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TO: Members of the State Board of Education

FROM: Karen B. Salmon, Ph.D.

DATE: September 19, 2017

SUBJECT: NAEP Performance and Exclusion Rates in Maryland

PURPOSE:

To provide the National Assessment of Educational Progress (NAEP) exclusion rates and performance results for the 2003-2015 administrations as well as the timing of the release of the 2017 NAEP administration results.

BACKGROUND/HISTORICAL PERSPECTIVE:

The National Assessment of Educational Progress (NAEP), also known as *The Nation's Report Card*, has served to provide reliable profiles of what students know and can do in key subject areas such as mathematics, reading, science, and writing.

In 2011, the National Assessment Governing Board, which governs NAEP under the direction of the U.S. Department of Education, adopted a national policy requiring all states to meet a minimum participation rate of 85% for students identified as SWD and ELL. In response to this policy, the Maryland State Department of Education (MSDE) required training for district staff on SWD and ELL accommodations for NAEP, an update to the language on the Individualized Education Program (IEP) regarding national and international assessments, and a letter detailing the policy's language for parents and families. Additionally, MSDE and the National Center for Education Statistics closely monitor NAEP exclusion rates during an assessment year.

Prior to 2015, Maryland's exclusion rates were above the national average for these particular subgroups. One of the contributing factors for the exclusion rates in Maryland is the number of students excluded from participation due to the read aloud accommodation. The Maryland State Assessment Program assesses the decoding of text and reading fluency separately from reading comprehension. Because of this, Maryland permits the use of the read aloud accommodation when assessing comprehension. The NAEP reading assessment, however, does not permit the use of this accommodation.

SUMMARY:

The National Assessment of Educational Progress (NAEP) assessments are administered in mathematics, reading, science, writing, the arts, civics, economics, geography, U.S. history, and Technology and Engineering Literacy. In 2017, NAEP began administering digitally-based assessments (DBA) for mathematics, reading, and writing, with additional subjects to be added in 2018 and 2019.

Roughly 2,000 students are sampled per content and grade level in each state. In Maryland, this represents roughly three percent of the student population in grades four and eight who take an hour long reading or an hour long mathematics assessment respectively.

NAEP assessment performance results are reported on the Nation's Report Card website (https://nces.ed.gov/nationsreportcard/). For the presentation to the state board, the NAEP results for national and statewide performance and exclusion rates are provided in the PowerPoint. The display of the results within the presentation aligns in both appearance and methodology with the data and information available on the Nation's Report Card website.

ACTION:

For information only. No action required.
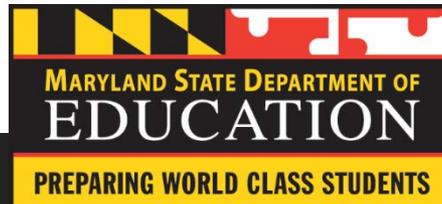
Purpose

To review:

- NAEP Sampling Procedure

- Maryland's NAEP Exclusion History

- NAEP Exclusion Rates and Performance

- NAEP 2015 State Comparisons

- 2017 NAEP Results Reporting Timeline

NAEP Sampling Process

- NAEP identifies schools whose students reflect the varying demographics of a specific jurisdiction, be it the nation, a state, or a district

- Schools are classified into groups, first by type of location (rural, suburban, and urban areas) and then by the racial/ethnic composition of the schools within those locations

- Schools are sorted by school-level results on state achievement tests to ensure that schools with varying levels of student performance are represented in the sample.

- Students are randomly selected for participation. Every student in a sampled school has an equal probability of being selected

- Psychometric weighting is applied to individual students within the sample to align with the population of the nation, state, and district

- NAEP Inclusion Policy defines specific inclusion goals for NAEP samples

- At the national, state, and district levels, the goal is to achieve 95 percent inclusion of all students selected for the NAEP sample, 85 percent inclusion of those identified as Students With Disability (SWD) or English Learners (EL)

Resources: https://nces.ed.gov/nationsreportcard/about/samplesfaq.aspx
https://www.nationsreportcard.gov/focus_on_naep/#/reports/sampling

NAEP Maryland Sample Size 2015

	4th Grade Maryland Sample Size 2015	8th Grade Maryland Sample Size 2015
Total Enrollment	69,200 (100%)	64,500 (100%)
Sample Size per Content	3,100 (5%)	3,000 (5%)
Baltimore City Sample	1,100	1,100
State Target/Weighted Sample	2,110 (3%)	2,010 (3%)
Students with Disabilities	316 (15%)	261 (13%)
English Learners	147 (7%)	60 (3%)
FARMS	950 (45%)	905 (45%)

Counts per Content by District Sampled in 2015

- Each school tests roughly 20 students per content

District Name	Total District Population	Grade 4		Grade 8	
		# of Schools	# of Students	# of Schools	# of Students
Allegany County	8,702	2	40	2	40
Anne Arundel County	81,379	8	160	14	280
Baltimore City	82,354	57	1140	54	1080
Baltimore County	112,139	19	380	15	300
Calvert County	15,950	2	40	4	80
Caroline County	5,705	0	0	0	0
Carroll County	25,255	1	20	3	60
Cecil County	15,633	4	80	3	60
Charles County	26,390	1	20	2	40
Dorchester County	4,816	1	20	0	0
Frederick County	41,317	4	80	6	120
Garrett County	3,833	0	0	0	0
Harford County	37,426	9	180	4	80
Howard County	55,626	5	100	6	120
Kent County	2,001	2	40	0	0
Montgomery County	159,010	13	260	16	320
Prince George's County	130,814	19	380	13	260
Queen Anne'S County	7,751	1	20	1	20
St. Mary's County	18,067	1	20	1	20
Somerset County	2,958	0	0	0	0
Talbot County	4,593	2	40	1	20
Washington County	22,545	4	80	1	20
Wicomico County	14,889	1	20	2	40
Worcester County	6,667	1	20	1	20
State Totals	885,820	157	3140	149	2980

Maryland's Exclusion Background

Prior to 2012

- With the introduction of the MSPAP and MSA, the Maryland Assessment program assessed decoding and comprehension separately

- When assessing comprehension, read aloud accommodations were introduced to the Maryland Individualized Education Program (IEP)

- NAEP's accommodation policy of not permitting certain accommodations on the test conflicts with certain accommodations offered within the Maryland State Assessment program

- The Maryland Accommodations Manual (MAM) notes that students must receive appropriately identified accommodations on all statewide assessments in the Maryland State Assessment program according to an IEP, 504 Plan, or EL Plan. This was interpreted to include NAEP

2012 to Present

- IEP language was updated to state: "A student may be asked to participate in National or International Assessments. Only allowable accommodations on National/International assessments are permitted."

