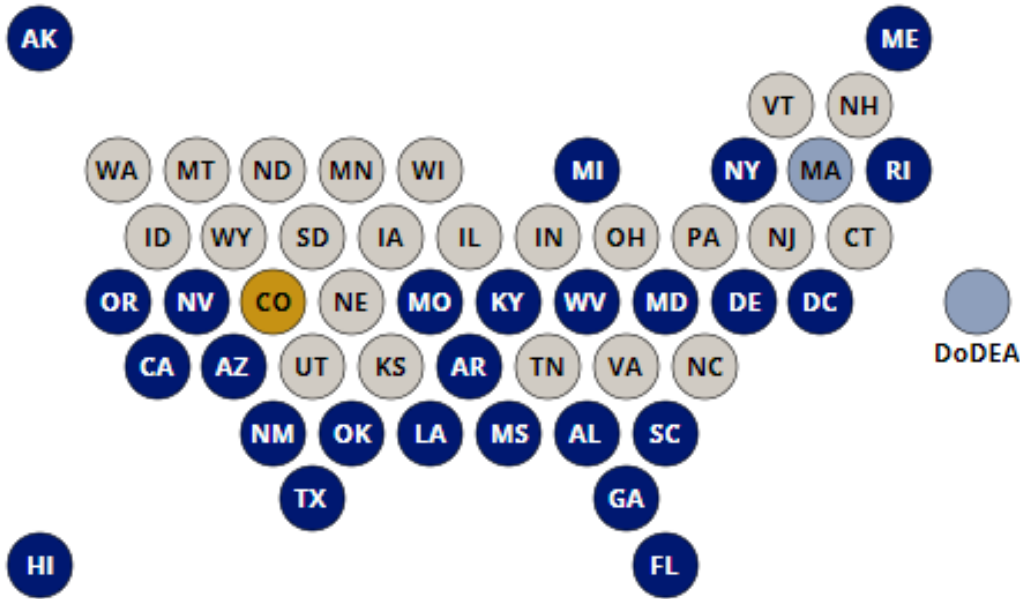


2024 National Assessment of Educational Progress (NAEP)

Colorado Grade 8 Math Results Graphics

NAEP 2024 Math Grade 8th: Average Scale Score

COMPARE THE AVERAGE SCORE IN 2024 TO OTHER STATES/JURISDICTIONS



In 2024, the average score in Colorado (278) was

- lower than those in 2 states/jurisdictions
- higher than those in 26 states/jurisdictions
- not significantly different from those in 23 states/jurisdictions

DoDEA = Department of Defense Education Activity (overseas and domestic schools).

NOTE: Puerto Rico was not included in the comparison results.

Figure 1

The map compares Colorado 8th graders average scale score on the NAEP 2024 Math assessment to the other 49 states, the District of Columbia and the Department of Defense schools. Colorado, which is shaded gold, is the focal state. States shaded dark blue scored lower than Colorado. Light-blue shaded states scored higher than Colorado and grey-shaded states scored the same as Colorado. Because NAEP results are based on samples, there is a margin of error associated with each score or percentage. Therefore, only those differences in scores or percentages that meet NAEP's standards for statistical significance are reported as higher or lower.



National NAEP Math Grade 8th Average Scale Scores

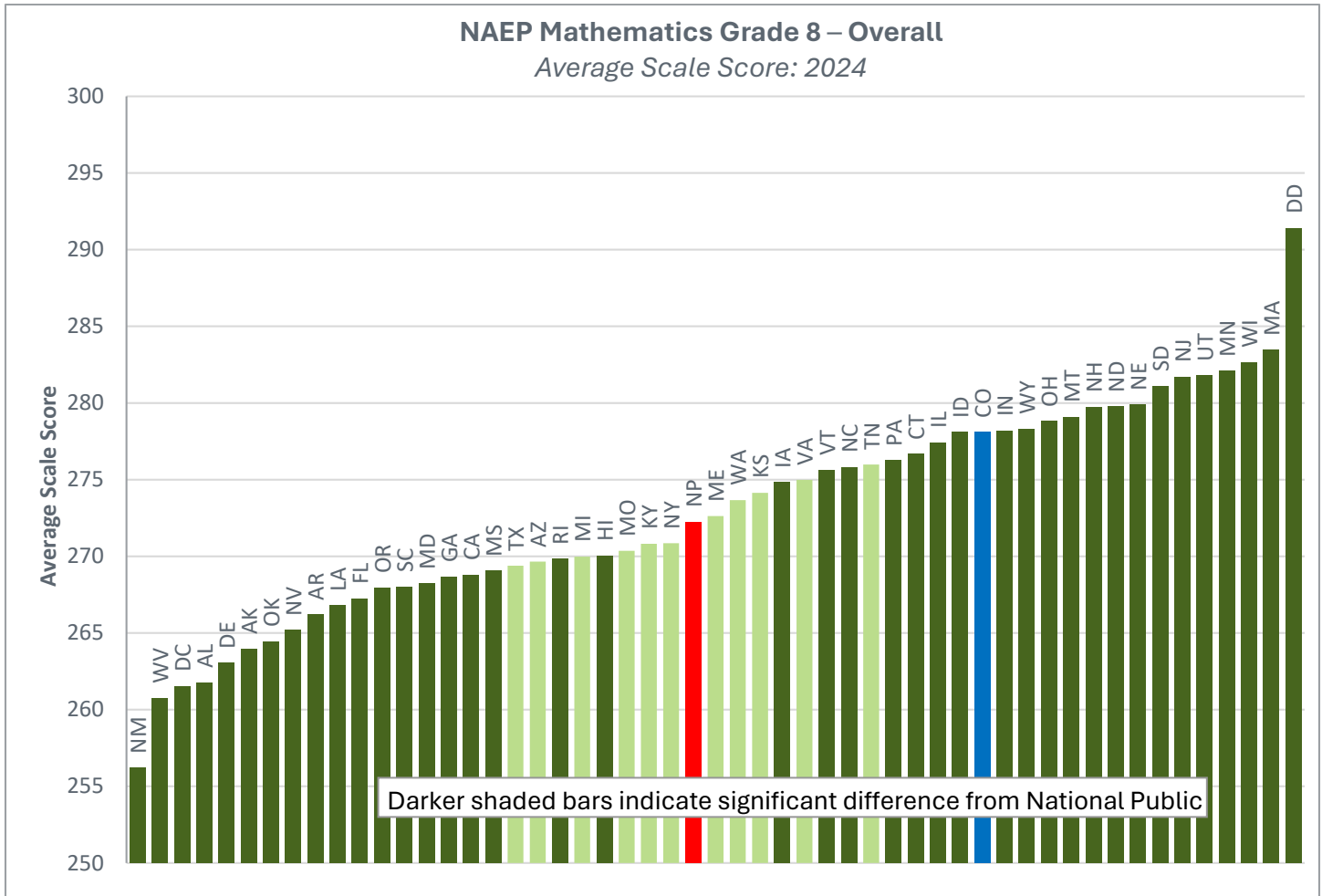


Figure 2

Using the average scale score on the NAEP 2024 Math assessment for each state, this bar graph compares Colorado 8th graders with the other 49 states, the District of Columbia and the Department of Defense schools. The red bar indicates the National Public average. The blue bar represents Colorado. Darker shaded bars indicate significant difference from National Public average.



