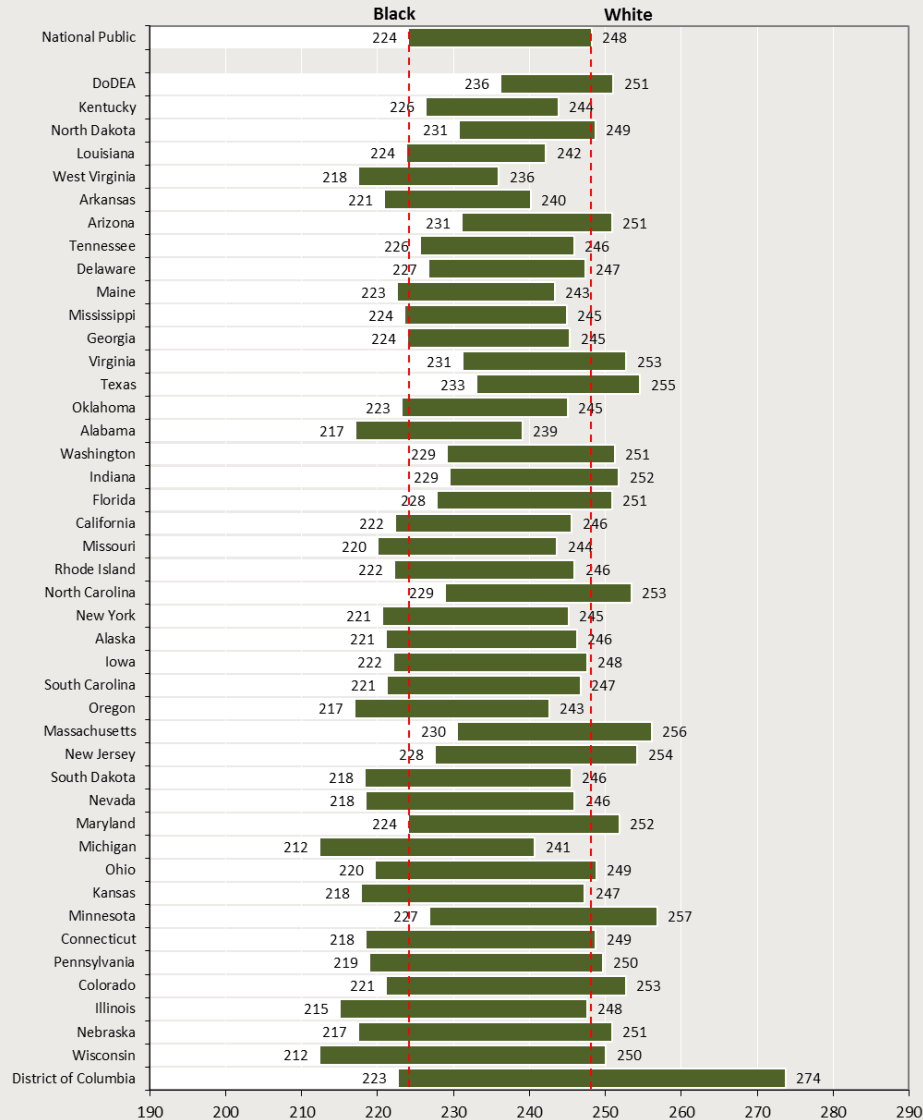
NP = 81%    DE = 82%





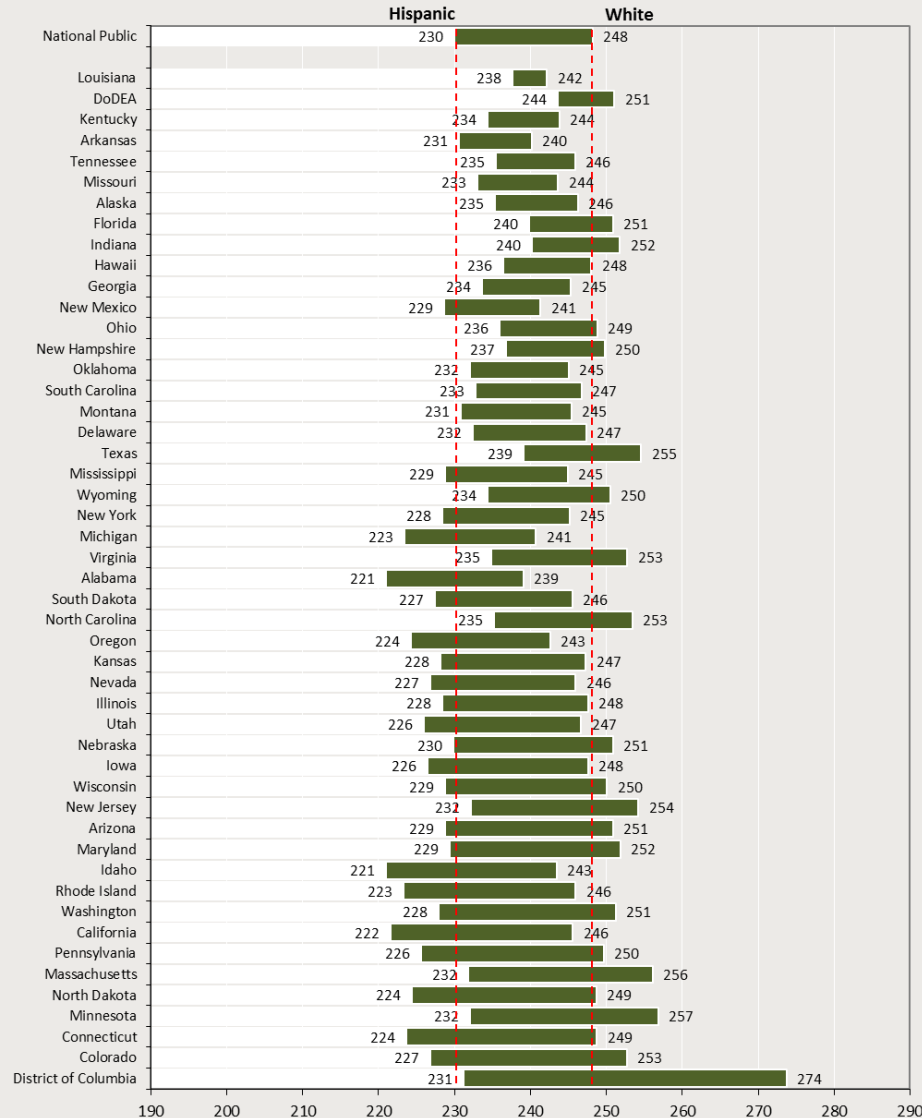
# NAEP Mathematics Grade 4 – White - Black