Non-Allowable NAEP Accommodations

Accommodations that students with disabilities in Maryland might have identified on an IEP that are not permitted on the NAEP assessment:

Mathematics

- Talking or Braille calculator for computation tasks
- Abacus, arithmetic tables, graph paper, or other graphic organizer

Reading

- Selected reading of the test
- Read aloud or verbatim reading of the entire test
- Screen Reading software of the entire test

Timing

- Takes test session over multiple test sessions or several class periods

Exclusion Rates

2003-2015 NAEP Exclusion Rates 4th Grade Reading
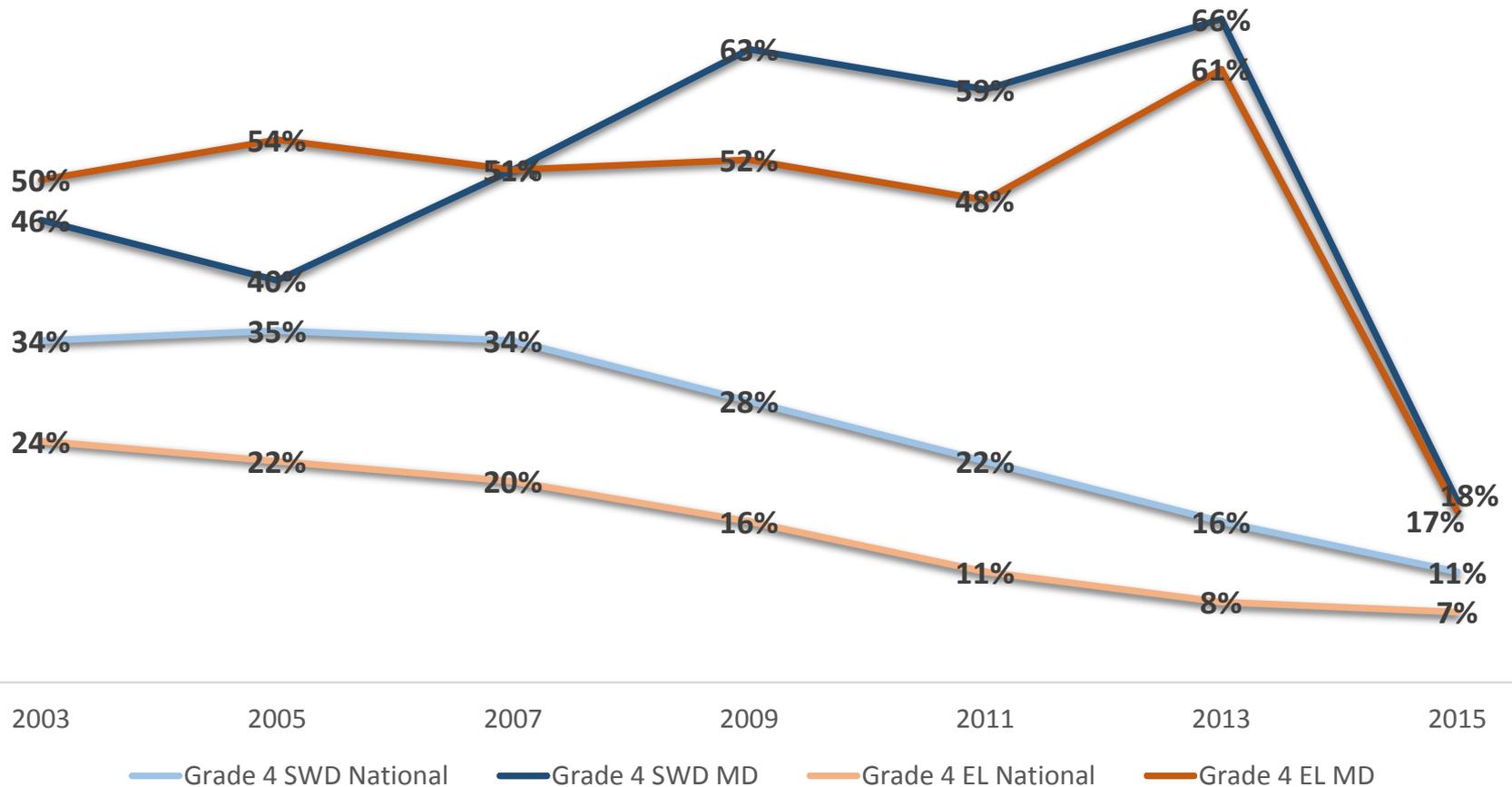
2003-2015 NAEP Exclusion Rates
8th Grade Reading

