To: School Committee of the Newton Public Schools
From: Katy Hogue, Chief of Data and Research
Renee McCall, Assistant Superintendent for Teaching and Learning
Date: November 20, 2023
Re: MCAS Annual Report

The following report provides a detailed analysis of the district's performance on the Massachusetts Comprehensive Assessment System (MCAS), and highlights trends and persistent gaps across grade levels and subjects. Spring 2023 MCAS performance is analyzed using both pre-pandemic (2019) and last spring (Spring 2022) as comparison points. Further, Newton's performance is assessed against the state and neighboring districts.

Some progress has been made in returning to achievement levels from 2019, however we noted lagging performance as compared to pre-pandemic levels in certain grades and subjects as measured by the percentage of students meeting or exceeding expectations.

- Noteworthy exceptions to the above include: high school (ELA and Physics), grade 4 (Math), and grade 5 (Science) that have regained or surpassed performance from 2019.
- Concerns remain in relation to grade 3 Math and ELA, where performance is below pre-pandemic and last year's levels. A potential contributing factor related to this grade's performance could be the impact of the pandemic as this group of students had their kindergarten year interrupted by the closure of schools in March 2020. Additionally, their first grade instruction was delivered in a hybrid format.
- Persistent opportunity gaps are identified across ELA, Math, and Science for certain subgroups including Black/African American students, Hispanic/Latinx students, and students with disabilities.
- While opportunity gaps persist for English Learners, improvements are seen for Former English Learners.
- Writing scores have improved from last year when both Newton and the state saw historically low average scores. However, writing scores in the early elementary grades continue to be lower than secondary grade levels.

Student Growth Percentiles (SGP) vary by performance level in grades 3-8, showing an increasing trend with higher performance levels. A similar pattern is observed with the median SGP.

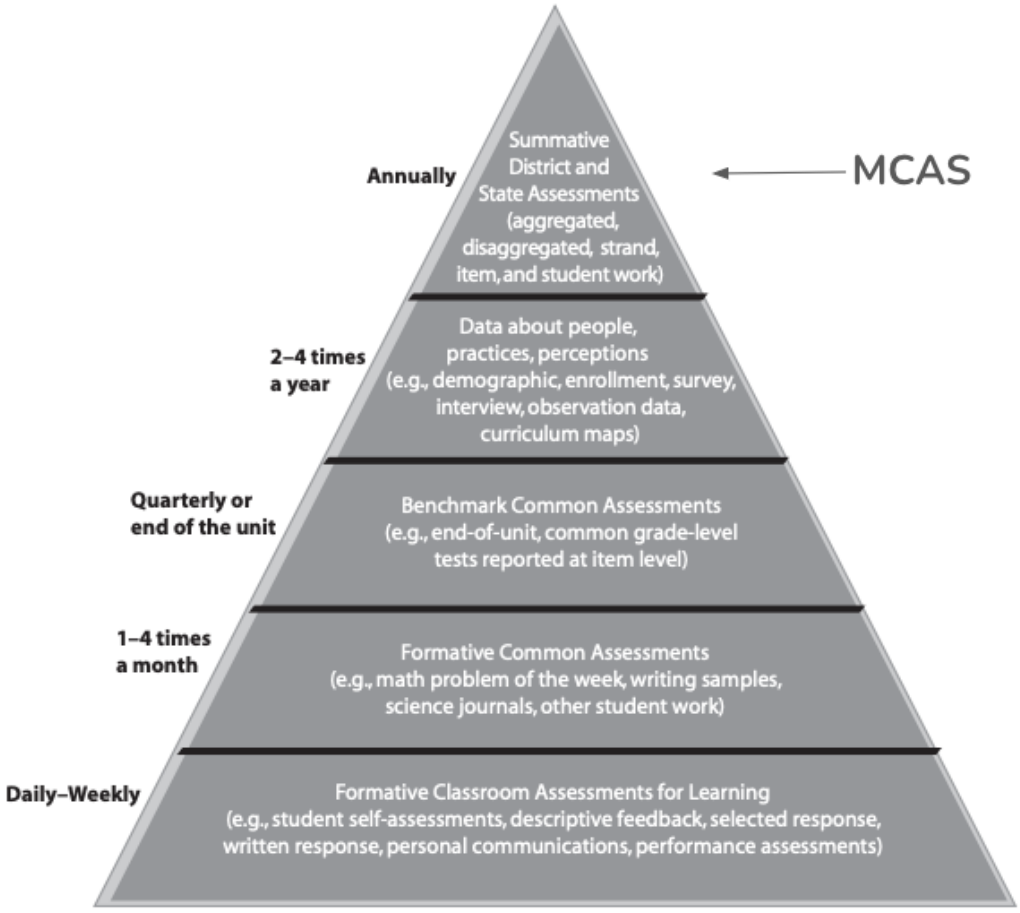
To address these performance concerns, we are taking the following actions:

- Strengthen Tier 1 reading and writing curriculum and instruction with the adoption of EL Education, which includes knowledge and vocabulary building, a focus on standards, and targeted writing instruction with an emphasis on analyzing texts.
- Continue building strong Tier 2 literacy intervention including regular assessment periods, data meetings, identification of student needs, targeted instruction, progress monitoring, and regular professional learning for literacy specialists and intervention teachers.
- Focus on strengthening the trajectory of writing instruction with more opportunities for students to compose and engage in the iterative writing process through feedback and common writing assignments.
- Adding in consistent fluency assessments in multiplication, following up with targeted intervention activities.
- Deliberate rollout of ST Math with emphasis on access for all students.
- Focus on strategies to bolster student mastery of grade-level standards in critical early grades.

This executive summary provides a comprehensive overview of the MCAS performance, highlighting both positive exceptions and areas of concern. Moving forward, addressing the identified challenges through curriculum, instruction, and professional learning will be essential to ensure equitable educational outcomes for all students.

It is important to remember that MCAS is one data point among many that is used by districts to assess student outcomes and identify student needs. The figure below (Love, 2008) provides an illustration of the various types of data that schools and districts use to inform instruction; note that MCAS falls into the top of the pyramid as an annual summative assessment. Data that is utilized on a more frequent basis is being collected and expanded this year, and analysis of this data is enhanced through the use of our data analytics platform.

THE DATA PYRAMID: RECOMMENDED



Results of MCAS Testing Spring 2023

In Spring 2023, Newton Public Schools students in Grades 3 – 8 took the Next-Generation MCAS tests in English Language Arts (ELA) and Mathematics for the sixth year (these assessments were first administered in Spring 2017). Fifth and eighth grade students took the Next-Generation MCAS Science and Technology/Engineering (STE) tests for the fourth year (the first administration for STE was in Spring 2019). High school students took Next-Generation MCAS tests in Mathematics and English Language Arts in Grade 10 for the fourth year (first administration was Spring 2019), and most freshmen took the Next-Generation MCAS physics test for the second year (first administration was Spring 2022). As a reminder, MCAS tests were not administered in Spring 2020 due to the COVID-19 pandemic.

This report is organized into four sections:

1. School and District Accountability
2. Overall Student Achievement
3. Student Achievement by Subgroups
4. Comparison Districts

School and District Accountability

In 2023, the Newton Public Schools was classified as "Not requiring assistance or intervention" because the district met or exceeded its accountability targets as set by the Department of Elementary and Secondary Education (DESE). In grades 3-8, the district made the most progress towards its ELA and math achievement targets and the least progress towards its chronic absenteeism targets. In high school, the district made the most progress on its achievement targets in all three subjects, its targets towards its four-year cohort graduation rate and its extended engagement rate, and its chronic absenteeism target. More detail on specific targets and the district's progress towards these targets can be found using DESE's School and District Profiles website. All schools, with the exception of Lincoln-Eliot, were classified as "Not requiring assistance or intervention" because they made at least moderate progress towards their accountability targets. Many schools made substantial progress towards their targets or met or exceeded their targets. Three schools (Angier, Newton South, and Williams) were designated as "Schools of Recognition", indicating that they had high achievement, high growth, and exceeded their accountability targets. Across the state, 66 schools were designated as "Schools of Recognition" this year. Lincoln-Eliot was classified as "Requiring assistance or intervention" by DESE because of a low assessment participation rate for students who identify as Hispanic/Latinx. This designation is due solely to assessment participation, not achievement. More detail can be found in the October 11, 2023 memo describing 2023 accountability.

Overall Student Achievement

Results from the Next-Generation MCAS are reported for Spring 2023 for all grades and subjects in this report. The Legacy MCAS is no longer administered; however, a brief description of these two assessments follows for reference:

- Legacy MCAS was the original MCAS test administered on paper. It was used for the last time for 10th grade English and math and for grades 5 and 8 science in 2018. The last administration of the 9th grade introductory physics legacy MCAS was in 2021.
- Next-Generation (Next-Gen) MCAS is the "new" MCAS developed by DESE and provides achievement, growth, and participation data for the new accountability system.
    - It was first administered in Spring 2017 for English Language Arts and Mathematics in Grades 3 - 8.
    - In 2018, districts had a choice in some grade levels to administer it online or on paper.
    - Starting in 2019, all MCAS was Next-Gen, including science (except grade 9 science) and high school.
    - Starting in 2022, grade 9 Biology and Introductory Physics were Next-Gen tests. Grade 9 Chemistry and Technology/Engineering were administered for the last time in Spring 2023 as legacy tests.
    - All Next-Gen MCAS assessments are administered electronically, with the exception of paper-based assessments for students with this accommodation on IEPs or 504s or first-year EL students who have little familiarity with technology.

Descriptors of Achievement Results

The tests use different performance levels to describe and categorize the results:

Legacy MCAS:

- Advanced
- Proficient
- Needs Improvement
- Warning/Failing

Next-Generation MCAS:

- Exceeding Expectations
- Meeting Expectations
- Partially Meeting Expectations
- Not Meeting Expectations

Performance by grade level

The tables below display the percentage of students in each performance level for the Spring 2023 assessments. Please note that percentages may not sum to 100% due to rounding.

District English Language Arts: Next-Generation MCAS								
	Percentage of students scoring at each performance level							
Grade Level	Exceeding or Meeting Expectations	Exceeding Expectations	Meeting Expectations	Partially Meeting Expectations	Not Meeting Expectations	Average Scaled Score	N	Average SGP
Grade 3	64%	14%	50%	28%	8%	506	835	N/A
Grade 4	61%	13%	49%	31%	8%	505	864	55.0
Grade 5	65%	11%	54%	28%	7%	506	845	56.0
Grade 6	68%	17%	50%	23%	9%	509	891	52.0
Grade 7	64%	18%	46%	30%	7%	508	859	53.0
Grade 8	73%	25%	48%	20%	7%	513	979	61.0
Grades 3-8	66%	16%	50%	26%	8%	508	5,273	56.0
Grade 10	81%	33%	48%	15%	4%	518	972	55.0

District Mathematics: Next-Generation MCAS								
	Percentage of students scoring at each performance level							
Grade Level	Exceeding or Meeting Expectations	Exceeding Expectations	Meeting Expectations	Partially Meeting Expectations	Not Meeting Expectations	Average Scaled Score	N	SGP
Grade 3	62%	18%	44%	29%	9%	507	835	N/A
Grade 4	69%	19%	50%	24%	7%	509	865	51.0
Grade 5	65%	15%	50%	29%	6%	508	843	55.0
Grade 6	68%	16%	52%	25%	7%	509	885	56.0
Grade 7	68%	21%	47%	25%	7%	511	857	58.0
Grade 8	74%	26%	48%	19%	7%	514	985	61.0
Grades 3-8	68%	19%	49%	25%	7%	510	5,270	57.0
Grade 10	81%	34%	47%	16%	3%	520	975	59.0

District Science and Technology/Engineering: Next Generation MCAS Grades 5, 8, 9							
	Percentage of students scoring at each performance level						
Grade Level	Exceeding or Meeting Expectations	Exceeding Expectations	Meeting Expectations	Partially Meeting Expectations	Not Meeting Expectations	Average Scaled Score	N
Grade 5 Science	63%	16%	47%	29%	8%	507	840
Grade 8 Science	65%	8%	57%	26%	9%	505	974
HS Introductory Physics	81%	37%	44%	16%	3%	520	972

The tables below display participation rates by grade and subject and by subgroup and subject.

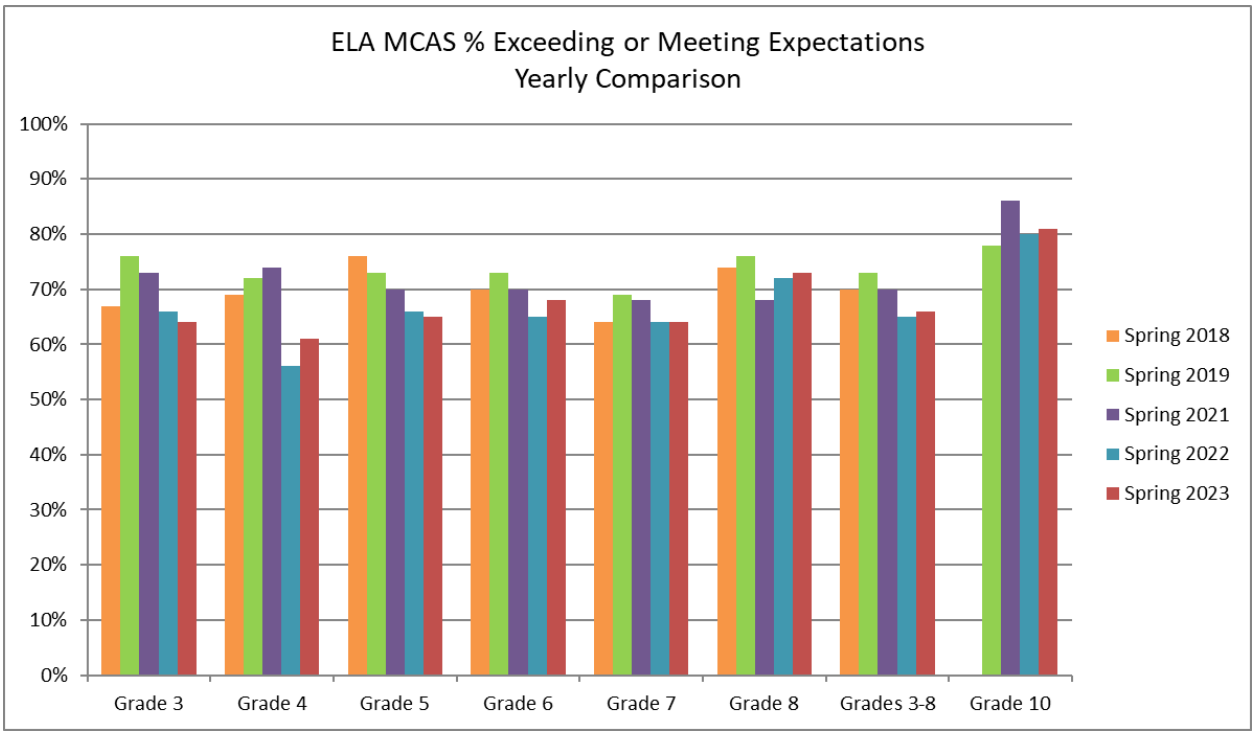
Grade	ELA Participation rate	Math Participation Rate	Science Participation Rate
3	99%	100%	N/A
4	100%	100%	N/A
5	100%	99%	99%
6	99%	99%	N/A
7	98%	98%	N/A
8	99%	99%	98%
10	98%	98%	99%

Grades 3-8			
Subgroup	ELA Participation rate	Math Participation Rate	Science Participation Rate
African American/Black	100%	99%	98%
Asian	100%	100%	100%
Hispanic/Latinx	99%	98%	96%
Multi-Race	99%	99%	99%
White	99%	99%	98%
EL	99%	100%	100%
SWD	97%	97%	97%
Low Income	98%	98%	97%
Female	99%	99%	98%
Male	99%	99%	99%

Grade 10		
Subgroup	ELA Participation rate	Math Participation Rate
African American/Black	98%	98%
Asian	99%	100%
Hispanic/Latinx	97%	97%
Multi-Race	100%	98%
White	98%	98%
EL	100%	94%
SWD	95%	96%
Low Income	97%	97%
Female	98%	99%
Male	98%	98%

Five year performance history

For ELA, Newton saw a slight increase in the percentage of students scoring exceeding or meeting expectations in grades 3-8 overall and in grade 10 from Spring 2022 (last year). There is variation by grade level: when compared to Spring 2022, grades 3 and 5 saw a slight decline in performance (-2 percentage points, or a decrease of 1 point in average scaled score for grade 3; -1 percentage point, or a decrease of 2 points in average scaled score for grade 5), while grade 4 saw the largest increase in performance (+5 percentage points, or an increase of 2 points in average scaled score). When compared to Spring 2019, however, all grade levels except grade 10 remain below pre-pandemic achievement. Similar trends are occurring in comparison districts, although there is variation by grade and subject (see Comparison Districts section for more detail). In grade 10, the percentage of students scoring exceeding or meeting expectations is above Spring 2019 scores, with an increase of three percentage points, or an increase of 2 points in average scaled score.



Newton and the state saw historically low writing scores in grades 3-8 in 2022, with lower scores clustered in grades 3-5, which contributed to the decline in overall ELA scores. Students in grades 3 and 4 wrote only one essay for the ELA MCAS, while students in grades 5, 6, 7, 8, and 10 wrote two essays (one in each session of the ELA assessment). The essay scores are broken into two components: a standard English convention score, which is reported in the language reporting category, and an idea development score, which is reported in the writing reporting category. The tables below display the average idea development scores only (the writing reporting category) for Spring 2022 and Spring 2023.

In 2023, Newton saw increases in writing scores in all grade levels except in grade 10, which saw a small decline. Grade 3 saw the largest increase in writing scores on average, although grade 3 continues to earn the lowest average percentage of points across the tested grade levels.

Because the number of writing points available varies by grade level, the table includes a calculation of the average percentage of points earned for each grade level. In Spring 2023, every grade level except grade 10 earned a higher percentage of writing points on average than in Spring 2022. Students in grade 4 in Spring 2023 (who were in grade 3 in Spring 2022) earned an average of 38% of the available writing points, compared to earning 23% of the available writing points (on average) in Spring 2022 when in grade 3. This is a percentage change of 63% from grade 3 in 2022 to grade 4 in 2023 in average writing points (however, this calculation includes all 3rd graders in Spring 2022 and all 4th graders in Spring 2023 and is not strictly a cohort calculation).

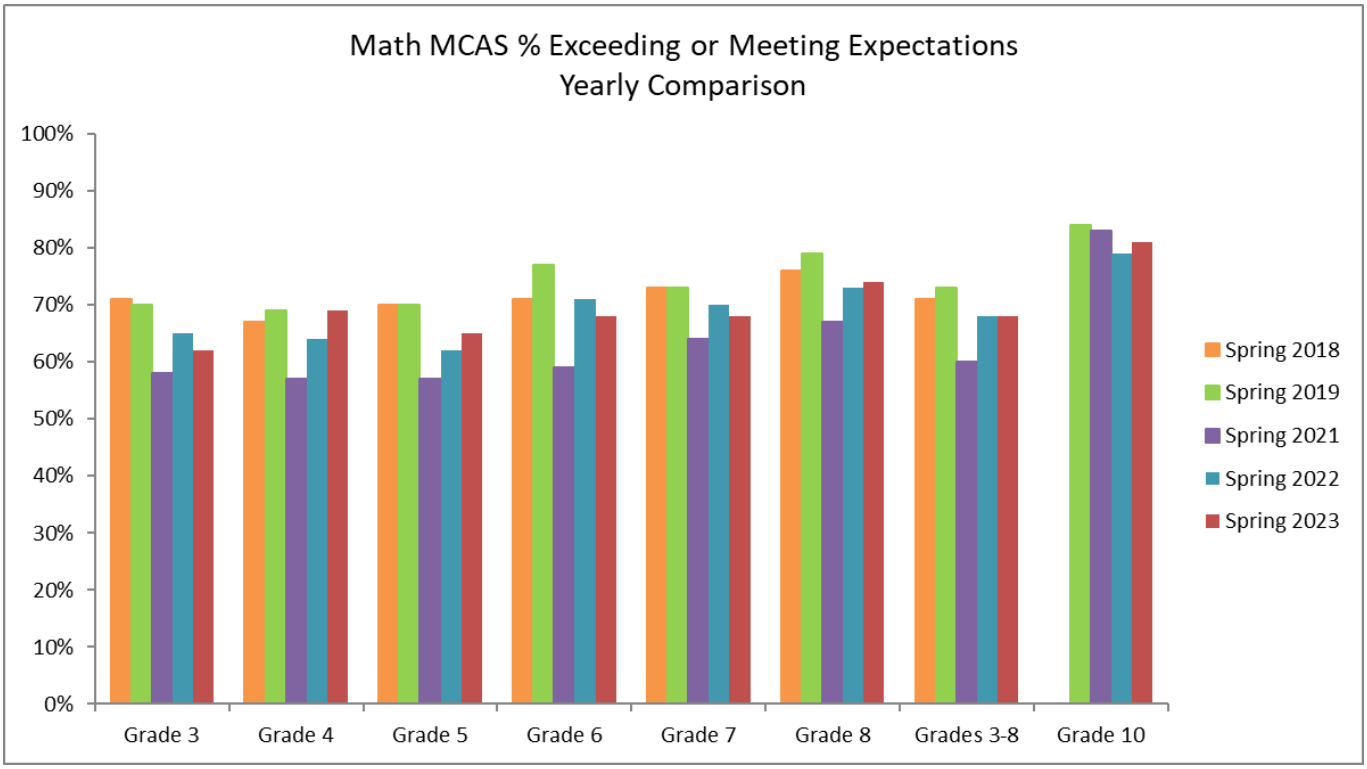
	Spring 2022			Spring 2023		
Grade Level	**Writing average score**	**Total Writing points available**	**Average % points earned**	**Writing average score**	**Total Writing points available**	**Average % points earned**
3	0.9	4	23.4%	1.4	4	35.1%
4	1.4	4	35.5%	1.5	4	38.1%
5	3.3	8	40.7%	3.4	8	43.1%
6	4.0	10	40.3%	4.1	10	41.3%
7	4.1	10	40.6%	4.3	10	43.1%
8	5.2	10	52.4%	5.4	10	53.6%
10	6.3	10	62.7%	6.2	10	61.9%

The next two tables display writing scores by grade and subgroup. Cells highlighted in blue indicate an average score below the grade level's average score. In all grade levels, students who identify as African American/Black or Hispanic/Latinx, English learners, students with disabilities, and economically disadvantaged students had lower average writing scores than their corresponding grade level in all grades.

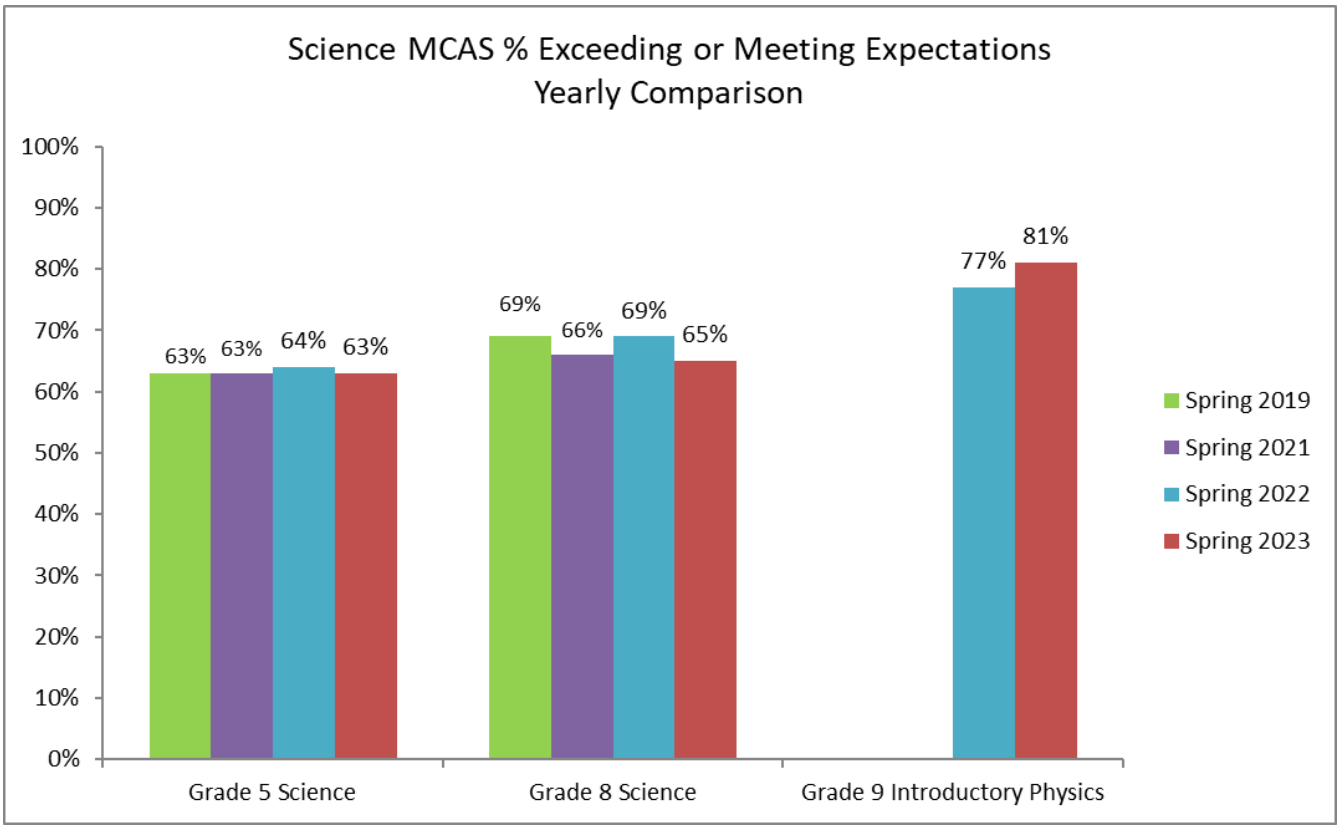
	Grade Level						
Race/Ethnicity	3	4	5	6	7	8	10
African American/Black	0.7	1.3	2.2	2.6	2.7	4.4	4.7
Asian	1.7	1.7	3.8	4.8	5.1	5.9	6.5
Hispanic/Latinx	1.1	1.1	2.8	3.2	3.1	4.7	5.0
More than 1 race	1.3	1.6	3.8	4.5	3.8	5.8	6.4
White	1.4	1.5	3.5	4.1	4.4	5.3	6.4
District	1.4	1.5	3.4	4.1	4.3	5.4	6.2

	Grade Level						
Additional Subgroups	3	4	5	6	7	8	10
English Learner (EL)	1.0	0.9	2.1	1.7	1.5	2.6	2.6
Non-English Learner (EL)	1.4	1.6	3.5	4.2	4.4	5.4	6.3
Students with disabilities	0.8	0.9	2.1	2.2	2.1	3.5	4.8
Non-students with disabilities	1.5	1.7	3.8	4.6	4.7	5.8	6.5
Low income	1.0	1.1	2.5	2.5	2.5	4.3	5.0
Non-low income	1.5	1.6	3.6	4.4	4.6	5.5	6.4
District	1.4	1.5	3.4	4.1	4.3	5.4	6.2

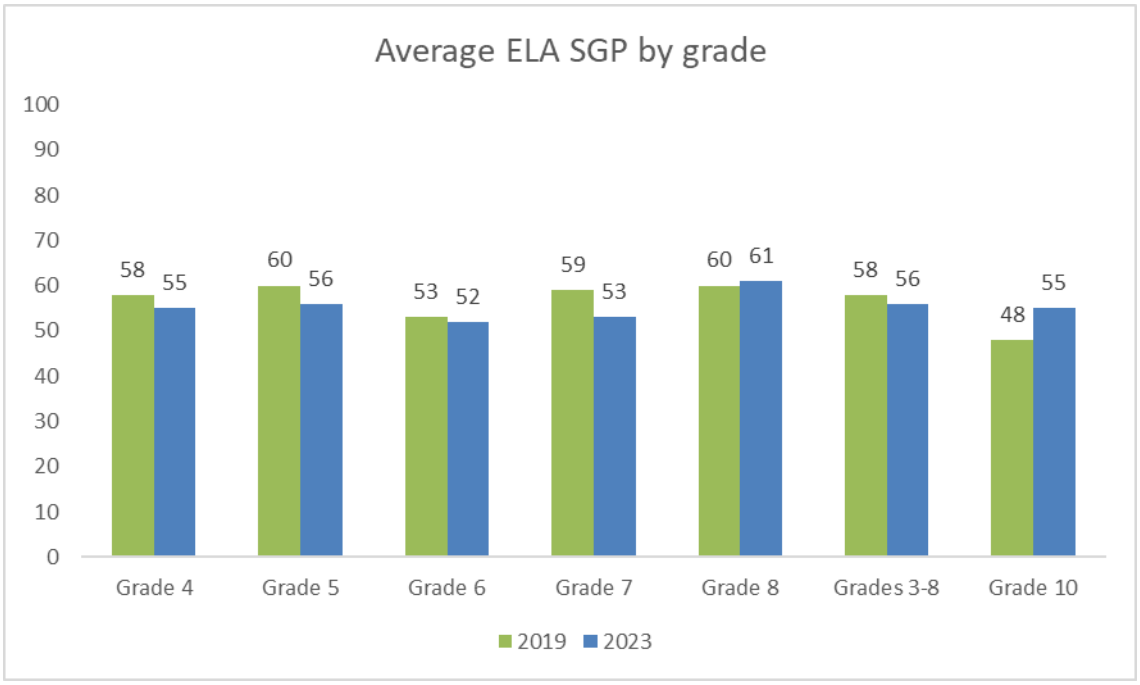
For math, Newton saw no changes in the percentage of students scoring exceeding or meeting expectations in grades 3-8 overall and saw a slight increase in grade 10 from Spring 2022 (last year). Like ELA, there is variation by grade level: when compared to Spring 2022, grades 4, 5, and 8 saw an increase in performance (+5 percentage points or an increase of 2 points in average scaled score for grade 4; +3 percentage points or an increase of 2 points in average scaled score for grade 5; and +1 percentage point but a decrease of 1 point in average scaled score for grade 8). Grade 10 saw an increase of +2 percentage points, but the same average scaled score. When compared to Spring 2019, however, all grade levels except grade 4 remain below pre-pandemic achievement. Similar trends are occurring in comparison districts, although there is variation by grade and subject (see Comparison Districts section for more detail). In grade 4, the percentage of students scoring exceeding or meeting expectations this year is the same as Spring 2019 scores, and the average scaled score is the same.

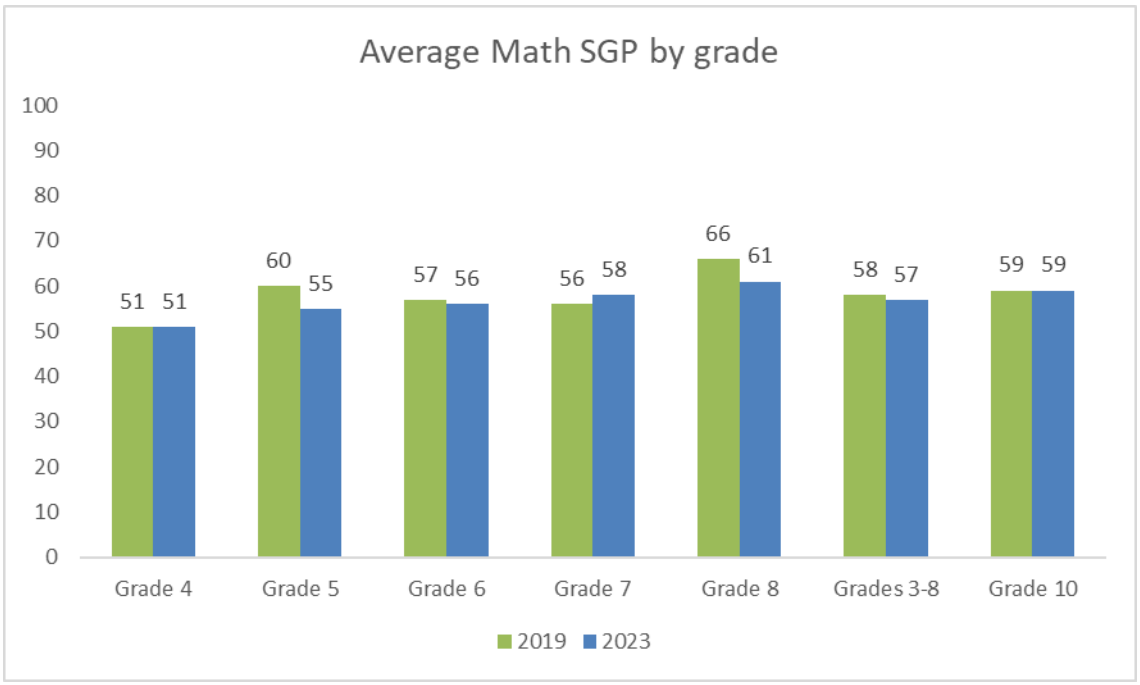


For science, Newton saw stability in grade 5 scores, a slight decline in grade 8 scores, and an increase in grade 9 Physics scores. Spring 2023 was the second year of the Next-Gen Physics assessment and is a graduation requirement.

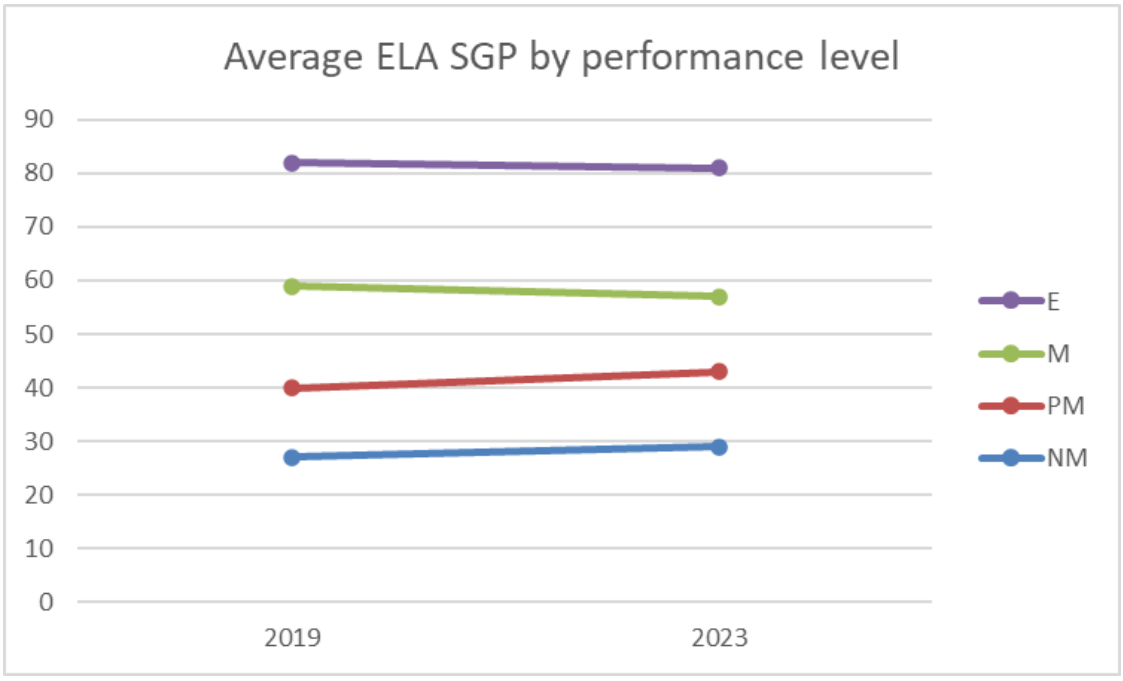


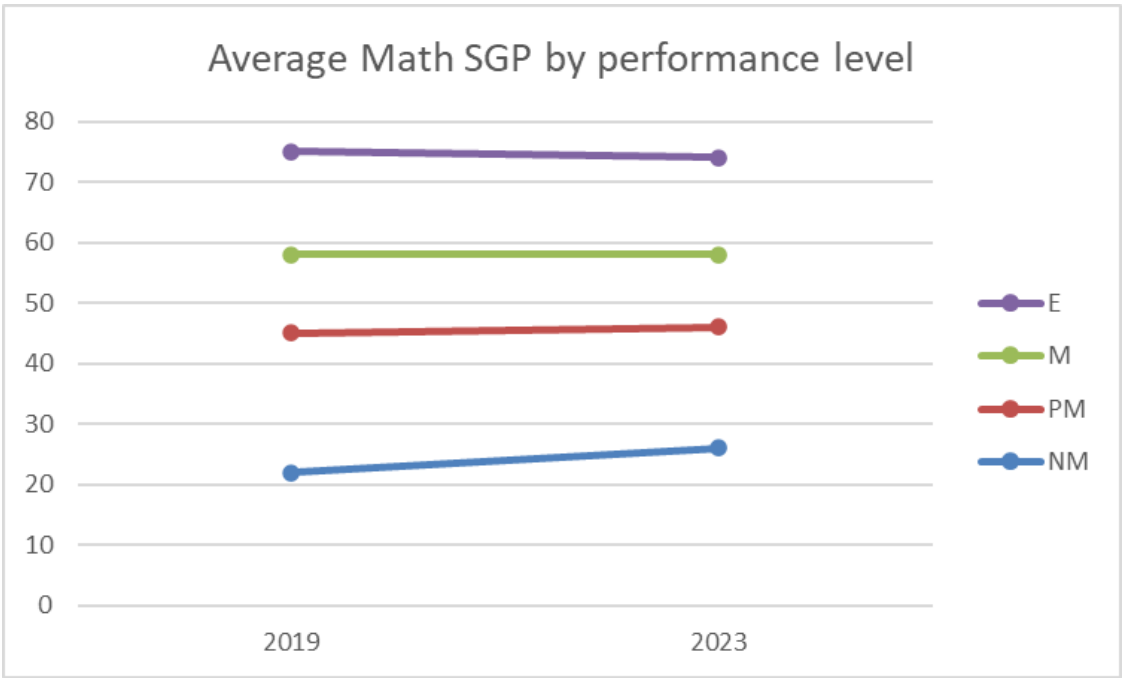
The next two graphs display average student growth percentile (SGP) by subject and grade for 2019 and 2023, and show relative stability. For both ELA and math, the average SGP in 2023 for most grade levels falls into the typical growth range (40-59). Average SGP in grade 8 for ELA and math fell into the high growth range.





When examined by performance level, there are differences in average SGP. Average SGP both pre-pandmic (2019) and this year (2023) increases as performance level increases. The graphs below display average SGP by student performance level in that year. The graphs indicate that on average, students scoring exceeding expectations had the highest average SGP and students scoring not meeting expectations had the lowest average SGP. This pattern is the same for median SGP (although not displayed here).


Average ELA SGP by performance level
90
80
70
60
50
40
30
20
10
0
2019
2023
E
M
PM
NM


Average Math SGP by performance level
80
70
60
50
40
30
20
10
0
2019
2023
E
M
PM
NM

As noted for writing scores, we know that success is not distributed proportionately among all of our student subgroups. The tables and charts in the next section detail the differences in performance among identified student subgroups.

Student Achievement by Subgroup

The Newton Public Schools is committed to achieving our system-wide goals of Equity and Excellence. One important measure of our progress is the disaggregation by subgroups of our student performance on MCAS. The following graphs illustrate the differences in student achievement by race/ethnicity, English Learner (EL) status, low income status, students with disabilities status, and gender.

Average scaled scores are included in this subgroup analysis in addition to the percentage of students scoring Exceeding or Meeting Expectations. Average scaled scores have been included to provide information on how the average student in each subgroup is performing, as data on percentages of students scoring Exceeding or Meeting Expectations focuses only on students in those performance levels. Taken together, these metrics can provide a more holistic view of subgroup achievement on the MCAS. The state has also recommended the use of average scaled scores when analyzing subgroup achievement. A scaled score of 500 is the cut score for Meeting Expectations. Please note that the scaled scores on the Next-Gen MCAS range from 440 to 560; most graphs in this analysis show the range as 480 to 530 so it is easier to see differences in average scaled score by subgroup. On the Average Scaled Score charts, the 500 score is indicated by a darkened line across the chart to indicate the minimum scaled score required to "meet expectations."

A note about differences in achievement by gender:

In English Language Arts grades 3 - 8, Newton continues to see a persistent difference in the percentage of students meeting or exceeding expectations between male and female students, with a higher percentage of females scoring meeting or exceeding expectations than males (a 16 percentage point gap this year). The average scaled scores reflect a similar trend with approximately a 9-point difference. At the high school level, while 83% of female sophomores scored meets or exceeds expectations, fewer male sophomores (79%) met that measure.

In math, there are virtually no differences in the percentage of students meeting or exceeding expectations between male and female students in grades 3-8 over the past five years, nor is there a difference in average scaled scores. This year in grade 10 (similar to last year), a slightly higher percentage of males scored meeting or exceeding expectations than females (83% versus 79%).

In Science and Tech/Engineering in grades 5 and 8, there are virtually no differences in the percentage of students scoring meeting or exceeding expectations between males and females. At the high schools, a slightly lower percentage of females (79%) scored meeting or exceeding compared to males (83%) on the grade 9 Physics test, the same trend as last year.

Achievement for gender non-conforming students is not described here due to the small number of students who identify as gender non-conforming to the district and take these assessments.

