MARYLAND STATE DEPARTMENT OF EDUCATION
EQUITY AND EXCELLENCE

Mohammed Choudhury
State Superintendent of Schools

To: Members of the State Board of Education

From: Mohammed Choudhury, State Superintendent of Schools

Date: January 24, 2023

Subject: Spring 2022 English Language Arts and Mathematics Assessment Results, Part 2

Purpose

The purpose of this item is to provide an update on the Spring 2022 English language arts and mathematics assessment results.

Background/Historical Perspective

The Every Student Succeeds Act (ESSA) requires states to assess students annually in grades 3-8 and once in high school in English Language Arts (ELA), mathematics, and science. The Maryland Comprehensive Assessment Program (MCAP) provides information to families, educators and the public on progress on the Maryland state content standards and fulfills federal and state assessment requirements.

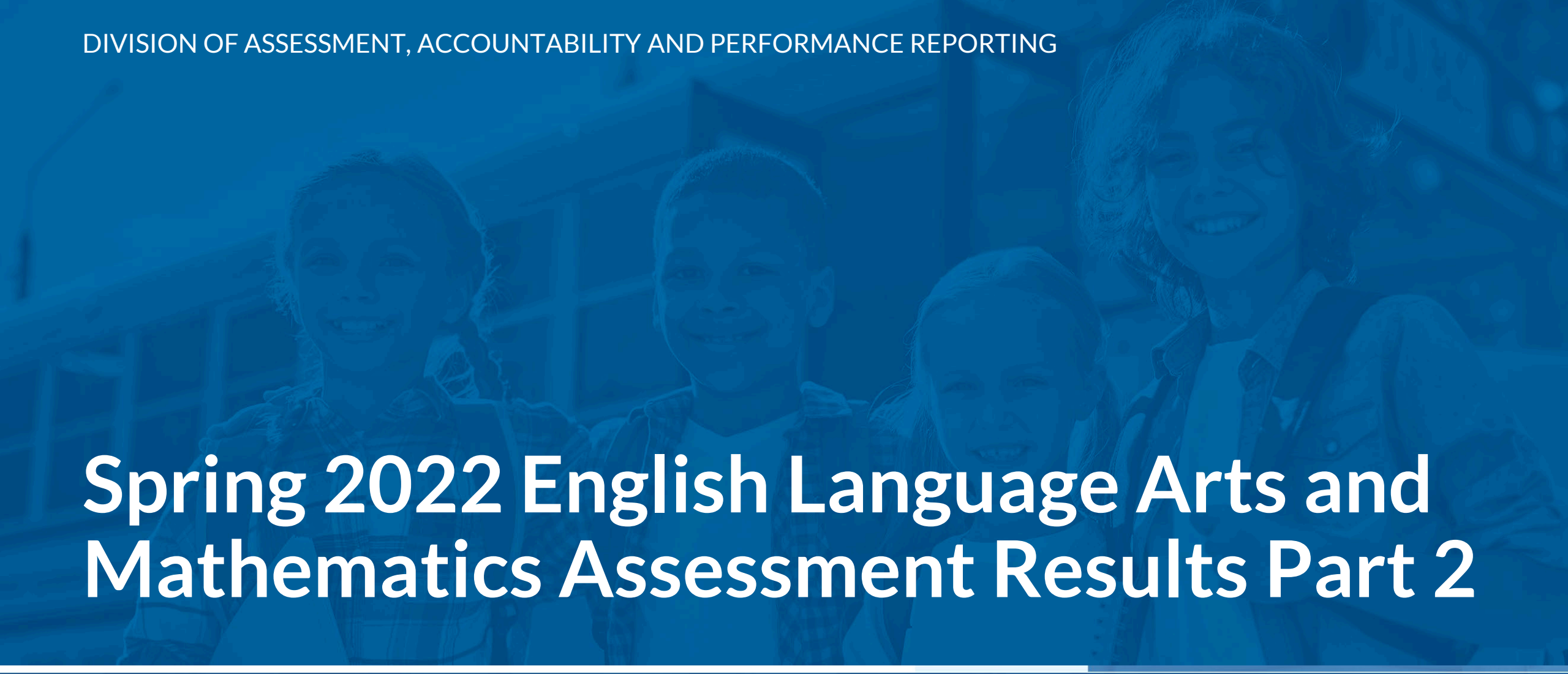
Executive Summary

Results of the Spring 2022 English language arts and mathematics assessments, including student group data and Local Education Agency (LEA) results are presented. The presentation also includes an analysis of the performance of cohorts of students over time.

Action

No action is required; this information is for discussion only.

DIVISION OF ASSESSMENT, ACCOUNTABILITY AND PERFORMANCE REPORTING



Spring 2022 English Language Arts and Mathematics Assessment Results Part 2

MARYLAND STATE BOARD OF EDUCATION | January 24, 2022

MARYLAND STATE DEPARTMENT OF EDUCATION
EQUITY AND EXCELLENCE

Presented By | Chandra Haislet, Assistant State Superintendent, Division of Assessment, Accountability and Performance Reporting

PRESENTATION OUTLINE

1. English Language Arts Results
2. Mathematics Results
3. Reporting
4. Cohort Analysis

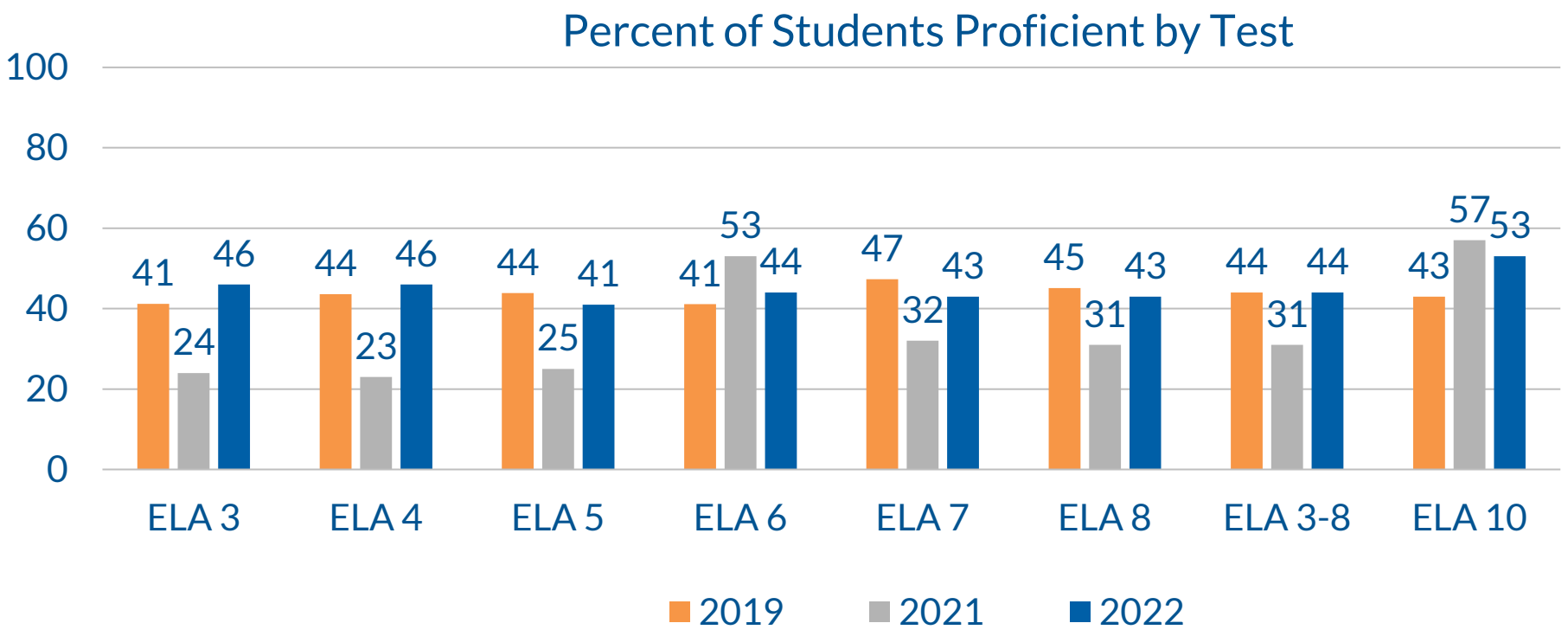
1. **English Language Arts Results**
2. Mathematics Results
3. Reporting
4. Cohort Analysis

English Language Arts Results

The Maryland Comprehensive Assessment Program Part 2 release of spring 2022 English language arts data.

English Language Arts Assessment Trend

Maryland students have returned to pre-pandemic performance with the percent of students proficient from SY 2021-2022 similar to or better than the performance from SY 2018-2019 across nearly all tests.

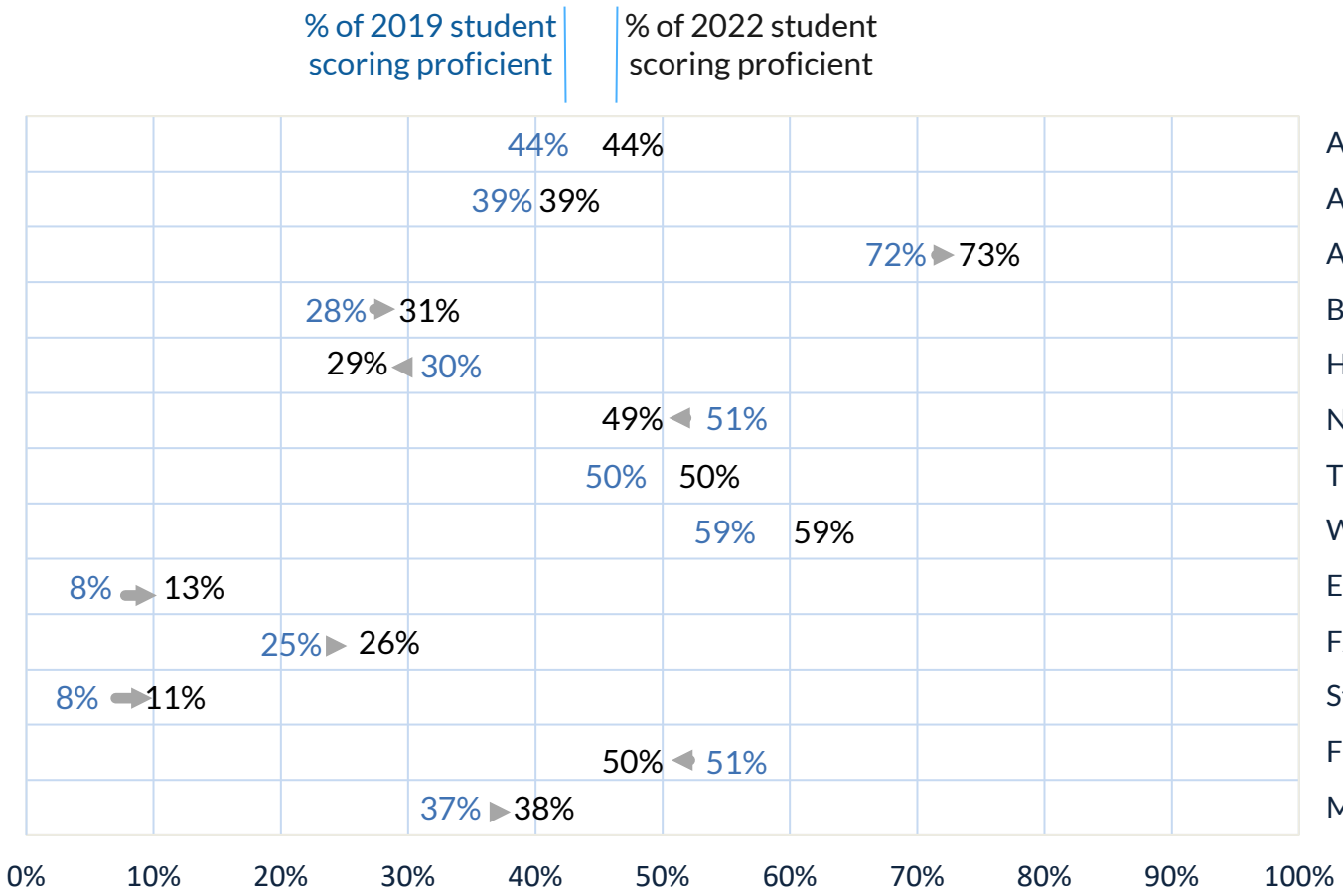


Test	Tested Count 2019	Tested Count 2021	Tested Count 2022
ELA 3	66,062	61,579	62,534
ELA 4	67,978	63,364	62,971
ELA 5	69,513	60,888	64,278
ELA 6	67,866	63,455	62,910
ELA 7	65,821	65,187	64,444
ELA 8	64,166	57,816	66,265
ELA 3-8	401,406	372,289	383,402
ELA 10	88,820	56,023	68,823

Note: SY 2020-2021 assessments were shortened assessments taken in Early Fall of 2021. SY 2021-2022 data as of December 19, 2022.