Gap - Average Scale Score: 2015





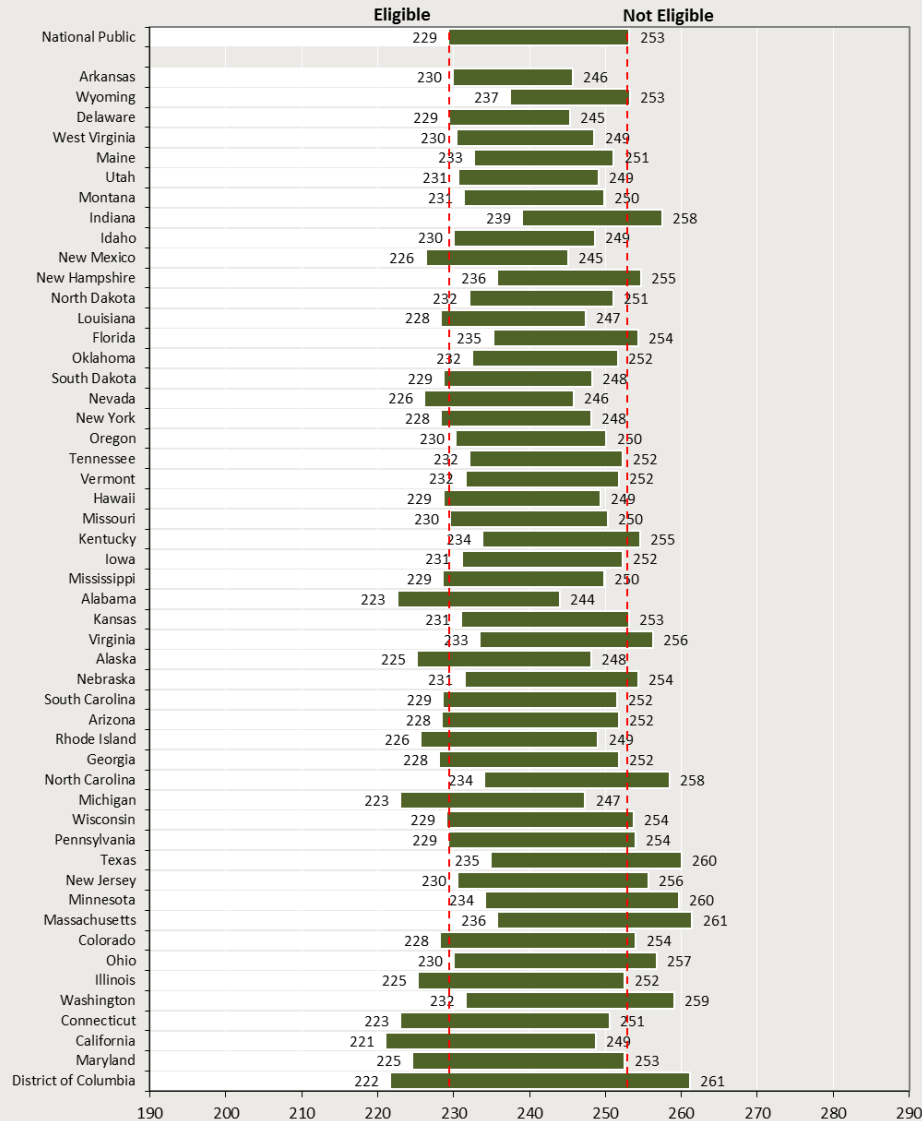
NAEP Mathematics Grade 4 – White - Hispanic  
Gap - Average Scale Score: 2015





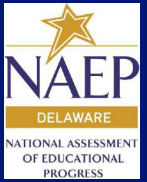
## NAEP Mathematics Grade 4 – National School Lunch Eligibility

