

**School Committee
Meeting Book**

**November 29, 2023
7:00 pm**

**Town Hall -100 Maple Avenue
Selectmen's Meeting Room**



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

AGENDA

**November 29, 2023 7:00pm
Town Hall—Selectmen’s Meeting Room
100 Maple Avenue**

Items

Suggested time allotments

I. Public Participation	
II. Chairperson’s Report & Members’ Reports	
III. Superintendent’s Report	
IV. Time Scheduled Appointments:	
A. Athletics Sponsorship: Vote	7:05 – 7:15
V. Curriculum	
A. State MCAS Testing: Annual Report	7:15 – 7:40
B. SHS Testing: Annual Report	7:40 – 8:05
VI. Policy	
VII. Finance & Operations	
A. Enrollment Projections for 2024-2025 School Year: Report	8:05 – 8:25
VIII. Old Business	
IX. New Business	
A. Superintendent’s Goals: Vote	8:25 – 8:35
X. Approval of Minutes	8:35 – 8:40
XI. Executive Session	8:40 – 9:15
A. For the purpose of addressing G.L. c. 30A, § 21(a)(7) “[t]o comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements” (“Purpose 7”), Open Meeting Law, G.L. c. 30A, §§ 22(f), (g) – for the purpose of reviewing, approving, and/or releasing executive session minutes.	
B. For the purpose of addressing G.L. c. 30A, § 21(a)(3) “to discuss strategy with respect to collective bargaining or litigation if an open meeting may have a detrimental effect of the bargaining or litigating position of the public body and the chair so declares” (“Purpose 3”)	



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

- the Shrewsbury Education Association Units A and/or B, the Shrewsbury Paraprofessional Association, and/or the Cafeteria Workers Association.

XII. Adjournment

Next regular meeting: December 6, 2023



SHREWSBURY PUBLIC SCHOOLS SCHOOL COMMITTEE MEETING

ITEM NO: I Public Participation

MEETING DATE: 11/29/23

SPECIFIC STATEMENT OR QUESTION:

Will the School Committee hear thoughts and ideas from the public regarding the operations and the programs of the school system?

BACKGROUND INFORMATION:

Copies of the policy and procedure for Public Participation are available to the public at each School Committee meeting.

ITEM NO: II. Chairperson's Report/Members' Reports

SPECIFIC STATEMENT OR QUESTION:

Will the School Committee hear a report from the Chairperson of the School Committee and other members of the School Committee who may wish to comment on school affairs?

BACKGROUND INFORMATION:

This agenda item provides an opportunity for the Chairperson and members of the Shrewsbury School Committee to comment on school affairs that are of interest to the community.

STAFF AVAILABLE FOR PRESENTATION:

School Committee Members
Ms. Sandra Fryc, Chairperson
Ms. Erin Boucher, Vice Chairperson
Mr. Jon Wensky, Secretary
Ms. Lynsey Heffernan, Committee Member
Ms. Rachel Sharifipour, Committee Member

ITEM NO: III. Superintendent's Report

SPECIFIC STATEMENT OR QUESTION:

Will the School Committee hear a report from Dr. Joseph M. Sawyer, Superintendent of Schools?

BACKGROUND INFORMATION:

This agenda item allows the Superintendent of the Shrewsbury Public Schools to comment informally on the programs and activities of the school system.

STAFF AVAILABLE FOR PRESENTATION:

Dr. Joseph M. Sawyer, Superintendent of Schools

ACTION RECOMMENDED FOR ITEMS I, II, & III:

That the School Committee accept the report and take such action as it deems in the best interest of the school system.



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **IV. Time Scheduled Appointments:**
A. Athletics Sponsorship: Vote

MEETING DATE: **11/29/23**

BACKGROUND INFORMATION:

In accordance with School Committee Policy 912: Sponsorship & Advertising, sponsorships involving an amount greater than \$5,000 must be approved by the School Committee. Dr. Sawyer, Mr. Girardi, and Mr. Costa will explain that a sponsorship donation of \$25,000 - composed of annual payments of \$5,000 for each of the next five years - to the Shrewsbury High School Artificial Turf Field Project Fund from Cornerstone Bank is being made in exchange for the conveyance of corporate logo placement on the Shrewsbury High School Stadium Scoreboard, and ask for the School Committee to vote to approve it. The memorandum of understanding is enclosed.

ACTION RECOMMENDED:

That the School Committee:

1. Vote to approve the enclosed memorandum of understanding with Cornerstone Bank regarding the proposed conveyance of corporate logo placement on the Shrewsbury High School Stadium Scoreboard.
2. Vote to accept annual donations of \$5,000 each for the next five years, for a total of \$25,000, for this sponsorship, with the funds to be allocated to the Shrewsbury High School Artificial Turf Field Project Fund.

STAFF AVAILABLE FOR PRESENTATION:

Dr. Joseph M. Sawyer, Superintendent of Schools

Mr. Chris Girardi, Assistant Superintendent for Finance & Operations

Mr. Jason Costa, Director of Athletics

Cornerstone Bank Representative(s)

MEMORANDUM OF UNDERSTANDING

SHREWSBURY HIGH SCHOOL STADIUM SCOREBOARD LOGO PLACEMENT

I. PURPOSE

The purpose of this Memorandum of Understanding [MOU] is to set forth the terms and conditions for the conveyance of a corporate logo placement on the Shrewsbury High School Stadium Scoreboard [Stadium Scoreboard], located at 75 Cypress Avenue, Shrewsbury, Massachusetts pursuant to M.G.L. c.44 S. 53A;

by the Shrewsbury Public Schools School Committee [the Committee],

to Cornerstone Bank currently located at 195 Main Street, Shrewsbury, MA.

II. TERMS AND CONDITIONS

In accordance with School Committee Policy 912 and in exchange for Cornerstone Bank's sponsorship donation of \$25,000, and subject to the conditions herein, the Committee agrees to situate the Cornerstone Bank logo for a five-year period commencing March 2024 and ending February 2029.

III. RIGHTS AND AUTHORITY OF SHREWSBURY PUBLIC SCHOOLS

By entering into this MOU, the Committee retains singular authority, control, and rights of use of the Stadium Scoreboard, and all property and activities at Shrewsbury High School as provided by statute, federal, state or local regulation, local Town Charter or by-law or requirement of the MIAA or other regulatory body.

The Committee reserves its right to confer other naming rights to other donors on the athletic complex, the stadium field itself, and other corporate logo rights on the scoreboard.

The Committee also reserves its right to rescind these logo rights in the unlikely event that Cornerstone Bank dissolves or is found to have committed any criminal, discriminatory, or other act deemed by the Committee to warrant such removal. In the event of a corporate sale to a new owner, the scoreboard logo rights will pass to the new owner only if the corporate name is retained as "Cornerstone Bank".

IV. CONVEYANCE OF SPONSORSHIP PAYMENTS

Cornerstone Bank agrees to provide to the Shrewsbury Public Schools an annual payment of \$5,000 for each of the next five years starting on or about December 1st 2023 and continuing for next successive four years on or about December 1st with the last payment due on about December 1, 2028. Said payment may be made in cash or corporate check and will be considered a sponsorship donation to the Shrewsbury High School Artificial Turf Field Project Fund and used strictly for the purpose of maintenance, repairs, replacement on the current stadium location and related activities, and shall be governed by the provisions of M.G.L. c.44 S. 53A. Any interest on said payment shall remain with and become a part of the funds so provided and may be expended as part of the Shrewsbury High School Artificial Turf Field Project.

V. EFFECTIVE DATE AND SIGNATURE

This MOU shall be effective upon the affirmative vote of the School Committee of the Shrewsbury Public Schools as verified by their respective duly authorized representative below and agreement by Joel Laureano.

[Signed]

Ms. Sandra Fryc
[Printed]
Shrewsbury Public Schools, Chairperson

[Signed]

Mr. Joel Laureano
[Printed]
AVP Senior Market Manager, Cornerstone Bank

Date

Date



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: IV. Time Scheduled Appointments:

MEETING DATE: 11/29/23

BACKGROUND INFORMATION:

ACTION RECOMMENDED:

STAFF & STUDENTS AVAILABLE FOR PRESENTATION:



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **V. Curriculum**
A. State MCAS Testing: Annual Report

MEETING DATE: **11/29/23**

BACKGROUND INFORMATION:

Each year, the administration provides a report on the district's performance on state exams. Ms. Clouter will summarize the enclosed report on the results of the 2023 MCAS exams and be available to answer questions.

ACTION RECOMMENDED:

That the School Committee accept the report and take whatever steps it deems necessary in the interests of the Shrewsbury Public Schools.

STAFF AVAILABLE FOR PRESENTATION:

Ms. Amy B. Clouter, Assistant Superintendent for Curriculum, Instruction, & Assessment



MCAS: An Indicator of Student Achievement

An Overview of 2023 State Assessment Results

by Amy Clouter

Assistant Superintendent for Curriculum, Instruction & Assessment

I. Introduction

The Massachusetts Comprehensive Assessment System –the test we know as MCAS – came into being with the passage of the Education Reform Act in 1993¹. This legislation was instrumental in raising academic expectations for students across the state. The effort to highlight the importance of equitable opportunities was particularly important for student groups that had been historically low performing and/or underserved. In the years since, the sustained attention on student growth as well as academic outcomes resulted in a renewed focus on achievement opportunity gaps. The continued use of common metrics across districts continues to guide our actions as we examine academic performance gaps between student groups in Shrewsbury.

In addition, while a single assessment is but one data point, the Department of Elementary and Secondary Education continues to affirm the importance of using MCAS results as a useful snapshot of the district as a whole. In Shrewsbury we use state testing results to determine where additional student support may be warranted. As we contemplate the extent to which our students have recovered from the academic impact of the pandemic, MCAS performance is one indicator to consider. In particular, the analysis of student subgroup scores gives us a full picture of current strengths and future needs.

II. Overview

As we review the latest MCAS results, it’s important to note that, due to adjustments made by the Department of Elementary and Secondary Education (DESE) during the pandemic, 2023 results are best compared with 2022 and 2019, not 2021. This is because the 2020 exam was canceled and the 2021 exam was shortened and administered differently, with some students taking it remotely from home.

It’s also important to recall that due to the COVID-19 pandemic, most districts did not receive an accountability determination in 2022. However, full accountability measures resumed this year.

More information about the components of accountability used by the state can be found in the [District and School](#)

Recent History of Accountability Measures					
Reported Measure	2019	2020	2021	2022	2023
Accountability Percentile	✓	✗	✗	✓	✓
Progress Towards Targets	✓	✗	✗	✗	✓

¹ Building on 20 Years of Massachusetts Education Reform Massachusetts Board of Elementary and Secondary Education Report M. D. Chester, Ed. D. Commissioner November 2014

[Accountability](#) section of the DESE website.

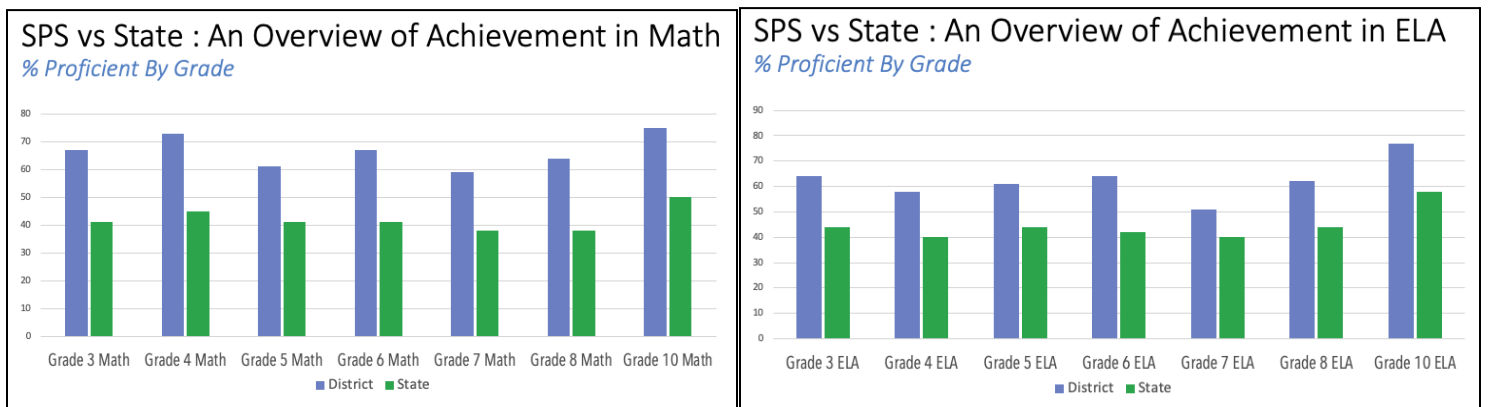
The section that follows will provide an overview of student achievement by grade and subject area. A link to Shrewsbury’s district profile, including detailed information about student performance reports, can be found here: [MCAS Tests of Spring 2023 Percent of Students at Each Achievement Level - Shrewsbury](#)

Test results prompt us to tell a “data story”. The story of the 2023 MCAS results is a book with different chapters. From the start, we can see that it will take time to fully regain the progress the district achieved in previous years. However, we also see from signs of recovery that the ending is a hopeful one. Moreover, it’s evident that academic achievement in some areas is rebounding faster than others. This makes sense, because cohorts of students experienced the impact of the disruption differently. For example, this year’s fourth graders were impacted more than our current third graders. For this reason it’s helpful to look at achievement testing by grade span.

III. Achievement Data Analysis

This part of the report details achievement scores by subject area and grade level.

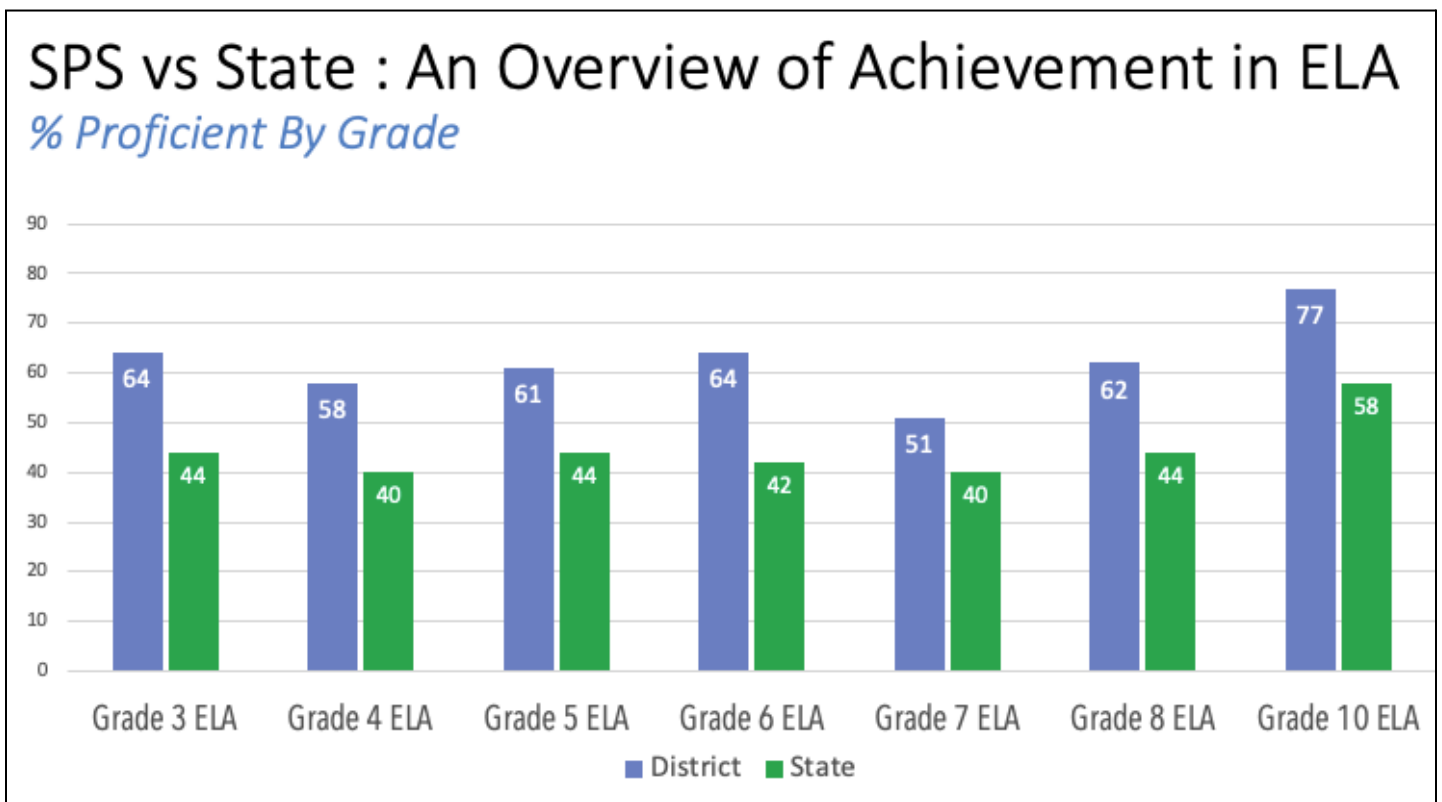
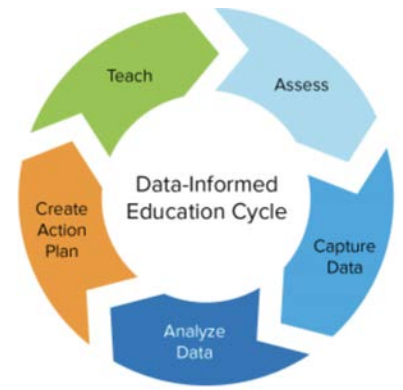
A student is considered “Proficient” having earned a score of “Meeting” or “Exceeding”. The graphs below depict 2023 student proficiency scores by subject area compared to the state average. A quick glance at the charts below makes it plain that student scores were higher in Math than in English Language Arts for most students in Grades 3-8. This is the second year in a row we’ve noted that trend.



2023 MCAS: District vs. State Comparison Data

As you know, the district has shifted practice to focus on the importance of teaching foundational reading skills in Grades K-6. This data affirms Shrewsbury's emphasis on literacy. Our new K-6 English Language Arts curriculum is better aligned with state standards, the criteria used for success on the MCAS exam.

Amongst students in the upper grades, English Language Arts and Math achievement scores were more similar, an indication that achievement outcomes for students at this level are less tied to curriculum experiences.

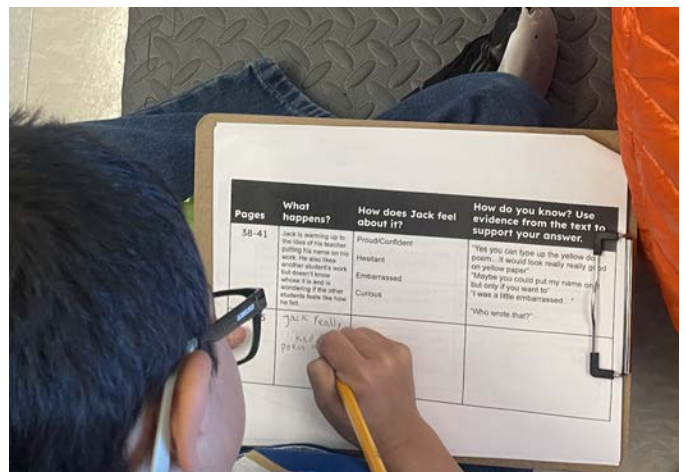
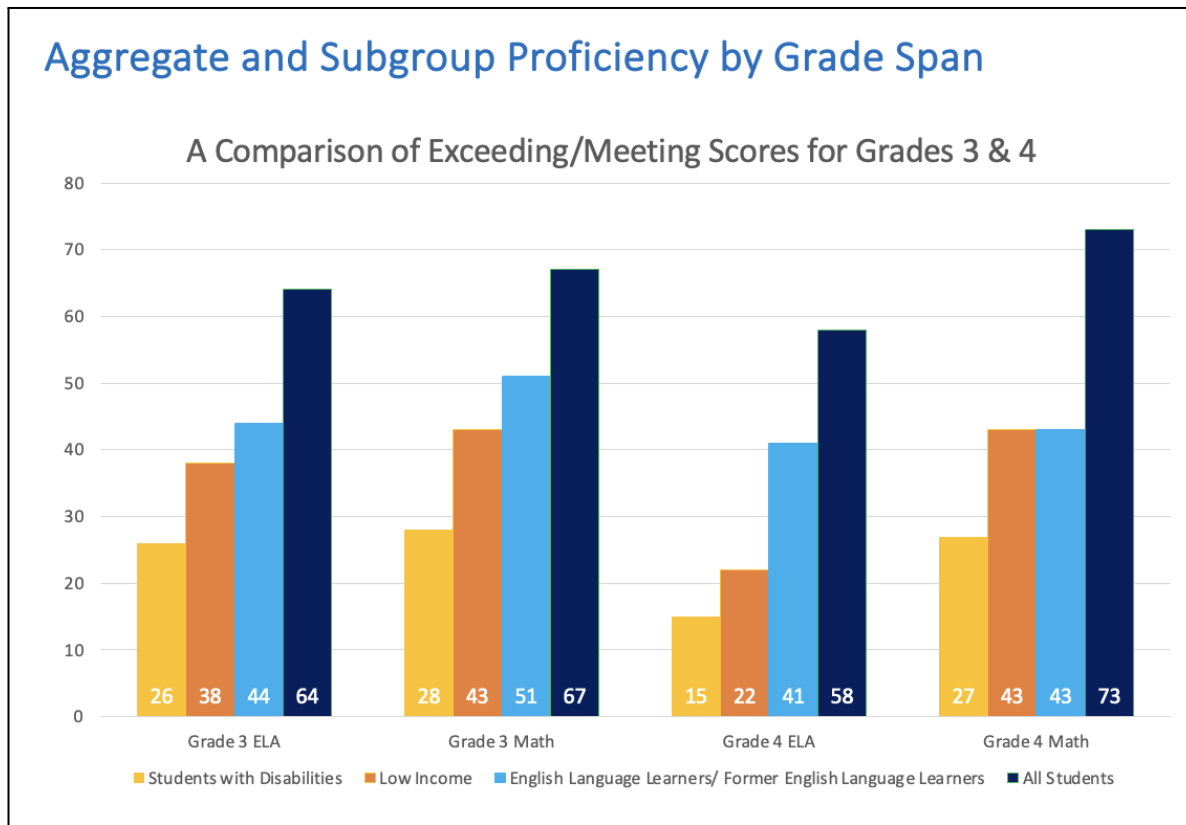


English Language Arts (ELA) achievement scores for all students continue to reflect the impact of lost instructional time on reading and writing, with the most significant differences between pre- and post-pandemic performance seen in our younger students. The number of students in Grades 3-4 scoring in the "Proficient" range in English Language Arts in 2023 is about 20% percent lower than in 2019. For students in Grades 5-8, the gap between current scores and 2019 scores is closer to 10%. Again, ELA scores are likely to increase with the addition of consistent foundational literacy learning and more opportunities for extended writing.

Student Achievement Data: Overall Trends

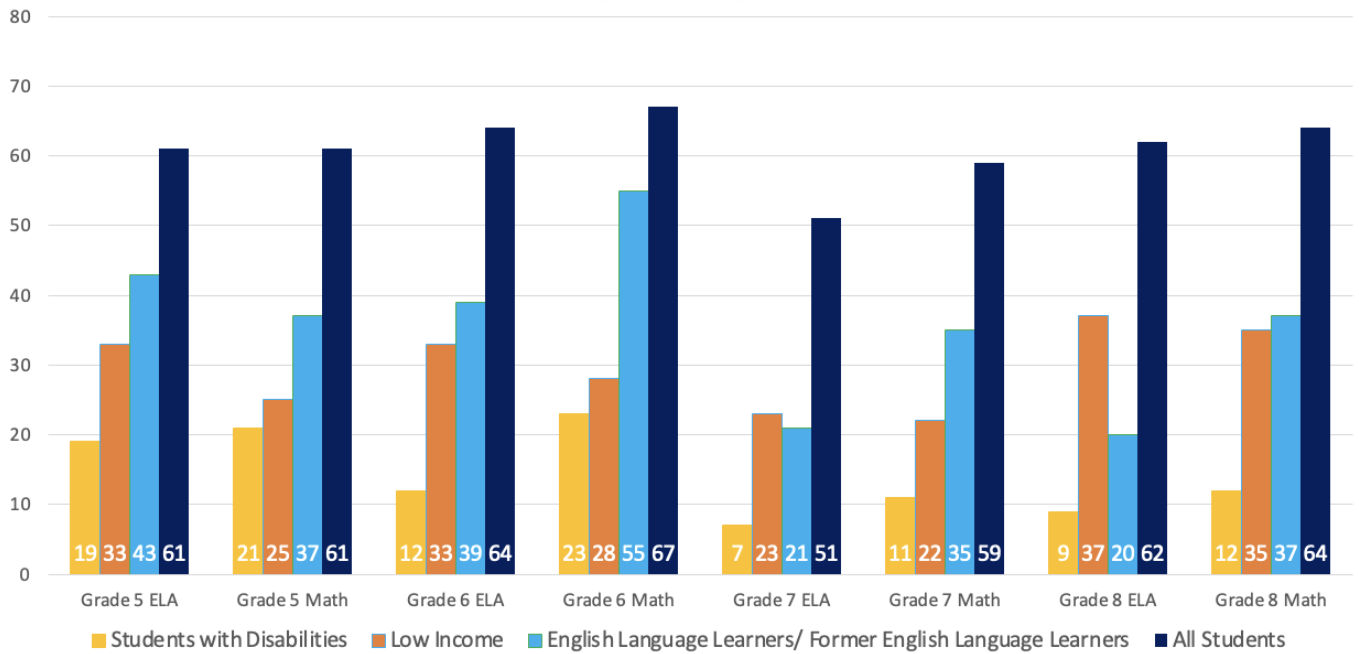
Just as achievement results vary across grade spans, it's evident that there are differences in student scores within grade spans as well. Another important way we can understand assessment data is by monitoring groups of children. These cohorts are called "subgroups." These results make plain that the disruption caused by COVID-19 had a disproportionate impact on students in need. Looking at trends for student subgroups suggests that significant achievement and opportunity gaps remain for students with disabilities, English language learners and economically disadvantaged students in English Language Arts, underscoring the importance of our literacy initiative.

SPS Student Subgroup Analysis for English Language Arts & Math



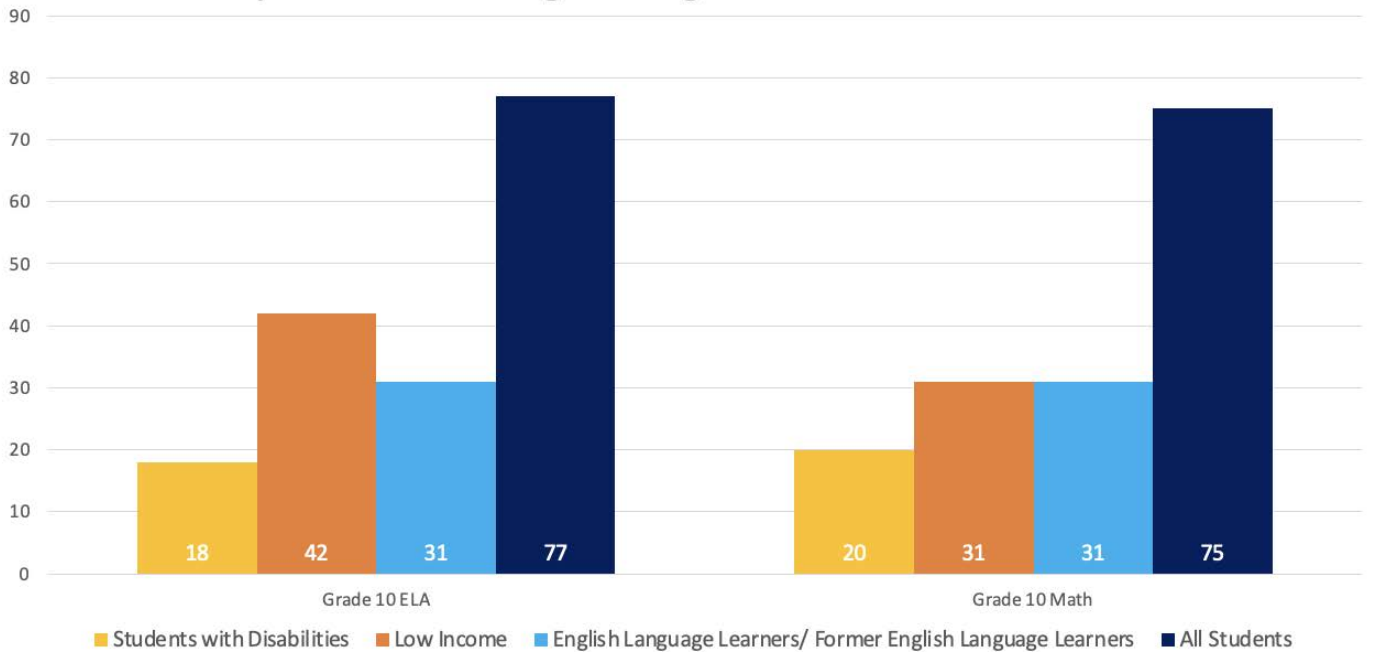
Aggregate and Subgroup Proficiency by Grade Span

A Comparison of Exceeding/Meeting Scores for Grades 5-8



Aggregate and Subgroup Proficiency by Grade Span

A Comparison of Exceeding/Meeting Scores for Grade 10



As we review Shrewsbury’s MCAS scores, it’s important to consider the data in context, and helpful to compare local trends to patterns across the state. For this reason, information about how our results compare with area districts is included for each grade span.

SPS English Language Arts Scores By Grade Level

Grade 3 Student Achievement Scores in English Language Arts

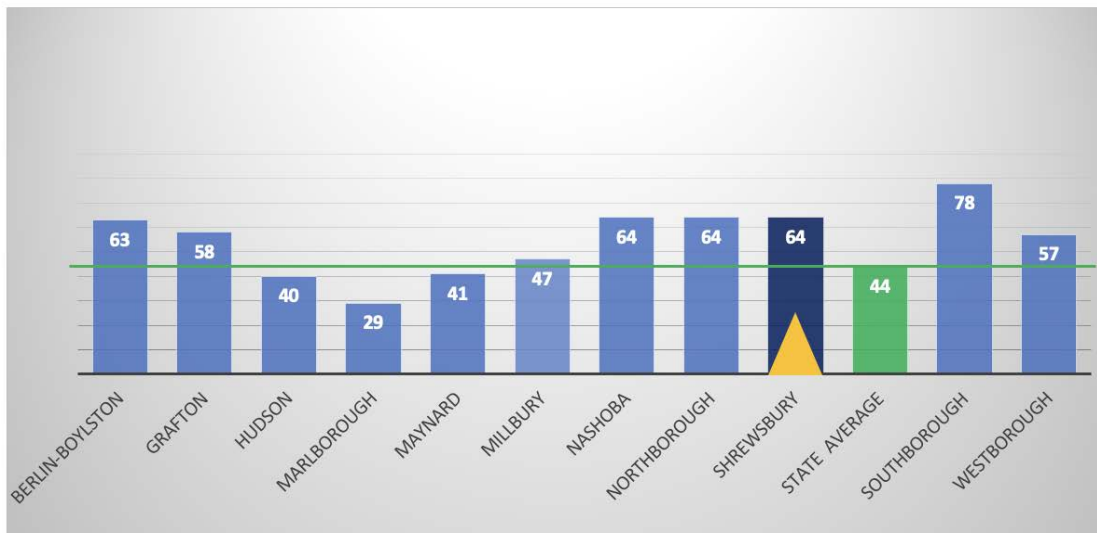
% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	80	74	64	64
Exceeding	28	19	19	15
Meeting	52	55	45	49
Partially Meeting	16	22	31	28
Not Meeting	3	4	5	8



As shown in the table above, English Language Arts scores for third graders dropped by 16% post-pandemic, with fewer students scoring in the “Exceeding” range. In 2023, only 64% of Grade 3 students met the state benchmark for proficiency in English Language Arts. With the addition of new curriculum materials for teaching decoding, educators in Shrewsbury are confident that we can help students accelerate their progress this year.