English Language Arts Grade 3-8 Tests by Student Group

Statewide, all student groups experienced a rebound in proficiency rates in ELA grade 3-8 tes in SY 2021-2022 as compared to the SY 2018-2019 results.

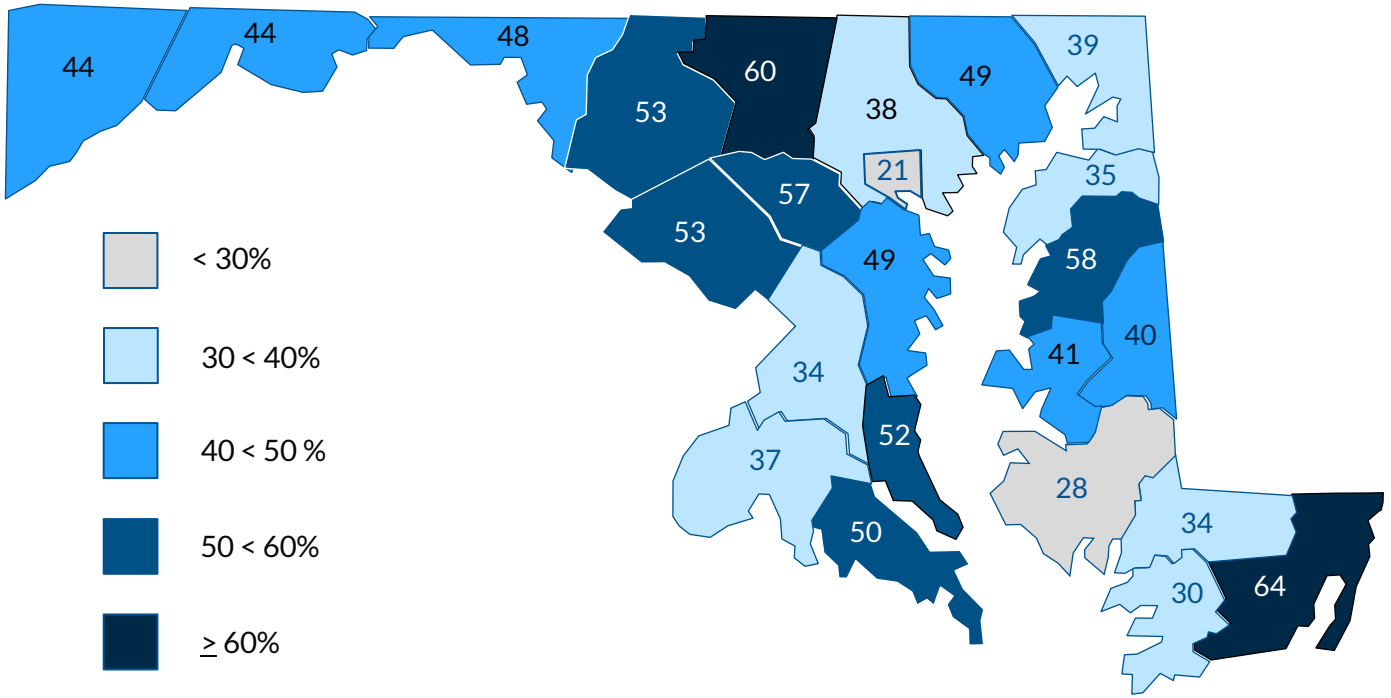


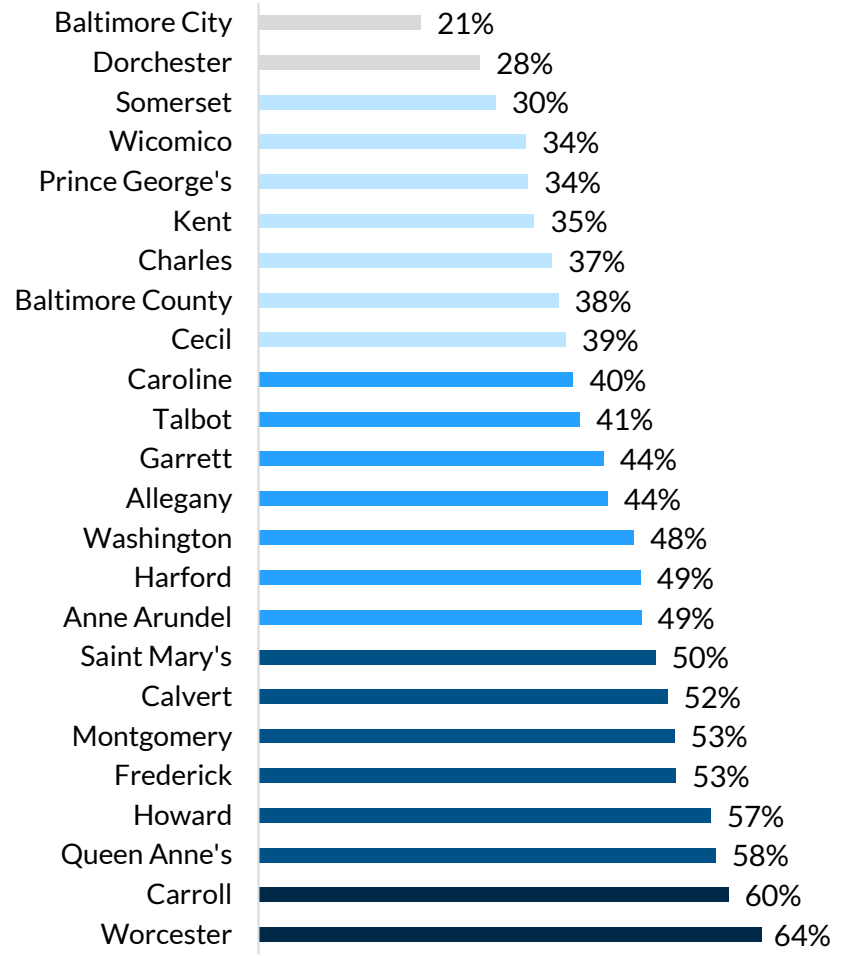
Student Groups	2019 Tested Count	2022 Tested Count
All Students	401,406	383,402
American Indian/Alaska Native	1,102	1,004
Asian	26,455	26,012
Black/African American	135,248	126,293
Hispanic/Latino	72,708	79,407
Native Hawaiian/ Pacific Islander	635	539
White	146,113	129,711
Two or more races	19,145	20,214
Students with Disabilities	45,812	43,761
English Learners	34,250	43,310
FARMs	176,927	171,943
Female	196,444	187,749
Male	204,962	195,394

Note: SY 2021-2022 data as of December 19, 2022.

English Language Arts Grade 3-8 Tests by LEA, SY 2021-2022

Statewide, the percentage of students scoring proficient in ELA grade 3-8 tests is 44%. LEAs vary from a low of 21% to a high of 64% in proficiency percentage.

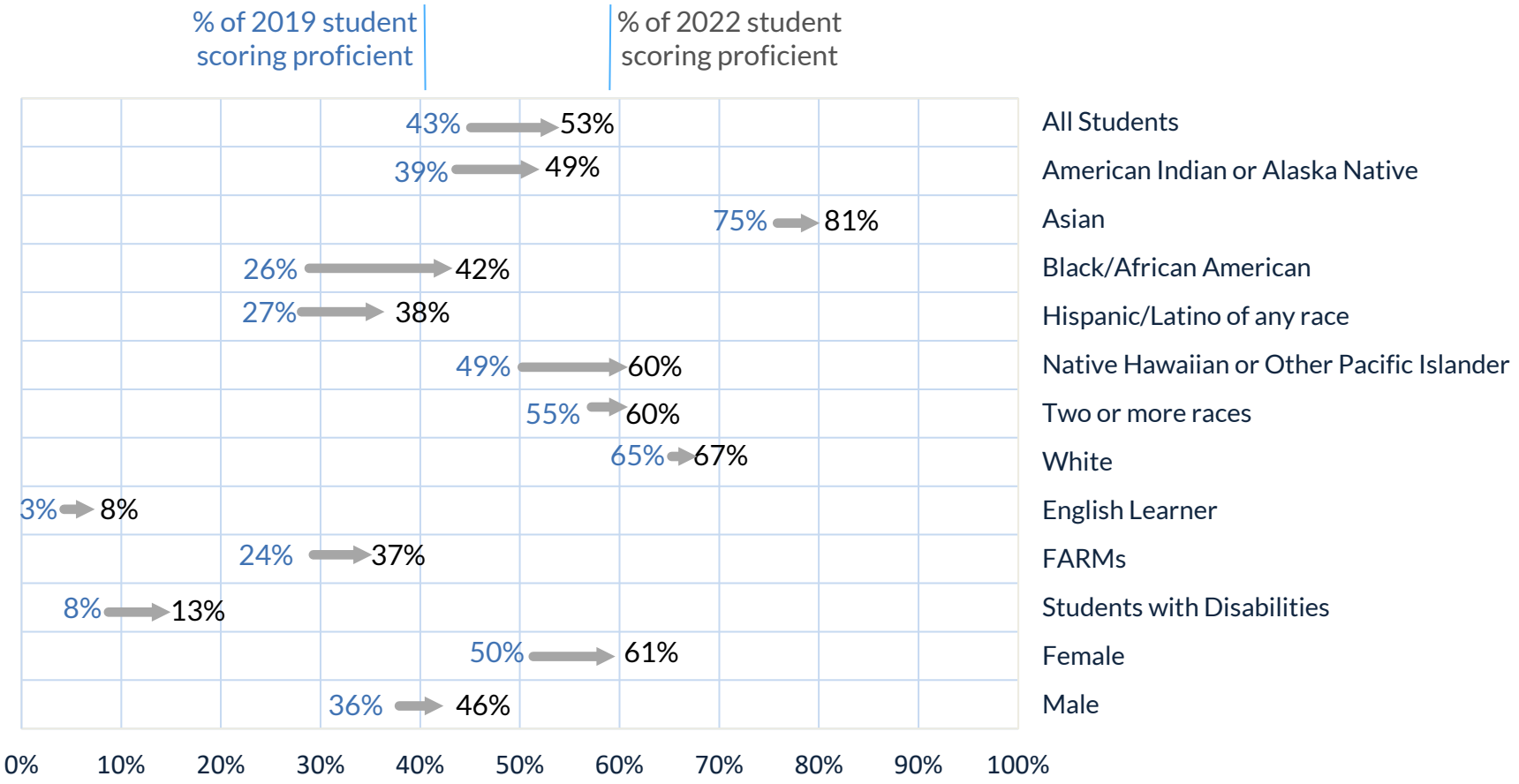




Note: SY 2021-2022 data as of December 19, 2022.

English 10 Test by Student Group

In Maryland, all student groups improved their performance on the English 10 test when comparing SY 2018-2019 to SY 2021-2022 results.