Gap - Average Scale Score: 2015





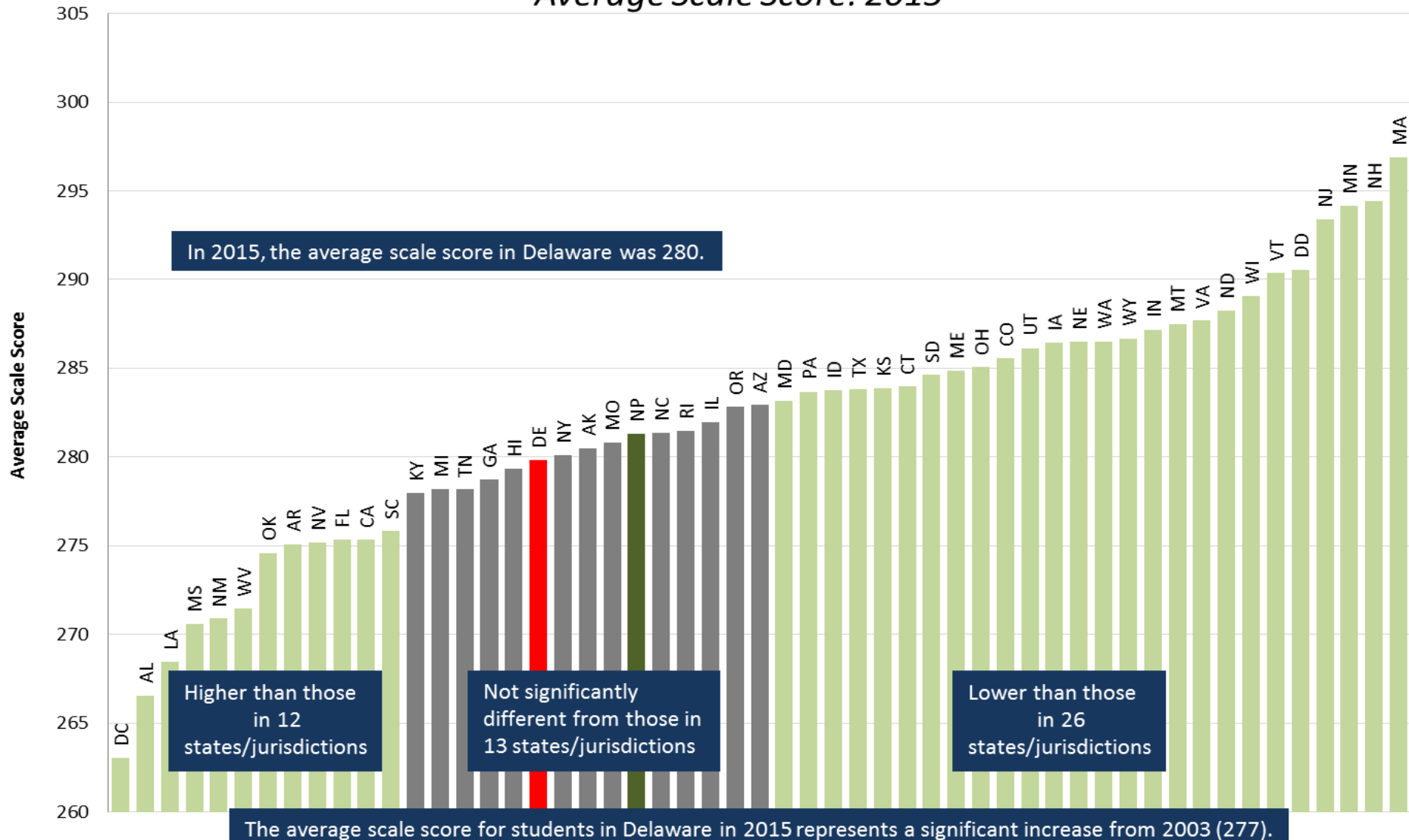
Gr 8





## NAEP Mathematics Grade 8 – Overall

*Average Scale Score: 2015*

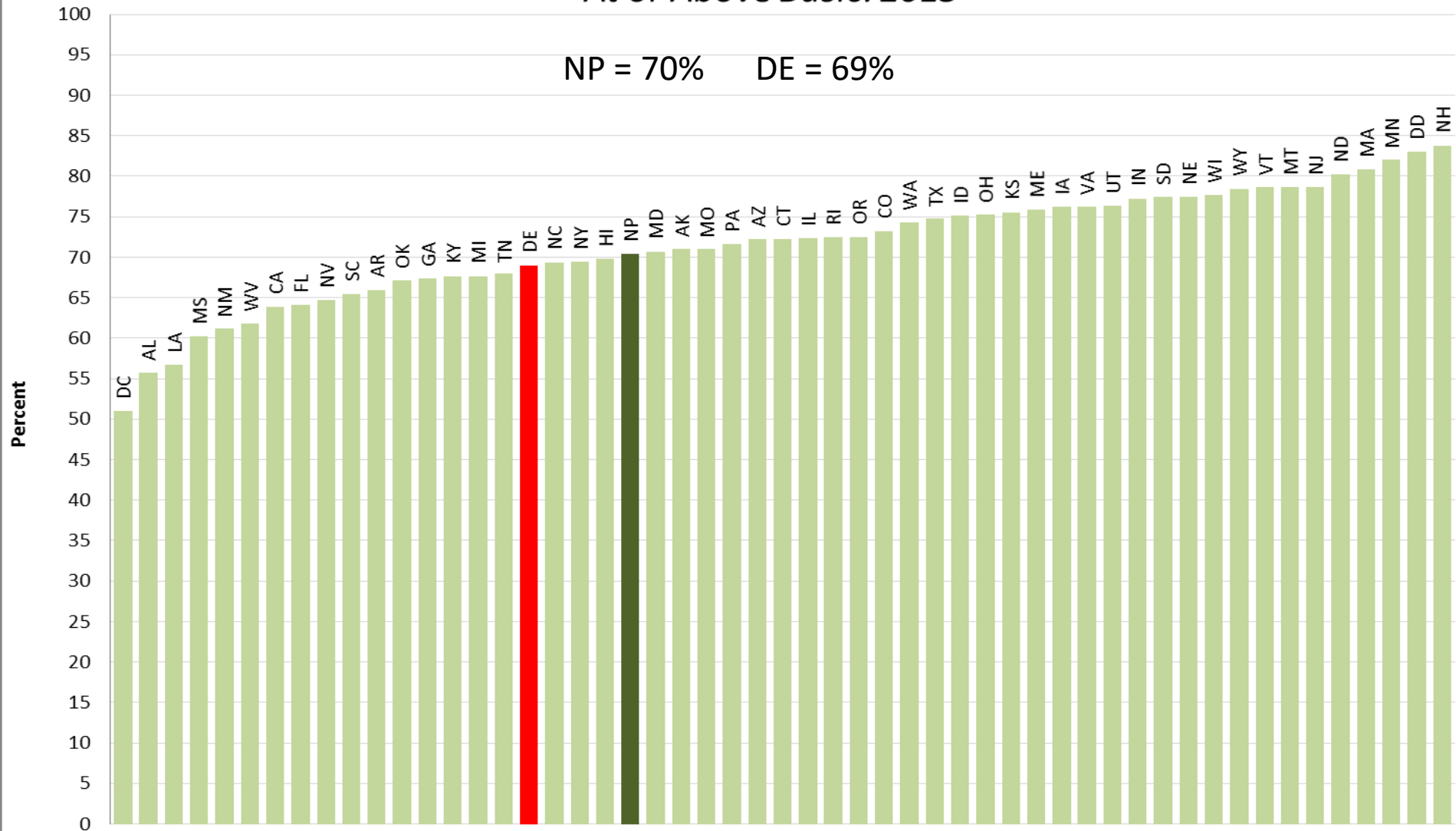




## NAEP Mathematics Grade 8 – Overall

*At or Above Basic: 2015*

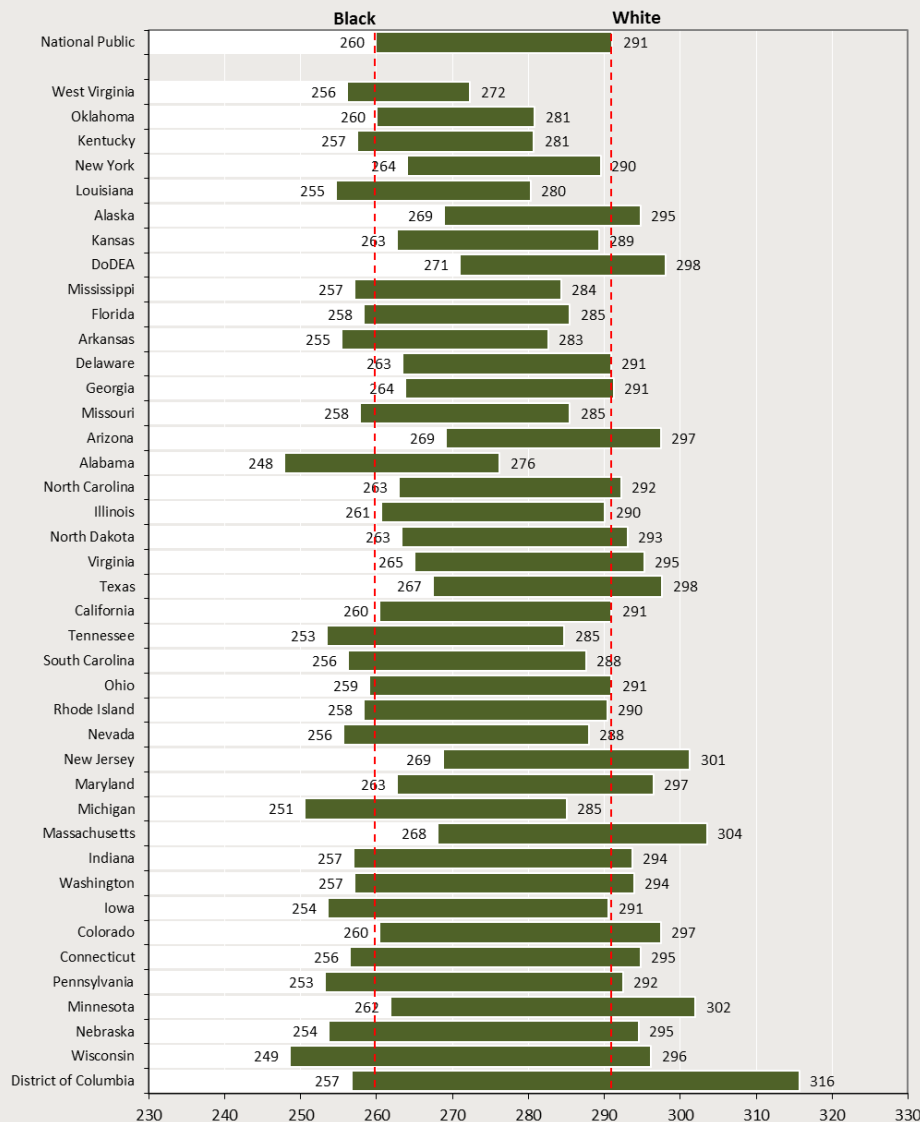