National Change in NAEP Grade 8th Math Scale Scores Over Ten Years

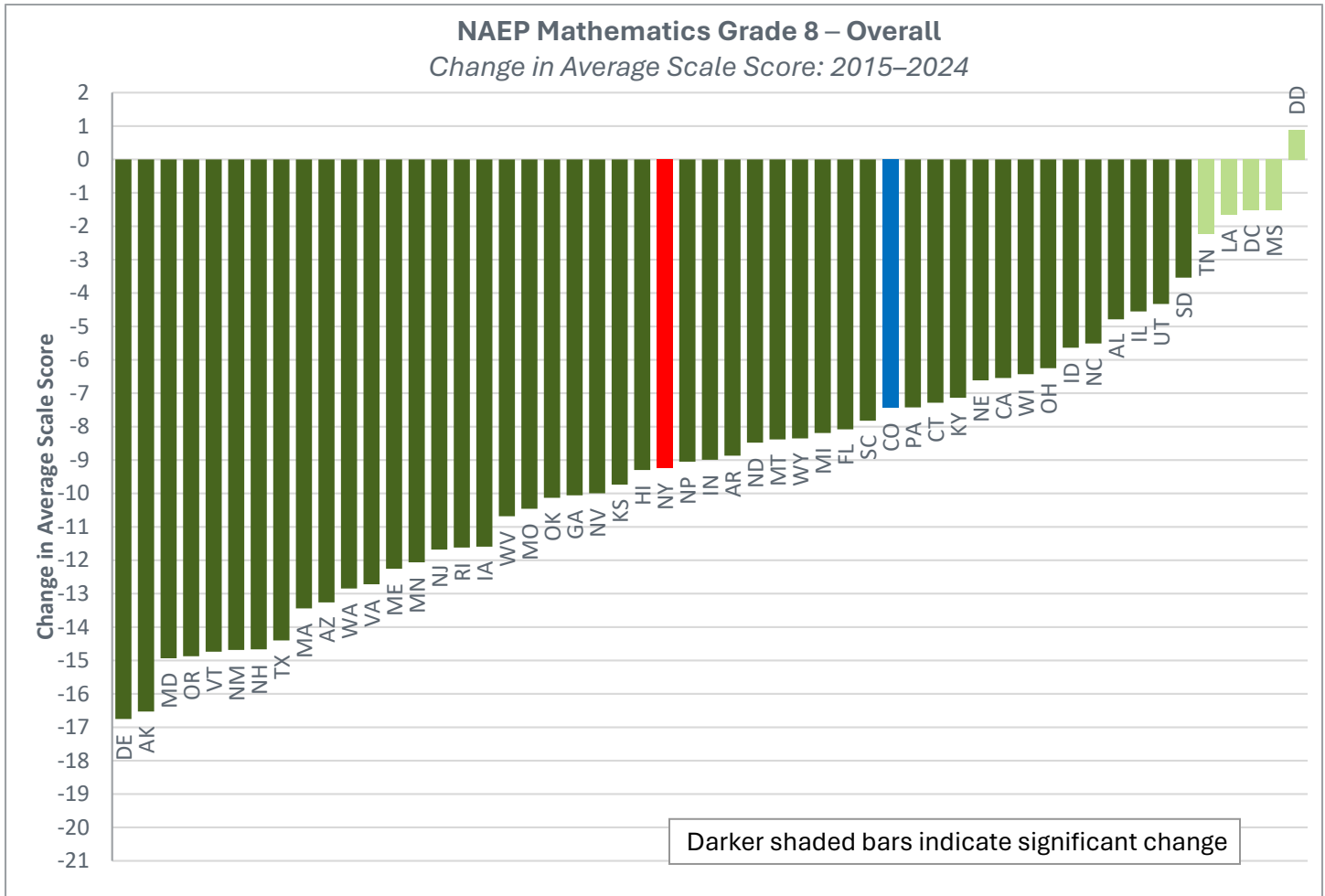


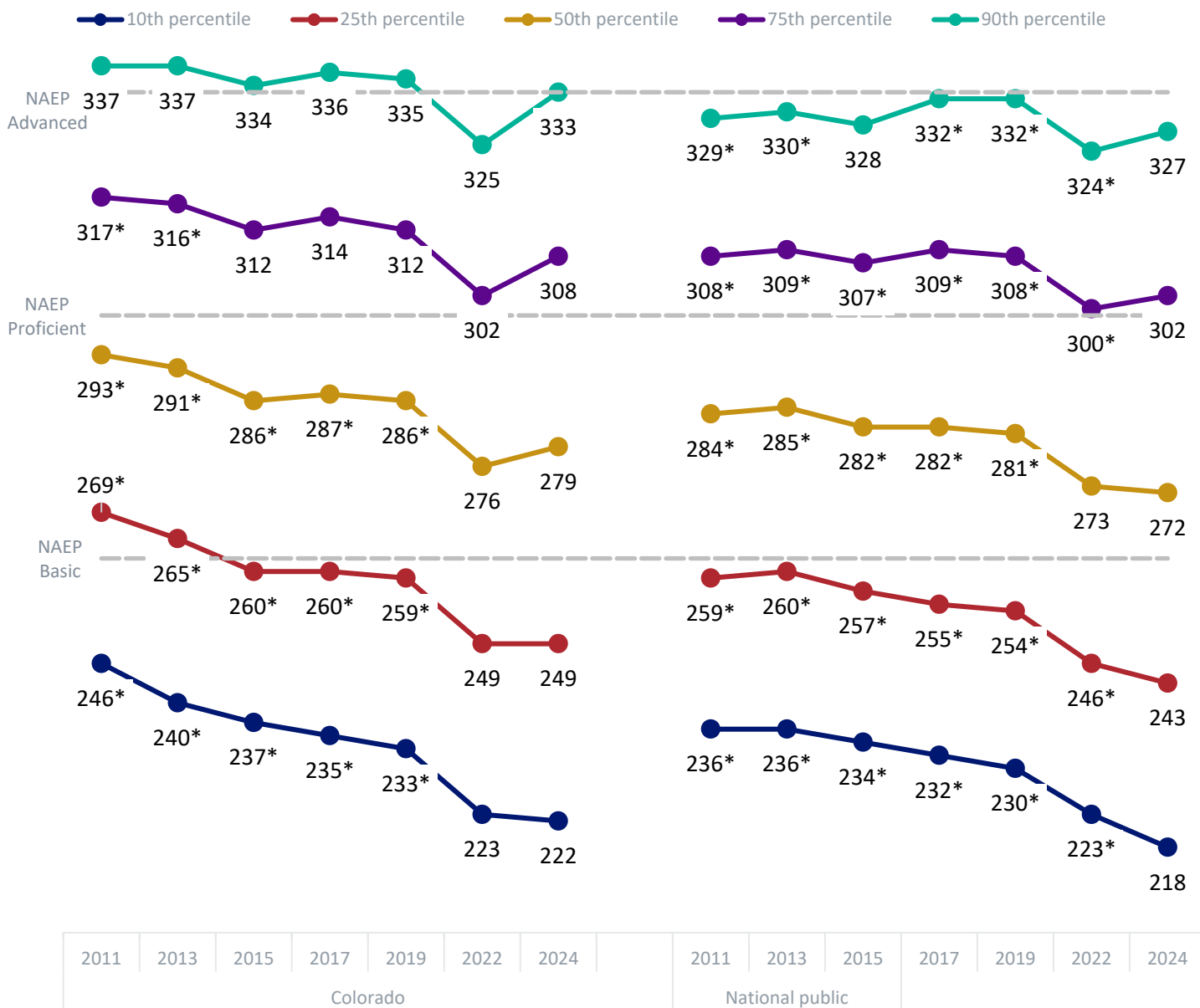
Figure 3

Using the average scale score on the NAEP 2024 Math assessment for each state, this bar graph compares Colorado 8th graders with the other 49 states, the District of Columbia and the Department of Defense schools. The red bar indicates the National Public average. The blue bar represents Colorado. Darker shaded bars indicate significant difference from National Public average.



Colorado vs National Public Average Scale Score by Percentiles 2011-2024

Trend in percentile scores for Colorado and National public grade 8 Mathematics



* Significantly different from 2024

Note: the NAEP Grade 8 Mathematics scale ranges from 0 to 500

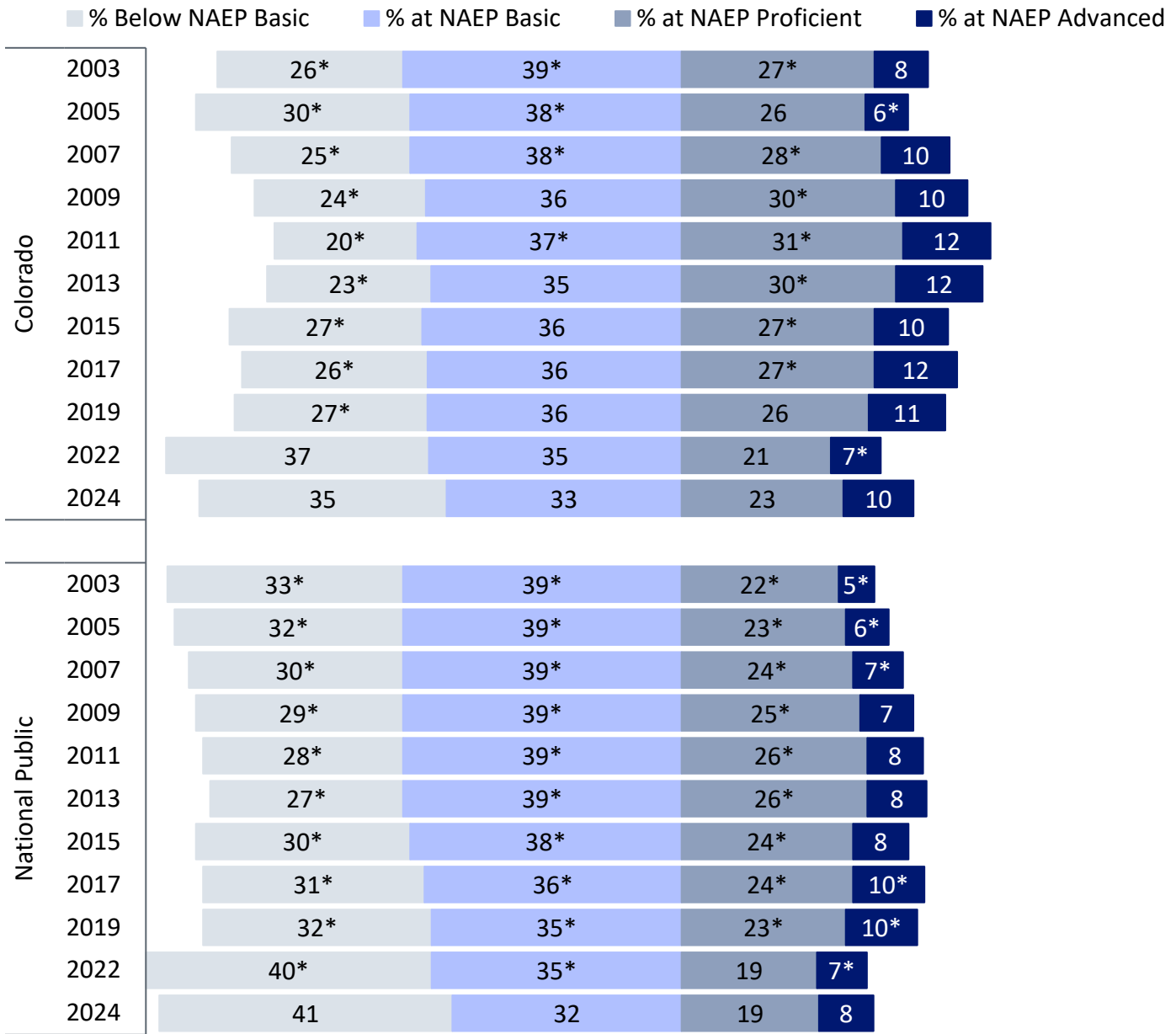
Figure 4

The line charts above represent average scale score on the 2024 NAEP Grade 8th Math assessment separated into the 10th, 25th, 50th, 75th, and 90th percentiles for each Colorado and National Public school students extending back to 2011. The dashed lines represents the 2024 NAEP Grade 8th Math NAEP basic, proficient, and advanced achievement levels.



Change in NAEP Math Grade 8th Achievement Levels Over Time

Percent of students performing at each NAEP Achievement Level for Colorado and National public



* Significantly different from 2024

Figure 5

The bar chart above compares the percentages at each NAEP Math achievement level for 8th graders in Colorado and National Public in 2003 through 2024. Navy represents the percent of students scoring in the advanced achievement level. Dark gray represents the percent of students scoring in the proficient achievement level. Light blue represents the percent of students scoring in the basic achievement level. Light gray represents the percent of students that scored below the basic achievement level.