Organization of graphs grades 3 - 8:

The following graphs are included for each subgroup and subject:

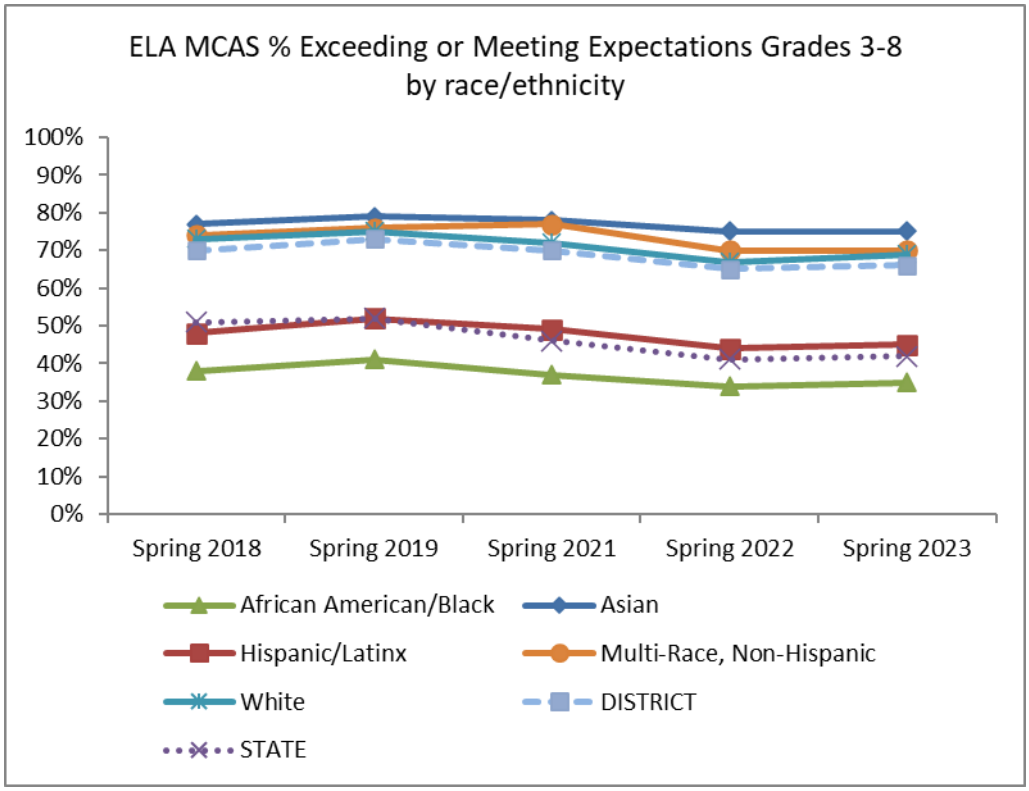
- 5 year trends for ELA and math
    - Percentage meeting or exceeding expectations
    - Average scaled score
- 4 year trends for STE
    - Percentage meeting or exceeding expectations
    - Average scaled score

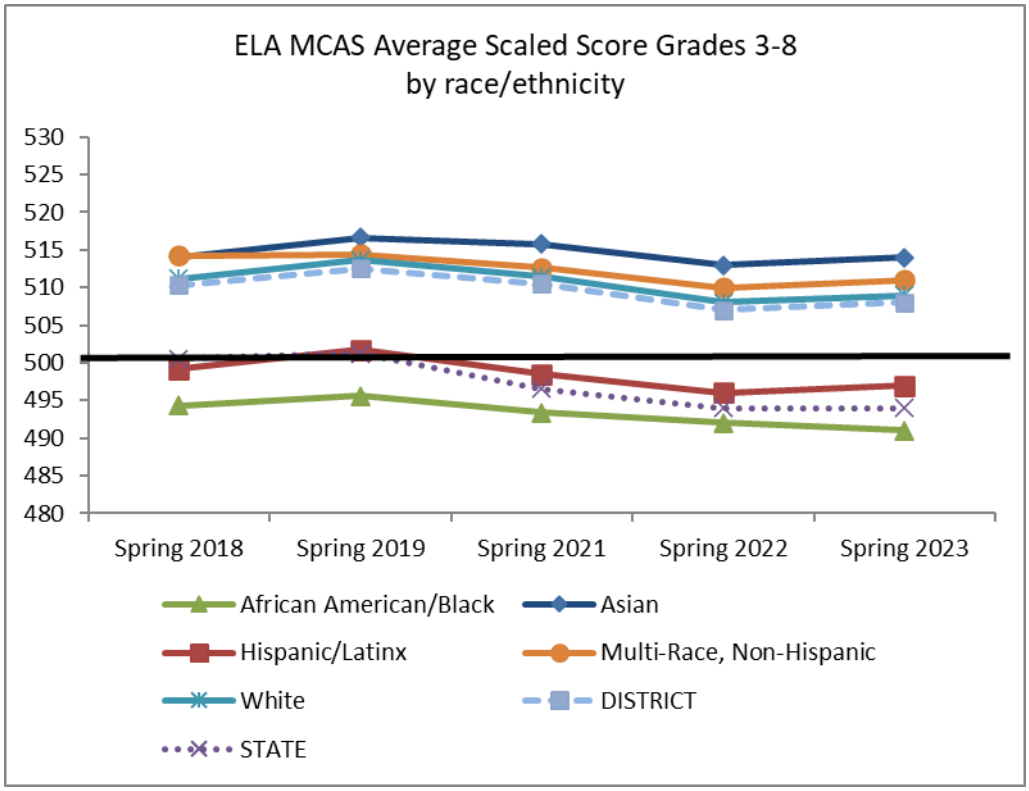
Organization of Graphs High School:

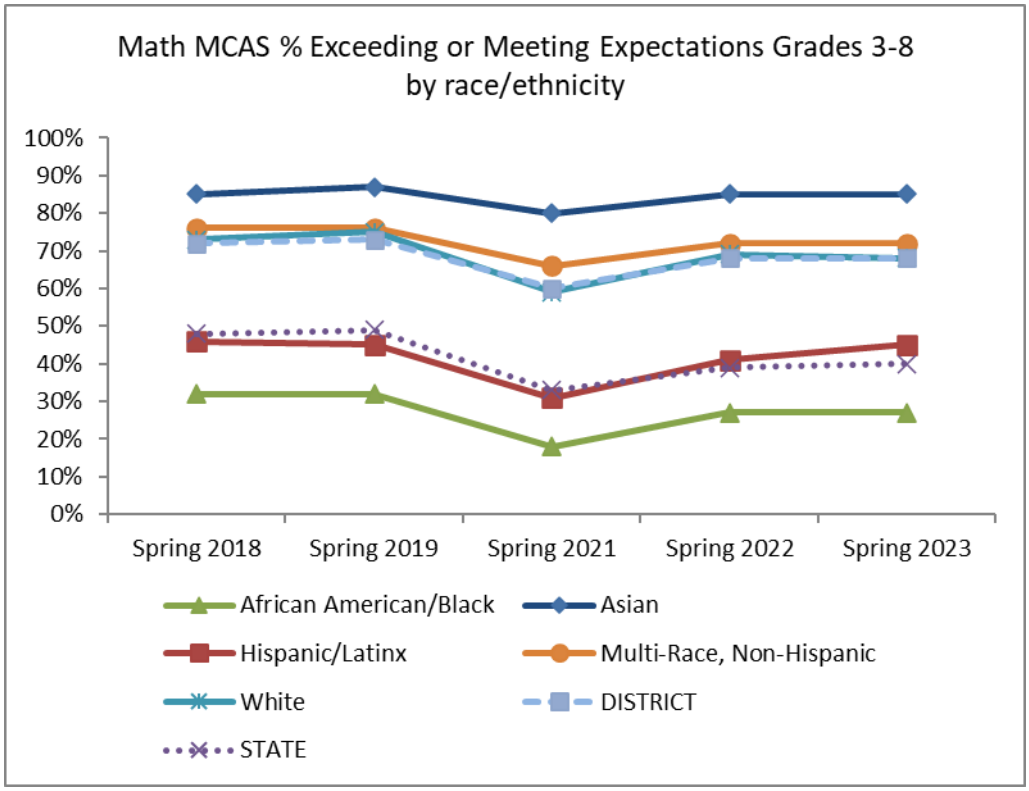
The following graphs are included for each subgroup and subject:

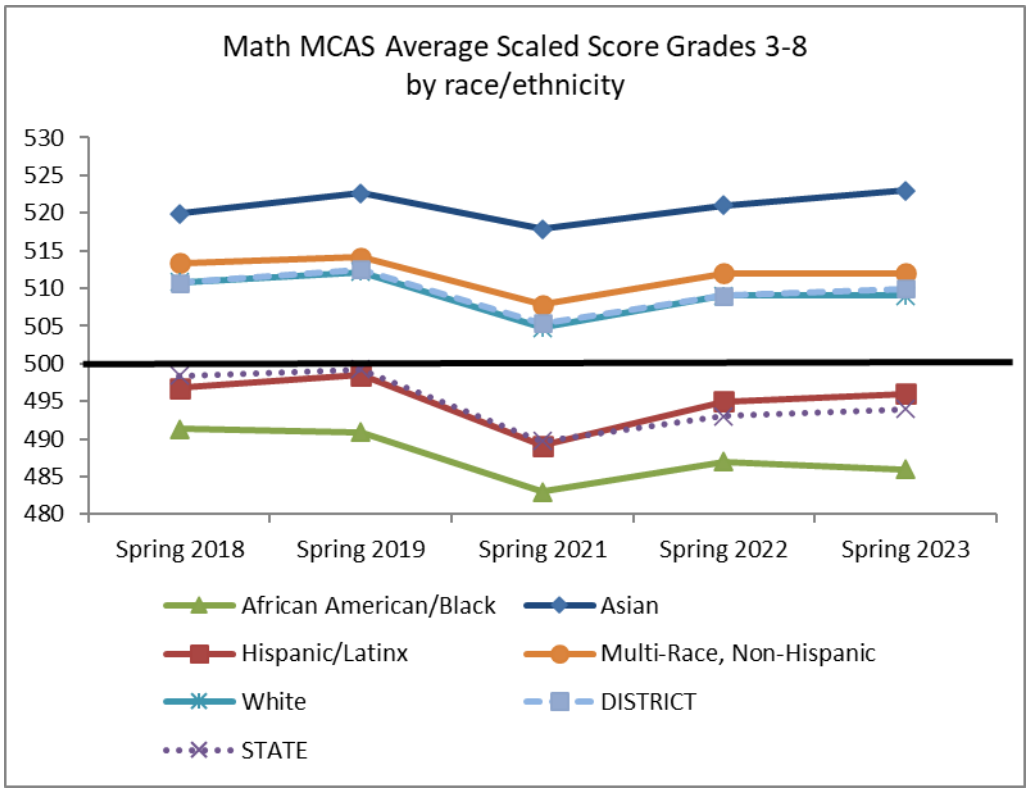
- 4 year trends for ELA and math
    - Percentage meeting or exceeding expectations
    - Average scaled score
- 2 year trends for Physics
    - Percentage meeting or exceeding expectations
    - Average scaled score

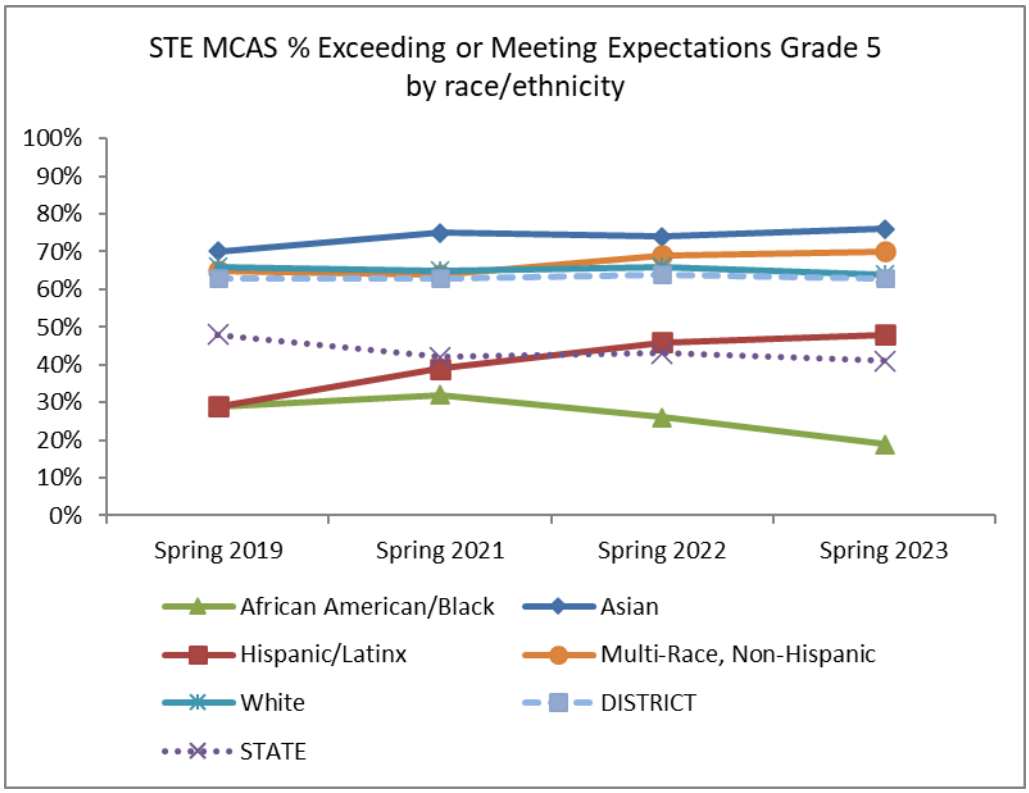
Grades 3 – 8: Race/Ethnicity

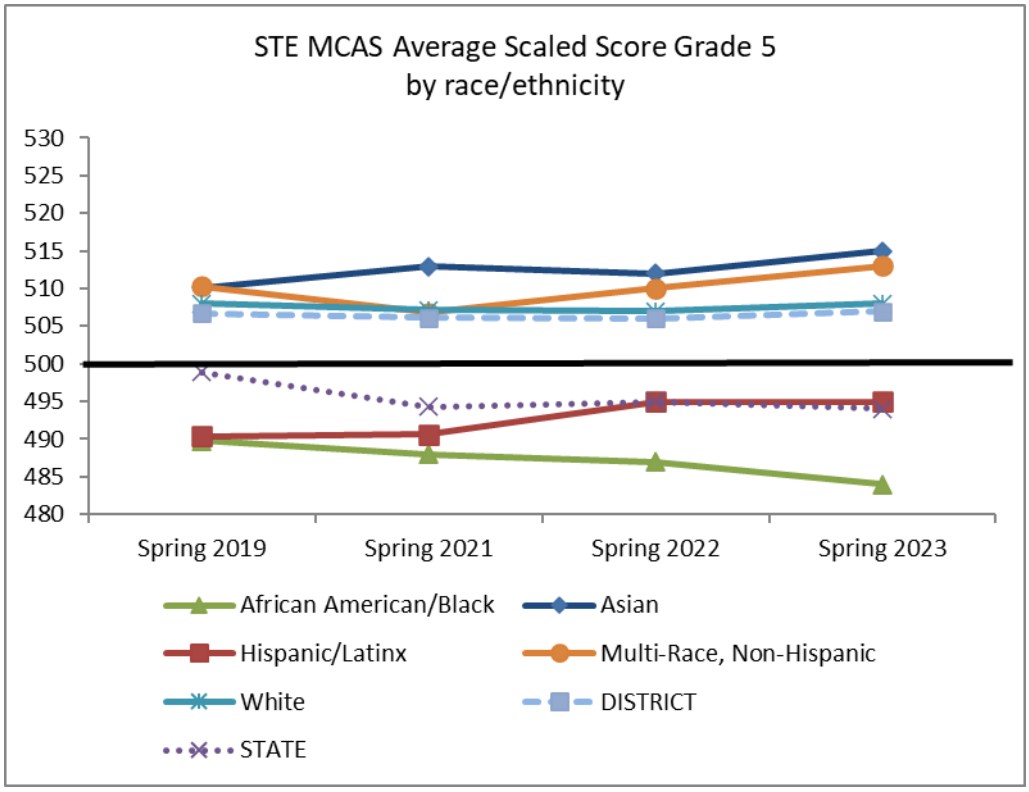


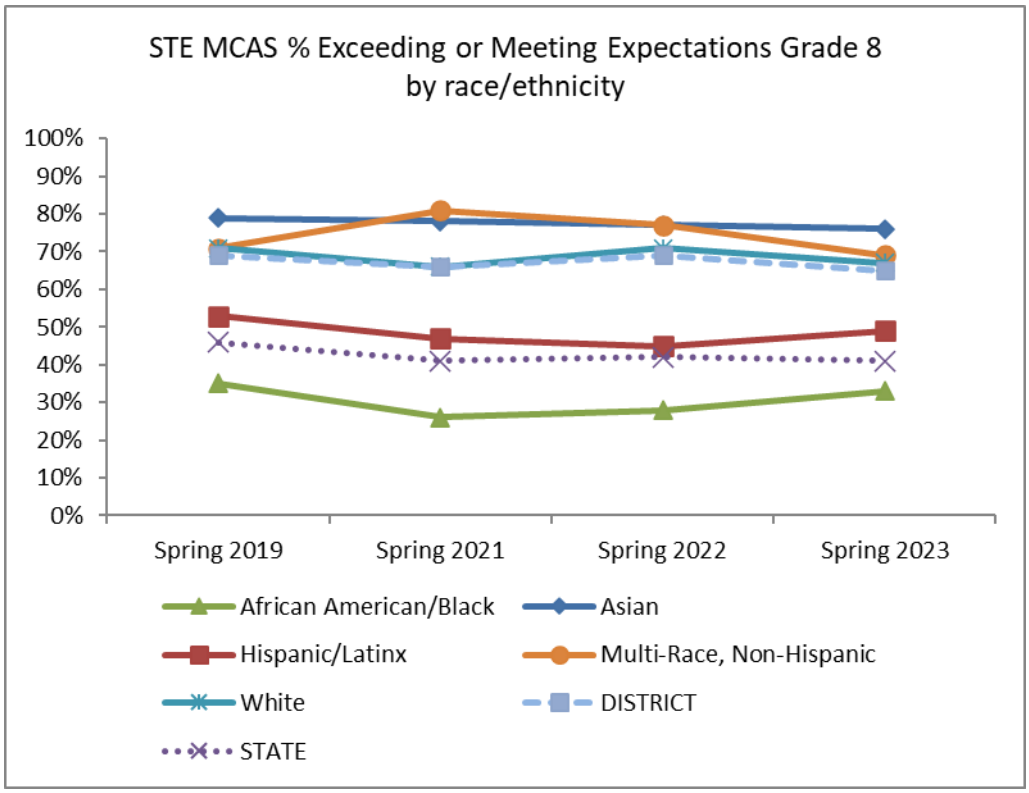


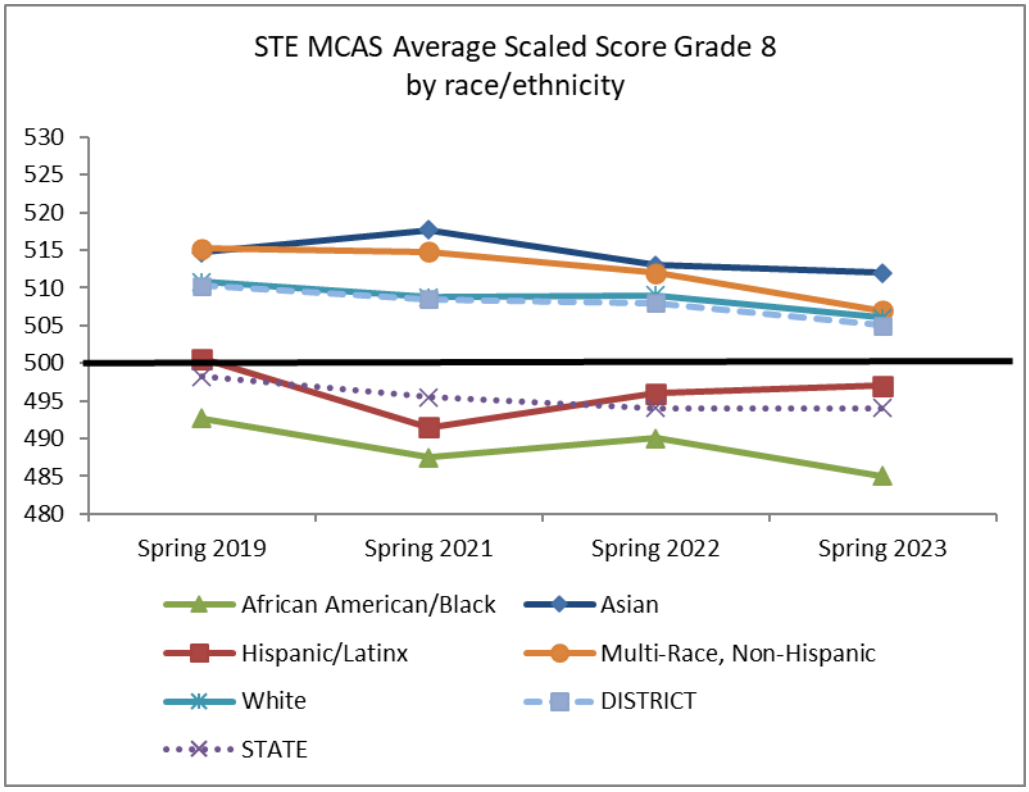

Math MCAS % Exceeding or Meeting Expectations Grades 3-8
by race/ethnicity
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE


Math MCAS Average Scaled Score Grades 3-8
by race/ethnicity
530
525
520
515
510
505
500
495
490
485
480
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

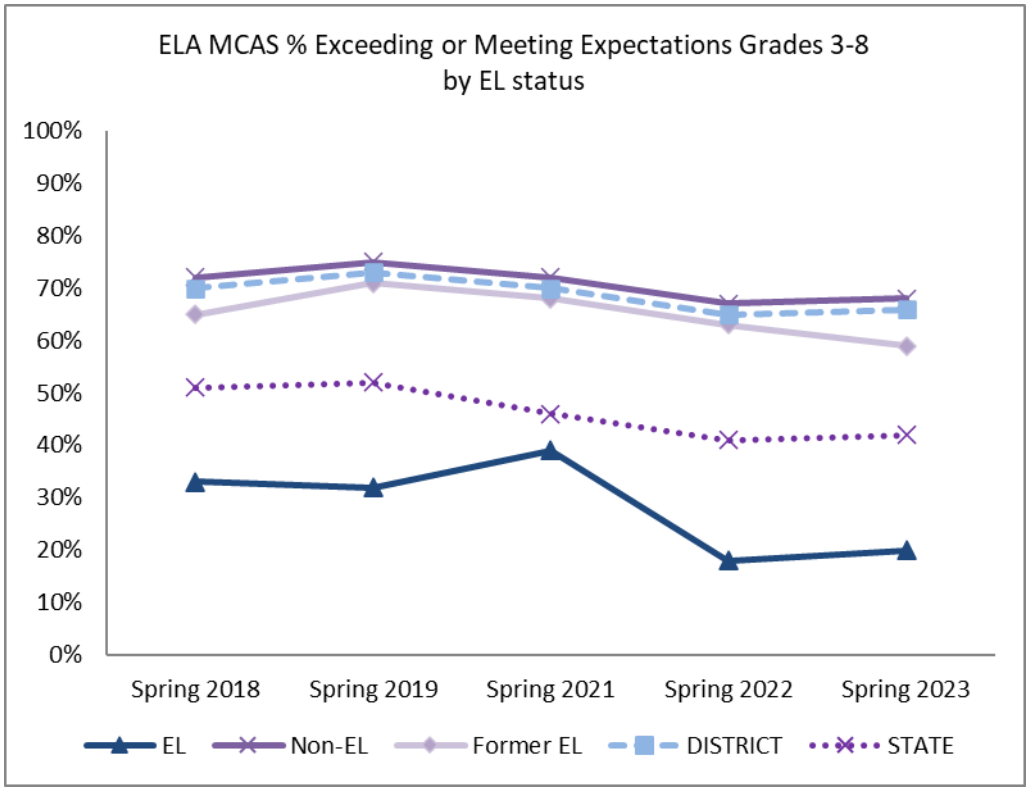

STE MCAS % Exceeding or Meeting Expectations Grade 5
by race/ethnicity
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

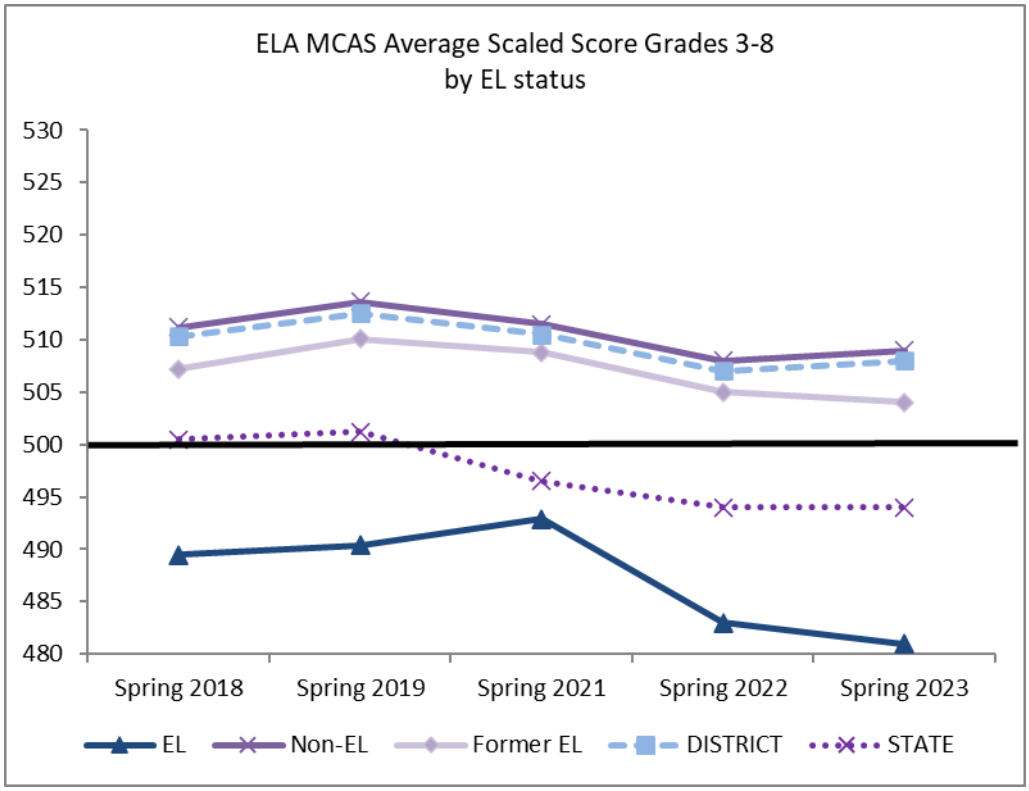

STE MCAS Average Scaled Score Grade 5
by race/ethnicity
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

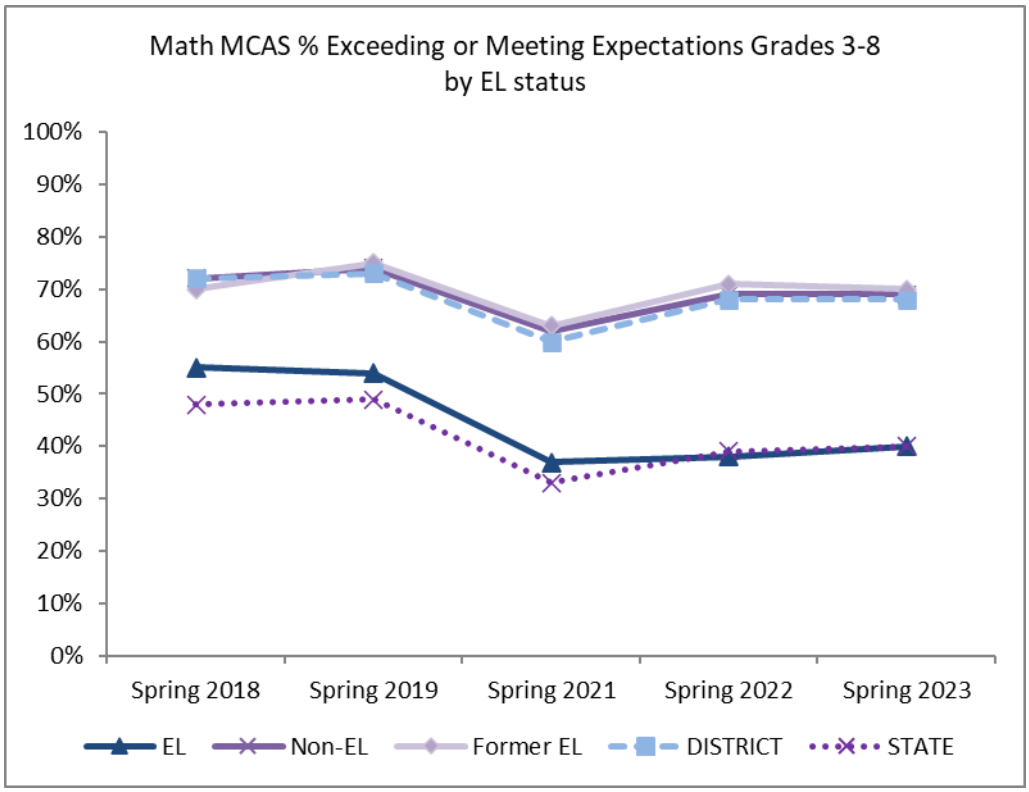

STE MCAS % Exceeding or Meeting Expectations Grade 8
by race/ethnicity
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

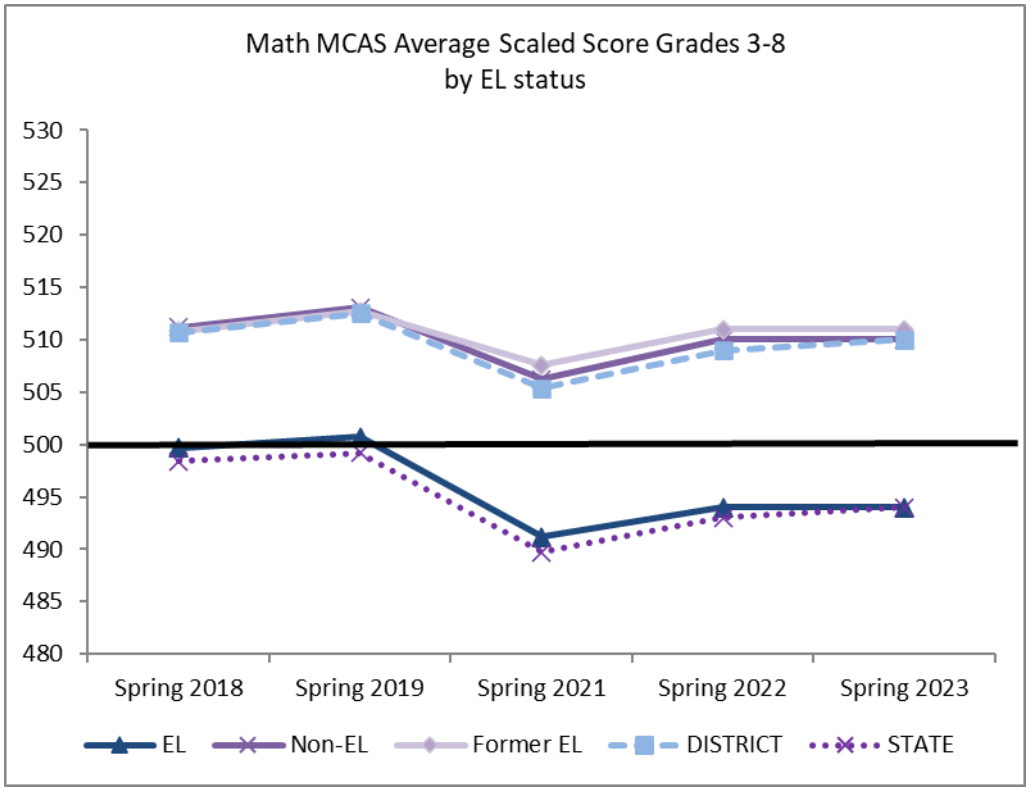

STE MCAS Average Scaled Score Grade 8
by race/ethnicity
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

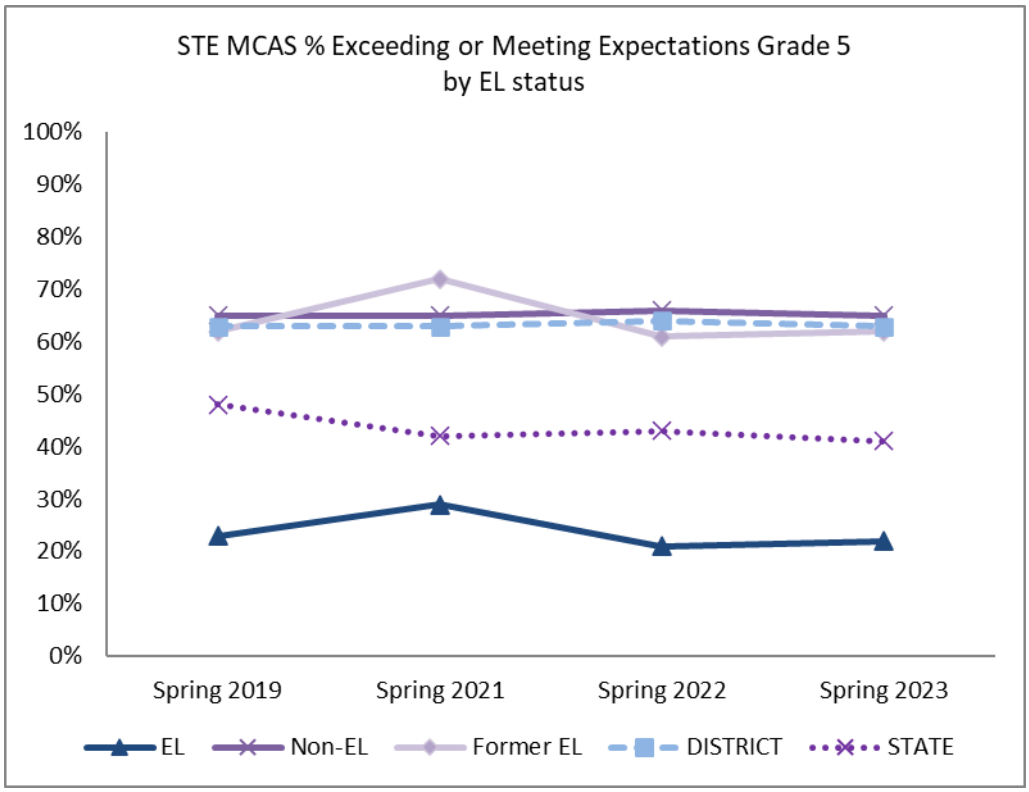
Grades 3 – 8: English Learner Status

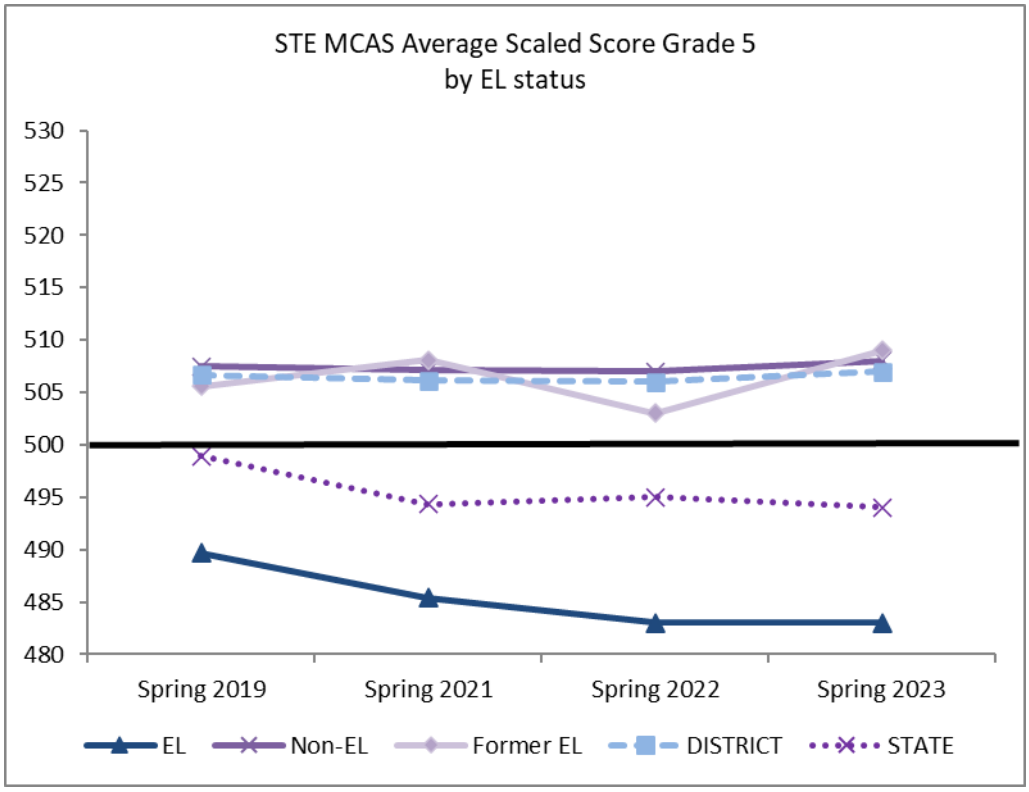


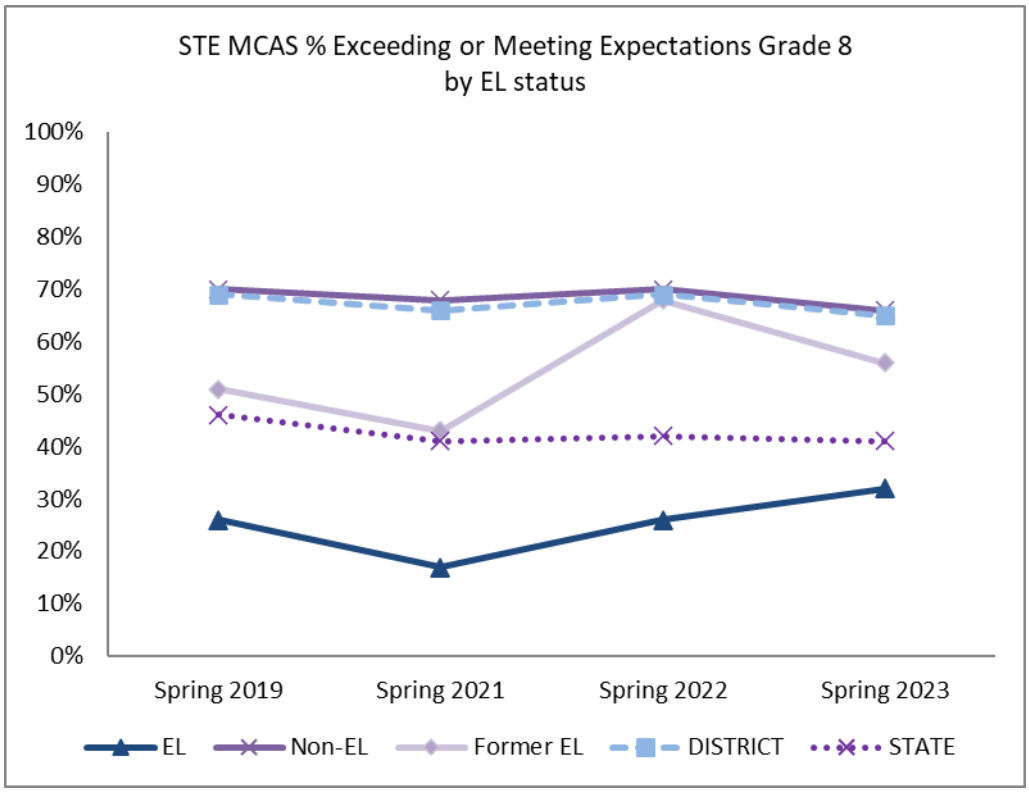


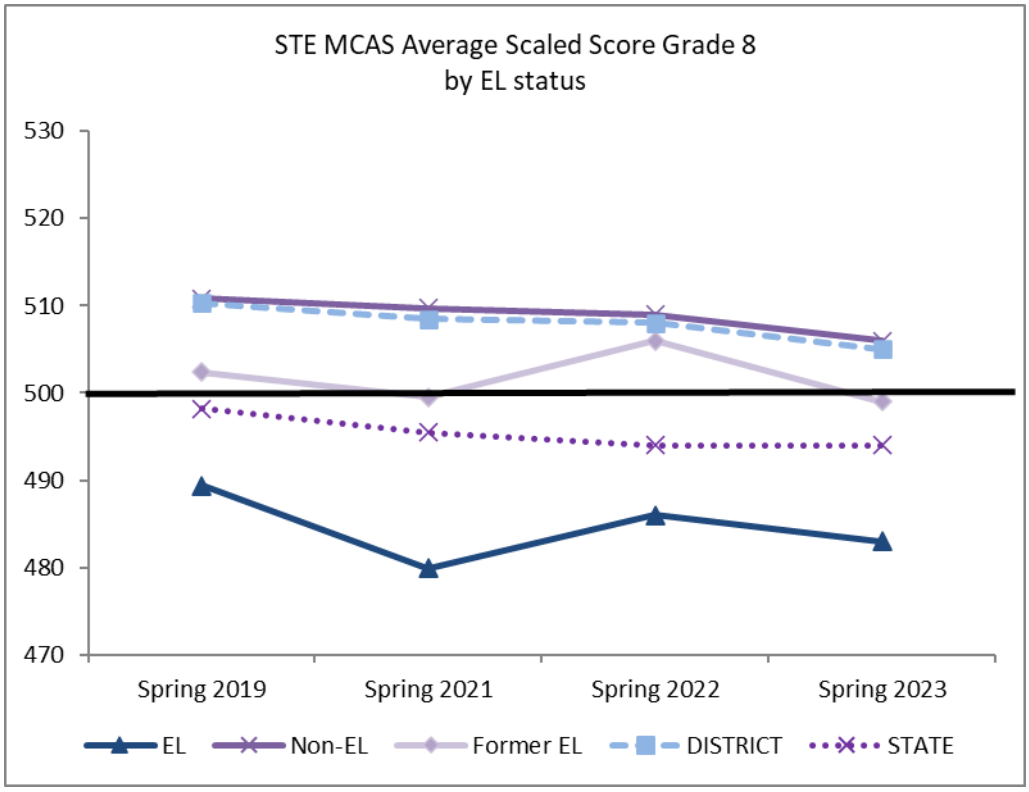

Math MCAS % Exceeding or Meeting Expectations Grades 3-8
by EL status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE


Math MCAS Average Scaled Score Grades 3-8
by EL status
530
525
520
515
510
505
500
495
490
485
480
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