Note: ---------- Reporting standards not met in 2005 for EL student group. Sample size insufficient to permit a reliable estimate.
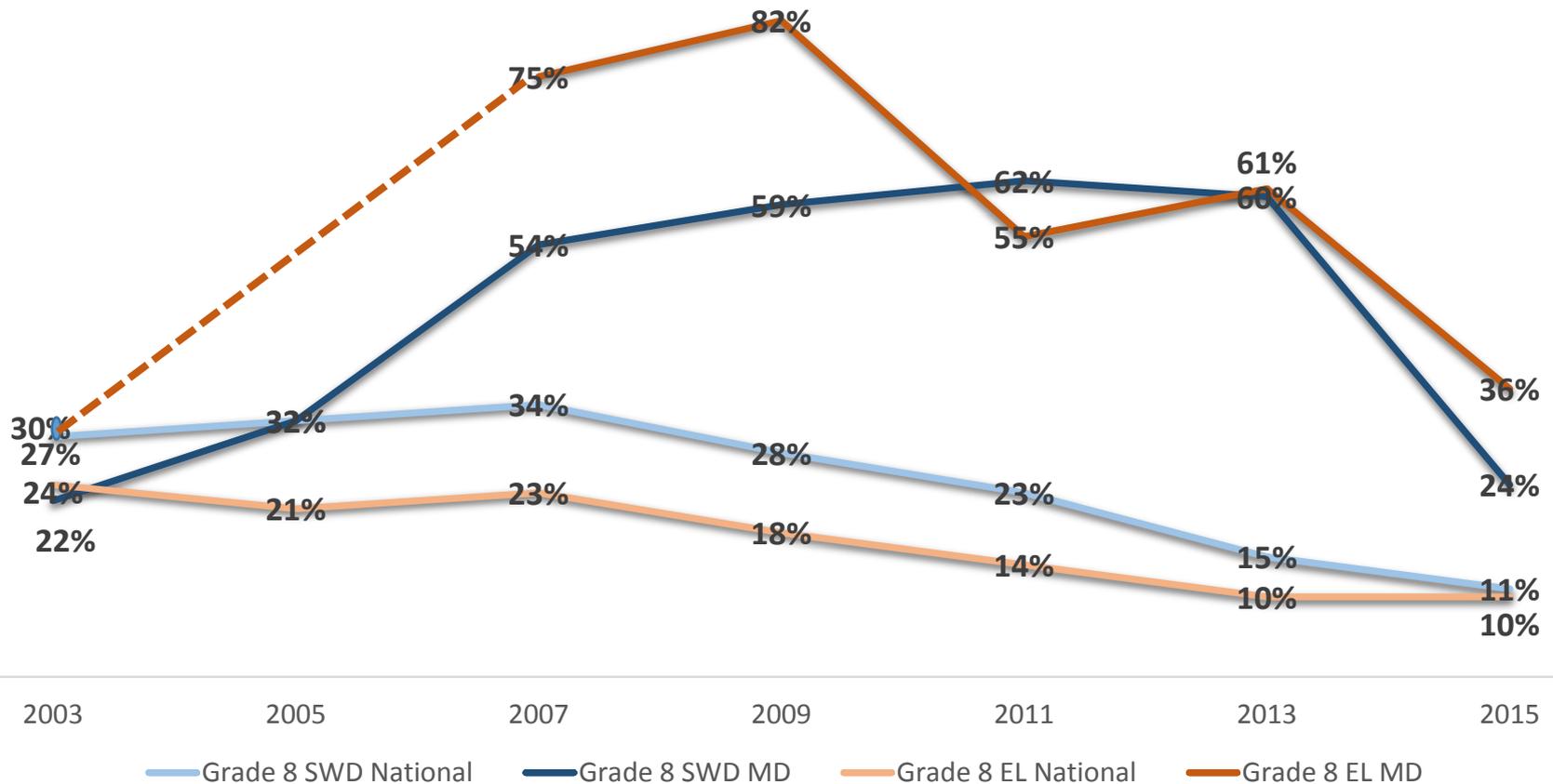
2003-2015 NAEP Exclusion Rates
4th Grade Mathematics
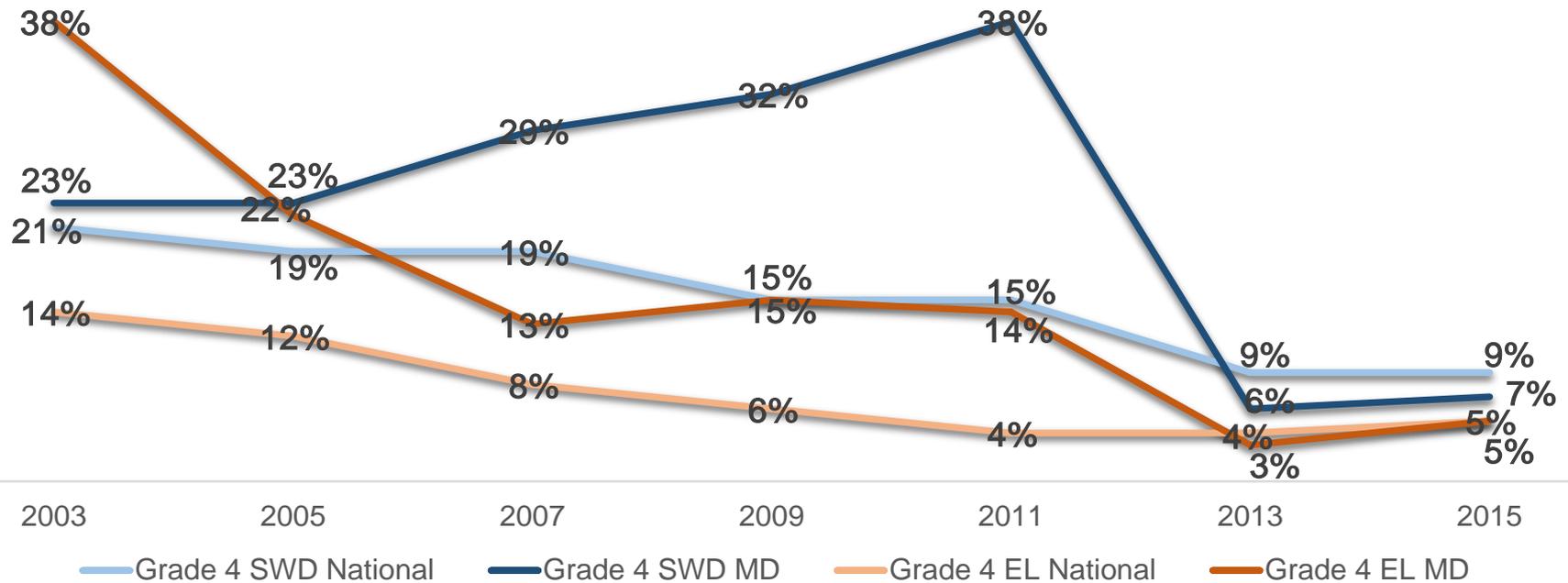