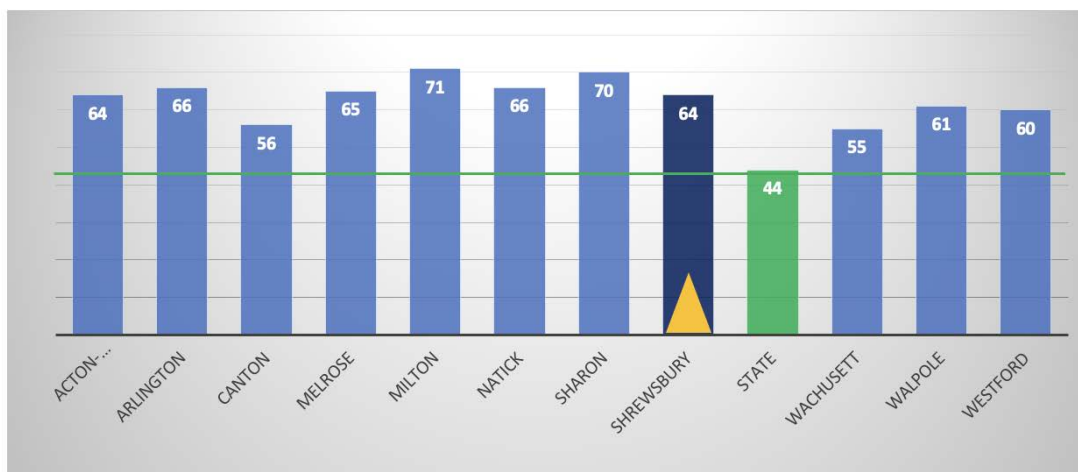


Percentage of Students Meeting or Exceeding Expectations
Next-Gen MCAS ELA / Grade 3
 Assabet Valley Collaborative District Comparisons



Comparisons with other districts in our area provide perspective on how our data compares within the region. The chart below depicts results for Grade 3 as compared with area districts. The Department of Secondary and Elementary education (DESE) also provides a wealth of comparative statistics. One helpful resource is District Analysis and Review Tools (DART), a district analysis and review tool that identifies districts most similar in terms of grade spans, total enrollment and special populations. The chart below shows how Shrewsbury's scores for Grade 3 compare to DART districts.

Percentage of students Meeting or Exceeding Expectations
Next-Gen MCAS ELA / Grade 3
 DART District Comparisons



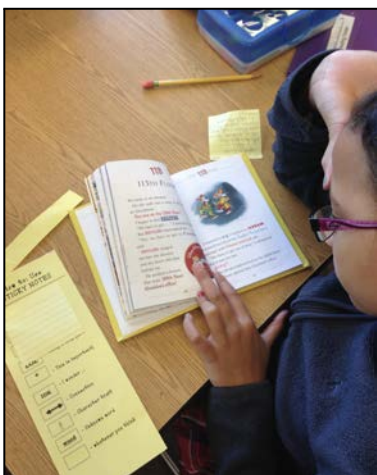
SPS ELA Grade 3 Subgroup Achievement Scores

A closer look at scores for third graders in various subgroups illustrates differences in rates of achievement. The Department of Elementary and Secondary Education calculates achievement level percentages for subgroups with ten or more students. Shrewsbury's subgroups include English Learners (ELs) and Former English Learners (FELs), for example. Only subgroups that have available information are included.

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 3 Students	64	15	49	28	8
Students w/ Disabilities	26	3	23	41	33
EL and Former EL	44	4	40	37	19
Low Income	38	5	33	46	16
High Needs*	42	6	36	41	18

Note: Per DESE, a student is considered "High Needs" if s/he is designated as either low income (prior to 2015 and from 2022 to the present) economically disadvantaged (from 2015 to 2021) English Learner (EL) or Former English Learner (FEL) or a student with disabilities.

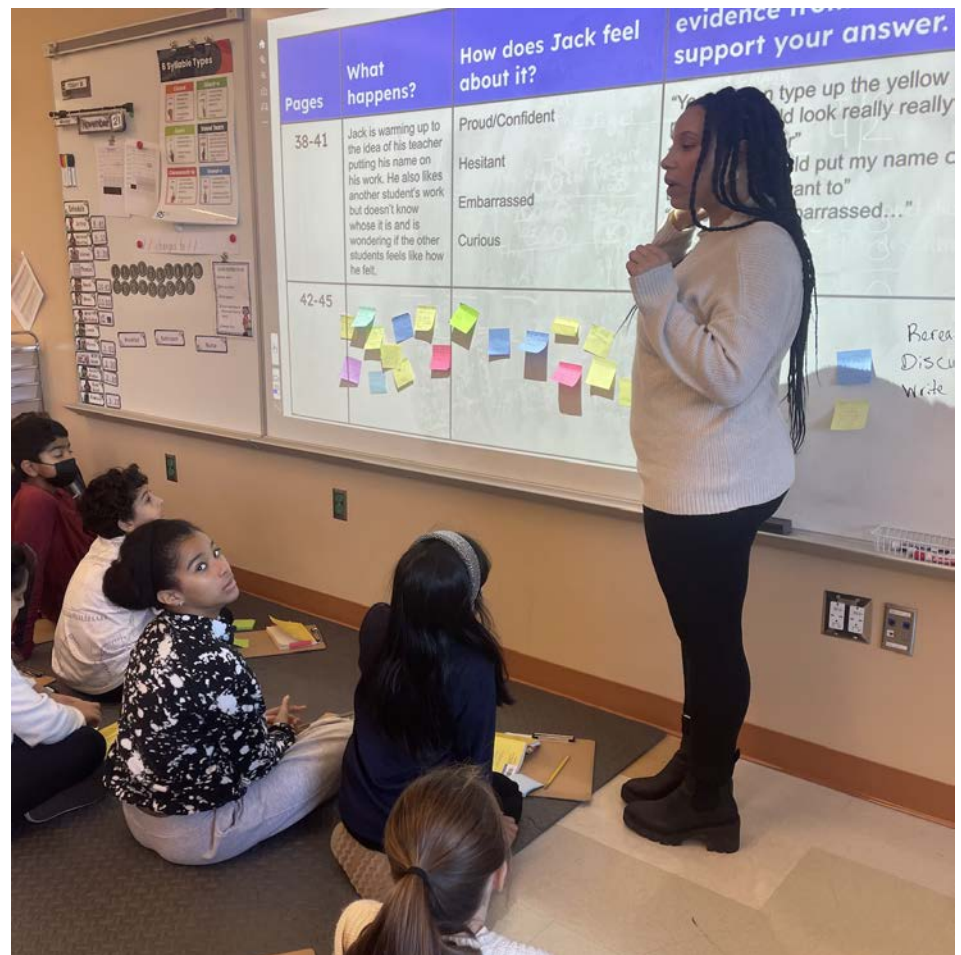
Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American / Black	57	0	57	36	7
Asian	72	18	54	21	7
Hispanic / Latinx	36	3	33	48	18
Multi-Race, Non-Hispanic / Latinx	58	5	53	32	11
White	65	18	47	29	5



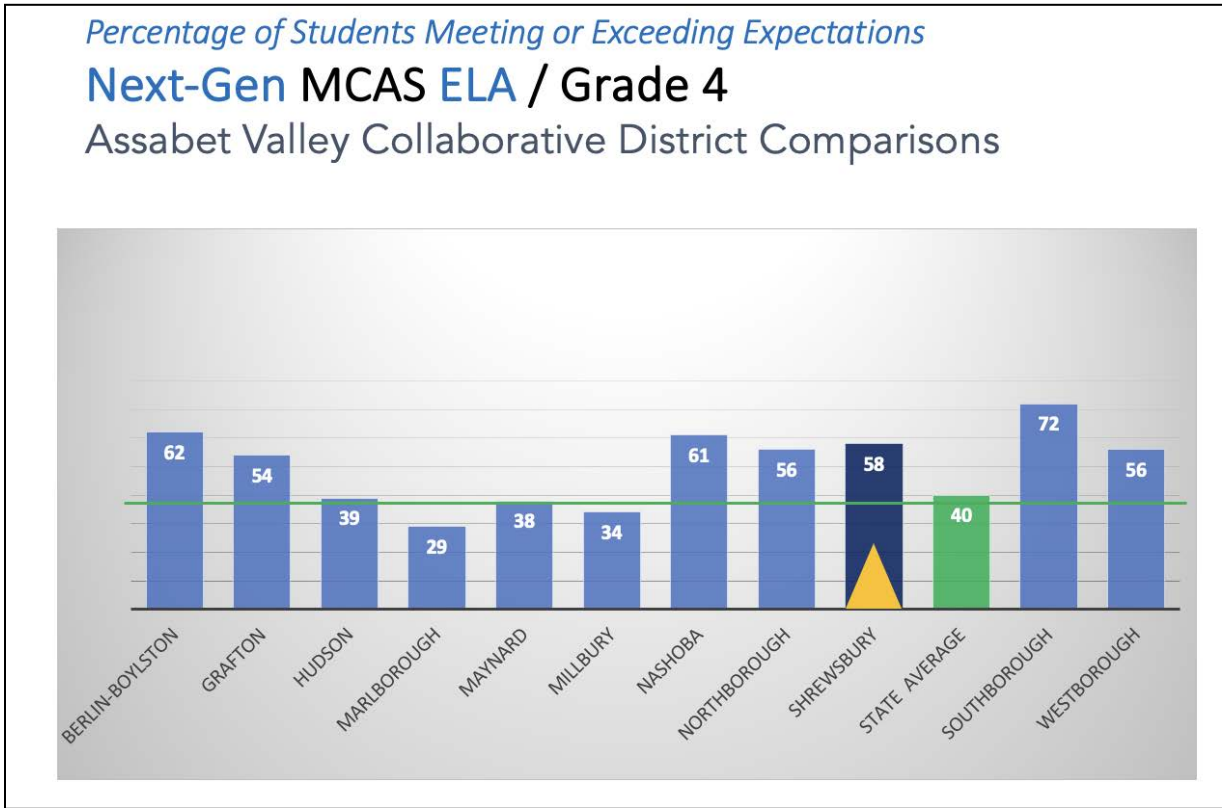
Grade 4 Student Achievement Scores in English Language Arts

Student scores for students in Grade 4 dropped slightly in 2023, with 58% of students scoring in the proficient range or better.

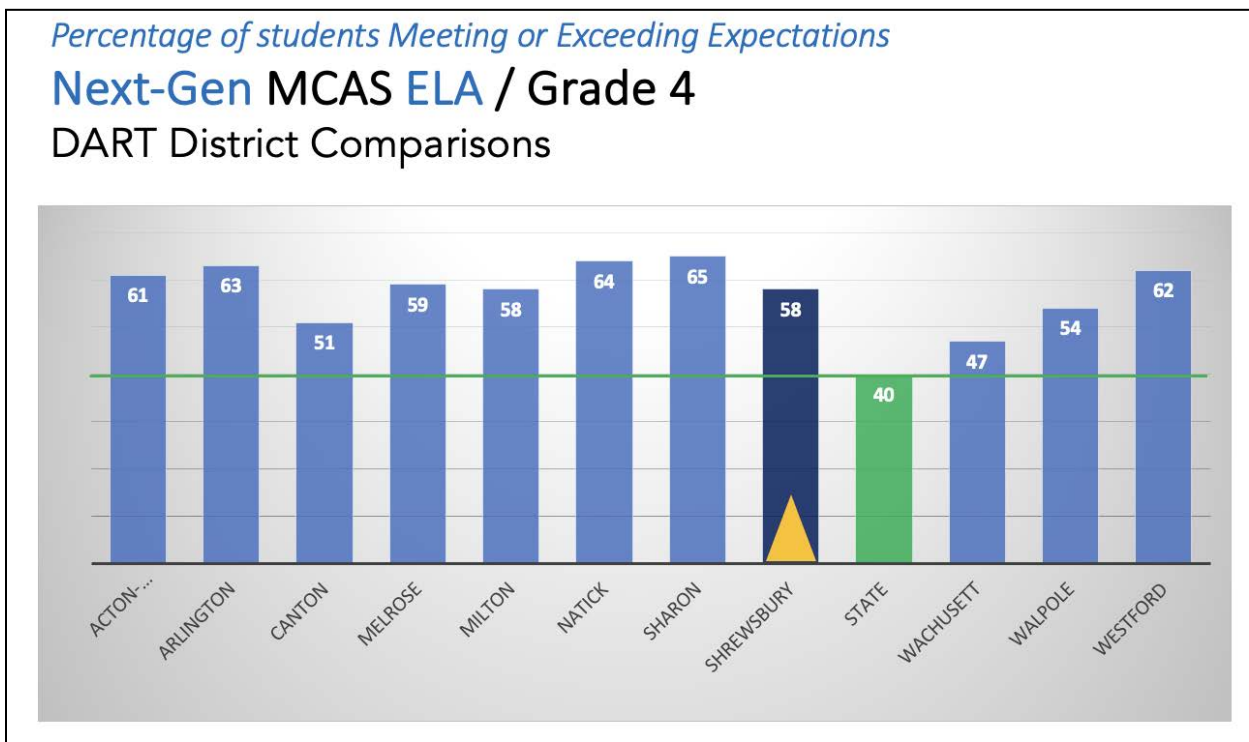
% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	75	72	60	58
Exceeding	21	11	11	11
Meeting	54	61	49	47
Partially Meeting	20	25	34	35
Not Meeting	4	4	6	7



This graph shows how our Grade 4 students compare with fourth-grade readers in nearby districts.



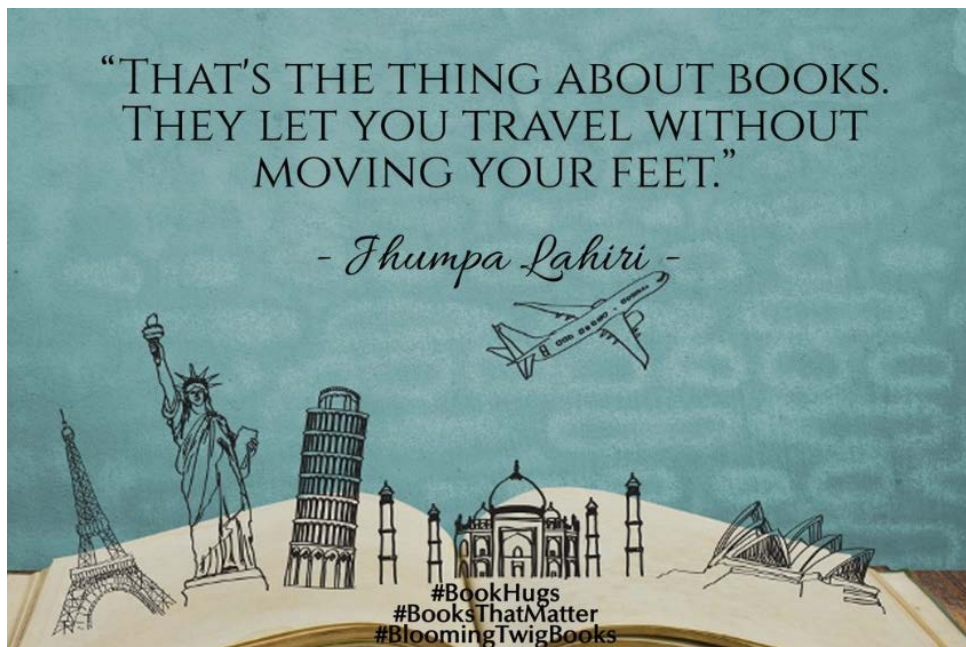
Grade 4 student scores in English Language Arts are similar to those in DART districts as well.



SPS ELA Grade 4 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 4 Students	58	11	47	35	7
Students w/ Disabilities	15	3	12	52	34
EL and Former EL	41	6	35	59	0
Low Income	22	2	20	58	19
High Needs	24	3	21	57	19

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American / Black	22	0	22	67	11
Asian	74	19	55	21	4
Hispanic / Latinx	46	3	43	48	8
Multi-Race, Non-Hispanic / Latinx	52	14	38	34	14
White	51	6	45	41	9



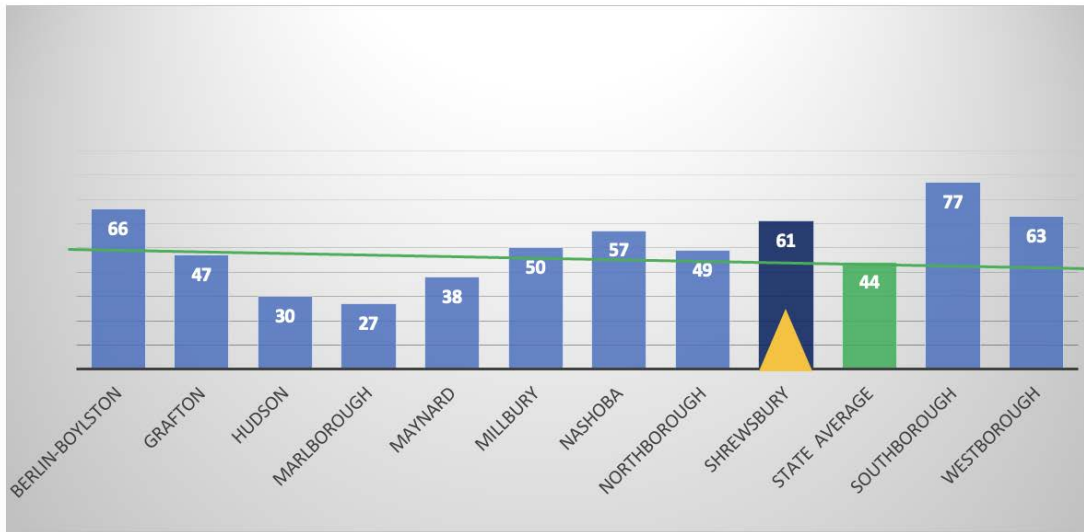
Grade 5 Student Achievement Scores in English Language Arts

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	70	62	59	61
Exceeding	13	13	7	2
Meeting	57	49	52	59
Partially Meeting	27	34	35	32
Not Meeting	3	5	5	7

In Grade 5, 61% of students reached proficiency benchmarks in 2023, a slight gain over 2022. Since 2021, the percentage of Shrewsbury students meeting or exceeding state benchmarks has remained about 10% below pre-pandemic scores. The decrease in the number of students scoring in the “Exceeding” range over time is concerning. At the same time, the chart below demonstrates that only three districts in the area had a higher number of proficient scores in this grade band.



Percentage of Students Meeting or Exceeding Expectations
Next-Gen MCAS ELA / Grade 5
 Assabet Valley Collaborative District Comparisons



While Shrewsbury students continued to outperform the state average, the percentage of students in Shrewsbury that met or exceeded achievement goals in English Language Arts in fifth grade remains lower than pre-pandemic scores.

Percentage of students Meeting or Exceeding Expectations
Next-Gen MCAS ELA / Grade 5
 DART District Comparisons



SPS ELA Grade 5 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 5 Students	61	2	59	32	7
Students w/ Disabilities	19	2	17	44	38
EL and Former EL	43	0	43	43	14
Low Income	33	0	33	48	19
High Needs	35	1	34	46	19

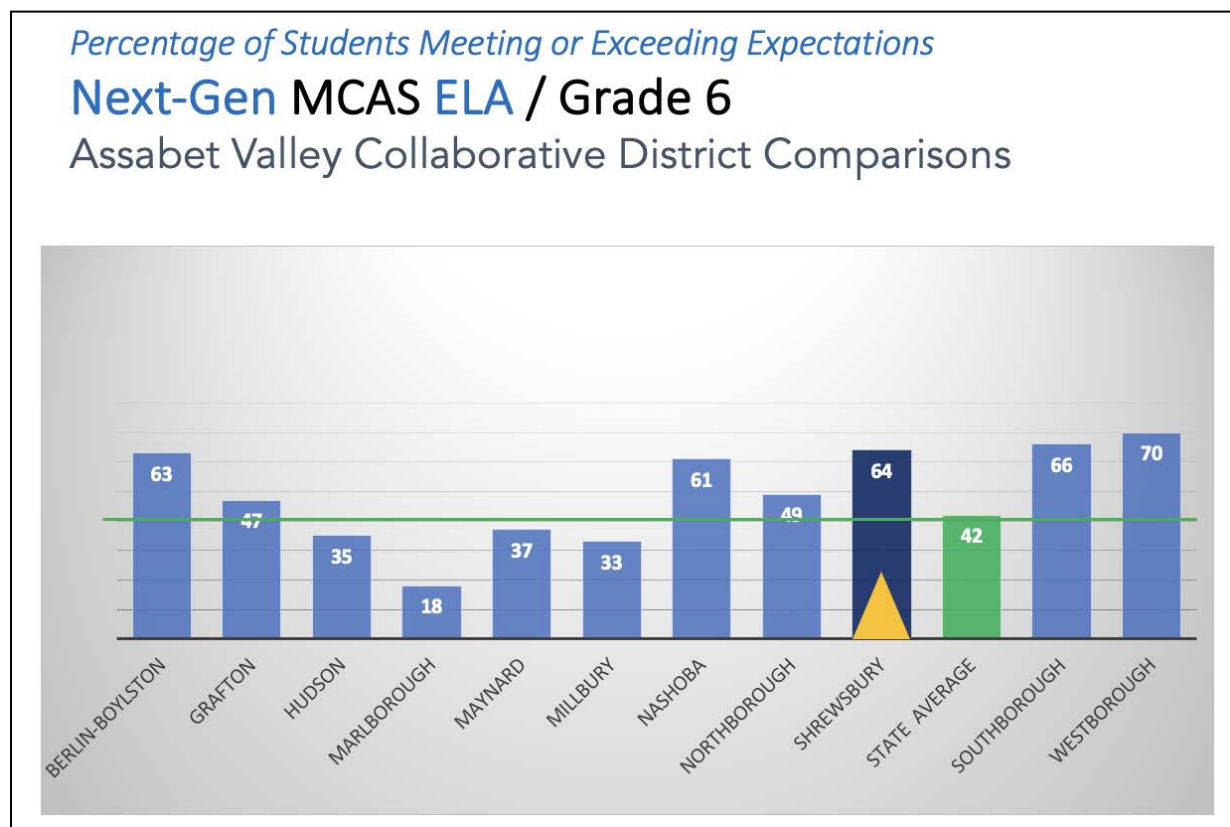
Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American / Black	50	0	50	33	17
Asian	72	3	69	25	3
Hispanic / Latinx	43	0	43	35	22
Multi-Race, Non-Hispanic / Latinx	74	4	74	15	7
White	55	1	54	38	7

Grade 6 Student Achievement Scores in English Language Arts

64% of students in Grade 6 met or exceeded state benchmarks in English Language Arts in 2023, up 3% from last year's scores.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	73	67	61	64
Exceeding	27	22	17	14
Meeting	46	45	44	50
Partially Meeting	20	22	32	26
Not Meeting	7	11	8	10

As shown below, students at the middle level scored well above the state average.

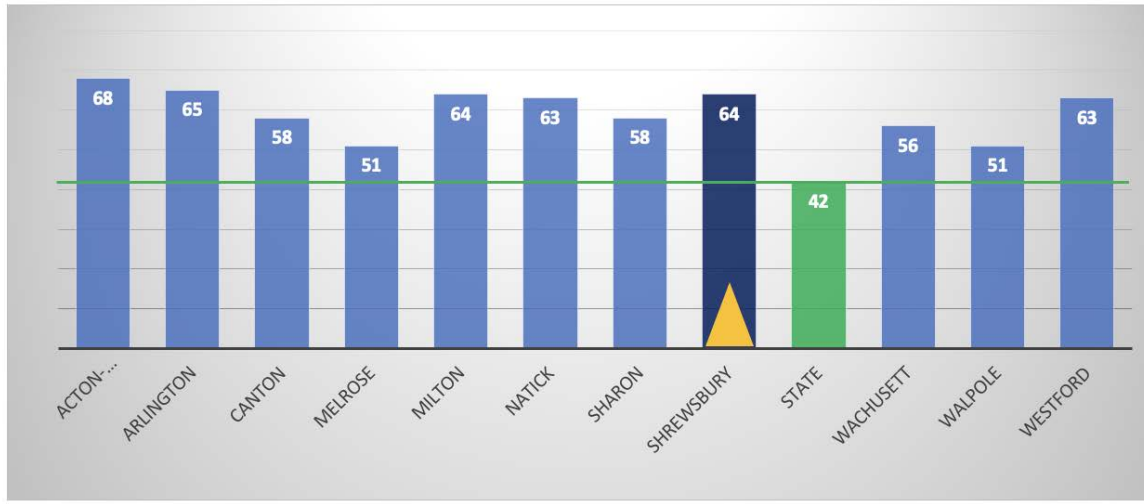


Shrewsbury's sixth graders achieved at similar rates to those of their peers in DART districts.

Percentage of students Meeting or Exceeding Expectations

Next-Gen MCAS ELA / Grade 6

DART District Comparisons



SPS Grade 6 ELA Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 6 Students	64	14	50	26	10
Students w/ Disabilities	12	0	12	46	43
EL and Former EL	39	2	37	46	15
Low Income	32	3	30	39	28
High Needs	30	2	28	43	27

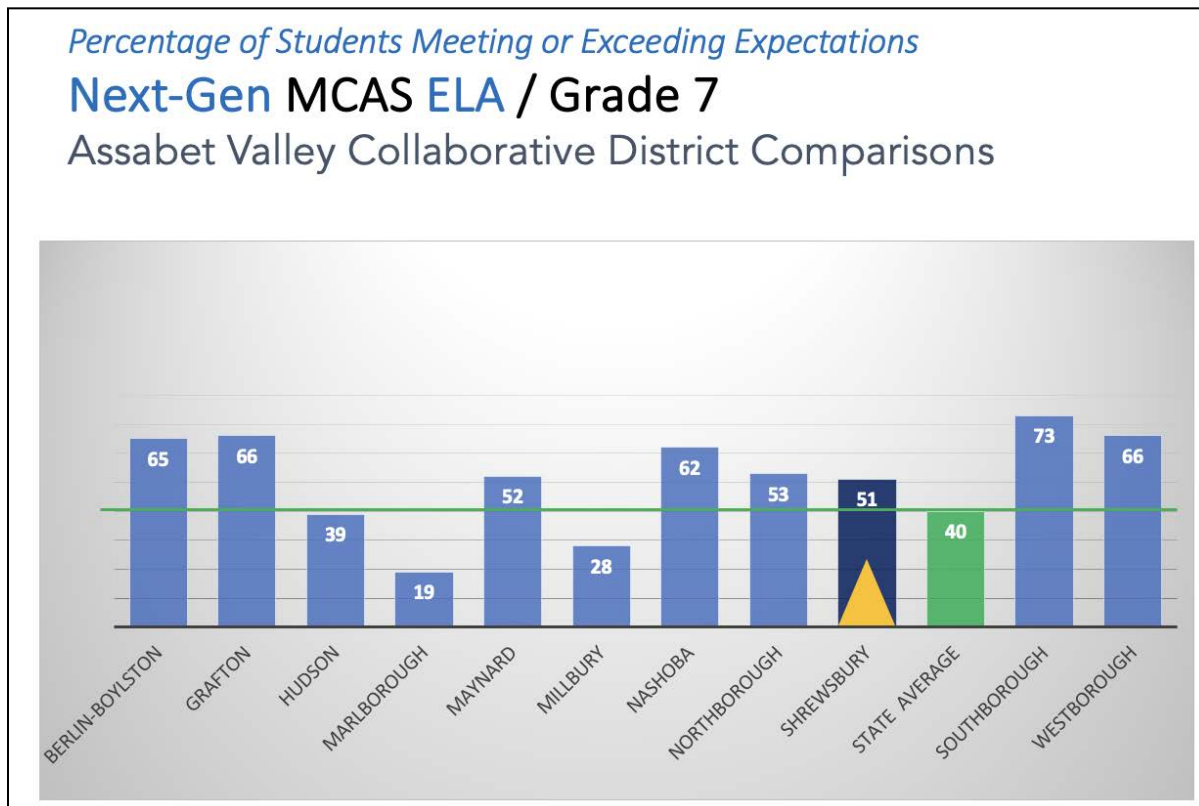
Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	39	8	31	46	15
Asian	79	23	56	18	3
Hispanic/Latinx	45	8	37	35	20
Multi-Race, Non-Hispanic/Latinx	60	4	56	30	11
White	58	9	49	29	13

Grade 7 Student Achievement Scores in English Language Arts

Only 51% of students in Grade 7 met the state benchmark in English Language Arts in 2023. Scores in ELA continue to decline for this grade, signaling the need for ongoing analysis and action. Fortunately, the new schedule put into place this year at Oak allows for consistent student support. Classroom-based practice can be matched to specific student needs and adjusted over time.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	62	59	59	51*
Exceeding	14	8	6	12
Meeting	48	51	52	40
Partially Meeting	31	32	32	39
Not Meeting	7	9	9	10

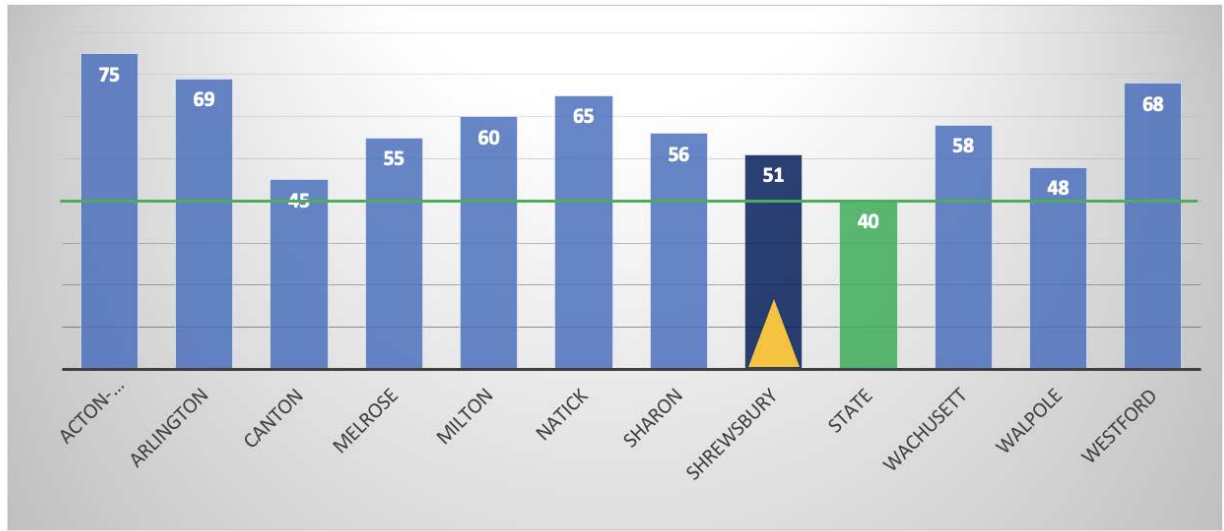
* Please Note: Achievement score percentiles are rounded up, so for some grade spans there is a difference in the number of students reported for each scoring category and the total number of students earning "Exceeding / Meeting". For example, if 7.4% of students earned a score in the "Exceeding" range and 52.4% of students earned a "Meeting" score, those numbers would be rounded to 7 and 52 respectively. However the total number of students scoring "Meeting" or better will total 60 to reflect the additional .8% adjustment by the Department of Elementary and Secondary Education. This is the case for Grade 7 and Grade 10.



Percentage of students Meeting or Exceeding Expectations

Next-Gen MCAS ELA / Grade 7

DART District Comparisons



SPS ELA Grade 7 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 7 Students	51*	12	40	39	10
Students w/ Disabilities	7	1	6	42	51
EL and Former EL	21	3	18	53	26
Low Income	23	5	18	54	23
High Needs	21	5	16	48	31

* Please Note: As mentioned previously, achievement score percentiles differ due to rounding.