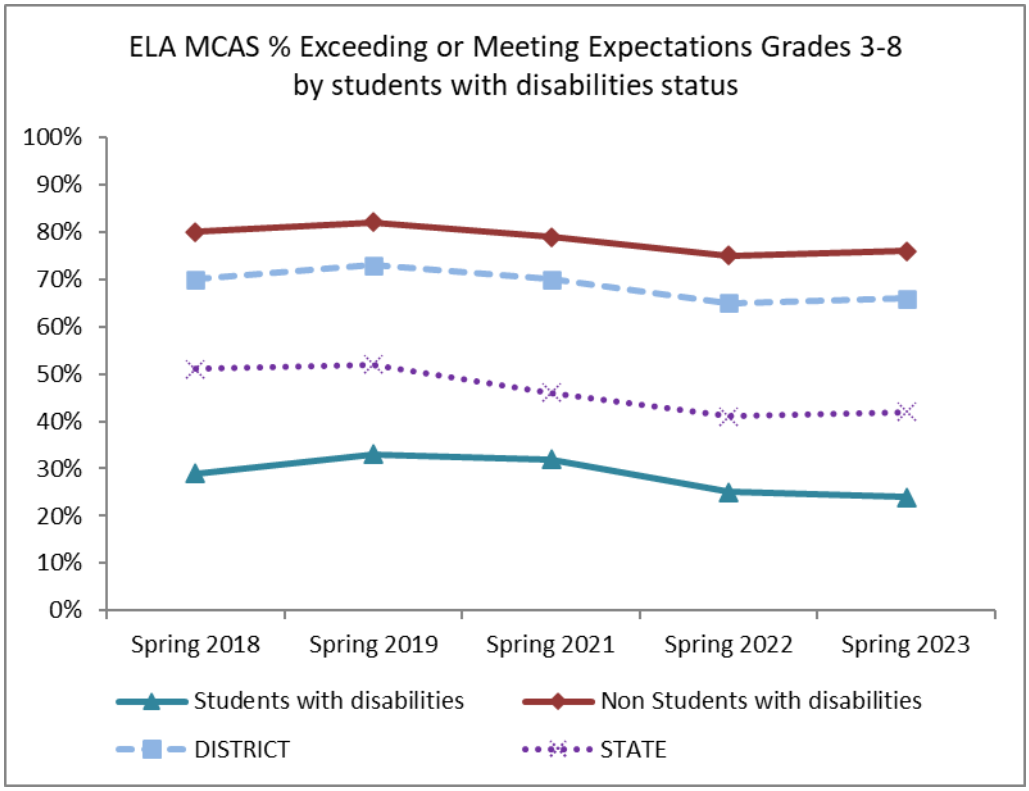

STE MCAS % Exceeding or Meeting Expectations Grade 5
by EL status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

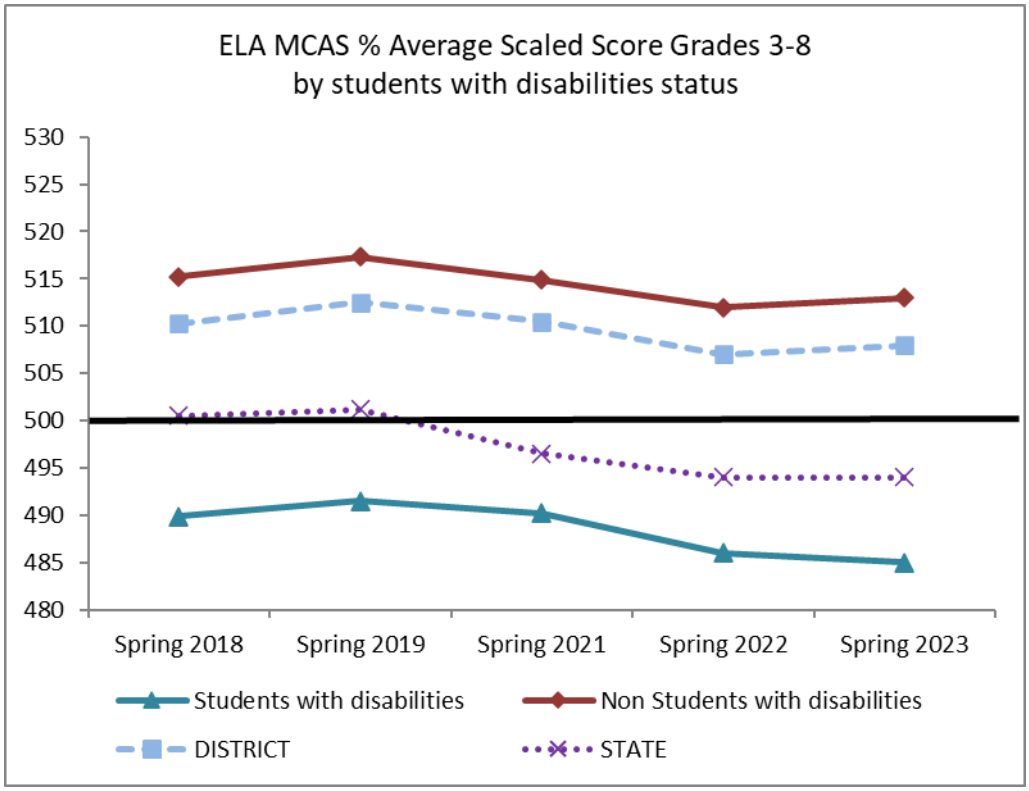

STE MCAS Average Scaled Score Grade 5
by EL status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

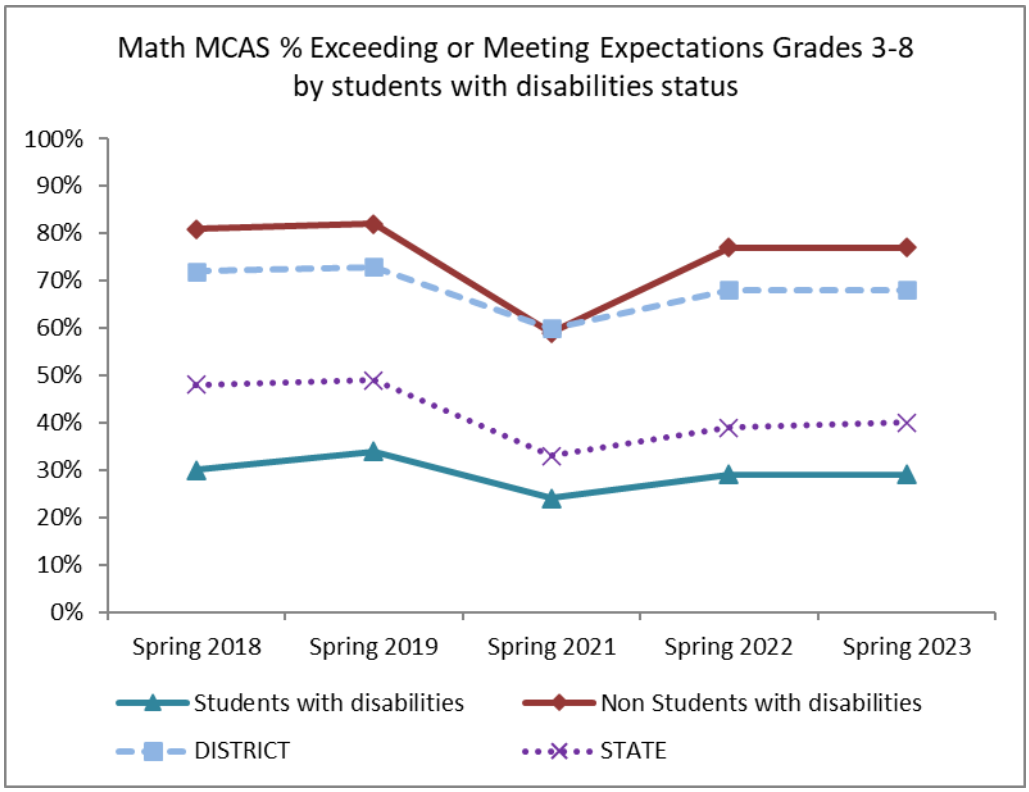

STE MCAS % Exceeding or Meeting Expectations Grade 8
by EL status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

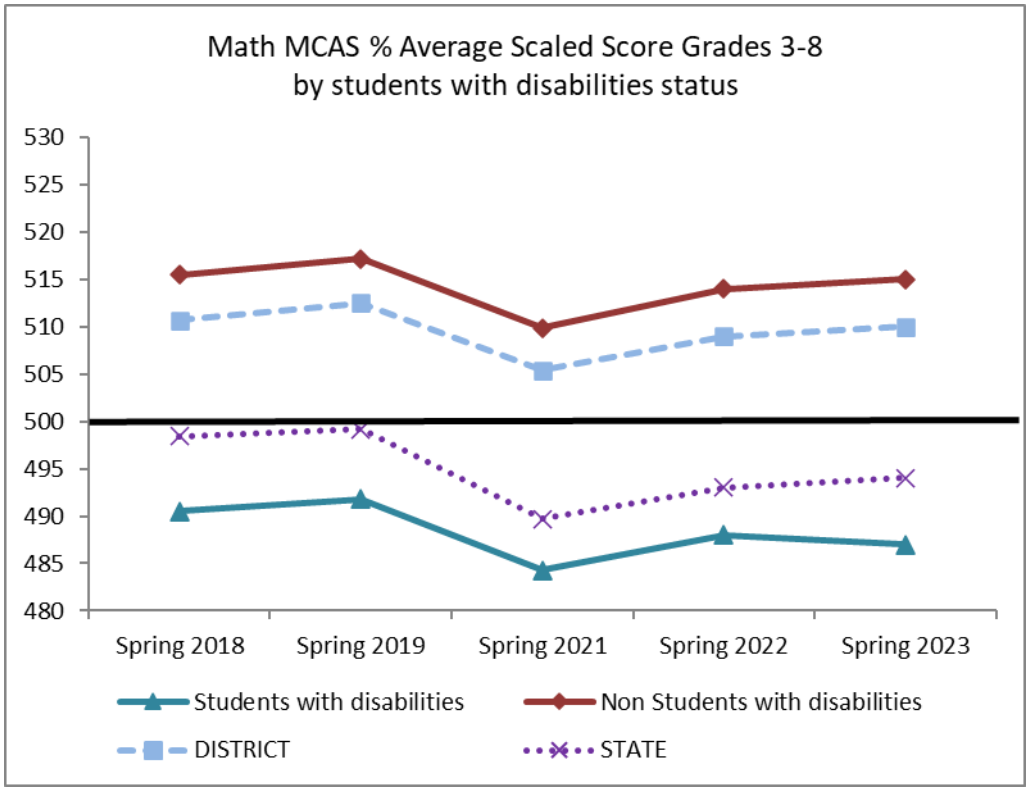

STE MCAS Average Scaled Score Grade 8
by EL status
530
520
510
500
490
480
470
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

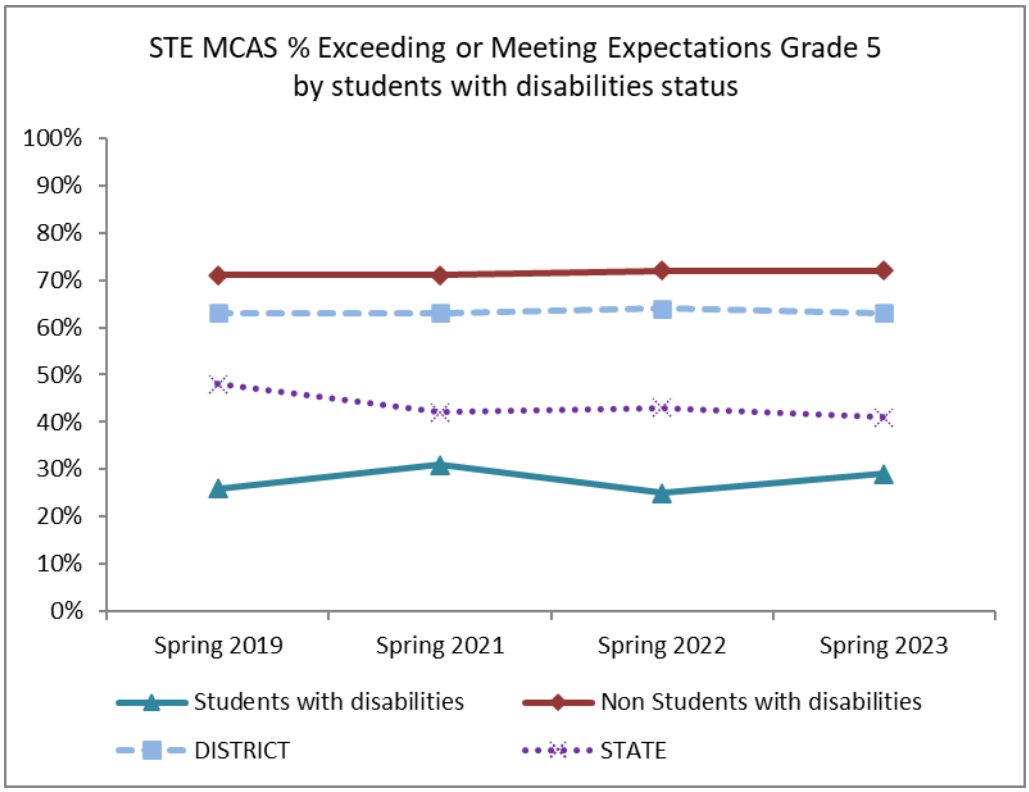
Grades 3 – 8: Students with Disabilities

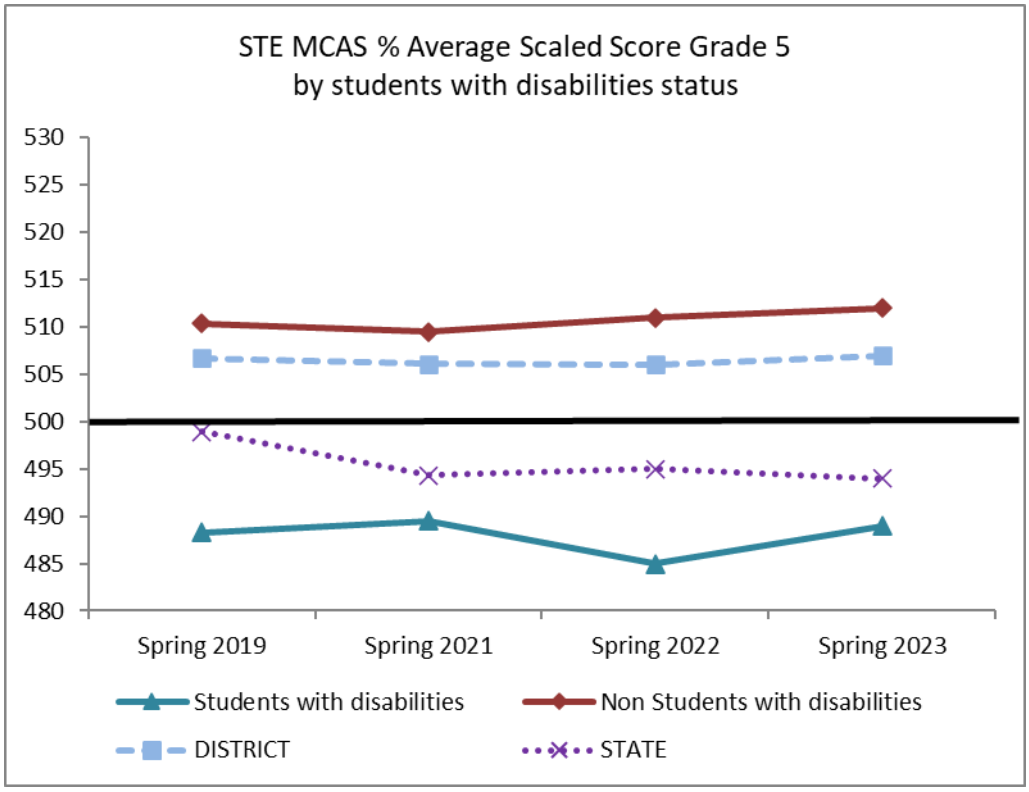


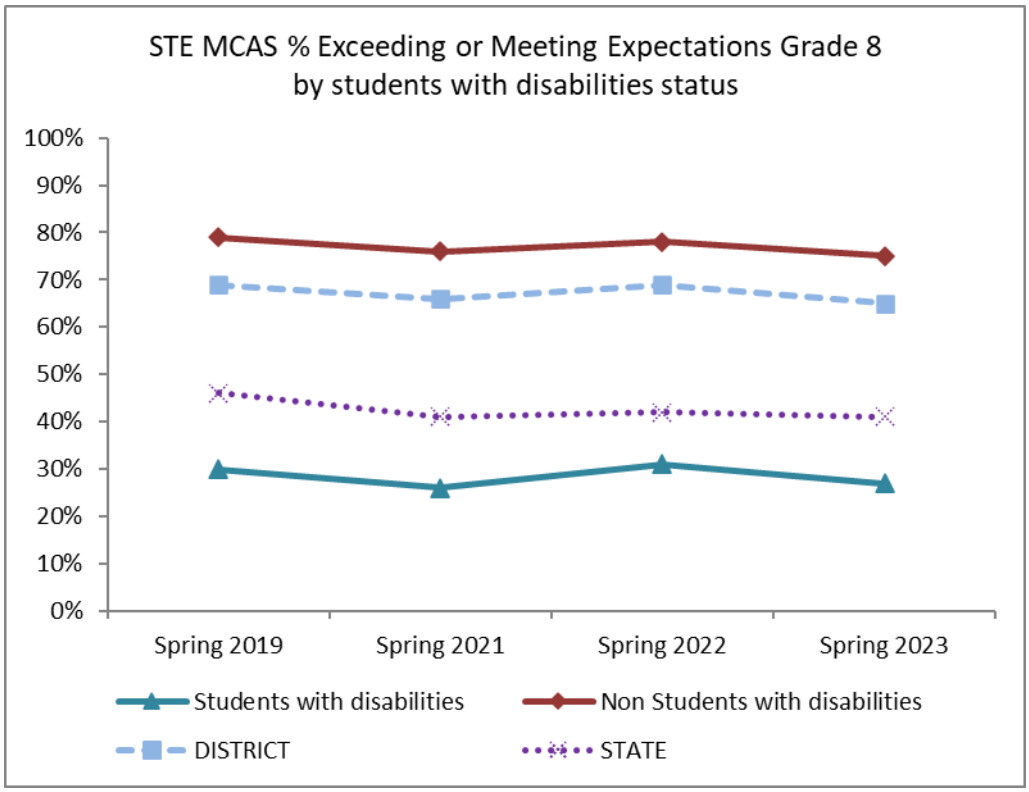


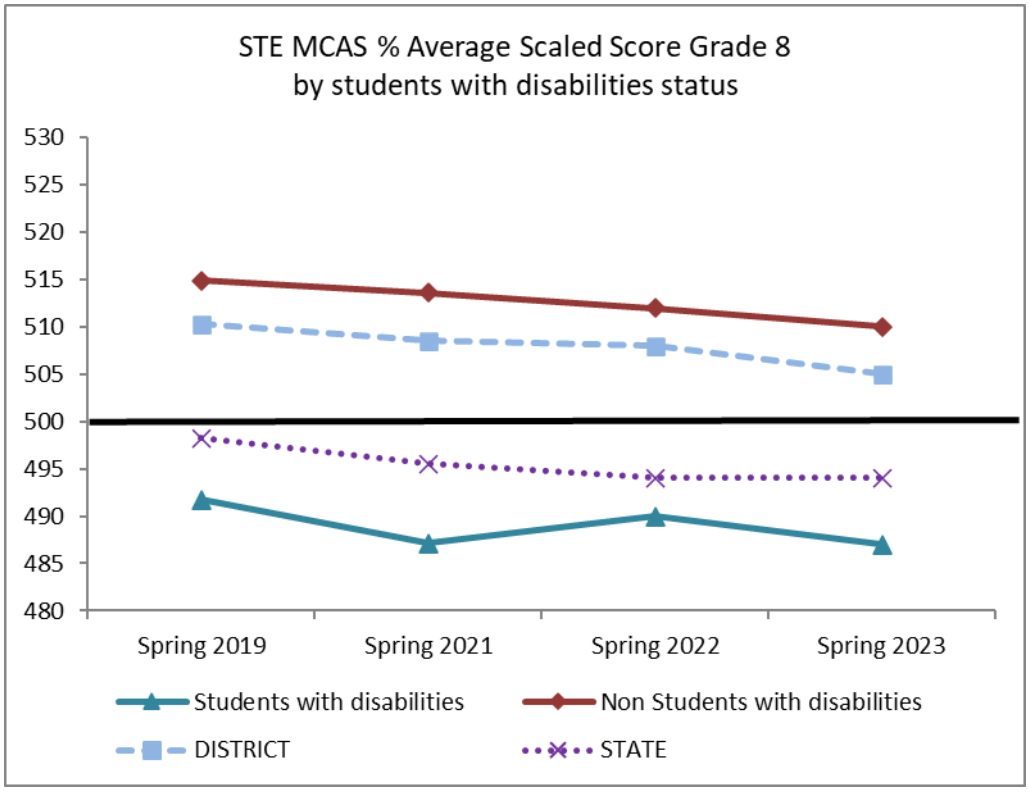

Math MCAS % Exceeding or Meeting Expectations Grades 3-8
by students with disabilities status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE


Math MCAS % Average Scaled Score Grades 3-8
by students with disabilities status
530
525
520
515
510
505
500
495
490
485
480
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

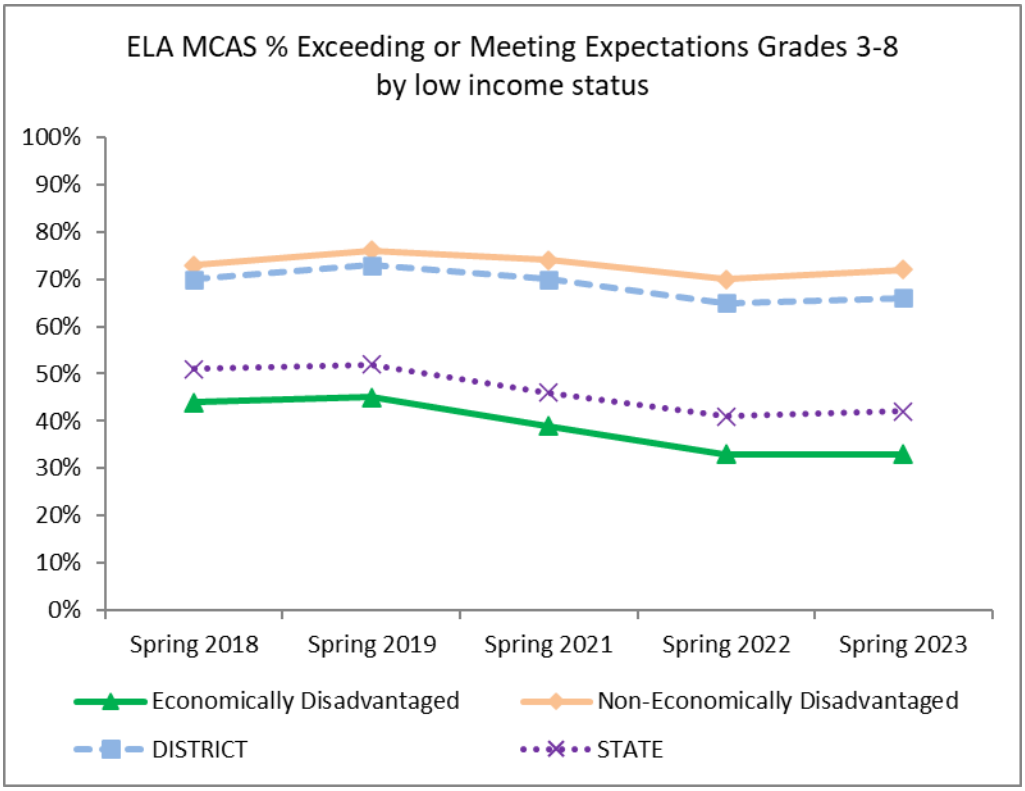

STE MCAS % Exceeding or Meeting Expectations Grade 5
by students with disabilities status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

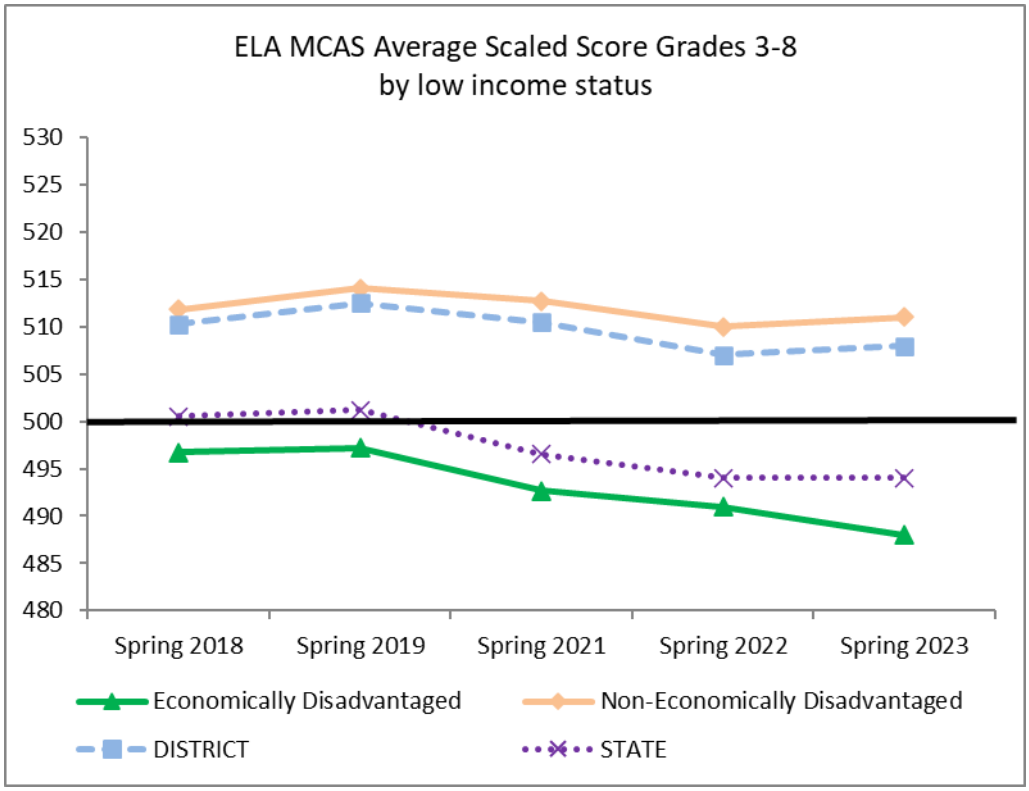

STE MCAS % Average Scaled Score Grade 5
by students with disabilities status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

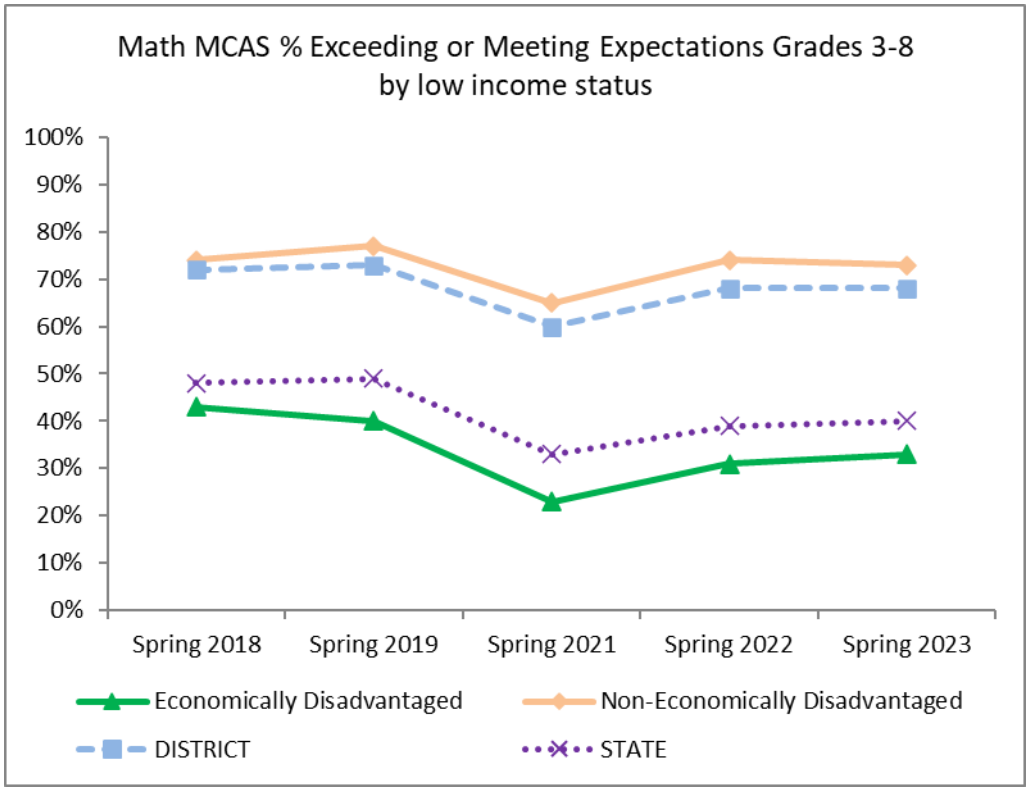

STE MCAS % Exceeding or Meeting Expectations Grade 8
by students with disabilities status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

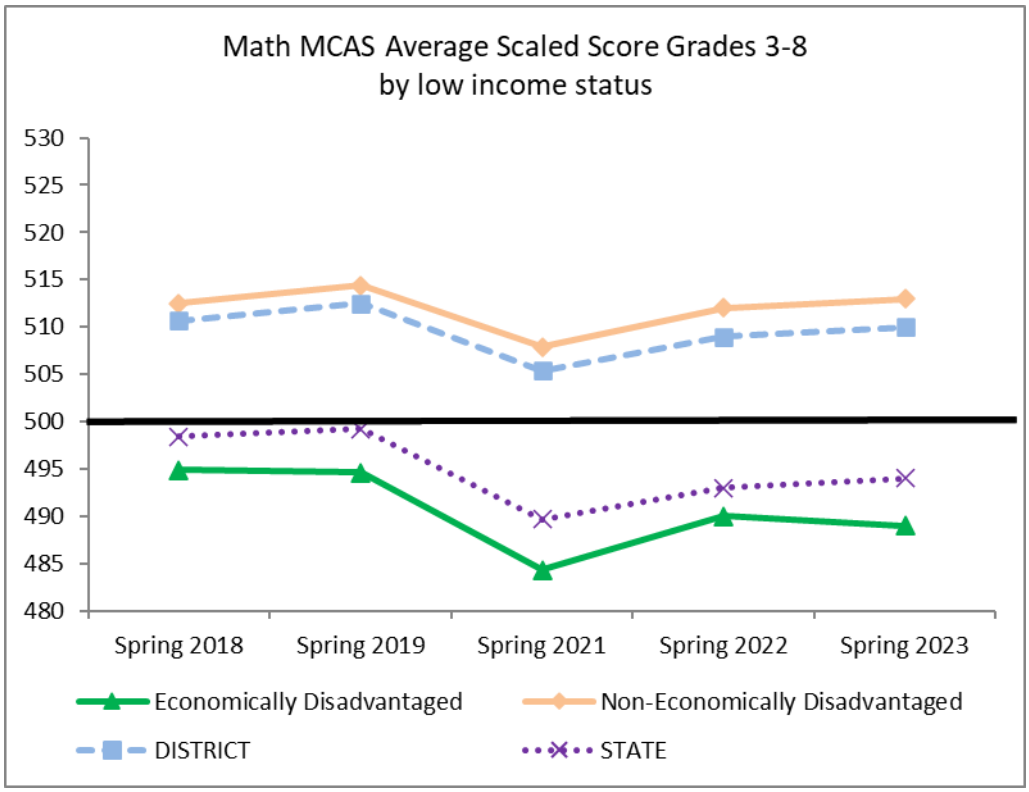

STE MCAS % Average Scaled Score Grade 8
by students with disabilities status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

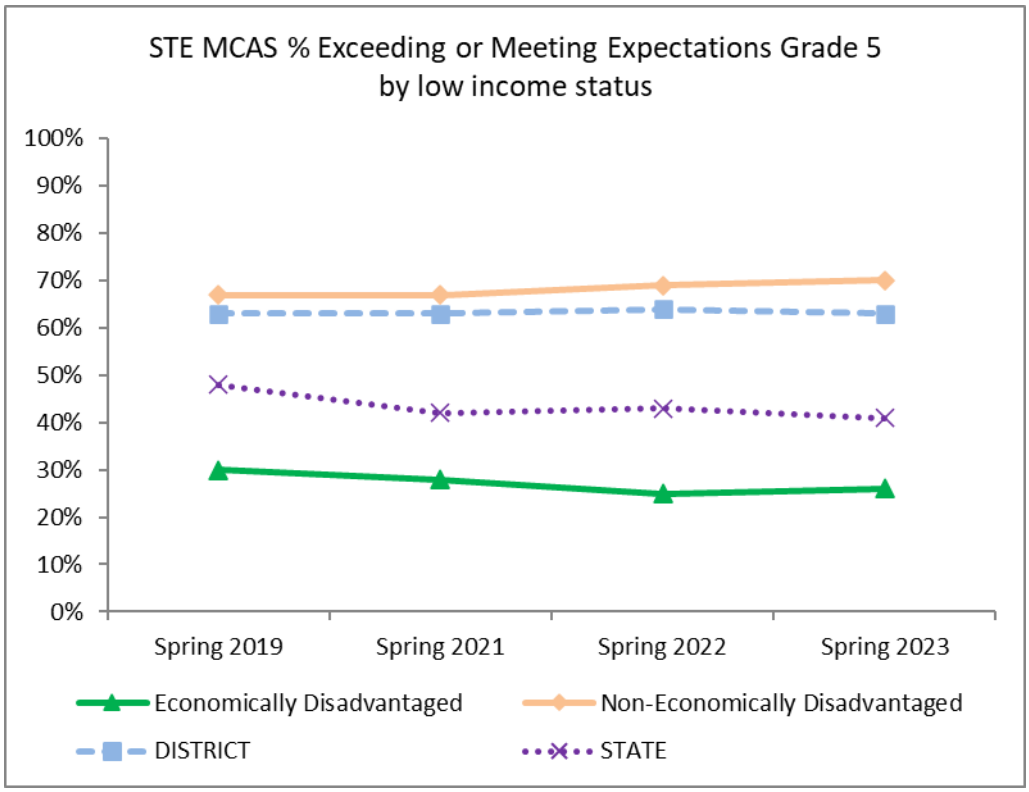
Grades 3 – 8: Low Income/Economically Disadvantaged

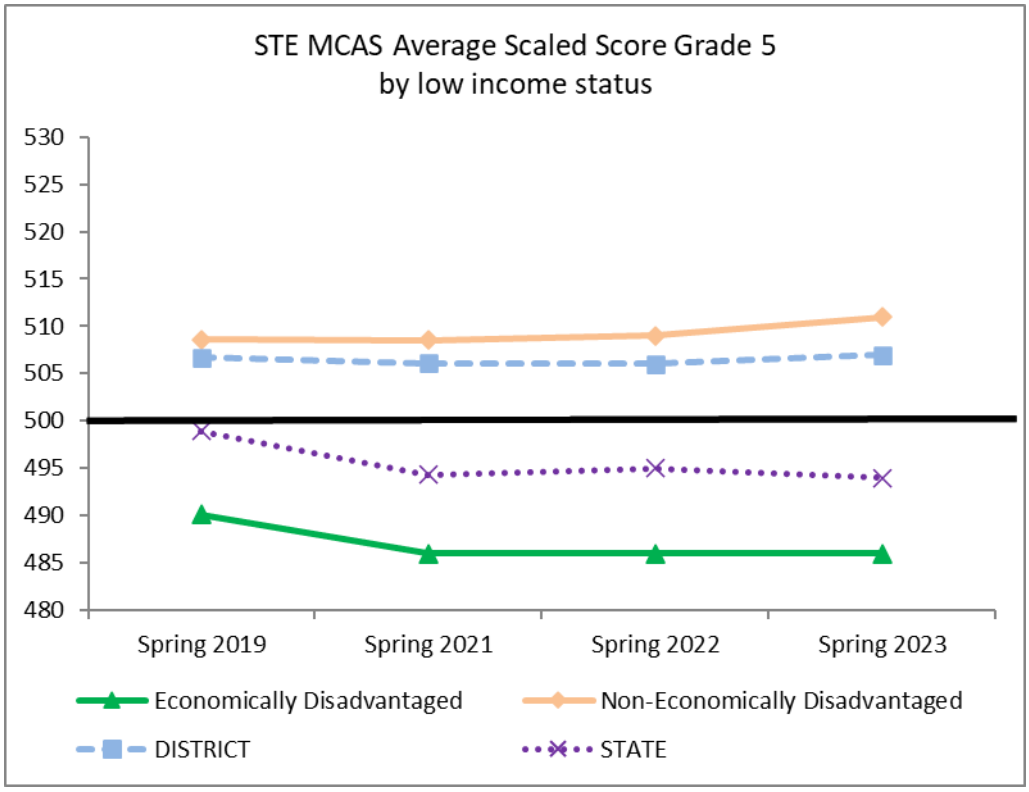


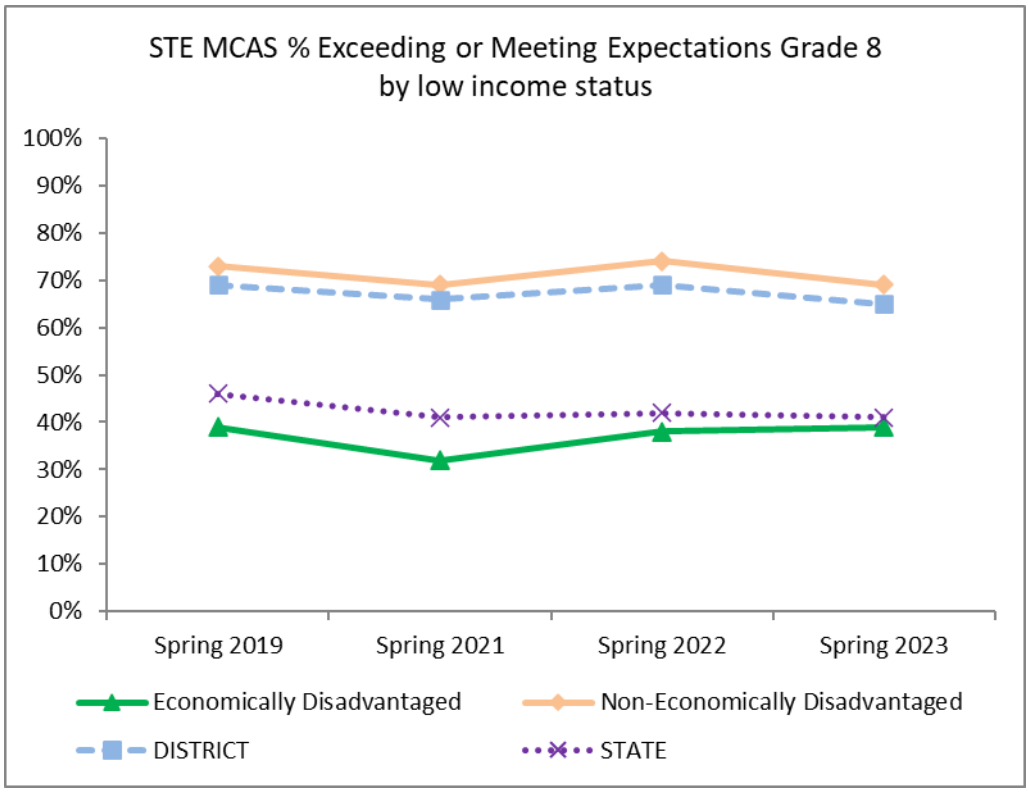


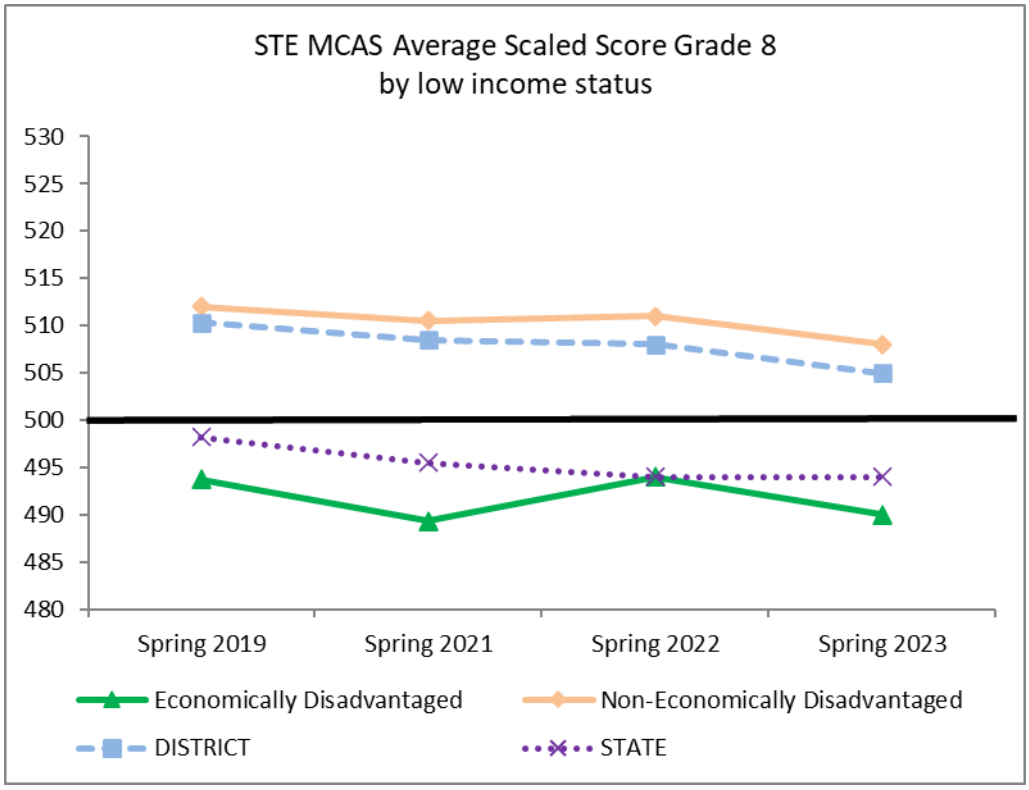

Math MCAS % Exceeding or Meeting Expectations Grades 3-8
by low income status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Economically Disadvantaged
Non-Economically Disadvantaged
DISTRICT
STATE