NP = 70%      DE = 69%





## NAEP Mathematics Grade 8 – White - Black

Gap - Average Scale Score: 2015

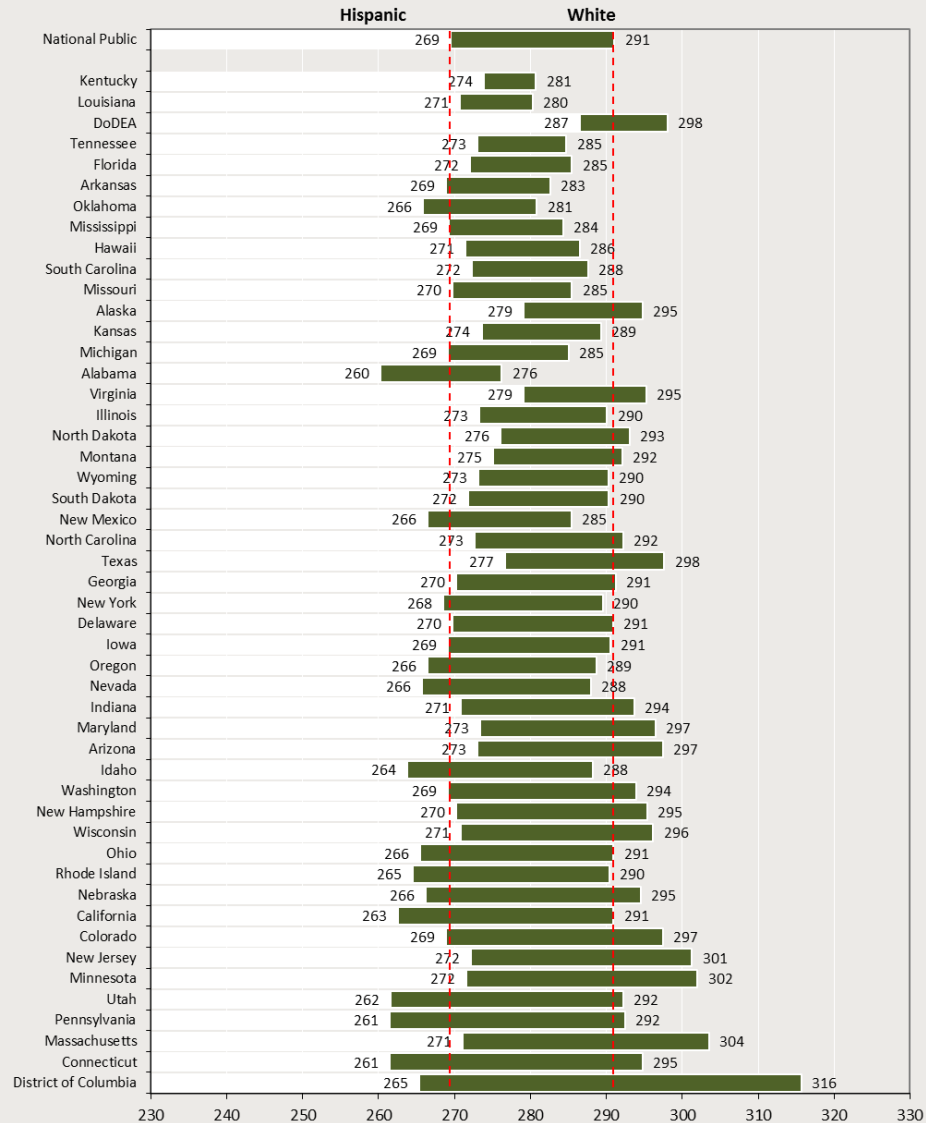






## NAEP Mathematics Grade 8 – White - Hispanic

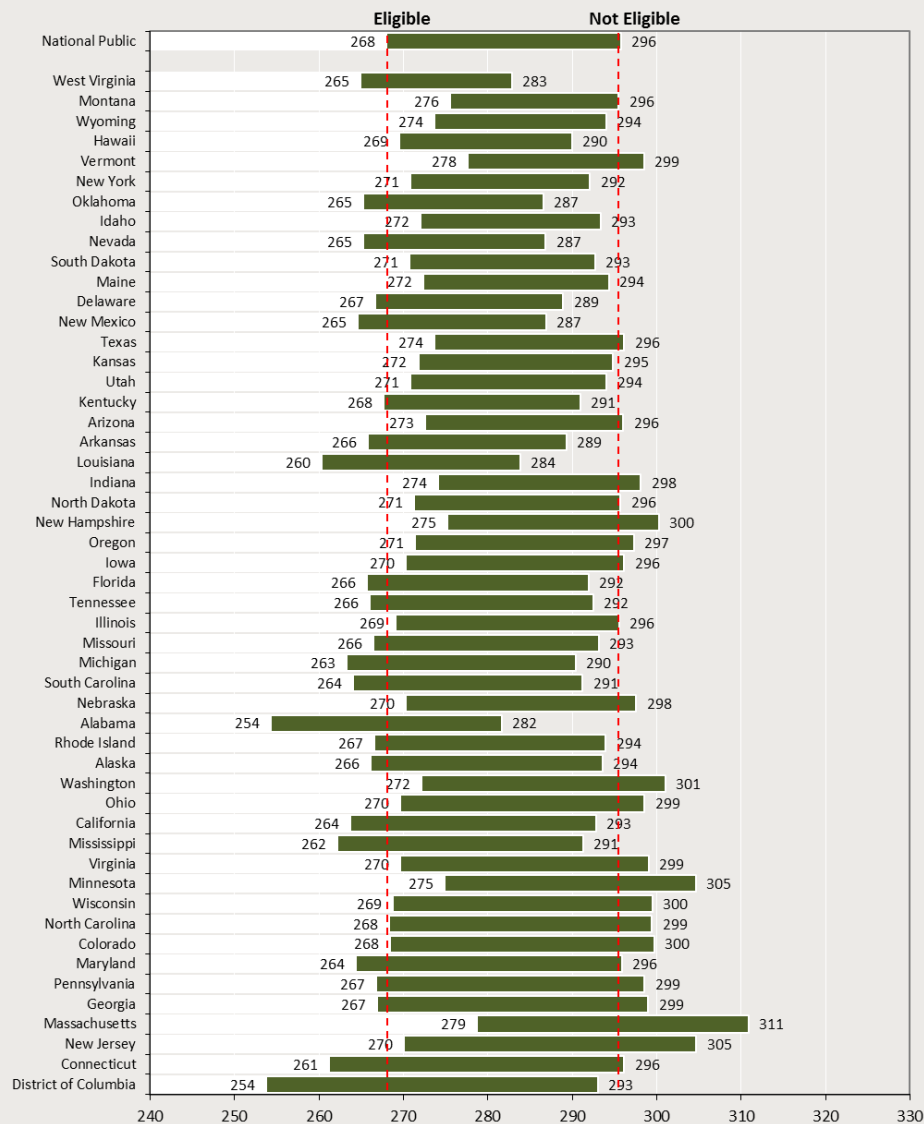
Gap - Average Scale Score: 2015