2024 Colorado NAEP Math Grade 8th Math Scale Scores Percentiles by Subgroups

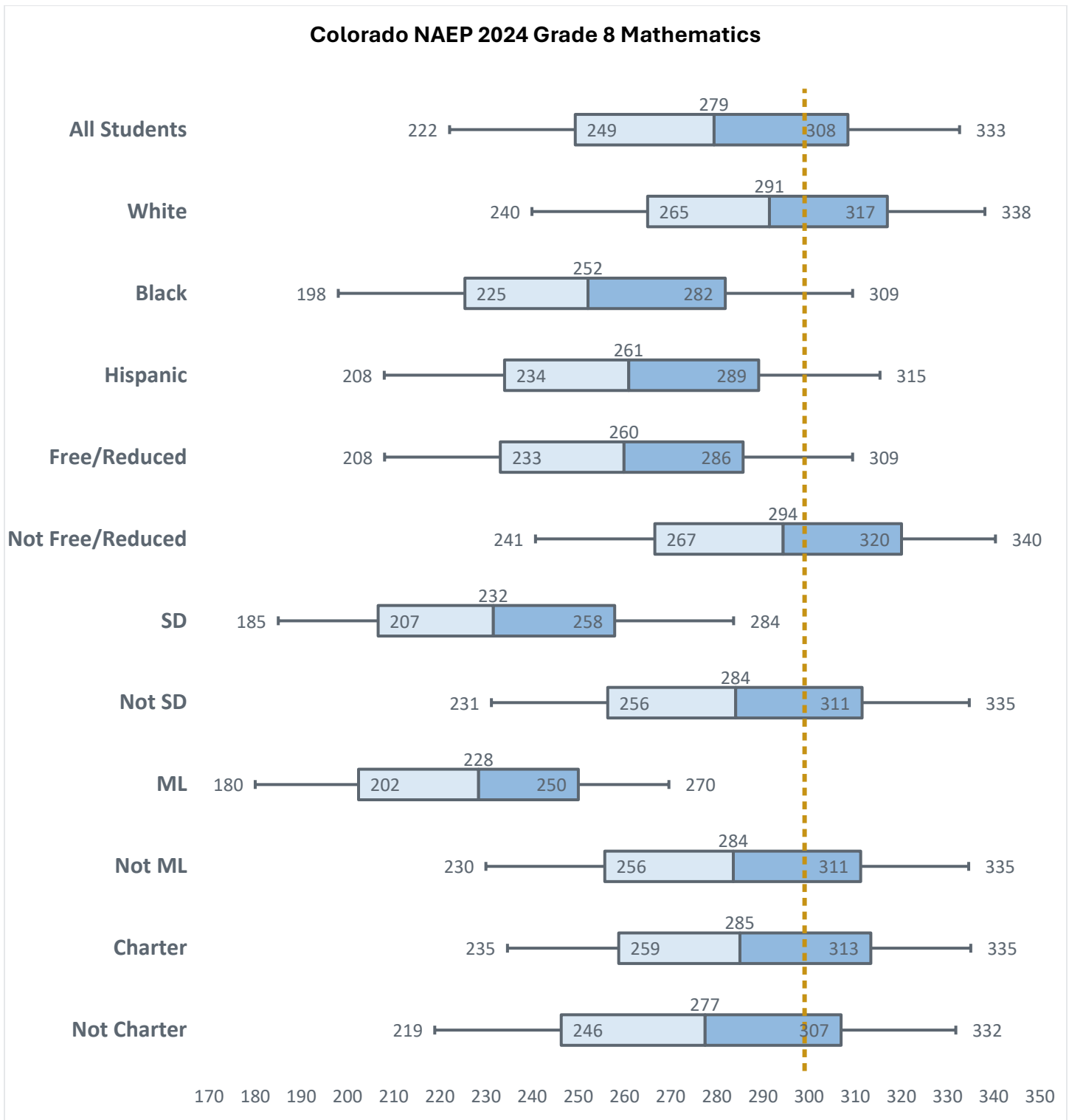


Figure 6

The horizontal box plots above represent average scale score on the 2024 NAEP Grade 8th Math assessment separated into the 10th, 25th, 50th, 75th, and 90th percentiles for each Colorado subgroup. The dashed orange line represents the 2024 NAEP Grade 8th Math NAEP Proficient achievement level scale score of 299.