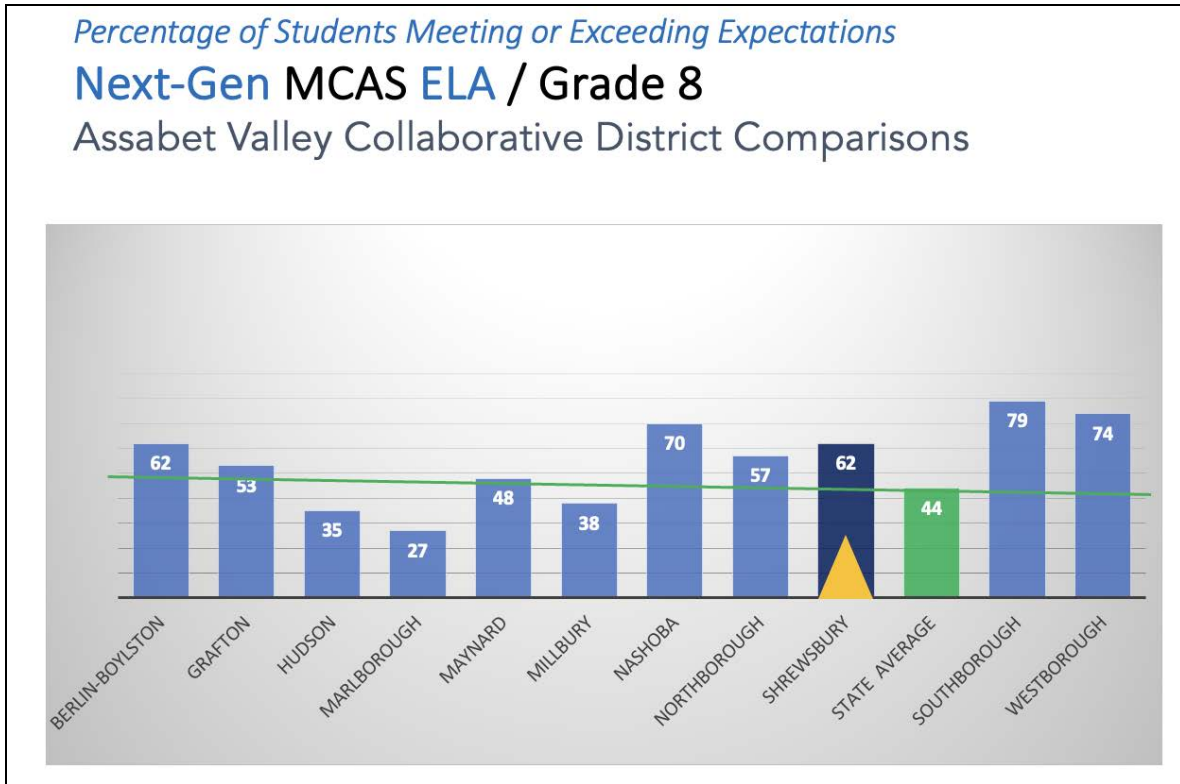
Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	24	10	14	67	10
Asian	69	22	47	25	6
Hispanic/Latinx	33	4	29	44	22
Multi-Race, Non-Hispanic/Latinx	55	20	35	35	10
White	44	5	39	45	11

Grade 8 Student Achievement Scores in English Language Arts

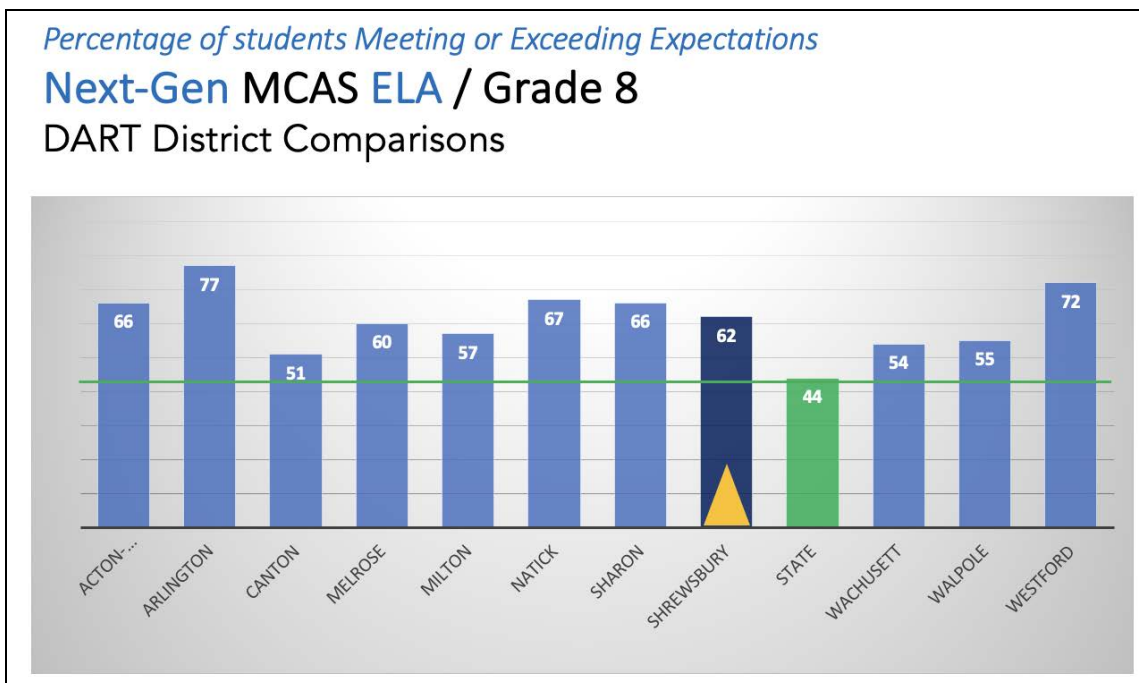
62% of Shrewsbury students in Grade 8 scored in the “Meeting” or “Exceeding” range last spring. As shown below, this result represents a drop in achievement scores from 2022.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	72	62	66	62
Exceeding	26	16	19	16
Meeting	46	46	47	46
Partially Meeting	20	30	27	26
Not Meeting	7	8	7	12

Shrewsbury's scores for this grade span continue to align with results seen in several area districts.



The graph below shows how Shrewsbury's eighth graders compare with students from districts with similar demographics.



SPS ELA Grade 8 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 8 Students	62	16	46	26	12
Students w/ Disabilities	9	4	5	37	54
EL and Former EL	20	0	20	33	47
Low Income	37	5	32	33	30
High Needs	27	5	22	36	36

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	40	0	40	40	20
Asian	76	26	50	16	8
Hispanic/Latinx	34	6	28	34	32
Multi-Race, Non-Hispanic/Latinx	77	19	58	15	8
White	58	13	45	31	10



Grade 10 Student Achievement Scores in English Language Arts

Once again, 77% of students earned a score of “Meeting” or “Exceeding” in Grade 10. While the number of students considered proficient in 2023 is similar to 2019, the significant increase in the number of students scoring in the “Exceeding” range over last year is a positive sign.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	79	83	77	77*
Exceeding	25	35	14	30
Meeting	54	48	64	46
Partially Meeting	18	12	19	19
Not Meeting	3	4	3	4

* Please Note: As mentioned previously, achievement score percentiles differ due to rounding.

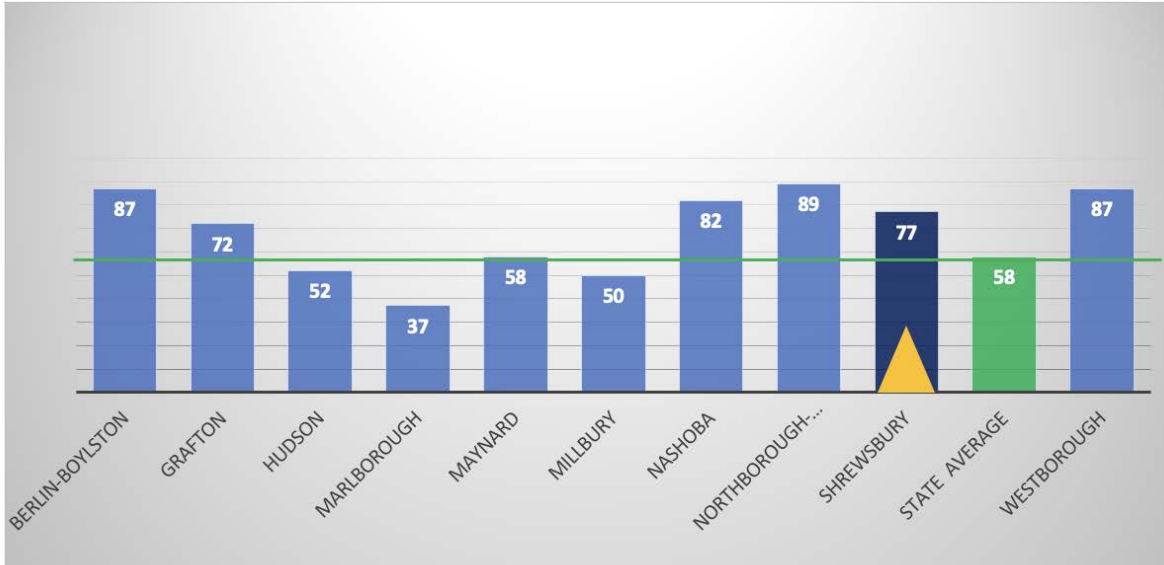


Looking at assessment information from area districts provides additional perspective on our results.

Percentage of Students Meeting or Exceeding Expectations

Next-Gen MCAS ELA / Grade 10

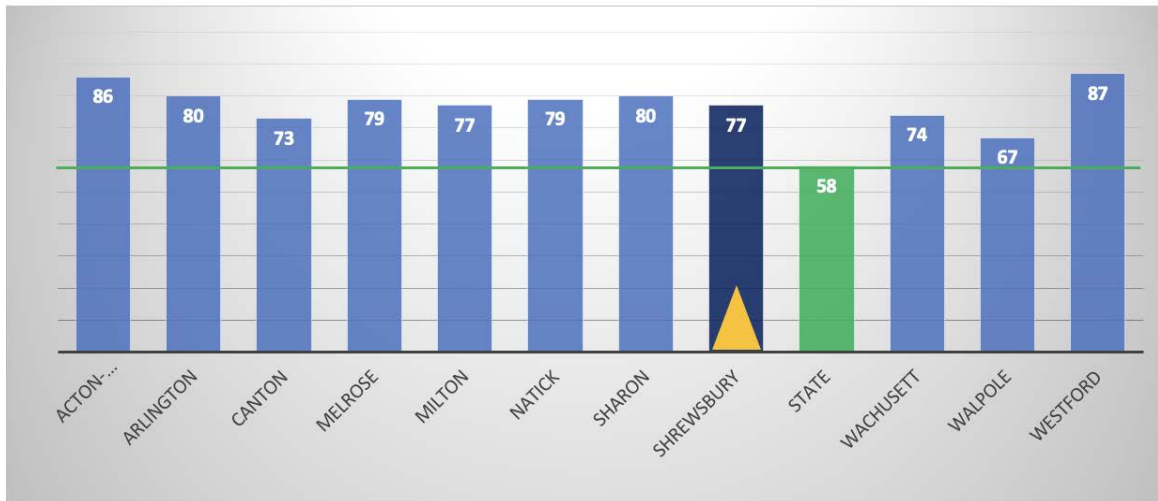
Assabet Valley Collaborative District Comparisons



Percentage of students Meeting or Exceeding Expectations

Next-Gen MCAS ELA / Grade 10

DART District Comparisons



SPS ELA Grade 10 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 10 Students	77*	30	46	19	4
Students w/ Disabilities	18	0	18	59	22
EL and Former EL	31	0	31	42	27
Low Income	42	8	34	45	13
High Needs	41	6	35	45	14

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American./Black	65	5	60	25	10
Asian	90	51	39	9	1
Hispanic/Latinx	51	15	36	35	15
Multi-Race, Non-Hisp./Latinx	63	21	42	26	11
White	78	24	54	21	2

* Please Note: As mentioned previously, achievement score percentiles differ due to rounding.

Trends Over Time in English Language Arts

As shown below, it's clear that the disruption caused by the pandemic continues to impact achievement scores in English Language Arts, especially for students in key transition years. At the same time, we see that Shrewsbury's results reflect small gains in Grades 5, 6 and 10, suggesting that many students in the district are beginning to recover lost ground.

Shrewsbury's scores have been consistently higher than state averages, and that trend held true for 2023. Finally, it's important to remember that aggregate scores for most grade spans in Shrewsbury were comparable with other districts that have similar demographics.

Percentage of Students Meeting or Exceeding Expectations

Grade and Subject	Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7	Gr. 8	Gr. 10
Shrewsbury % E / M 2019	81%	76%	71%	73%	62%	72%	79%
State Results 2019	56%	52%	52%	53%	48%	52%	61%
Shrewsbury % E / M 2021	74%	72%	61%	67%	59%	62%	84%
State Results 2021	51%	49%	47%	47%	43%	41%	64%
Shrewsbury % E / M 2022	64%	60%	59%	61%	58%	66%	78%
State Results 2022	44%	38%	41%	41%	41%	42%	58%
Shrewsbury % E / M 2023	64%	58%	61%	64%	51%	62%	77%
State Results 2023	44%	39%	44%	42%	41%	44%	58%

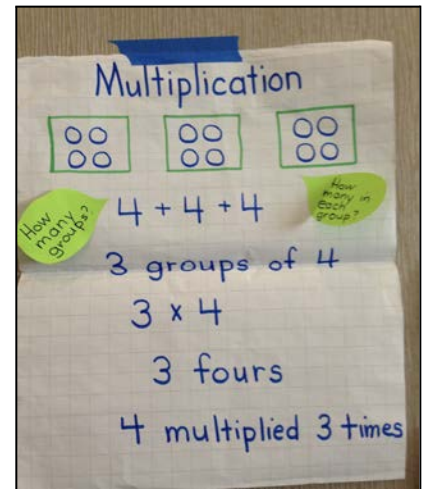


Mathematics Scores By Grade Level

Grade 3 Student Achievement Scores in Mathematics

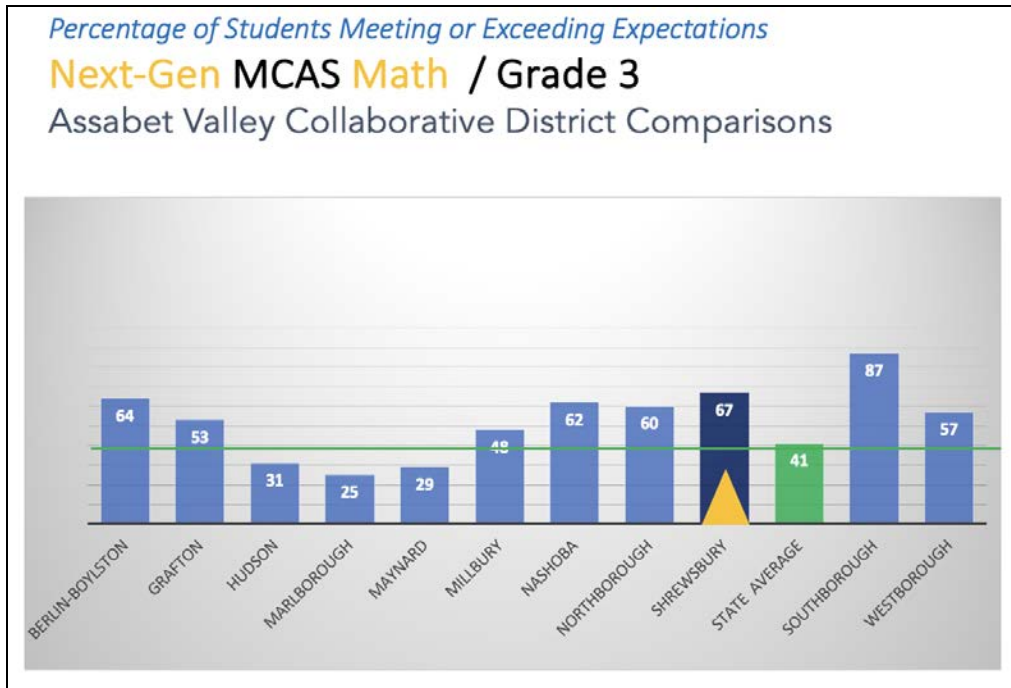
Prior to the pandemic, Shrewsbury's students were making steady gains in Math – especially in the younger grades. In 2023, 67% of third grade students met or exceeded state benchmarks- a very similar result to last year. However, more students scored in the Exceeding range in 2023 than in 2022.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	75	62	68	67
Exceeding	22	14	16	20
Meeting	53	48	52	47
Partially Meeting	19	31	24	24
Not Meeting	5	7	8	9

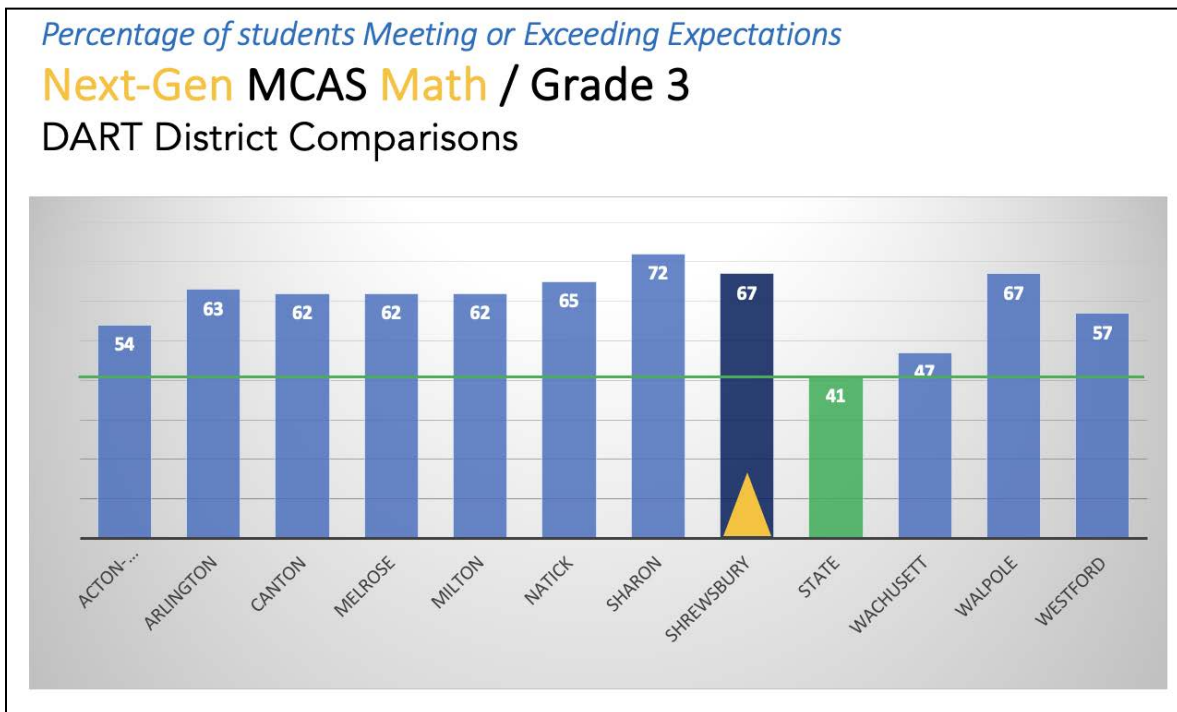


Across the Commonwealth, Math achievement scores are recovering faster than English Language Arts. This is true for Shrewsbury's students as well. The graphs that follow illustrate how Shrewsbury's student scores in Grade 3 compare to student achievement scores in nearby districts.





Last spring, Grade 3 student scores were among the highest among area districts. Shrewsbury's scores for Grade 3 also compare well among districts with similar demographics.



SPS Math Grade 3 Subgroup Achievement Scores

Looking at subgroup trends provides another perspective on Math achievement scores.

	% Proficient by Category				
Accountability Subgroups	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 3 Students	67	20	47	24	9
Students w/ Disabilities	28	5	23	37	35
EL and Former EL	51	10	41	30	19
Low Income	43	5	38	38	18
High Needs	45	8	37	35	19

	% Proficient by Category				
Race & Ethnicity Subgroups	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	36	0	36	50	14
Asian	78	28	50	15	7
Hispanic/Latinx	46	3	43	38	18
Multi-Race, Non-Hispanic/Latinx	58	11	47	26	16
White	65	18	47	27	7



Grade 4 Student Achievement Scores in Mathematics

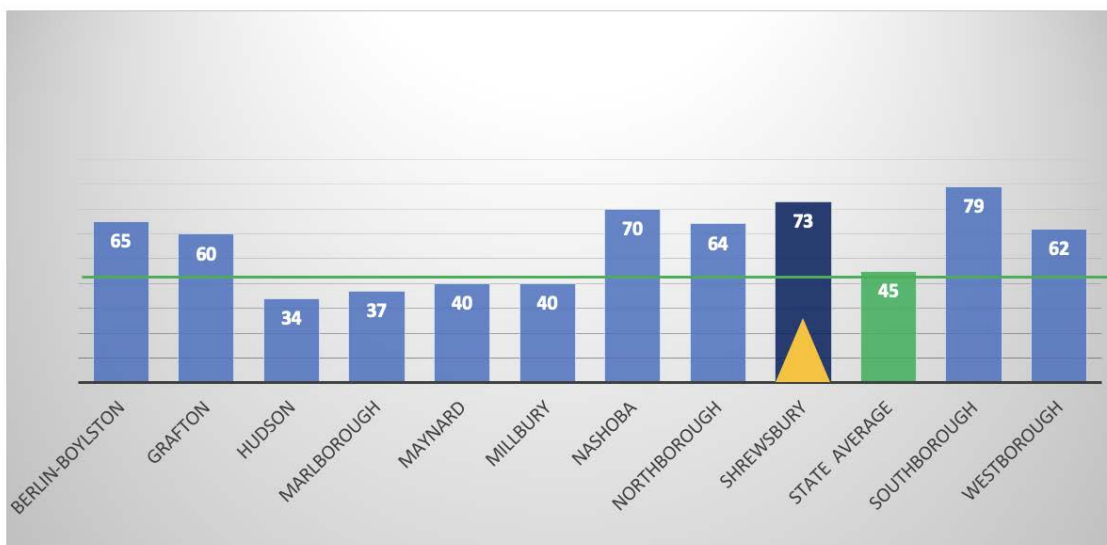
74% of Grade 4 students scored in the “Meeting” or “Exceeding” category in 2023, reflecting incremental gains over last year.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	79	64	70	73
Exceeding	28	14	21	22
Meeting	51	50	49	51
Partially Meeting	16	29	25	22
Not Meeting	5	7	4	5

Shrewsbury’s Grade 4 Math scores are among the highest in the Assabet Valley Collaborative. District scores for Grade 4 compare well with results from DART districts, too.



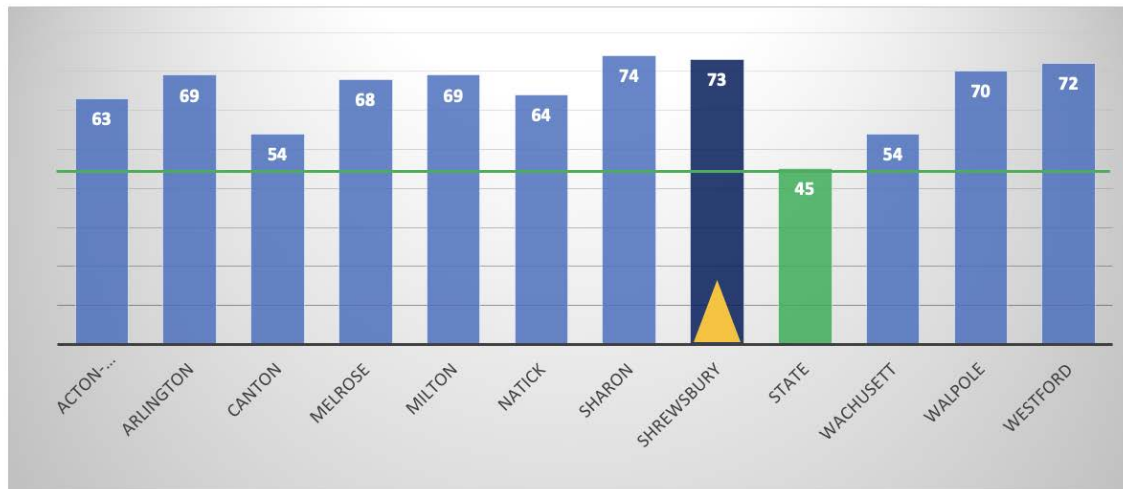
Percentage of Students Meeting or Exceeding Expectations
Next-Gen MCAS Math / Grade 4
 Assabet Valley Collaborative District Comparisons



Percentage of students Meeting or Exceeding Expectations

Next-Gen MCAS Math / Grade 4

DART District Comparisons



SPS Math Grade 4 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 4 Students	73	22	51	22	5
Students w/ Disabilities	27	4	23	47	26
EL and Former EL	65	18	47	35	0
Low Income	43	2	41	41	16
High Needs	47	7	40	39	14

Race & Ethnic Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	50	0	50	39	11
Asian	86	35	51	12	2
Hispanic/Latinx	63	12	51	32	5

Multi-Race, Non-Hispanic/Latinx	73	14	59	21	7
White	66	15	51	28	6



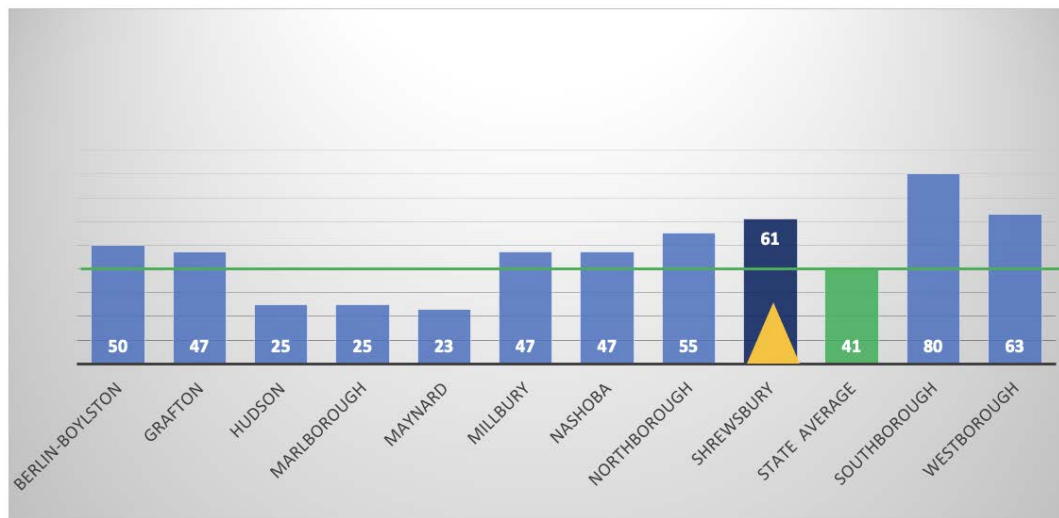
Grade 5 Student Achievement Scores in Mathematics

In 2023 61% of students in Grade 5 met grade-level benchmarks in math, up 11 percentage points over last year. However, in 2019, 72% of Grade 5 students met or exceeded the state grade-level benchmark, suggesting that student achievement at this level shows signs of recovery.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	72	54	50	61*
Exceeding	14	10	8	11
Meeting	58	44	42	51
Partially Meeting	25	38	43	32
Not Meeting	2	7	8	6

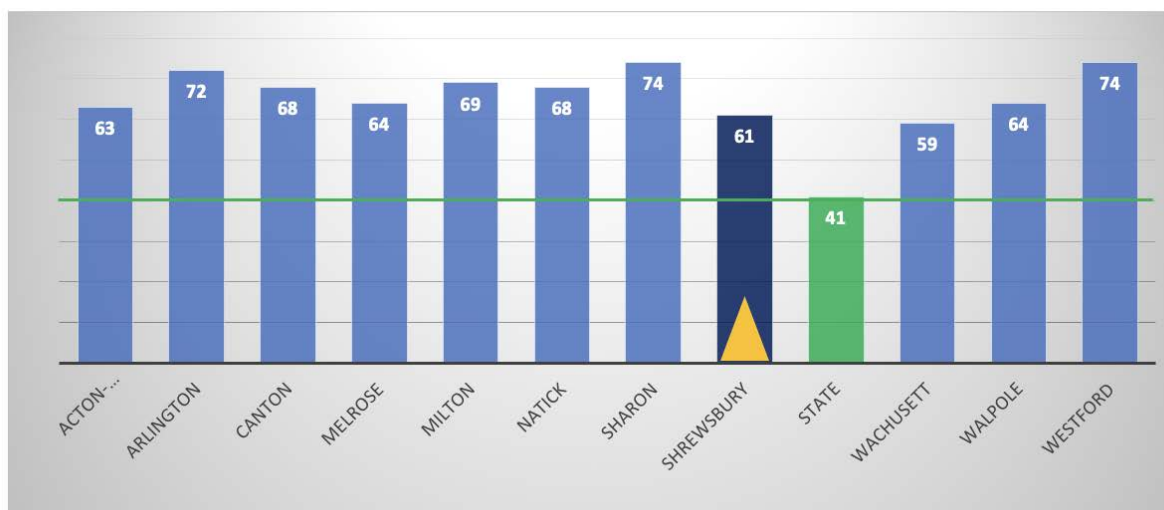
* Please Note: As mentioned previously, achievement score percentiles differ due to rounding.

Percentage of Students Meeting or Exceeding Expectations
Next-Gen MCAS Math / Grade 5
 Assabet Valley Collaborative District Comparisons



Shrewsbury's scores for this grade level rank among the highest among area districts. However, our Grade 5 Math scores do not compare as well with DART districts.

Percentage of students Meeting or Exceeding Expectations
Next-Gen MCAS Math / Grade 5
 DART District Comparisons



Lower Math scores in the aggregate for Grade 5 students are also reflected in the differences seen between the average achievement scores and subgroup scores for the grade.

SPS Math Grade 5 Subgroup Achievement Scores

	% Proficient by Category				
Accountability Subgroups	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 5 Students	61*	11	51	32	6
Students w/ Disabilities	21	5	16	41	39
EL and Former EL	37	0	37	51	12
Low Income	25	0	25	59	16
High Needs	30	2	28	51	18

	% Proficient by Category				
Race & Ethnicity Subgroups	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	28	0	28	61	11
Asian	83	18	65	15	2
Hispanic/Latinx	27	0	27	51	22
Multi-Race, Non-Hispanic/Latinx	71	15	56	19	11
White	53	7	46	41	6

* Please Note: As mentioned previously, achievement score percentiles differ due to rounding.

Grade 6 Student Achievement Scores in Mathematics

In 2023, 67% of students at this level scored in the “Meeting” or “Exceeding” range, reflecting a slight decrease in the number of students meeting state benchmarks from last year. This result aligns with pre-pandemic scores.