## NAEP Mathematics Grade 8 – National School Lunch Eligibility

Gap - Average Scale Score: 2015

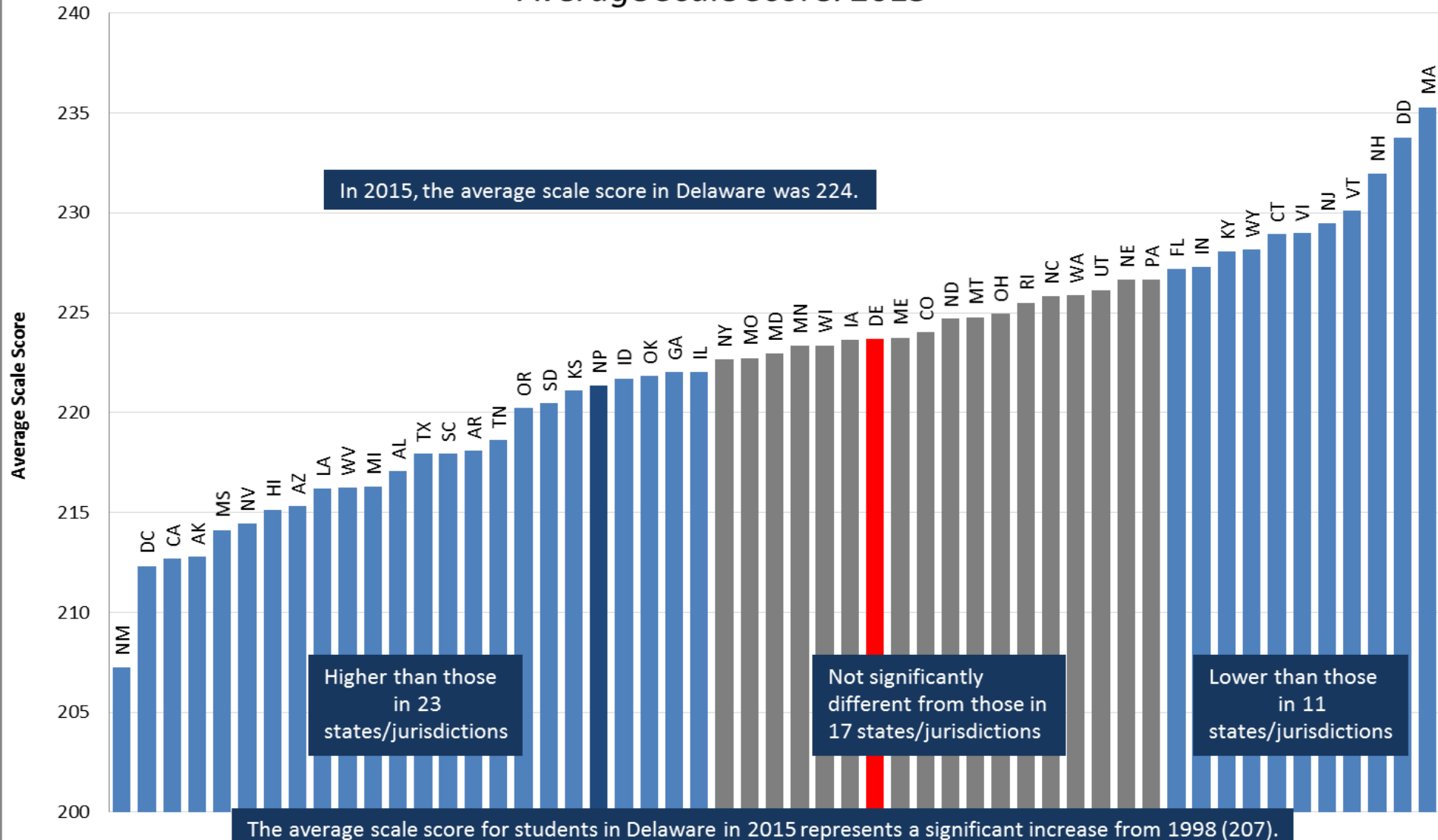






## NAEP Reading Grade 4 – Overall

*Average Scale Score: 2015*

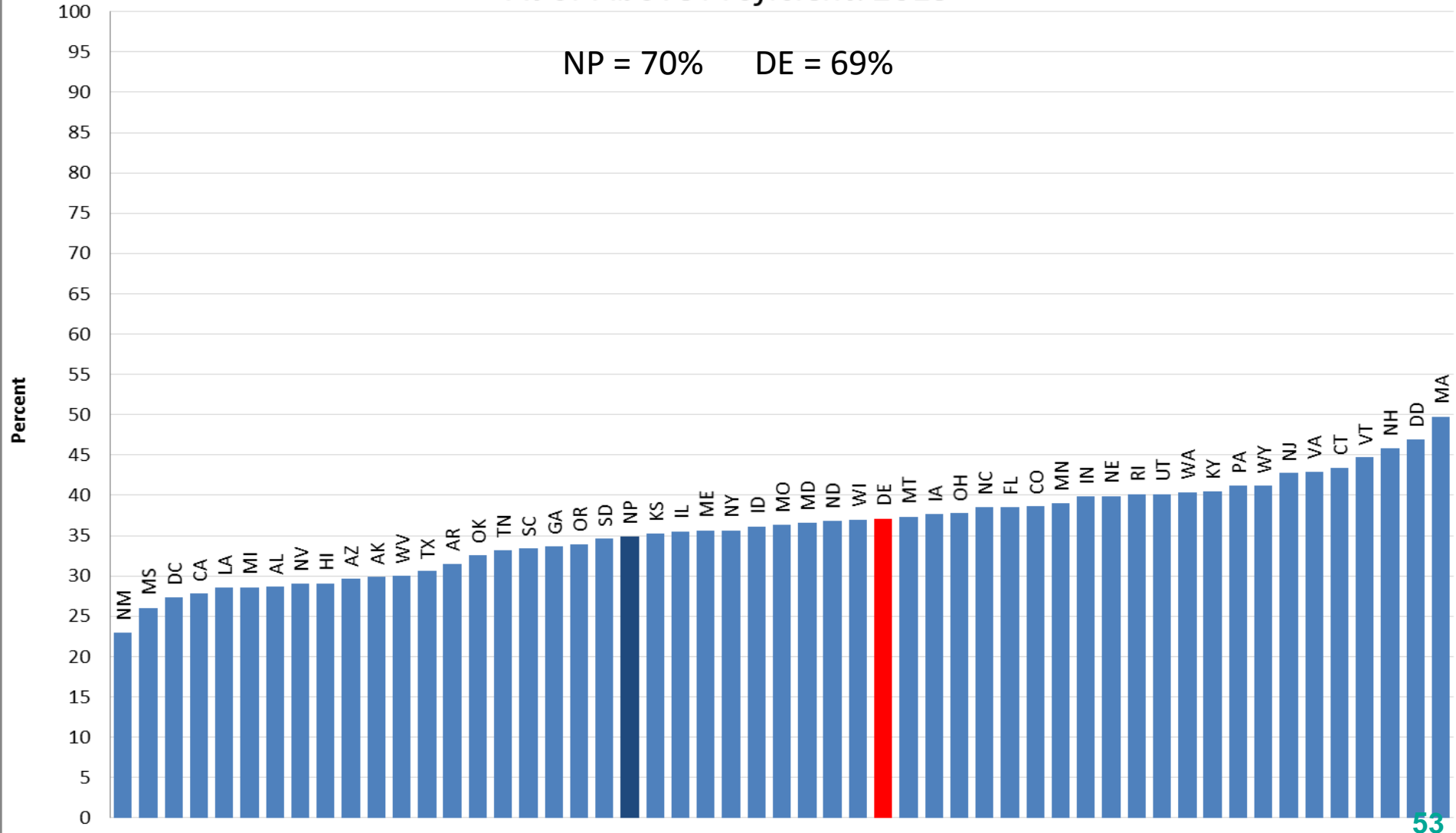




## NAEP Reading Grade 4 – Overall

*At or Above Proficient: 2015*