2003-2015 NAEP Exclusion Rates
8th Grade Mathematics
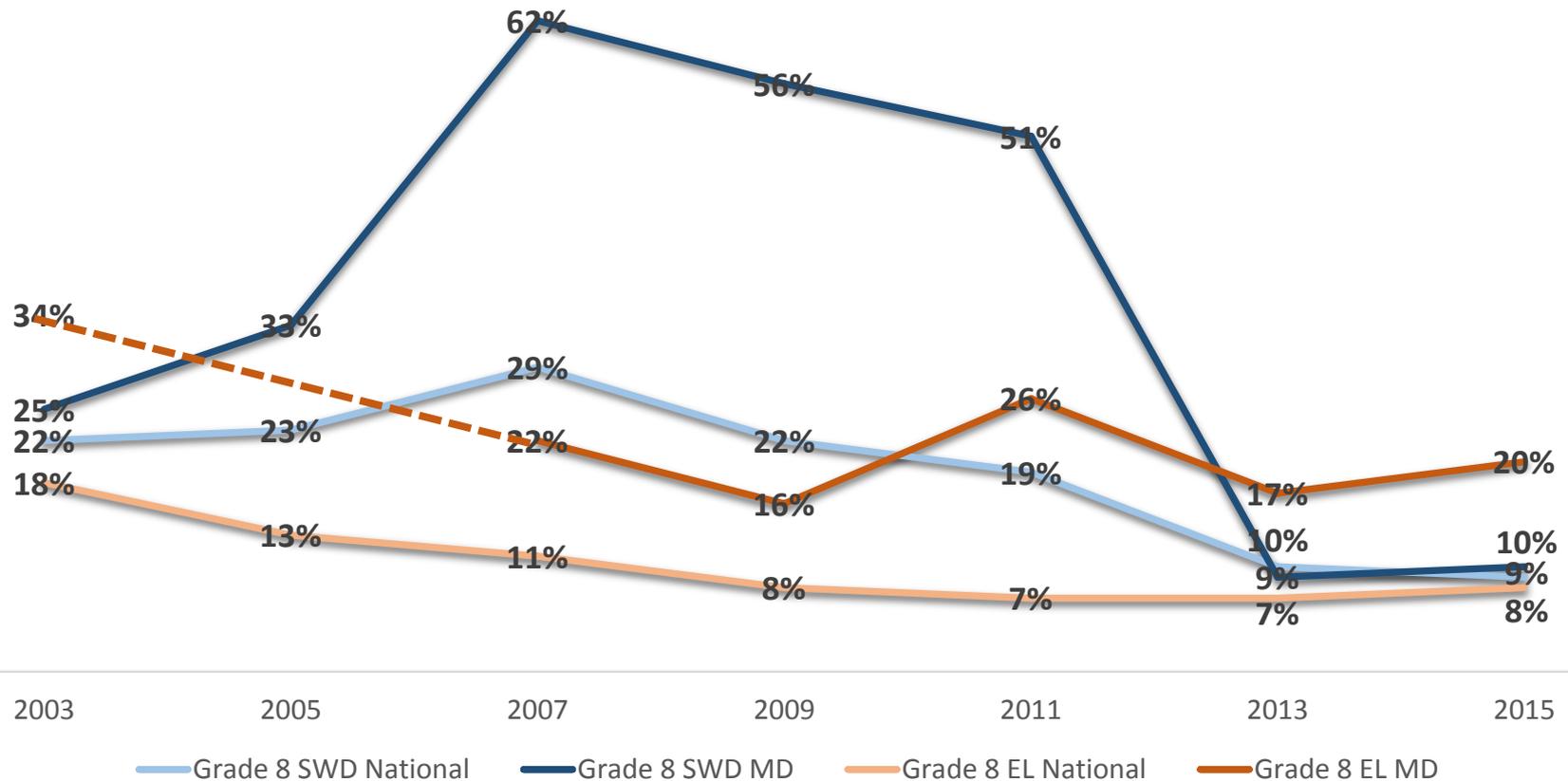
Grade 8 SWD MD: 25%, 33%, 62%, 56%, 51%, 10%, 9%
Grade 8 SWD National: 22%, 23%, 29%, 22%, 19%, 9%, 10%
Grade 8 EL National: 18%, 13%, 11%, 8%, 7%, 7%, 8%
Grade 8 EL MD: 34%, 22%, 16%, 26%, 17%, 20%