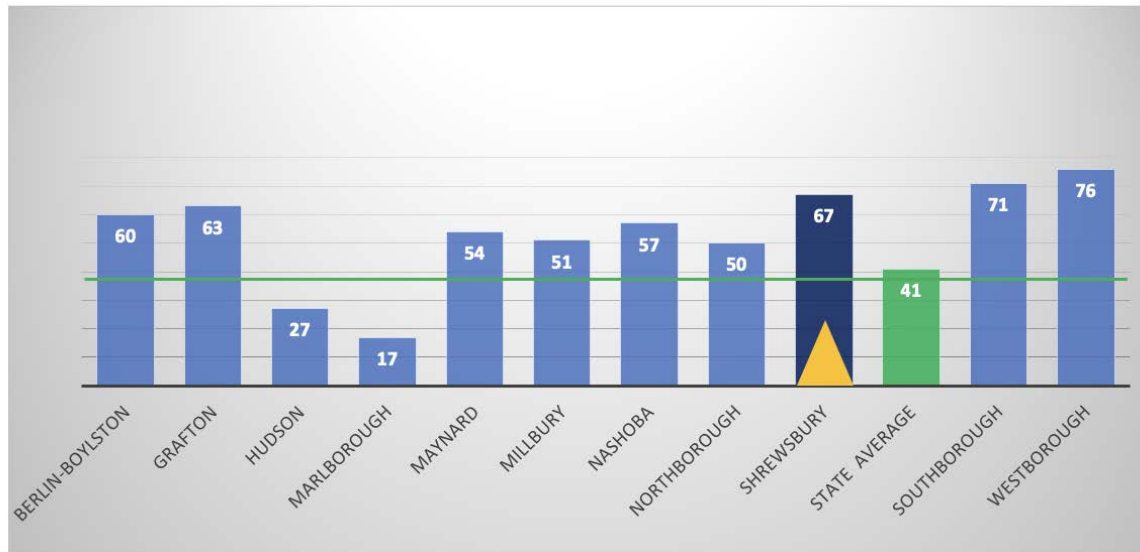
% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	69	57	70	67
Exceeding	22	12	17	19
Meeting	47	45	53	48
Partially Meeting	24	32	23	27
Not Meeting	7	11	7	6



Percentage of Students Meeting or Exceeding Expectations

Next-Gen MCAS Math / Grade 6

Assabet Valley Collaborative District Comparisons



Percentage of students Meeting or Exceeding Expectations

Next-Gen MCAS Math / Grade 6

DART District Comparisons



SPS Math Grade 6 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 6 Students	67	19	48	27	6
Students w/ Disabilities	23	4	19	49	28
EL and Former EL	55	6	49	36	9
Low Income	28	4	24	58	13
High Needs	36	5	31	47	17

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	27	4	23	69	4
Asian	92	39	53	6	2
Hispanic/Latinx	35	4	31	54	12
Multi-Race, Non-Hispanic/Latinx	67	11	56	30	4
White	57	6	51	34	9

Grade 7 Student Achievement Scores in Mathematics

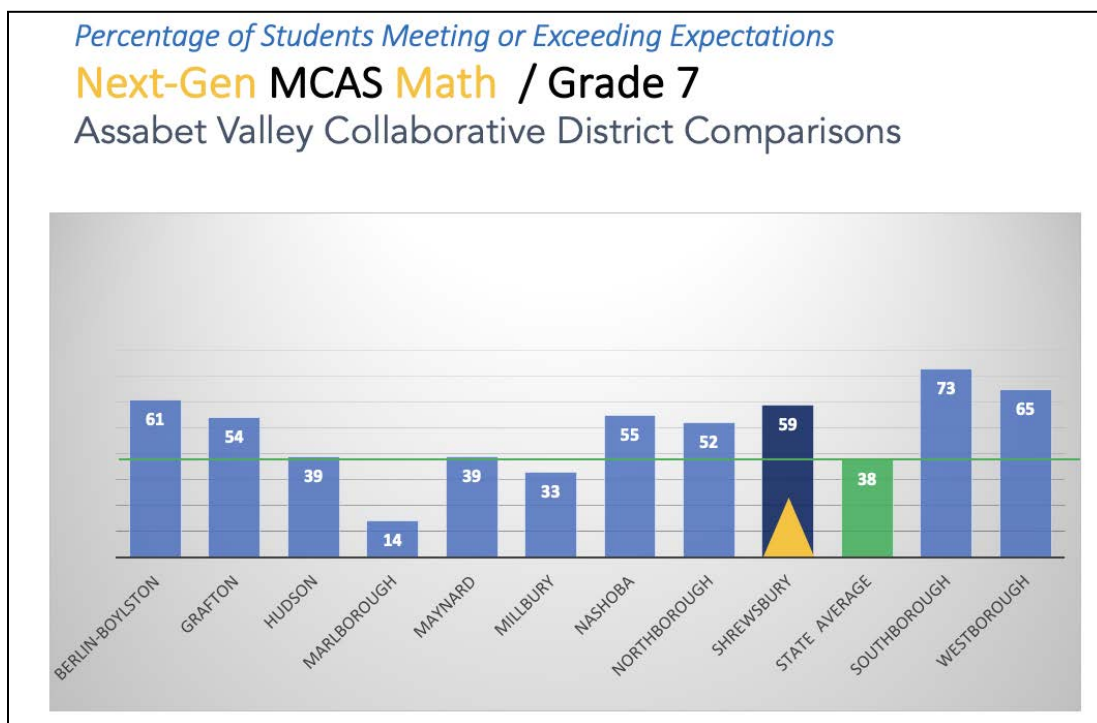
59% of students at this grade span scored in the “Meeting” or “Exceeding” range in 2023, compared to 56% in 2022.

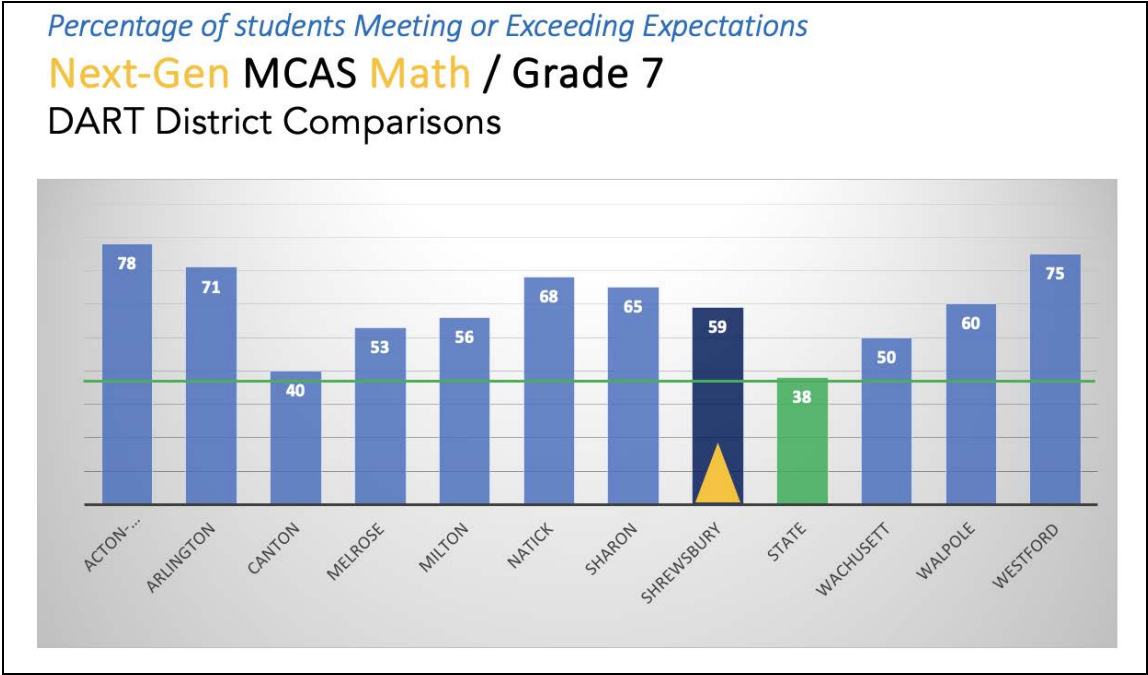
% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	62	59	56	59*
Exceeding	17	17	14	16
Meeting	45	42	42	44
Partially Meeting	32	35	33	32
Not Meeting	6	7	10	9



* Please Note: As mentioned previously, achievement score percentiles differ due to rounding.

Although results for this grade span are lower overall, Shrewsbury’s scores remain significantly higher than the state average.





SPS Math Grade 7 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 7 Students	59*	16	44	32	9
Students w/ Disabilities	11	0	11	44	45
EL and Former EL	35	3	32	47	18
Low Income	22	1	21	57	21
High Needs	25	2	23	48	27

* Please Note: As mentioned previously, achievement score percentiles differ due to rounding.

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	38	14	24	52	10
Asian	83	34	49	13	5
Hispanic/Latinx	28	4	24	49	22
Multi-Race, Non-Hispanic/Latinx	50	20	30	45	5
White	52	5	47	39	9

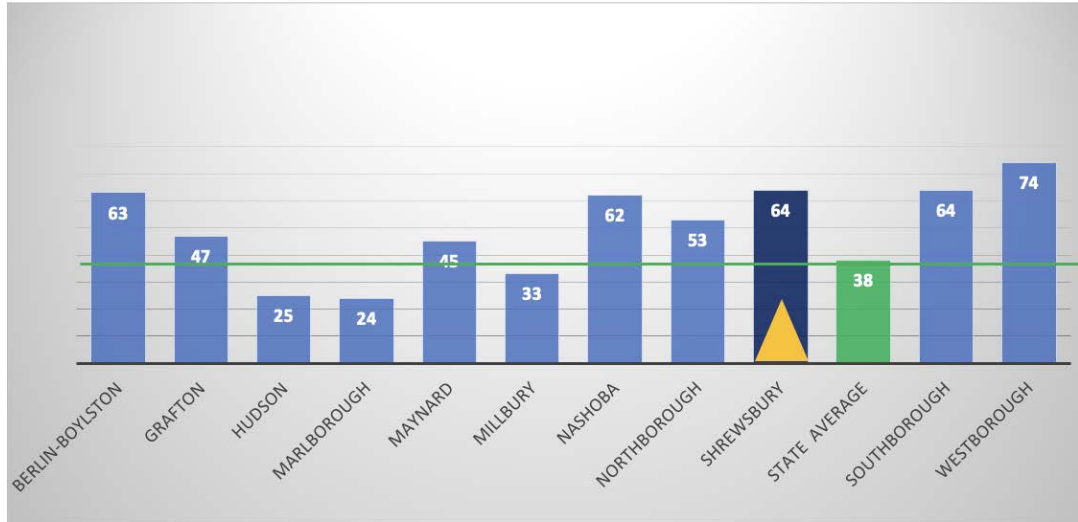
Grade 8 Student Achievement Scores in Mathematics

Math scores for students in Grade 8 decreased slightly over last year. 64% of students met state benchmarks in 2023.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	68	61	65	64
Exceeding	26	14	21	21
Meeting	42	47	44	43
Partially Meeting	27	29	28	27
Not Meeting	5	9	7	9

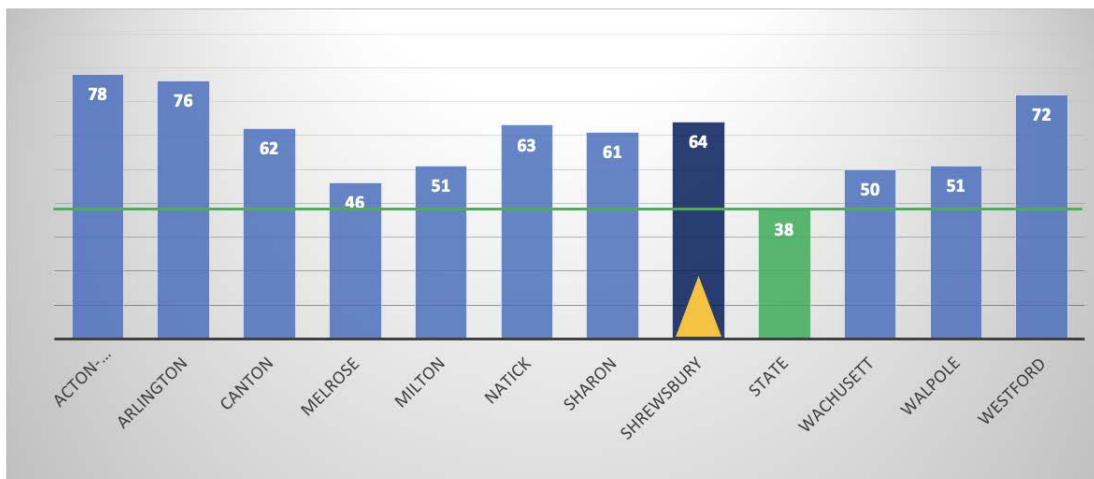


Percentage of Students Meeting or Exceeding Expectations
Next-Gen MCAS Math / Grade 8
 Assabet Valley Collaborative District Comparisons



Notably, Shrewsbury's scores for this grade span are among the highest in the area. Our achievement scores compare well to DART districts as well.

Percentage of students Meeting or Exceeding Expectations
Next-Gen MCAS Math / Grade 8
 DART District Comparisons



SPS Math Grade 8 Subgroup Achievement Scores

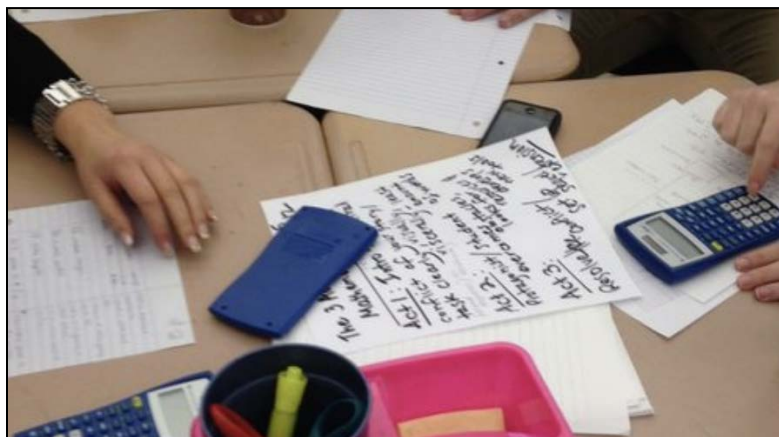
	% Proficient by Category				
Accountability Subgroups	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 8 Students	64	21	43	27	9
Students w/ Disabilities	12	0	12	44	45
EL and Former EL	37	10	27	43	20
Low Income	35	6	29	38	27
High Needs	30	5	25	41	29

	% Proficient by Category				
Race & Ethnicity Subgroups	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	47	0	47	40	13
Asian	86	46	40	7	6
Hispanic/Latinx	28	2	26	52	20
Multi-Race, Non-Hispanic/Latinx	89	31	58	12	0
White	55	8	47	35	10

Grade 10 Student Achievement Scores in Mathematics

In 2019, high school students across the state took the “next generation” test in Mathematics for the first time. Scores for the old “legacy” test cannot be compared with scores on this exam, so comparisons for this grade span are limited. 75% of students in Grade 10 met or exceeded state benchmarks in 2023.

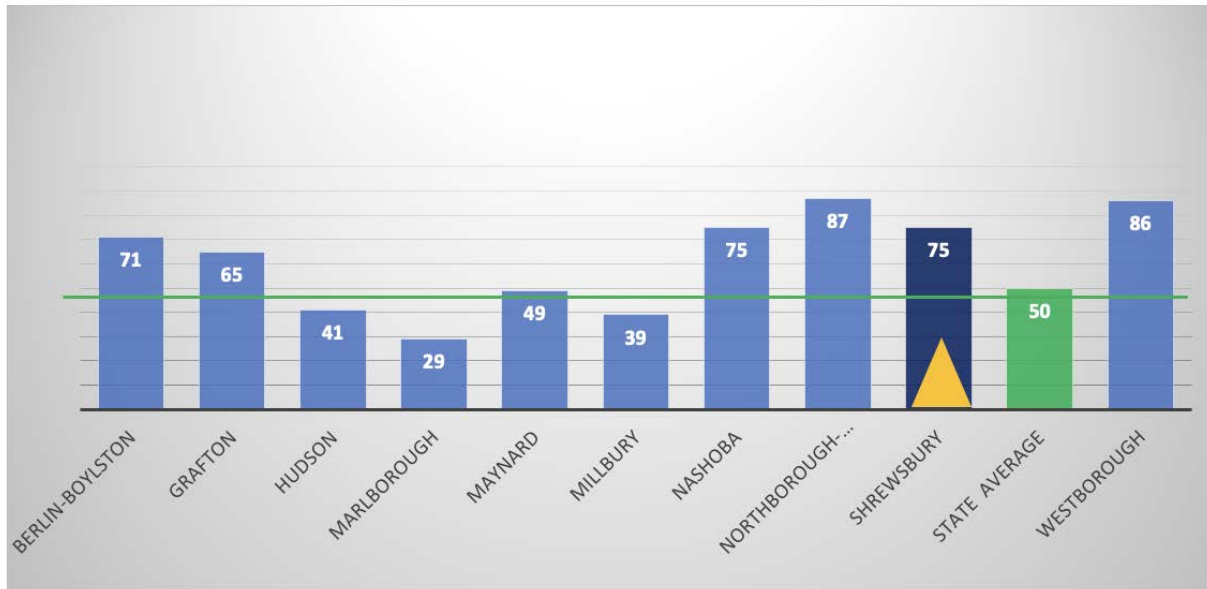
% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	80	77	74	75
Exceeding	29	32	27	31
Meeting	51	45	47	44
Partially Meeting	17	19	22	23
Not Meeting	3	4	4	2



Percentage of Students Meeting or Exceeding Expectations

Next-Gen MCAS Math / Grade 10

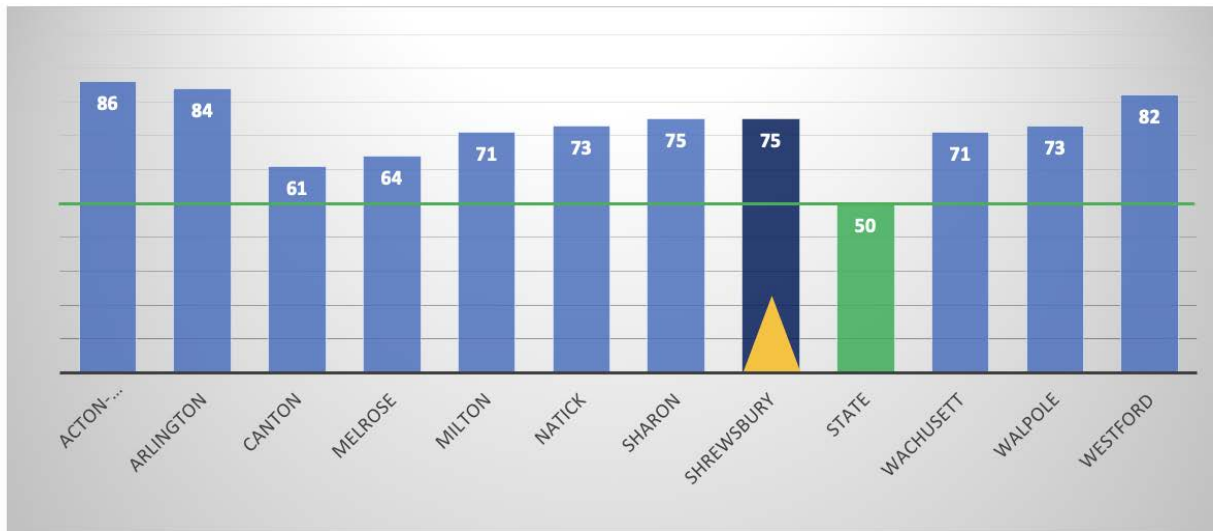
Assabet Valley Collaborative District Comparisons



Percentage of students Meeting or Exceeding Expectations

Next-Gen MCAS Math / Grade 10

DART District Comparisons



SPS Math Grade 10 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 10 Students	75	31	44	23	2
Students w/ Disabilities	20	4	16	63	16
EL and Former EL	31	0	31	58	12
Low Income	31	7	24	61	8
High Needs	36	7	29	55	9

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	45	0	45	45	10
Asian	92	62	30	7	0
Hispanic/Latinx	40	13	27	53	7
Multi-Race, Non-Hispanic/Latinx	74	32	42	21	5
White	75	17	58	23	2



All students should have the opportunity and the support necessary to learn significant mathematics with depth and understanding. There is no conflict between equity and excellence.

National Council of Teachers of Mathematics

Trends Over Time in Mathematics

In Shrewsbury and comparison districts, signs of recovery are best seen in this subject area. For most grade spans, achievement scores in Math for 2023 were similar to last year's results. Scores for students in Grade 5 were up significantly from 2022, representing a bright spot in our overall results.

Percentage of Students Meeting or Exceeding Expectations

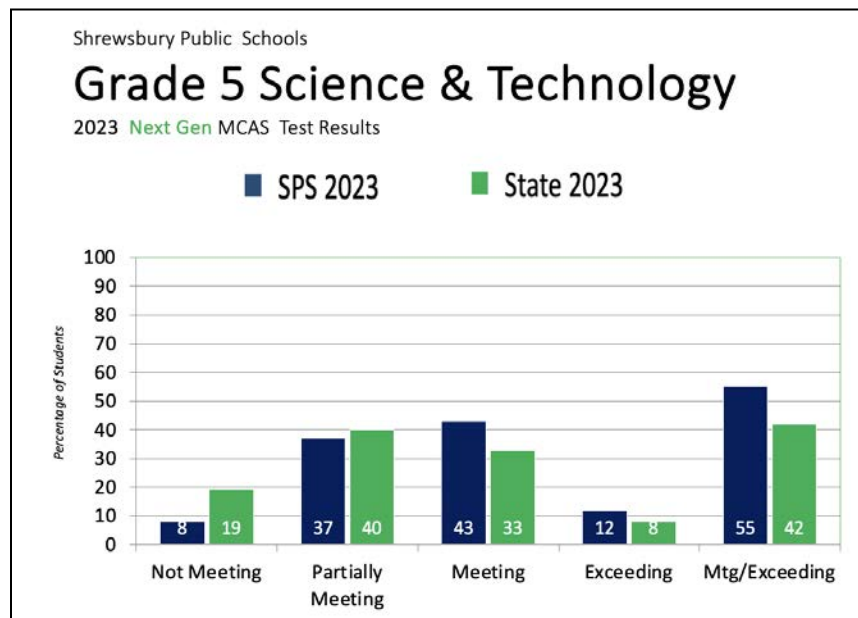
Grade and Subject	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr. 10
Shrewsbury % E / M 2019	75%	79%	73%	69%	63%	68%	80%
State Results 2019	49%	50%	48%	52%	48%	46%	59%
Shrewsbury % E / M 2021	62%	64%	54%	57%	59%	62%	77%
State Results 2021	33%	33%	33%	33%	35%	32%	52%
Shrewsbury % E / M 2022	68%	70%	50%	70%	56%	65%	74%
State Results 2022	41%	42%	36%	42%	38%	36%	49%
Shrewsbury % E / M 2023	67%	73%	61%	67%	59%	64%	75%
State Results 2023	41%	45%	41%	41%	39%	37%	50%

Science & Technology Scores by Grade Level

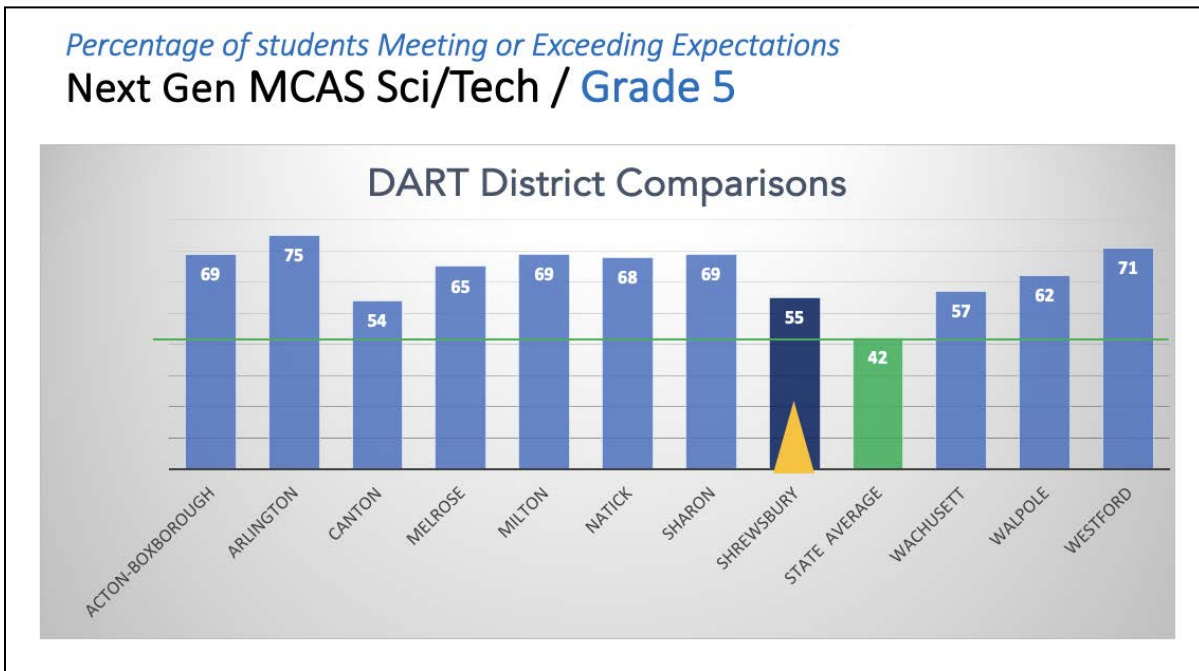
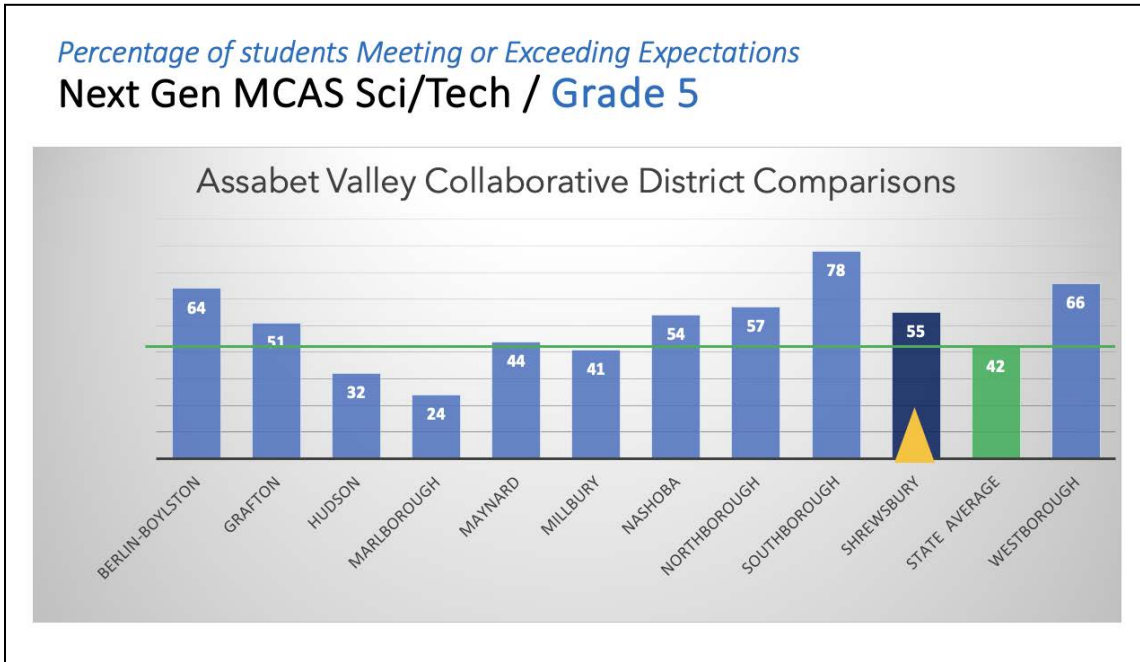
Grade 5 Student Achievement Scores in Science

Students at this level took a new exam in 2019, thereby establishing a new baseline for the grade span. In 2023, only 55% of students in Grade 5 met or exceeded state benchmarks in Science, a drop from 64% of students reaching proficiency in 2022.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	63	59	64	55
Exceeding	12	13	12	12
Meeting	51	46	52	43
Partially Meeting	31	34	30	37
Not Meeting	5	6	6	8



Here's how our Grade 5 results compared to nearby districts in 2023.



As mentioned in previous reports, the timing of curriculum units in Shrewsbury has an impact on student performance. For example, our Grade 5 students are tested cumulatively on content that is taught in earlier grades. During remote learning, much of the Science content was adjusted for safety and in consideration of curriculum priorities, which means students may need additional time to build prerequisite knowledge in some Science subjects.

SPS Science Grade 5 Subgroup Achievement Scores

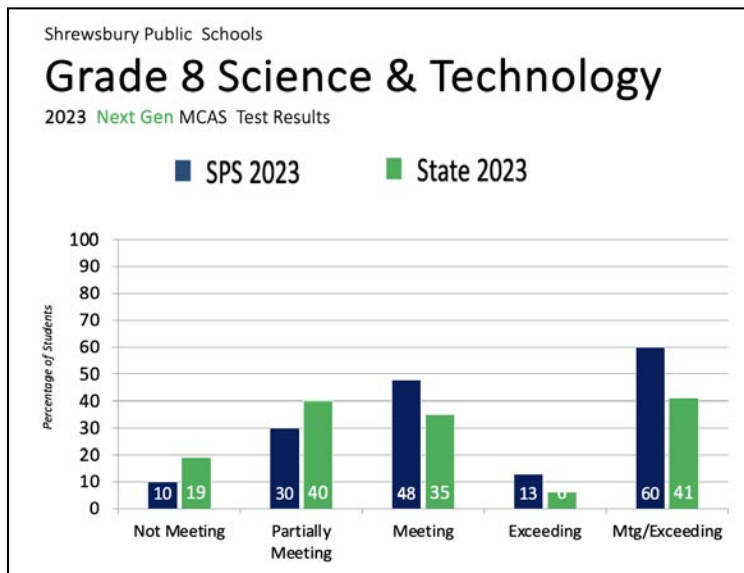
Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 5 Students	55	12	43	37	8
Students w/ Disabilities	13	3	10	44	44
EL and Former EL	40	5	35	42	19
Low Income	33	3	30	48	20
High Needs	31	4	27	45	24

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American/Black	23	6	17	61	17
Asian	69	15	54	29	2
Hispanic / Latinx	42	3	39	33	25
Multi-Race, Non-Hispanic / Latinx	66	22	44	26	7
White	46	10	36	44	10

Grade 8 Student Achievement Scores in Science

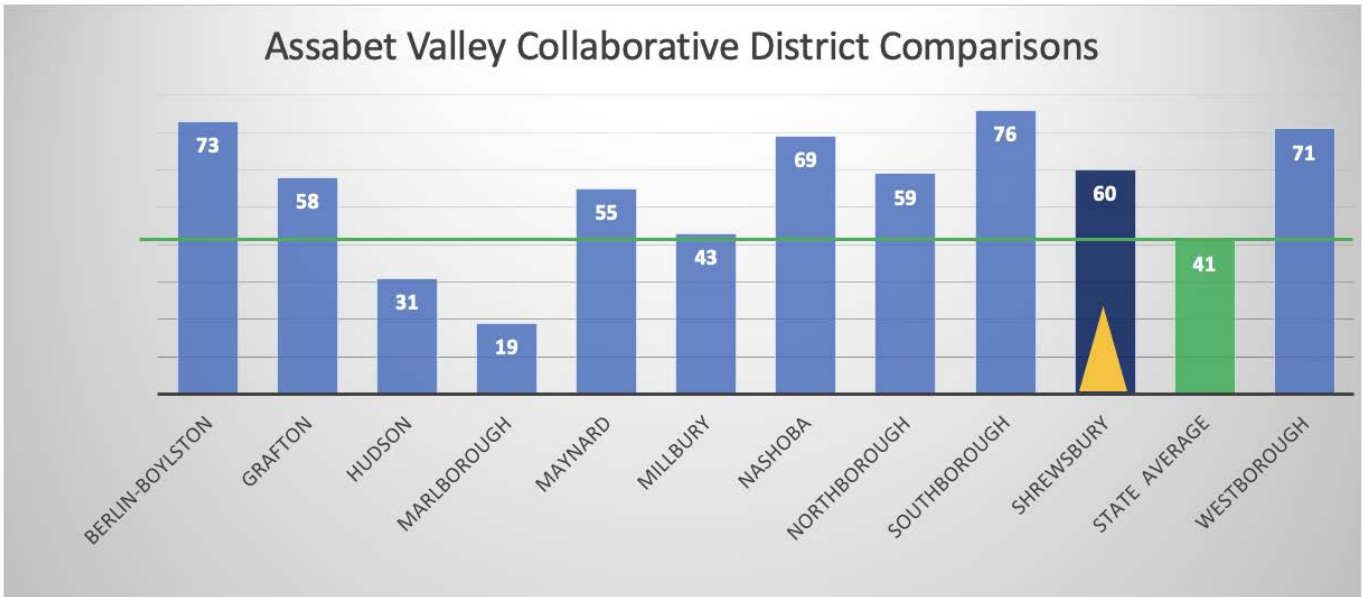
In 2019, students in Grade 8 took the “next generation” Science test for the first time as well. Student scores have remained relatively flat in the time since, with 60% of students scoring in the “Meeting” range or better in 2023.

% by level	2019	2021	2022	2023
Proficient (Exceeding + Meeting)	62	61	62	60
Exceeding	16	17	9	13
Meeting	46	44	53	48
Partially Meeting	33	33	31	30
Not Meeting	5	7	7	10

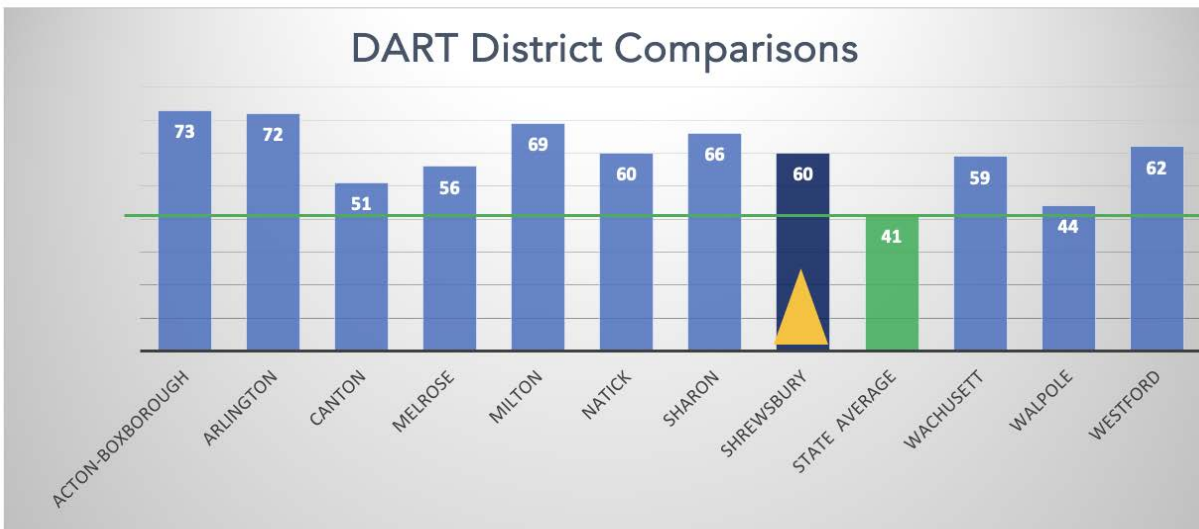


Shrewsbury students continue to outperform state averages. However, scores in Science for this grade band don't compare as favorably as scores in Grade 5.