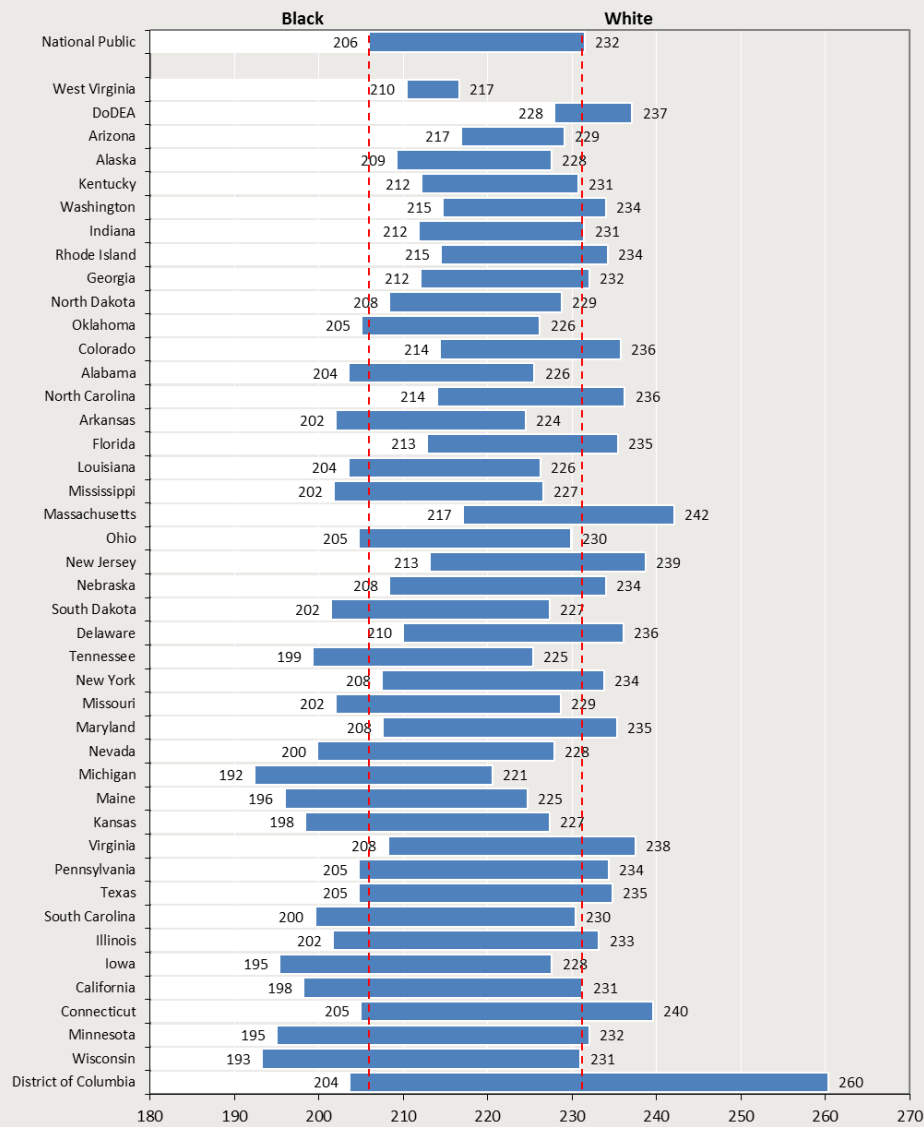
NP = 70%    DE = 69%





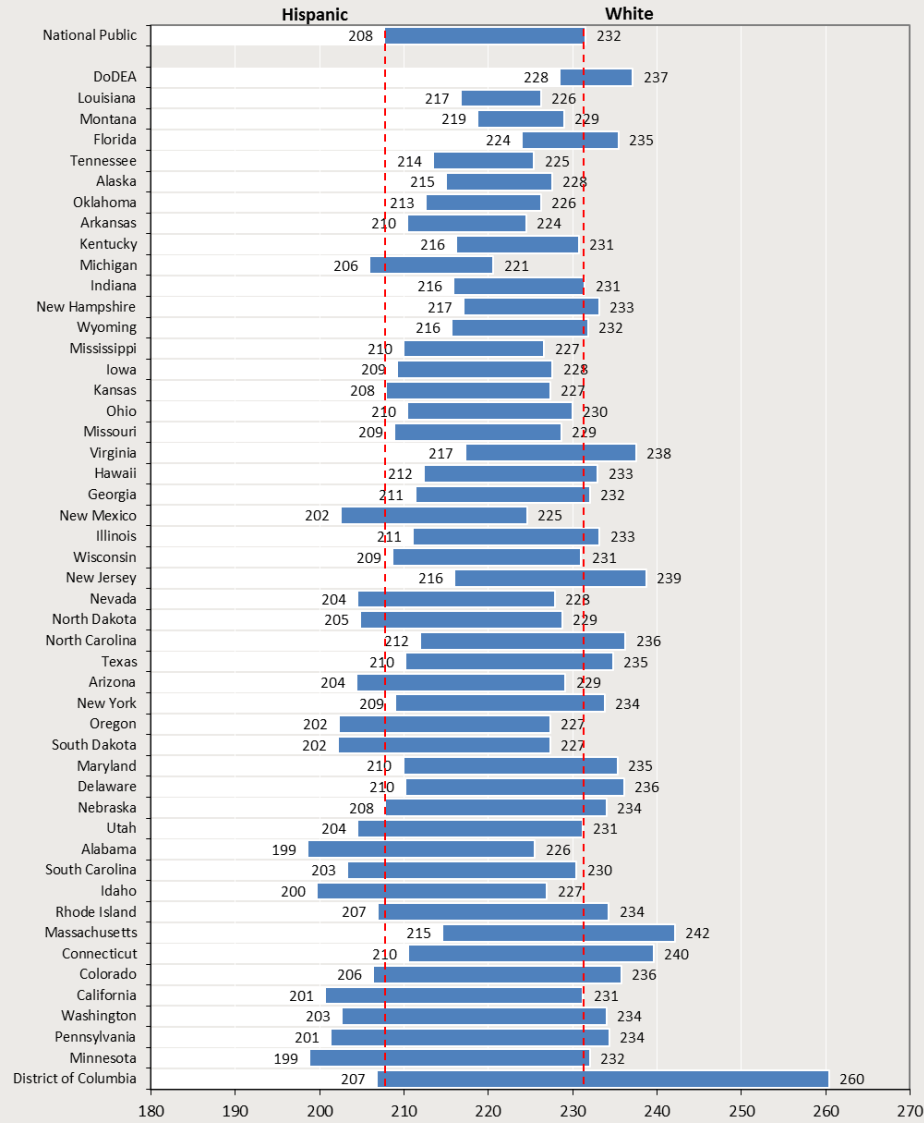
## NAEP Reading Grade 4 – White - Black

Gap - Average Scale Score: 2015





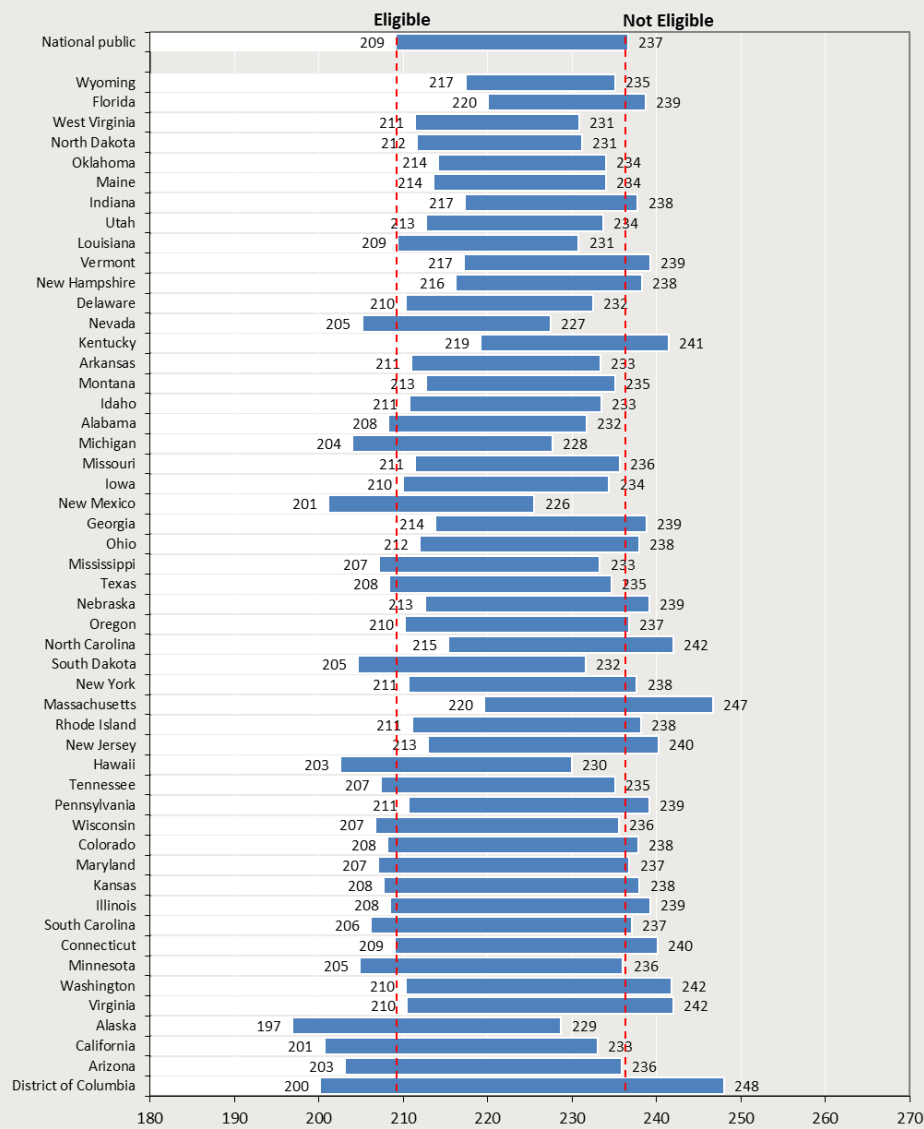
# NAEP Reading Grade 4 – White - Hispanic Gap - Average Scale Score: 2015