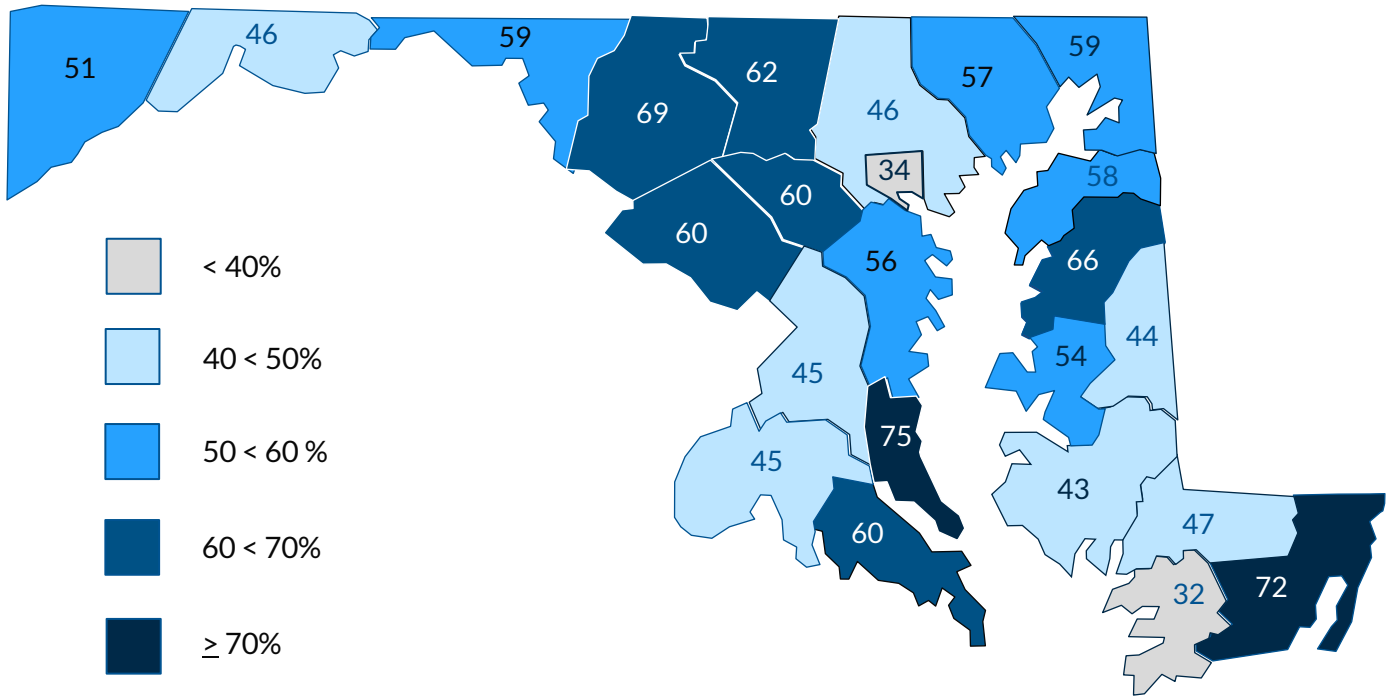


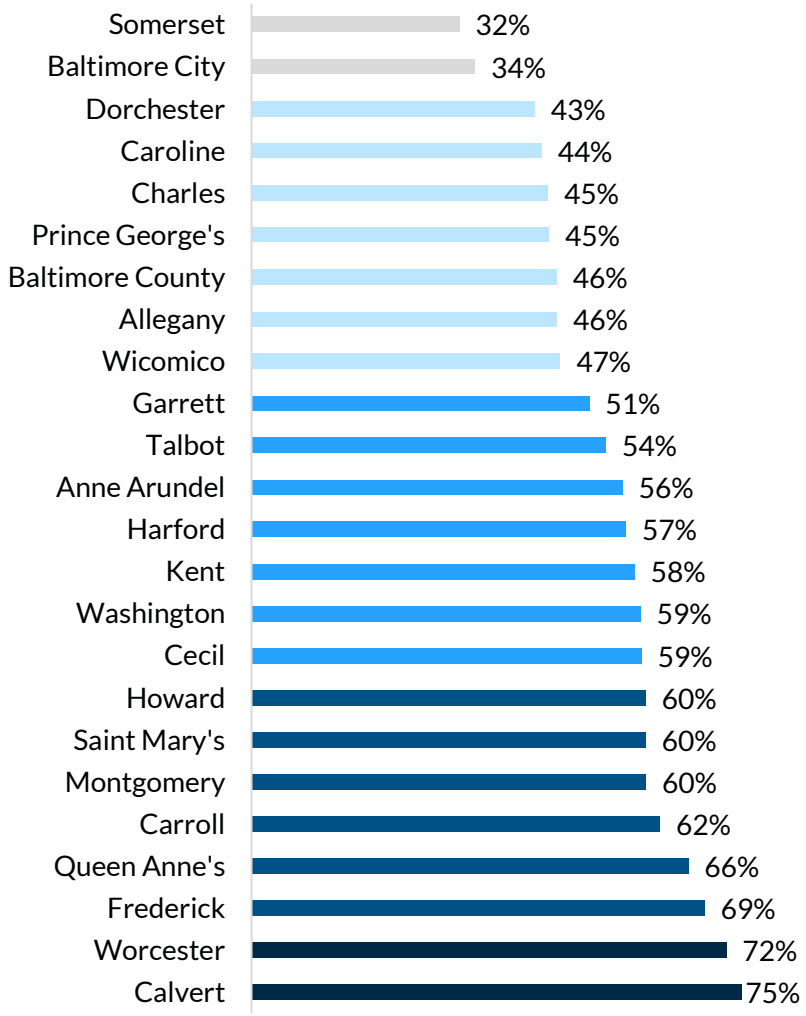
Student Groups	2019 Tested Count	2022 Tested Count
All Students	88,820	68,823
American Indian/Alaska Native	210	174
Asian	5,056	4,667
Black/African American	34,489	23,219
Hispanic/Latino	16,097	13,828
Native Hawaiian/ Pacific Islander	99	111
White	28,661	23,738
Two or more races	3,398	3,040
Students with Disabilities	12,013	7,008
English Learners	9,056	5,292
FARMs	36,241	27,799
Female	41,614	33,724
Male	47,206	35,015

Note: SY 2021-2022 data as of December 19, 2022.

English 10 Test by LEA, SY 2021-2022

Statewide, the percentage of students scoring proficient in the English 10 test was 53% for SY 2021-2022. LEAs vary from a low of 32% to a high of 75% in proficiency percentage.





Note: SY 2021-2022 data as of December 19, 2022.

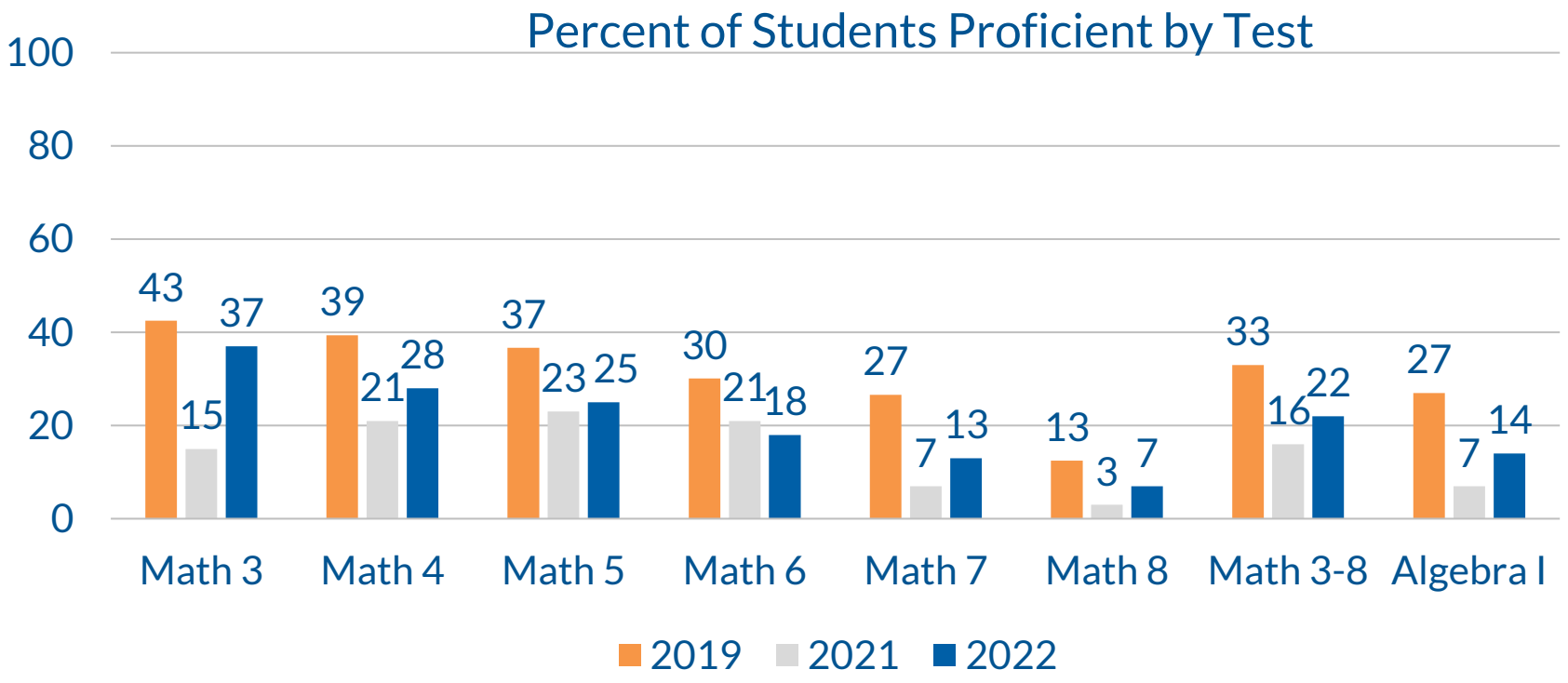
1. English Language Arts Results
2. **Mathematics Results**
3. Reporting
4. Cohort Analysis

Mathematics Results

The Maryland Comprehensive Assessment Program Part 2 release of spring 2022 mathematics data.

Mathematics Assessment Trends

In Maryland, most grades in mathematics have improved as compared to the Early Fall 2021 assessments. Students have not returned to pre-pandemic performance outcomes when comparing to SY 2018-2019.

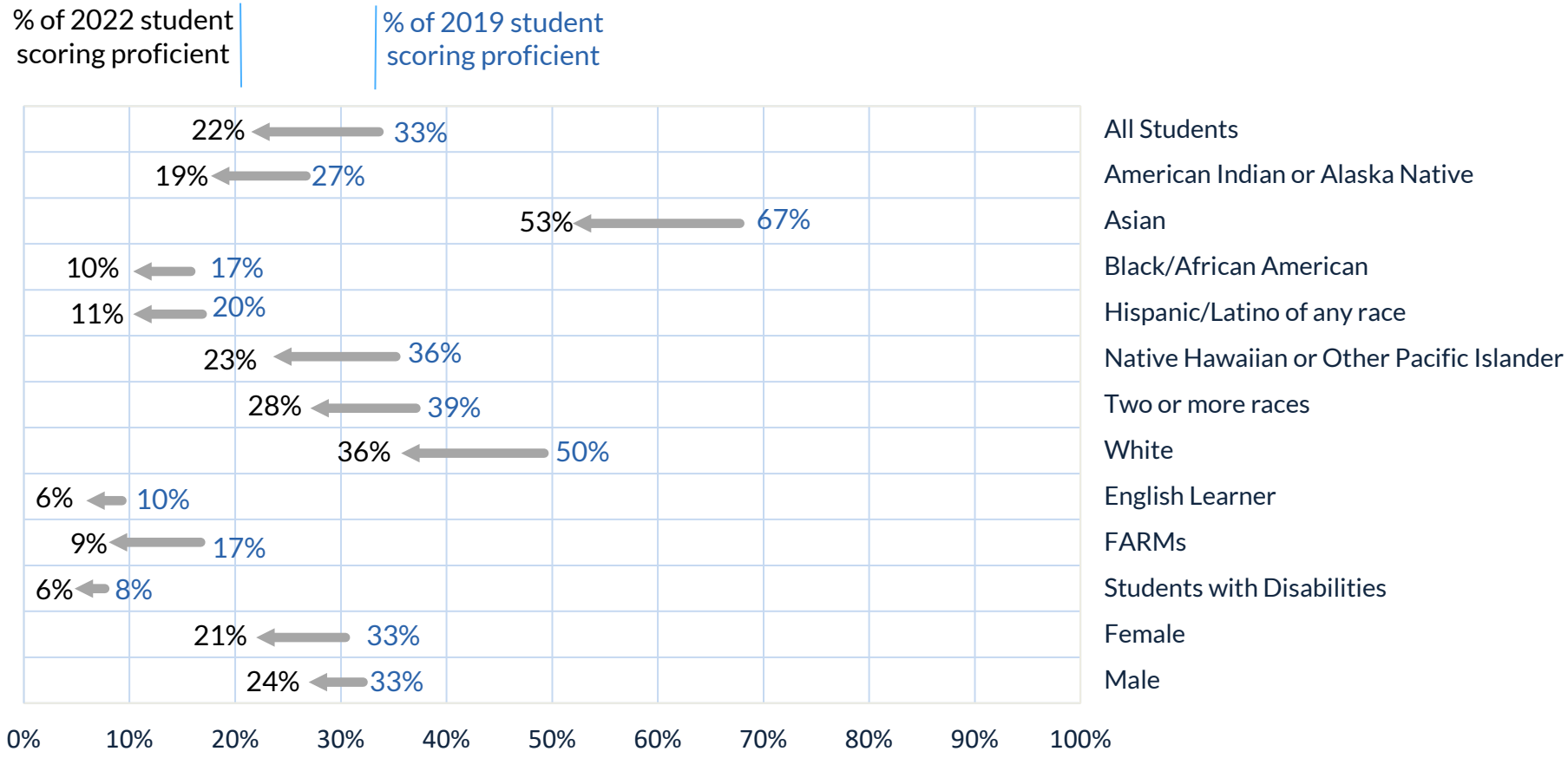


Test	Tested Count 2019	Tested Count 2021	Tested Count 2022
Math 3	66,364	61,706	63,246
Math 4	68,307	63,336	63,730
Math 5	69,786	60,827	64,979
Math 6	67,762	62,902	63,178
Math 7	58,120	56,078	56,279
Math 8	36,356	33,658	41,265
Math 3-8	366,695	338,507	352,677
Algebra I	98,988	59,623	76,608

Note: SY 2020-2021 assessments were shortened assessments taken in Early Fall of 2021. SY 2021-2022 data as of December 19, 2022.