2003 2005 2007 2009 2011 2013 2015

—— Grade 8 SWD National   —— Grade 8 SWD MD   —— Grade 8 EL National   —— Grade 8 EL MD

Note: - - - - - Reporting standards not met in 2005 for EL student group. Sample size insufficient to permit a reliable estimate.

NAEP Performance

Impacts to Performance on NAEP

When reviewing NAEP performance data keep in mind:

- NAEP performance is based on a 3% sample of the state

- The test is relatively short averaging an hour of testing time per content

- Students take only one content

- The test is meant to provide a high level summary of student mastery of subject specific content

- There is misalignment between what is taught in Maryland and what is assessed on NAEP. Maryland adopted the Maryland College and Career Ready Standards based on the Common Core in 2010 and transitioned its assessment program in 2014. The NAEP assessed content remains unchanged since 1990

NAEP Achievement Levels

Figure 1.3 Policy definitions of the three NAEP achievement levels

| Achievement Levels	
Basic	This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
Proficient	This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
Advanced	This level signifies superior performance.

SOURCE: National Assessment Governing Board. (2002). *Reading Framework for the 2003 National Assessment of Educational Progress*. Washington, DC: Author.

2003- 2015 NAEP Performance Percent At or Above Proficient Grade 4 Reading

Line graph showing NAEP Grade 4 Reading performance from 2003-2015.

- MD Grade 4 Read: 2003: 32%, 2005: 32%, 2007: 36%, 2009: 37%, 2011: 43%, 2013: 45%, 2015: 37%
- Nation Grade 4 Read: 2003: 30%, 2005: 30%, 2007: 32%, 2009: 32%, 2011: 32%, 2013: 34%, 2015: 35%