## NAEP Reading Grade 4 – National School Lunch Eligibility

Gap - Average Scale Score: 2015



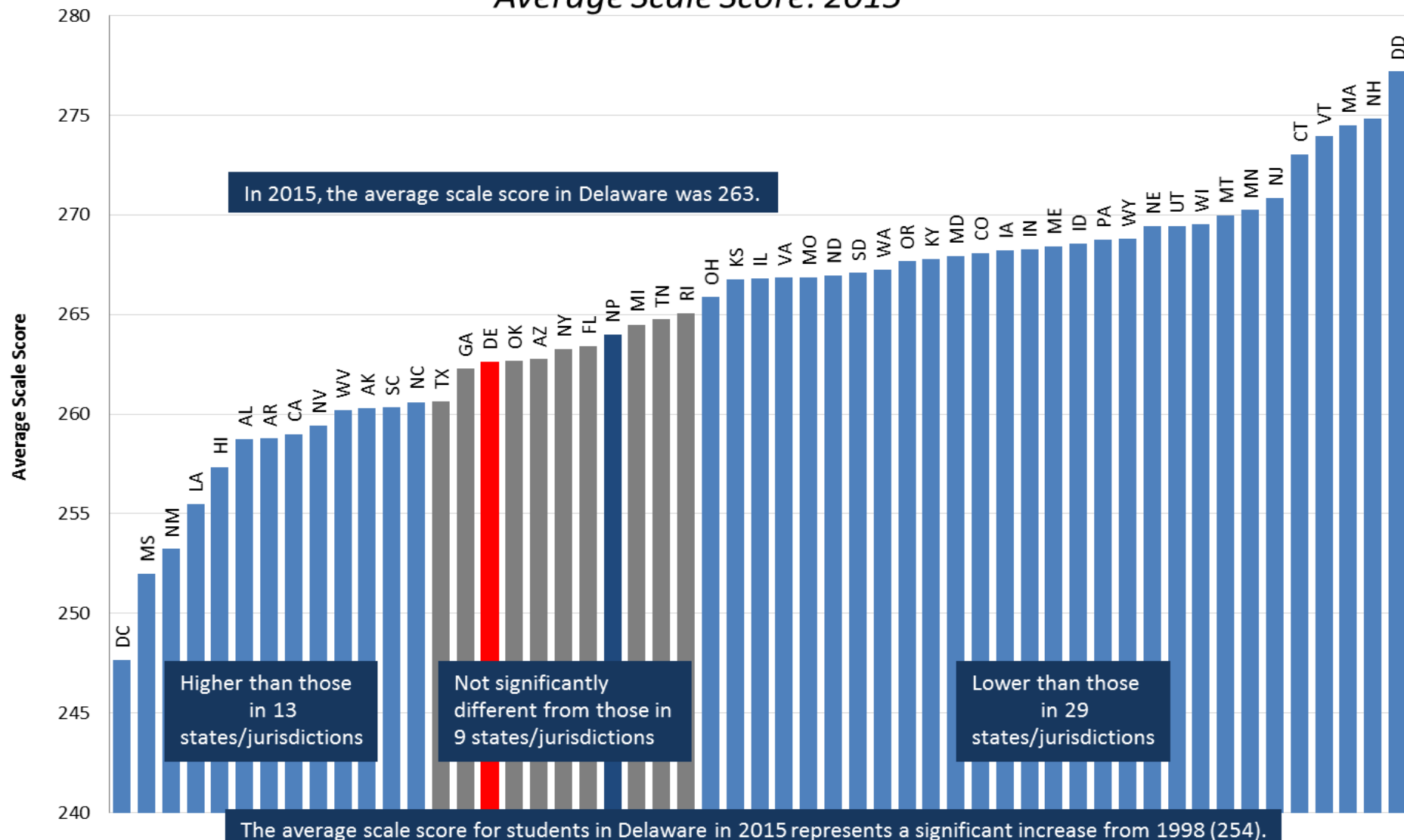






## NAEP Reading Grade 8 – Overall

*Average Scale Score: 2015*

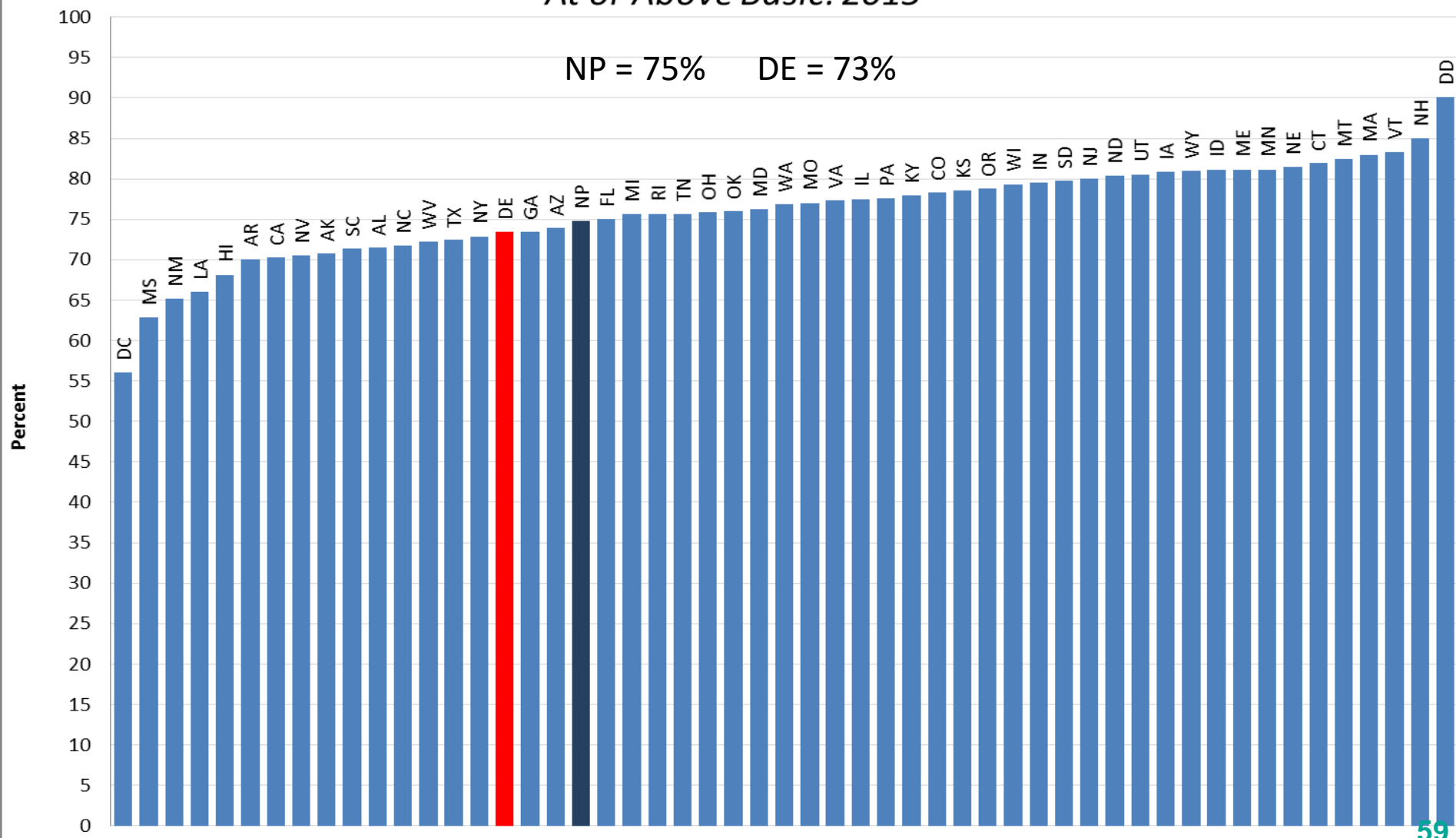




## NAEP Reading Grade 8 – Overall

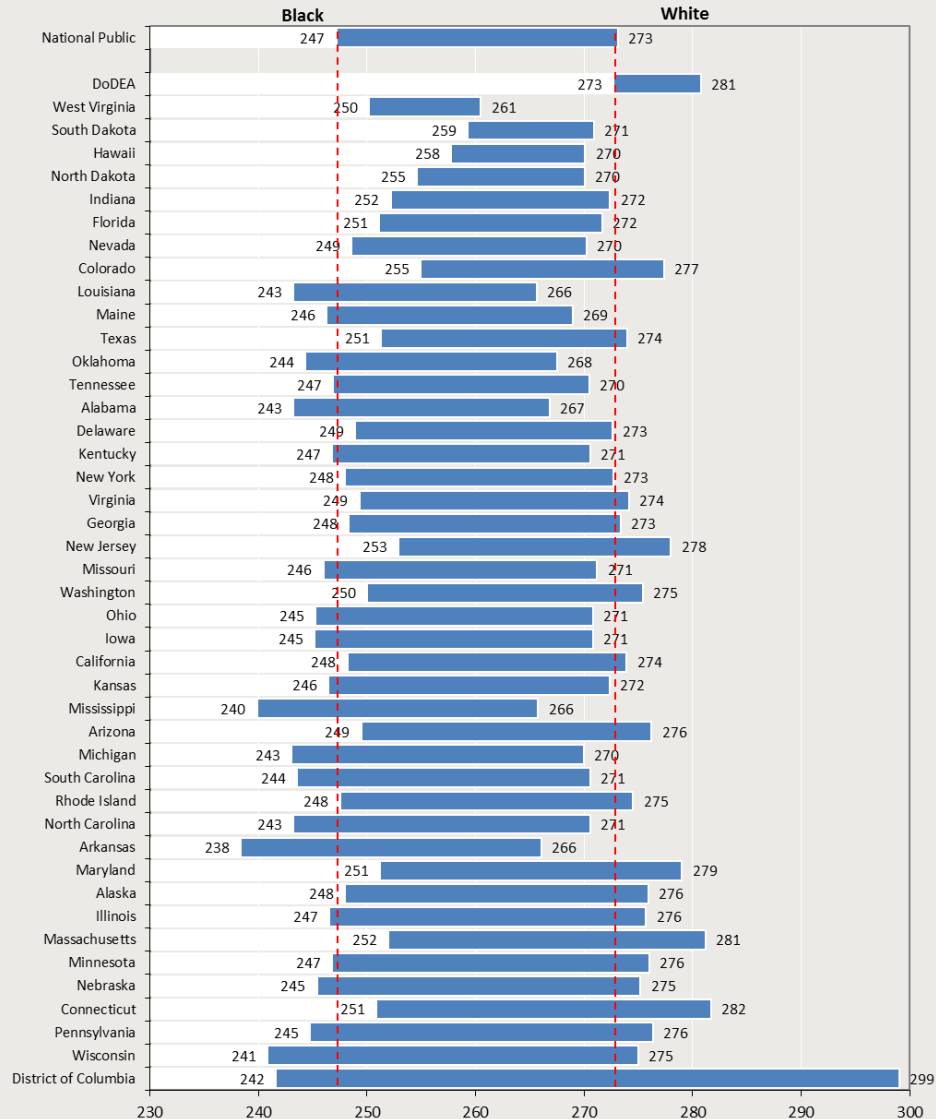