Percentage of students Meeting or Exceeding Expectations
Next Gen MCAS Sci/Tech / Grade 8



Percentage of students Meeting or Exceeding Expectations
Next Gen MCAS Sci/Tech / Grade 8



Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Gr 8 Students	60	13	48	30	10
Students w/ Disabilities	13	3	10	40	47
EL and Former EL	27	0	27	43	30
Low Income	33	2	31	42	25
High Needs	29	3	26	41	30

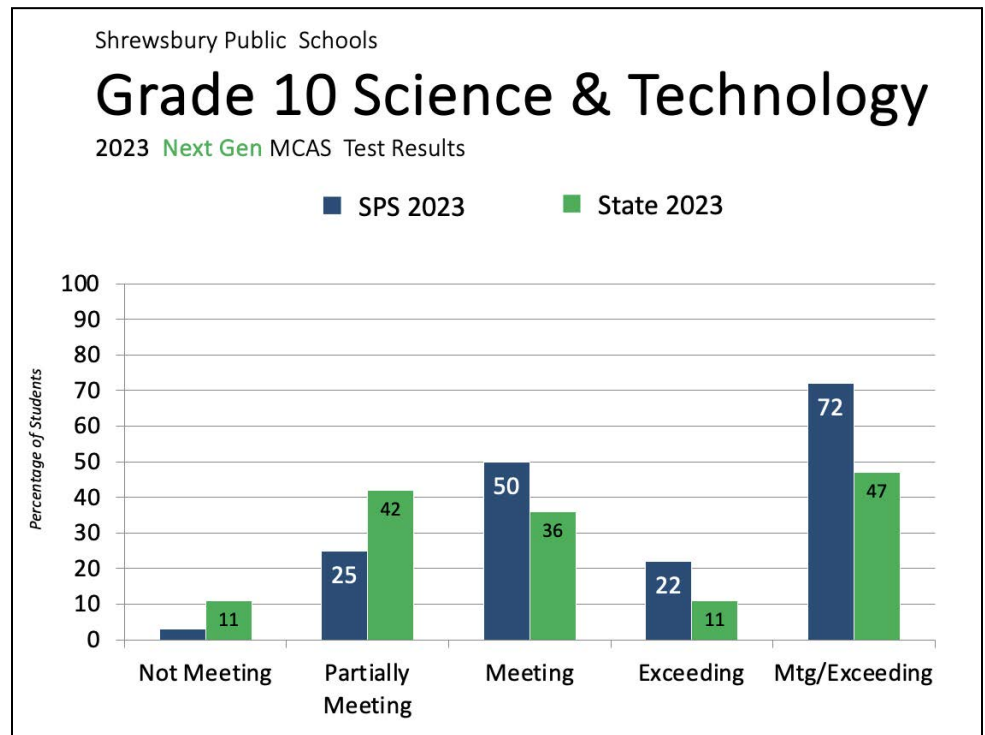
SPS Science Grade 8 Subgroup Achievement Scores

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American / Black	40	0	40	47	13
Asian	75	23	52	20	5
Hispanic / Latinx	35	2	33	43	22
Multi-Race, Non-Hispanic / Latinx	84	19	65	12	4
White	55	8	47	34	11

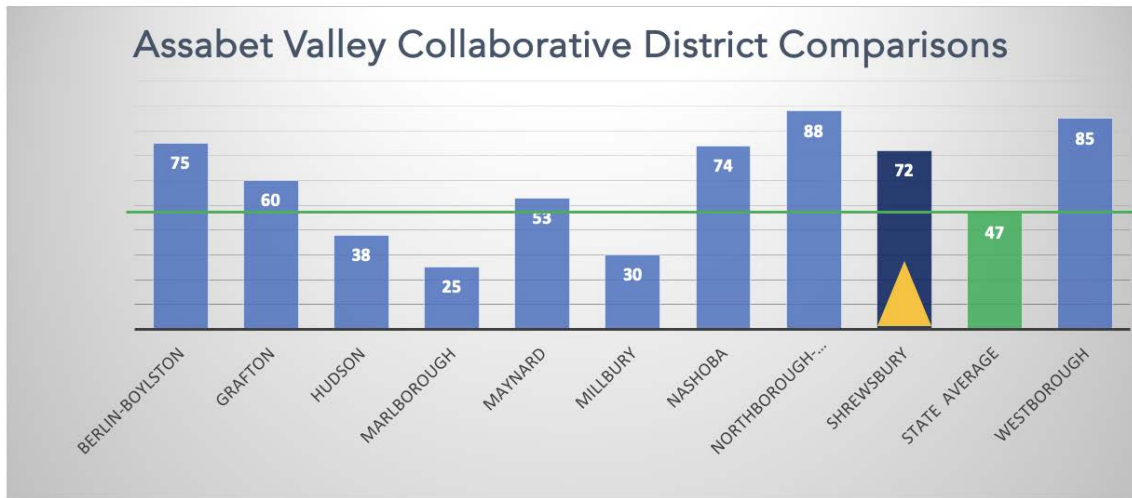
Grade 10 Student Achievement Scores in Science

2019 was the last year that students in this grade span took the older (“legacy”) version of MCAS Science and Technology exam. As you know, the MCAS test was canceled in 2020. High school students were not required to take the Science exam in 2021. In 2022, 59% of Grade 10 students scored proficient or higher on the “next generation” version of the exam, completing the transition from the “legacy” version for all grade spans and subjects.

% by level	2021	2022	2023
Proficient (Exceeding + Meeting)	NA	59	72
Exceeding	NA	18	22
Meeting	NA	41	50
Partially Meeting	NA	36	25
Not Meeting	NA	4	3

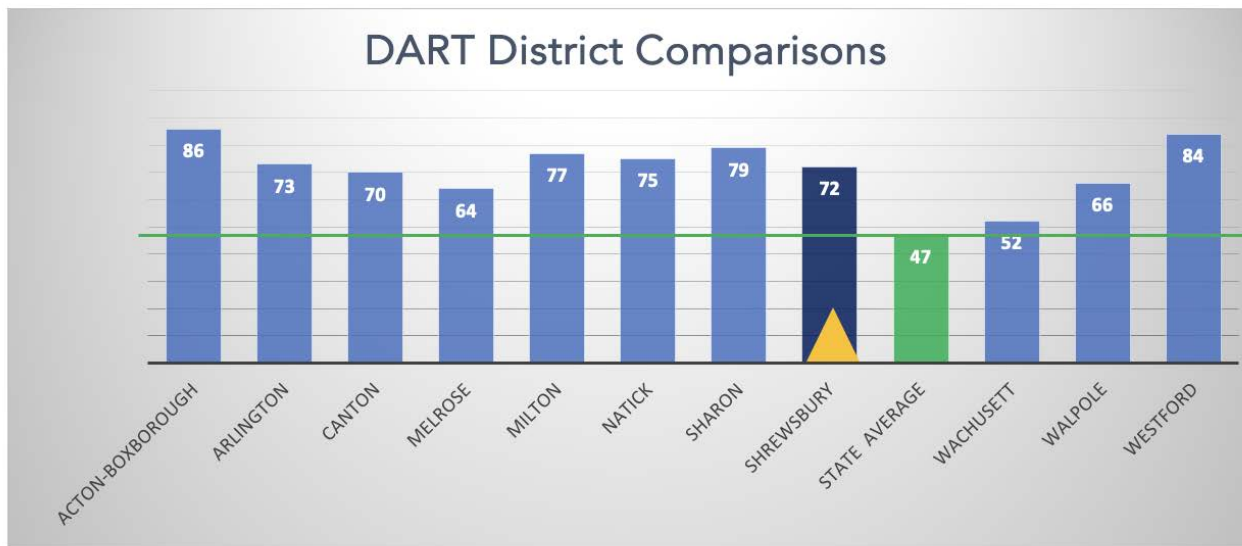


Percentage of students Meeting or Exceeding Expectations
Next Gen MCAS Sci/Tech / Grade 10



These charts illustrate how Shrewsbury scores on the Science, Technology and Engineering (STE) exam compare to other districts.

Percentage of students Meeting or Exceeding Expectations
Next Gen MCAS Sci/Tech / Grade 10



SPS Science Grade 10 Subgroup Achievement Scores

Accountability Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
All Grade 10 Students	72	22	50	25	3
Students w/ Disabilities	17	2	15	62	21
EL and Former EL	30	0	30	60	10
Low Income	35	6	29	56	8
High Needs	37	6	31	52	11

Race & Ethnicity Subgroups	% Proficient by Category				
	E / M	Exceeding	Meeting	Partially Meeting	Not Meeting
African American / Black	44	0	44	50	6
Asian	89	43	46	10	1
Hispanic / Latinx	37	9	28	54	9
Multi-Race, Non-Hispanic / Latinx	65	24	41	29	6
White	72	13	59	26	2

Trends Over Time in Science, Technology & Engineering (STE)

Science achievement scores for Grades 5 and 8 show signs of recovery for most students. Scores for students in Grade 10 remain well below pre-pandemic achievement scores.

Percentage of Students Meeting or Exceeding Expectations

Grade and Subject	Gr 5	Gr 8	Gr. 10
Shrewsbury % E / M 2019	63	62	88
State Results 2019	49	46	74
Shrewsbury % E / M 2021	60	60	N/A*
State Results 2021	42	41	N/A*
Shrewsbury % E / M 2022	63	62	59
State Results 2022	43	42	47
Shrewsbury % E / M 2023	55	60	72
State Results 2023	41	41	47


Note: Grade 10 results for spring 2021 STE are not provided because students in the class of 2023 were not required to take the STE test. Additional information about competency determination requirements is available at <https://www.doe.mass.edu/mcas/graduation.html>.

IV. Student Growth Percentile Scores (SGPs)

Assessment levels indicate how each student is achieving, relative to the state standards for that grade level and content area. Growth scores represent change in an individual student's MCAS performance from one exam to the next. By utilizing a growth measure, the state is attempting to answer the question, "How much academic progress did a student or group of students make in one year, as measured by MCAS?"

Massachusetts measures growth for individual students by comparing the change in their achievement on statewide assessments to that of their "academic peers" (all other students in the state who previously had similar historical assessment results). The comparison is expressed as a percentile, and represents how many students showed greater or lesser improvement on this year's test as compared to the performance of the cohort of students with the same achievement score history.

Student Growth Percentiles (SGP)



- ✓ Massachusetts measures growth by comparing the change in a student's achievement scores on statewide assessments with all other students with similar test score histories.
- ✓ The rate of change is expressed as a percentile.
 - How much did Rishi improve in mathematics from 4th and 5th grade to 6th grade, relative to her academic peers?
 - If Rishi improved more than 65 percent of her academic peers, then her Student Growth Percentile (SGP) would be 65.

The state defines *moderate* (or expected) growth to be between the 40-60th percentile, with *low* growth below the 40th percentile and *high growth* above the 60th percentile. In reviewing an individual student's result, teachers and parents might wonder, "How much did Rishi improve her math score on MCAS in 6th grade, relative to students who had the same math scores on the 4th and 5th grade math tests?" SGP scores help to answer that question: if Rishi had a higher score than 65 percent of her academic peers with the same score history, then her Student Growth Percentile (SGP) would be 65.

The growth model method operates independently of MCAS performance levels. As a result, all students may demonstrate growth. Growth percentiles are typically calculated in ELA and Mathematics for students in Grades 4 through 8 and 10, because the model requires at least two years of MCAS results to calculate growth percentiles. Therefore, no growth scores are available for Grade 3. This year the Department of Elementary and Secondary Education emphasized that districts should return to a pre-pandemic approach to calibrating student growth percentiles. For this reason, SGP results for 2022 are best compared with statistics from 2019. Finally, because the Science and Technology test is only administered in grades five, eight, and nine/ten, there is no growth data produced for this test.

Analyzing student test scores over time provides us with additional information; this data helps us

monitor individual students and subgroups within the district. Importantly, it may also help us identify “bright spots,” instructional models, or grade level practices that yield exceptional outcomes for students.


Aggregate Growth Percentiles

While student growth percentiles enable educators to chart the growth of an individual student compared to that of academic peers, student growth percentiles may also be aggregated to understand growth at the subgroup, school, or district level.

Initially, the Department of Elementary and Secondary Education reported growth as a median percentile (the middle score if one ranks the individual student growth percentiles from highest to lowest). A typical school or district in the Commonwealth would have a median student growth percentile of 50. Beginning in 2018, the DESE moved to a growth model where the average student growth percentile replaces median SGP for school and district metrics. Although there are areas to target for improvement that will take more time to achieve, our collective goal remains accelerating student growth.

Why measure growth?

- **A way to measure progress for students at all performance levels**
 - A student can achieve at a low level but still improve relative to his academic peers
 - Another could achieve well but not improve much from year to year
- **Provides evidence of improvement even among those with low achievement**
- **Gives high achieving students and schools something to strive for beyond proficiency**



Massachusetts Department of
ELEMENTARY & SECONDARY
EDUCATION

Shrewsbury Public Schools Average SGP by Grade Span

Results for the English Language Arts Assessment 2019-2023

Again, ELA growth percentile scores are expected to fall within the 40-60 range. In 2023, growth scores dropped from 2022. However, students in most grade spans met or surpassed the state's benchmark for "moderate growth".

As a reminder, student growth scores for 2023 are best compared with scores in 2019 and/or 2022.

ELA	2019	2021	2022	2023
Gr 4	56	N/A	54	49
Gr 5	47	30	52	39
Gr 6	52	39	53	53
Gr 7	43	34	47	45
Gr 8	55	38	62	53
Gr 10	56	52	55	57

Shrewsbury Public Schools Average SGP by Grade:

Results for the Mathematics Assessment 2019-2023

At every grade span Shrewsbury's 2023 Math growth percentile scores met or exceeded the 40-60 range for "moderate growth". Note the higher rates of growth for students in Grades 6 and 8.

Math	2019	2021	2022	2023
Gr 4	64	N/A	58	58
Gr 5	51	34	37	42
Gr 6	42	28	61	63
Gr 7	43	37	42	48
Gr 8	61	40	57	61
Gr 10	63	53	68	59

V. District Subgroup Performance Trends

Comparing subgroup results to aggregate data helps educators to identify and close achievement opportunity gaps. As we review this data, it's important to keep in mind that students may belong to multiple subgroups and therefore are counted more than once in terms of total numbers. Finally, it should be mentioned that the data we have relies on how families self-report when they register.

The table below was prepared as a helpful summary of "the big picture": it shows how Shrewsbury's results for most students compare to students with disabilities, students that are considered low income, and students that are English learners. Why focus on these specific subgroups? Briefly, while we are resolved to monitor progress for all student subgroups, we see persistent gaps between achievement scores for students in these subgroups and aggregate scores across grade spans and administration years. Moreover, for some subgroups we see lower rates of growth.

Growth scores shaded in red in the chart below highlight places where we see growth at a rate that's lower than 50, the rate of growth that is more typical for students in Shrewsbury.

Grade Level & Subject	SPS All Students		SPS Students with Disabilities		SPS Low Income		SPS English Learners and Former English Learners	
	% E/M	SGP	% E/M	SGP	% E/M	SGP	% E/M	SGP
Gr 3 ELA	64	N/A	26	NA	38	NA	44	NA
Gr 3 Math	67	N/A	28	NA	43	NA	51	NA
Gr 4 ELA	58	49	15	43	22	46	41	49
Gr 4 Math	73	50	27	44	43	46	65	46
Gr 5 ELA	61	50	19	43	33	48	43	52
Gr 5 Math	62	50	21	45	25	48	37	51
Gr 5 Sci	55	N/A	13	NA	33	NA	40	NA
Gr 6 ELA	64	50	12	44	33	47	39	49
Gr 6 Math	67	50	23	44	28	48	55	51
Gr 7 ELA	52	50	7	45	23	47	21	49
Gr 7 Math	60	50	11	47	22	47	35	49
Gr 8 ELA	62	50	9	45	37	47	20	48
Gr 8 Math	64	50	12	45	35	48	37	49
Gr 8 Sci	61	N/A	13	NA	33	NA	27	NA
Gr 10 ELA	76	49	18	40	42	45	31	42
Gr 10 Math	75	50	20	42	31	40	31	40
Gr 10 STE	72	N/A	17	NA	35	NA	30	NA

*Red cells denote growth rates below 50, the mid-moderate range per DESE guidelines.

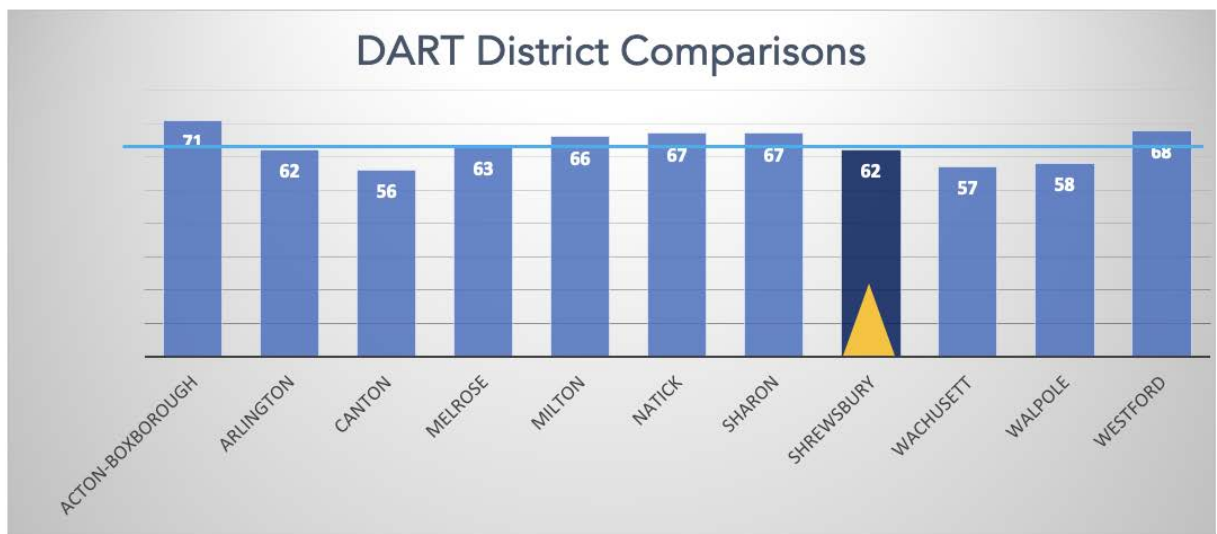
Internally, Geoffrey Thayer, a district Data Specialist, conducted a more detailed analysis for all subgroups with the goal of identifying how student results in Shrewsbury compare with those of DART districts. His findings show that Shrewsbury is on par with neighboring districts with regards to closing educational opportunity and achievement gaps. However, in some cases the performance of subgroups only compares well because results went down in the aggregate, so it's important to look at trends over time.

Looking across a comparison with DART districts, we can also see opportunities to improve our outcomes by learning from districts with similar enrollments. Scores for English Learners in Shrewsbury drop from Grade 3 to Grade 10, with fewer students receiving passing grades on the MCAS in the upper grades. There are some districts that do not experience this, including Acton-Boxborough and Westborough.

A closer look at Shrewsbury's achievement results across accountability subgroups is warranted. While 58% of Shrewsbury's fourth graders met or exceeded state benchmarks, in 2023, only 15% of Students with Disabilities in Shrewsbury (a portion of our "High Needs" group) met or exceeded expectations for the Grade 4 MCAS test in ELA. In contrast, 30% of Grade 4 Students with Disabilities in Melrose met the state benchmark in English Language Arts in 2023. The comparison data for other DART districts across grade spans is illustrated in the charts below.

Average Percentage of Students Meeting or Exceeding Expectations in ELA Across Grades & Subgroups

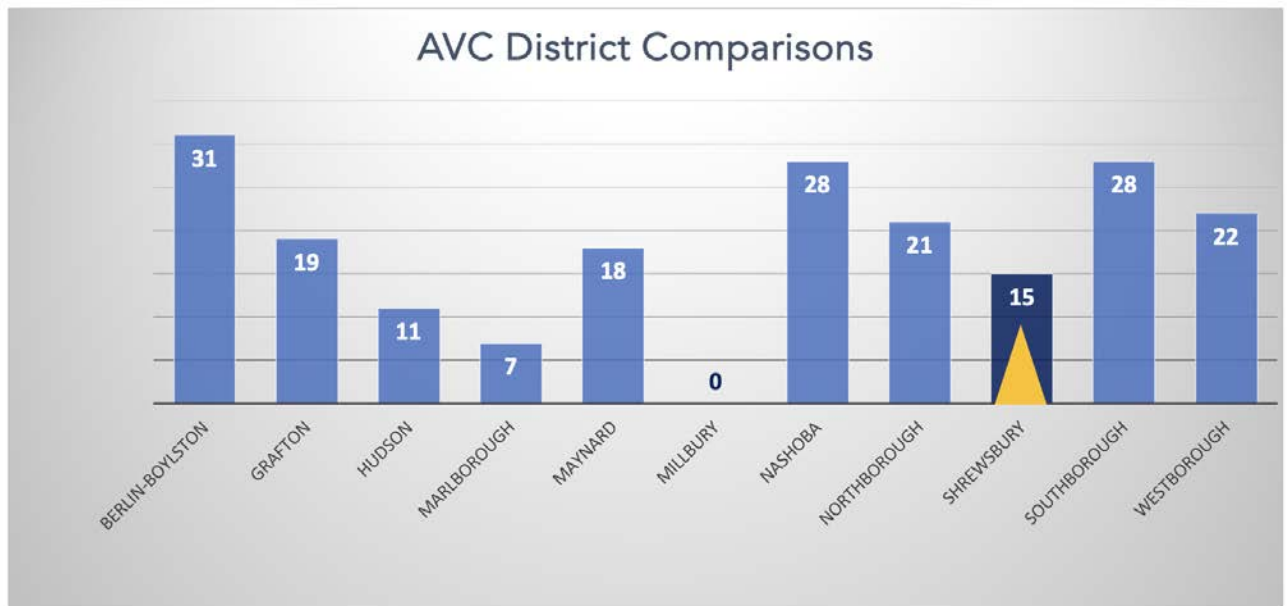
■ DART districts — Trendline for Average



Most districts in the Assabet Valley Collaborative did not have sufficient numbers to compare results for all student subgroups. However, comparing Grade 4 achievement scores in English Language

Arts for students with disabilities illustrates well that closing achievement gaps is possible.

Percentage of Grade 4 Students With Disabilities in Area Districts Meeting or Exceeding Expectations in ELA



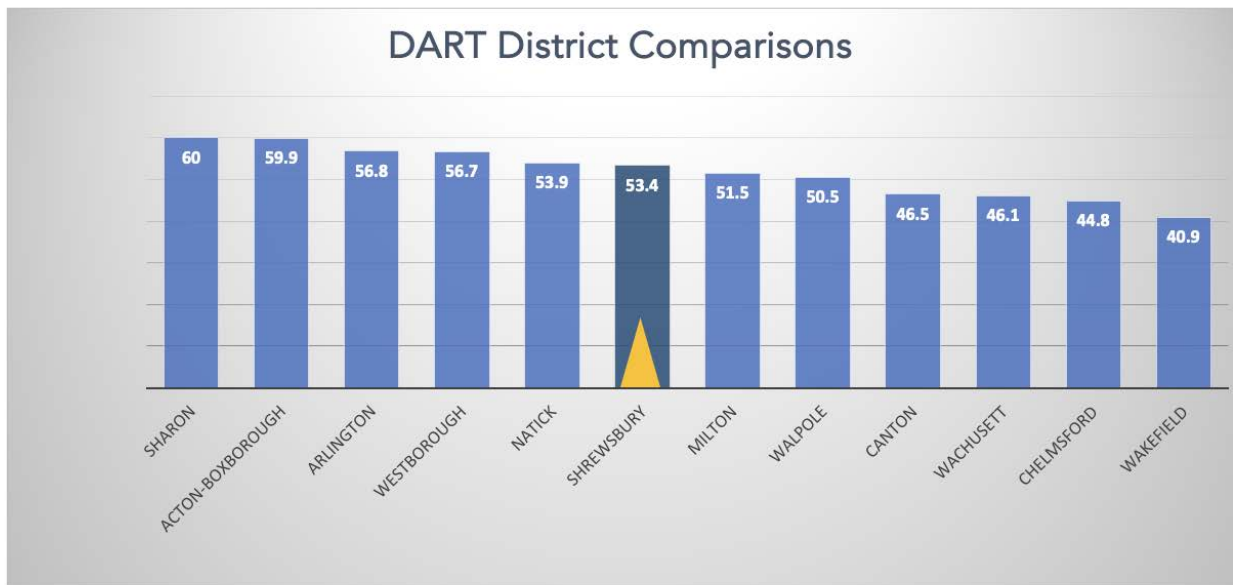
Student data is useful only to the extent that it helps educators reflect on our practice. With the purchase of the Star screener tools, we are better able to triangulate assessment information. Most importantly, we are able to monitor students in Grades K-8 between MCAS administrations.

Staff look closely at the achievement gap between student subgroups as compared to the “All Students” group in various ways. As children work towards content mastery, students that struggle to achieve proficiency may still demonstrate high growth. For example, the growth percentiles in English Language Arts for students within the “High Needs” accountability subgroup is similar to those for most Grade 4 students. This suggests that students in both groups are growing at a similar rate.

Significantly, if students within our subgroups don’t exceed typical growth, achievement gaps between students with disabilities and typical students will widen over time. When we analyze the performance of students in subgroups, there is a wide range of performance scores. It’s important to consider both achievement and growth percentiles, which signals attention to both content mastery and closing gaps. In Shrewsbury, the rate of achievement among students in this group has increased gradually over time. However, higher rates of growth will be needed for students in subgroups to achieve parity with same-age peers.

Shrewsbury's average percentage of students meeting proficiency benchmarks across subgroups is depicted in comparison to DART districts below.

Average Percentage of Students Meeting or Exceeding Expectations in Math Across Grades & Subgroups



VI. Data-Informed Decision Making

Staff analyze MCAS data from the DESE portal to review student performance, identify strengths and weaknesses in specific standards, and to examine released questions to determine how instructional planning might shift. The DESE district profile portal allows anyone to access data about standards, question types, and even to compare item scores across districts. Click [here](#) to see how it works.

Scrutinizing student results by question helps educators to align their practice with the expectations inherent in the assessment. Educators look at student work related to questions like the one depicted above/right to see which concepts they should revisit in class. Looking at the results in this way allows

This question has four parts.

These circle graphs represent the number of sixth-grade and seventh-grade students on academic teams at two middle schools.

South Middle School Students on Academic Teams

Total Students: 75

Jefferson Middle School Students on Academic Teams

Total Students: 80

Part A

Based on the data in the circle graph for South Middle School, what percent of students on academic teams are sixth-grade students? Show or explain how you got your answer.

Enter your answer and your work or explanation in the space provided.

teacher teams to refine instructional plans together.

VII. Next Steps

Using Data to Adjust Instruction

The achievement our students experience is the result of a number of systems working together. In a typical year, partnerships between home and school, coupled with an engaging and rigorous curriculum, help students to meet rising expectations over time. Yet the past three years have been anything but typical. While educators put a great deal of effort into advancing students' academic proficiency, high rates of student absenteeism and the need to address student behavioral and mental health needs also required significant time and attention. Increasingly, we are using data to focus specifically on academic goals and creating systems to monitor student progress.

Monitoring Student Progress

The adoption of a universal screening tool for students in Grades K-8 has made it easier to follow student progress in both English Language Arts and Mathematics in real time. Moreover, in addition to common assessment opportunities, the Star platform provides reports that empower educators to make decisions informed by recent assessment results. For example, classroom teachers can see which skills are most important for mastery, and adjust instruction accordingly. Forecasting reports enable district leaders and teacher teams alike to see which students are at the highest risk for not meeting state benchmarks. In this way we can identify individual students in need of extra support early and intervene accordingly.

For the third year in a row we noted that actual MCAS scores were within 10% of the scores predicted by the Star assessment. As depicted in the charts below, overall projections from last year aligned well with 2023 achievement results in each subject for most grade spans.

Grade	% Predicted to be Proficient in 2023 in Reading	Actual % Met / Exceeding in 2023 in ELA	% Difference
3	55	64	+9
4	57	58	+1
5	56	61	+5
6	62	64	+2
7	54	52	- 2
8	54	62	+8

Grade	% Predicted to be Proficient in 2023 in Math	Actual % Met / Exceeding in 2023 in Math	% Difference
3	73	67	- 6
4	72	73	+1
5	59	62	+3
6	57	67	+10
7	53	60	+7
8	62	64	+2

Results from the first Star assessment screeners, given three times each year, enable us to address student needs in advance of the MCAS administration window. Looking at student data compels us to action. With additional assessment information in hand, we can anticipate and respond to students in need sooner than we were able to do in the past.

Triangulating Student Data

The next administration of the Star assessment is scheduled to conclude on January 12, 2024. In the interim, students that scored below benchmark in September are being supported individually. At all levels, educators are using the information they gain from common assessments to adjust instruction and to provide tiered support.

VIII. Conclusion

While state assessment results reveal that student achievement scores are not back to pre-pandemic levels, the district as a whole is better able to respond to student needs because of the data systems and tiered intervention systems we have put in place. Our districtwide commitment to using universal screening software means we need not wait to know how our students are faring. Within our assessment tools, we have the means to measure individual student growth and the performance of accountability subgroups in anticipation of and after receiving MCAS results. Responding effectively to students' academic needs as indicated by assessment data is the key to realizing the aspirations manifested within the Education Reform Act. I'm confident our educators will continue to work tirelessly to close opportunity and performance gaps with the goal of empowering all our children to meet high expectations.



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **V. Curriculum**
B. SHS Testing: Annual Report

MEETING DATE: **11/29/23**

BACKGROUND INFORMATION:

Each year, a report is presented that includes Shrewsbury High School student performance data on standardized tests, including the SAT and AP tests. Mr. Bazydlo and Ms. Flynn will summarize the report and be available to answer questions.

ACTION RECOMMENDED:

That the School Committee accept the report and take whatever steps it deems necessary in the interests of the Shrewsbury Public Schools.

STAFF AVAILABLE FOR PRESENTATION:

Mr. Todd Bazydlo, Shrewsbury High School Principal
Ms. Angie Flynn, Director of School Counseling

Shrewsbury High School Testing Report

2022-2023 School year



**Presented to the School Committee
November 29, 2023**

**Todd Bazydlo, Principal
Angie Flynn, Director of School Counseling**

Shrewsbury High School Testing Report Class of 2023

Table of Contents

Summary Statements	3-5
Shrewsbury, State, and National SAT Scores—1600 scales	6-7
Critical Reading, Math, and Writing Scores by Gender	8
SAT Scores by Race/Ethnicity	9-11
Appropriate Grade Levels for AP Courses	12
Advanced Placement Program Participation Rates	13
Advanced Placement Average Scores by Sub-Groups	14
Advanced Placement Mean Scores—SHS, Massachusetts, and Nationally	15-16
Advanced Placement Summary of All Scores	17-18
Percent of students scoring 3, 4, or 5 and AP Scholars	18-19
AP School Honor Roll	20
PSAT/National Merit Scholarship Qualifying Test	21-22

Summary Statements

College Board Testing Administration and Score Reporting Changes

- Beginning in 2021, the SAT eliminated optional exams including the SAT Essay and SAT Subject tests.
- Recent surveys of college admissions indicate approximately 80% of colleges and universities are “test-optional” and nearly 100 are “test-blind”.
- The 2023 SAT program results show that 1.9 million students in the high school class of 2023 took the SAT at least once, up from the 1.7 million in the class of 2022.