Colorado NAEP Math Grade 8th Black / White Gap

Trend in NAEP average scores and Black/White score gaps for students in Colorado

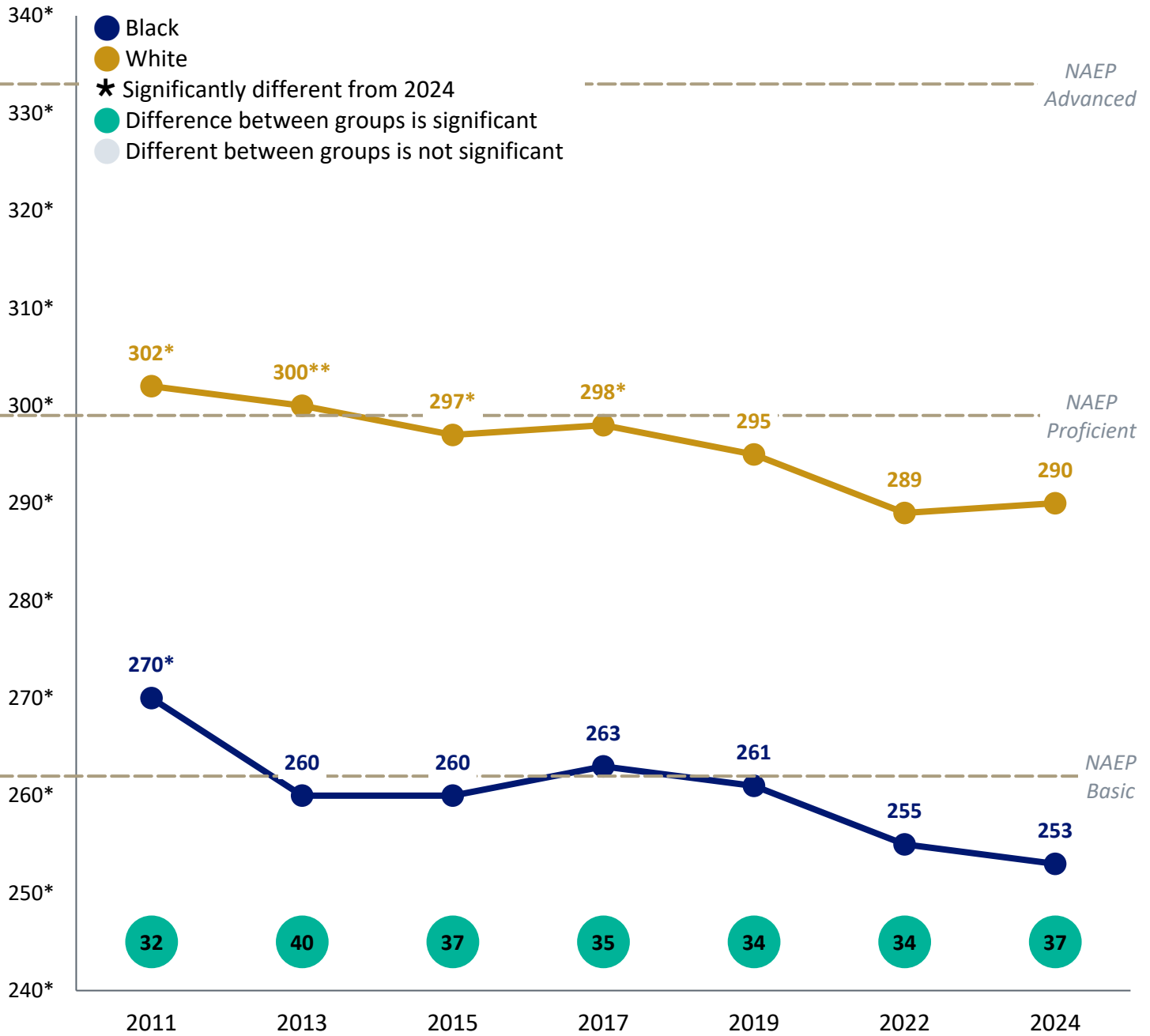


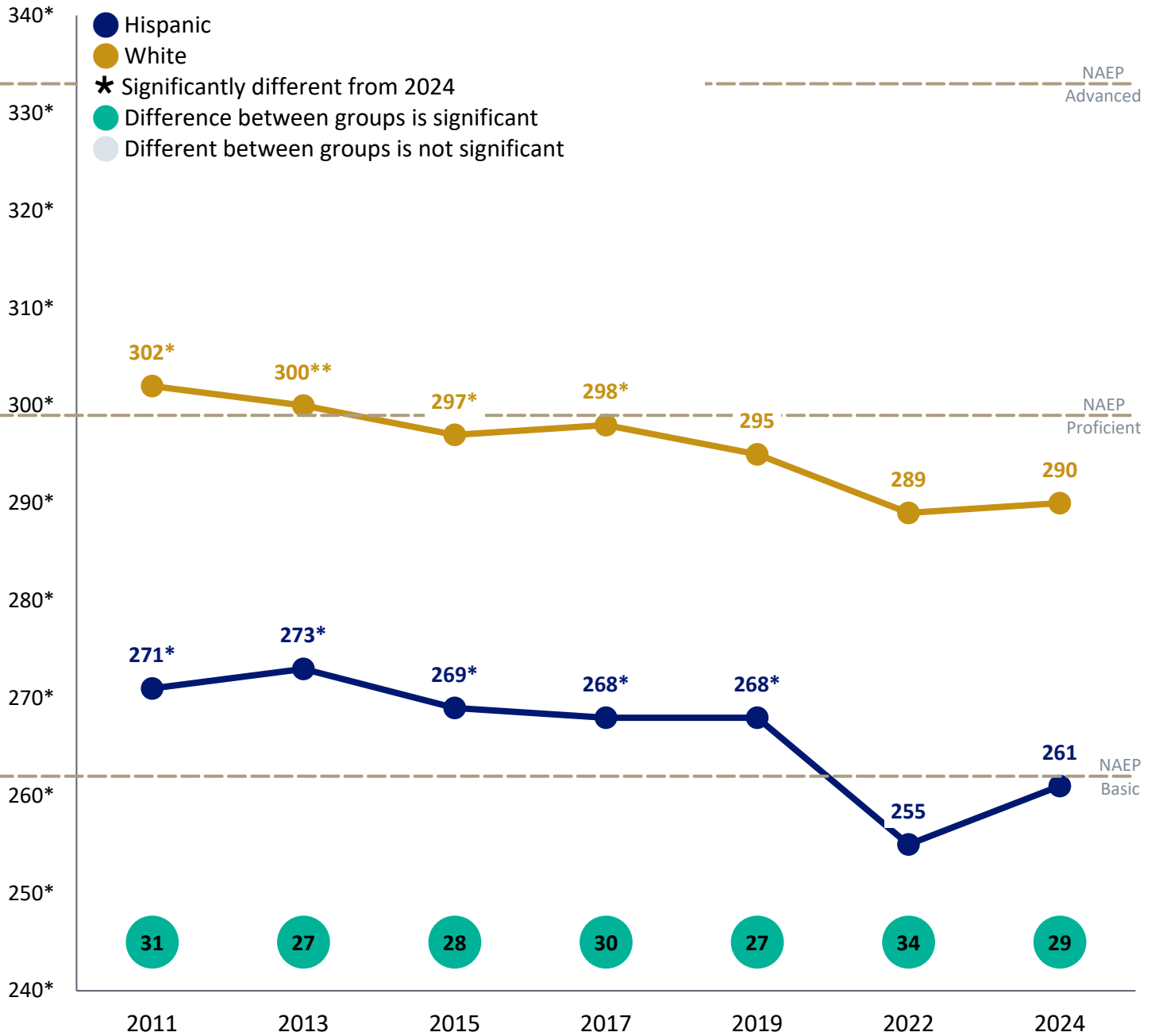
Figure 7

This is a comparison of Colorado 8th grade student subgroups using the average scale scores on the NAEP Math assessment extending back to 2011. The gold line represents White student 8th grade average scale scores while the blue line represents Black student 8th grade average scale scores. The green dots represent the score gaps between the student subgroups.



Colorado NAEP Math Grade 8th Hispanic / White Gap

Trend in NAEP average scores and Hispanic/White score gaps for students in Colorado