*At or Above Basic: 2015*

NP = 75%    DE = 73%



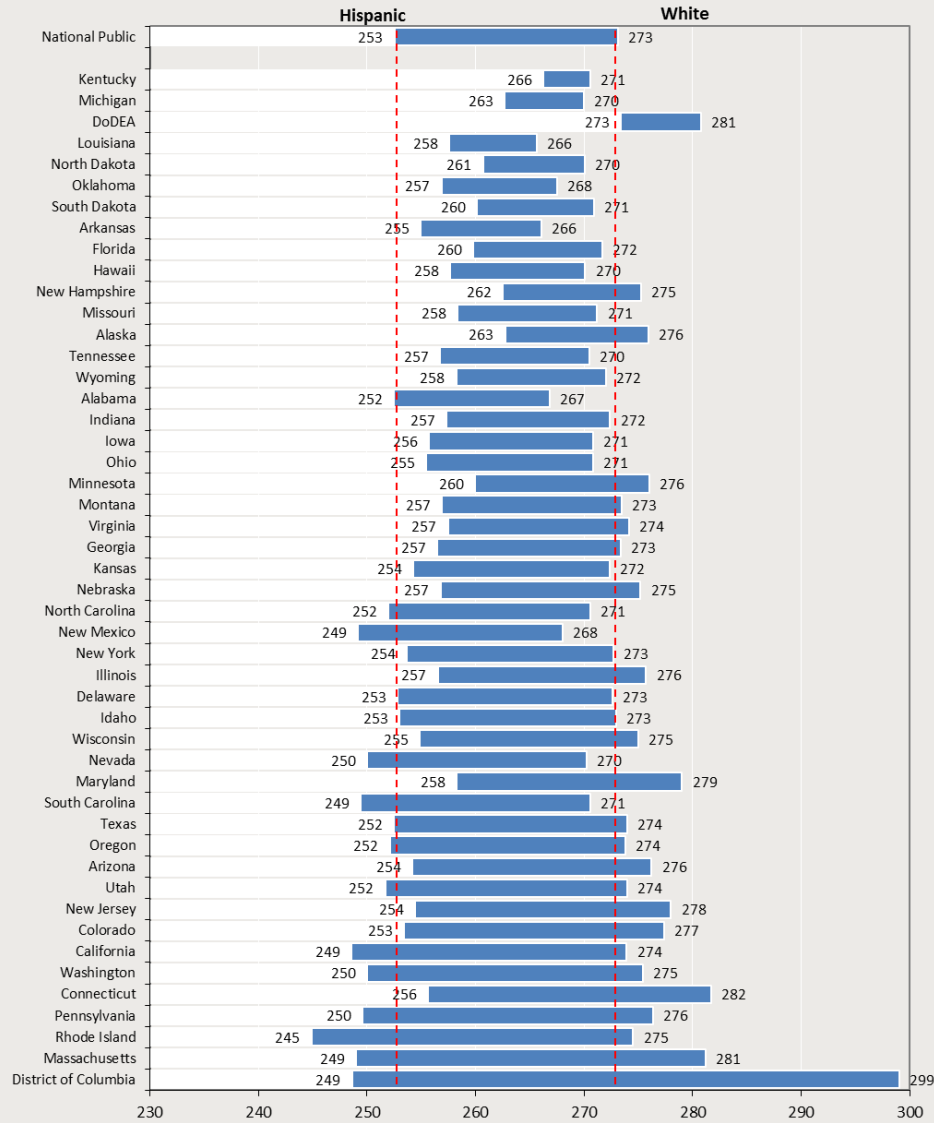


**NAEP Reading Grade 8 – White - Black**  
*Gap - Average Scale Score: 2015*





# NAEP Reading Grade 8 – White - Hispanic Gap - Average Scale Score: 2015





# NAEP Reading Grade 8 – National School Lunch Eligibility

Gap - Average Scale Score: 2015