Mathematics Grade 3-8 Tests by Student Group

Statewide, all student groups experienced a decrease in proficiency rates in math grade 3-8 tests SY 2021-2022 when comparing to SY 2018-2019 results.

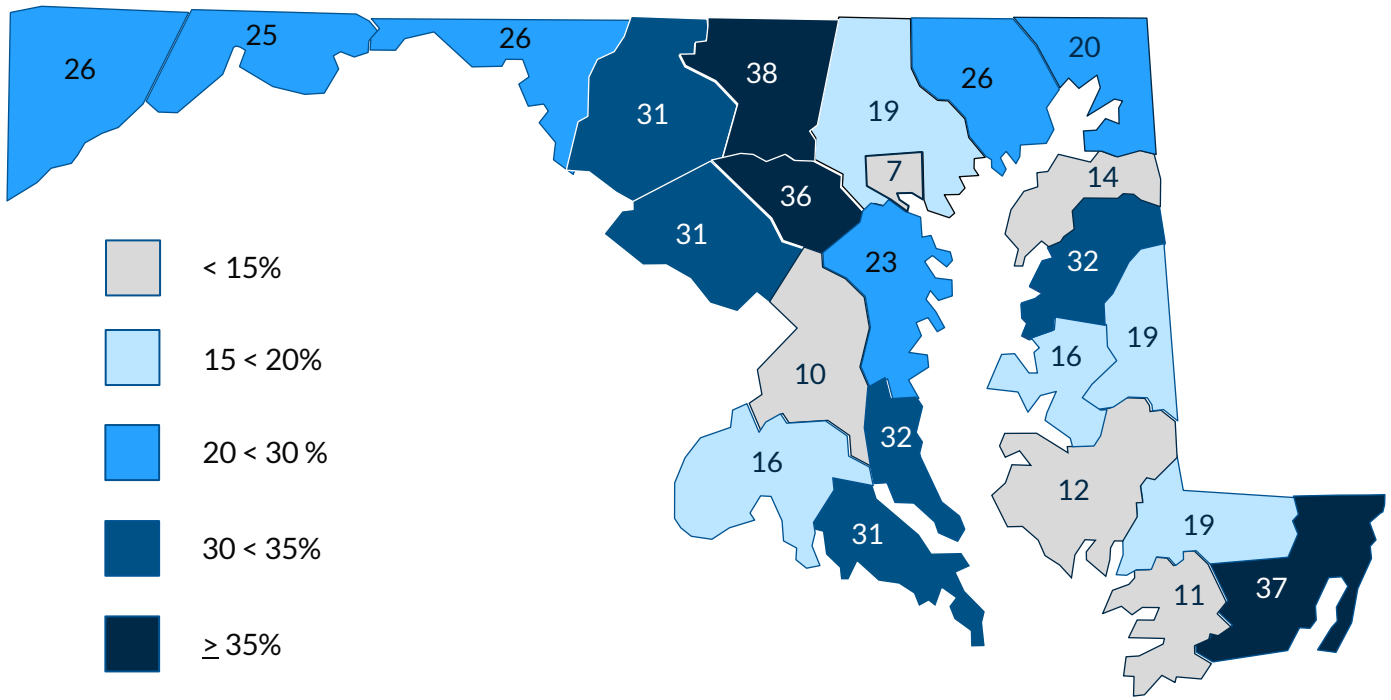


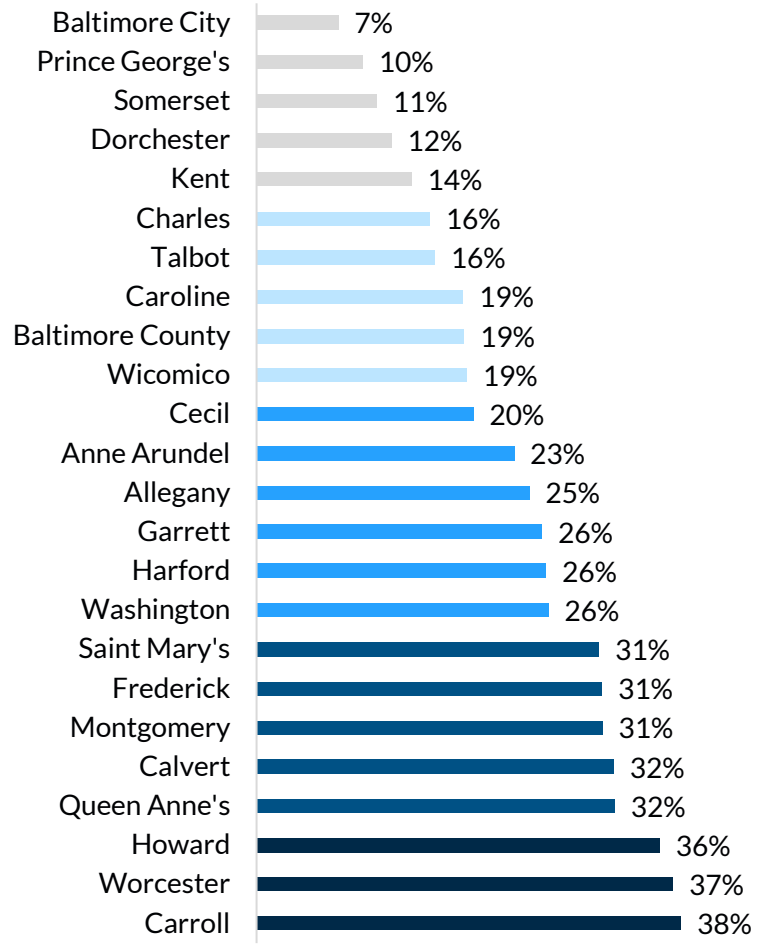
Student Groups	2019 Tested Count	2022 Tested Count
All Students	366,695	352,677
American Indian/Alaska Native	1,036	917
Asian	21,121	20,863
Black/African American	128,101	119,093
Hispanic/Latino	69,069	78,214
Native Hawaiian/ Pacific Islander	586	496
White	129,486	114,591
Two or more races	17,296	18,199
Students with Disabilities	44,746	42,803
English Learners	35,313	47,032
FARMs	169,314	165,047
Female	178,869	172,337
Male	187,826	180,071

Note: SY 2021-2022 data as of December 19, 2022.

Mathematics Grade 3-8 Tests by LEA, SY 2021-2022

Statewide, the percentage of students scoring proficient on math grade 3-8 tests is 22% for SY 2021-2022. LEAs vary from a low of 7% to a high of 38% in proficiency percentage.

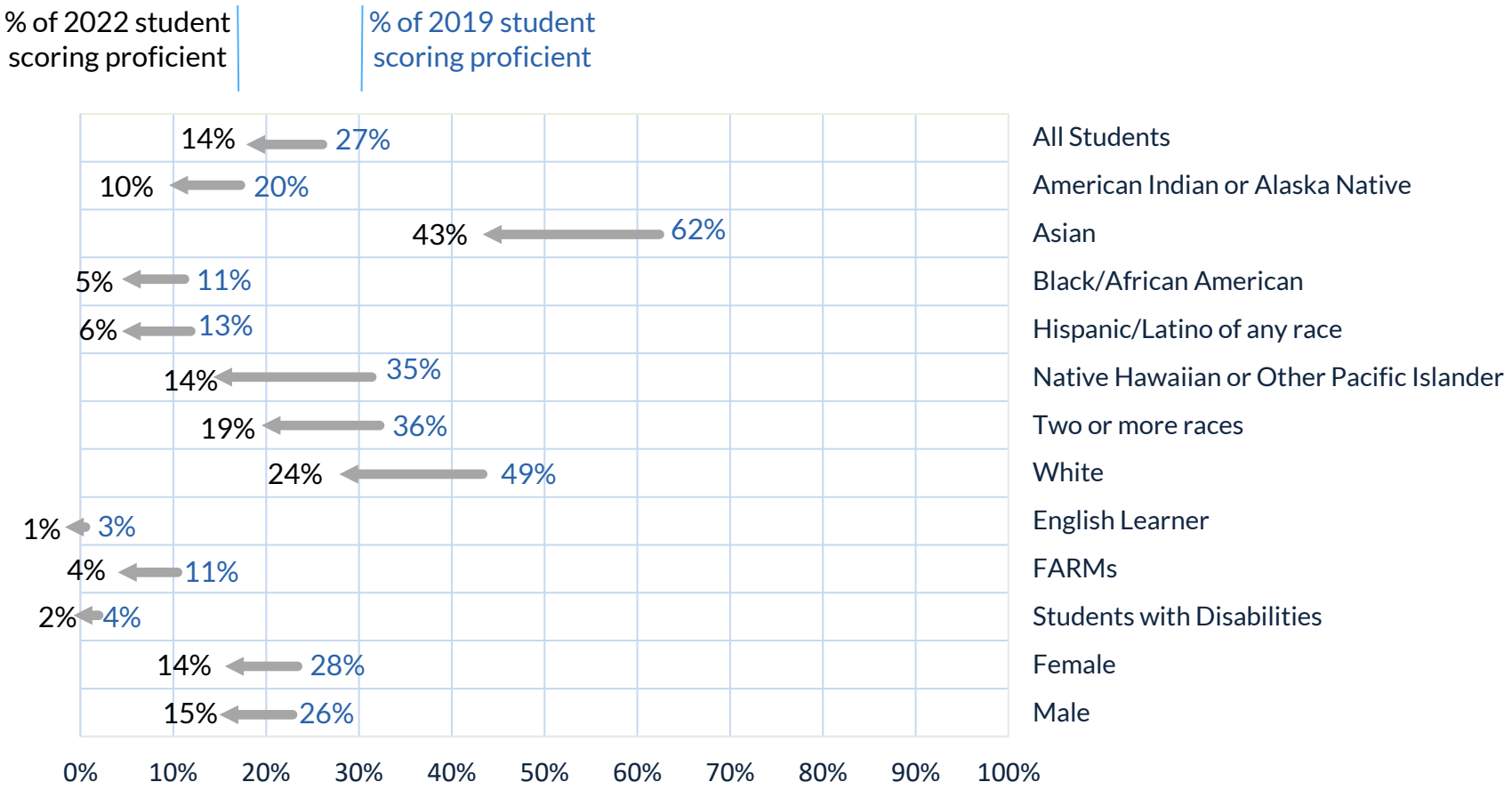




Note: SY 2021-2022 data as of December 19, 2022.

Algebra I Test by Student Group

In Maryland, all student groups experienced a decrease in proficiency rates in Algebra I in SY 2021-2022 as compared to SY 2018-2019 results.