Note: The NAEP Grade 8 Mathematics scale is from 0 to 500

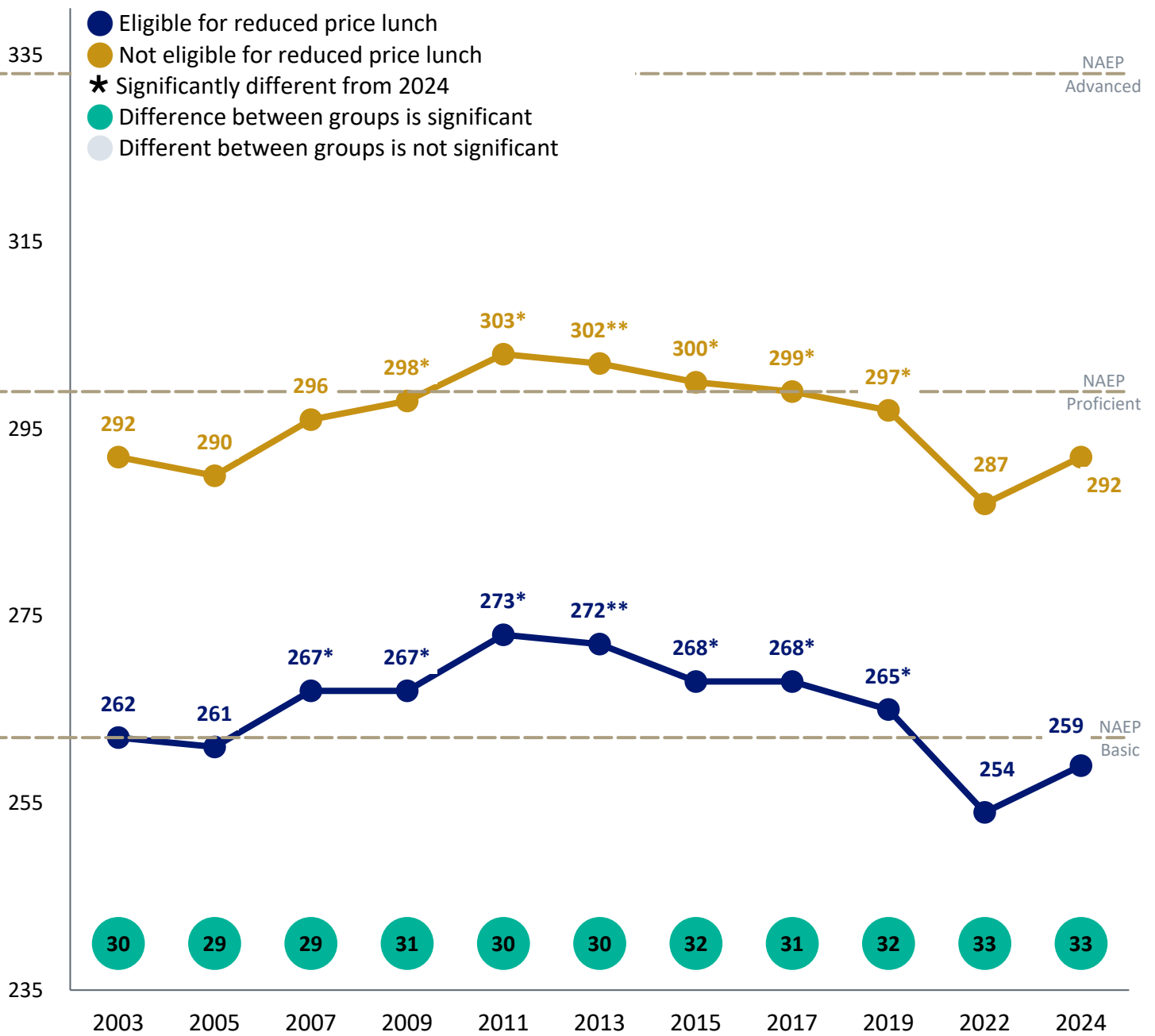
Figure 8

This is a comparison of Colorado 8th grade student subgroups using the average scale scores on the NAEP Math assessment extending back to 2011. The gold line represents White student 8th grade average scale scores while the blue line represents Hispanic student 8th grade average scale scores. The green dots represent the score gaps between the student subgroups.



Colorado NAEP Math Grade 8th Free and Reduced Lunch / Non- Free and Reduced Lunch Gap

Trend in NAEP average scores and score gaps for students in Colorado, by reduced price lunch status



Note: The NAEP Grade8 Mathematics scale is from 0 to 500

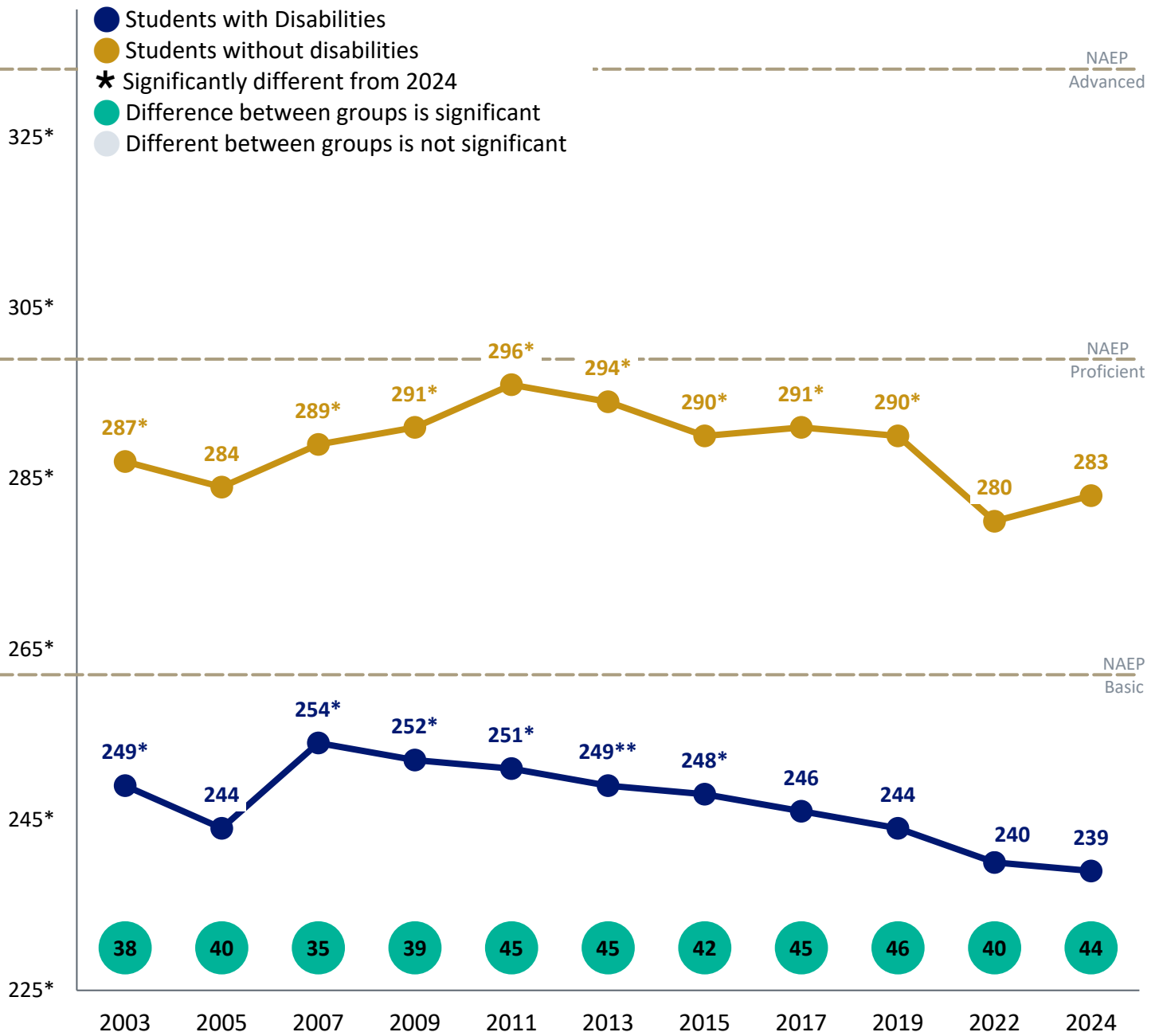
Figure 9

This is a comparison of Colorado Public 8th grade student subgroups using the average scale scores on the NAEP Math assessment extending back to 2003. The gold line represents 8th grade students not eligible for free and reduced lunch average scale scores while the blue line represents 8th grade students eligible for free and reduced lunch average scale scores. The green dots represent the score gaps between the student subgroups.