Math MCAS Average Scaled Score Grades 3-8
by low income status
530
525
520
515
510
505
500
495
490
485
480
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Economically Disadvantaged
Non-Economically Disadvantaged
DISTRICT
STATE

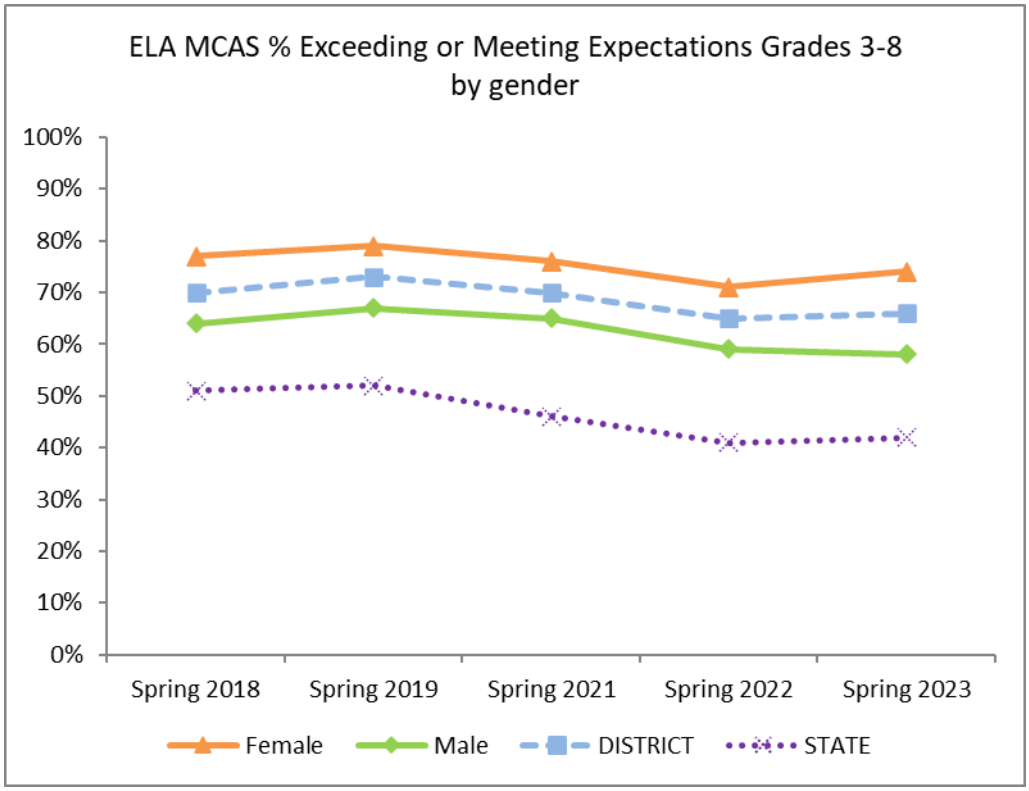

STE MCAS % Exceeding or Meeting Expectations Grade 5
by low income status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Economically Disadvantaged
Non-Economically Disadvantaged
DISTRICT
STATE

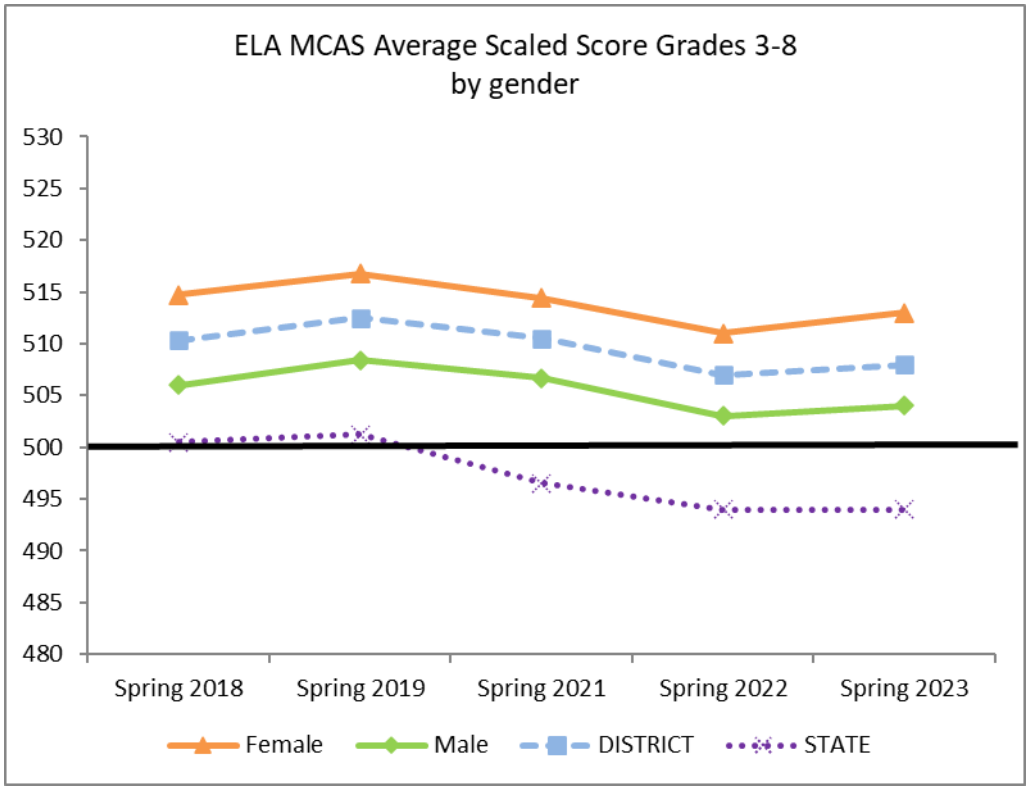

STE MCAS Average Scaled Score Grade 5
by low income status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Economically Disadvantaged
Non-Economically Disadvantaged
DISTRICT
STATE

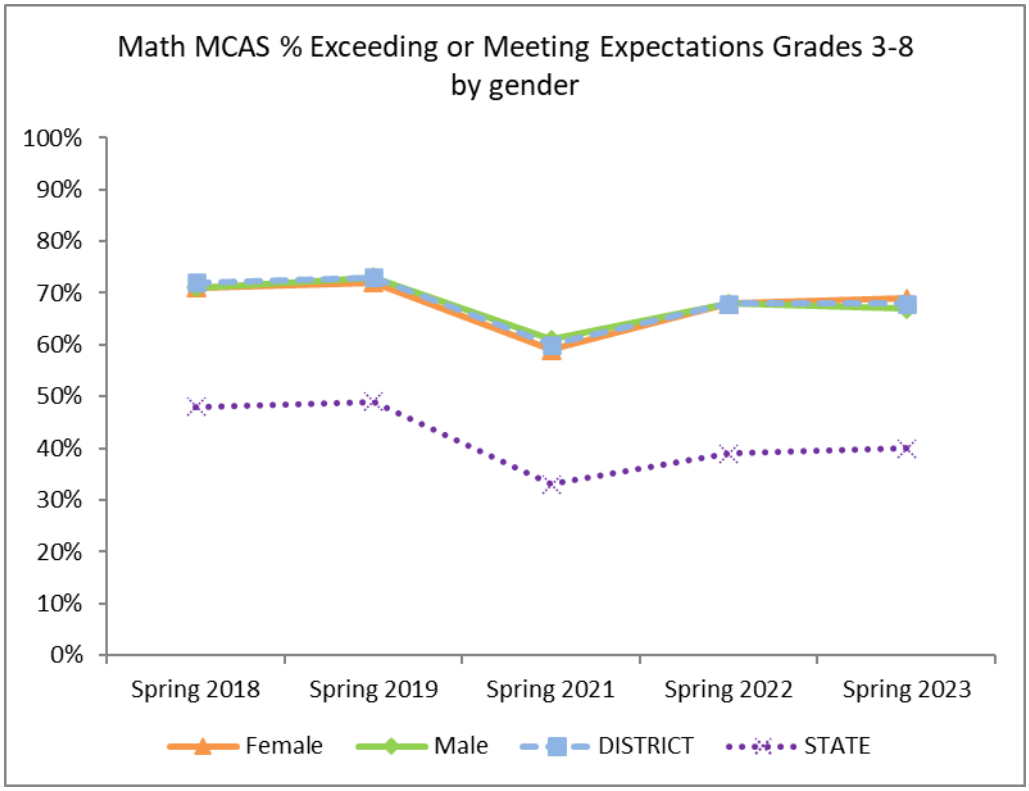

STE MCAS % Exceeding or Meeting Expectations Grade 8
by low income status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Economically Disadvantaged
Non-Economically Disadvantaged
DISTRICT
STATE

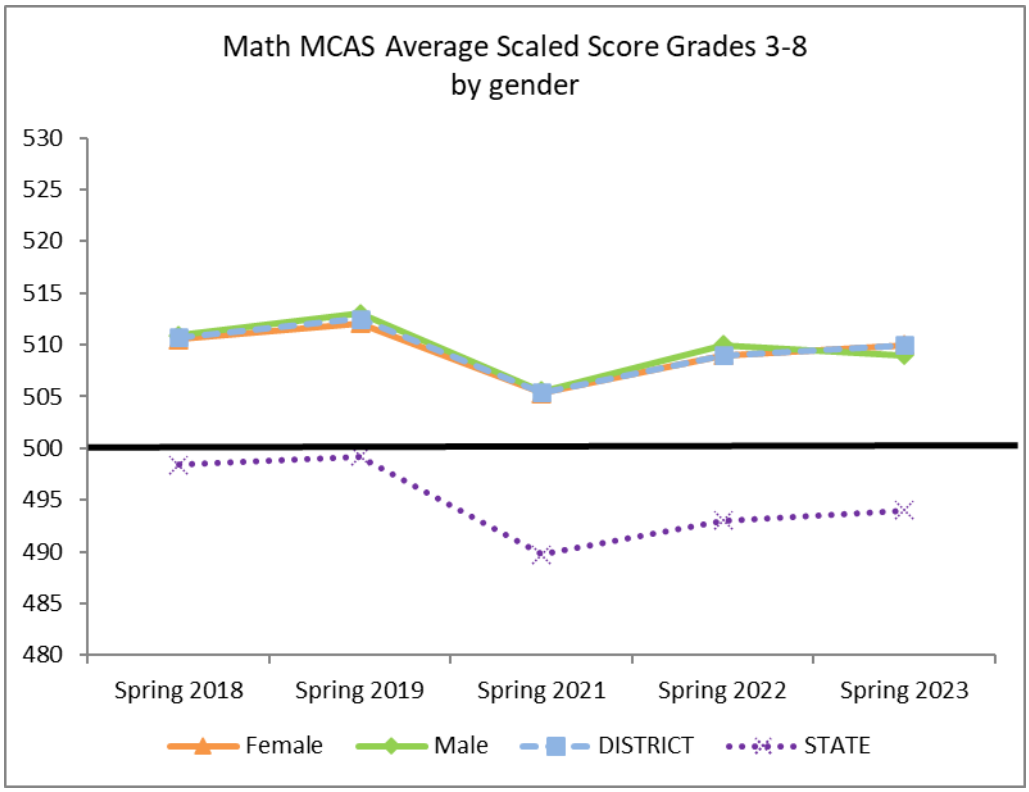

STE MCAS Average Scaled Score Grade 8
by low income status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Economically Disadvantaged
Non-Economically Disadvantaged
DISTRICT
STATE

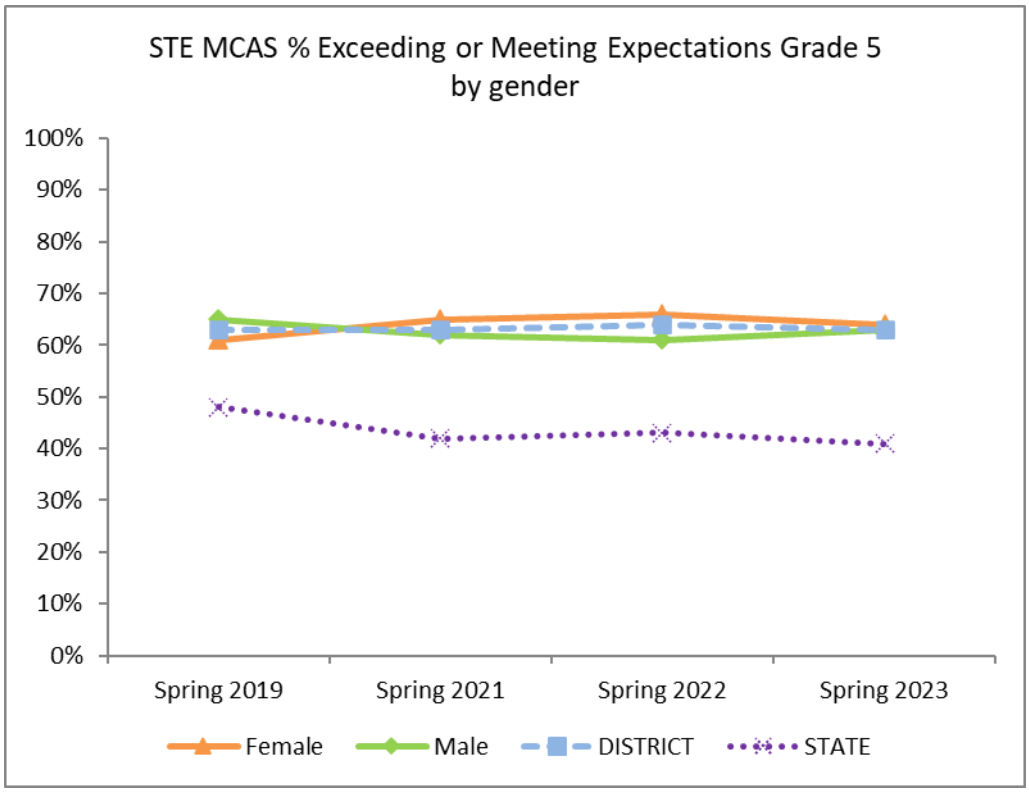
Grades 3 – 8: Gender

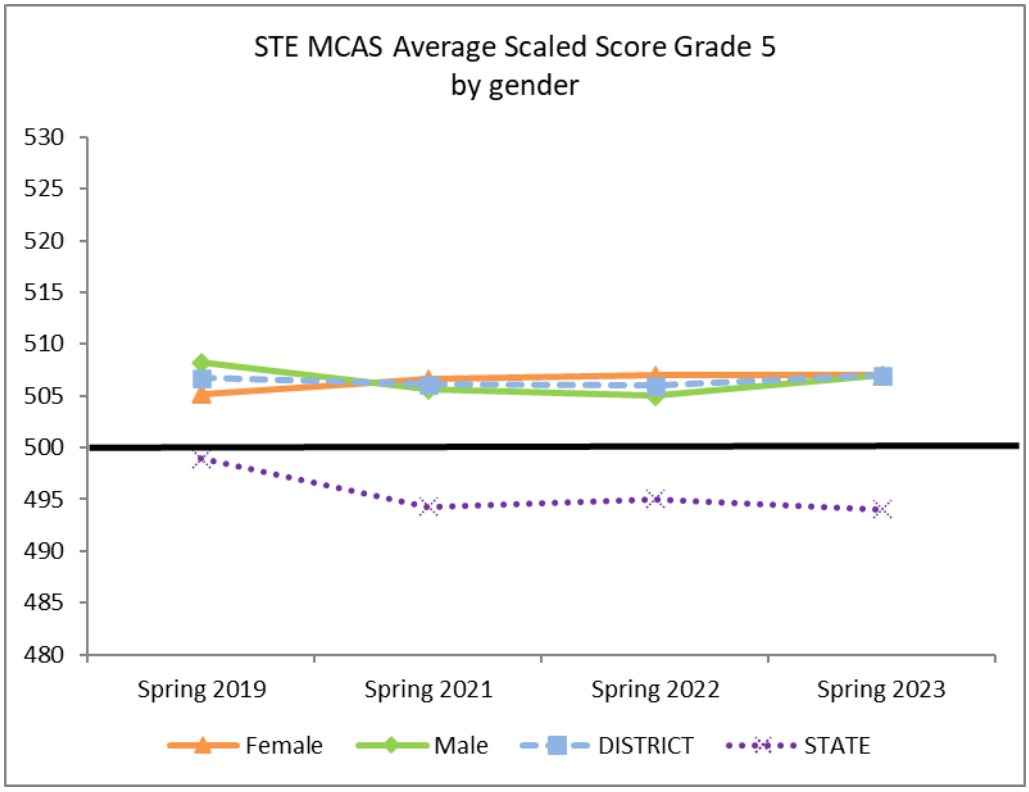


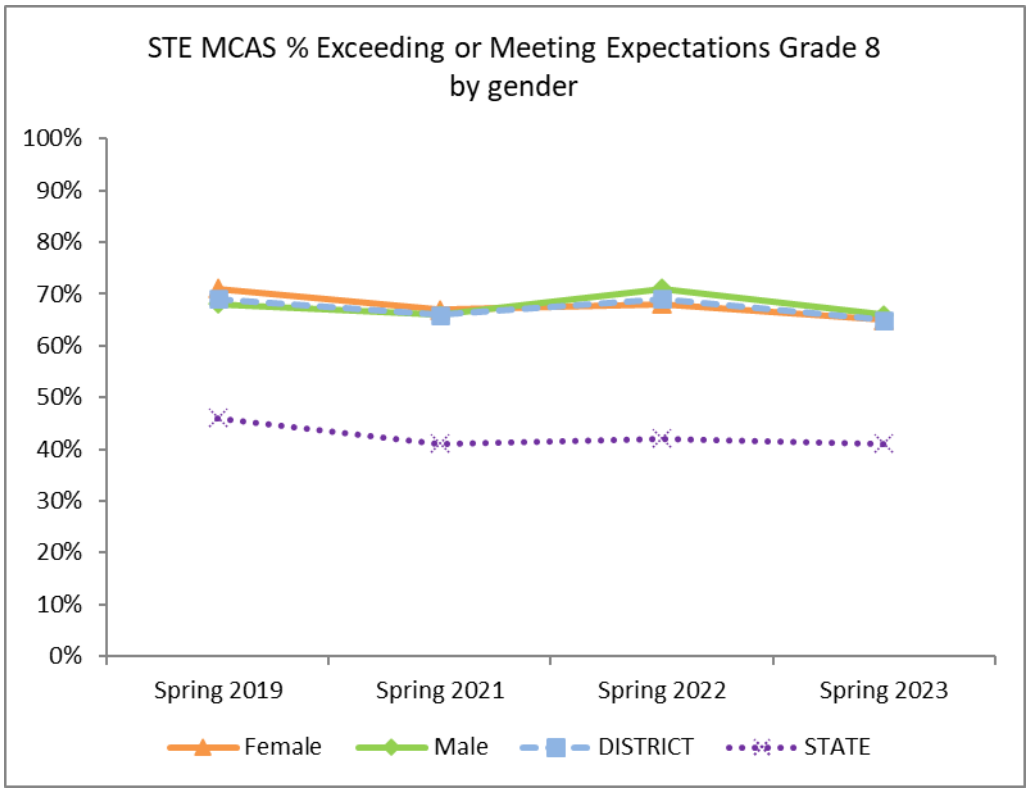


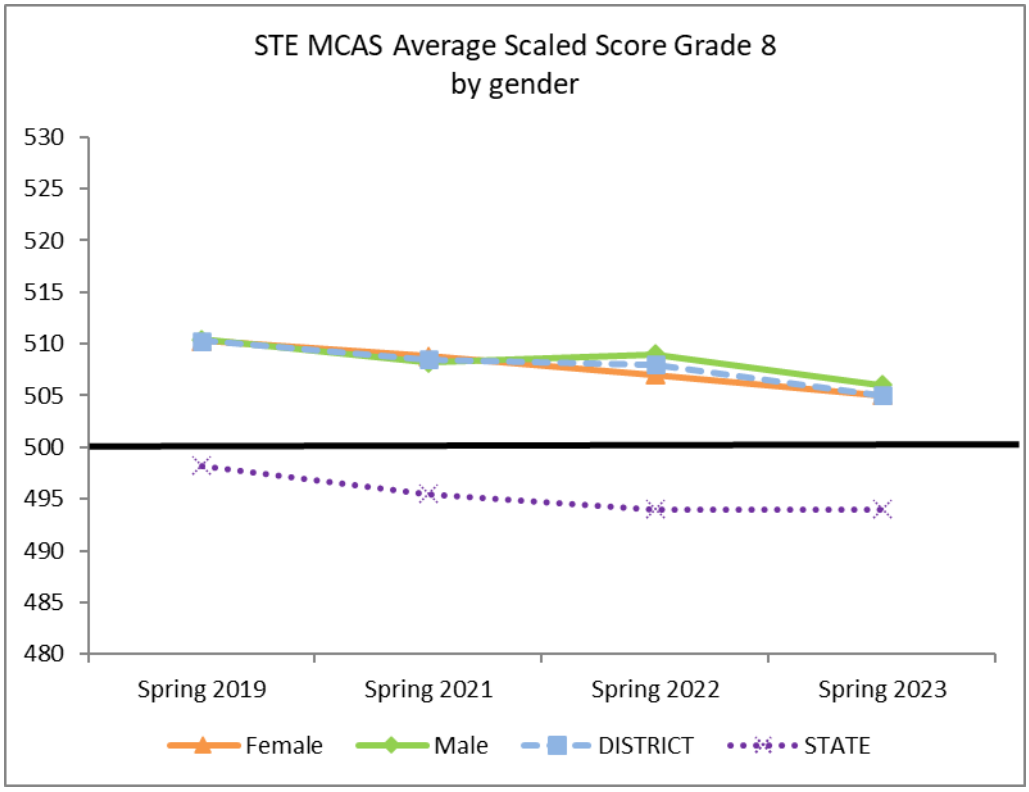

Math MCAS % Exceeding or Meeting Expectations Grades 3-8
by gender
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE


Math MCAS Average Scaled Score Grades 3-8
by gender
530
525
520
515
510
505
500
495
490
485
480
Spring 2018
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE

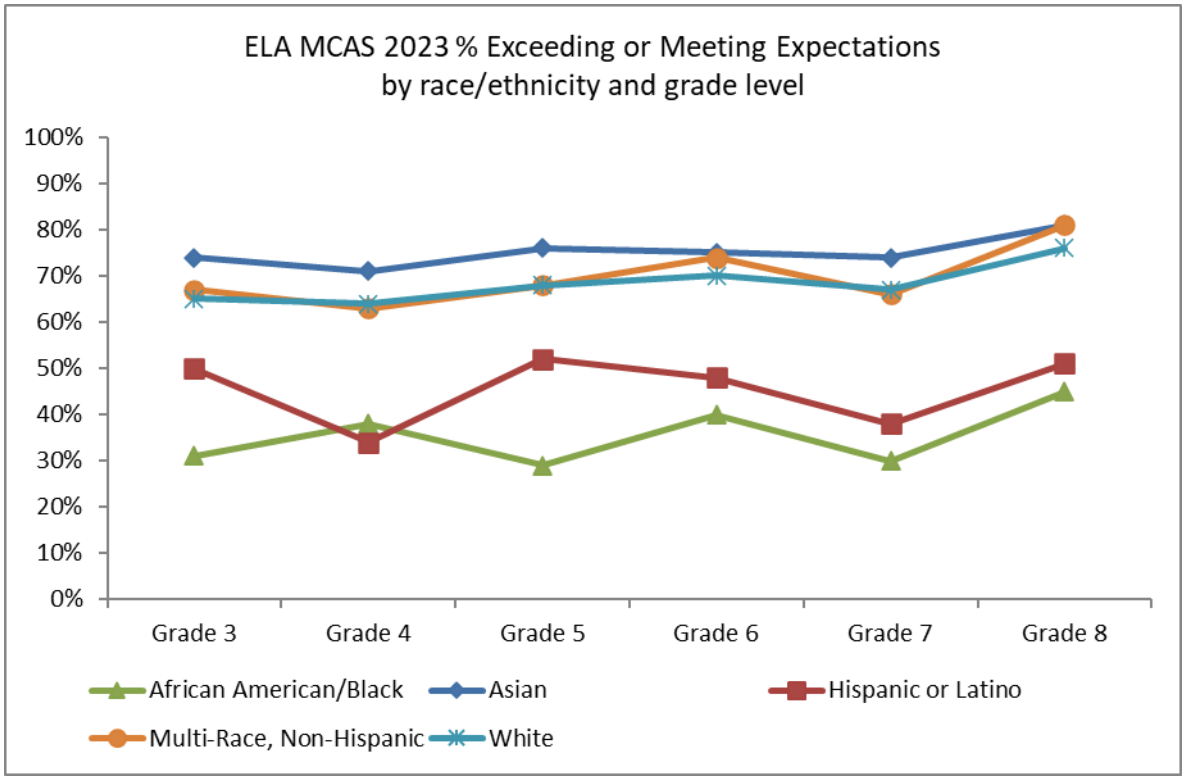

STE MCAS % Exceeding or Meeting Expectations Grade 5
by gender
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE

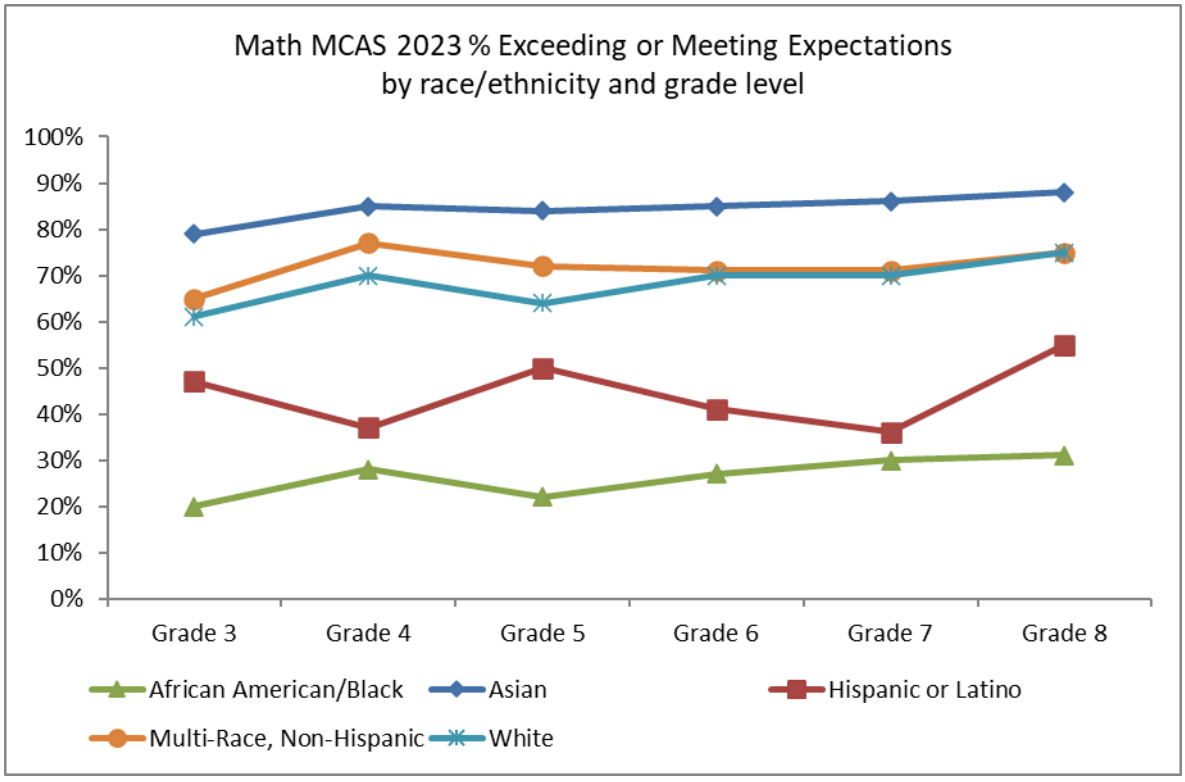

STE MCAS Average Scaled Score Grade 5
by gender
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE


STE MCAS % Exceeding or Meeting Expectations Grade 8
by gender
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE

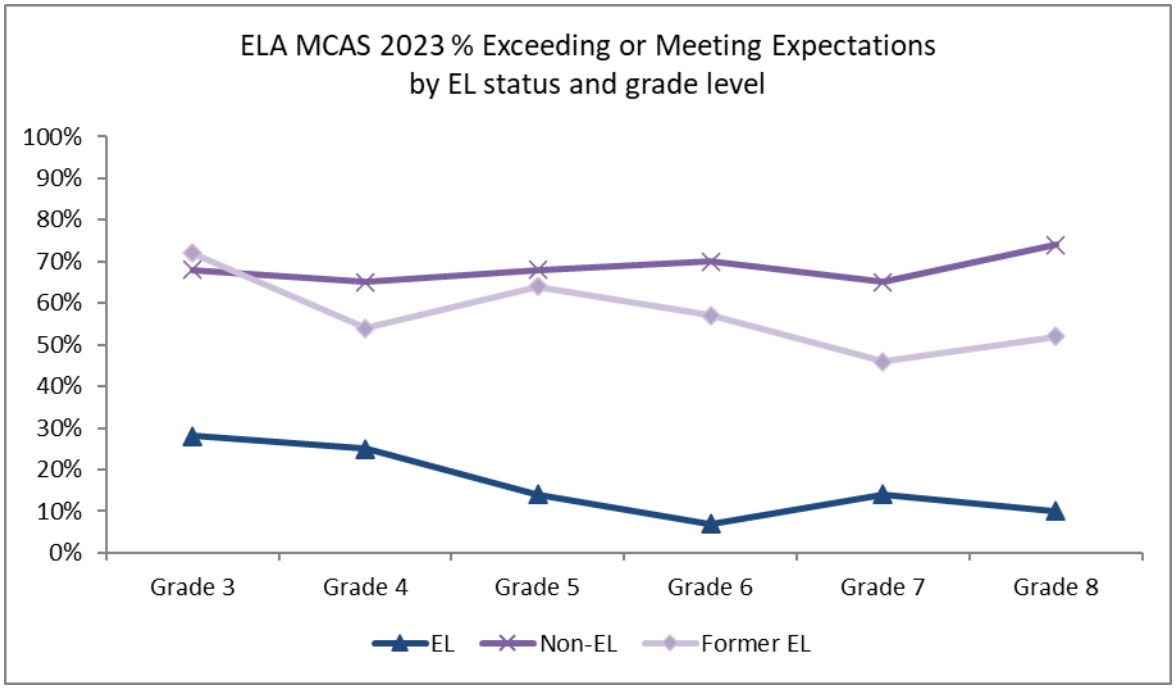

STE MCAS Average Scaled Score Grade 8
by gender
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE

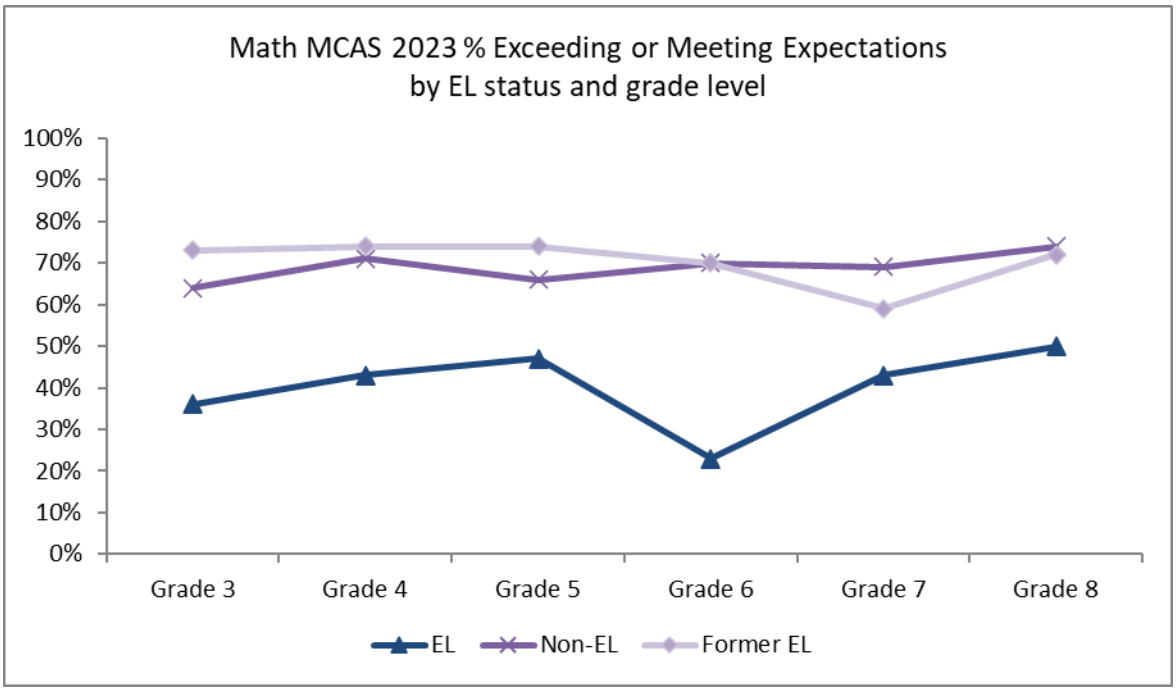
Grades 3 – 8: Subgroups by grade: Race/Ethnicity



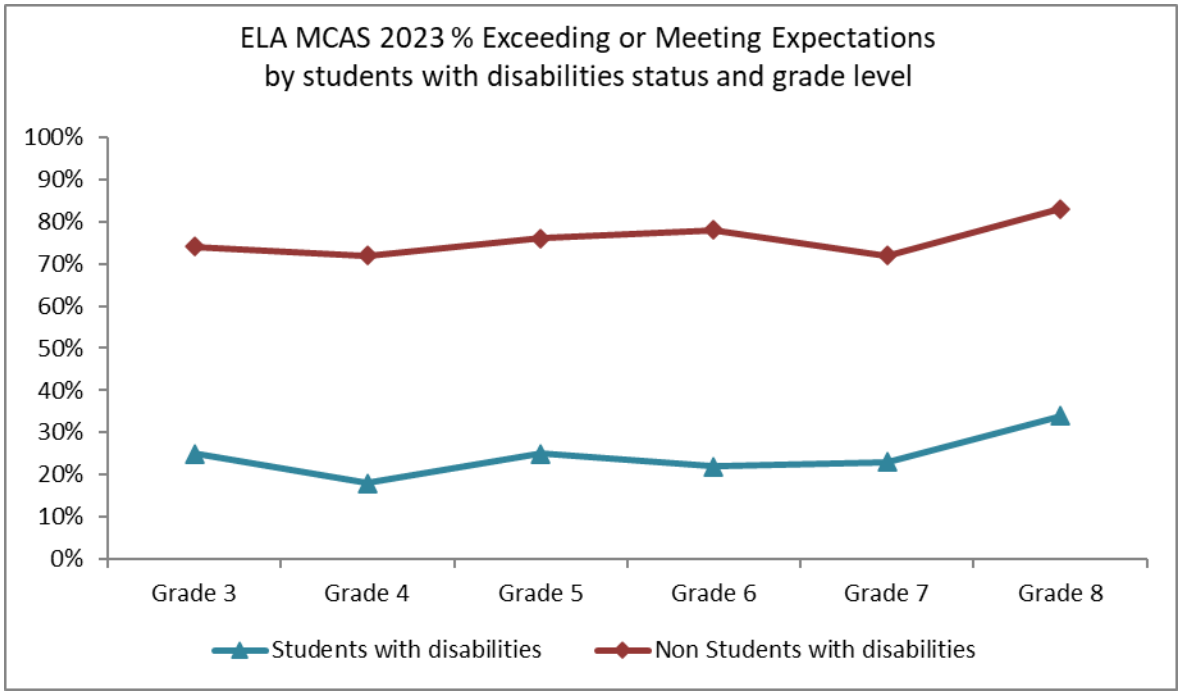


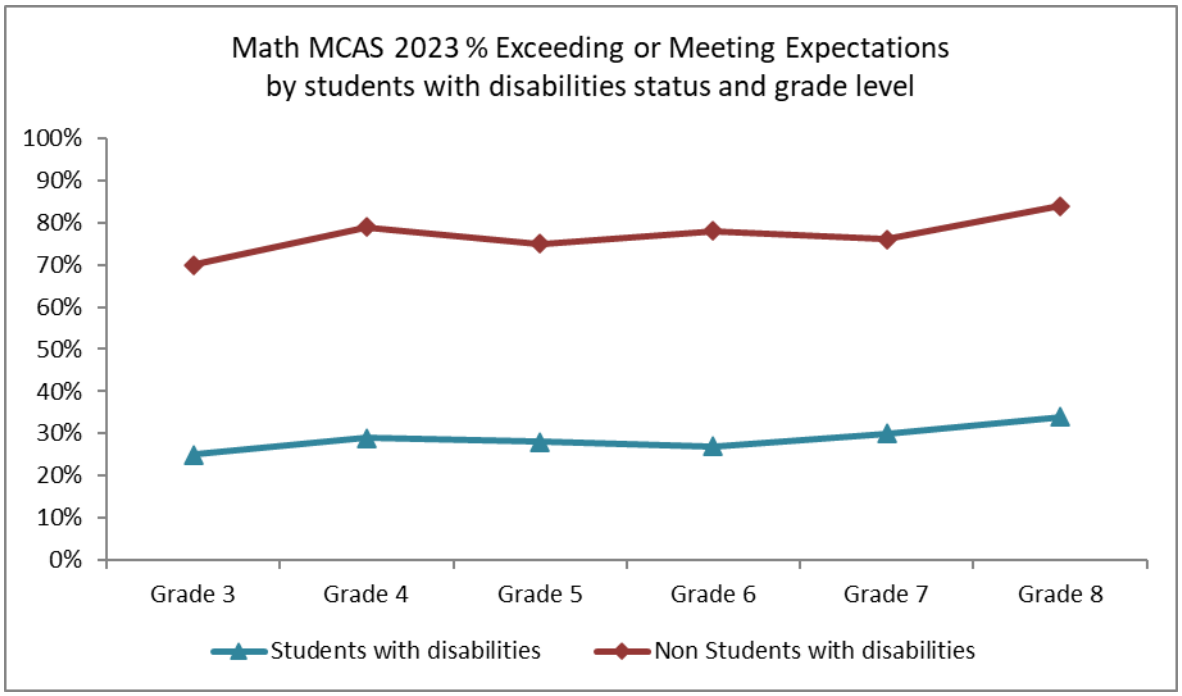
Grades 3 – 8: Subgroups by grade: EL Status



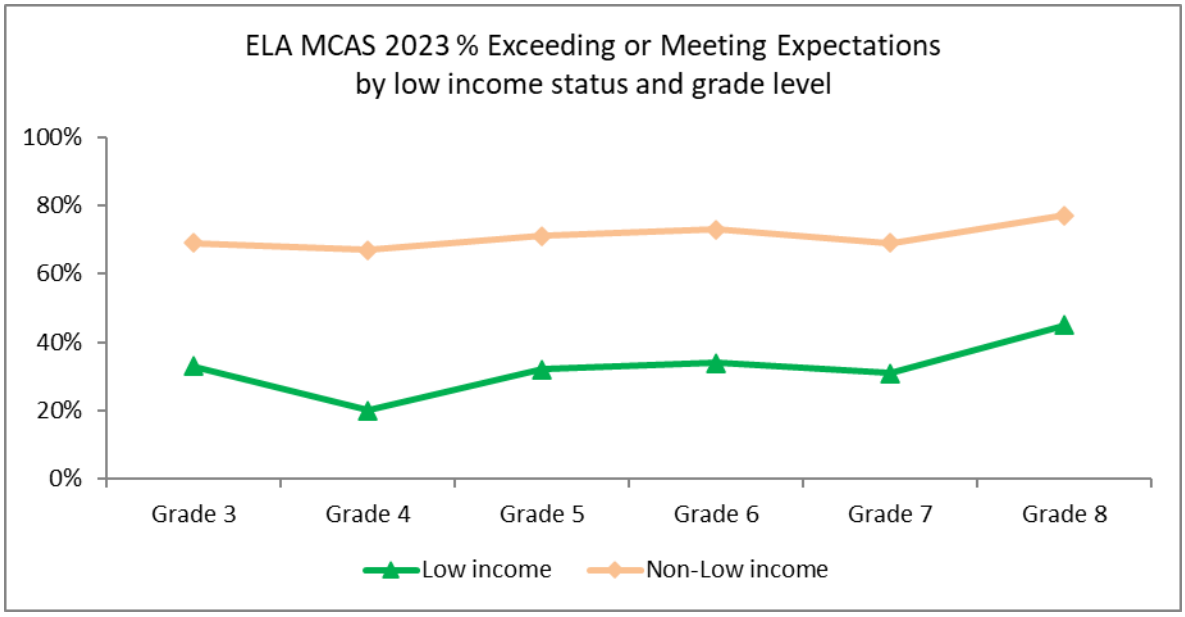


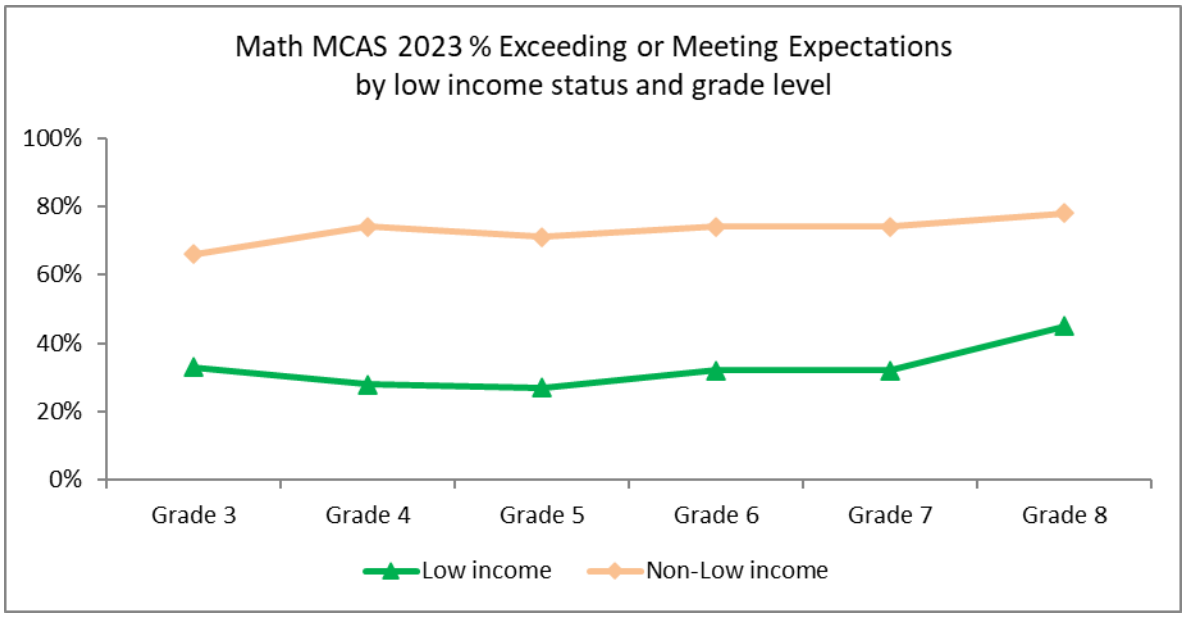
Grades 3 – 8: Subgroups by grade: Students with disabilities Status