Legend: ▬ MD Grade 4 Read   ▬ Nation Grade 4 Read
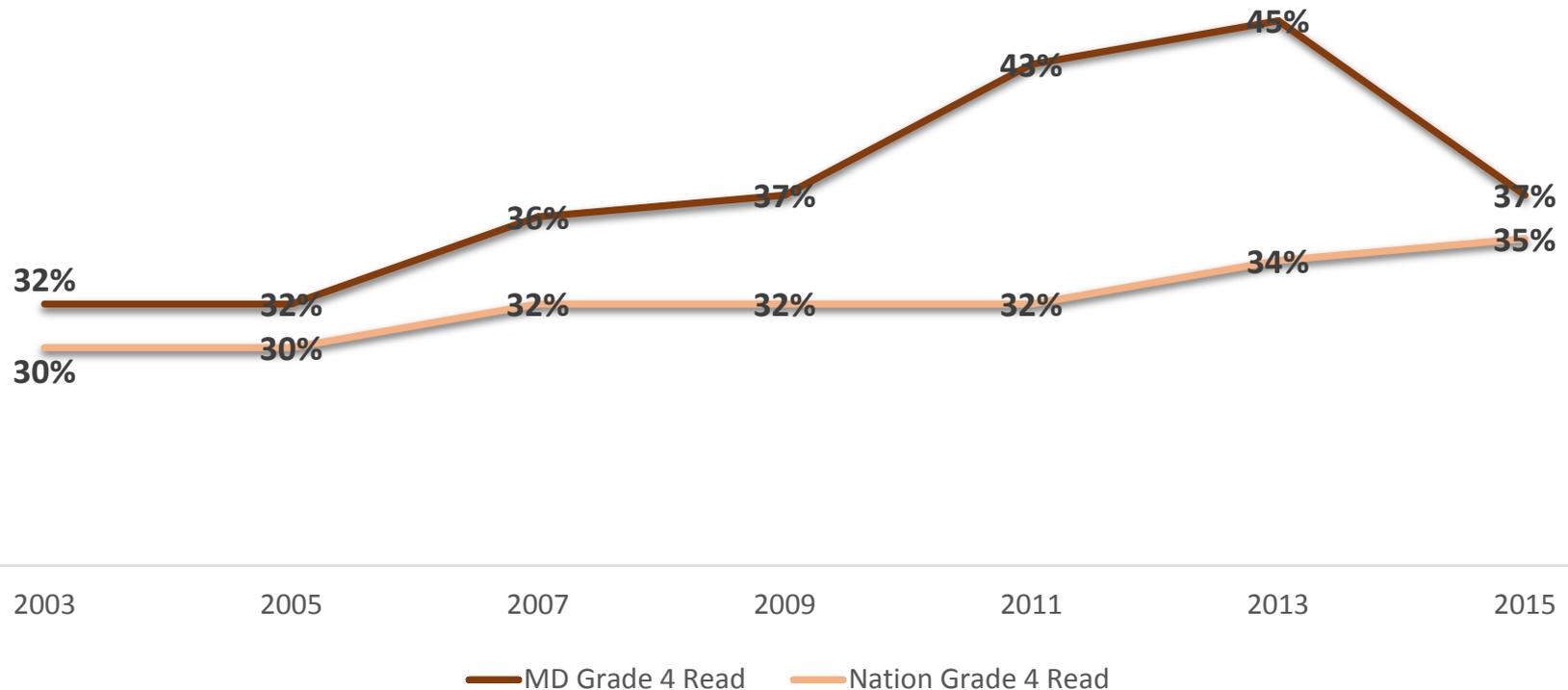
2003- 2015 NAEP Performance Percent At or Above Proficient Grade 4 Mathematics
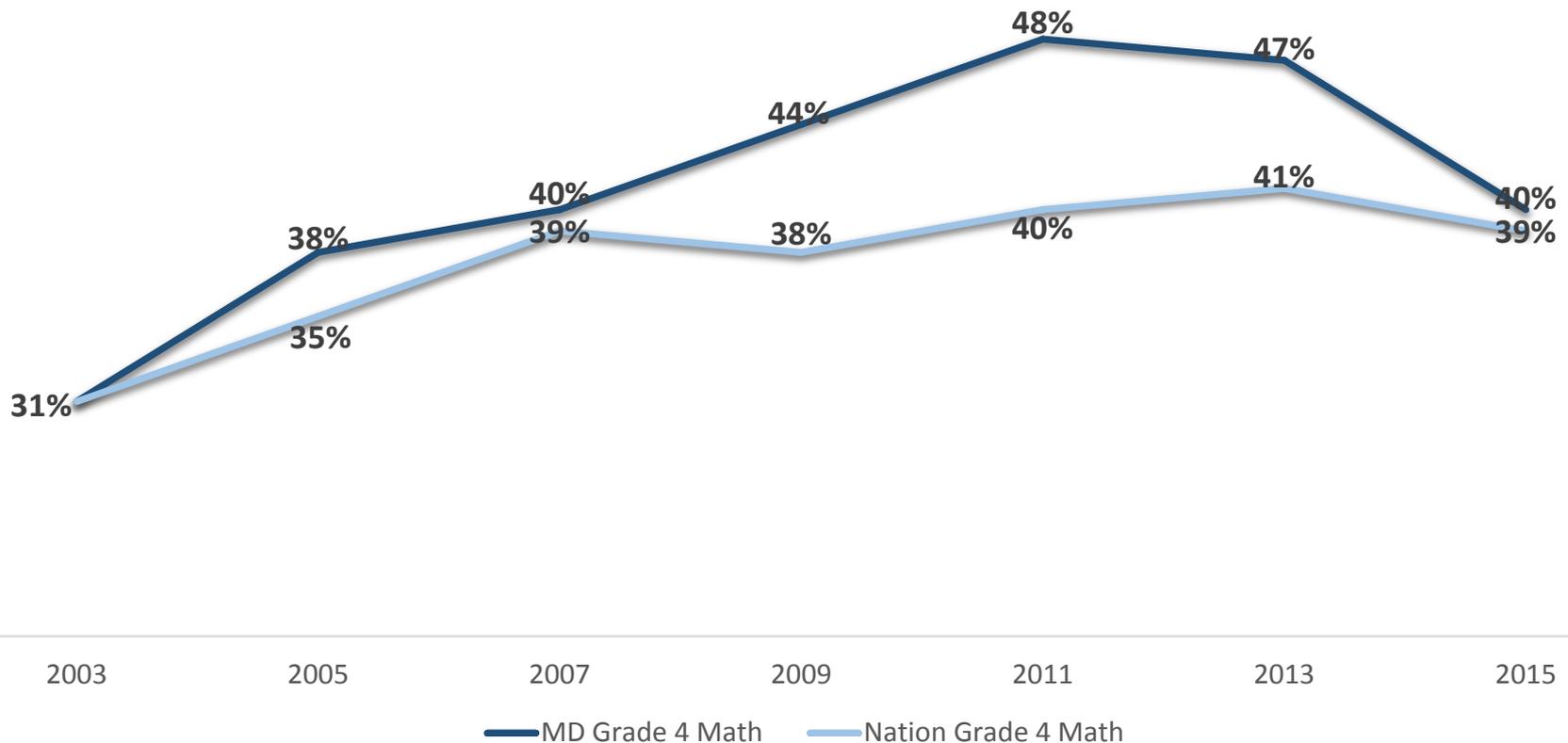
2003- 2015 NAEP Performance Percent At or Above Proficient Grade 8 Reading
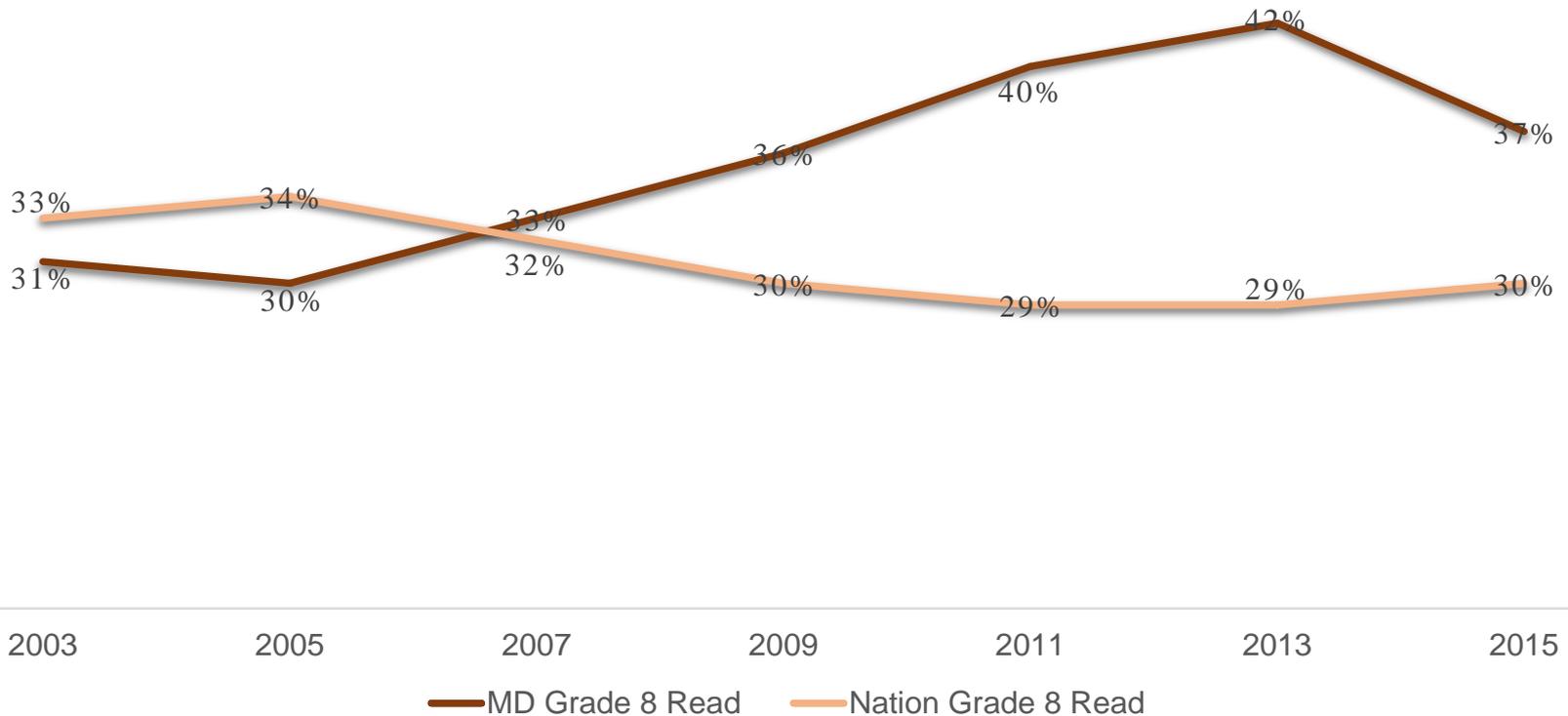
2003- 2015 NAEP Performance Percent At or Above Proficient Grade 8 Mathematics