Colorado NAEP Math Grade 8th Non-Disabled Students / Students with Disabilities Gap

Trend in NAEP average scores and score gaps for students in Colorado, by disability status



Note: The NAEP Grade 8 Mathematics scale is from 0 to 500

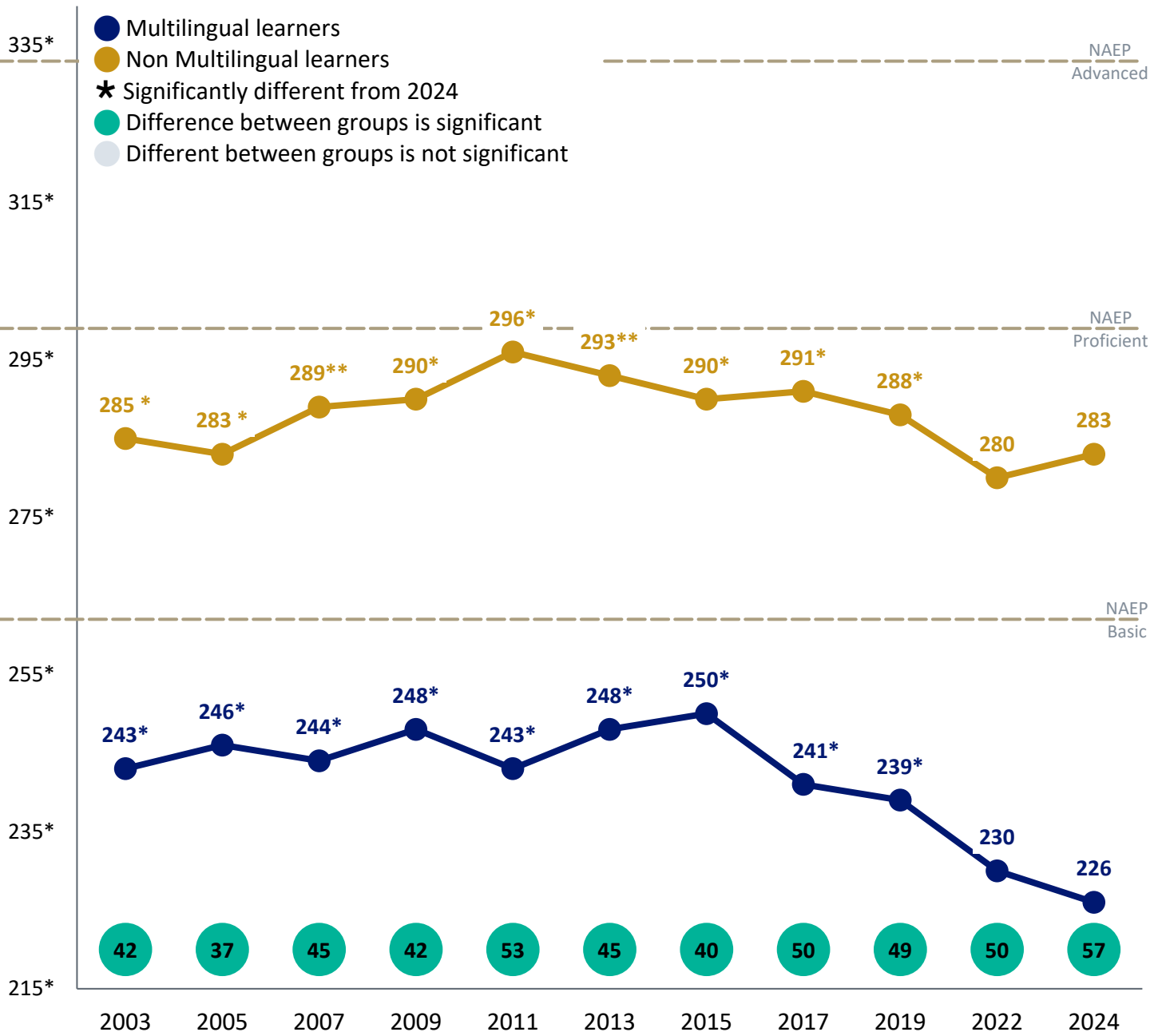
Figure 10

This is a comparison of Colorado 8th grade student subgroups using the average scale scores on the NAEP Math assessment extending back to 2003. The gold line represents 8th grade average scale scores of non disabled students while the blue line represents 8th grade average scale scores of students with disabilities. The green dots represent the score gaps between the student subgroups.



Colorado NAEP Math Grade 8th Non-Multilingual Learners / Multilingual Learners Gap

Trend in NAEP average scores and score gaps for students in Colorado, by status as an Multilingual learners



Note: The NAEP Grade 8 Mathematics scale is from 0 to 500

Figure 11

This is a comparison of Colorado 8th grade student subgroups using the average scale scores on the NAEP Math assessment extending back to 2003. The gold line represents 8th grade average scale scores of students who are not Multilingual Learners while the blue line represents 8th grade average scale scores of students who are Multilingual learners. The green dots represent the score gaps between the student subgroups.