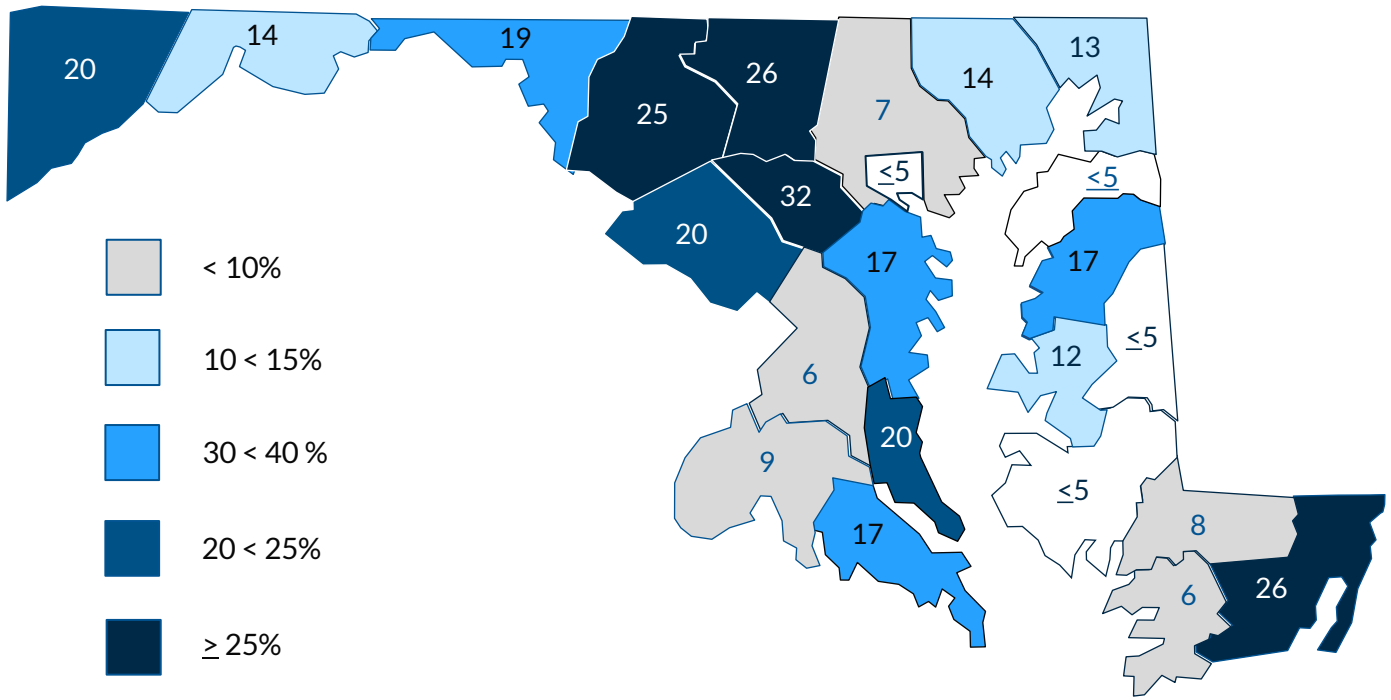


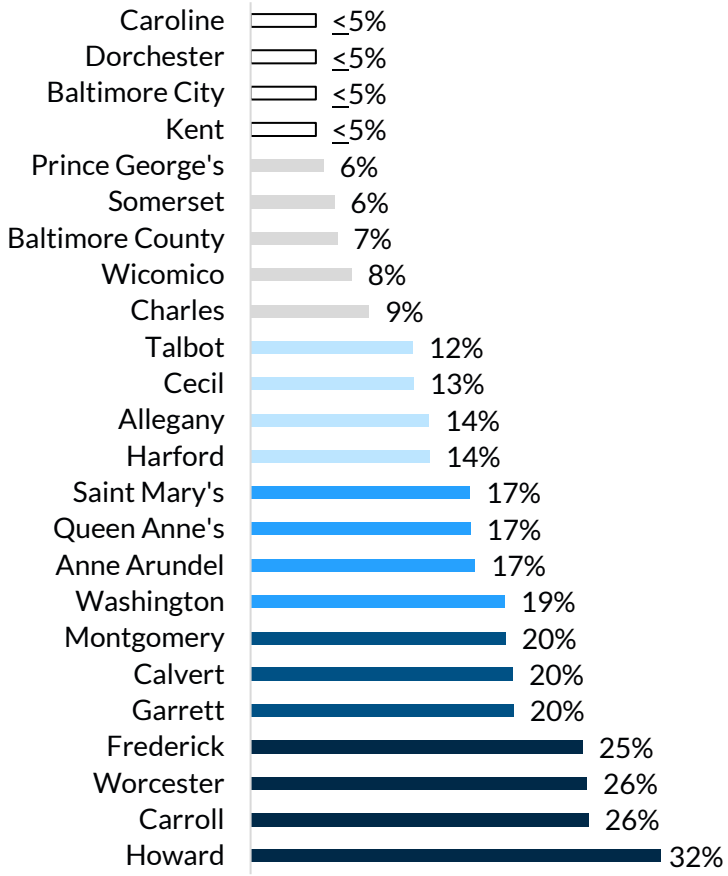
Student Groups	2019 Tested Count	2022 Tested Count
All Students	98,988	76,608
American Indian/Alaska Native	256	213
Asian	5,522	4,859
Black/African American	39,135	26,161
Hispanic/Latino	19,507	16,470
Native Hawaiian/ Pacific Islander	120	133
White	30,671	25,142
Two or more races	3,777	3,569
Students with Disabilities	13,814	8,136
English Learners	9,930	7,400
FARMs	42,577	32,414
Female	47,541	36,806
Male	51,447	39,700

Note: SY 2021-2022 data as of December 19, 2022.

Algebra I Test by LEA, SY 2021-2022

Statewide, the percentage of students scoring proficient on the Algebra I test was 14% for SY 2021-2022. LEAs vary from a low of <5% to a high of 32% in proficiency percentage.



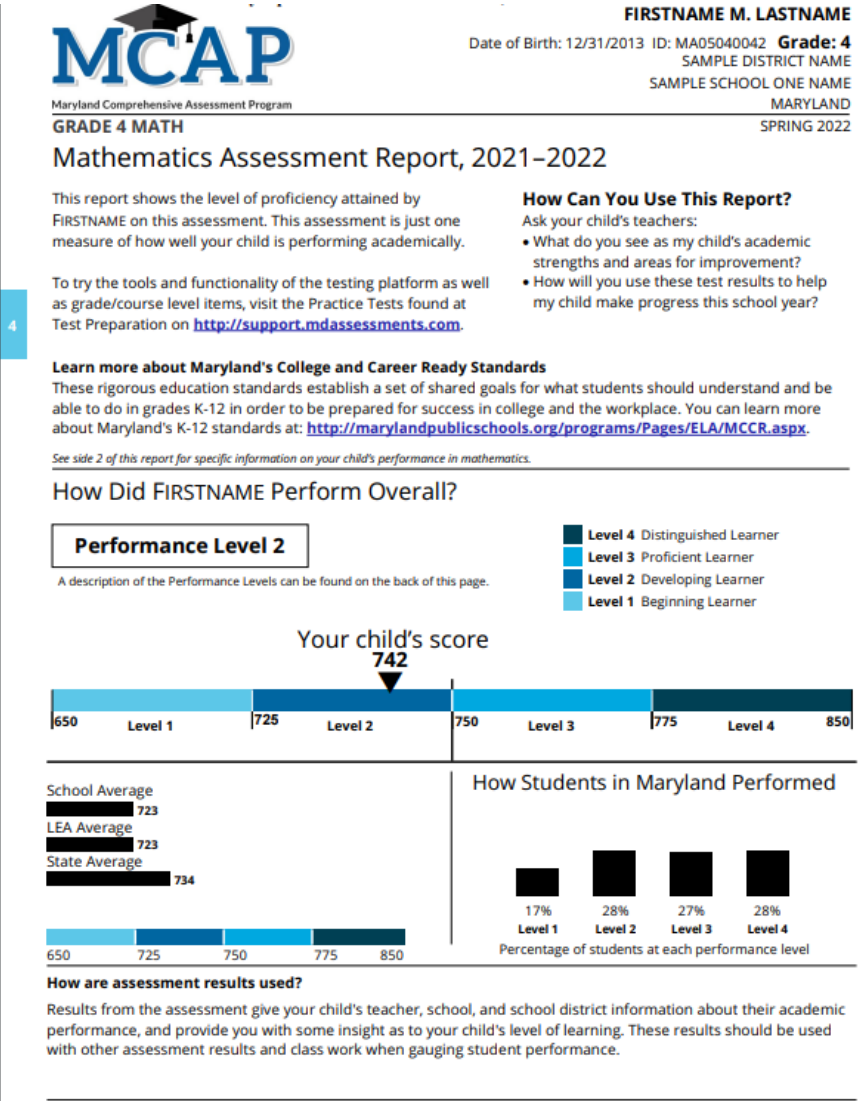


Note: SY 2021-2022 performance data as of December 19, 2022.

1. English Language Arts Results
2. Mathematics Results
3. **Reporting**
4. Cohort Analysis

Reporting

Individual student, student group and school level reporting tools provide resources to families and educators for targeted student support to accelerate learning.



MCAP
Maryland Comprehensive Assessment Program
GRADE 4 MATH

FIRSTNAME M. LASTNAME
Date of Birth: 12/31/2013 ID: MA05040042 **Grade: 4**
SAMPLE DISTRICT NAME
SAMPLE SCHOOL ONE NAME
MARYLAND
SPRING 2022

Mathematics Assessment Report, 2021–2022

This report shows the level of proficiency attained by FIRSTNAME on this assessment. This assessment is just one measure of how well your child is performing academically.

To try the tools and functionality of the testing platform as well as grade/course level items, visit the Practice Tests found at Test Preparation on http://support.mdassessments.com.

How Can You Use This Report?
Ask your child's teachers:
- What do you see as my child's academic strengths and areas for improvement?
- How will you use these test results to help my child make progress this school year?

Learn more about Maryland's College and Career Ready Standards
These rigorous education standards establish a set of shared goals for what students should understand and be able to do in grades K-12 in order to be prepared for success in college and the workplace. You can learn more about Maryland's K-12 standards at: http://marylandpublicschools.org/programs/Pages/ELA/MCCR.aspx.

See side 2 of this report for specific information on your child's performance in mathematics.

How Did FIRSTNAME Perform Overall?

Performance Level 2

A description of the Performance Levels can be found on the back of this page.

Level 4 Distinguished Learner
Level 3 Proficient Learner
Level 2 Developing Learner
Level 1 Beginning Learner

Your child's score
742

650 Level 1 | 725 Level 2 | 750 Level 3 | 775 Level 4 | 850

School Average 723
LEA Average 723
State Average 734

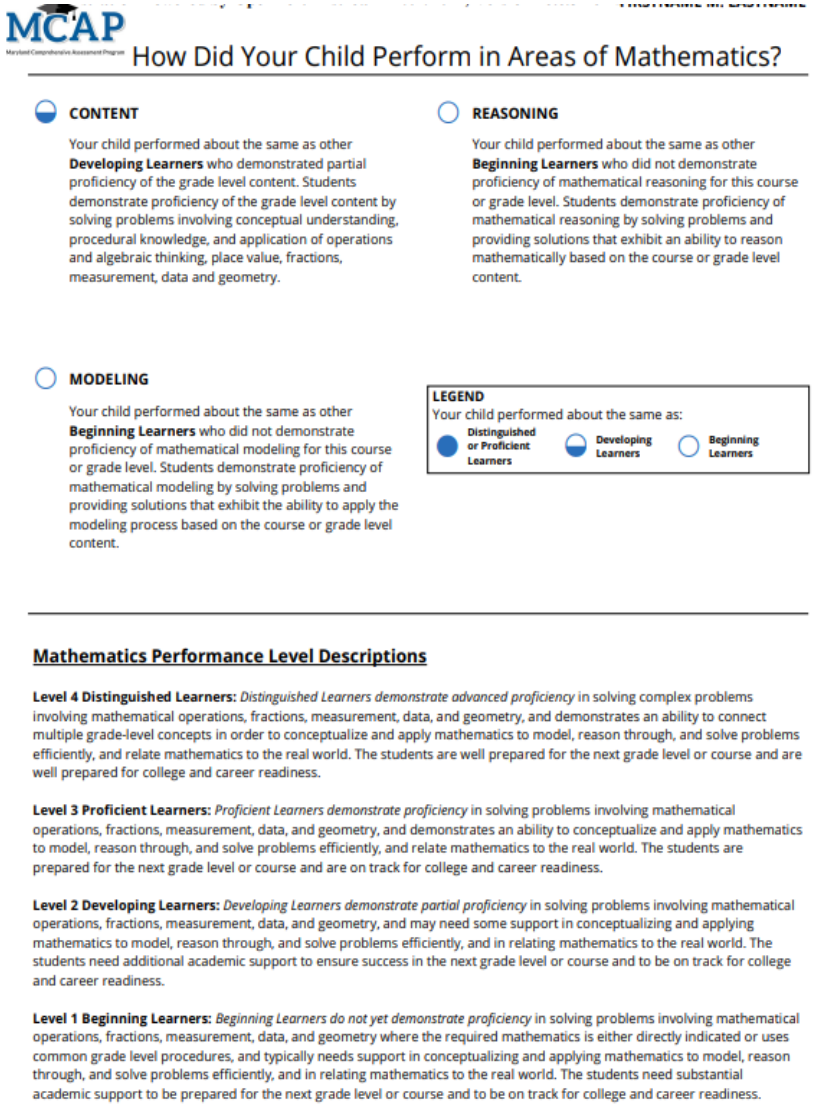
650 725 750 775 850

How Students in Maryland Performed

17% Level 1 | 28% Level 2 | 27% Level 3 | 28% Level 4

Percentage of students at each performance level

How are assessment results used?
Results from the assessment give your child's teacher, school, and school district information about their academic performance, and provide you with some insight as to your child's level of learning. These results should be used with other assessment results and class work when gauging student performance.



MCAP

How Did Your Child Perform in Areas of Mathematics?

CONTENT
Your child performed about the same as other **Developing Learners** who demonstrated partial proficiency of the grade level content. Students demonstrate proficiency of the grade level content by solving problems involving conceptual understanding, procedural knowledge, and application of operations and algebraic thinking, place value, fractions, measurement, data and geometry.

REASONING
Your child performed about the same as other **Beginning Learners** who did not demonstrate proficiency of mathematical reasoning for this course or grade level. Students demonstrate proficiency of mathematical reasoning by solving problems and providing solutions that exhibit an ability to reason mathematically based on the course or grade level content.

MODELING
Your child performed about the same as other **Beginning Learners** who did not demonstrate proficiency of mathematical modeling for this course or grade level. Students demonstrate proficiency of mathematical modeling by solving problems and providing solutions that exhibit the ability to apply the modeling process based on the course or grade level content.