2003   2005   2007   2009   2011   2013   2015

MD Grade 8 Math   Nation Grade 8 Math
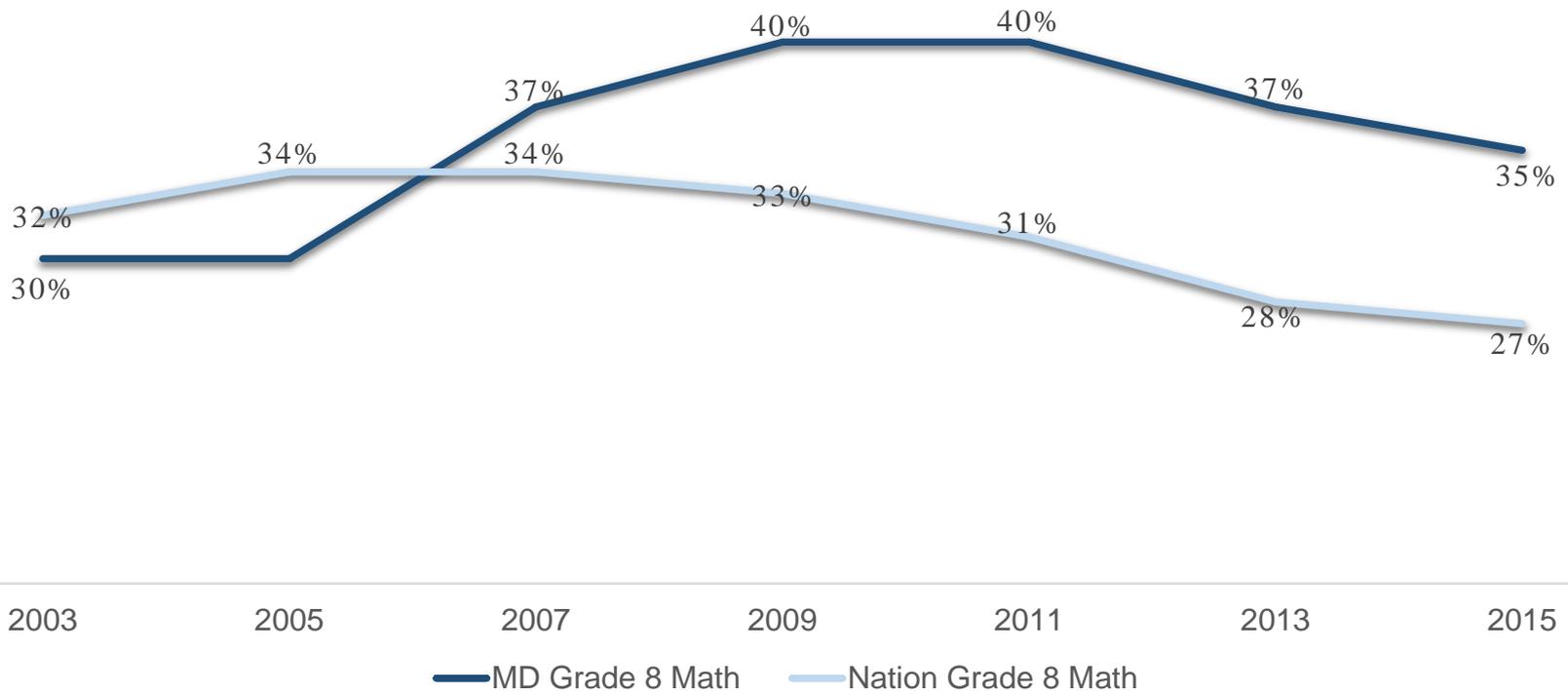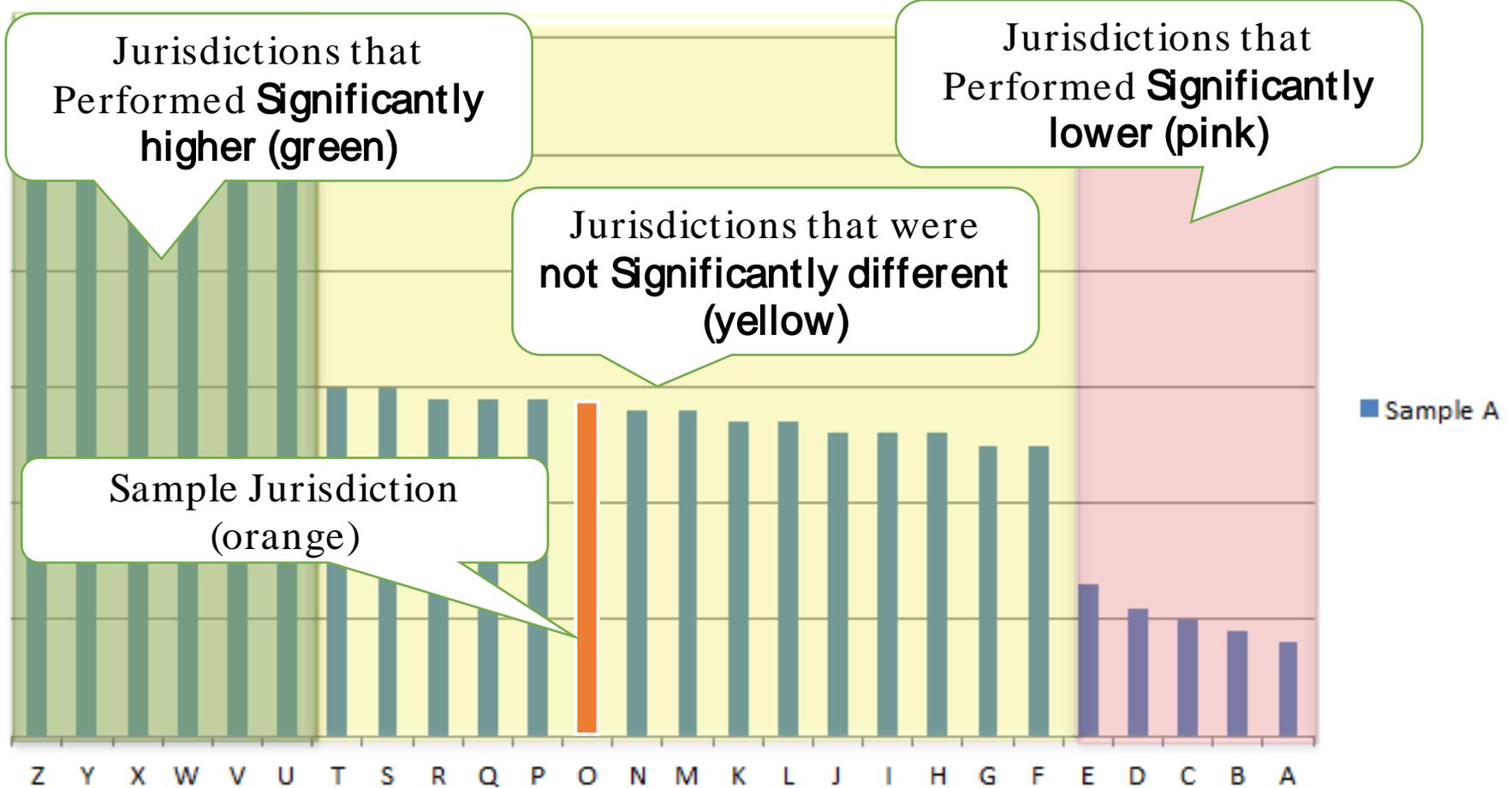
State Comparisons for At or Above Proficiency in 2015