College Board SAT:

Page 6

Average Scores—1600 scale (Figures 1)

- The reporting of the redesigned SAT is in its sixth year. The score is based on two section scores: Evidence Based Reading & Writing and Math with a score range from 200-800. As a result of the redesigned SAT, scores are not directly comparable to the old SAT.
- Based on the 1600 scale, Shrewsbury’s SAT score of 1217 remains well above the state (1112) and national averages (1028).
- From 2022, the average scores in Evidence-Based Reading & Writing decreased by 5 points, and in Math decreased by 7 points.
- In the spring of 2020, students took the SAT online however in the fall of 2020, the SAT was offered only in-person.

Page 6-7

SAT: Individual Critical Reading, and Math Scores & Participation Rate

- On each individual section, Shrewsbury’s scores are:
 - Math = 612 (Figure 2)
 - Evidence-Based Reading & Writing = 604 (Figure 3)
- The SAT participation rate for the Class of 2023 is 80%,N=349 test takers. (Figure 4)
- The SAT participation rate for the Class of 2022 is 81%,N=372 test takers.
- The national participation rate in 2023 is 1.9 million, increasing from 1.7 million in 2022 to 1.5 million in 2021.
- The participation rate in Massachusetts was 44,441 an increase from the 43,576 test takers in 2022.
- Prior to the pandemic, 2.1 million students participated in SAT in 2018, while 2.2 million students participated in the SAT during 2019 and 2020.

Page 8

SAT: Critical Reading, Math scores by Gender (Figure 5)

- In the Evidence-Based Reading & Writing and Math scores, Shrewsbury females and males scored higher than the state and national trends.
- Shrewsbury females scored lower than males scored on the Evidence-Based Reading & Writing section of the SAT (F/M – 597/613) similar to the state (M/F –561/558) and unlike the national trend with females scoring higher (F/M – 523/517). Shrewsbury females scored lower than males (F/M – 594/636) in the Math section also similar to state (F/M – 539/565) and national (F/M – 500/515) trends.
 - Evidence-Based Reading & Writing (F – 597; M – 613)

- o Math (F – 594; M – 636)

Page 9-11

SAT: Critical Reading, Math scores by Race/Ethnicity (Figures 6, 7, 8)

- Students self-report race/ethnicity to the College Board. Percentages by race/ethnicity of the SHS students who took the SAT are noted below with their average scores
 - o Asian students’ average scores (31% of SHS test takers):
 - Evidenced Based Reading & Writing: 644
 - Math: 671
 - o Hispanic/Latino students’ average scores (8% of SHS test takers):
 - Evidence-Based Reading & Writing: 541
 - Math: 520
 - o Black/African American student’s average scores (3% of SHS test takers):
 - Evidence-Based Reading & Writing: 576
 - Math: 560
 - o White students’ average scores (52% of SHS test takers):
 - Evidence-Based Reading & Writing: 592
 - Math: 596
 - o Students who did not report Race/Ethnicity (3% of SHS test takers):
 - Evidenced-Based Reading & Writing: 600
 - Math: 565
 - o <3% (less than 10 total students) of SHS test takers self-reported Multi-race; as a result of the small sample size of this group College Board did not report scores for the group to protect their anonymity

Advanced Placement Exams:

Page 12

Appropriate Grade Levels for AP Courses

- The College Board does not recommend students in the 9th grade for AP courses. Instead, students should “develop the necessary skills and conceptual understandings in foundational courses prior to enrolling in AP.”
- Nationally, 78% of all AP Exams were taken by juniors and seniors.
- In the class of 2023, 23% of Shrewsbury students took three or more exams in their senior year.

Page 13

Participation Rates (Figure 9)

- The number of exams administered decreased by sixty exams to a total of 916 exams. The number of students who took AP exams decreased by twelve students.
- The total number of students who took at least one AP exam is 436.
 - o The number of seniors who participated in an AP exam is 256.
 - o The number of Juniors who participated in an AP exam is 174.
 - o The number of sophomores who participated in an AP exam is 6.
 - o The number of freshmen who participated in an AP exam is 0.
 - o Sophomores and freshmen who participated in exams did so through self-study, not through an SHS course
- **Fifty-four percent (59%) of the students in the Class of 2023 took at least one AP exam during their high school years.**

Page 14 **AP Scores by Subgroups as Self-Reported to the College Board (Figure 10)**

Page 15-16 **Average Scores—Shrewsbury High School and Nationally (Figure 11 & 12)**

- Scored on a scale of 1 – 5, the average AP Exam scores of Shrewsbury students are particularly impressive. All but two of the seventeen AP courses at Shrewsbury had an average score above 3.0 — and seven had an average score of 4.0 and above. *All of the average AP exam scores were above the state and national averages.*

Pages 17-18 **Exam Results—Shrewsbury High School**

- The percentage of students in the Class of 2023 scoring 3 or above is 83%.
- Eight out of the seventeen AP courses offered at Shrewsbury had at least 90% of their students scoring at a 3 or above.
- Thirty-one percent (31%) of the exams administered resulted in a score of 5—the highest possible score available.

Page 19 **Scholars/AP School Honor Roll**

- The total number of AP scholars in 2021 is 173.
- Additionally, the College Board has added Honor Roll for qualifying schools and SHS was awarded the “Bronze” designation.

PSAT/NMSQT

Page 20 - 21 **National Merit Scholarship Program**

- Three students from the Class of 2023 were named National Merit Finalists and one student was a Scholarship Recipient.

Scores for the Redesigned SAT begin with the 2017 year in the following 3 charts.

SAT: Evidenced Based Reading & Writing and Math Combined Score (1600 Score)

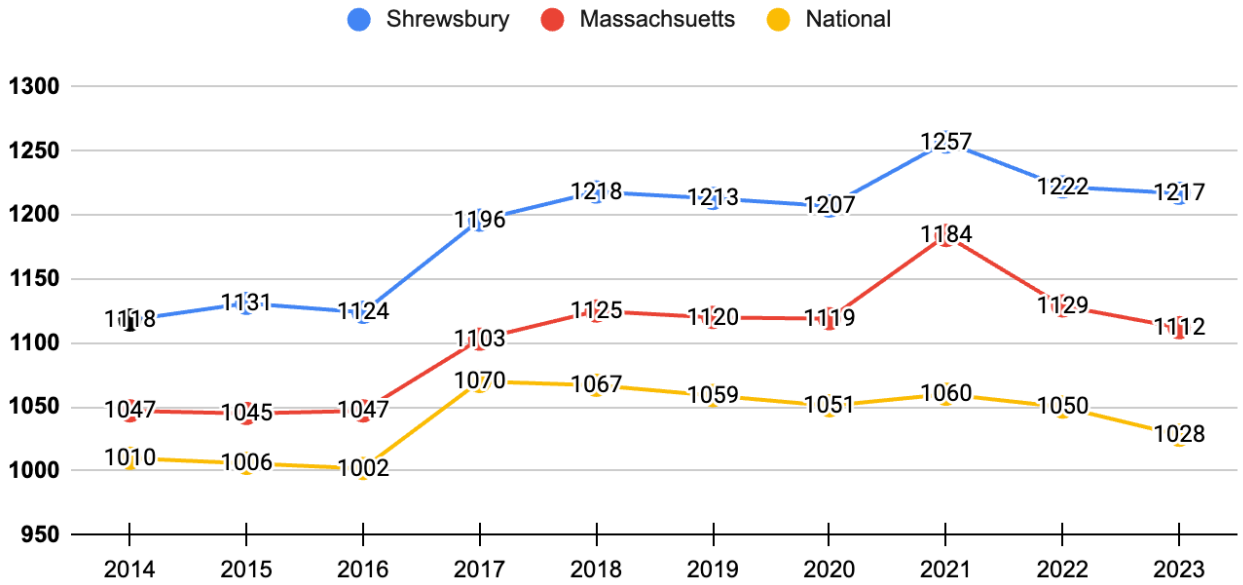


Figure 1

SAT Math Score (800 Score)

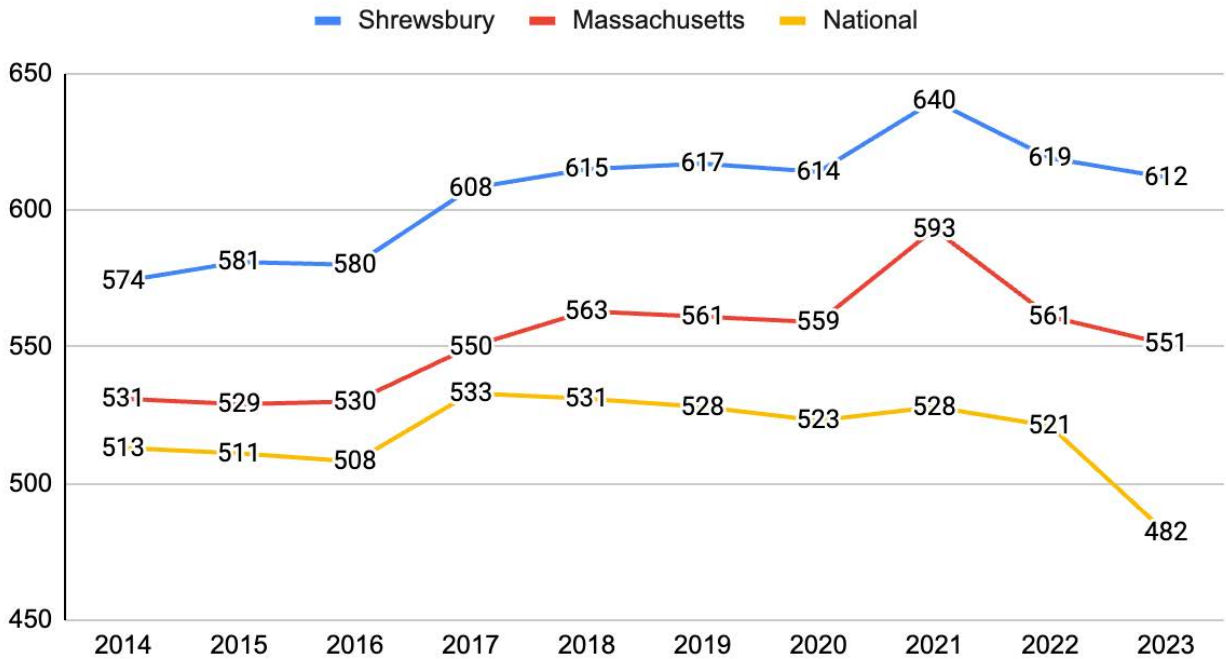
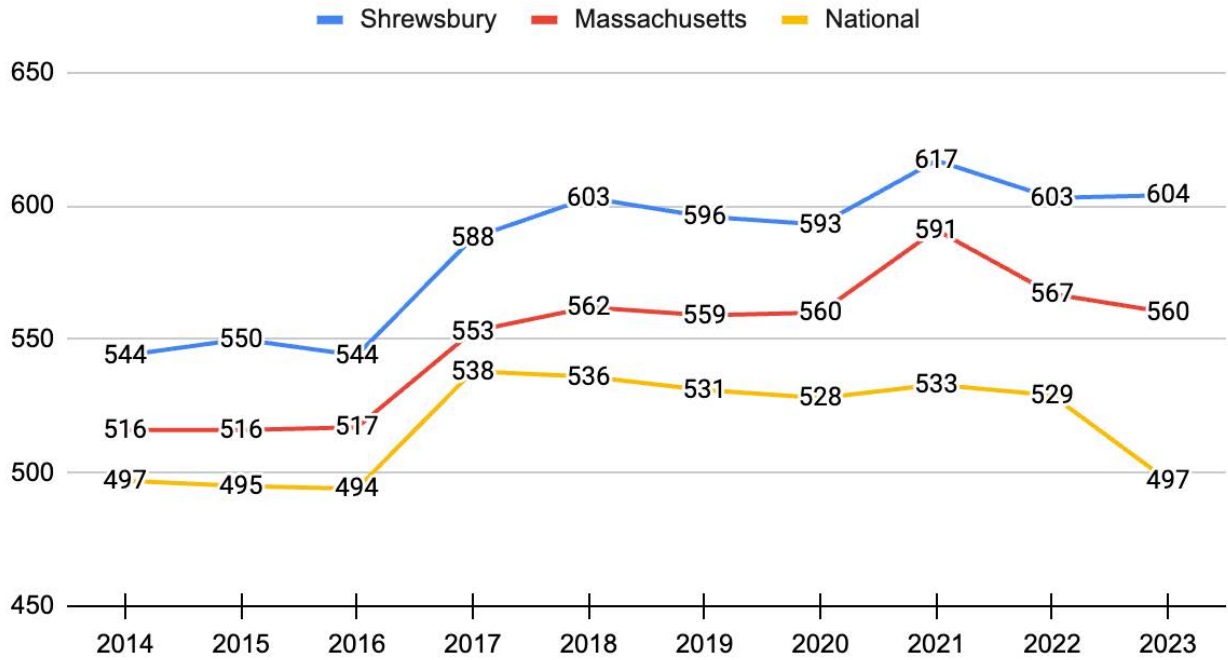


Figure 2

Figure 3

SAT: Evidenced Reading & Writing (800 Score)



Participation Rate

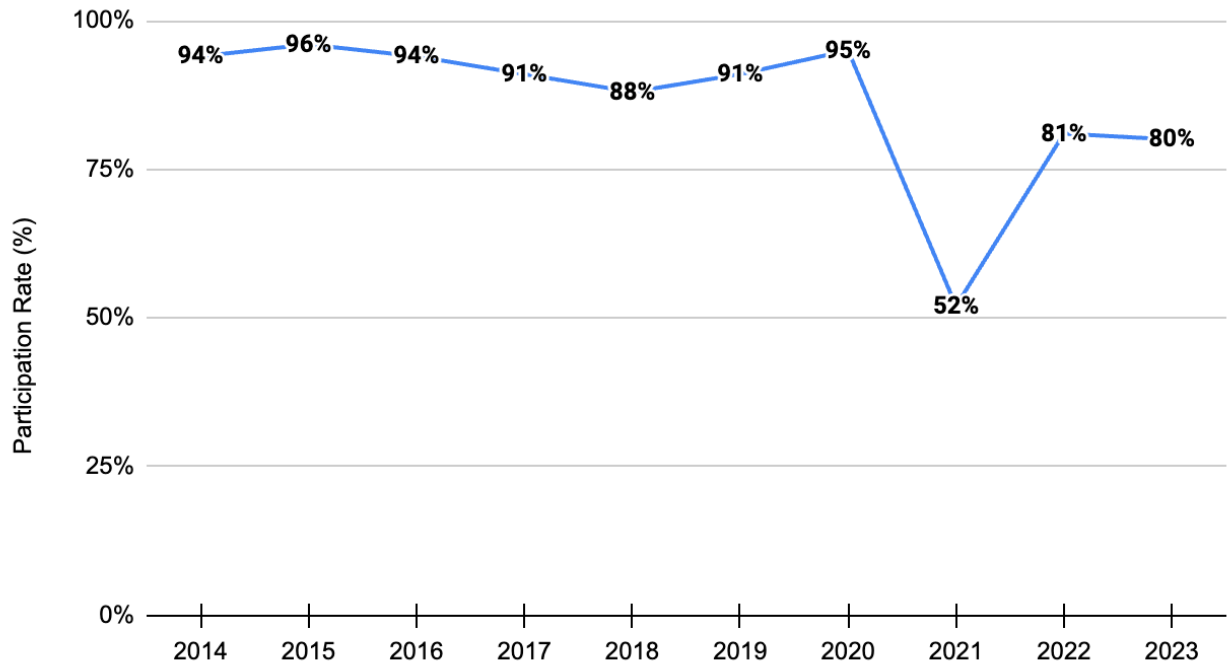


Figure 4

**Evidenced-Based Reading & Writing, and Math Scores by Gender
Shrewsbury High School, Massachusetts, and Nationally**

E-B Reading & Writing	SHS	Massachusetts	National
Males	613	561	517
Females	597	558	523
Male-to-Female Difference	+16	+3	-6
Math	SHS	Massachusetts	National
Males	636	565	515
Females	594	539	500
Male-to-Female Difference	+42	+26	+15

**SAT—Scores by Gender 2023
Shrewsbury High School**

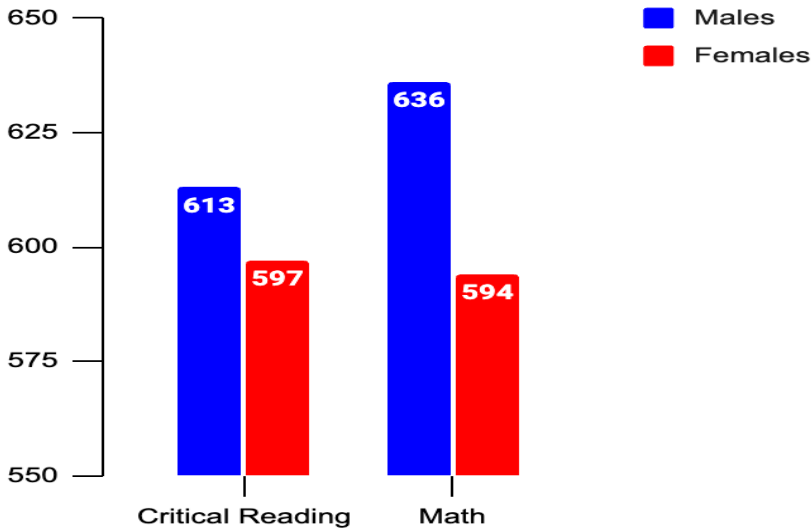


Figure 5

Evidenced-Based Reading & Writing, and Math Scores by Race/Ethnicity Shrewsbury High School

Race/Ethnicity*	Percent	Combined	EBRW	Math
Asian	31%	1315	644	671
Black/African American	3%	1136	576	560
Hispanic/Latino	8%	1060	541	520
White	52%	1188	592	596
Multi-race	n/a	n/a	n/a	n/a
No response	3%	1165	600	565

*Self-reported by students to the College Board

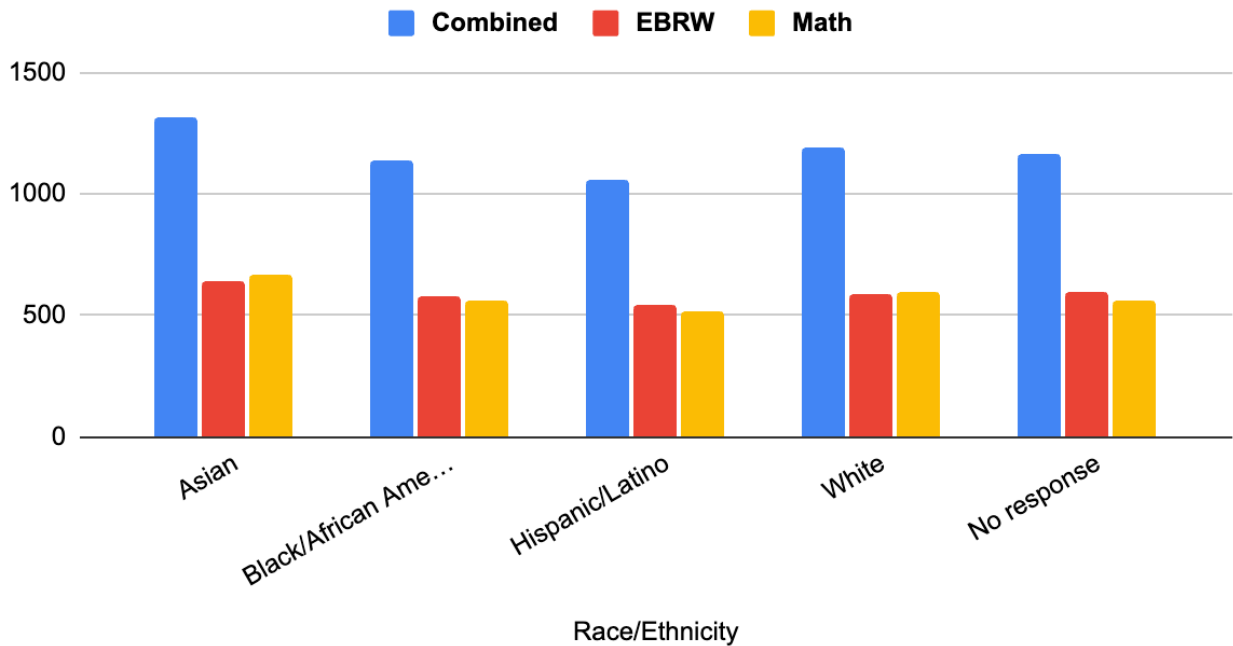


Figure 6

Evidenced-Based Reading & Writing, and Math Scores by Race/Ethnicity Massachusetts

Race/Ethnicity*	Percent	Combined	EBRW	Math
Asian	11%	1260	614	646
Black/African American	7%	971	492	479
Hispanic/Latino	14%	987	499	488
White	57%	1149	582	567
Multi-race	4%	1172	593	579
No response	7%	955	481	473

*Self reported by students to the College Board

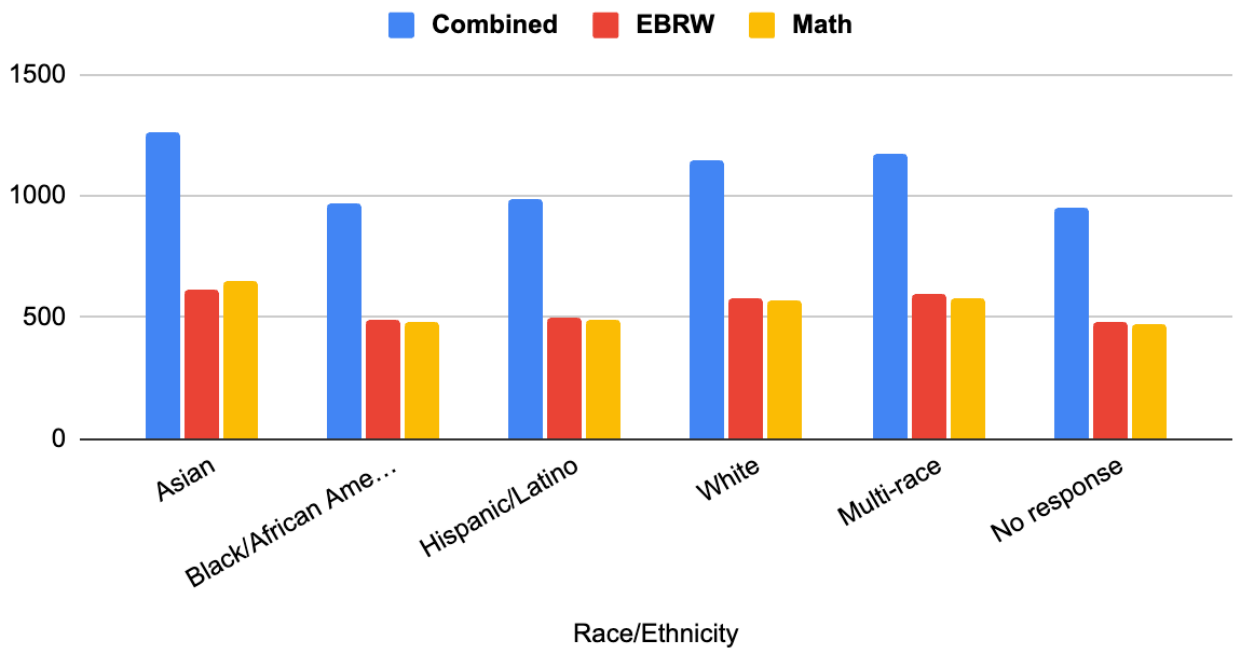


Figure 7

Evidenced-Based Reading & Writing, and Math Scores by Race/Ethnicity National

Race/Ethnicity*	Percent	Combined	EBRW	Math
Asian	10%	1219	593	626
Black/African American	12%	908	466	441
Hispanic/Latino	24%	943	482	461
White	39%	1082	550	532
Multi-race	4%	1091	556	535
No response	10%	955	478	477

*Self reported by students to the College Board

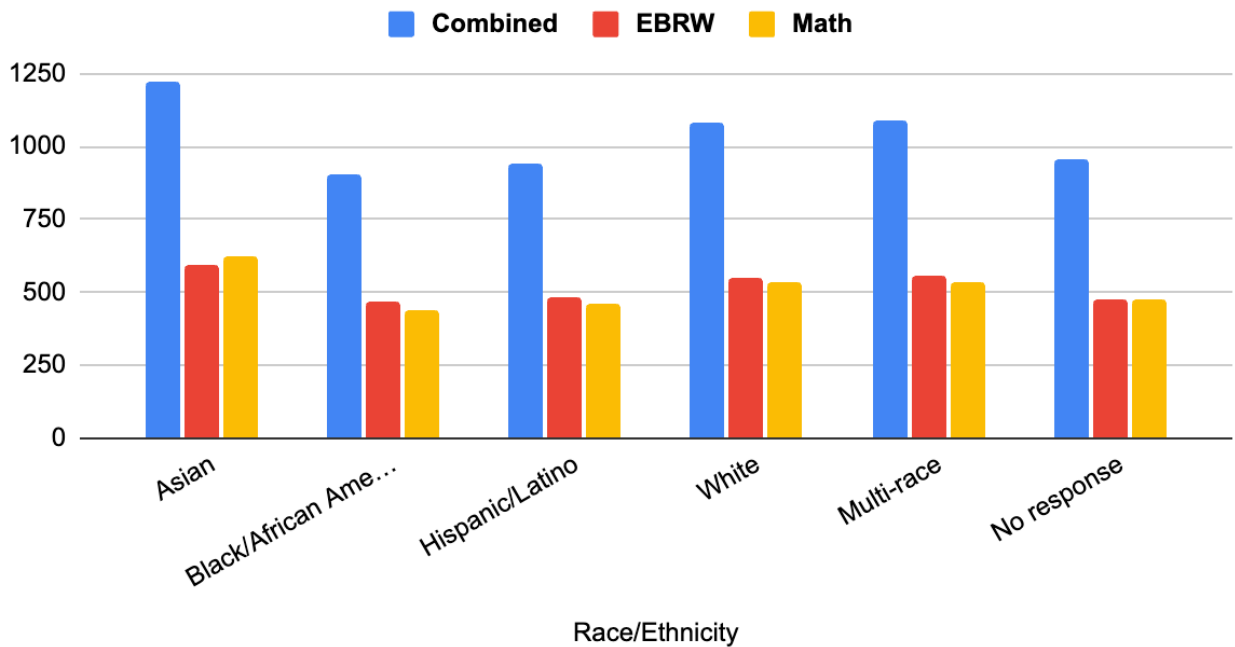


Figure 8

Advanced Placement Program

The Advanced Placement (AP) Program consists of a series of college-level courses and exams for secondary school students. Satisfactory completion of an AP Exam makes it possible for a student to earn college credit or advanced standing in college prior to arrival on the college campus. AP Exams are rigorous, multiple-component tests that are administered each May.

Of the 435 students in the Class of 2023, 256 students (59% of the class) took at least one AP Exam, out of 436 total SHS students who took an exam. Overall, 916 exams were administered to participating SHS students in 2023.

The following AP courses were offered during the 2022 – 2023 school year:

Biology	French Language
Calculus AB	Human Geography
Calculus BC	Psychology
Chemistry	Physics 1
Chinese Language	Physics C: Mechanics
English Language	Spanish Language
English Literature	Statistics
Environmental Science	Studio Art Drawing
	U.S. History

Appropriate Grade Levels for AP Courses

The College Board's policy related to the appropriate grade levels for AP courses has shifted. In 2016, it stated that "Student performance on AP exams illustrate that in many cases, AP courses are best positioned as part of a student's 11th and 12th grade academic experience. Some subject areas, however, such as World History and European History, can be successfully offered to academically prepared 10th grade students." However, the College Board's current policy removed the language specific to recommending waiting until 11th and 12th grade to take AP courses, while keeping the language that it "recognizes the autonomy of secondary schools and districts in setting the AP course participation policies that best meet their students' unique needs and learning goals. At the same time, AP courses are specifically designed to provide challenging, college-level coursework for willing and academically prepared high school students. Educators should be mindful of the following when considering offering AP to younger students. AP courses are rarely offered in 9th grade, and exam results show that, for the most part, 9th grade students are not sufficiently prepared to participate in a college-level course. Therefore, the College Board believes these students would be better served by coursework focusing on the academic building blocks necessary for later, successful enrollment in college-level courses. Many college admissions officers support this position, feeling that students should not be rushed into AP coursework, but should instead develop the necessary skills and conceptual understandings in foundational courses prior to enrolling in AP."

The College Board is now clearly promoting some AP coursework in earlier grades, as its new AP School Honor Roll, includes a criterion for taking at least one AP course in 9th or 10th grade "so that students are spreading their AP experience across grades rather than feeling disproportionate pressure in any single year." However, some critics believe that the College Board is promoting more AP courses at earlier grades for financial reasons. SHS will continue to review its policy of reserving AP coursework for 11th and 12th grades.

Advanced Placement Participation Rates

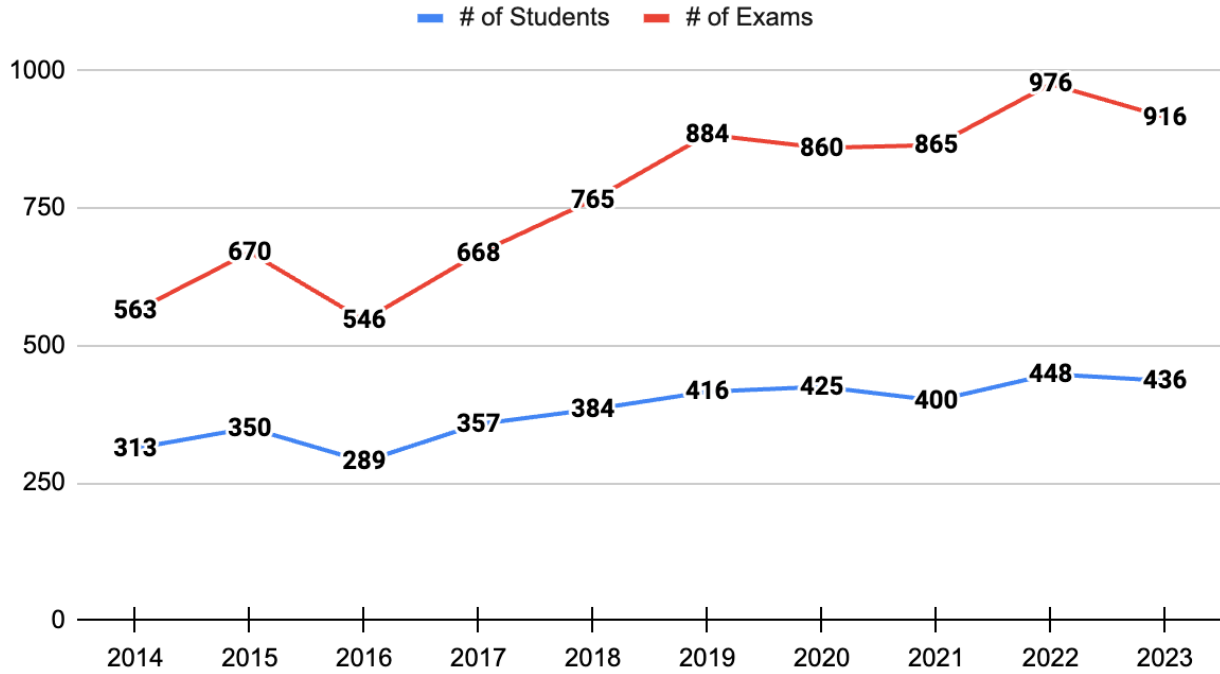


Figure 9

Of all the SHS students taking AP Exams, the percentage of students in each grade level is indicated below.