LEGEND
Your child performed about the same as:
Distinguished or Proficient Learners | Developing Learners | Beginning Learners

Mathematics Performance Level Descriptions

Level 4 Distinguished Learners: *Distinguished Learners demonstrate advanced proficiency* in solving complex problems involving mathematical operations, fractions, measurement, data, and geometry, and demonstrates an ability to connect multiple grade-level concepts in order to conceptualize and apply mathematics to model, reason through, and solve problems efficiently, and relate mathematics to the real world. The students are well prepared for the next grade level or course and are well prepared for college and career readiness.

Level 3 Proficient Learners: *Proficient Learners demonstrate proficiency* in solving problems involving mathematical operations, fractions, measurement, data, and geometry, and demonstrates an ability to conceptualize and apply mathematics to model, reason through, and solve problems efficiently, and relate mathematics to the real world. The students are prepared for the next grade level or course and are on track for college and career readiness.

Level 2 Developing Learners: *Developing Learners demonstrate partial proficiency* in solving problems involving mathematical operations, fractions, measurement, data, and geometry, and may need some support in conceptualizing and applying mathematics to model, reason through, and solve problems efficiently, and in relating mathematics to the real world. The students need additional academic support to ensure success in the next grade level or course and to be on track for college and career readiness.

Level 1 Beginning Learners: *Beginning Learners do not yet demonstrate proficiency* in solving problems involving mathematical operations, fractions, measurement, data, and geometry where the required mathematics is either directly indicated or uses common grade level procedures, and typically needs support in conceptualizing and applying mathematics to model, reason through, and solve problems efficiently, and in relating mathematics to the real world. The students need substantial academic support to be prepared for the next grade level or course and to be on track for college and career readiness.

Individual Student Report (ISR) Example: Math

- Report provided to student and families with information on student's score, performance level with a performance level description.
- The School, LEA and State average and percent proficient provided for comparison.
- Additional information on how a student performed on sub-scores such as content, modeling and reasoning for math.

School Evidence Statement Analysis

- Provides educators with information on the performance of students on specific questions and content.
- School, LEA, State comparisons provided.
- Additional information includes by item type and sub-score.

MCAP
Maryland Comprehensive Assessment Program

School Evidence Statement Analysis

Grade 8

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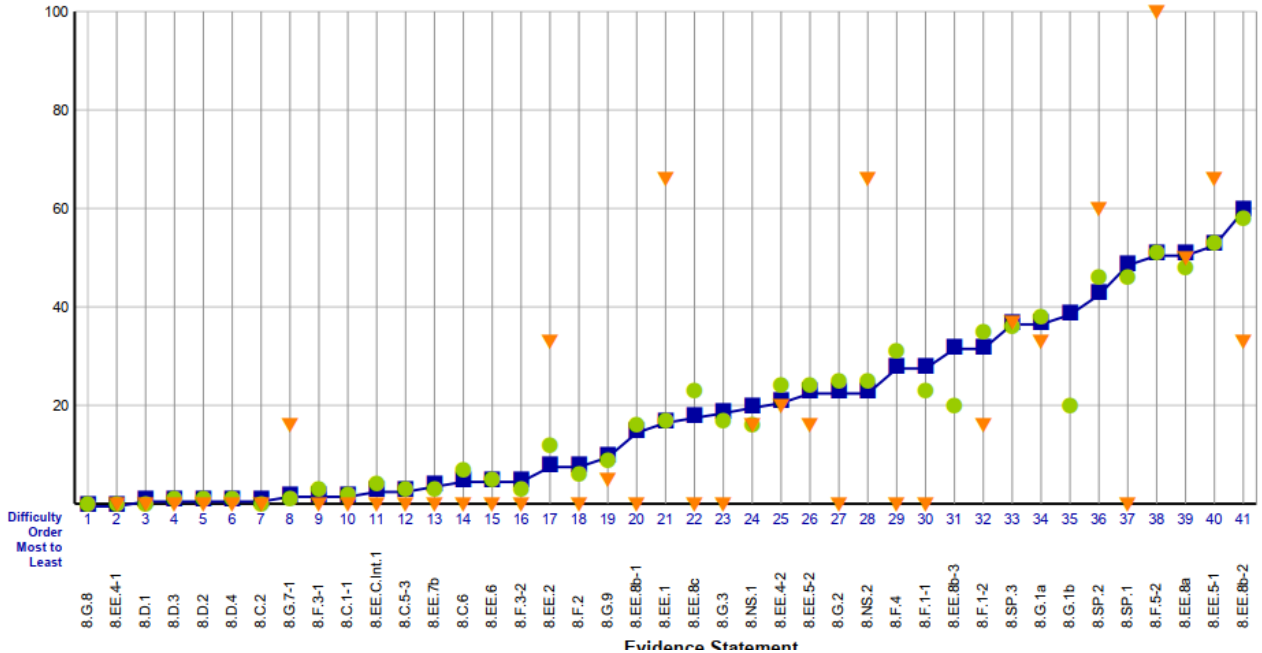
SAMPLE SCHOOL NAME
SAMPLE LEA NAME
MARYLAND
SPRING 2022

MATHEMATICS
Grade 8 Assessment, 2021–2022

State
LEA
School

Students with Valid Scores (46)

Purpose: This report presents the average percent correct by Evidence Statement for school, LEA and state.



MCAP
Maryland Comprehensive Assessment Program

School Evidence Statement Analysis

Grade 8

CONFIDENTIAL - DO NOT DISTRIBUTE

SAMPLE SCHOOL NAME
SAMPLE LEA NAME
MARYLAND
SPRING 2022

This report shows the operational Evidence Statements for the given grade and subject sorted by difficulty.

MATHEMATICS
Grade 8 Assessment, 2021–2022

Difficulty Order Most to Least	Evidence Statement*	Subclaim	Item Type	School Student Count
1	8.G.8	Geometry	Math - Type I	0
2	8.EE.4-1	Expressions and Equations	Math - Type I	1
3	8.D.1	Modeling and Reasoning	Math - Type III	6
4	8.D.3	Modeling and Reasoning	Math - Type III	1
5	8.D.2	Modeling and Reasoning	Math - Type III	6
6	8.D.4	Modeling and Reasoning	Math - Type III	5
7	8.C.2	Modeling and Reasoning	Math - Type II	1
8	8.G.7-1	Geometry	Math - Type I	6
9	8.F.3-1	Functions	Math - Type I	5
10	8.C.1-1	Modeling and Reasoning	Math - Type II	6
11	8.EE.C.Int.1	Expressions and Equations	Math - Type I	1
12	8.C.5-3	Modeling and Reasoning	Math - Type II	6
13	8.EE.7b	Expressions and Equations	Math - Type I	6
14	8.C.6	Modeling and Reasoning	Math - Type II	5

Algebra I

MCAP
Maryland Comprehensive Assessment Program

Content Standards Roster

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PV D1S1 SCRM101
PVBE D1 SCRM101
MARYLAND
SPRING 2022

MATHEMATICS
Algebra I Assessment, 2021–2022

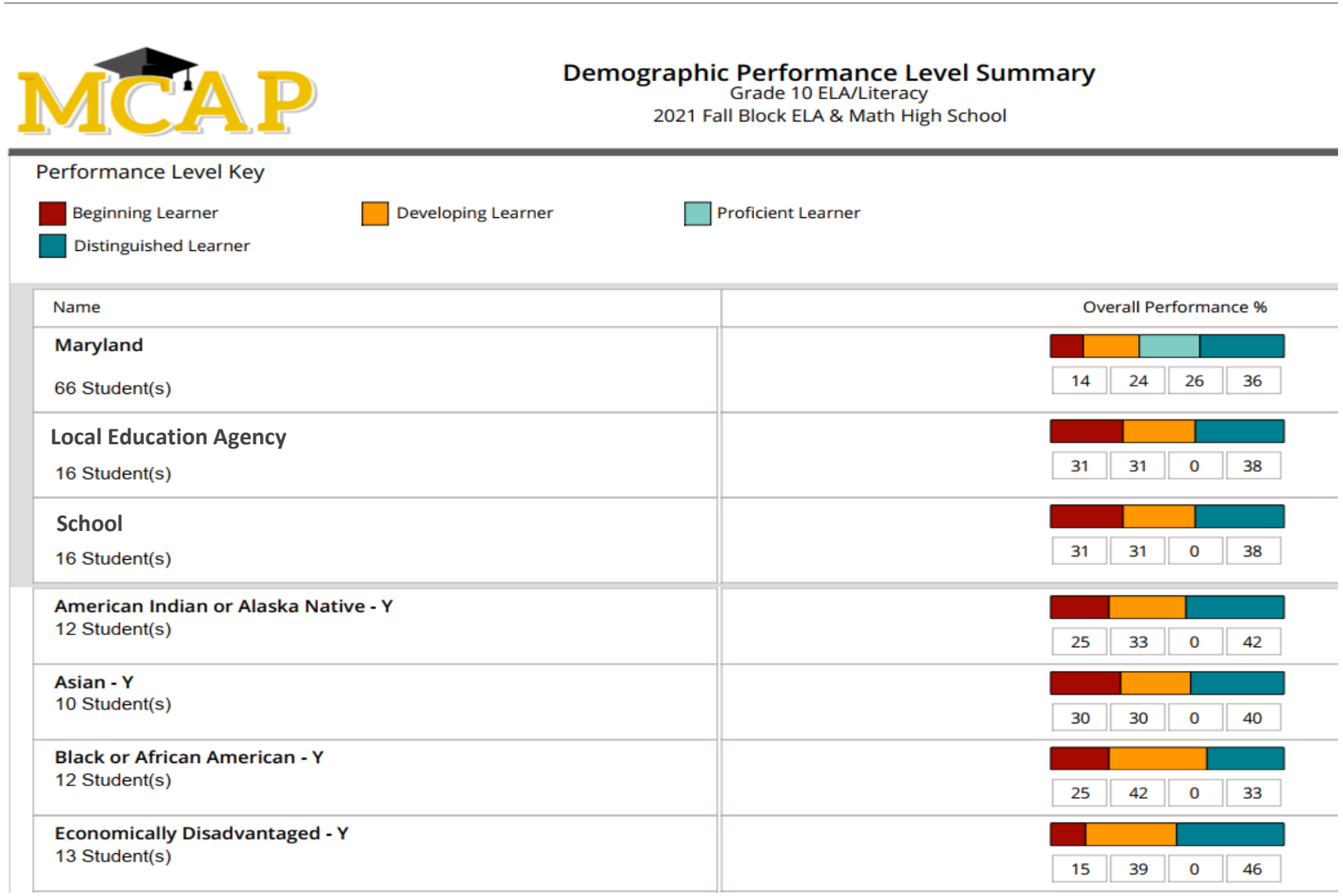
MD = State Average Percent Points Achieved
ST = Student Percent Points Achieved

STUDENT	CORE FORM	Number and Quantity: N.RN.A.1 N.RN.B.3 N.Q.A.1 N.Q.A.2 N.Q.A.3		Algebra: A.SSE.A.1 A.SSE.A.1a A.SSE.A.1b A.SSE.A.2 A.SSE.B.3 A.SSE.B.3.a A.SSE.B.3.b A.SSE.B.3.c A.SSE.B.4 A.APR.A.1 A.APR.B.2 A.APR.B.3 A.APR.C.4 A.APR.C.5 A.APR.D.6 A.APR.D.7 A.CED.A.1 A.CED.A.2 A.CED.A.3 A.CED.A.4 A.REI.A.1 A.REI.A.2 A.REI.B.3 A.REI.B.3-1 A.REI.B.3-2 A.REI.B.4 A.REI.B.4.a A.REI.B.4.b A.REI.C.5 A.REI.C.6 A.REI.C.7 A.REI.C.8 A.REI.C.9 A.REI.D.10 A.REI.D.11 A.REI.D.12		Functions: F.IF.A.1 F.IF.A.2 F.IF.A.3 F.IF.B.4 F.IF.B.5 F.IF.B.6 F.IF.B.6-3 F.IF.C.7 F.IF.C.7-1.a F.IF.C.7-2.a F.IF.C.8 F.IF.C.8.a F.IF.C.9 F.BF.A.1 F.BF.A.1-1.a F.BF.A.1-2.a F.BF.A.2 F.BF.B.3 F.BF.B.4 F.BF.B.5 F.LE.A.1 F.LE.A.1a F.LE.A.1b F.LE.A.1c F.LE.A.2 F.LE.A.3 F.LE.A.4 F.LE.B.5 F.LE.B.5-1 F.LE.B.5-2		Statistics & Probability: S.ID.A.1 S.ID.A.2 S.ID.A.3 S.ID.A.4 S.ID.B.5 S.ID.B.6 S.ID.B.6-1.a S.ID.B.6-2.a S.ID.B.6c S.ID.C.7 S.ID.C.8 S.ID.C.9		Modeling: A1.M.1 A1.M.2 A1.M.3 A1.M.4 A1.M.5 A1.M.6 A1.M.7		Reasoning: A1.R.1 A1.R.2 A1.R.3 A1.R.4 A1.R.5 A1.R.6 A1.R.7 A1.R.8 A1.R.11	
		MD	ST	MD	ST	MD	ST	MD	ST	MD	ST	MD	ST	MD	ST
1 BEET, BXPVF X.	O22	10	21	20	21	30	31	40	41	50	51	60	61		

For more information about the Maryland College and Career Ready Mathematics Content Standards go to https://www.marylandpublicschools.org/about/Pages/DCAA/Math/MCCRSM.aspx
Evidence Statements: https://marylandpublicschools.org/about/Pages/DAAIT/Assessment/MCAP/Math.aspx

Content Standards Roster Example: Mathematics

- Provides percentage of points earned on questions grouped by major groupings of content standards.
- Information provided for each student.
- State comparison provided.