NAEP Assessment	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Maryland's Percentage at or above Proficient
Grade 4 Reading	7	30	13	37%
Grade 4 Mathematics	12	25	13	40%
Grade 8 Reading	5	26	19	37%
Grade 8 Mathematics	8	25	17	35%

State Comparisons for Student Groups At or Above Proficiency Grade 4 Reading in 2015

Race/ Ethnicity	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
White	2	19	29	N/A
Black	1	39	1	9
Hispanic	2	45	0	3
Asian/Pacific Islander	0	25	3	22
American Indian/Alaska Native	N/A	N/A	N/A	N/A
Two or More Races	0	32	1	17

https://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx

State Comparisons for Student Groups At or Above Proficiency Grade 4 Reading in 2015

Student group	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
Eligible for FARMS	14	35	0	1
Not Eligible for FARMS	2	39	8	1
Students with a Disability	0	50	0	N/A
Not Students with a Disability	11	28	11	N/A
English Learners	1	35	0	14
Not English Learners	7	37	6	N/A

https://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx

State Comparisons for Student Groups At or Above Proficiency Grade 4 Mathematics in 2015

Race/ Ethnicity	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
White	1	26	23	N/A
Black	0	39	3	8
Hispanic	3	43	1	3
Asian/Pacific Islander	0	24	6	20
American Indian/Alaska Native	N/A	N/A	N/A	N/A
Two or More Races	0	31	0	19

https://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx

State Comparisons for Student Groups At or Above Proficiency Grade 4 Mathematics in 2015

Student group	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
Eligible for FARMS	22	25	2	1
Not Eligible for FARMS	8	34	7	1
Students with a Disability	0	45	5	N/A
Not Students with a Disability	17	24	9	N/A
English Learners	2	35	1	12
Not English Learners	10	30	10	N/A

State Comparisons for Student Groups At or Above Proficiency Grade 8 Reading in 2015

Race/ Ethnicity	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
White	1	24	25	N/A
Black	1	34	7	8
Hispanic	0	45	1	4
Asian/Pacific Islander	0	28	8	14
American Indian/Alaska Native	N/A	N/A	N/A	N/A
Two or More Races	0	24	0	26

https://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx

State Comparisons for Student Groups At or Above Proficiency Grade 8 Reading in 2015

Student group	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
Eligible for FARMS	5	42	2	1
Not Eligible for FARMS	1	35	13	1
Students with a Disability	0	46	4	N/A
Not Students with a Disability	6	24	20	N/A
English Learners	0	26	0	24
Not English Learners	5	27	18	N/A

State Comparisons for Student Groups At or Above Proficiency Grade 8 Mathematics in 2015

Race/Ethnicity	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
White	3	21	26	N/A
Black	0	36	3	11
Hispanic	0	47	0	3
Asian/Pacific Islander	1	21	6	18
American Indian/Alaska Native	N/A	N/A	N/A	N/A
Two or More Races	0	23	0	27

https://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx

State Comparisons for Student Groups At or Above Proficiency Grade 8 Mathematics in 2015

Student group	Jurisdictions that Performed Significantly higher than Maryland	Jurisdictions that were not Significantly different from Maryland	Jurisdictions that Performed Significantly lower than Maryland	Reporting Standards Not Met
Eligible for FARMS	20	27	2	1
Not Eligible for FARMS	3	35	11	1
Students with a Disability	0	42	7	1
Not Students with a Disability	7	27	16	N/A
English Learners	0	26	0	24
Not English Learners	10	25	15	N/A

2017 NAEP Reporting Timeline

- NAEP 2017 results are delayed due to NAEP transitioning to online testing

- Maryland's NAEP Performance and Exclusion results for 2017 will be released in late January – early February, 2018

- Depending on the actual release date, MSDE is planning to present the results during the February meeting