9th grade	0%
10th grade	<2%
11th grade	40.0%
12th grade	59.0%

# of Exams Taken by Students	SHS %	SHS # of Students Taking Exams
1	35.0%	165
2	30.0%	124
3	23.0%	101
4	8.0%	31
5 or more	4.0%	15

AP Scores by Subgroups as Self-Reported to the College Board

Category	# of Students	# of Exams	Mean Score	Total # of Juniors & Seniors
Race/Ethnicity				
American Indian or Alaska Native	n/a	n/a	n/a	n/a
Asian	190	478	3.74	186
Black/African American	18	27	3.63	18
Hispanic or Latino	26	43	3.63	26
White	170	299	3.66	169
Two or more races, non-Hispanic	15	29	3.93	15
No response	17	40	4.25	16
English Learners/Former English Learners	<5	Not reported	Not reported	Not reported
Students with Disabilities	<5	Not reported	Not reported	Not reported
Low Income (Fee Reduction Granted)	33	57	3.54	33
Gender				
Male	183	408	3.79	178
Female	251	504	3.68	250
Another response	<5	Not reported	Not reported	Not reported

Figure 10

**Advanced Placement Exams 2023
Average Scores
Shrewsbury High School, Massachusetts, and Nationally**

	# of Tests Taken	SHS	Mass	National
Biology	75	3.52	3.27	3.04
Calculus AB	48	3.54	3.04	2.99
Calculus BC	39	4.05	3.87	3.76
Chemistry	28	4.46	3.49	3.27
Chinese Language	10	2.90	4.04	4.05
Drawing	11	4.27	3.41	3.47
English Language	127	3.71	2.98	2.82
English Literature	50	4.26	3.51	3.26
Environmental Sci	31	3.74	2.98	2.79
French Language	10	4.0	3.41	3.20
Human Geography	77	3.82	2.91	2.75
Physics C	41	3.73	3.51	3.41
Physics 1	47	2.34	2.50	2.55
Psychology	118	4.13	2.94	2.89
Spanish Language	15	4.27	3.58	3.56
Statistics	97	3.78	2.94	2.88
US History	52	3.40	2.88	2.54

Figure 11

AP Average Scores: Shrewsbury, Massachusetts, & National

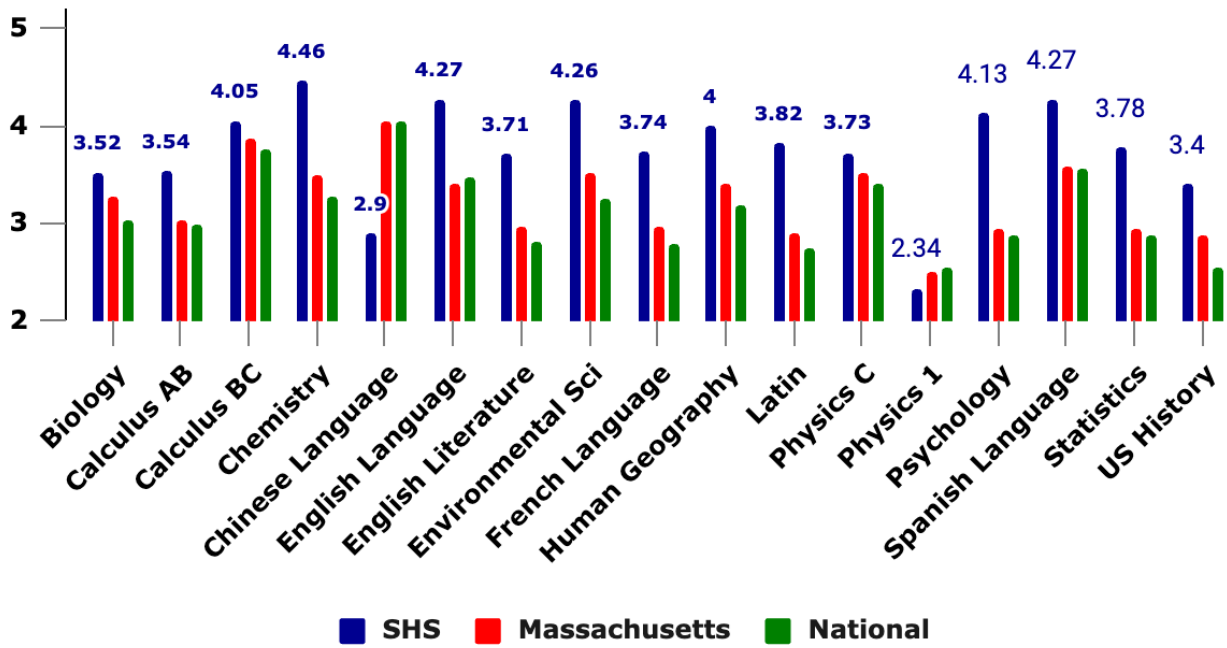


Figure 12

2023 Advanced Placement Exam Results

	1	2	3	4	5	# of tests administered	2023 % scoring 5	2023 % scoring 4 or above	2023 % scoring 3 or above	2022 % scoring 3 or above
Biology	1	10	26	25	13	75	17	50	85	94%
Calculus AB	2	10	9	14	13	48	27	56	75	77%
Calculus BC	0	1	11	12	15	39	38	69	97	91%
Chemistry	0	0	2	11	15	28	54	93	100	97%
Chinese Language	2	1	4	2	1	10	10	30	70	100%
Drawing	0	0	2	4	5	11	45	81	100	100%
English Language	1	19	33	37	37	127	29	58	84	89%
English Literature	0	0	9	19	22	50	44	82	100	97%
Environmental Science	0	3	8	14	6	31	19	64	90	92%
French Language	0	0	3	4	3	10	30	70	100	100%
Human Geography	7	6	14	17	33	77	43	65	83	93%
Physics C	1	4	8	20	8	41	20	69	89	85%
Physics 1	8	24	7	7	1	47	2	17	32	56%
Psychology	4	7	11	44	52	118	44	81	90	88%
Spanish Language	0	0	2	7	6	15	40	87	100	84%
Statistics	3	10	23	30	31	97	32	63	87	82%
US History	2	10	17	11	12	52	23	44	77	65%
VHS/Self Study	4	6	10	11	9	40	23	50	75	N/A
Totals	35	111	199	289	282	916	31	63	85	85%

Figure 13

Quick AP Highlights:

- The number of students taking AP exams is 436 (12 fewer than last year).
- The number of AP exams administered is 916 (60 fewer than last year).
- 59% of seniors took at least one AP exam, a particularly high percentage compared to most high schools.
- 31% of the exams administered resulted in a score of 5—the highest possible score available.
- 40 VHS or self-study exams were taken

**Overall AP Exam Scores
Shrewsbury High School**

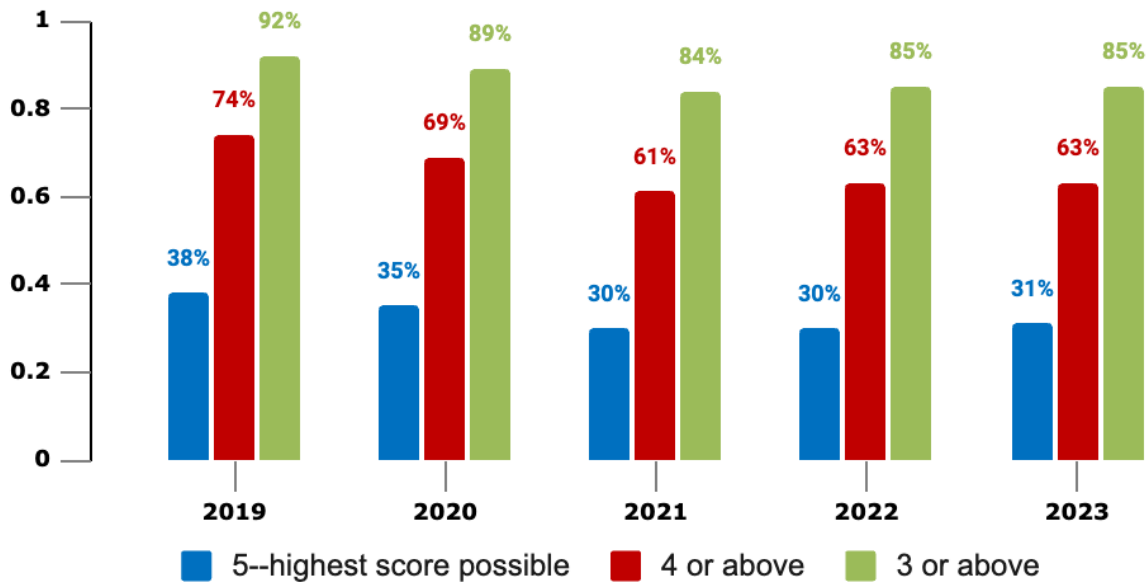


Figure 14

Advanced Placement Scholars

The AP Program offers several AP Scholar Awards to recognize high school students who have demonstrated college-level achievement through AP courses and exams. Although there is no monetary award, in addition to receiving an award certificate, this achievement is acknowledged on any AP Score Report that is sent to colleges the following fall.

Award Levels 2023

AP Scholar: Granted to students who receive scores of 3 or higher on three or more AP Exams over the course of their time in high school.

AP Scholar with Honor: Granted to students who receive an average score of at least 3.25 on all AP Exams taken, **and** scores of 3 or higher on four or more of these exams.

AP Scholar with Distinction: Granted to students who receive an average score of at least 3.5 on all AP Exams taken, **and** scores of 3 or higher on five or more of these exams.

Year	AP Scholar	AP Scholar w/Honors	AP Scholar w/Distinction	AP National Scholar	Total # of AP Scholars
2023	78	31	64	Discontinued	173
2022	81	26	67	Discontinued	174
2021	71	45	56	Discontinued	172
2020	58	34	72	3	167
2019	69	34	64	5	172
2018	66	20	49	6	141
2017	46	18	37	4	105
2016	47	21	33	6	107
2015	48	39	37	2	124
2014	29	25	31	1	85
2013	41	26	31	1	98
2012	19	25	44	2	88

The AP School Honor Roll

The [AP School Honor Roll](#) is a prestigious annual recognition program that celebrates schools whose AP programs have done outstanding work to welcome students into AP courses and support them on the path to college success.

- How to earn this recognition: Schools are included on the honor roll based on criteria that reflect a commitment to increasing college-going culture, providing opportunities for students to earn college credit, and maximizing college outcomes.
- Recognition tiers: There will be four tiers to the recognition program: bronze, silver, gold, and platinum. Each tier reflects a school’s ability to meet criteria anchored in research-based relationships between AP and college outcomes.
- Equity and Inclusion Award: Schools on the AP School Honor Roll can also earn the AP Equity and Inclusion Award, which recognizes schools that demonstrate a clear and effective commitment to equitable access to advanced coursework.

AP School Honor Roll Progress Report - 2023


Shrewsbury High School (221930)

Data Updated: September 06, 2023
Report Run: November 20, 2023

Honor Roll Criteria

Congratulations! Shrewsbury High School has earned Bronze recognition on the 2023 AP School Honor Roll.

Class of 2023

AP School Honor Roll Metrics	Bronze Criteria	Silver Criteria	Gold Criteria	Platinum Criteria	Your School  BRONZE Your school achieved all Bronze criteria!	
College Culture	40%	50%	65%	80%	59% <i>(271/459)</i>	Silver
College Credit	25%	30%	35%	50%	54% <i>(248/459)</i>	Platinum
College Optimization	2%	5%	10%	15%	2% <i>(7/459)</i>	Bronze

PSAT/NMSQT

The Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) is a program cosponsored by the College Board and National Merit Scholarship Corporation (NMSC). It's a standardized test that provides first-hand practice for the SAT. It also gives students a chance to enter the NMSC scholarship programs and gain access to college and career planning tools.

Similarly, to the SAT, the PSAT/NMSQT measures:

- Critical reading skills
- Math problem-solving skills
- Writing skills

National Merit Scholarship Program **Shrewsbury High School**

Year	Commended	Finalist	Scholarship Recipient	Hispanic Recognition Program
2023	26	3	1	
2022	20	3	1	-
2021	27	4	1	-
2020	26	3	1	-
2019	24	4	1	-
2018	18	5	1	-
2017	15	1	1	-
2016	19	2	2	-
2016	19	2	2	-
2015	19	1	1	-
2014	14	1	1	-
2013	17	4	1	1
2012	19	4	1	-
2011	12	1	1	-
2010	16	4	1	-
2009	17	3	1	-
2008	18	2	1	-
2007	14	3	1	-
2006	10	3	-	1
2005	15	2	-	-
2004	8	2	1	-
2003	8	2	1	2
2002	5	3	-	-
2001	4	1	-	-

National Merit Scholarship Program

Program Recognition: Of the 1.5 million juniors who take the PSAT, the top 2%-3% with the highest combined scores (Reading + Mathematics + Language and Writing Skills) qualify for recognition in the National Merit Scholarship Program.

Commended Students: students who score in the top 2% - 3% of all test takers.

Semifinalists: students who score in the top 1% - 1.5% of all test takers. To ensure that academically able young people from all parts of the United States are included in this talent pool, Semifinalists are designated on a state-by-state basis. That is, semifinalists are the highest-scoring entrants in each state. To be considered for a National Merit Scholarship, Semifinalists must advance to Finalist standing in the competition by meeting high academic standards.

Finalists: Most students (approximately 90%) who complete the Semifinalist application process will be named National Merit Finalists.

Scholarship Recipients: All winners of Merit Scholarship awards (Merit Scholar® designees) are chosen from the Finalist group, based on their abilities, skills, and accomplishments—without regard to gender, race, ethnic origin, or religious preference. A variety of information is available for NMSC selectors to evaluate—the Finalist's academic record, information about the school's curricula and grading system, two sets of test scores, school official's written recommendation, information about the student's activities and leadership, and the Finalist's own essay.

National Merit Scholarship Program

Program Recognition: Of the 1.5 million juniors who take the PSAT, the top 2%-3% with the highest combined scores (Reading + Mathematics + Language and Writing Skills) qualify for recognition in the National Merit Scholarship Program.

Commended Students: students who score in the top 2% - 3% of all test takers.

Semifinalists: students who score in the top 1% - 1.5% of all test takers. To ensure that academically able young people from all parts of the United States are included in this talent pool, Semifinalists are designated on a state-by-state basis. That is, semifinalists are the highest-scoring entrants in each state. To be considered for a National Merit Scholarship, Semifinalists must advance to Finalist standing in the competition by meeting high academic standards.

Finalists: Most students (approximately 90%) who complete the Semifinalist application process will be named National Merit Finalists.

Scholarship Recipients: All winners of Merit Scholarship awards (Merit Scholar® designees) are chosen from the Finalist group, based on their abilities, skills, and accomplishments—without regard to gender, race, ethnic origin, or religious preference. A variety of information is available for NMSC selectors to evaluate—the Finalist's academic record, information about the school's curricula and grading system, two sets of test scores, school official's written recommendation, information about the student's activities and leadership, and the Finalist's own essay.



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **VI. Policy**

MEETING DATE: **11/29/23**

BACKGROUND INFORMATION:

ACTION RECOMMENDED:

COMMITTEE MEMBERS/STAFF AVAILABLE FOR PRESENTATION:



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **VII. Finance & Operations**

MEETING DATE: **11/29/23**

A. Enrollment Projections for 2024-2025 School Year: Report

BACKGROUND INFORMATION:

Mr. Girardi will provide information regarding enrollment projections for the district's student population in future years. The report includes information on historical and projected enrollment from the New England School Development Council, the Shrewsbury Town Manager's Office, and the McKibben Report created for the recent capital planning report.

ACTION RECOMMENDED:

That the School Committee accept the report and take whatever steps it deems necessary in the interests of the Shrewsbury Public Schools.

STAFF AVAILABLE FOR PRESENTATION:

Mr. Christian Girardi, Assistant Superintendent for Finance and Operations



Shrewsbury Public Schools

Christian Girardi

Assistant Superintendent for Finance and Operations

November 29, 2023

To: School Committee

Subj: ENROLLMENT PROJECTION REPORT

Background

Enrollment projections are an essential element in short- and long-term school planning. We use enrollment projections for near-term class size and staff planning, as well as long-term projections for capital planning purposes. Enrollment projection models provide Shrewsbury three key elements of our budget development:

- evidence of trusted information to make enrollment projections
- short-term planning to make accurate projections for the number of sections and staffing needed each year to address School Committee class size guidelines
- long-term capital planning that projects enrollment trends over time to keep pace with physical space needs and evolving mandates for educating students

Enrollment Projection Models

The following projection methods provide Shrewsbury with a trusted source of information to forecast student enrollment.

- **Town Manager's [TM] Enrollment Report**
 - conducted annually. This is a standard *cohort survival method* using a five-year average for each cohort survival ratio.
- **New England School Development Council [NESDEC] Enrollment Report**
 - conducted annually through membership with the Council. This is a three-year *cohort survival method* for grades 1-12 and a 99% survival ratio for birth to kindergarten.
- **The McKibben Report**
 - This was a one-time report conducted in March 2022 as part of the PreK-12 Capital Investment and Assessment Study. This uses a *Cohort-Component Method*, which forecasts future population based on the survival of the existing population and the births that will occur.

Short-term enrollment projections

Short-term enrollment projections offer greater accuracy due to the known factors based on current enrollment and birth rate actuals. Chart 1 below details the enrollment projection from The Town Manager and NESDEC projections to the actual number of students enrolled as of October 1, 2023. The data shows an accuracy percentage of 1.29 to 1.54 variance between the projections and the actual number of enrollments for 2023-2024.

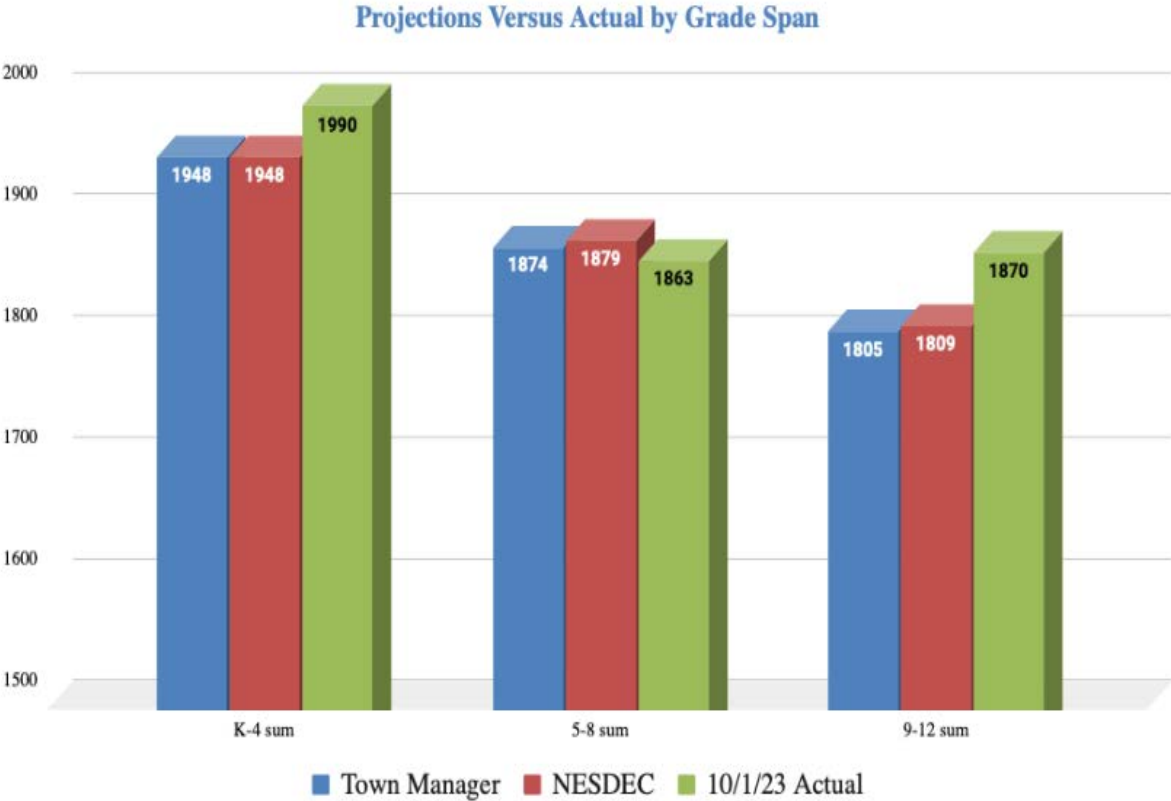
Chart 1: Enrollments projected versus actual for 2023-2024

	TM Projection	NESDEC Projection	Actual as of 10/1
Preschool	na	205	202
	TM Projection	NESDEC Projection	Actual
Kindergarten	351	330	359
Grade 1	415	412	392
Grade 2	390	391	400
Grade 3	381	379	390
Grade 4	434	436	449
Grade 5	453	455	470
Grade 6	446	449	450
Grade 7	509	509	483
Grade 8	466	466	460
Grade 9	446	450	491
Grade 10	486	486	507
Grade 11	444	445	438
Grade 12	429	428	434
	5,650	5,636	5,723
		Accuracy	Variance
Actual v. Town Mgr		101.29%	1.29%
Actual v. NESDEC		101.54%	1.54%
		Variance	Variance
			73
			87

Highlights

The accuracy of these projections provides a strong set of data for short-term class size decisions, however there are limiting factors that do not account for sudden changes in enrollment that may impact the forecast formula. Highlighted above, the actual numbers in Grades 7, 9 and 10 have greater variances. This is information that the School Department attributes to upstream causes such as the loss of access to Assabet Regional Technical High School in Grade 9 and 10. Acceptance to the recently formed St. John’s Middle School has an impact in Grade 7, with 15 students from Shrewsbury enrolling in that program. The District is also monitoring the impact on migration to Shrewsbury, including the unexpected settling of homeless families and potential impacts across all levels (and would not have been factored into enrollment formulas.) Graph 1 below shows the variances across grade spans.

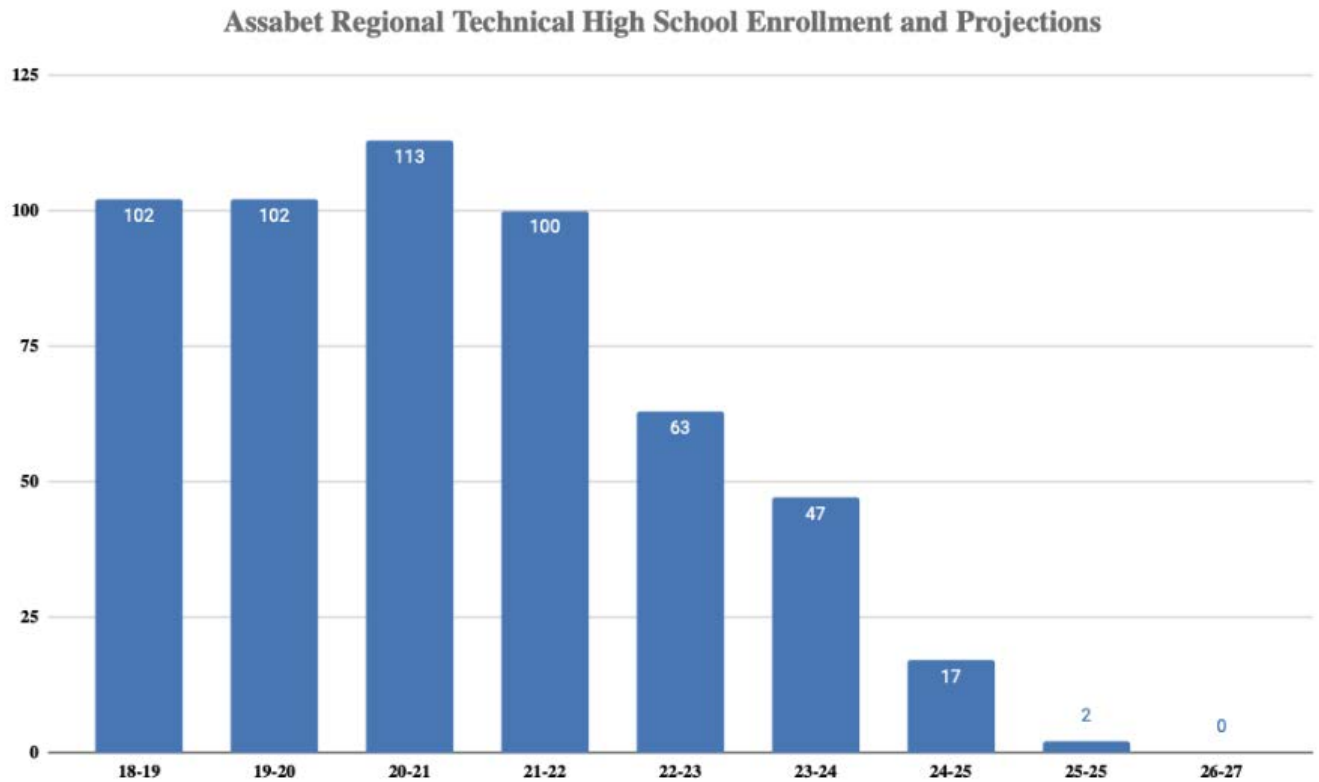
Graph 1: 2023-2024 Projections versus Actual Enrollments



Assabet Regional Technical High School

We continue to monitor the decrease in enrollment at Assabet Regional Technical High School numbers as a result of the change in policy for accepting Shrewsbury students into their program. Graph 2 below show the decline in Assabet Enrollments with the projection of 0 students attending by 2026-2027.

Graph 2: Assabet Regional Technical high School Enrollment: Impact on High School Projections



Planning for FY25

Chart 2 below compares the October 1, 2023 enrollment numbers by grade level with the 2024-2025 projections from the Town Manager’s Office and NESDEC. The goal is to use these three data sets to build class sections and right-fit staffing. As a continuation from the data above, Grades 7 and 9 continue to project measurably higher variances, as does Grade 4. Regardless of these variances, the overall K-12 enrollment (Totals in Chart 2 below) provides a level of accuracy that is not projecting impactful changes to FY25 class size and staffing preparation.

Chart 2: Projection comparison: K-12 for 2024-2025 School Year

	10/1/2023 Enrollment	Town Manager Projected for SY 24-25	Change: 10/1/23 to SY 24-25	NESDEC Projected for SY 24-25	Change: 10/1/23 to SY 24-25
K	359	396	37	359	0
Gr. 1	392	409	17	406	14
Gr. 2	400	412	12	414	14
Gr. 3	390	406	16	406	16
Gr. 4	449	399	-50	401	-48
K-4	1990	2022	32	1986	-4
Gr. 5	470	460	-10	462	-8
Gr. 6	450	478	28	480	30
Gr. 5 + Gr. 6	920	938	18	942	22
Gr. 7	483	445	-38	448	-35
Gr. 8	460	482	22	479	19
Gr. 7 + Gr. 8	943	927	-16	927	-16
Gr. 9	491	441	-50	444	-47
Gr. 10	507	496	-11	492	-15
Gr. 11	438	497	59	493	55
Gr. 12	434	437	3	437	3
Gr. 9-12	1870	1871	1	1866	-4
Totals	5723	5758	35	5721	-2

Preschool

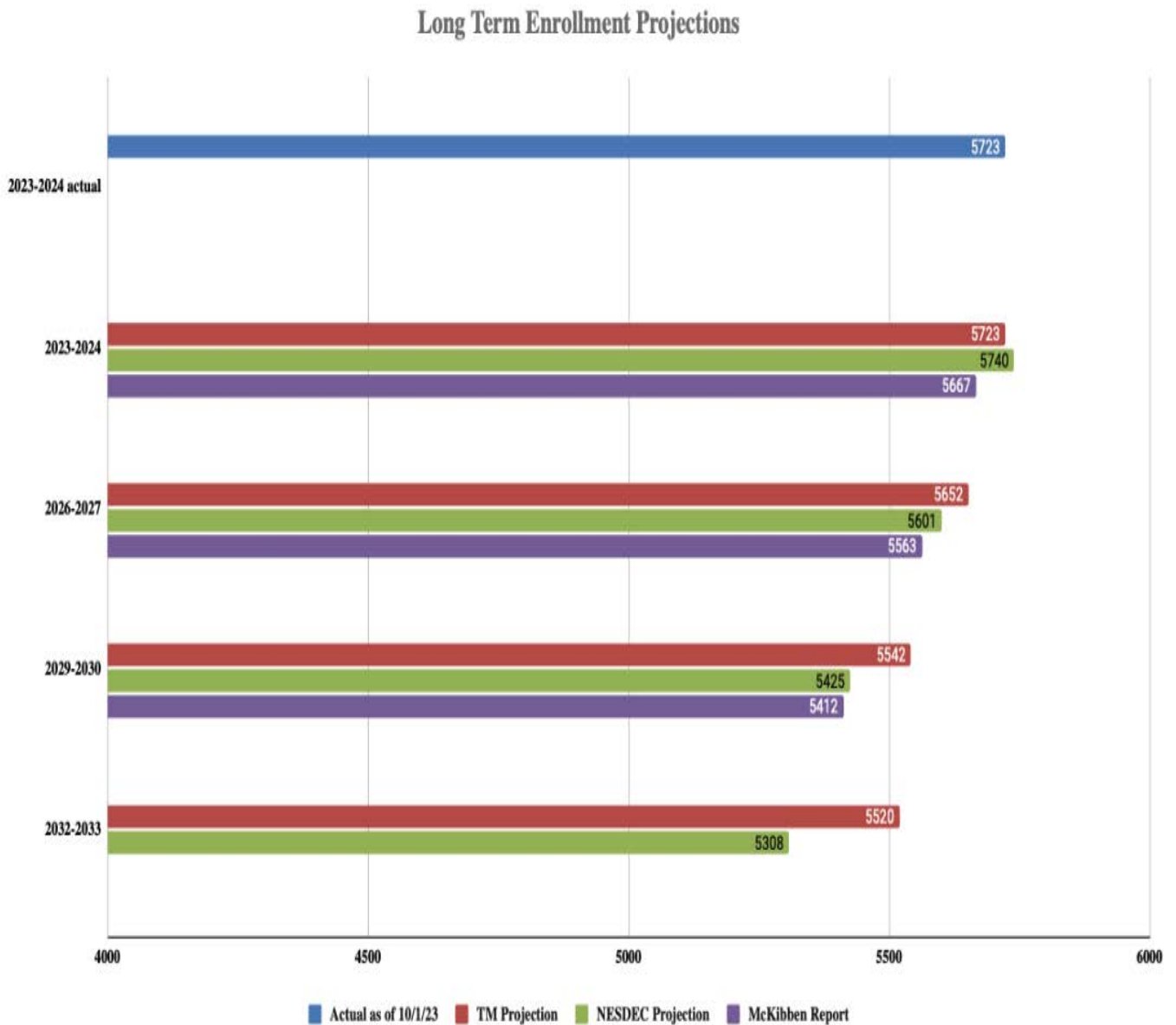
For comparison purposes, preschool has not been factored into the short- and long-term projections shown above due to this cohort not being part of the Town Manager’s calculation. Parker Road Preschool currently has a set number of seats it can offer through multiple programs based on day, time of day, and program need. Ten year projections for preschool shows a fixed enrollment of 242 students due to this being the maximum number of seats currently available.

Parker Road Preschool continues to review trends of interest in preschool from our community to monitor if it is the right-size fit for families, and the School Department will continue to monitor trends at the state level as conversations continue around universal public preschool.

Long-term planning

Long-term enrollment projections provide data for capital planning purposes that project enrollment trends over time to keep pace with physical space needs and evolving mandates for educating students. Graph 2 below depicts the three K-12 projection models at three-year intervals as compared to the 2023-2024 actual enrollment. All three projections show a slow and marginal decrease in enrollment over the projected term.

Graph 2: 10 Year Enrollment Projections



Post-pandemic: birth rates

A factor in declining enrollment projections is the low birth rate totals from 2020 and 2022, which one would equate to the COVID-19 pandemic. From 2011 through 2019, Shrewsbury averaged 340 births per year. 2020 and 2022 are exceptions from the average and will have a down-stream impact on 10 year projections.

Chart 3: Birth Rates as a factor for long-term projections

Births		Entering K		Birth to K ratio
2011	373	2016	388	1.040
2012	326	2017	355	1.089
2013	372	2018	351	0.944
2014	341	2019	362	1.062
2015	324	2020	287	0.886
2016	336	2021	343	1.021
2017	313	2022	358	1.144
2018	324	2023	359	1.108
			2 Year Avg	1.126
Projections				
2019	352	2024	0	0.000
2020	259	2025	0	0.000
2021	343	2026	0	0.000
2022	297	2027	0	0.000
	313	Avg		
Assumed (241 births through 10/27/2023)				

Summary

The enclosed enrollment projection models allow us to complete our short-term staff planning for the 2023-2024 school year. This takes into account the quantitative projections of enrollment trends over time through our projection models, as well as qualitative projections identifying variables such as Assabet and St. John’s acceptance rates, migration to Shrewsbury, and potential changes to preschool.