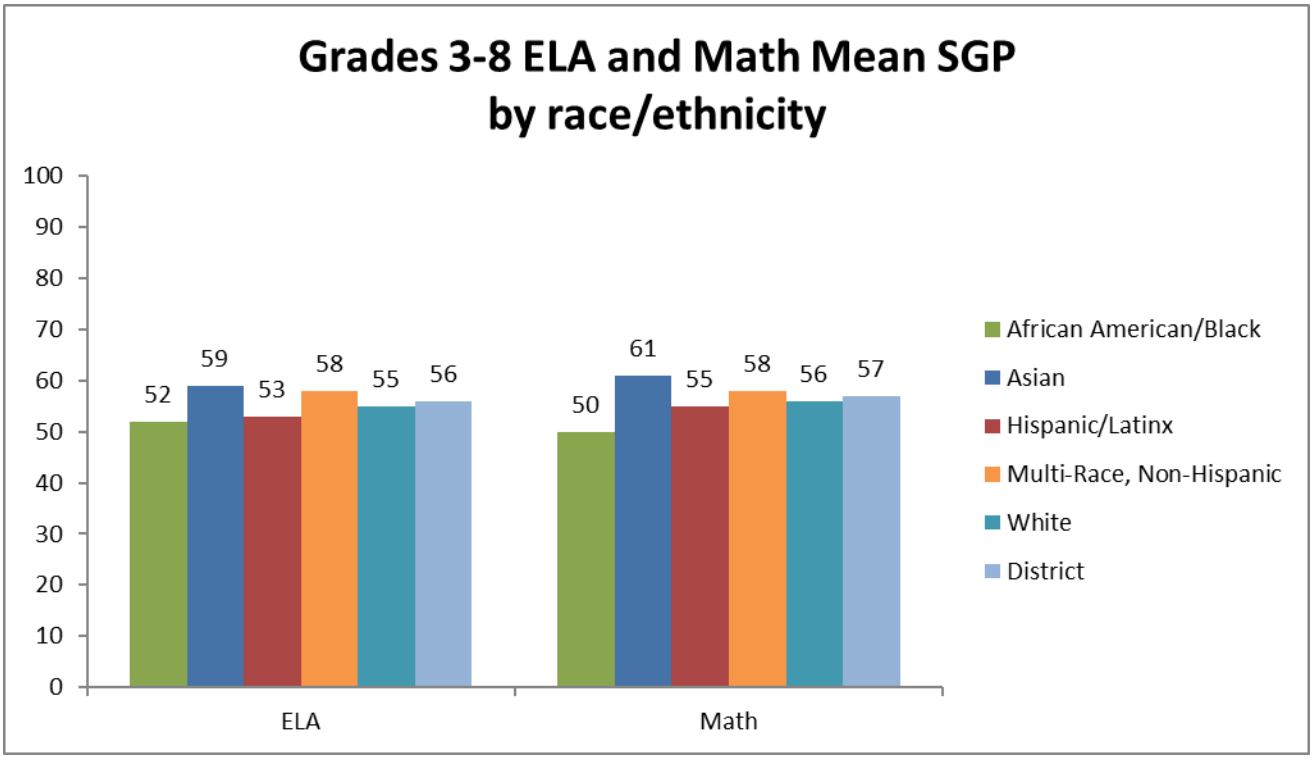


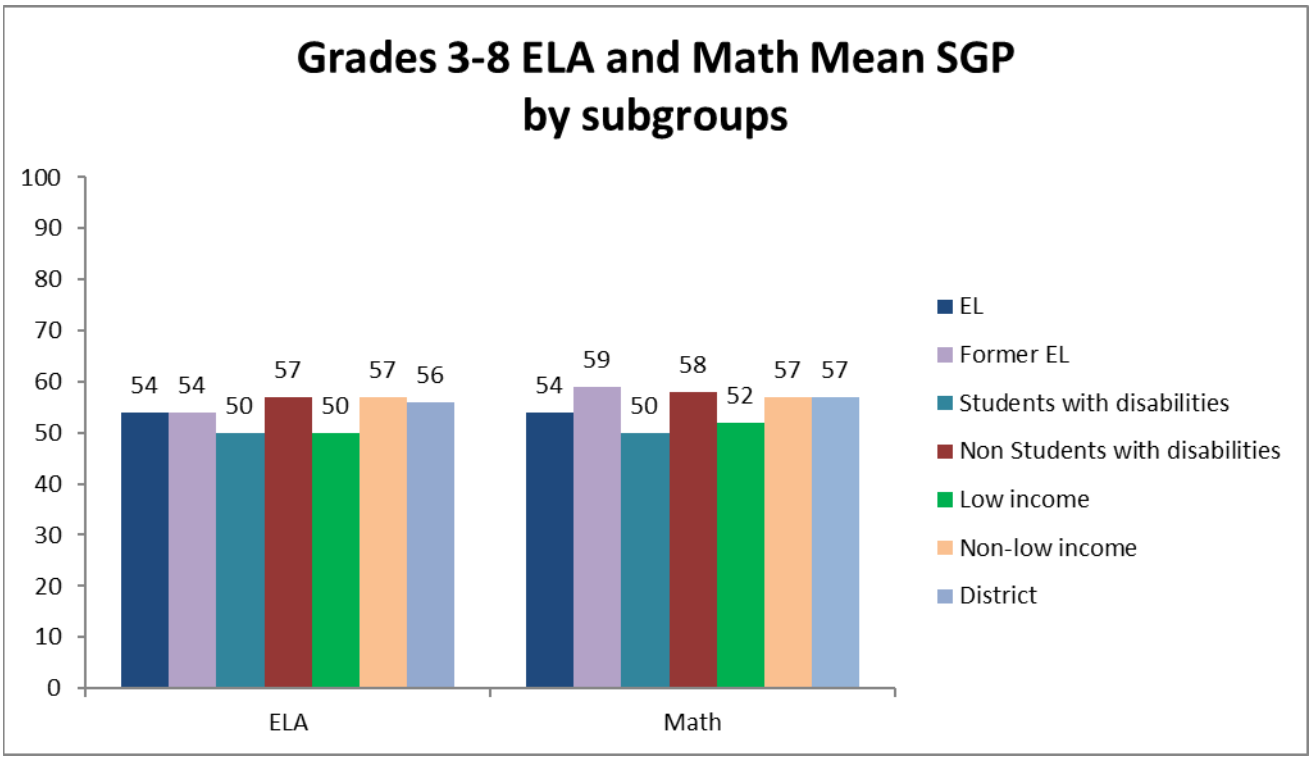
Grades 3 – 8: Subgroups by grade: Low income/Economically disadvantaged Status



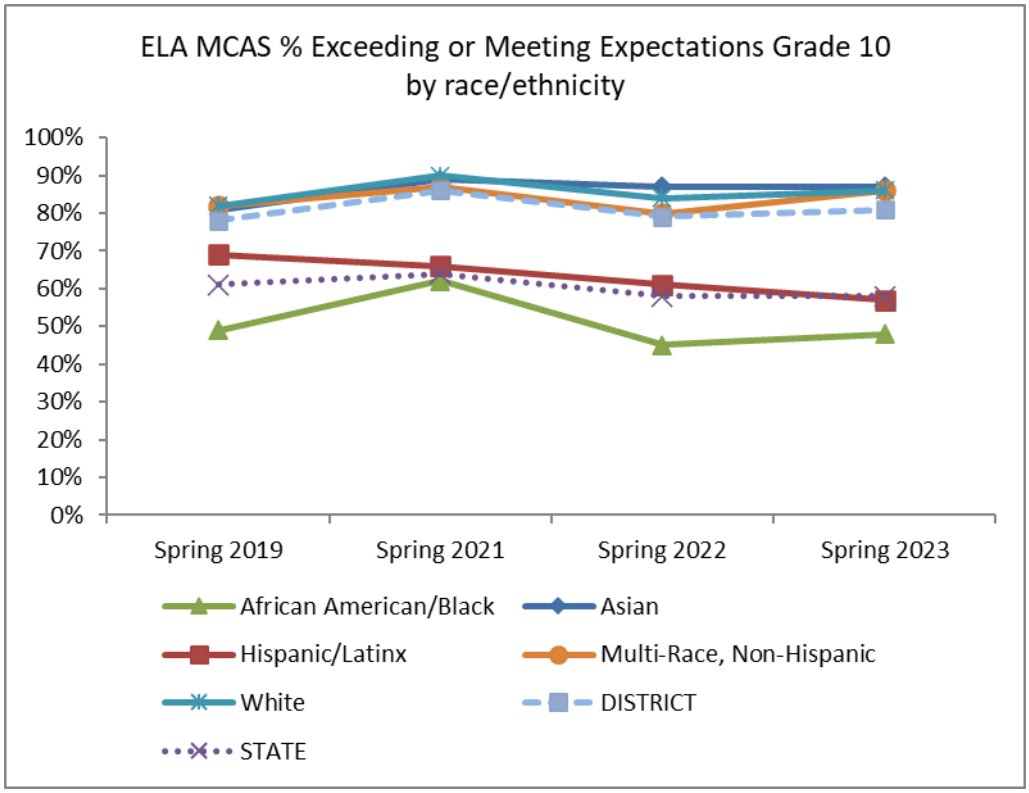


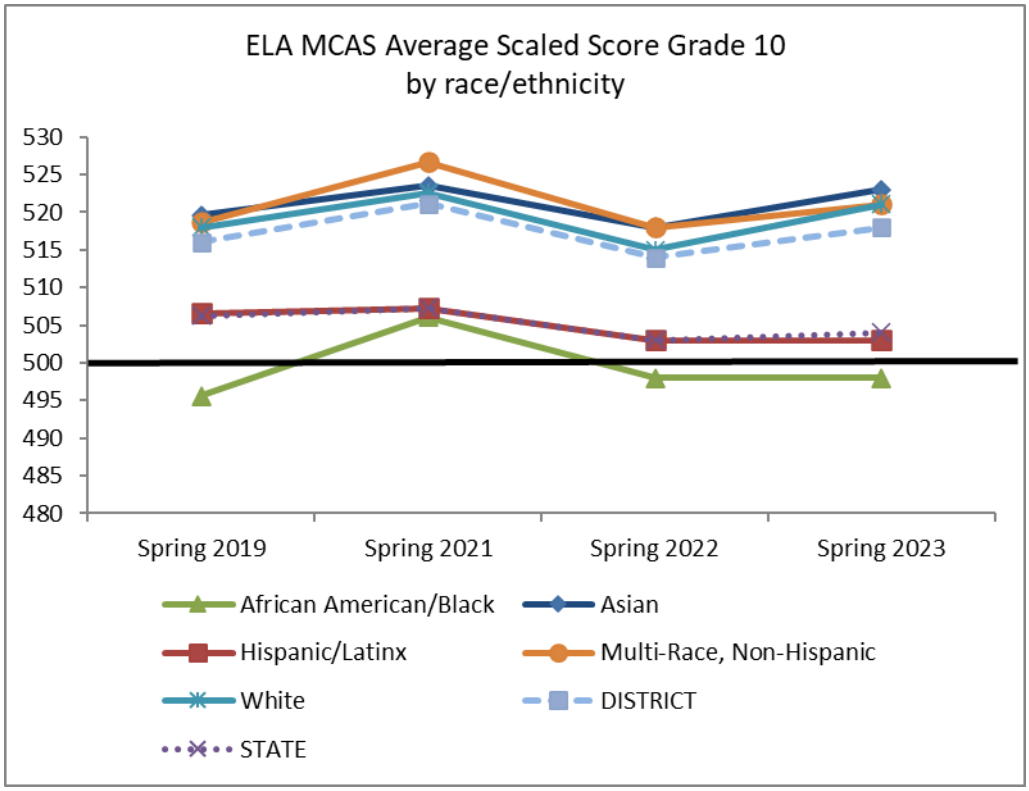
Grades 3-8: Student Growth Percentiles by subgroups

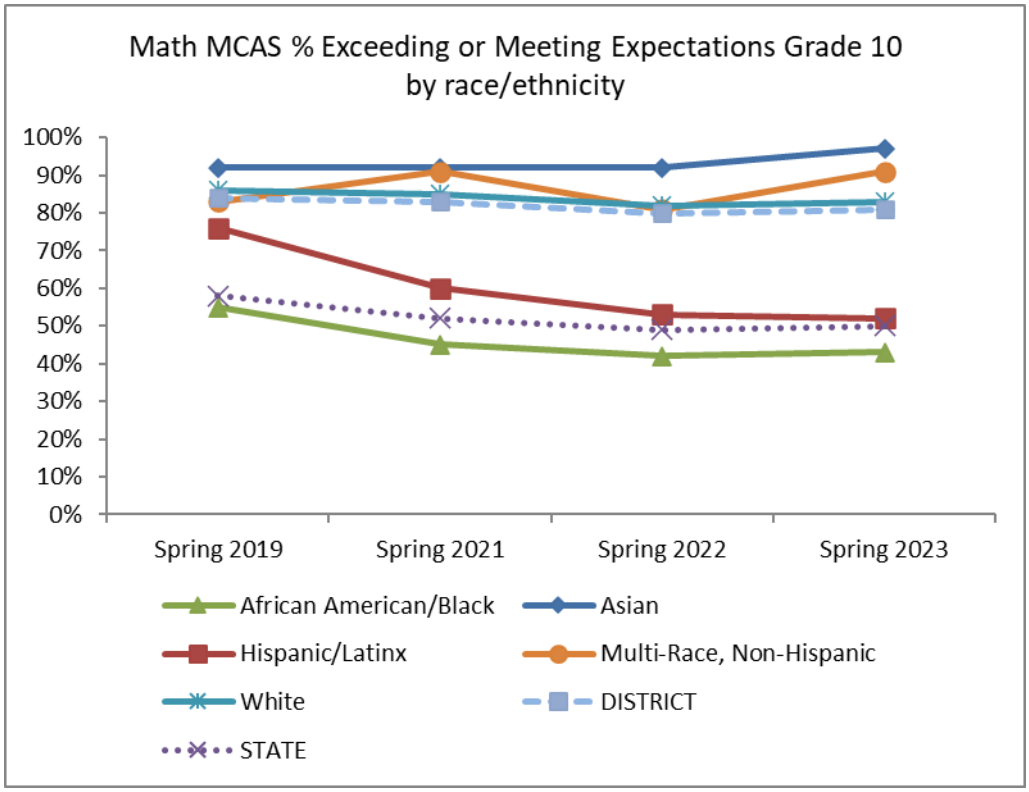


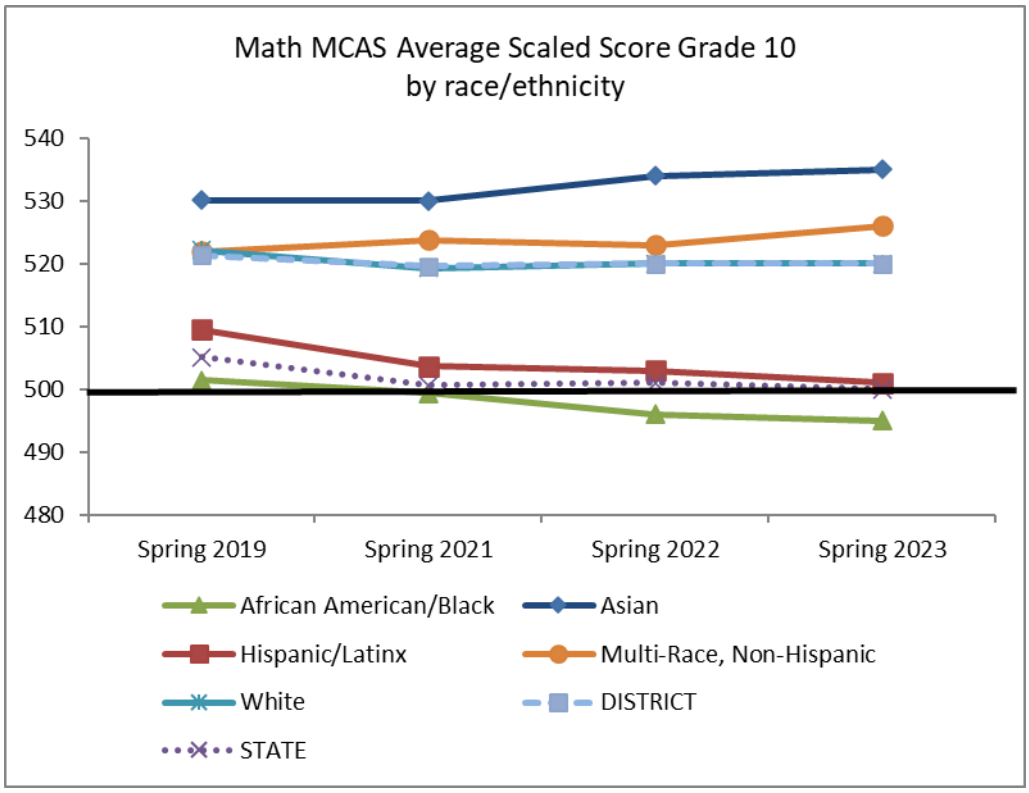


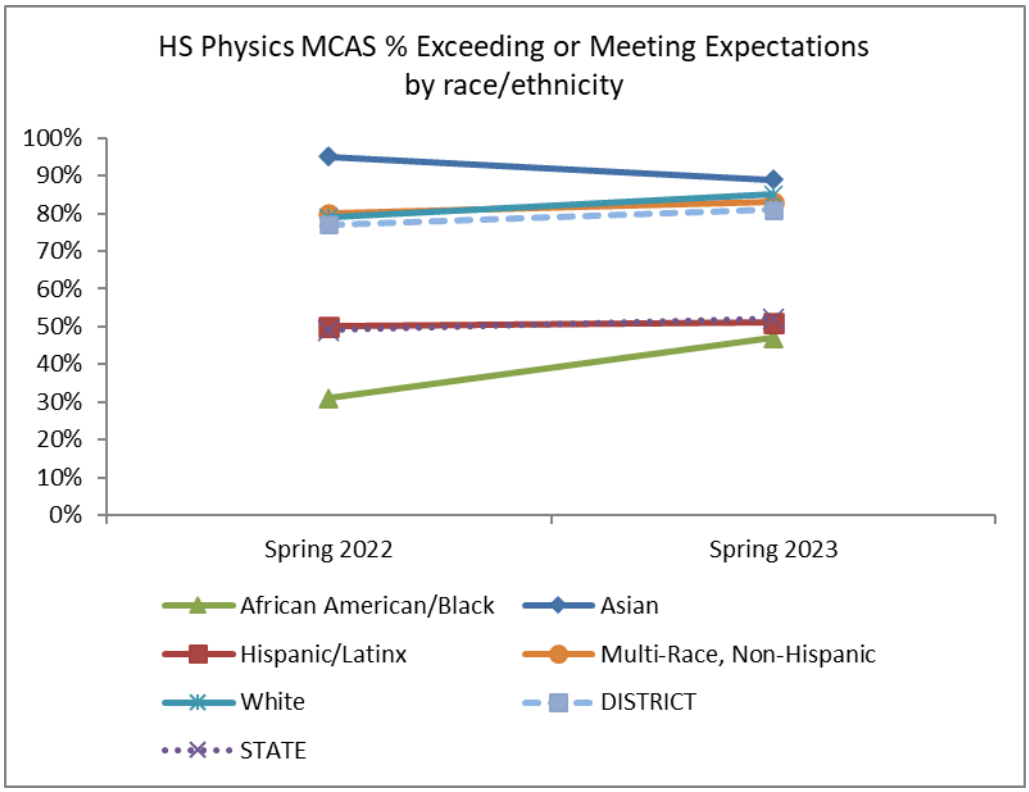
High Schools: Race/Ethnicity

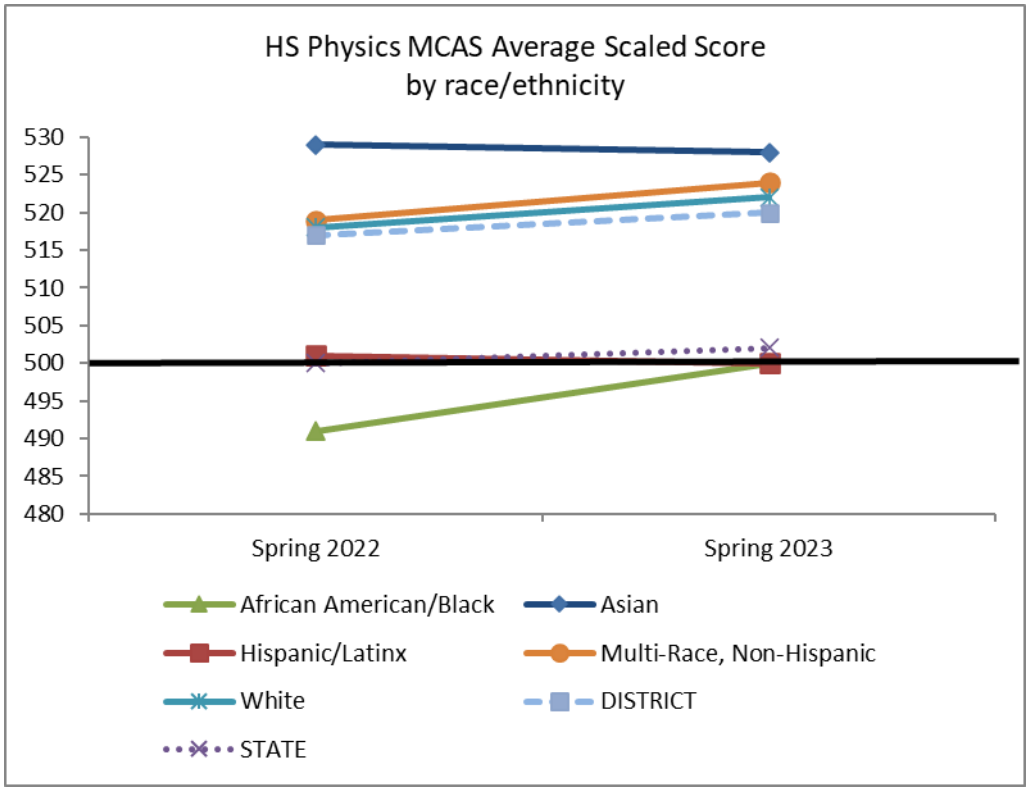




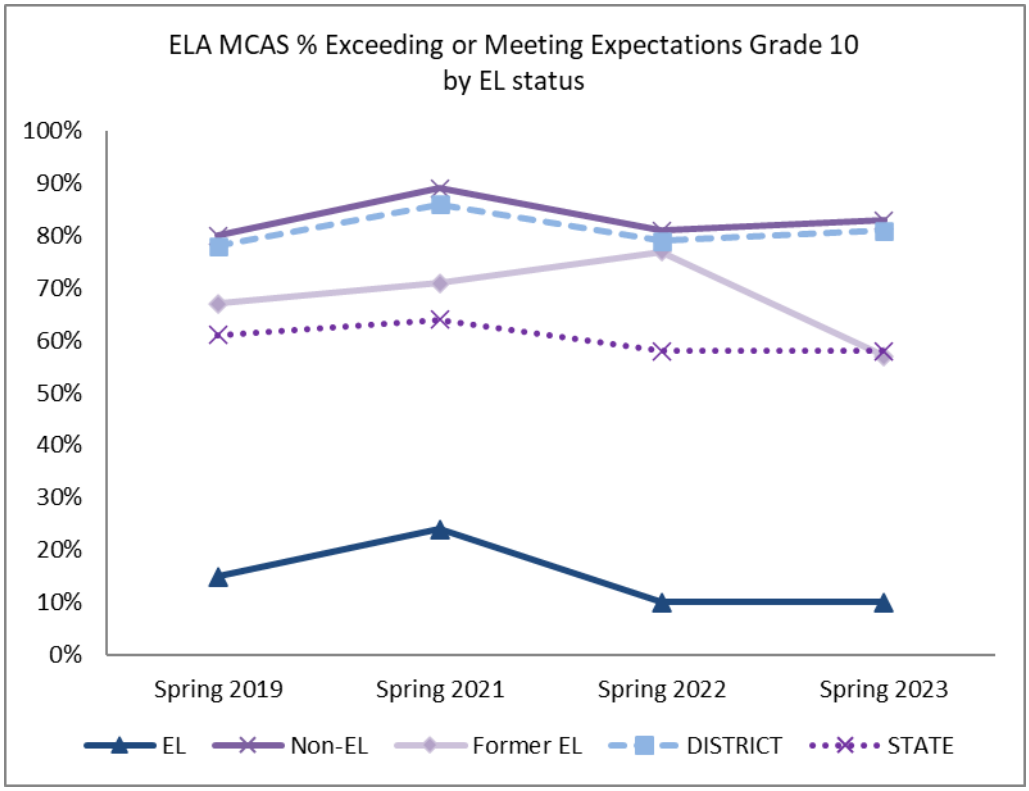

Math MCAS % Exceeding or Meeting Expectations Grade 10
by race/ethnicity
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

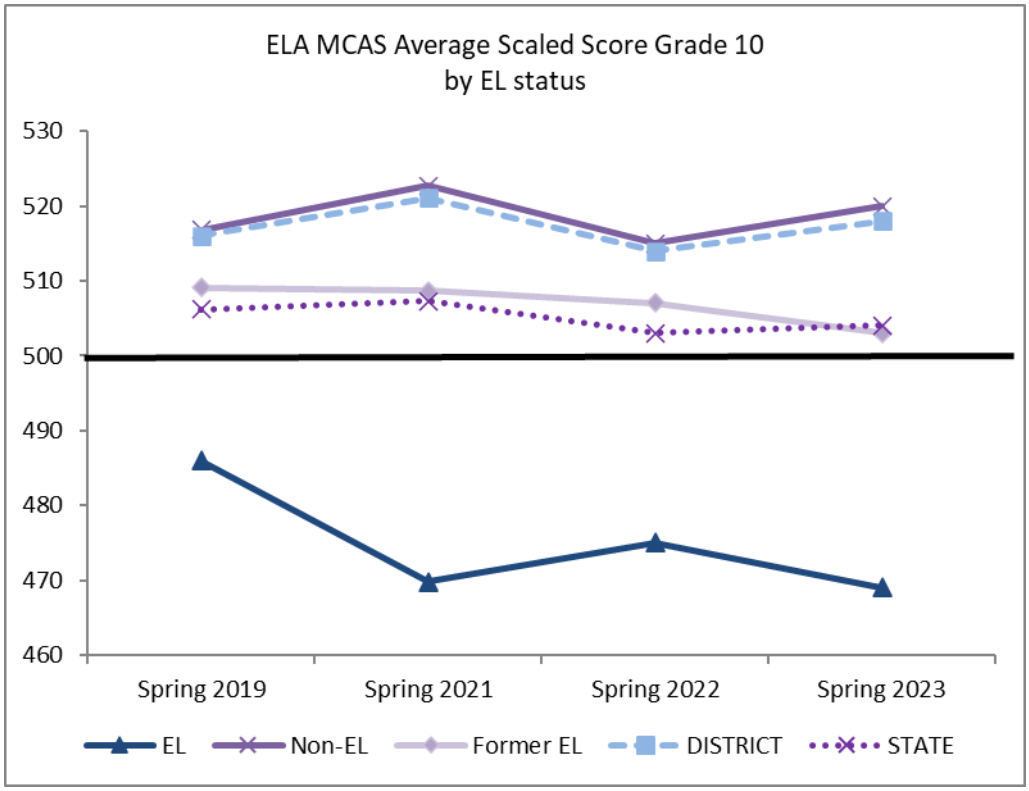

Math MCAS Average Scaled Score Grade 10
by race/ethnicity
540
530
520
510
500
490
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

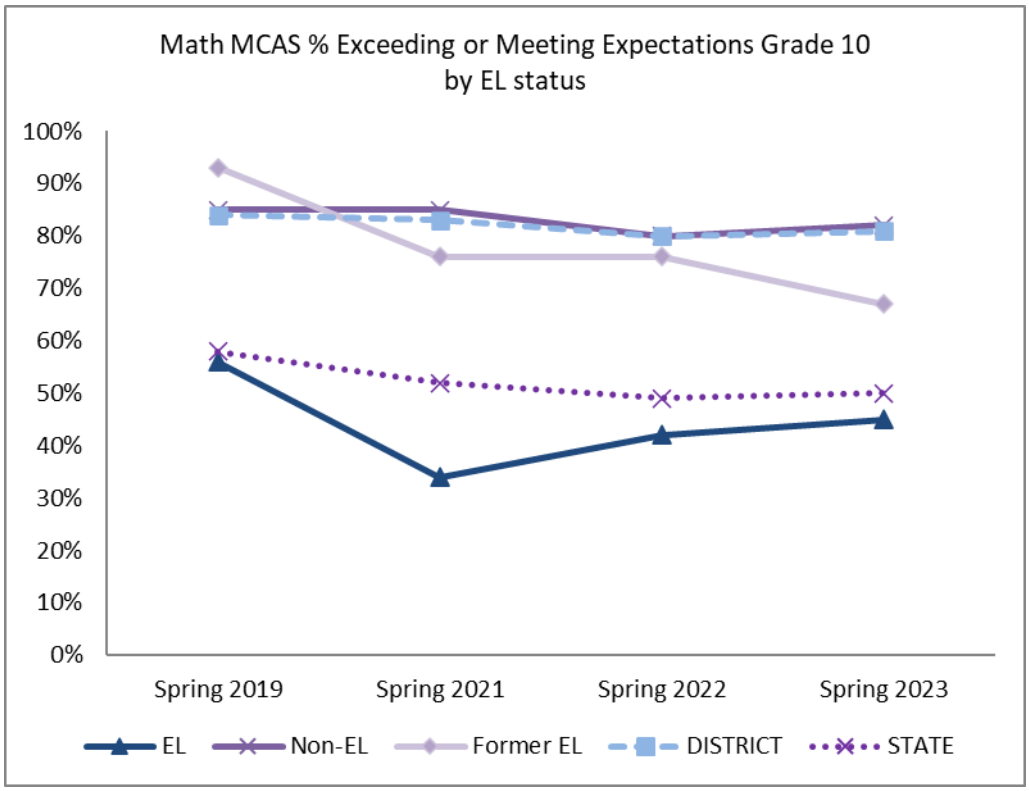

HS Physics MCAS % Exceeding or Meeting Expectations
by race/ethnicity
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

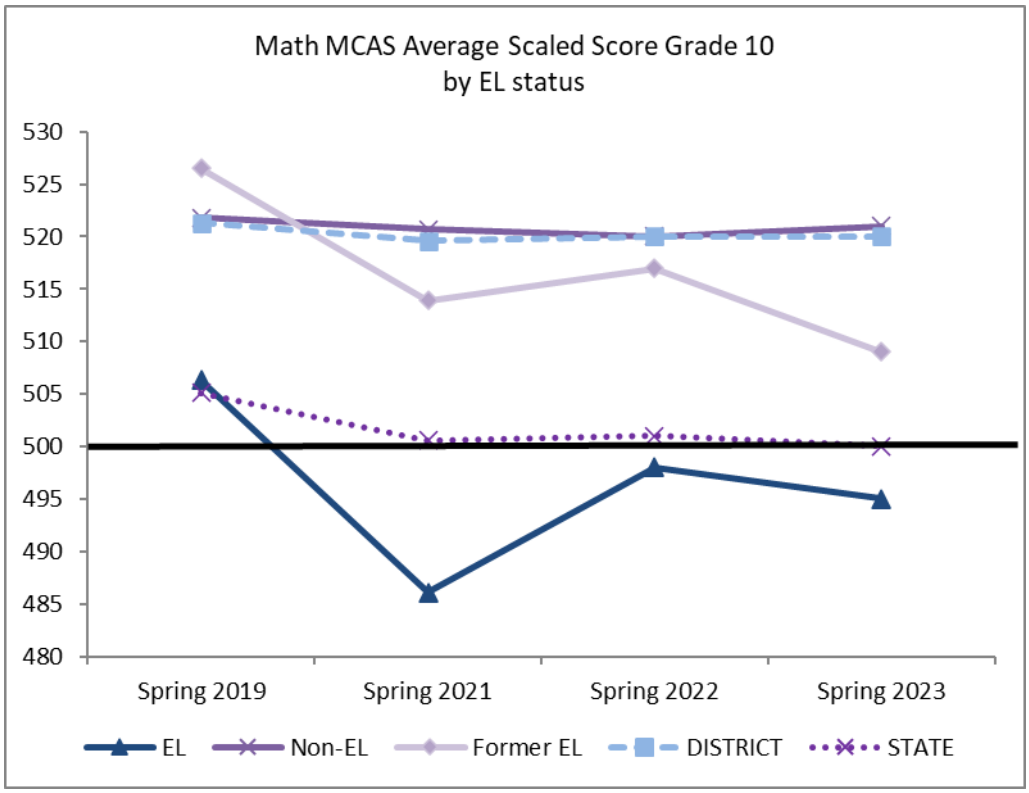

HS Physics MCAS Average Scaled Score
by race/ethnicity
530
525
520
515
510
505
500
495
490
485
480
Spring 2022
Spring 2023
African American/Black
Asian
Hispanic/Latinx
Multi-Race, Non-Hispanic
White
DISTRICT
STATE

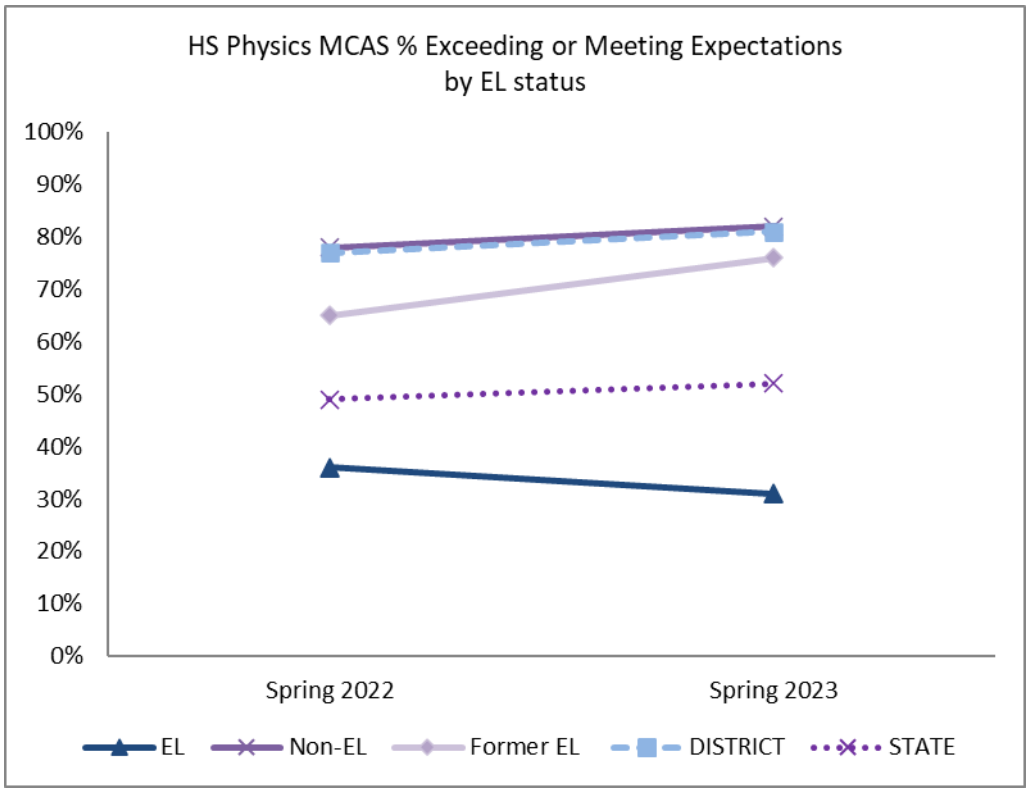
High School: English Learner Status

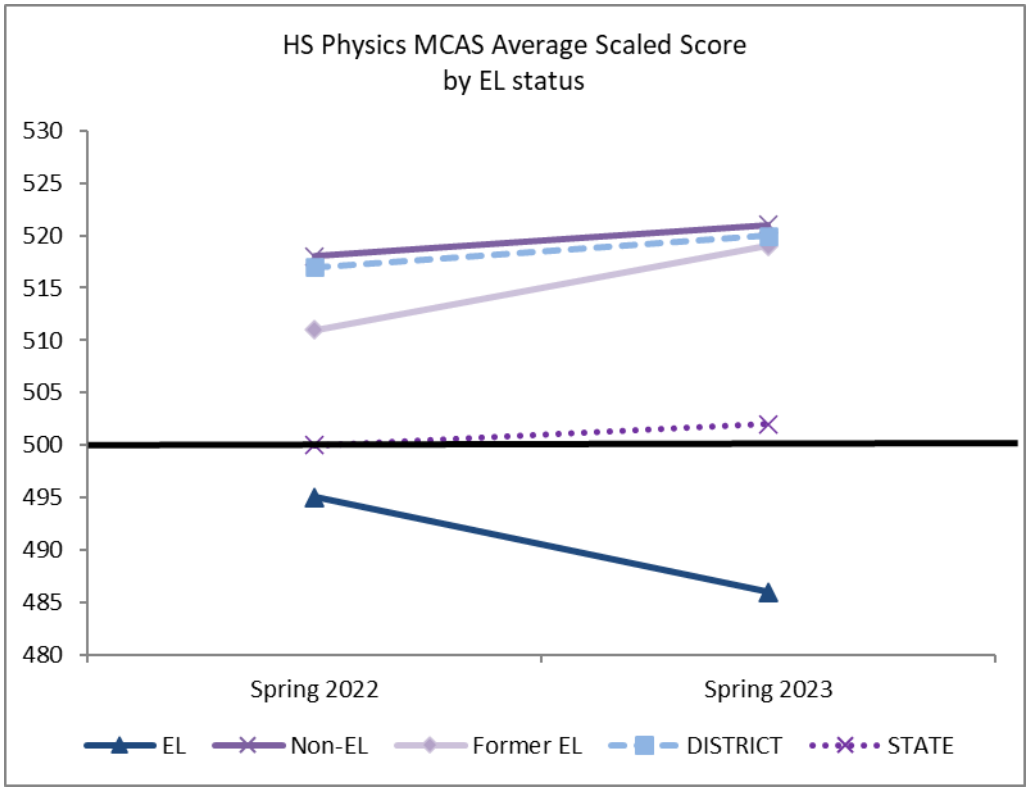




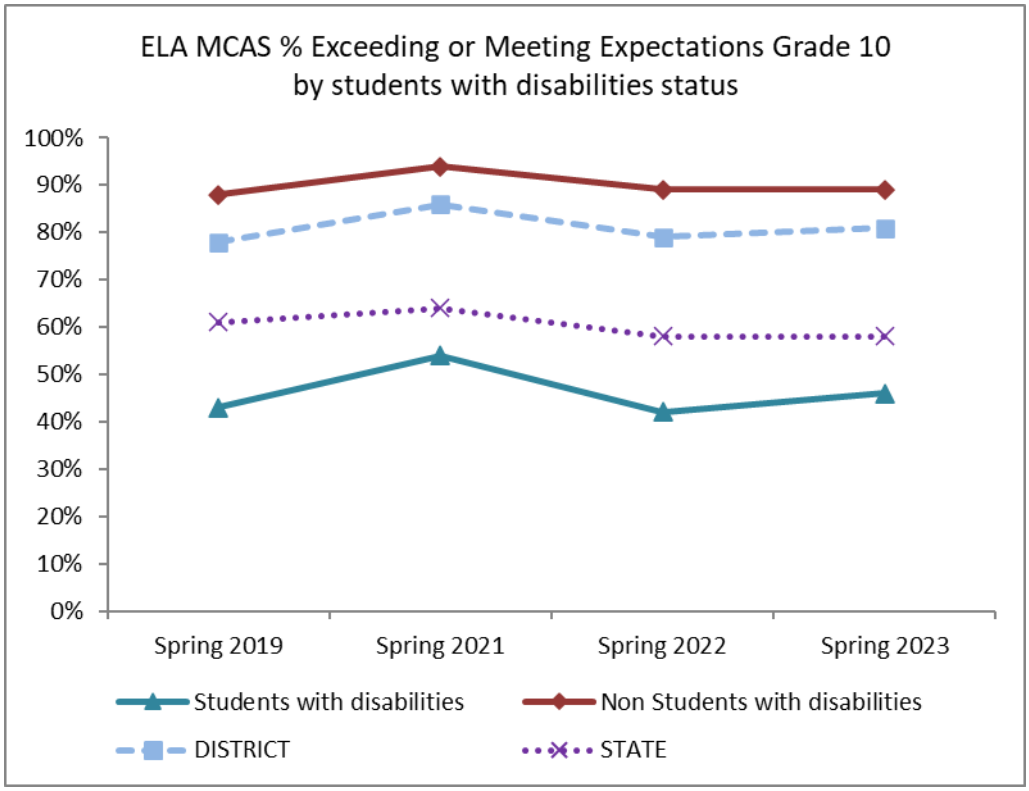

Math MCAS % Exceeding or Meeting Expectations Grade 10
by EL status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