MCAP

Demographic Performance Level Summary
Grade 10 ELA/Literacy
2021 Fall Block ELA & Math High School

Performance Level Key

Beginning Learner | Developing Learner | Proficient Learner | Distinguished Learner

Name	Overall Performance %
Maryland 66 Student(s)	14 24 26 36
Local Education Agency 16 Student(s)	31 31 0 38
School 16 Student(s)	31 31 0 38
American Indian or Alaska Native - Y 12 Student(s)	25 33 0 42
Asian - Y 10 Student(s)	30 30 0 40
Black or African American - Y 12 Student(s)	25 42 0 33
Economically Disadvantaged - Y 13 Student(s)	15 39 0 46

Demographic Performance Level Summary Report

- Provides performance level percentages for specific student groups.

MCAP

Reporting Category Roster
Grade 10 ELA/Literacy
2021 Fall Block ELA & Math High School

PV E2 SCORING SCH
PV E2E SCORING DST
Maryland

Performance Level Key
- Beginning Learner
- Developing Learner
- Proficient Learner
- Distinguished Learner

Expectations Key
- Beginning Learners
- Developing Learners
- Distinguished or Proficient Learners

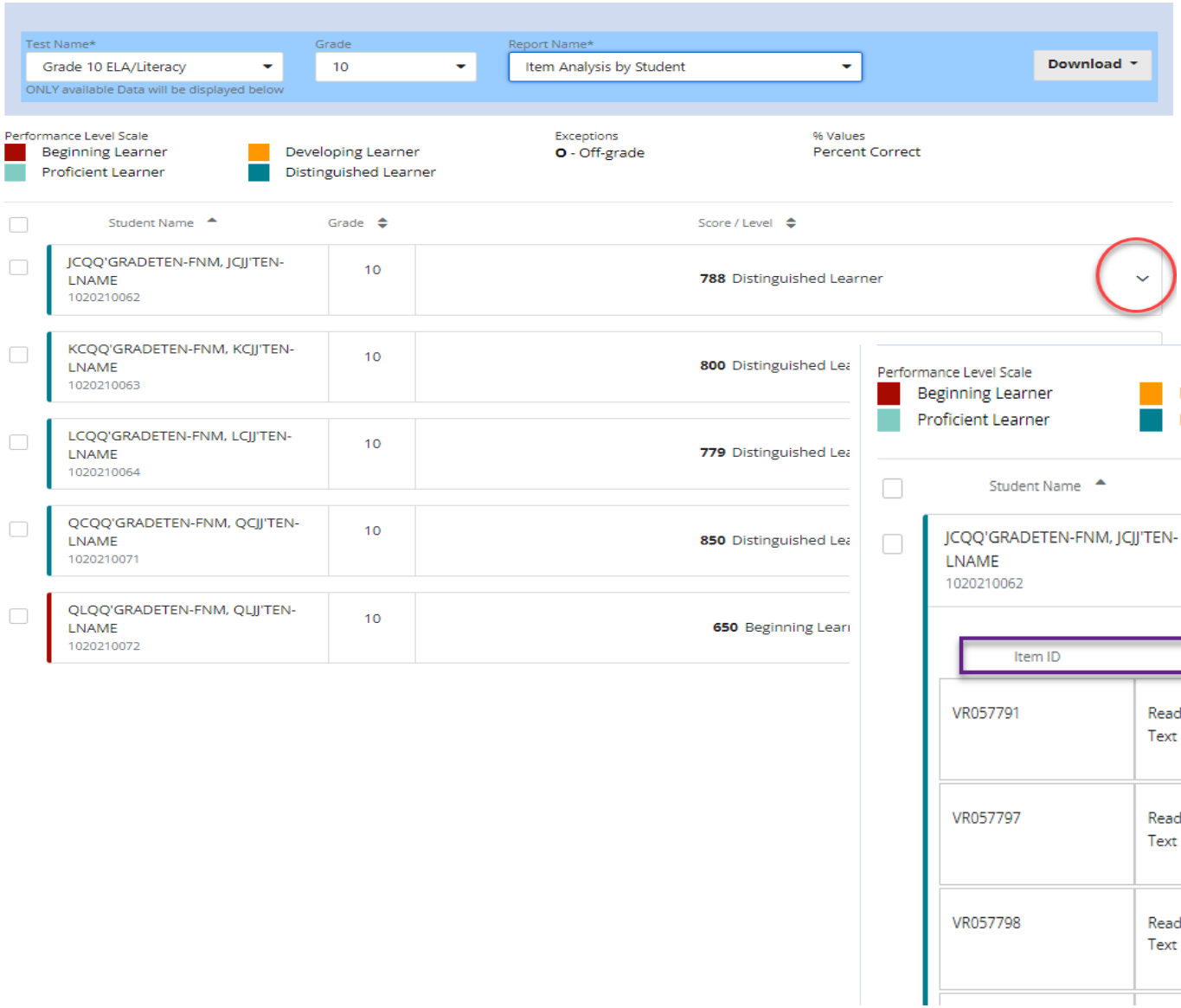
Name	Overall Score	Reading Score	Reading Informational	Reading Literary	Vocabulary	Writing Score	Written Conventions	Written Expression
Maryland 66 Student(s) 14 24 26 36	759 avg.	49	35 26 39	32 20 48	29 10 61	39	21 14 65	23 4 73
Local Education Agency 16 Student(s) 31 31 0 38	750 avg.	47	44 19 37	56 6 38	44 6 50	33	44 0 56	50 0 50
School 16 Student(s) 31 31 0 38	750 avg.	47	44 19 37	56 6 38	44 6 50	33	44 0 56	50 0 50
Student A .NAME 1020210027	850	90	▲	▲	▲	60	▲	▲
ACQQ'GRADETEN-FNM, ACJJ'TEN-LNAME 1020210053	850	90	▲	▲	▲	60	▲	▲
BAQQ'GRADETEN-FNM, BAJJ'TEN-LNAME B 1020210002	748	49	◆	◆	▲	34	▲	▼

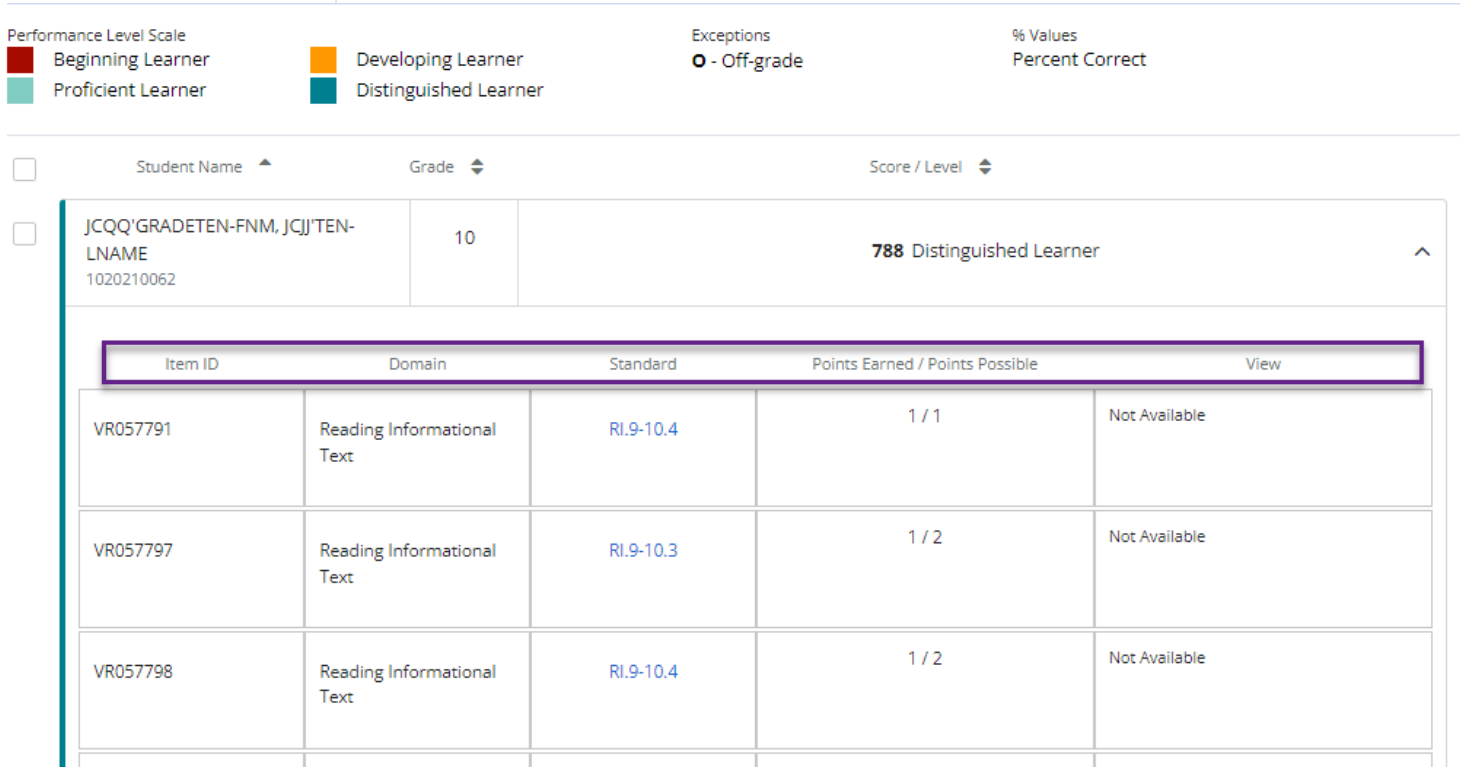
Reporting Category Summary Example: ELA

- Provides percentage of students at each performance level.
- Provides percentage of student performance on sub-scores.
- Comparisons to LEA and State.

Item Analysis Reports

Item analysis reports provide educators with student level data by individual test question.





On the Cusp of Proficiency (1 of 5)

A substantial percentage of students scored just below the proficiency score cutoff. For Grade 5 students in math 49% of students scored in Performance Level 2 which is just below the proficiency Performance Level 3. For Grade 8 English language arts (ELA), 40% of students scored in Performance Level 2.

Math Grade 5

	Student Count	Percent
Performance Level 1	16,938	26.1%
Performance Level 2	32,073	49.4%
Performance Level 3/4	15,968	24.6%

ELA Grade 8

	Student Count	Percent
Performance Level 1	11,356	17.1%
Performance Level 2	26,625	40.2%
Performance Level 3/4	28,284	42.7%

On the Cusp of Proficiency (2 of 5)

Students scoring just below the proficiency score cutoff of 750 in Performance Level 3 may have just missed scoring proficient. Improvements in a single sub-content such as reading literacy or expressions may bring these students up to proficient.