NAEP 2024 Math Grade 8: National Comparison of White Hispanic Gaps

NAEP Mathematics Grade 8 – White - Hispanic
Gap - Average Scale Score: 2024

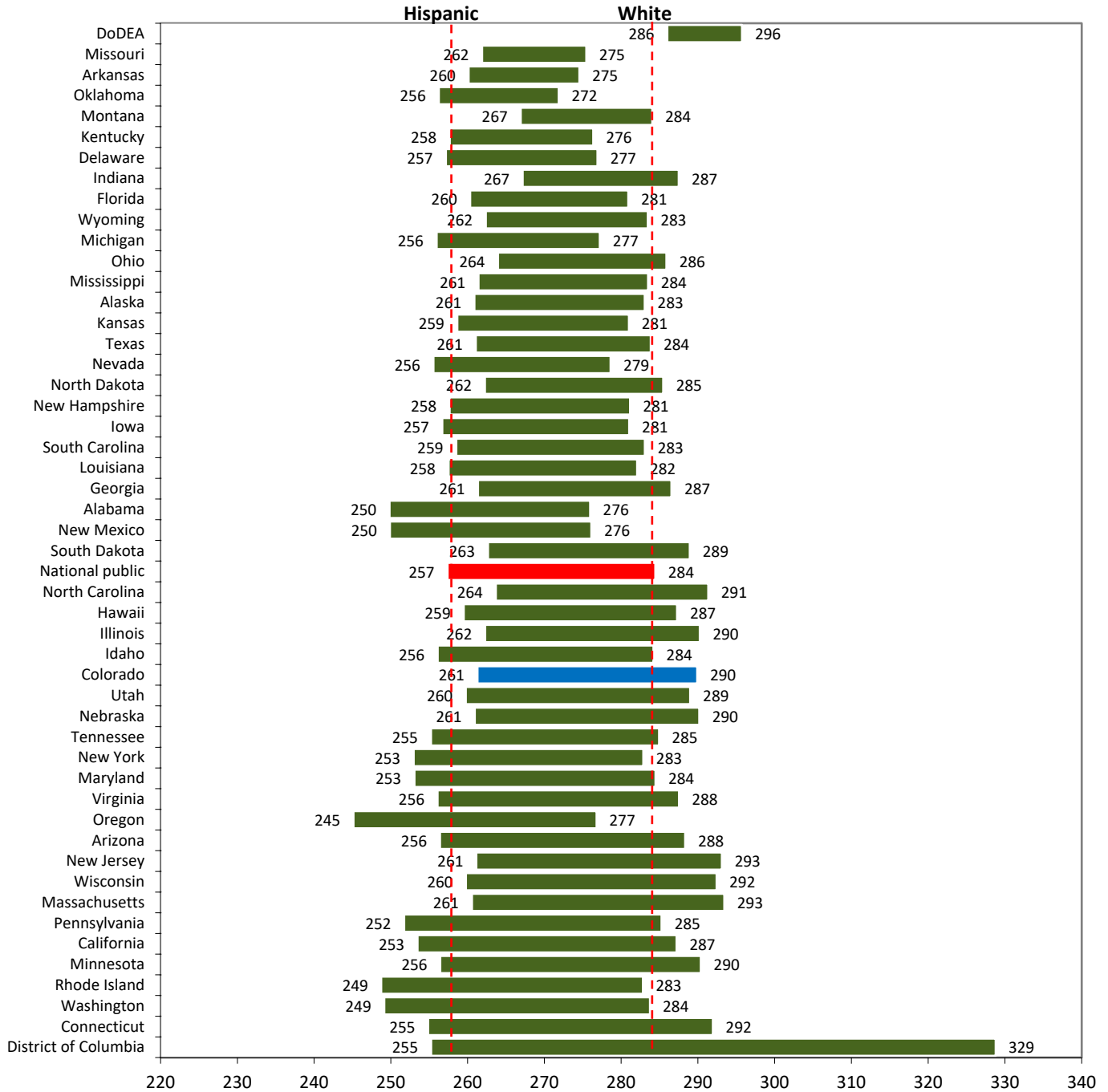


Figure 12

Using the average scale score on the NAEP 2024 Math assessment for each state, this bar graph compares the Hispanic/White gaps of Colorado 8th graders with the other 49 states, the District of Columbia and the Department of Defense schools. The bars represent the score gaps between the student subgroups. The red bar indicates the National Public average. The blue bar represents Colorado.



NAEP 2024 Math Grade 8: National Comparison of Economically Disadvantaged to Not Economically Disadvantaged gaps

NAEP Mathematics Grade 8 – Economically Disadvantaged
Gap - Average Scale Score: 2024

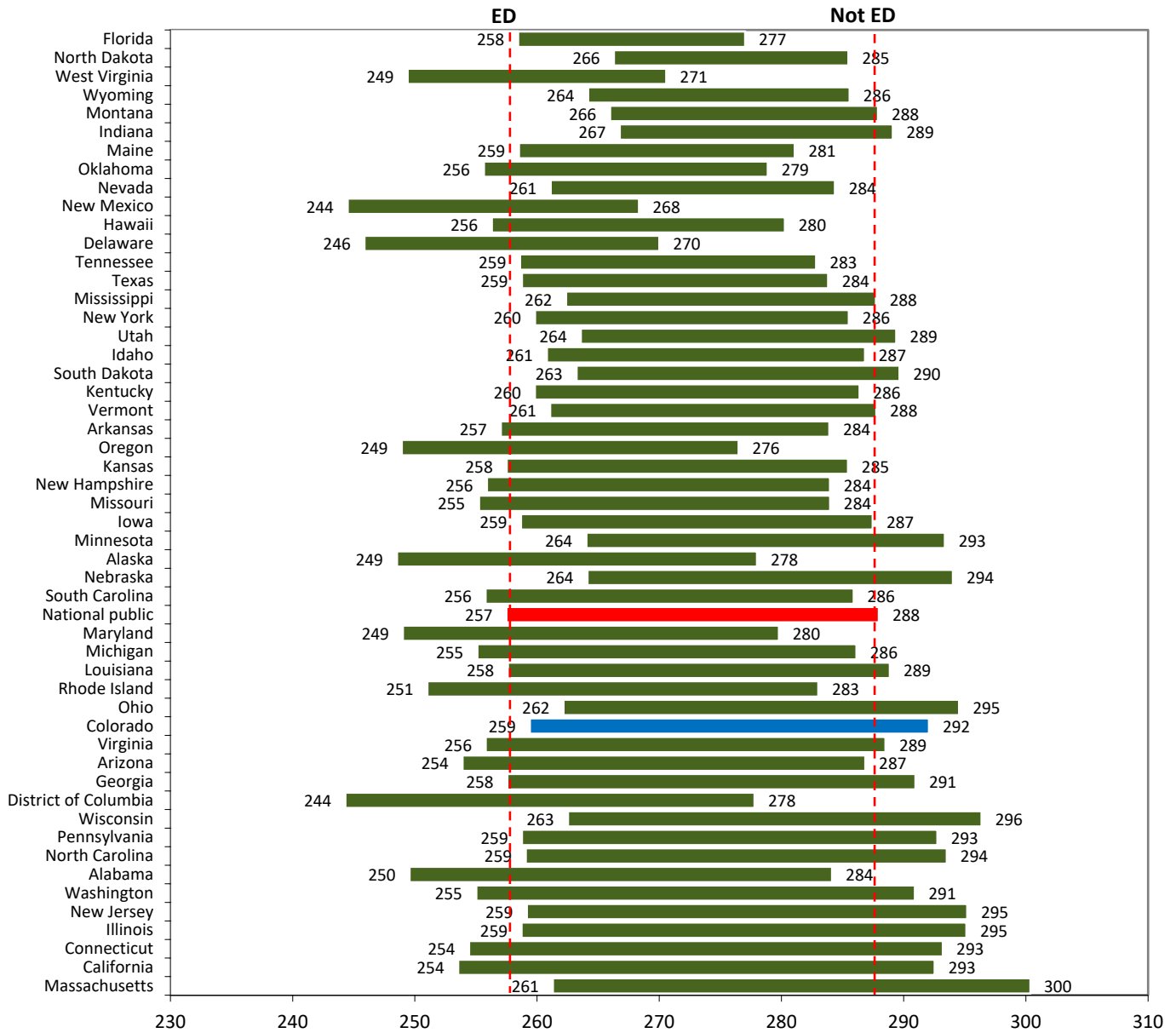


Figure 13

Using the average scale score on the NAEP 2024 Math assessment for each state, this bar graph compares the Economically Disadvantaged/Not Economically Disadvantaged gaps of Colorado 8th graders with the other 49 states, the District of Columbia and the Department of Defense schools. The bars represent the score gaps between the student subgroups. The red bar indicates the National Public average. The green bar represents Colorado.

WHERE CAN I LEARN MORE?

- [Colorado National Assessment of Educational Progress](#)
- [The Nation's Report Card](#)