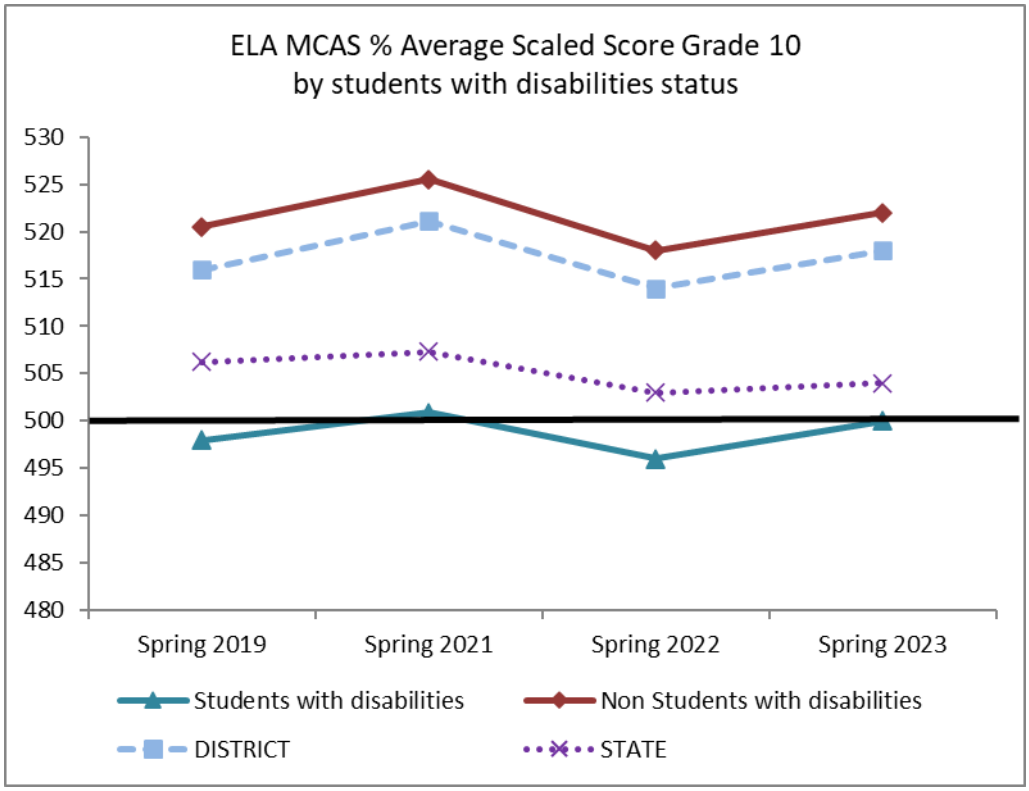

Math MCAS Average Scaled Score Grade 10
by EL status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

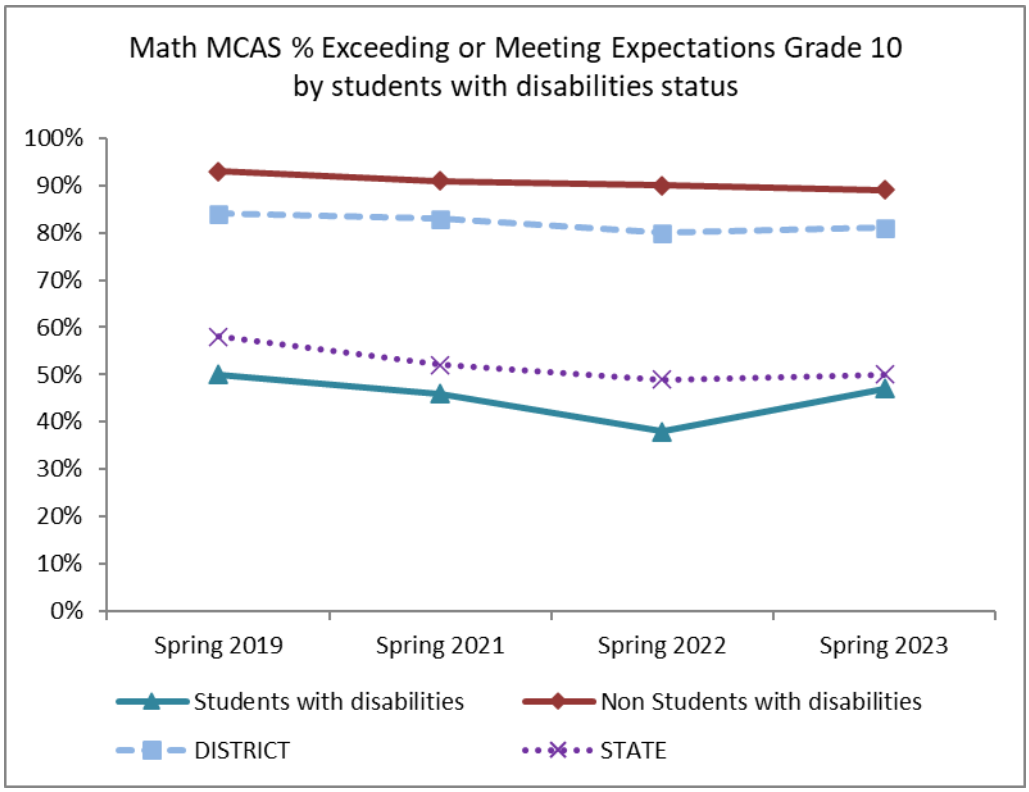

HS Physics MCAS % Exceeding or Meeting Expectations
by EL status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

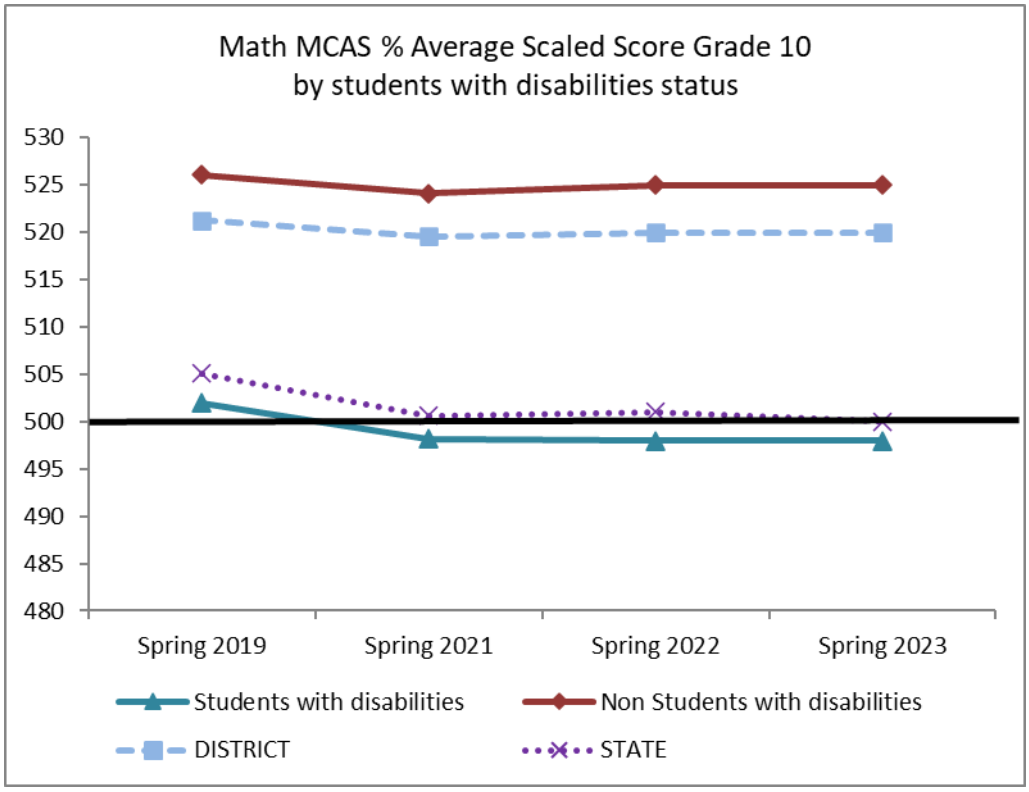

HS Physics MCAS Average Scaled Score
by EL status
530
525
520
515
510
505
500
495
490
485
480
Spring 2022
Spring 2023
EL
Non-EL
Former EL
DISTRICT
STATE

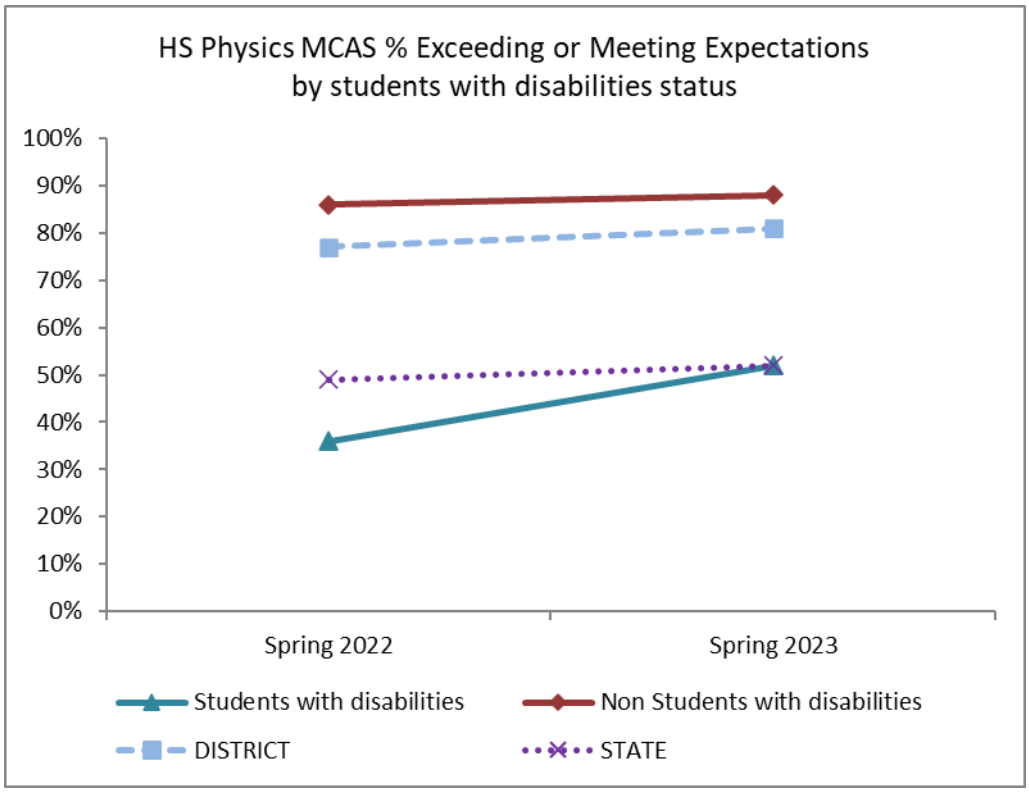
High School: Students with Disabilities status

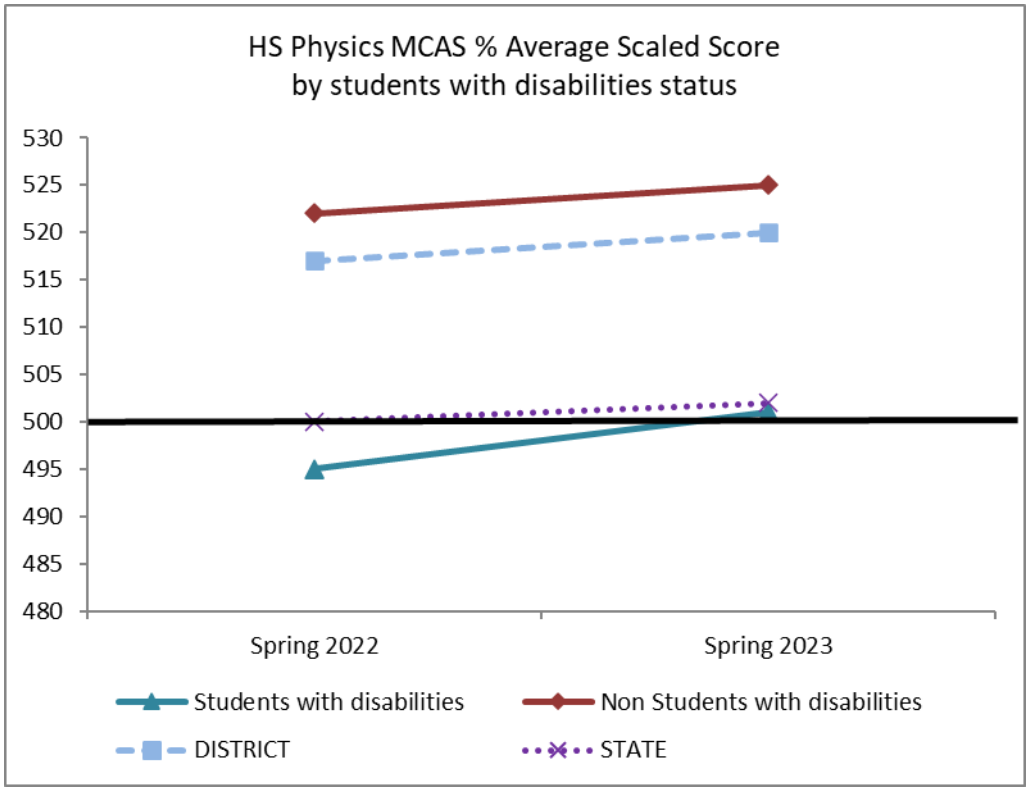




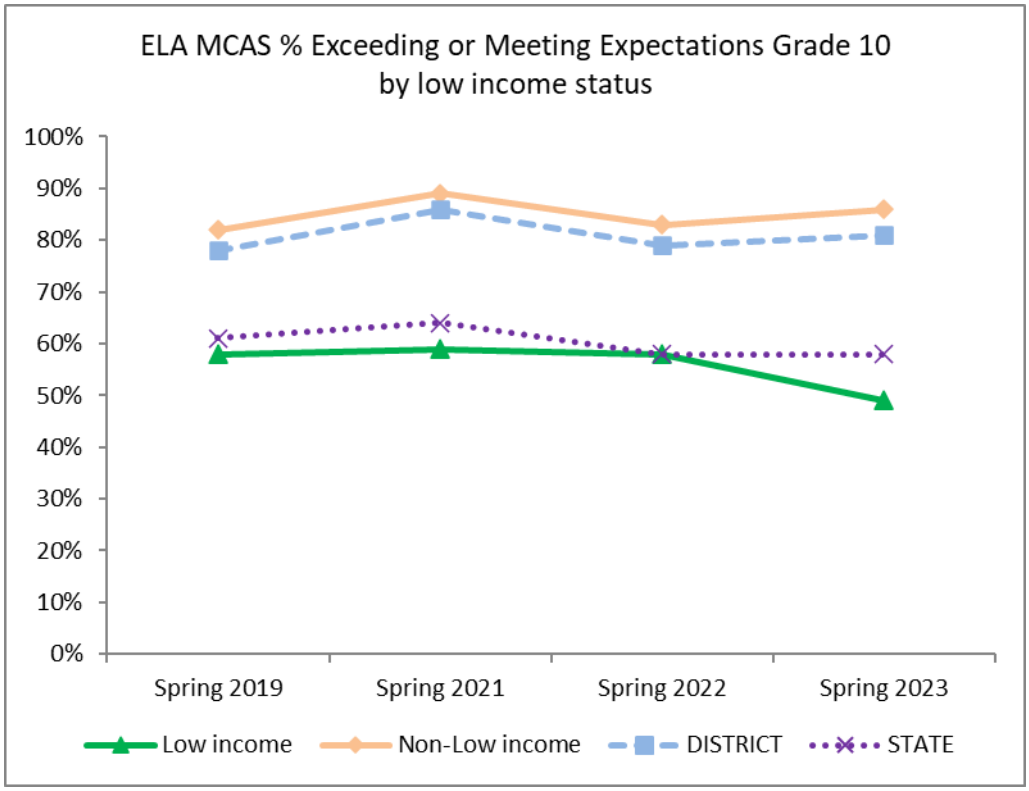

Math MCAS % Exceeding or Meeting Expectations Grade 10
by students with disabilities status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

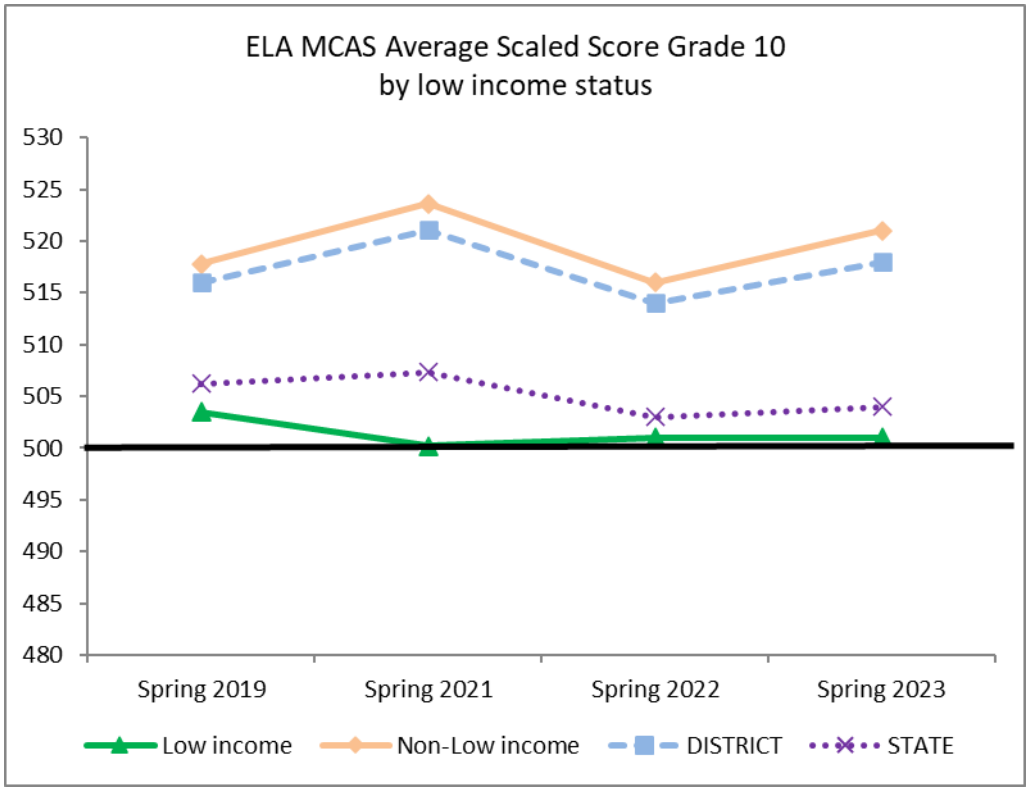

Math MCAS % Average Scaled Score Grade 10
by students with disabilities status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

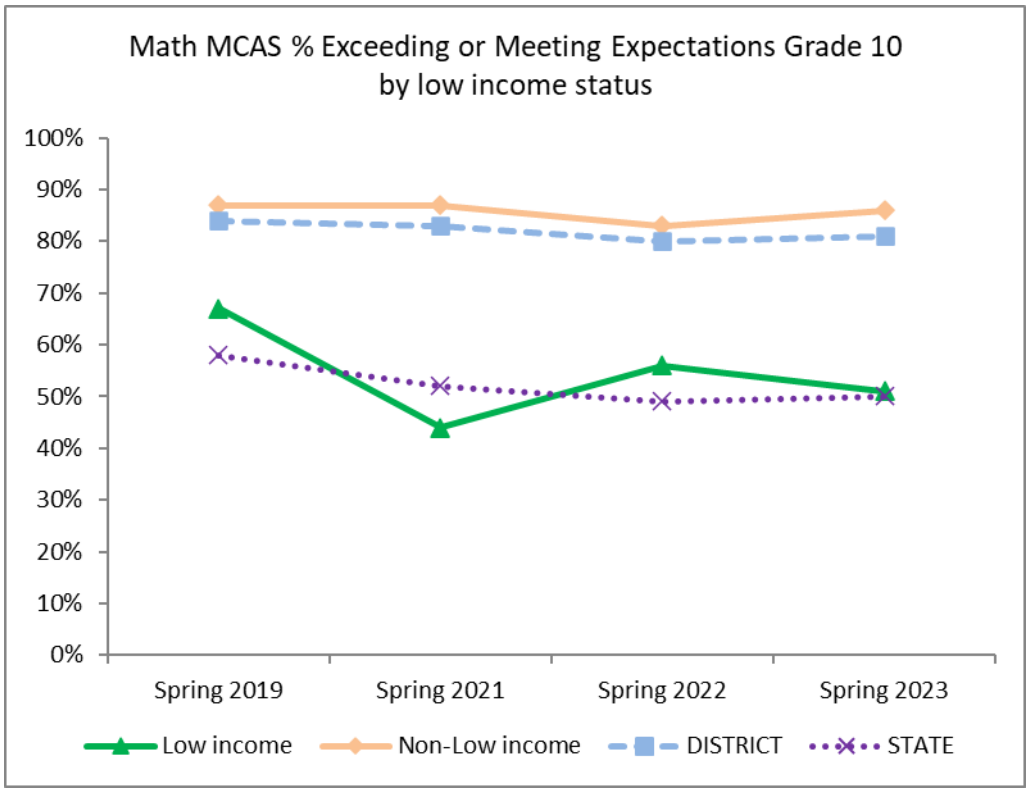

HS Physics MCAS % Exceeding or Meeting Expectations
by students with disabilities status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

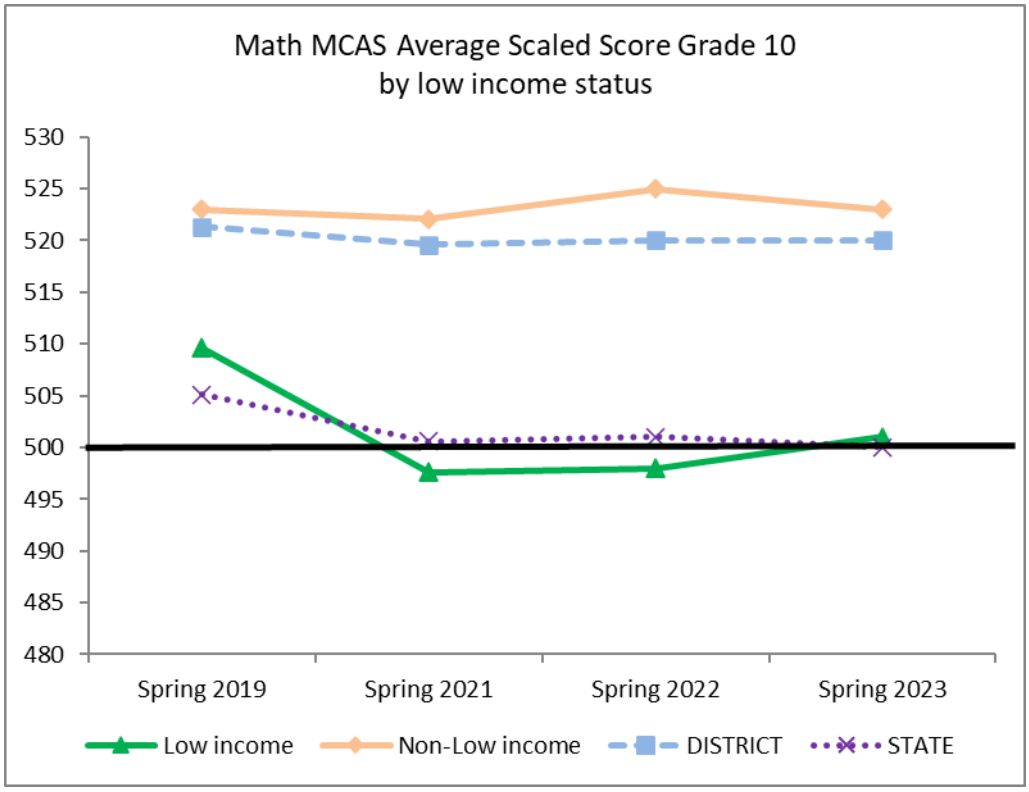

HS Physics MCAS % Average Scaled Score
by students with disabilities status
530
525
520
515
510
505
500
495
490
485
480
Spring 2022
Spring 2023
Students with disabilities
Non Students with disabilities
DISTRICT
STATE

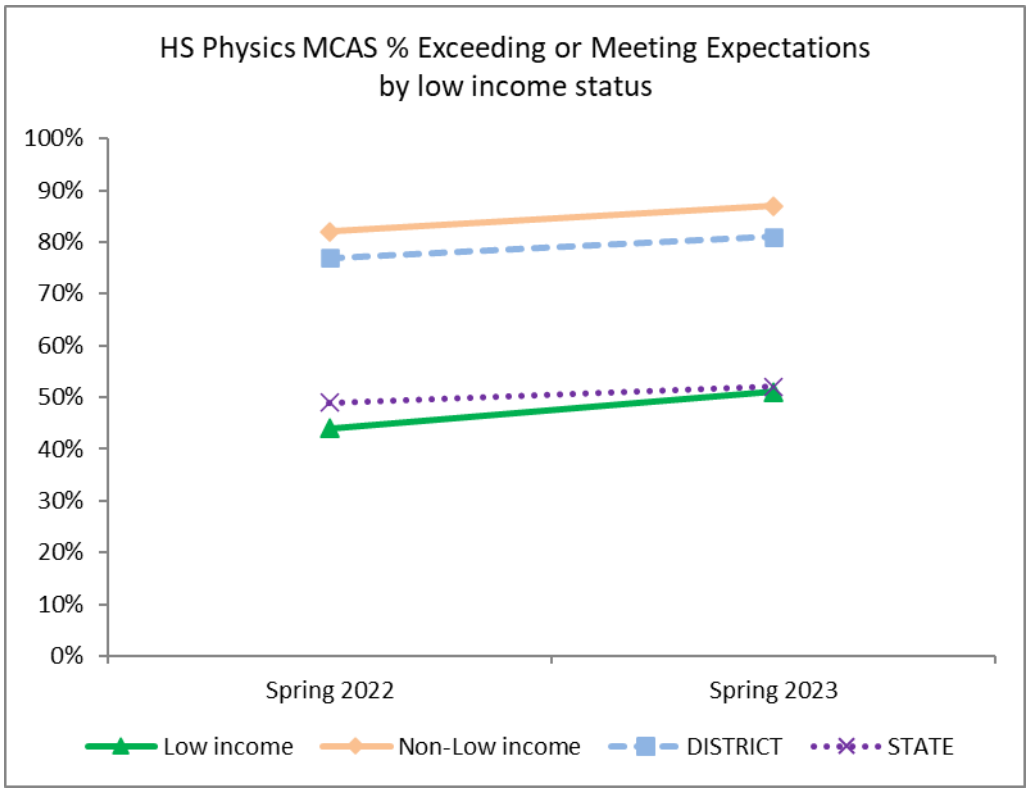
High School: Students by Low income/Economically Disadvantaged Status

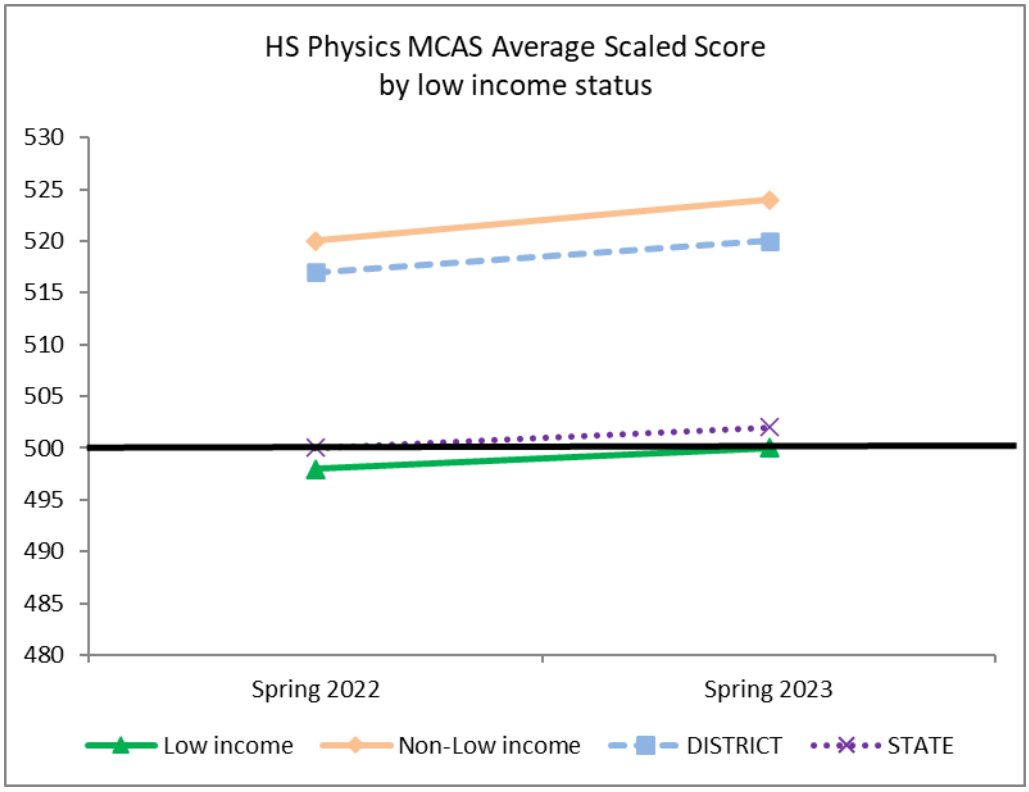




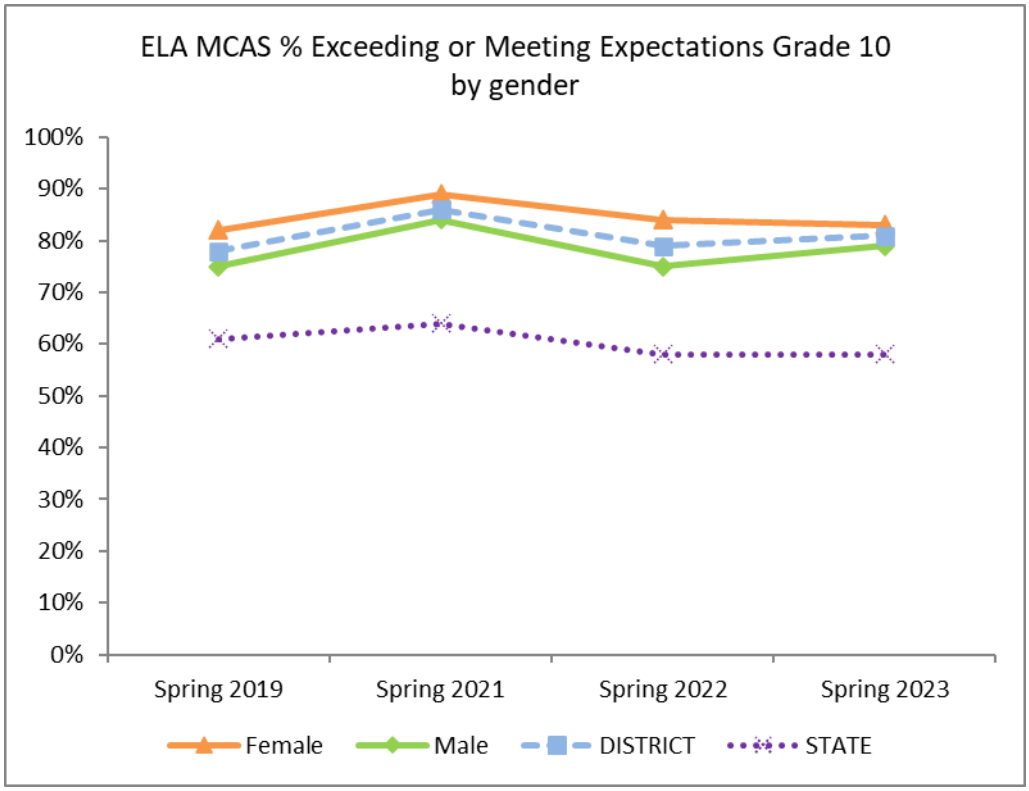

Math MCAS % Exceeding or Meeting Expectations Grade 10
by low income status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Low income
Non-Low income
DISTRICT
STATE

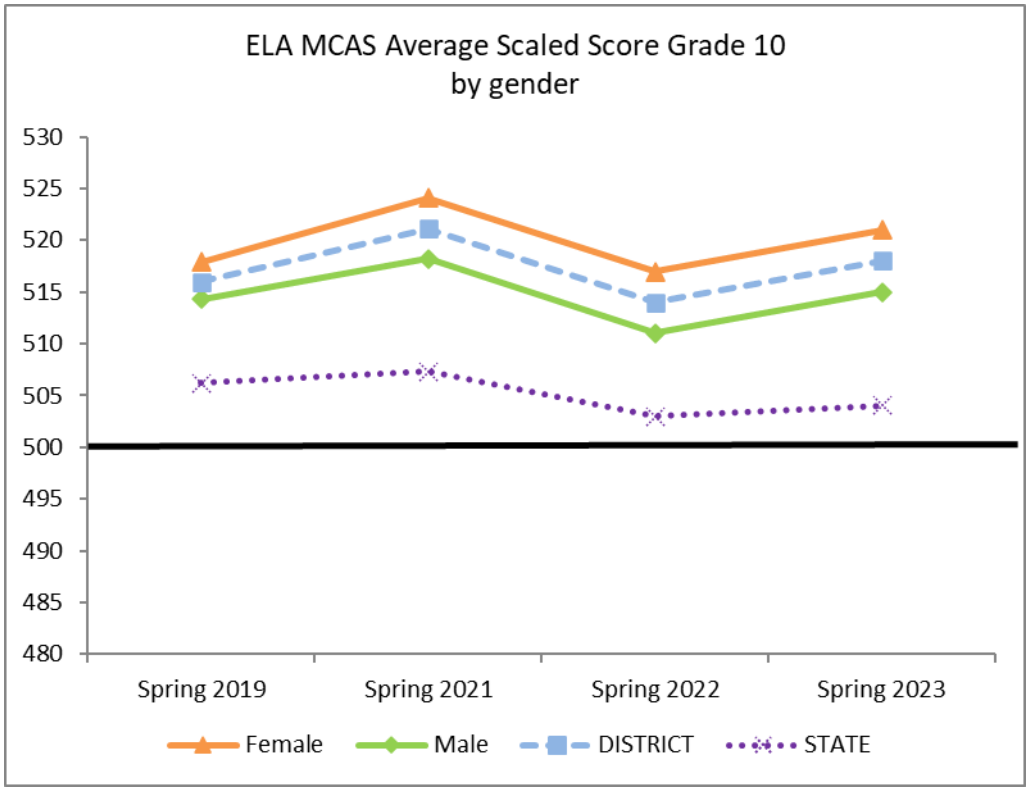

Math MCAS Average Scaled Score Grade 10
by low income status
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Low income
Non-Low income
DISTRICT
STATE

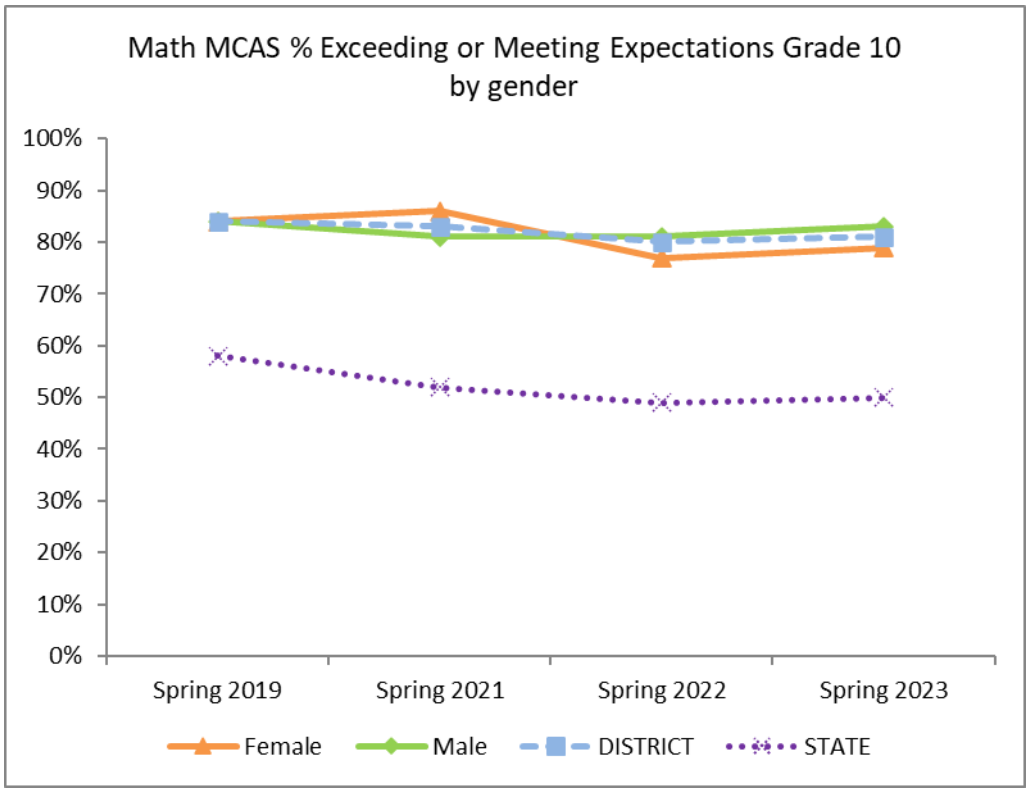

HS Physics MCAS % Exceeding or Meeting Expectations
by low income status
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2022
Spring 2023
Low income
Non-Low income
DISTRICT
STATE

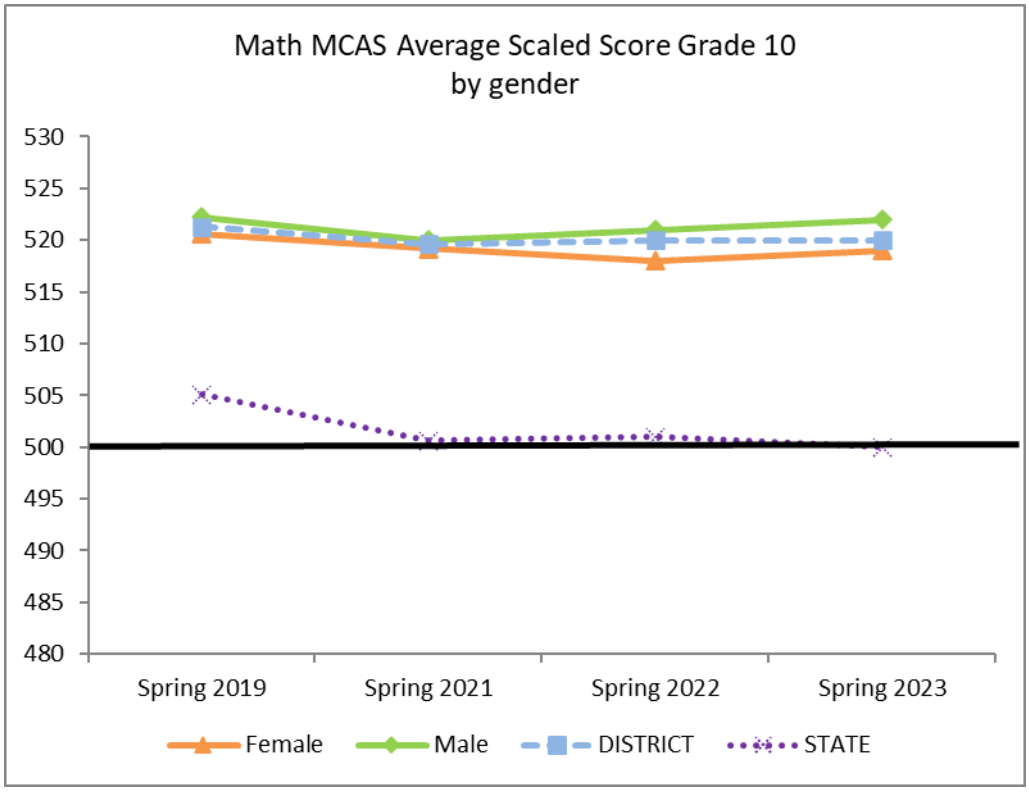

HS Physics MCAS Average Scaled Score
by low income status
530
525
520
515
510
505
500
495
490
485
480
Spring 2022
Spring 2023
Low income
Non-Low income
DISTRICT
STATE