Count and Percent of Students Scoring 10 Points or Less Below the Proficiency Threshold in Math and ELA

Math

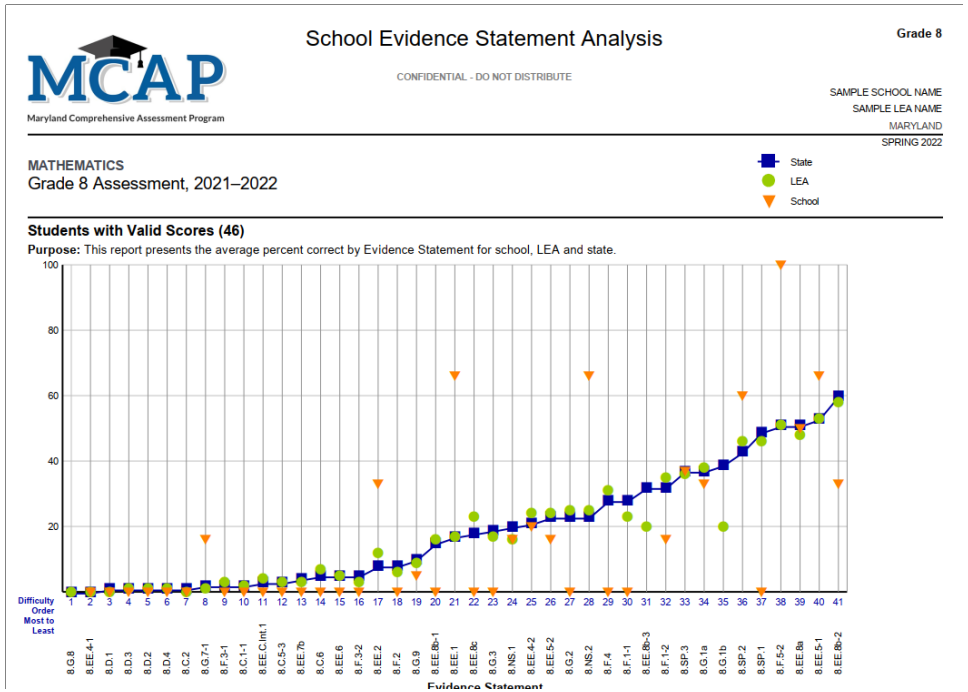
	Student Count	Percent
Grade 5	10,640	16.4%
Grade 8	4,422	10.7%
Algebra I	10,509	15.0%

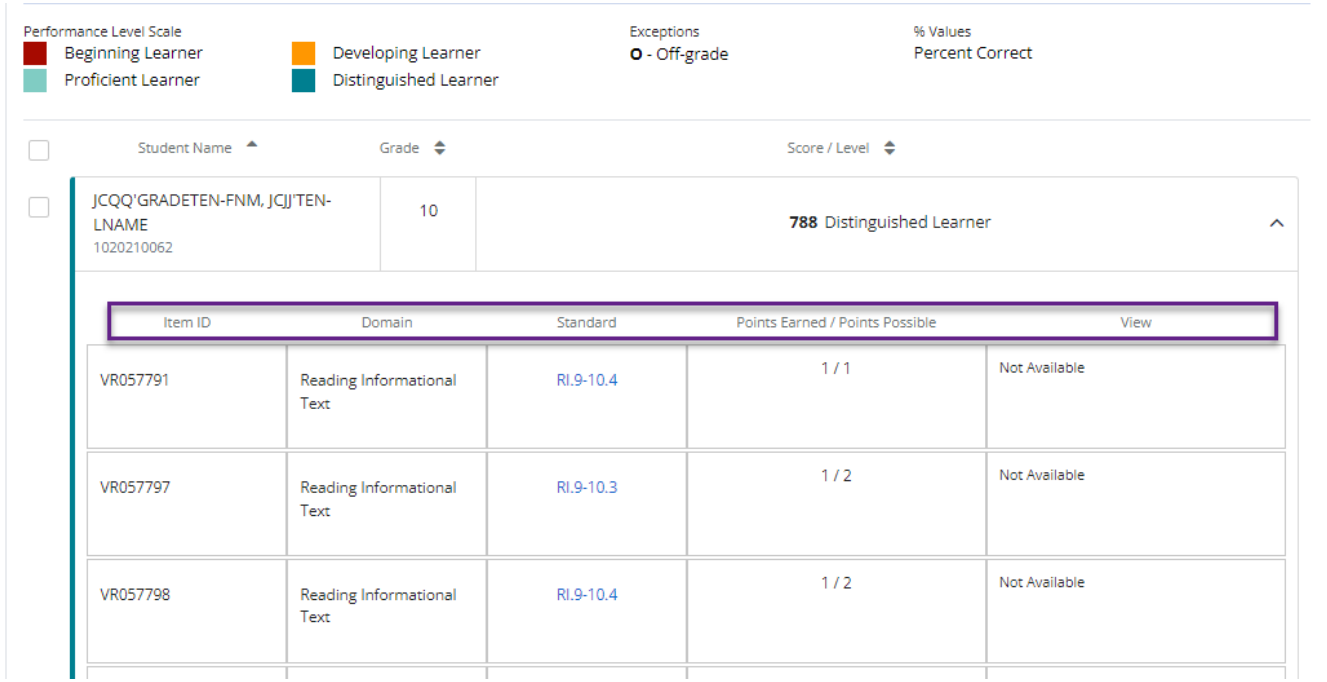
ELA

	Student Count	Percent
Grade 5	12,790	19.8%
Grade 8	11,532	17.3%
Grade 10	9,315	18.4%

On the Cusp of Proficiency: Reports (3 of 5)

The Maryland Comprehensive Assessment Program prioritizes reporting and with the spring 2022 results educators have reports that target instruction for all students. The Evidence Statement Analysis and Item Analysis Reports can be used to identify students on the cusp and a pathway for accelerating learning.





On the Cusp of Proficiency: Scoring (4 of 5)

- On the Spring 2022 mathematics grade 5 test, **Student A scored in Performance Level 2, with a scale score of 746.**
- Question 2, which has a maximum point value of 1, was answered incorrectly.
- Question 2 is a test item aligned to Number and Operations – Fractions (Evidence statement: 5.NF.B.7c).
- **If Student A had answered Question 2 correctly, the student would have scored a 753 which is Performance Level 3 and Proficient.**

Math Grade 5

Test Item	Actual Response Pattern	With One More Question Correct
1	Correct	Correct
2	Incorrect	Correct
3	Correct	Correct
4	Incorrect	Incorrect
… 35 test items	21 of 45 points earned	22 of 45 points earned
Scale Score	**746 (Developing Learner)**	**753 (Proficient Learner)**

On the Cusp of Proficiency: Scoring (5 of 5)

- On the Spring 2022 English language arts grade 8 test, **Student B scored in Performance Level 2 with a scale score of 745.**
- Question 2, which has a maximum point value of 2, was answered incorrectly.
- Question 2 is a test item aligned to Reading – Literary, Key Ideas and Details (Evidence statement: RL.8.3).
- **If student B had answered Question 2 partially correct earning 1 additional point, the student would have scored a 756 which is Performance Level 3 and Proficient.**

English Language Arts Grade 8

Test Item	Actual Response Pattern	With One More Question Correct
1	Correct	Correct
2	Incorrect (0)	Partial (1)
3	Correct	Correct
4	Incorrect	Incorrect
… 33 test items	25 of 56 points earned	26 of 56 points earned
Scale Score	**745 (Developing Learner)**	**756 (Proficient Learner)**

1. English Language Arts Results
2. Mathematics Results
3. Reporting
4. **Cohort Analysis**

Cohort Analysis

An analysis of the performance of cohorts of students over time.

Cohort Performance Over Time Overview

The performance of a grade in the current year is typically reported and compared to the performance of the same grade in the prior school year. For example, grade 3 results in SY 2021-2022 are compared to grade 3 results in SY 2020-2021.

- Indication of how each grade is doing but **does not compare the same students over time.**
- **Different grade levels were affected differently** by the pandemic (Kuhfeld et al., 2020).

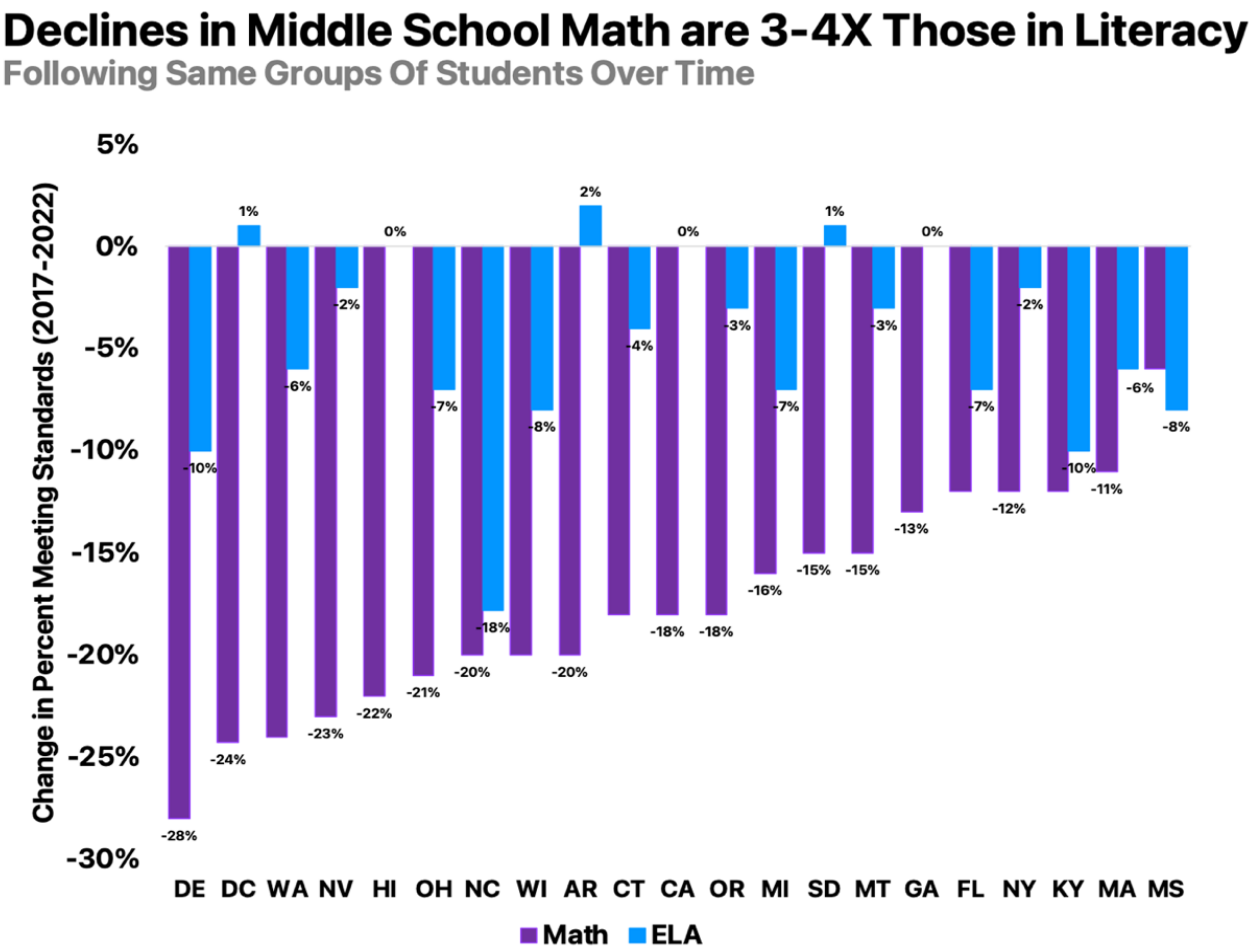
Alternatively, the **performance of the same students** can be tracked over time.

- How are **students who stay in Maryland** doing over time?
- **Controls for student mobility** in and out of the state.

Kuhfeld, M., Tarasawa, B., Johnson, A., Ruzek, E., & Lewis, K. (2020). Learning during COVID-19: Initial findings on students' reading and math achievement and growth. NWEA. https://www.nwea.org/research/publication/learning-during-covid-19-initial-findings-on-students-reading-and-math-achievement-and-growth/

National Perspective: Math and ELA Performance

An analysis of test results following groups of students over time (from SY 2016-2017 to SY 2021-2022) in 21 states found that **the decline in middle school math proficiency rates was 3-4 times larger than the decline in ELA.**



Source: Learning Loss is Worse than NAEP Showed. Middle School Math Must be the Priority. (December 14, 2022). The 74 Million. Retrieved from https://www.the74million.org/article/learning-loss-is-worse-than-naep-showed-middle-school-math-must-be-the-priority/

Cohort Performance in ELA

Following cohorts of students over time in Maryland, ELA proficiency has increased by 4-5 percentage points since grade 3.

ELA Percent Proficient by Cohort

Cohort	ELA 3	ELA 4	ELA 5	ELA 6	ELA 7	ELA 8	Change
Class of 2026 (n = 52,506)	41.3%	45.1%	46.3%	--	33.1%	45.4%	+4.1%
Class of 2027 (n = 52,776)	40.1%	45.4%	--	55.1%	45.5%	(2023)	+5.4%
Class of 2028 (n = 52,666)	42.2%	--	26.0%	46.1%	(2023)	(2024)	+3.9%

Note: Only students who have a test in each of the years are included in each cohort. Assessments were not administered in 2019-2020 due to the COVID-19 pandemic.

Cohort Performance in Math

Following cohorts of students over time in Maryland, math proficiency has decreased by 24-26 percentage points since grade 3.

Math Percent Proficient by Cohort

Cohort	Math 3	Math 4	Math 5	Math 6	Math 7	Grade 8	Change
Class of 2026 (n = 52,506)	44.7%	40.9%	39.0%	--	8.7%	18.2%	-26.5%
Class of 2027 (n = 52,564)	43.7%	41.3%	--	22.0%	18.1%	(2023)	-25.6%
Class of 2028 (n = 52,867)	43.8%	--	23.8%	19.5%	(2023)	(2024)	-24.3%

Note: Only students who have a test in each of the years are included in each cohort. The rate for each grade includes all students from that grade, regardless of which test they took, e.g. Math 8, Algebra I, etc. Assessments were not administered in 2019-2020 due to the COVID-19 pandemic.

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