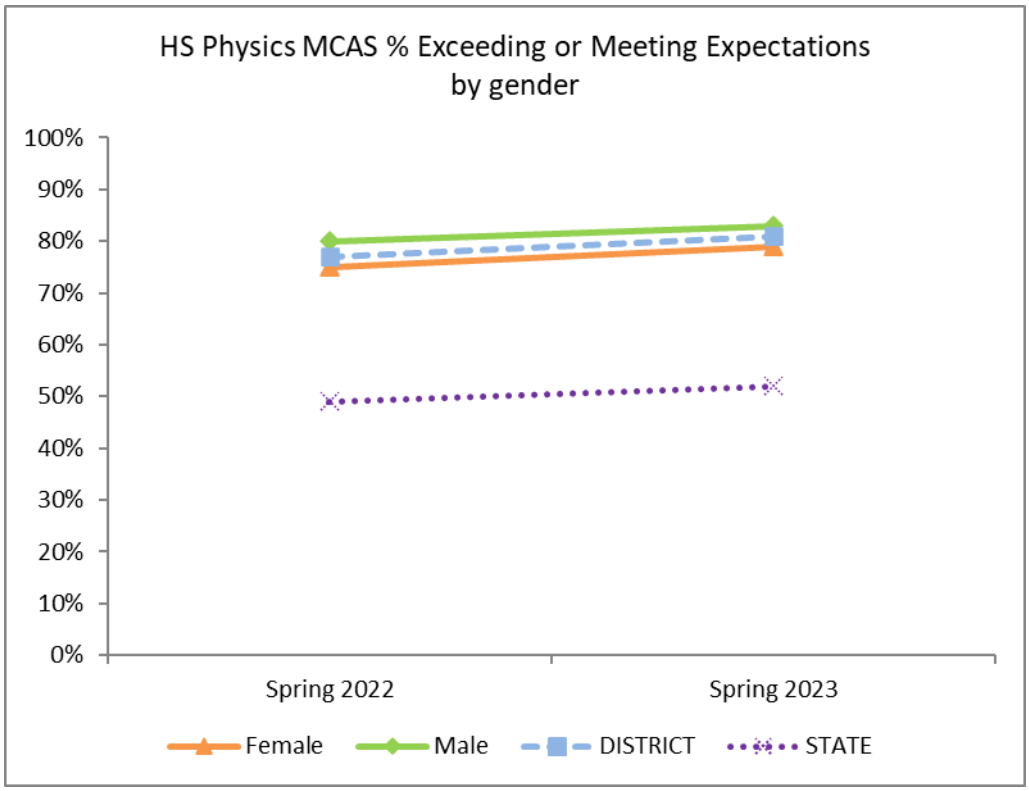
High School: By Gender

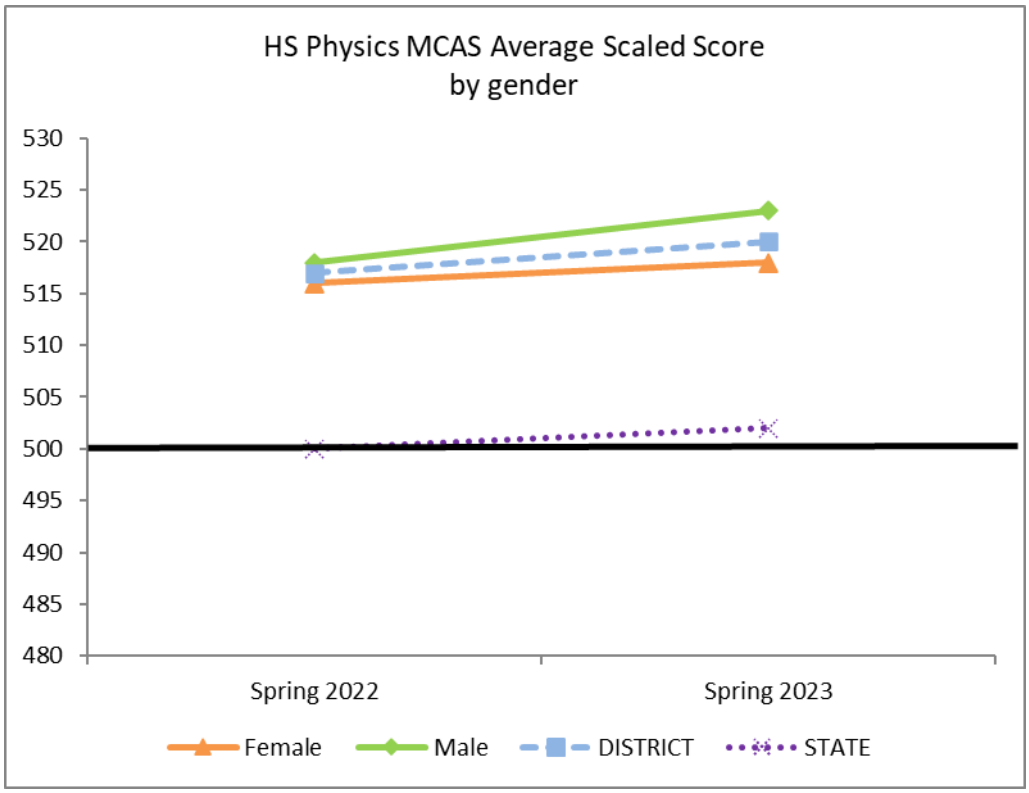




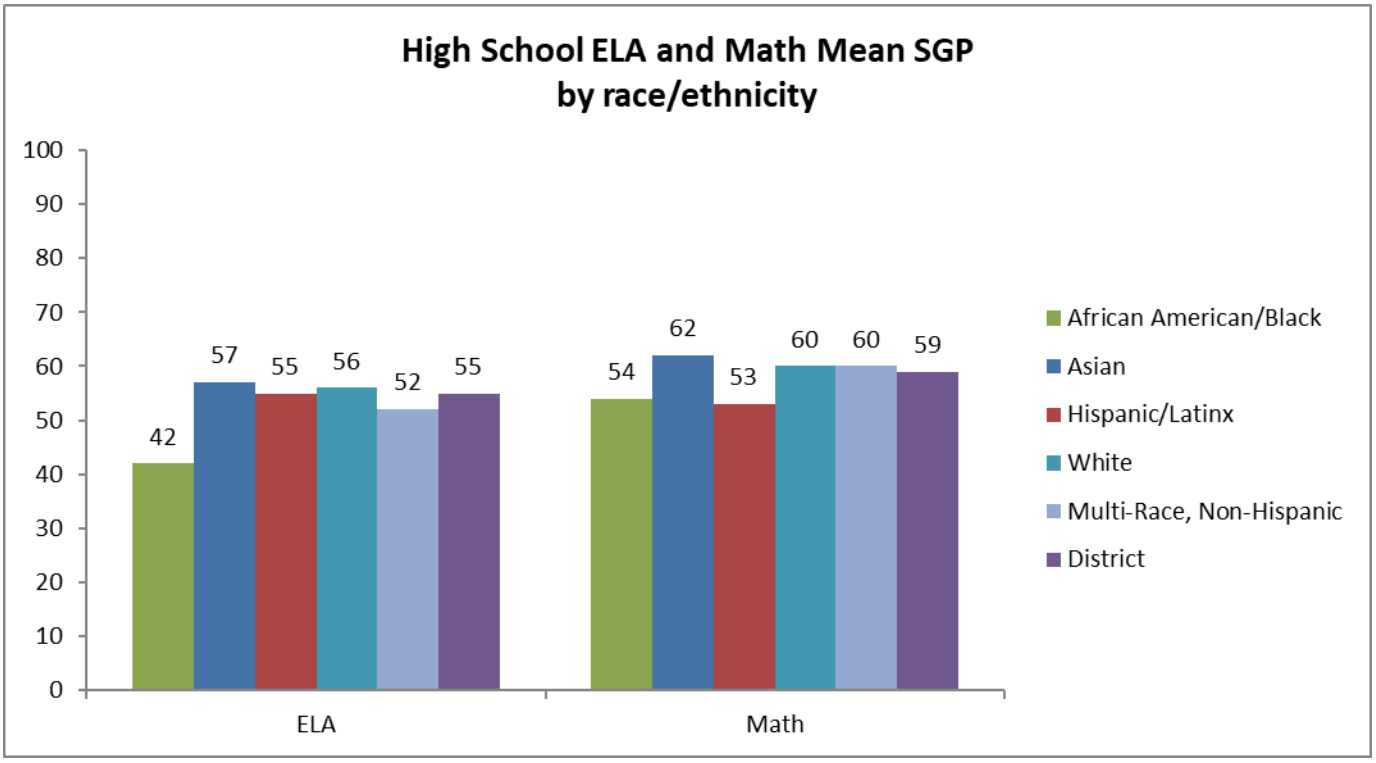

Math MCAS % Exceeding or Meeting Expectations Grade 10
by gender
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE

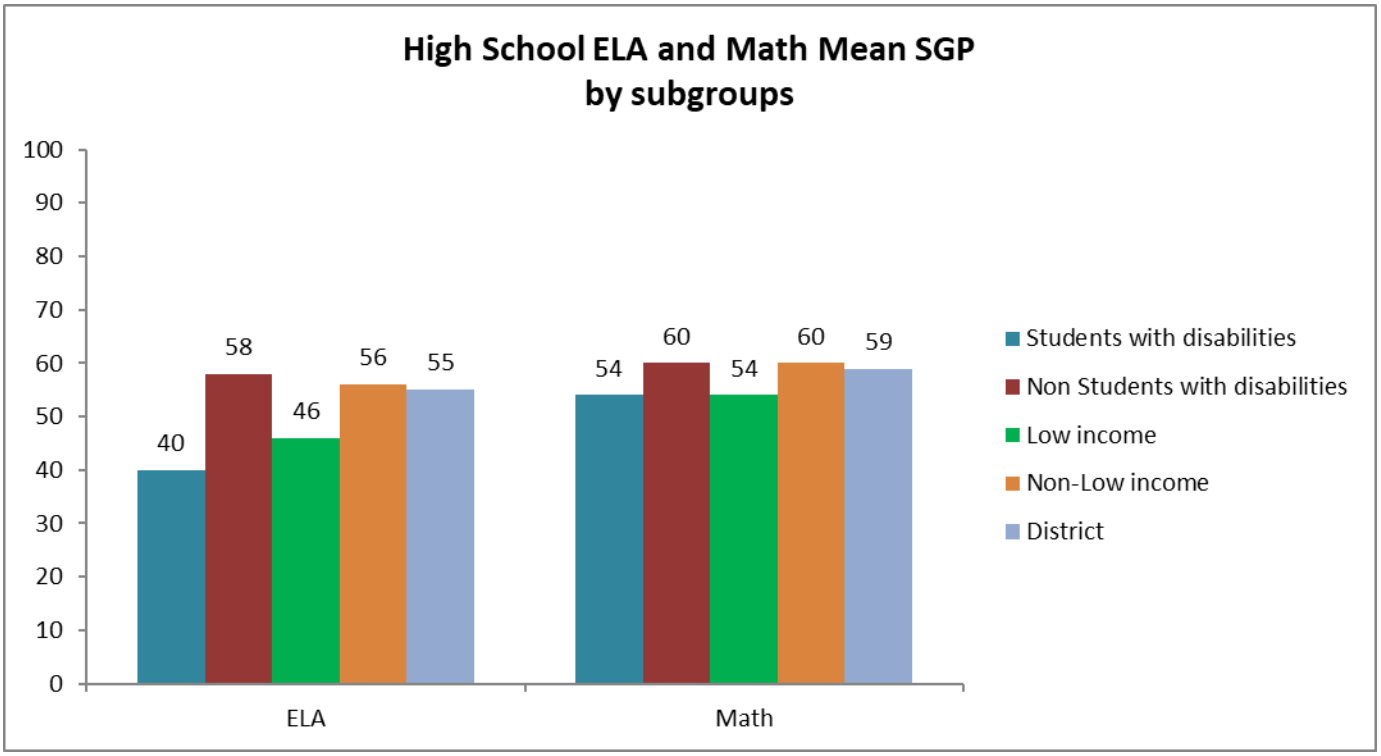

Math MCAS Average Scaled Score Grade 10
by gender
530
525
520
515
510
505
500
495
490
485
480
Spring 2019
Spring 2021
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE


HS Physics MCAS % Exceeding or Meeting Expectations by gender
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE


HS Physics MCAS Average Scaled Score by gender
530
525
520
515
510
505
500
495
490
485
480
Spring 2022
Spring 2023
Female
Male
DISTRICT
STATE

High School: Student Growth Percentiles by subgroups



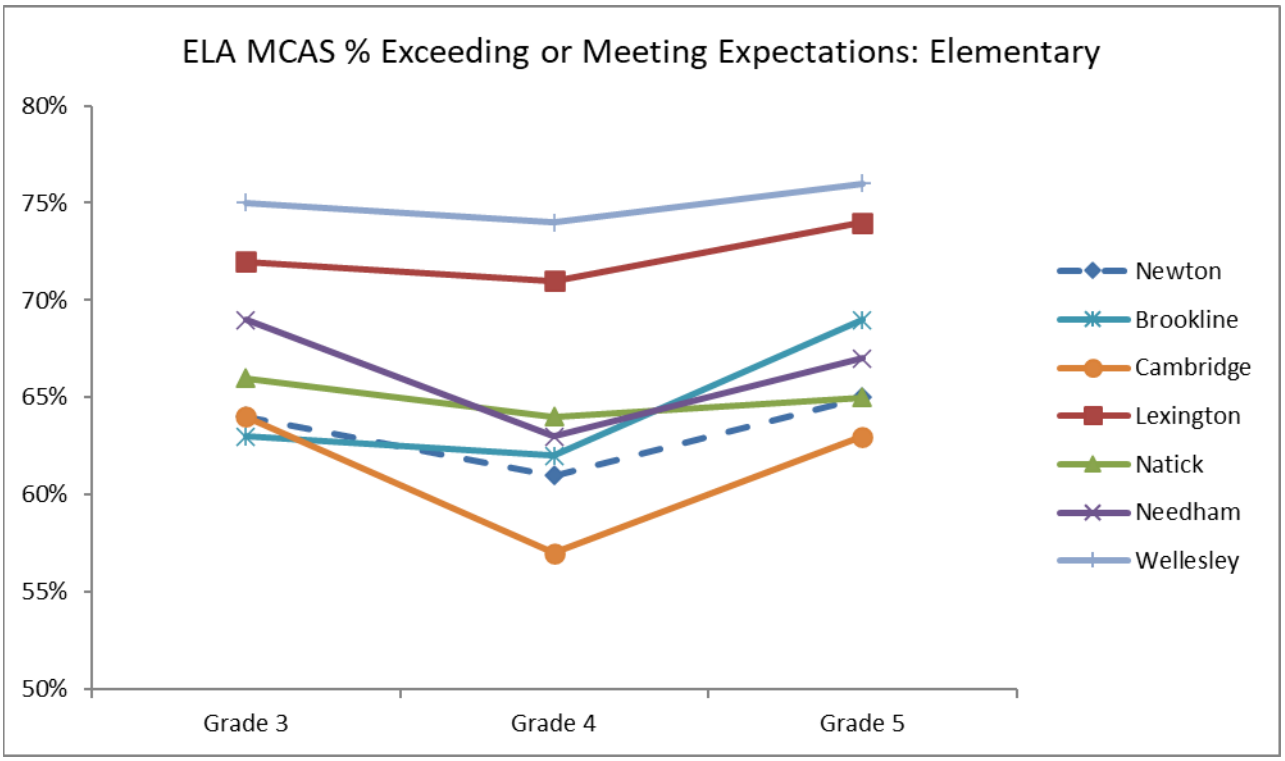


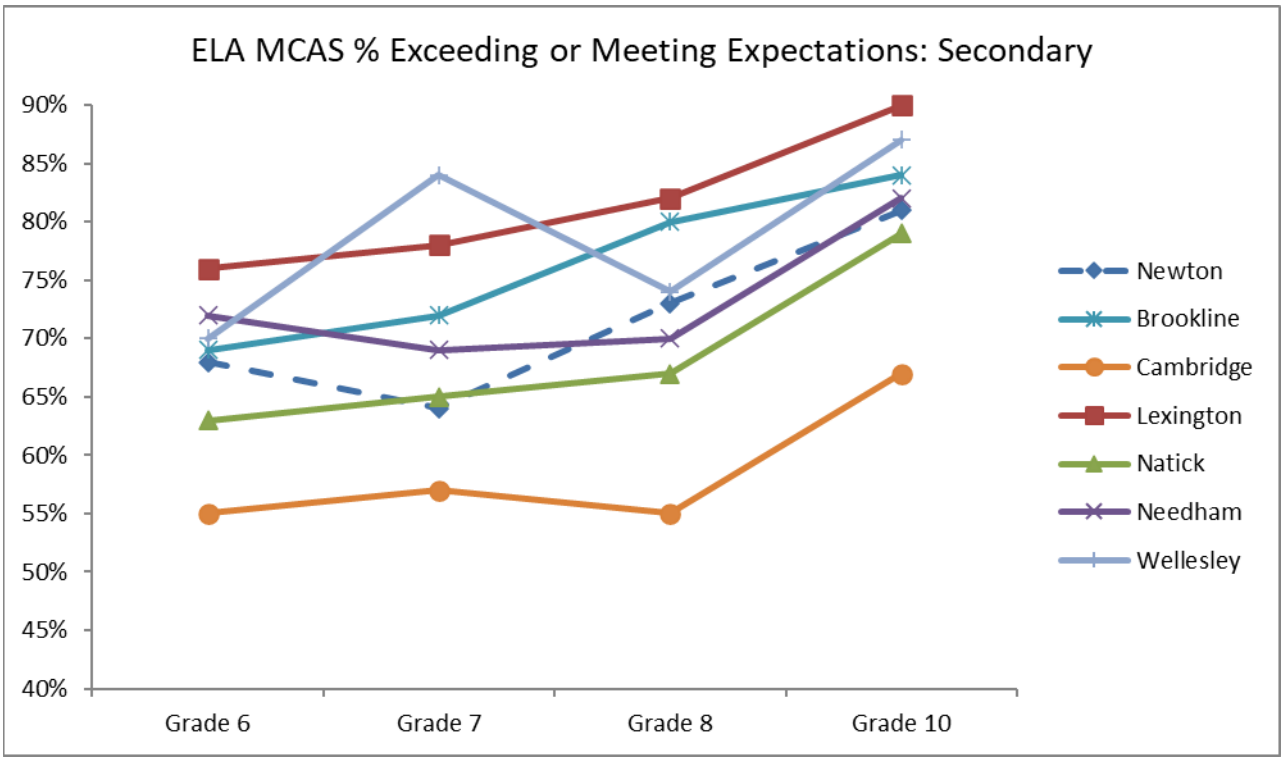
*SGP unavailable for EL students due to small sample size.

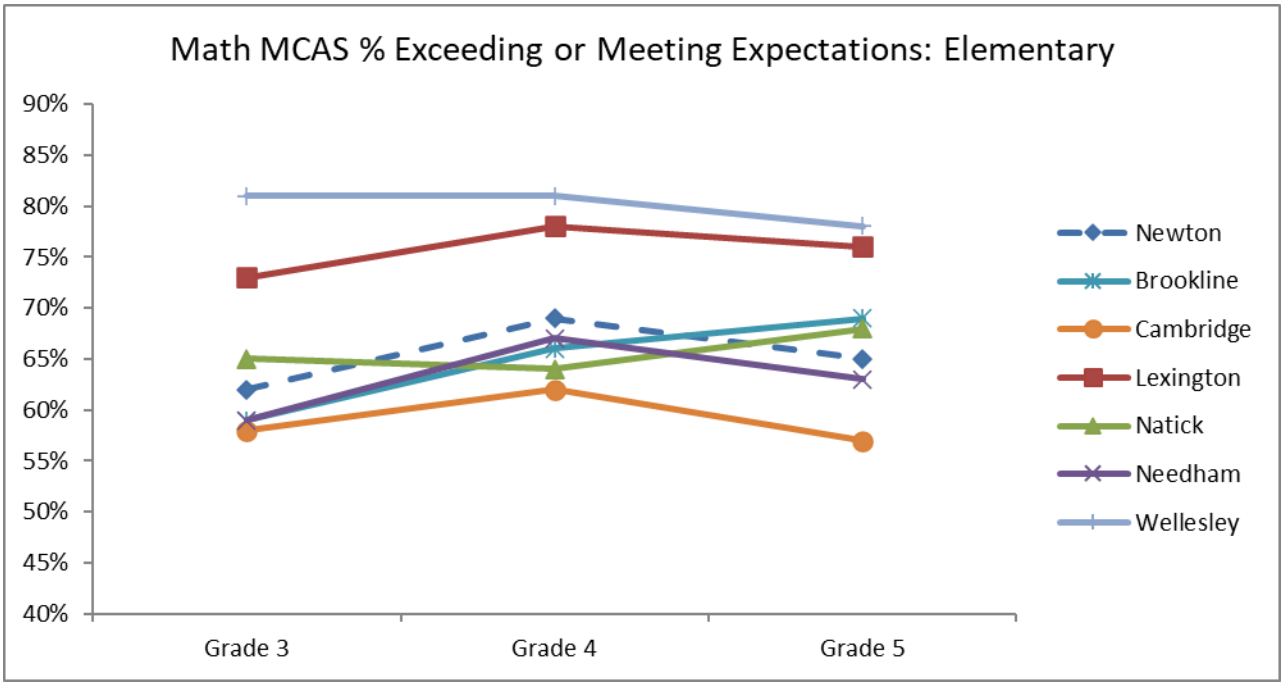
Comparison Districts

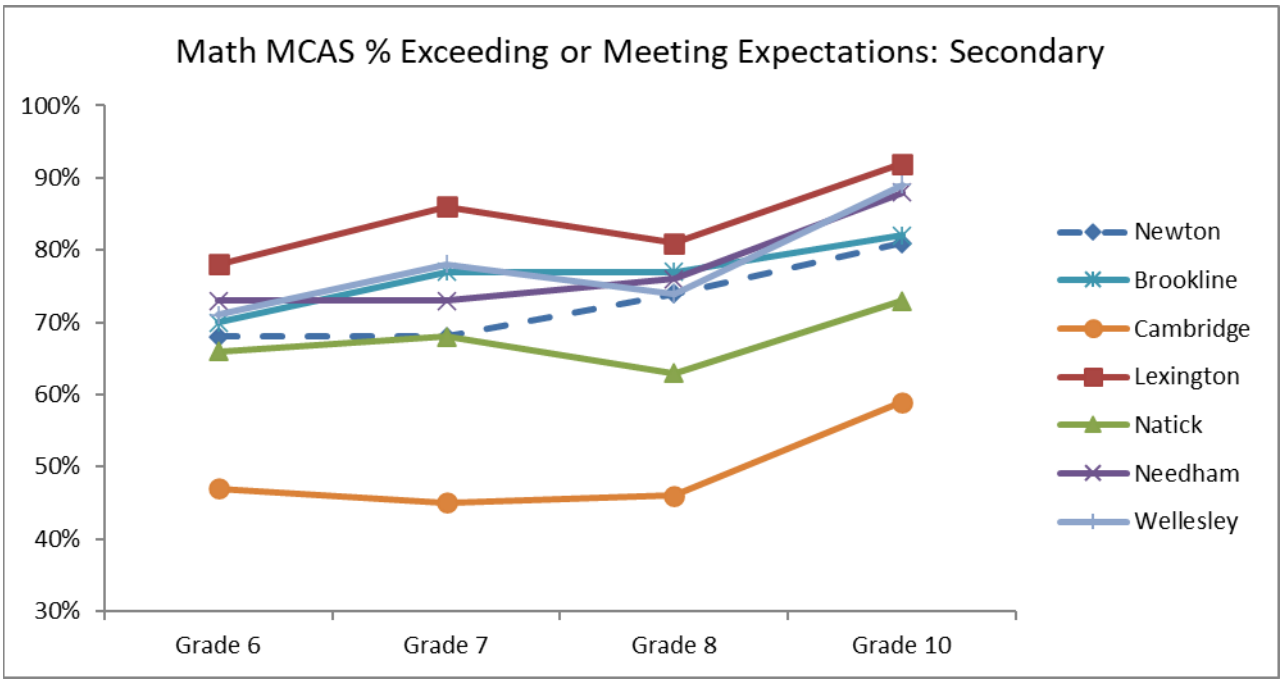
The following graphs display Newton's performance on MCAS by grade and subject, by subject and subgroup, and by subject over the past 5 years compared to a set of comparison districts: Brookline, Cambridge, Lexington, Natick, Needham, and Wellesley. Identifying comparison districts for Newton is difficult, given the fact that there are few districts of comparable size to Newton in this region of Massachusetts. The comparison districts in the following graphs were identified as serving similar populations of students as Newton, or as a city or town that is near Newton that families may also consider when deciding to move to Newton. Newton's performance is displayed as a dashed line in these graphs to differentiate it from the comparison districts.

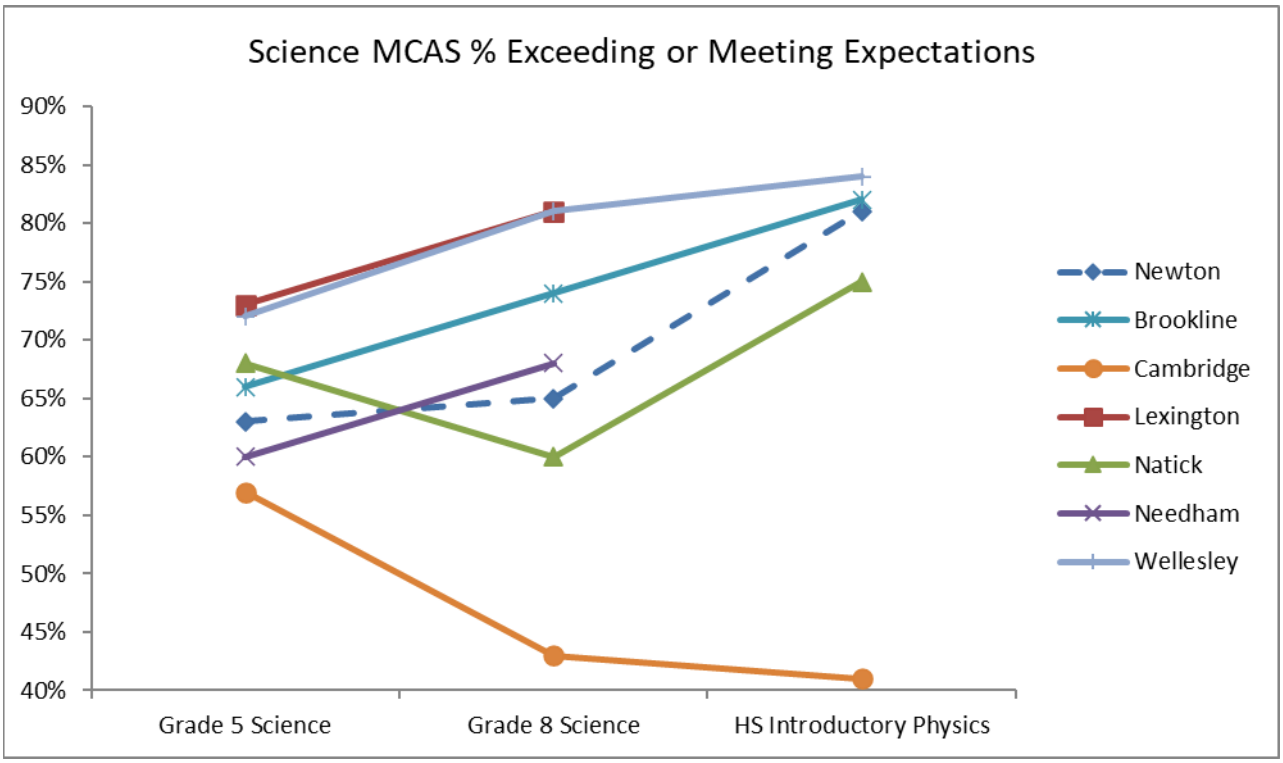
Comparison districts by grade and subject




ELA MCAS % Exceeding or Meeting Expectations: Secondary
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Grade 6
Grade 7
Grade 8
Grade 10
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

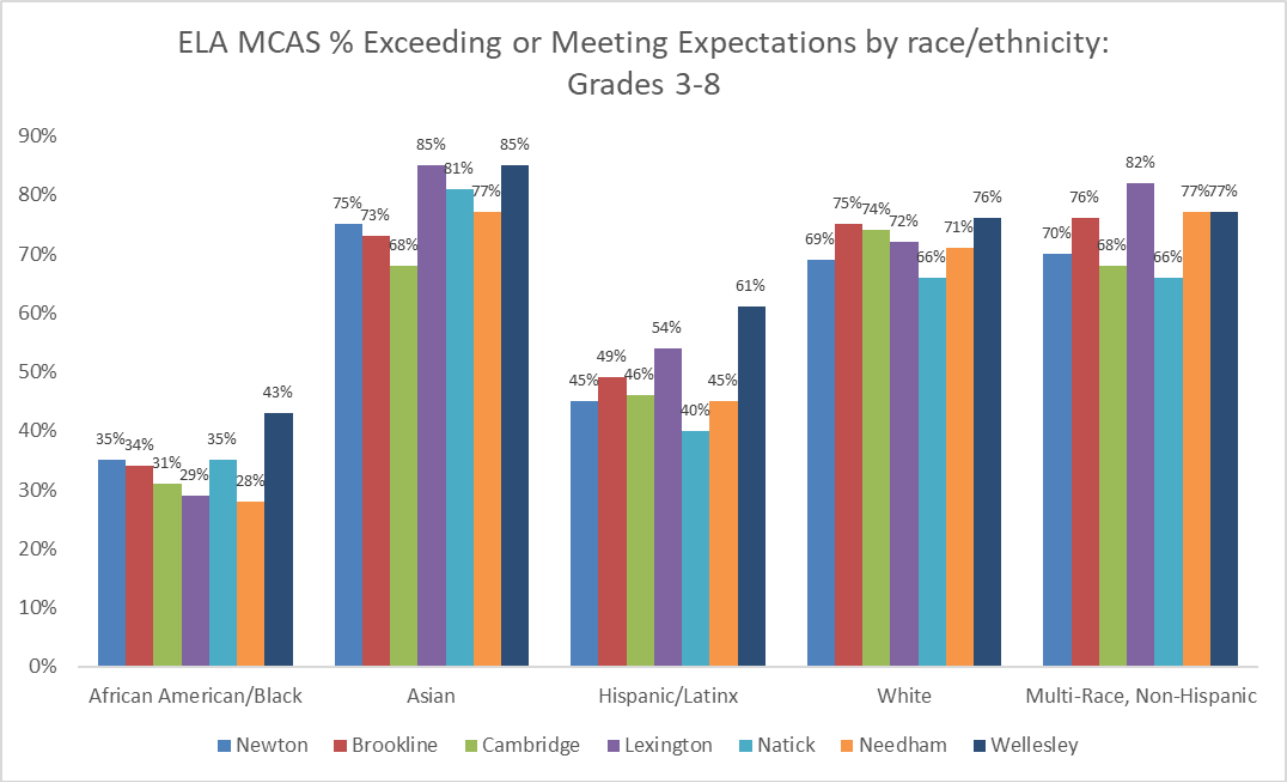

Math MCAS % Exceeding or Meeting Expectations: Elementary
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Grade 3
Grade 4
Grade 5
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

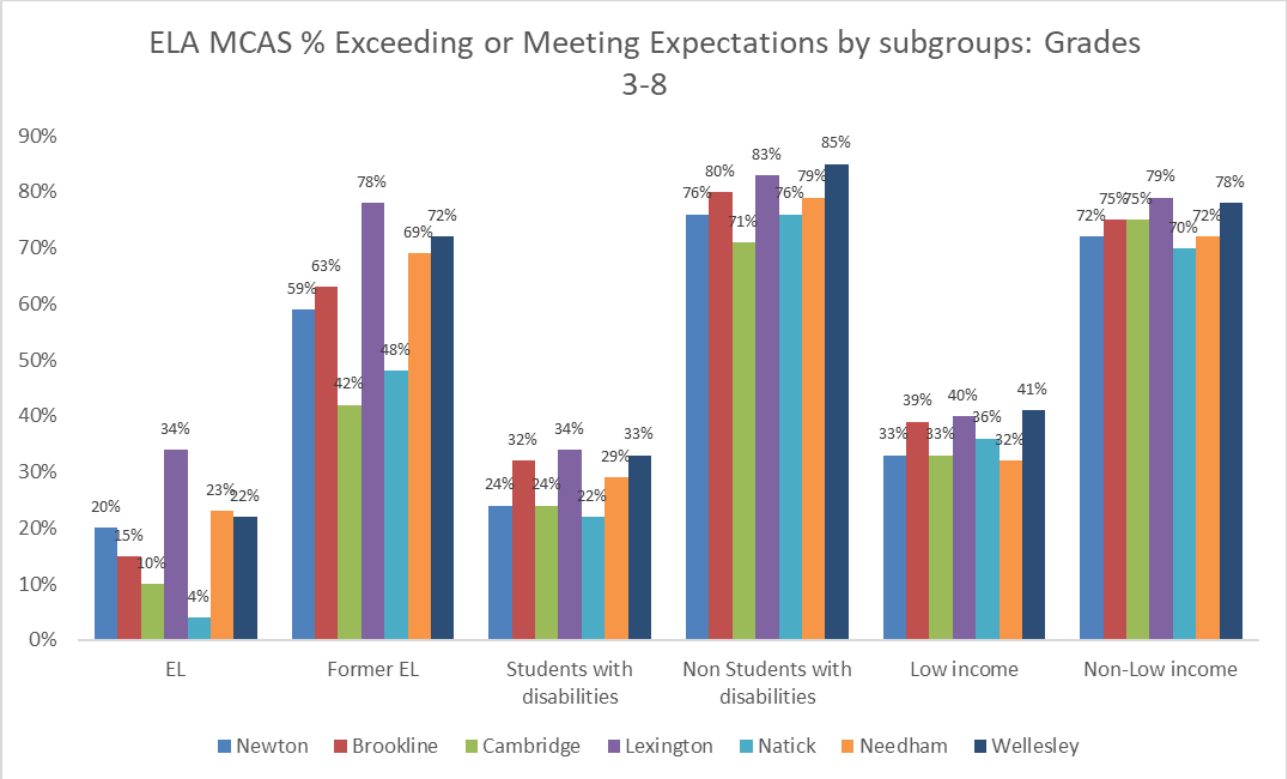


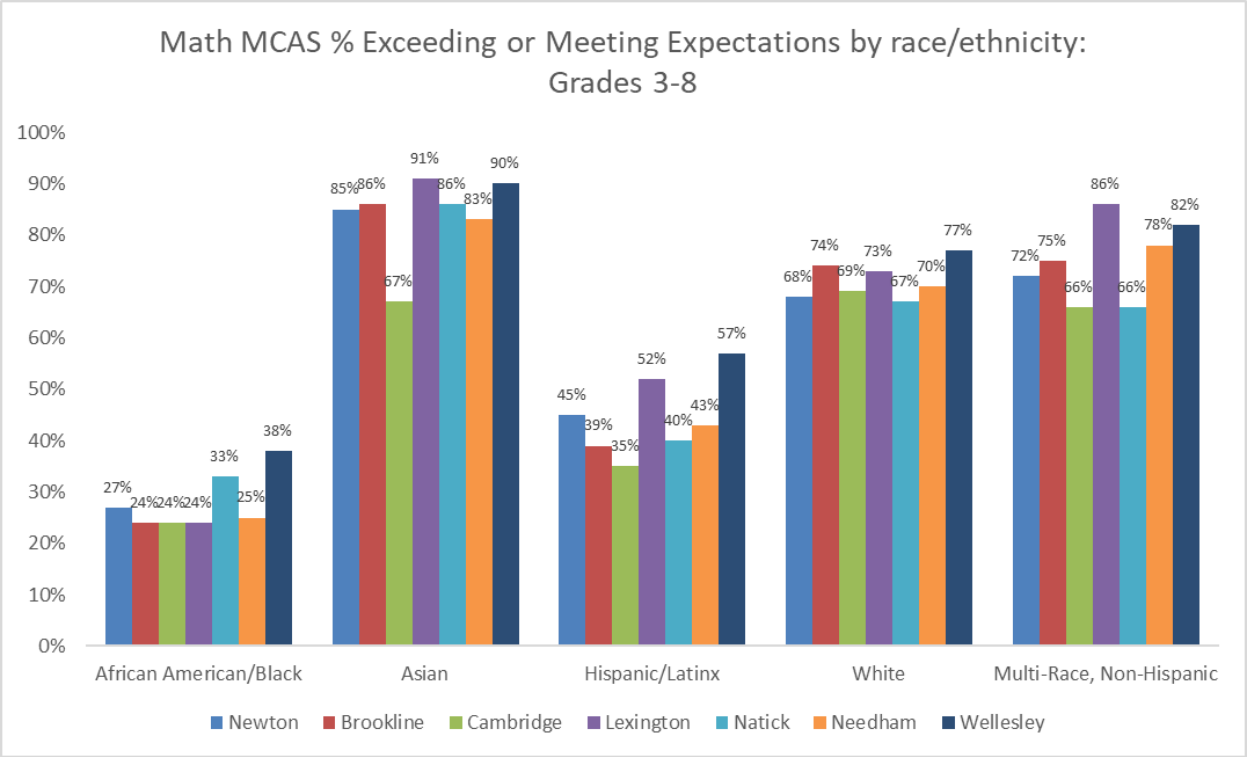


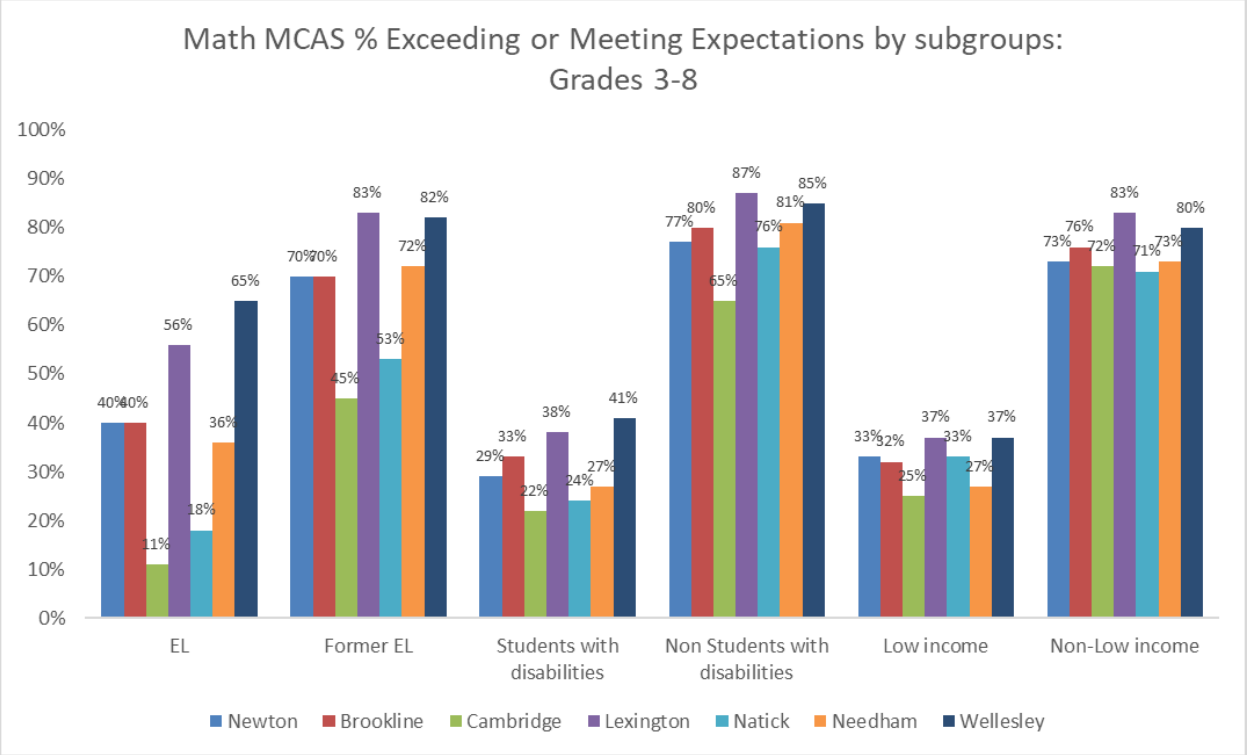
*Students in Lexington and Needham take the Biology test instead of the Physics test in high school and thus are omitted from this graph.

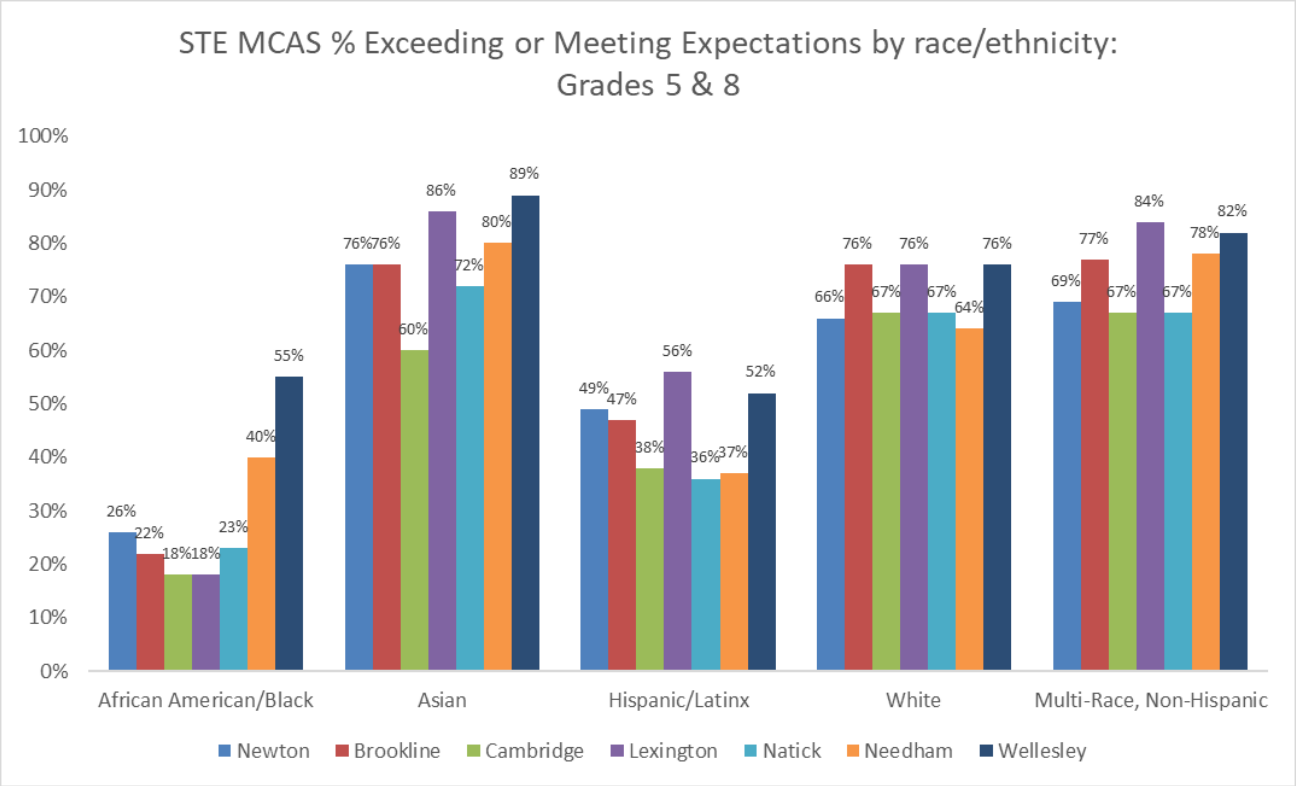
Comparison districts by subgroup and subject

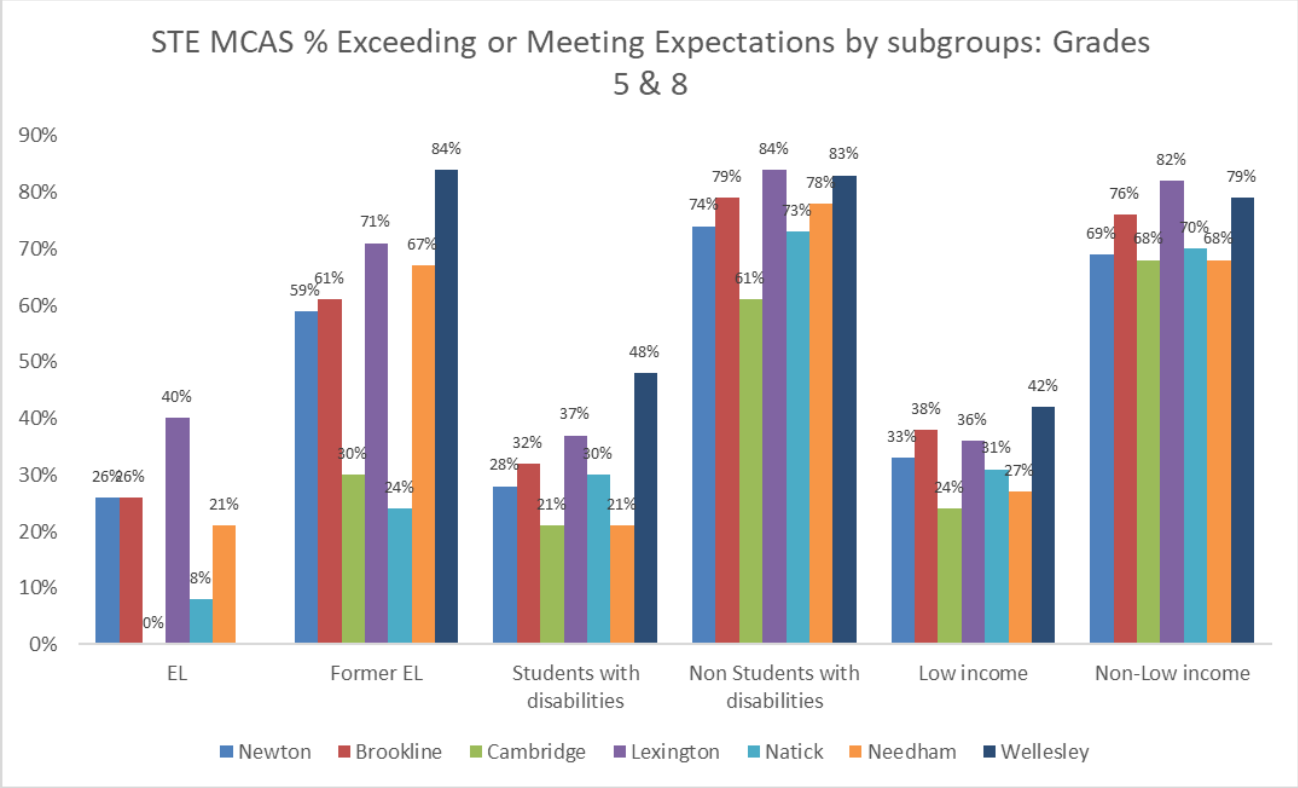


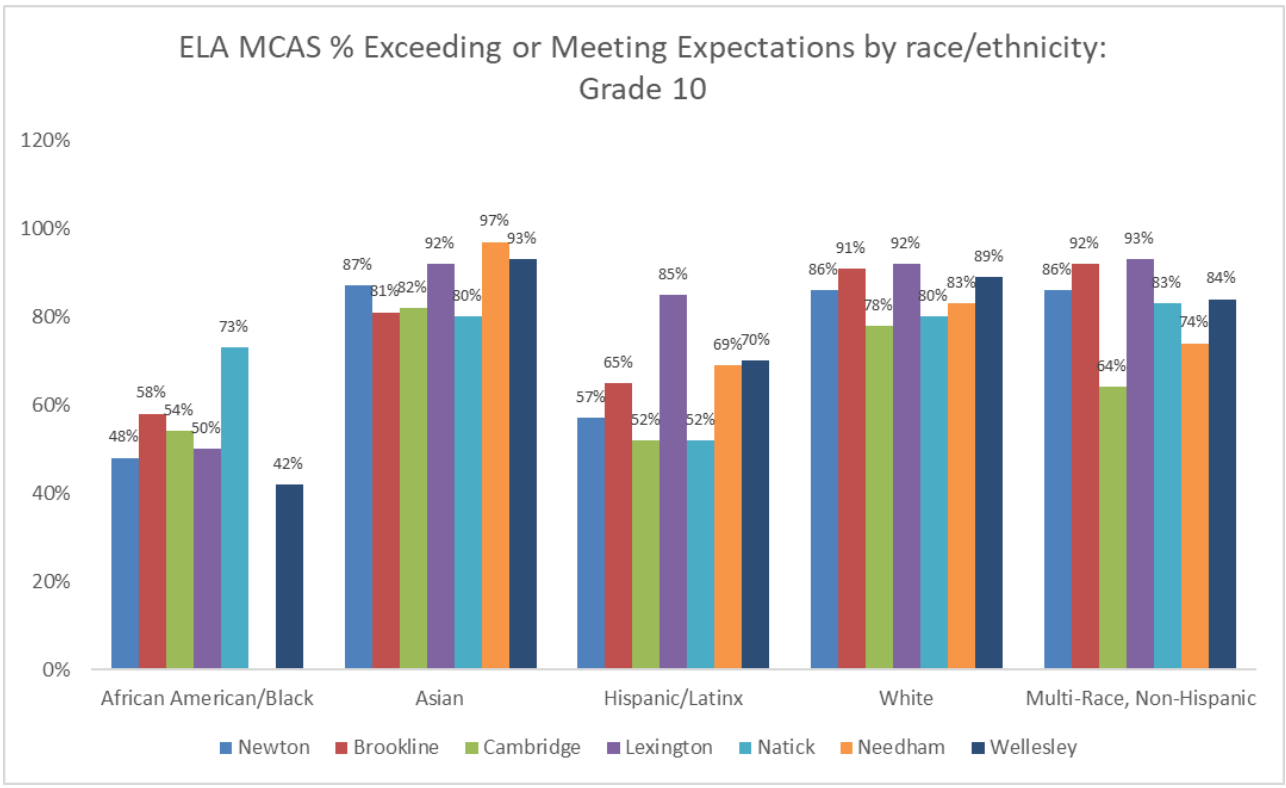


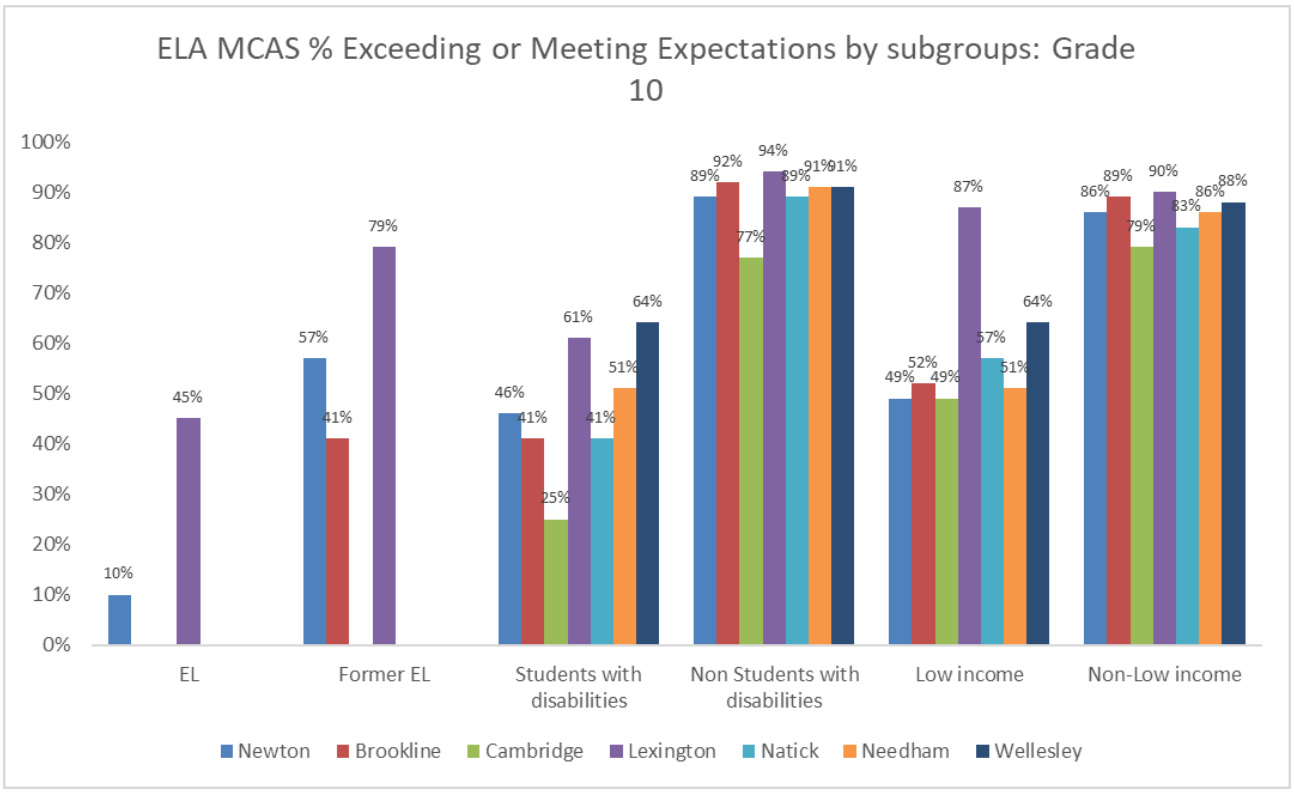

Math MCAS % Exceeding or Meeting Expectations by race/ethnicity: Grades 3-8
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
27% 24% 24% 24% 33% 25% 38%
85% 86% 67% 91% 86% 83% 90%
45% 39% 35% 52% 40% 43% 57%
68% 74% 69% 73% 67% 70% 77%
72% 75% 66% 86% 66% 78% 82%
African American/Black
Asian
Hispanic/Latinx
White
Multi-Race, Non-Hispanic
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

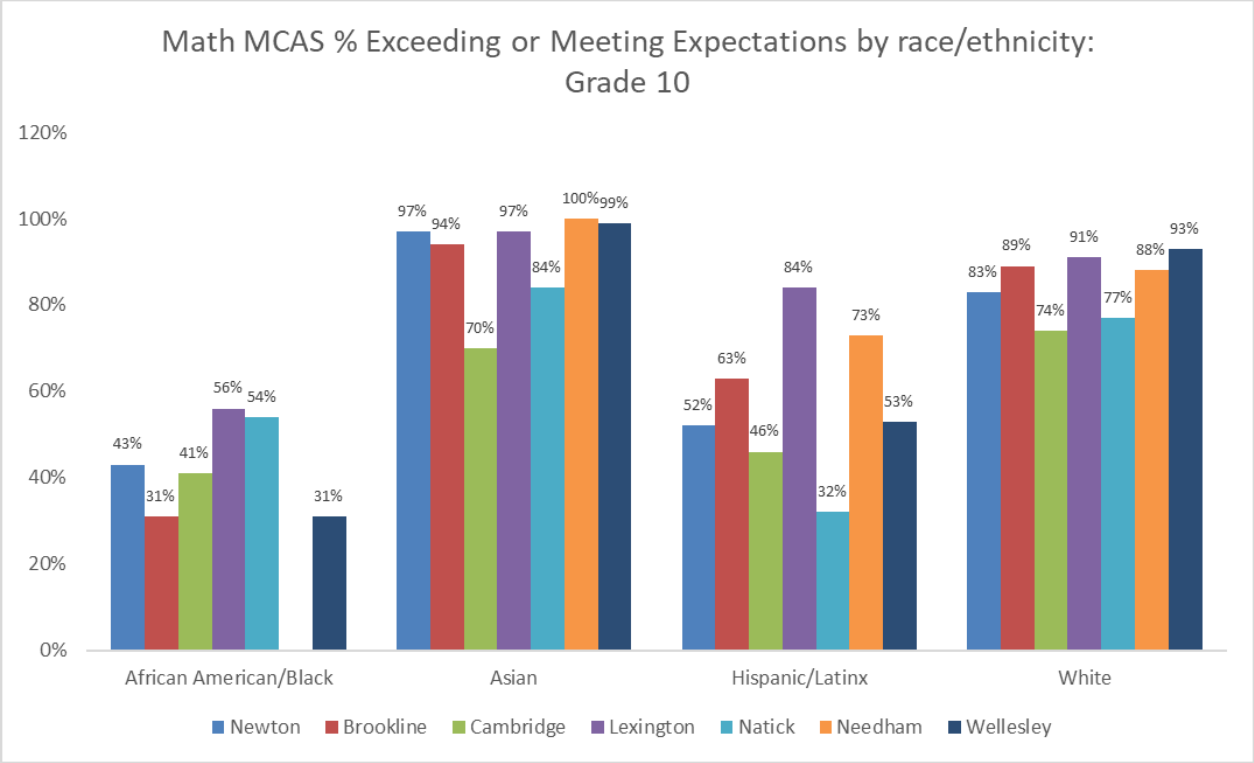

Math MCAS % Exceeding or Meeting Expectations by subgroups: Grades 3-8
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
40% 40% 11% 56% 18% 36% 65%
70% 70% 45% 83% 53% 72% 82%
29% 33% 22% 38% 24% 27% 41%
77% 80% 65% 87% 76% 81% 85%
33% 32% 25% 37% 33% 27% 37%
73% 76% 72% 83% 71% 73% 80%
EL
Former EL
Students with disabilities
Non Students with disabilities
Low income
Non-Low income
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

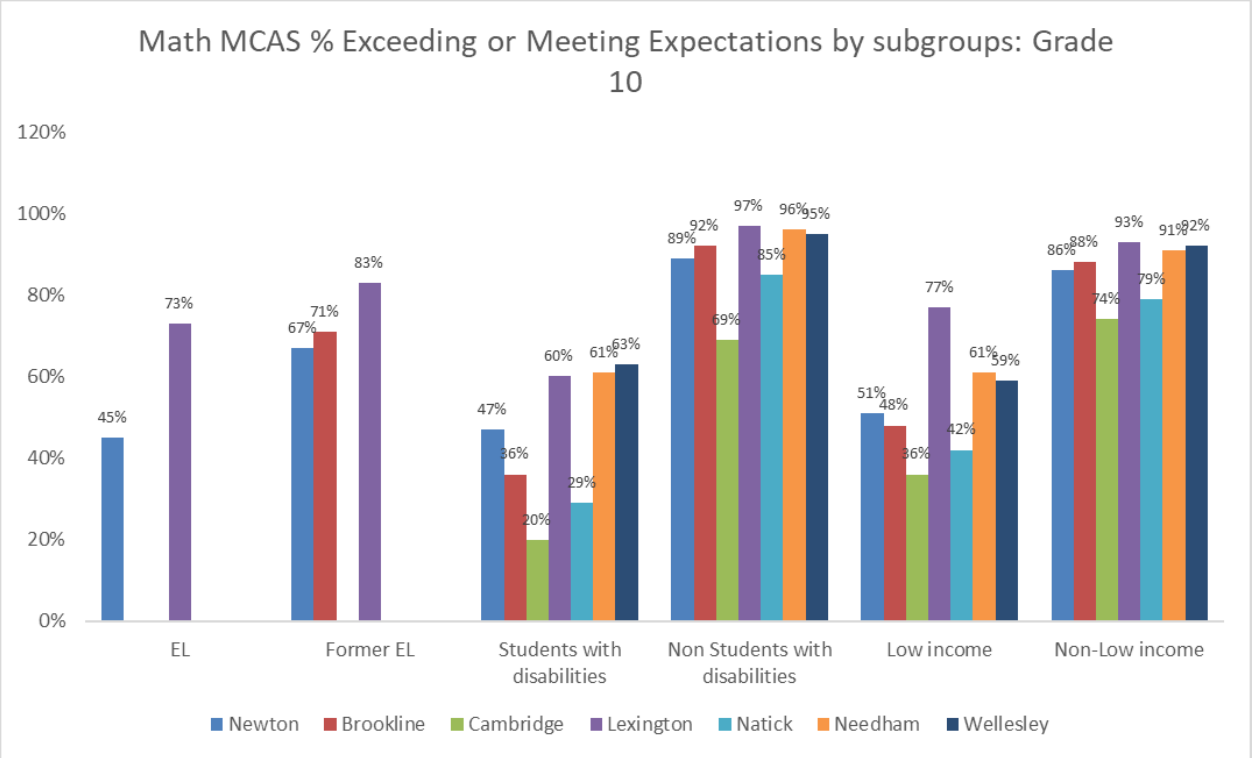

STE MCAS % Exceeding or Meeting Expectations by race/ethnicity: Grades 5 & 8
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
26%
22%
18%
18%
23%
40%
55%
76%
76%
60%
86%
72%
80%
89%
49%
47%
38%
56%
36%
37%
52%
66%
76%
67%
76%
67%
64%
76%
69%
77%
67%
84%
67%
78%
82%
African American/Black
Asian
Hispanic/Latinx
White
Multi-Race, Non-Hispanic
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

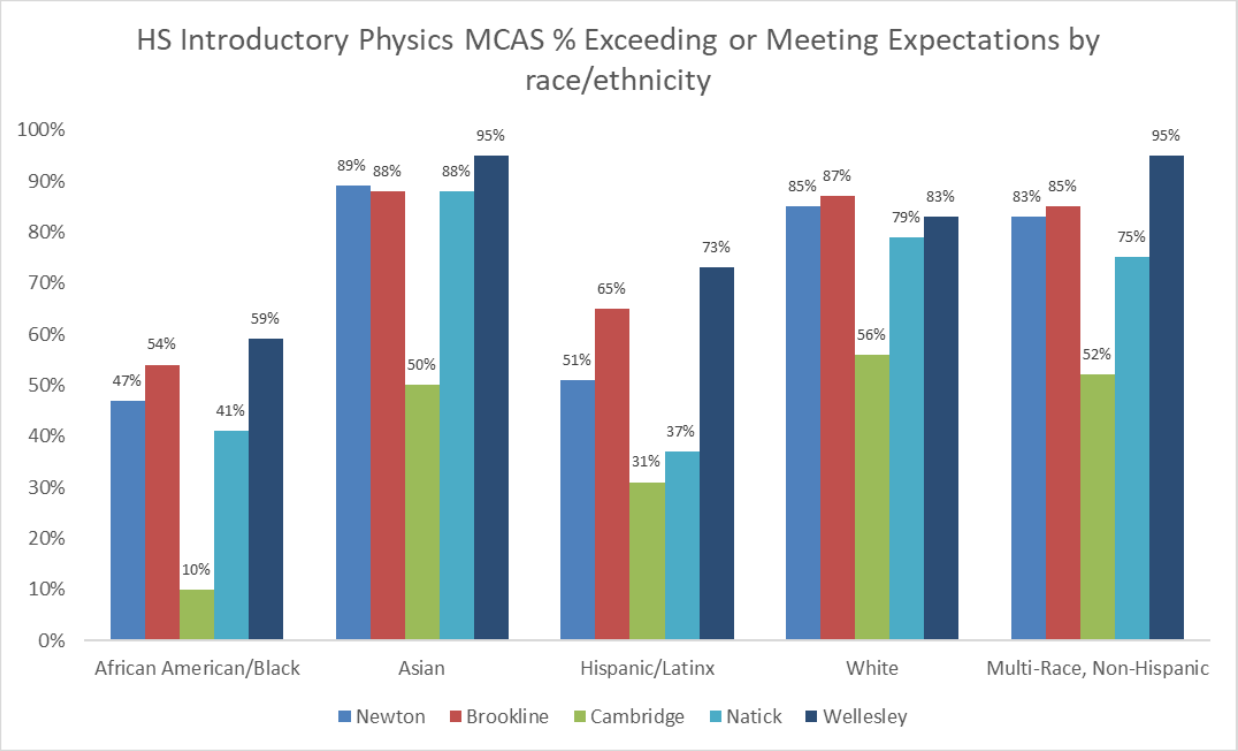

STE MCAS % Exceeding or Meeting Expectations by subgroups: Grades 5 & 8
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
26%
26%
0%
40%
8%
21%
59%
61%
30%
71%
24%
67%
84%
28%
32%
21%
37%
30%
21%
48%
74%
79%
61%
84%
73%
78%
83%
33%
38%
24%
36%
31%
27%
42%
69%
76%
68%
82%
70%
68%
79%
EL
Former EL
Students with disabilities
Non Students with disabilities
Low income
Non-Low income
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

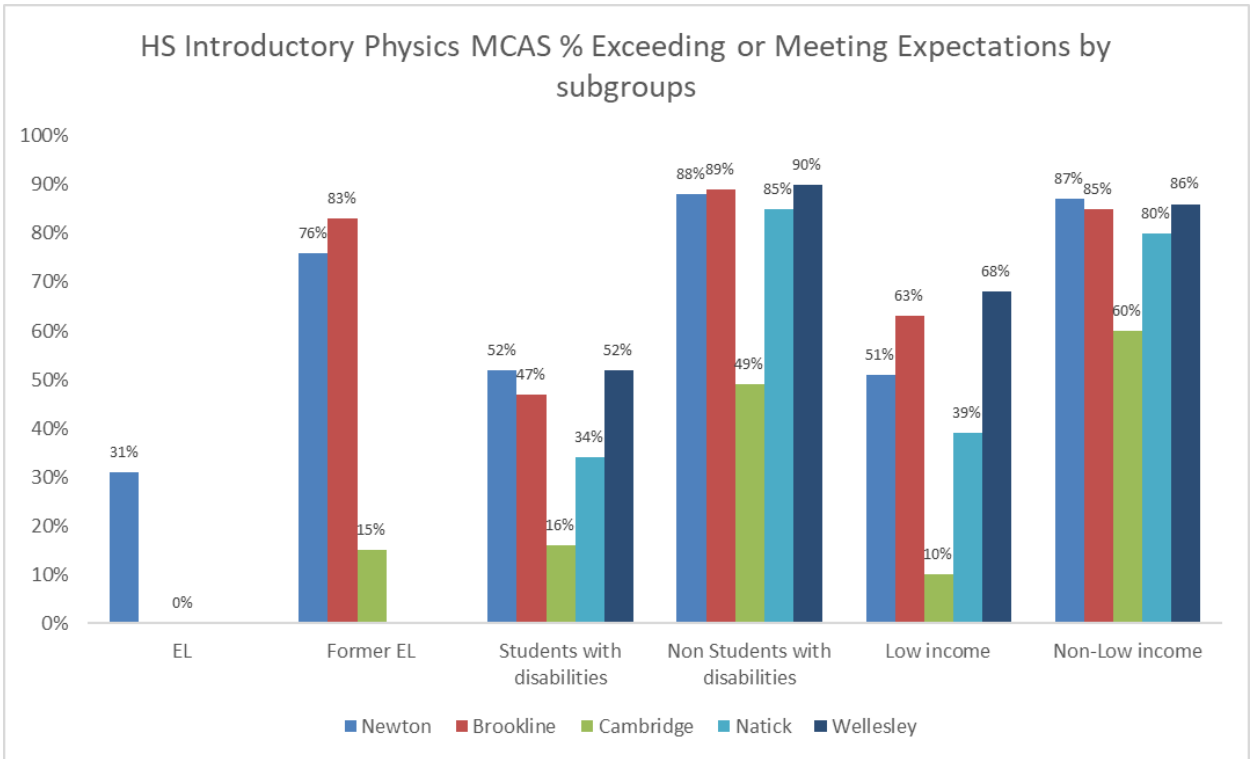

ELA MCAS % Exceeding or Meeting Expectations by race/ethnicity: Grade 10
120%
100%
80%
60%
40%
20%
0%
48% 58% 54% 50% 73%
42%
87% 81% 82% 92% 80% 97% 93%
57% 65% 52% 85% 52% 69% 70%
86% 91% 78% 92% 80% 83% 89%
86% 92% 64% 93% 83% 74% 84%
African American/Black
Asian
Hispanic/Latinx
White
Multi-Race, Non-Hispanic
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley


ELA MCAS % Exceeding or Meeting Expectations by subgroups: Grade 10
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10% 45%
57% 41% 79%
46% 41% 25% 61% 41% 51% 64%
89% 92% 77% 94% 89% 91% 91%
49% 52% 49% 87% 57% 51% 64%
86% 89% 79% 90% 83% 86% 88%
EL
Former EL
Students with disabilities
Non Students with disabilities
Low income
Non-Low income
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

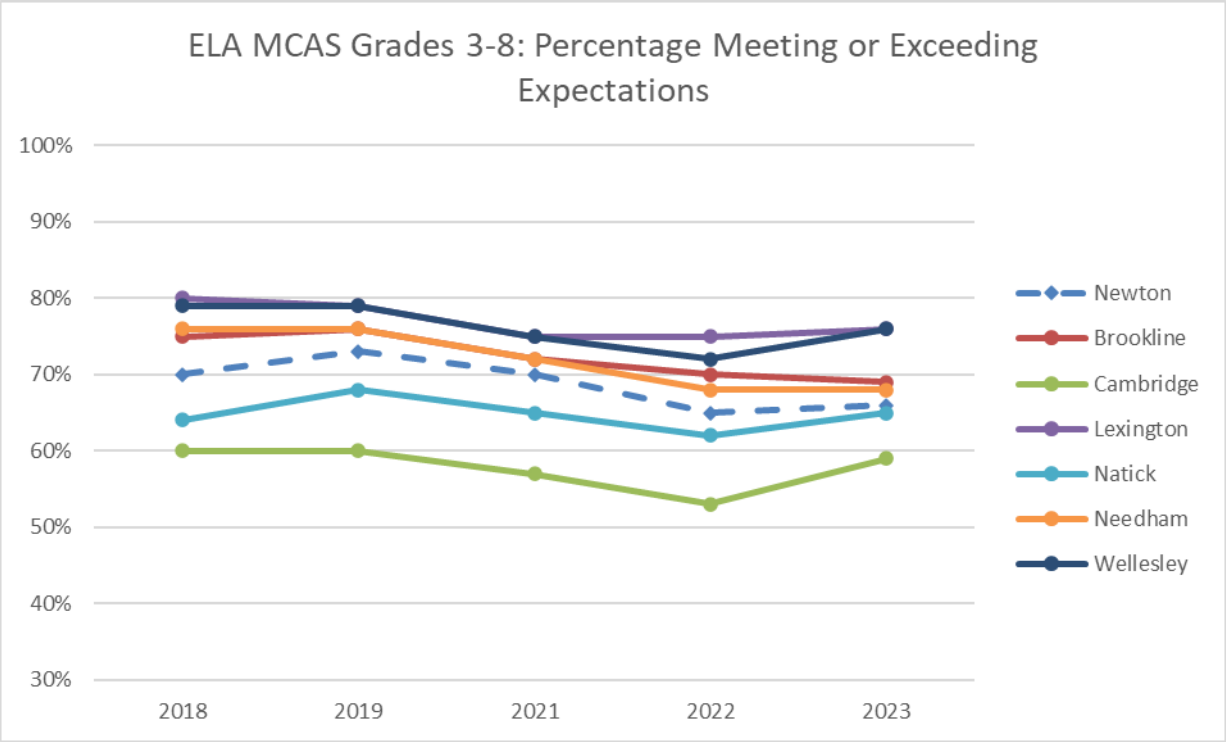

Math MCAS % Exceeding or Meeting Expectations by race/ethnicity: Grade 10
120%
100%
80%
60%
40%
20%
0%
43%
31%
41%
56%
54%
31%
97%
94%
70%
97%
84%
100%
99%
52%
63%
46%
84%
32%
73%
53%
83%
89%
74%
91%
77%
88%
93%
African American/Black
Asian
Hispanic/Latinx
White
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

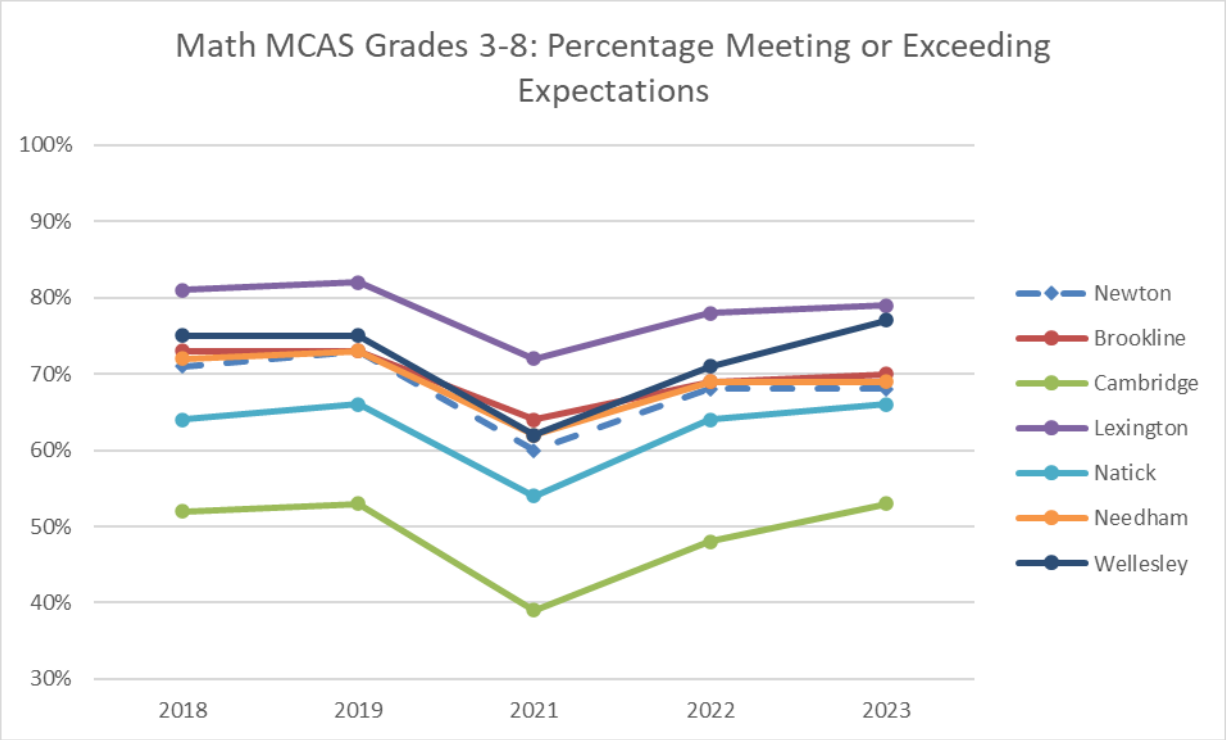

Math MCAS % Exceeding or Meeting Expectations by subgroups: Grade 10
120%
100%
80%
60%
40%
20%
0%
45%
73%
67%
71%
83%
47%
36%
20%
60%
29%
61%
63%
89%
92%
69%
97%
85%
96%
95%
51%
48%
36%
77%
42%
61%
59%
86%
88%
74%
93%
79%
91%
92%
EL
Former EL
Students with disabilities
Non Students with disabilities
Low income
Non-Low income
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley

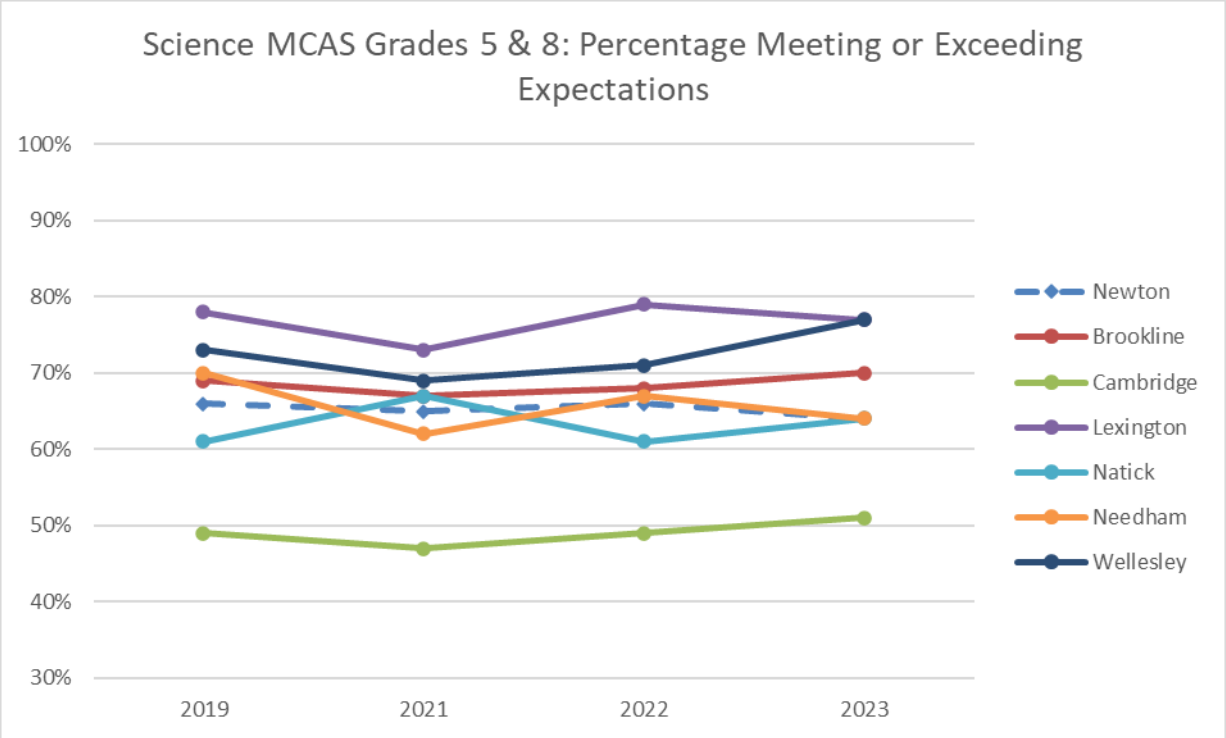

HS Introductory Physics MCAS % Exceeding or Meeting Expectations by race/ethnicity
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
47%
54%
10%
41%
59%
89%
88%
50%
88%
95%
51%
65%
31%
37%
73%
85%
87%
56%
79%
83%
83%
85%
52%
75%
95%
African American/Black
Asian
Hispanic/Latinx
White
Multi-Race, Non-Hispanic
Newton
Brookline
Cambridge
Natick
Wellesley

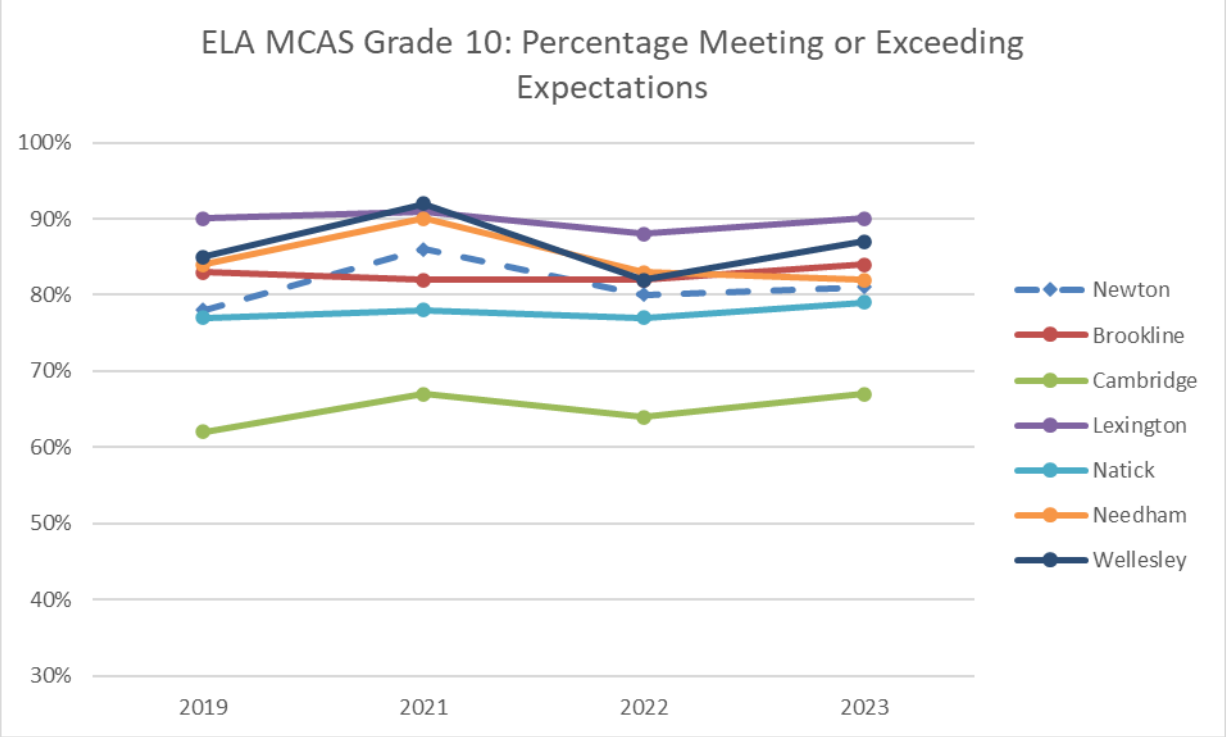

HS Introductory Physics MCAS % Exceeding or Meeting Expectations by subgroups
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
31%
0%
76%
83%
15%
52%
47%
16%
34%
52%
88%
89%
49%
85%
90%
51%
63%
10%
39%
68%
87%
85%
60%
80%
86%
EL
Former EL
Students with disabilities
Non Students with disabilities
Low income
Non-Low income
Newton
Brookline
Cambridge
Natick
Wellesley

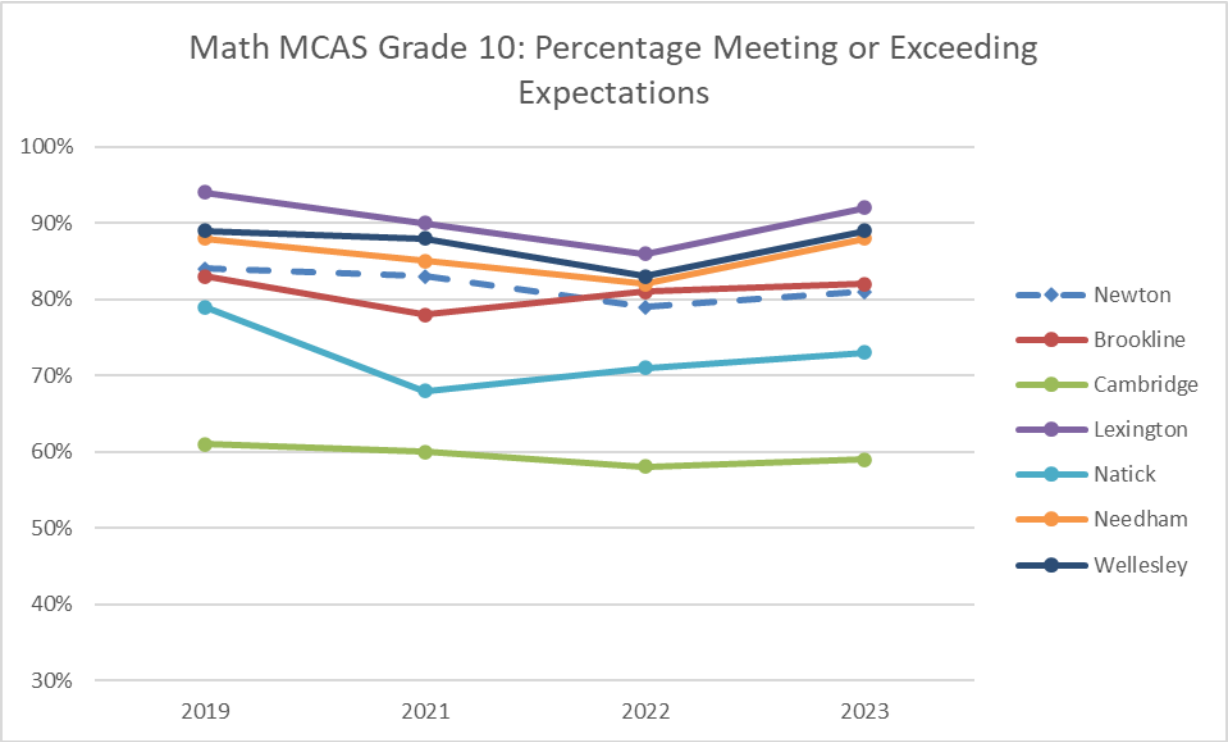
Comparison districts over time






Science MCAS Grades 5 & 8: Percentage Meeting or Exceeding Expectations
100%
90%
80%
70%
60%
50%
40%
30%
2019
2021
2022
2023
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley


ELA MCAS Grade 10: Percentage Meeting or Exceeding Expectations
100%
90%
80%
70%
60%
50%
40%
30%
2019
2021
2022
2023
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley


Math MCAS Grade 10: Percentage Meeting or Exceeding Expectations
100%
90%
80%
70%
60%
50%
40%
30%
2019
2021
2022
2023
Newton
Brookline
Cambridge
Lexington
Natick
Needham
Wellesley