The projection models also provide critical data for long-term capital planning with 10-year

enrollment projections. This is critical to our work with our current Statement of Interest to the Massachusetts School Building Authority for the potential expansion of Shrewsbury High School, as well as our PreK-4 Space Planning Committee to make recommendations on long-term capital planning for preschool and elementary facilities and programming.

SHREWSBURY PUBLIC SCHOOLS

**POPULATION AND ENROLLMENT FORECASTS,
2022-23 THROUGH 2031-32**

MARCH 2022

**MCKIBBEN DEMOGRAPHIC RESEARCH, LLC
JEROME MCKIBBEN, PH.D.
ROCK HILL, SC**

j.mckibben@mckibbendemographics.com

978-501-7069



CONTENTS

EXECUTIVE SUMMARY 3

INTRODUCTION 4

DATA 5

ASSUMPTIONS 6

METHODOLOGY 9

REFERENCES..... 11

Appendix A: Supplemental Tables 12

Appendix B: Population Forecasts 15

Appendix C: Population Pyramids 21

Appendix D: Enrollment Forecasts 25

EXECUTIVE SUMMARY

1. The resident total fertility rate for the Shrewsbury Public Schools over the life of the forecasts is below replacement level. (1.82 vs. the replacement level of 2.1)
2. Most in-migration to the district continues to occur in the 0-to-9 and 25-to-44-year-old age groups.
3. The local 18-to-24-year-old population continues to leave the district, going to college or moving to other urbanized areas. This population group accounts for the largest segment of the district's out migration flow and will increase steadily over the next 10 years. The second largest migration outflow is in the 70+ age groups.
4. The primary factors causing the district's enrollment to decrease over the next nine years is the increase in empty nest households, the relatively low number of elderly housing units turning over coupled with a flat rate of in migration of young families.
5. Changes in year-to-year enrollment over the next ten years will primarily be due to small cohorts entering and moving through the school system in conjunction with larger cohorts leaving the system.
6. The elementary enrollment will begin to increase after the 2024-25 school year.
7. The median age of the district's population will increase from 43.7 in 2020 to 46.6 in 2030.
8. Even if the district continues to have some amount of annual new housing unit construction over the next 10 years, the rate, magnitude, and price of existing home sales will become the increasingly dominant factor affecting the amount of population and enrollment change.
9. Total district enrollment is forecasted to decrease by 80 students, or -1.4%, between 2021-22 and 2026-27. Total enrollment will decrease by 168 students, or -2.9%, from 2026-27 to 2031-32.

INTRODUCTION

By demographic principle, distinctions are made between projections and forecasts. A projection extrapolates the past (and present) into the future with little or no attempt to take into account any factors that may impact the extrapolation (e.g., changes in fertility rates, housing patterns or migration patterns) while a forecast results when a projection is modified by reasoning to take into account the aforementioned factors.

To maximize the use of this study as a planning tool, the ultimate goal is not simply to project the past into the future, but rather to assess various factors' impact on the future. The future population and enrollment change of each school district is influenced by a variety of factors. Not all factors will influence the entire school district at the same level. Some may affect different areas at dissimilar magnitudes and rates causing changes at varying points of time within the same district. The forecaster's judgment, based on a thorough and intimate study of the district, has been used to modify the demographic trends and factors to predict likely changes more accurately. Therefore, strictly speaking, this study is a forecast, not a projection; and the amount of modification of the demographic trends varies between different areas of the district as well as within the timeframe of the forecast.

To calculate population forecasts of any type, particularly for smaller populations such as a school district, realistic suppositions must be made as to what the future will bring in terms of age specific fertility rates and residents'

demographic behavior at certain points of the life course. The demographic history of the school district and its interplay with the social and economic history of the area is the starting point and basis of most of these suppositions particularly on key factors such as the age structure of the area. The unique nature of each district's and attendance area's demographic composition and rate of change over time must be assessed and understood to be factors throughout the life of the forecast series. Moreover, no two populations, particularly at the school district and attendance area level, have exactly the same characteristics.

The manifest purpose of these forecasts is to ascertain the demographic factors that will ultimately influence the enrollment levels in the district's schools. There are of course, other non-demographic factors that affect enrollment levels over time. These factors include, but are not limited to transfer policies within the district; student transfers to and from neighboring districts; placement of "special programs" within school facilities that may serve students from outside the attendance area; state or federal mandates that dictate the movement of students from one facility to another (No Child Left Behind was an excellent example of this factor); the development of charter schools in the district; the prevalence of home schooling in the area; and the dynamics of local private schools.

Unless the district specifically requests the calculation of forecasts that reflect the effects of changes in these non-demographic factors, their influences are

held constant for the life of the forecasts. Again, the main function of these forecasts is to determine what impact demographic changes will have on future enrollment. It is quite possible to calculate special “scenario” forecasts to measure the impact of school policy modifications as well as planned economic and financial changes. However, in this case the results of these population and enrollment forecast are meant to represent the most likely scenario for changes over the next 10 years in the district and its attendance areas.

The first part of the report will examine the assumptions made in calculating the population forecasts for the Shrewsbury Public Schools. Since the results of the population forecasts drive the subsequent enrollment forecasts, the assumptions listed in this section are paramount to understanding the area’s demographic dynamics. The remainder of the report is an explanation and analysis of the district’s population forecasts and how they will shape the district’s grade level enrollment forecasts.

DATA

The data used for the forecasts come from a variety of sources. The Shrewsbury Public Schools provided enrollments by grade and attendance center for the school years 2017-18 to 2021-22. Birth and death data for the years 2000 through 2018 were obtained from the Massachusetts Department of Health. The net migration values were calculated using Internal Revenue Service migration reports for the years 2000 through 2018. The data used for the calculation of migration models came

from the United States Bureau of the Census, 2005 to 2010, and the models were designed using demographic and economic factors. The base age-sex population counts used are from the results of the 2010 Census.

Recently the Census Bureau began releasing annual estimates of demographic variables at the block group and tract level from the American Community Survey (ACS). There has been wide scale reporting of these results in the national, state, and local media. However, due to the methodological problems the Census Bureau is experiencing with their estimates derived from ACS data, particularly in areas with a population of less than 60,000, the results of the ACS are not used in these forecasts. For example, given the sampling framework used by the Census Bureau, each year only 350 of the over 14,300 current households in the district would have been included. For comparison 1,600 households in the district were included in the sample for the long form questionnaire in the 2000 Census. As a result of this small sample size, the ACS survey result from the last 5 years must be aggregated to produce the tract and block group estimates.

To develop the population forecast models, past migration patterns, current age specific fertility patterns, the magnitude and dynamics of the gross and net migration, the current age specific mortality trends, the distribution of the population by age and sex, the rate and type of existing housing unit sales, and future housing unit construction are considered primary variables. In addition, the change in household size

relative to the age structure of the forecast area was addressed. While there was a slight drop in the average household size in the Shrewsbury Public Schools as well as most other areas of the state during the previous 20 years, the rate of this decline has been forecasted to slow over the next ten years.

ASSUMPTIONS

For these forecasts, the mortality probabilities are held constant at the levels calculated for the year 2010. While the number of deaths in an area are impacted by and will change given the proportion of the local population over age 65, in the absence of an extraordinary event such as a natural disaster or a breakthrough in the treatment of heart disease, death rates rarely move rapidly in any direction, particularly at the school district or attendance area level. Thus, significant changes are not foreseen in district's mortality rates between now and the year 2031. (At this point in time, there is insufficient data of the geographic and age level impacts of COVID-19 on mortality rates. We assume that most areas will return to their traditional mortality rate levels by 2022.) Any increases forecasted in the number of deaths will be due primarily to the general aging of the district's population and specifically to the increase in the number of residents aged 65 and older.

Similarly, fertility rates are assumed to stay fairly constant for the life of the forecasts. Like mortality rates, age specific fertility rates rarely change quickly or dramatically, particularly in

small areas. Even with the recently reported rise in the fertility rates of the United States, overall fertility rates have stayed within a 10% range for most of the last 40 years. In fact, the vast majority of year-to-year change in an area's number of births is due to changes in the number of women in childbearing ages (particularly ages 20-29) rather than any fluctuation in an area's fertility rate.

The resident total fertility rate (TFR), the average number of births a woman will have while living in the school district during her lifetime, is estimated to be 1.82 for the total district for the ten years of the population forecasts. A TFR of 2.1 births per woman is considered the theoretical "replacement level" of fertility necessary for a population to remain constant in the absence of in-migration. Therefore, in the absence of migration, fertility alone would be slightly below the level needed to maintain the current level of population and enrollment within the Shrewsbury Public Schools over the course of the forecast period. At the current TFR and given the number of women in prime childbearing age in the district (ages 20–34-year-old), the district will consistently see the number of total resident births be on average over 60 lower than the average enrollment in grade one.

A close examination of data for the Shrewsbury Public Schools has shown the age specific pattern of net migration will be nearly constant throughout the life of the forecasts. While the number of in and out migrants has changed in past years for the Shrewsbury Public Schools (and will change again over the next 10 years), the basic age pattern of the migrants has stayed nearly the same over the last 30

years. Based on the analysis of data it is safe to assume this age specific migration trend will remain unchanged into the future. This pattern of migration shows most of the local out-migration occurring in the 18-to-24-year-old age group as young adults leave the area to go to college or move to other urbanized areas. The second group of out-migrants is those householders aged 70 and older who are downsizing their residences. Most of the non-college in-migration occurs in the 0-to-9 and 25-44 age groups (the bulk of which come from areas within 75 miles of the Shrewsbury Public Schools) primarily consisting of younger adults and their children.

As the Worcester County area is not currently contemplating any major expansions or contractions, the forecasts also assume that the current economic, political, social, and environmental factors, as well as the transportation and public works infrastructure (with a few notable exceptions) of the Shrewsbury Public Schools and its attendance areas will remain the same through the year 2031. Below is a list of assumptions and issues that are specific to the Shrewsbury Public Schools. These issues have been used to modify the population forecast models to predict the impact of these factors more accurately on each area's population change.

Specifically, the forecasts for the Shrewsbury Public Schools assume that throughout the study period:

- a. The national, state, or regional economy does not go into deep recession at any time during the 10 years of the forecasts; (Deep recession is defined as four consecutive quarters where the

GDP contracts greater than 1% per quarter)

- b. Interest rates have reached a historic low and will not fluctuate more than one percentage point in the short term; the interest rate for a 30-year fixed home mortgage stays below 4.5%;
- c. The rate of mortgage approval stays at 2015-2020 levels and lenders do not return to “sub-prime” mortgage practices;
- d. There are no additional restrictions placed on home mortgage lenders or additional bankruptcies of major credit providers;
- e. The rate of housing foreclosures does not exceed 125% of the 2015-2020 average of Worcester County for any year in the forecasts;
- f. All currently planned, planned, approved, and permitted housing developments are built out and completed by 2030. All new housing units constructed are occupied by 2031. Speculative new home construction plans are not included;
- g. The average annual unemployment rates for the Worcester County and the Greater Boston Metropolitan Area will remain below 7.5% for the 10 years of the forecasts;
- h. The intra-district student transfer policy remains

unchanged over the next 10 years;

- i. The rate of students transferring out of the Shrewsbury Public Schools will remain at the 2015-16 to 2020-21 average;
- j. The inflation rate for gasoline will stay below 5% per year for the 10 years of the forecasts;
- k. The state of Massachusetts does not change the current policy on open enrollment or school vouchers anytime in the next 10 years;
- l. There will be no building moratorium within the district;
- m. Businesses within the district and the Shrewsbury Public Schools area will remain viable;
- n. There are no charter schools opened in the district anytime over the next 10 years;
- o. The number of existing home sales in the district that are a result of “distress sales” (homes worth less than the current mortgage value) will not exceed 20% of total homes sales in the district for any given year;
- p. Housing turnover rates (sale of existing homes in the district) will remain at their current levels. The majority of existing home sales are made by homeowners over the age of 60;
- q. The district will have at least an average of 350 existing home

sales per year for the next 10 years;

- r. The district will have at least an average of 50 new single-family housing units constructed per year over the next 10 years;
- s. Private school and home school attendance rates will remain constant;
- t. The rate of foreclosures for commercial property remains at the 2015-2020 average for Worcester County.

If a major employer in the district or in the Worcester County or the Greater Boston Metropolitan Area (particularly in western parts of the metropolitan area) closes, reduces or expands its operations, the population forecasts would need to be adjusted to reflect the changes brought about by the change in economic and employment conditions. The same holds true for any type of natural disaster, major change in the local infrastructure (e.g., highway construction, water and sewer expansion, changes in zoning regulations etc.), a further economic downturn, any additional weakness in the housing market or any instance or situation that causes rapid and dramatic population changes that could not be foreseen at the time the forecasts were calculated.

The high proportion of high school graduates from the Shrewsbury Public Schools that attend college or move to urban areas outside of the district for employment is a significant demographic factor. Their departure is a major reason for the extremely high out-migration in the 18 to 24 age group and was taken into

account when calculating these forecasts. The out-migration of graduating high school seniors is expected to continue over the period of the forecasts and the rate of out-migration has been forecasted to remain the same over the life of the forecast series.

Finally, all demographic trends (i.e., births, deaths, and migration) are assumed to be linear in nature and annualized over the forecast period. For example, if 1,000 births are forecasted for a 5-year period, an equal number, or proportion of the births are assumed to occur every year, 200 per year. Actual year-to-year variations do and will occur, but overall year to year trends are expected to be constant.

METHODOLOGY

The population forecasts presented in this report are the result of using the Cohort-Component Method of population forecasting (Siegel, and Swanson, 2004: 561-601) (Smith et. al. 2004). As stated in the **INTRODUCTION**, the difference between a projection and a forecast is in the use of explicit judgment based upon the unique features of the area under study. Strictly speaking, a cohort projection refers to the future population that would result if a mathematical extrapolation of historical trends. Conversely, a cohort-component forecast refers to the future population that is expected because of a studied and purposeful selection of the components of change (i.e., births, deaths, and migration) and forecast models are developed to measure the impact of these changes in each specific geographic area.

Five sets of data are required to generate population and enrollment forecasts. These five data sets are:

- a. a base-year population (here, the 2010 Census population for the Shrewsbury Public Schools and its attendance areas);
- b. a set of age-specific fertility rates for the district to be used over the forecast period and its attendance areas;
- c. a set of age-specific survival (mortality) rates for the district and its attendance areas;
- d. a set of age-specific migration rates for the district and its attendance areas and;
- e. the historical enrollment figures by grade.

The most significant and difficult aspect of producing enrollment forecasts is the generation of the population forecasts in which the school age population (and enrollment) is embedded. In turn, the most challenging aspect of generating the population forecasts is found in deriving the rates of change in fertility, mortality, and migration. From the standpoint of demographic analysis, the Shrewsbury Public Schools is classified as a “small area” population (as compared to the population of the state of Massachusetts or to that of the United States). Small area population forecasts are more complicated to calculate because local variations in fertility, mortality, and migration may be more irregular than those at the regional, state or national scale. Especially challenging is the

forecast of the migration rates for local areas, because changes in the area's socioeconomic characteristics can quickly change from past and current patterns (Peters and Larkin, 2002.)

The population forecasts for Shrewsbury Public Schools were calculated using a cohort-component method with the populations divided into male and female groups by five-year age cohorts that range from 0-to-4 years of age to 85 years of age and older (85+). Age- and sex-specific fertility, mortality, and migration models were constructed to specifically reflect the unique demographic characteristics of each of the attendance areas in the Shrewsbury Public Schools.

The enrollment forecasts were calculated using a modified average survivorship method. Average survivor rates (i.e., the proportion of students who progress from one grade level to the next given the average amount of net migration for that grade level) over the previous five years of year-to-year enrollment data were calculated for grades two through twelve. This procedure is used to identify specific grades where there are large numbers of students changing facilities for non-demographic factors, such as private school transfers or enrollment in special programs.

The survivorship rates were modified or adjusted to reflect the average rate of forecasted in and out migration of 5-to-9, 10-to-14 and 15-to-17-year-old cohorts to each of the attendance centers in Shrewsbury Public Schools for the period 2010 to 2015. These survivorship rates then were

adjusted to reflect the forecasted changes in age-specific migration the district should experience over the next five years. These modified survivorship rates were used to project the enrollment of grades 2 through 12 for the period 2015 to 2020. The survivorship rates were adjusted again for the period 2020 to 2025 to reflect the predicted changes in the amount of age-specific migration in the district for the period.

The forecasted enrollments for kindergarten and first grade are derived from the 5-to-9-year-old population of the age-sex population forecast at the elementary attendance center district level. This procedure allows the changes in the incoming grade sizes to be factors of forecasted population change and not an extrapolation of previous class sizes. Given the potentially large amount of variation in kindergarten enrollment due to parental choice, changes in the state's minimum age requirement, and differing district policies on allowing children to start Kindergarten early, first grade enrollment is deemed to be a more accurate and reliable starting point for the forecasts. (McKibben, 1996) The level of the accuracy for both the population and enrollment forecasts at the school district level is estimated to be no more than +/-2.0% for the life of the forecasts.

REFERENCES

- McKibben, J.
The Impact of Policy Changes on
Forecasting for School District.
Population Research and Policy
Review, Vol. 15, No. 5-6, December
1996
- McKibben, J., M. Gann, and K. Faust.
The Baby Boomlet's Role in Future
College Enrollment. American
Demographics, June 1999.
- Peters, G. and R. Larkin
Population Geography. 7th Edition.
Dubuque, IA: Kendall Hunt
Publishing. 2002.
- Siegel, J. and D. Swanson
The Methods and Materials of
Demography: Second Edition,
Academic Press: New York, New
York. 2004.
- Smith, S., J. Tayman and D. Swanson
State and Local Population
Projections, Academic Press, New
York, New York. 2001.

Appendix A: Supplemental Tables

Table 1: Forecasted Elementary Area Population Change, 2020 to 2030

	2020	2025	2020-2025 Change	2030	2025-2030 Change	2020-2030 Change
Coolidge	5,720	6,000	4.9%	6,250	4.2%	9.3%
Floral Street	9,620	9,970	3.6%	10,330	3.6%	7.4%
Beal	12,130	12,330	1.6%	12,500	1.4%	3.1%
Paton	5,610	5,770	2.9%	5,880	1.9%	4.8%
Spring Street	5,270	5,380	2.1%	5,510	2.4%	4.6%
District Total	38,350	39,450	2.9%	40,470	2.6%	5.5%

Table 2: Household Characteristics by Elementary Area, 2010 Census

	HH w/ Pop Under 18	% HH w/ Pop Under 18	Total Households	Household Population	Persons Per Household
Coolidge	671	31.6%	2,125	5,109	2.40
Floral Street	1,337	43.0%	3,111	8,385	2.69
Beal	1,591	35.4%	4,497	11,463	2.55
Paton	725	34.7%	2,087	5,331	2.55
Spring Street	773	48.2%	1,604	4,916	3.06
District Total	5,097	38.0%	13,424	35,204	2.62

Table 3: Householder Characteristics by Elementary Area, 2010 Census

	Percentage of Householders aged 35-54	Percentage of Householders aged 65+	Percentage of Householders who own homes
Coolidge	43.1%	20.2%	65.8%
Floral Street	50.8%	17.5%	61.9%
Beal	46.1%	23.7%	74.8%
Paton	42.3%	32.0%	81.5%
Spring Street	54.2%	20.3%	97.1%
District Total	47.1%	22.6%	74.1%

Table 4: Percentage of Households that are Single Person Households and Single Person Households that are over age 65 by Elementary Area, 2010 Census

	Percentage of Single Person Households	Percentage of Single Person Households and are 65+
Coolidge	30.7%	9.0%
Floral Street	24.6%	8.9%
Beal	25.6%	10.8%
Paton	27.0%	15.8%
Spring Street	10.3%	5.5%
District Total	24.6%	10.2%

Table 5: Elementary Enrollment (K-4), 2021, 2026, 2031

	2021	2026	2021-2026 Change	2031	2026-2031 Change	2021-2031 Change
Coolidge	255	263	3.1%	292	11.0%	14.5%
Floral Street	508	514	1.2%	510	-0.8%	0.4%
Beal	583	522	-10.5%	548	5.0%	-6.0%
Paton	312	284	-9.0%	318	12.0%	1.9%
Spring Street	297	270	-9.1%	303	12.2%	2.0%
District Total	1,955	1,853	-5.2%	1,971	6.4%	0.8%

Table 6: Age Under One to Age Ten Population Counts, by Year of Age, by Elementary Area: 2010 Census

	Under 1 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
Coolidge	60	48	53	62	49	75	56	69	68	60	75
Floral Street	117	94	106	149	127	147	153	146	141	142	153
Beal	125	110	139	138	152	155	153	149	172	170	167
Paton	54	47	74	60	80	85	78	83	77	80	96
Spring Street	33	51	56	54	69	75	81	78	96	94	97
District Total	390	350	427	464	477	537	521	525	555	546	588

Appendix B: Population Forecasts

Shrewsbury Public Schools Total Population

	2010	2015	2020	2025	2030
0-4	2051	1910	1900	1860	1900
5-9	2658	2310	2230	2140	2220
10-14	2780	2750	2400	2340	2290
15-19	2449	2490	2450	2110	2040
20-24	1509	1700	1670	1730	1360
25-29	1747	1670	1870	1830	1890
30-34	1983	2040	1980	2200	2160
35-39	2529	2420	2510	2410	2680
40-44	3118	2950	2890	2890	2780
45-49	3308	3120	2920	2890	2900
50-54	2792	3270	3070	2880	2860
55-59	2096	2730	3200	3020	2830
60-64	1770	2070	2680	3130	2940
65-69	1376	1620	1890	2440	2870
70-74	937	1330	1560	1810	2340
75-79	920	920	1290	1500	1730
80-84	791	880	830	1210	1410
85+	794	890	1010	1060	1270
Total	35608	37070	38350	39450	40470
Median Age	40.2	42.1	43.7	45.4	46.6
Births	1690	1680	1650	1610	
Deaths	1210	1360	1480	1770	
Natural Increase	480	320	170	-160	
Net Migration	930	1000	1000	1070	
Change	1410	1320	1170	910	

Differences between period Totals may not equal Change due to rounding.

Coolidge Elementary Total Population

	2010	2015	2020	2025	2030
0-4	278	300	270	290	290
5-9	325	300	320	340	360
10-14	332	340	320	340	370
15-19	281	290	300	300	320
20-24	263	240	250	250	250
25-29	328	280	260	270	280
30-34	408	370	330	300	310
35-39	421	490	460	370	360
40-44	442	500	580	510	430
45-49	403	440	500	580	500
50-54	377	400	430	490	560
55-59	325	370	390	420	490
60-64	264	320	360	380	410
65-69	189	240	290	330	350
70-74	132	180	230	280	320
75-79	128	130	180	230	260
80-84	112	120	120	170	210
85+	103	120	130	150	180
Total	5109	5430	5720	6000	6250
Median Age	39.0	41.1	43.0	45.3	46.6
Births	280	250	240	240	
Deaths	170	190	210	250	
Natural Increase	110	60	30	-10	
Net Migration	220	230	240	250	
Change	330	290	270	240	

Differences between period Totals may not equal Change due to rounding.

Floral Street Elementary Total Population

	2010	2015	2020	2025	2030
0-4	575	550	590	550	530
5-9	729	610	590	610	590
10-14	706	770	640	610	650
15-19	671	640	690	570	540
20-24	455	530	490	550	420
25-29	525	490	570	520	580
30-34	550	590	550	630	600
35-39	673	650	700	670	750
40-44	800	730	720	760	730
45-49	802	800	730	710	760
50-54	608	790	780	720	710
55-59	406	590	780	770	700
60-64	301	400	590	760	750
65-69	236	270	360	530	700
70-74	170	230	270	350	510
75-79	158	170	220	250	340
80-84	133	150	150	210	240
85+	198	190	200	200	230
Total	8696	9150	9620	9970	10330
Median Age	36.0	38.0	39.9	41.8	43.5
Births	510	550	510	490	
Deaths	250	270	300	360	
Natural Increase	260	280	210	130	
Net Migration	170	180	180	190	
Change	430	460	390	320	

Differences between period Totals may not equal Change due to rounding.

Beal Elementary Total Population

	2010	2015	2020	2025	2030
0-4	650	570	510	490	490
5-9	784	700	630	570	610
10-14	829	830	740	690	630
15-19	725	740	730	640	580
20-24	475	490	470	450	360
25-29	599	520	530	520	510
30-34	669	700	620	640	640
35-39	842	810	840	780	810
40-44	1028	980	960	1000	890
45-49	1097	1010	970	950	990
50-54	859	1080	1010	950	940
55-59	677	840	1060	980	940
60-64	587	670	820	1040	960
65-69	495	540	610	750	950
70-74	325	480	520	580	720
75-79	343	310	460	500	560
80-84	304	320	290	430	470
85+	239	300	360	370	450
Total	11527	11890	12130	12330	12500
Median Age	40.9	43.0	45.2	47.0	48.7
Births	520	480	460	430	
Deaths	410	470	500	600	
Natural Increase	110	10	-40	-170	
Net Migration	240	260	270	280	
Change	350	270	230	110	

Differences between period Totals may not equal Change due to rounding.

Paton Elementary Total Population

	2010	2015	2020	2025	2030
0-4	292	270	290	280	330
5-9	408	360	340	320	340
10-14	408	400	360	340	320
15-19	344	370	380	320	300
20-24	164	240	270	280	220
25-29	179	200	280	310	310
30-34	219	210	230	340	340
35-39	320	250	240	290	400
40-44	432	390	310	300	360
45-49	481	430	370	310	300
50-54	444	480	420	370	310
55-59	352	440	460	420	360
60-64	329	350	430	460	400
65-69	259	300	320	390	420
70-74	181	250	290	310	370
75-79	181	180	240	280	290
80-84	165	180	160	230	260
85+	202	210	220	220	250
Total	5360	5510	5610	5770	5880
Median Age	44.0	45.8	46.4	46.7	45.3
Births	210	220	250	260	
Deaths	240	260	270	310	
Natural Increase	-30	-40	-20	-50	
Net Migration	160	170	160	180	
Change	130	130	140	130	

Differences between period Totals may not equal Change due to rounding.

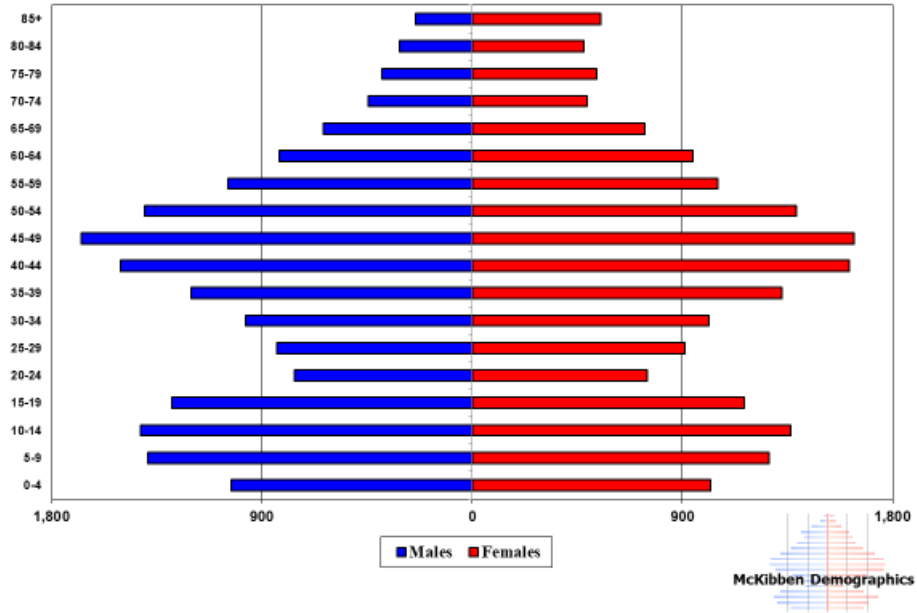
Spring Street Elementary Total Population

	2010	2015	2020	2025	2030
0-4	256	220	240	250	260
5-9	413	340	350	300	320
10-14	504	410	340	360	320
15-19	428	450	350	280	300
20-24	152	200	190	200	110
25-29	116	180	230	210	210
30-34	138	170	250	290	270
35-39	273	220	270	300	360
40-44	416	350	320	320	370
45-49	525	440	350	340	350
50-54	504	520	430	350	340
55-59	336	490	510	430	340
60-64	289	330	480	490	420
65-69	197	270	310	440	450
70-74	129	190	250	290	420
75-79	111	130	190	240	280
80-84	77	110	110	170	230
85+	52	70	100	120	160
Total	4916	5090	5270	5380	5510
Median Age	42.1	45.1	46.4	47.6	48.4
Births		170	180	190	190
Deaths		140	170	200	250
Natural Increase		30	10	-10	-60
Net Migration		140	160	150	170
Change		170	170	140	110

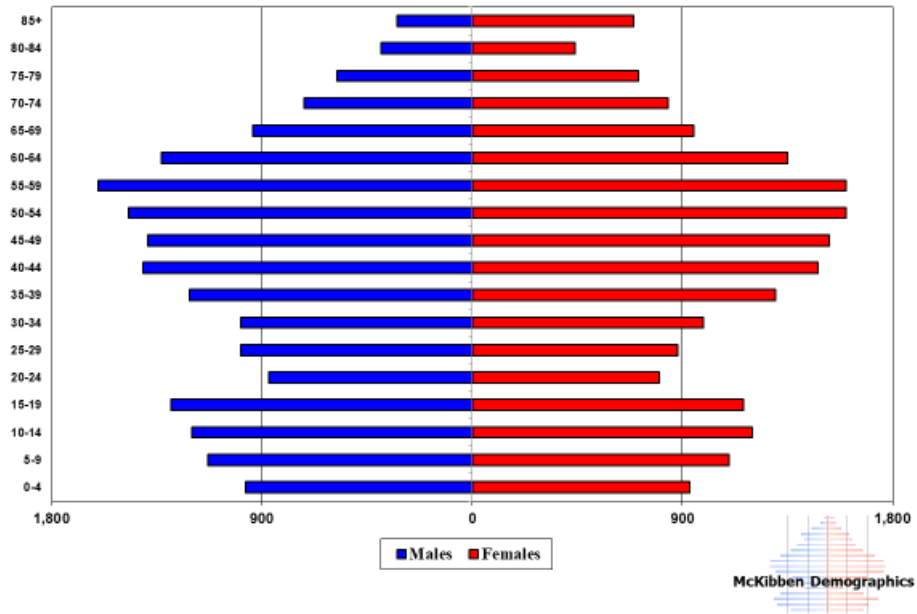
Differences between period Totals may not equal Change due to rounding.

Appendix C: Population Pyramids

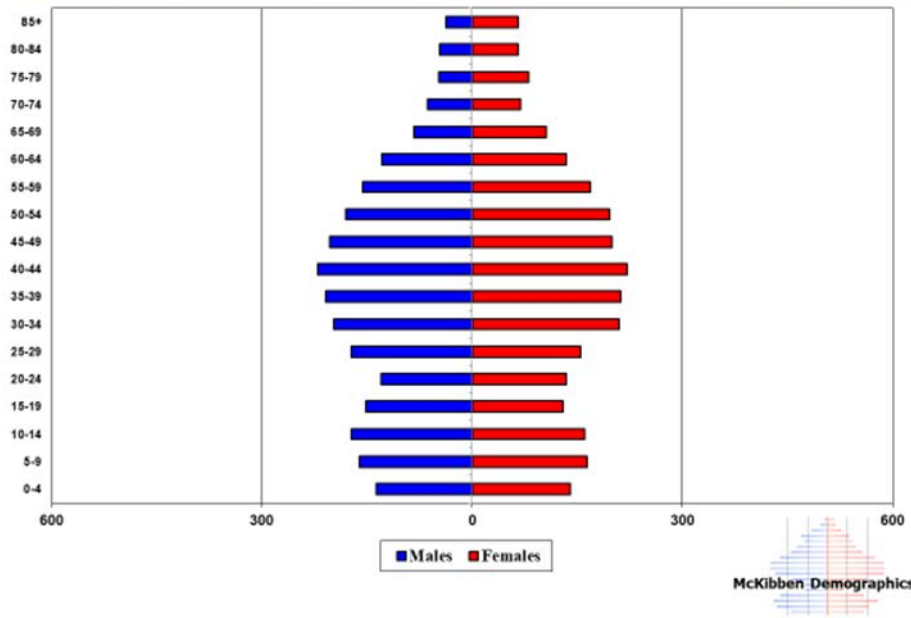
Shrewsbury School District -- Total Population 2010 Census



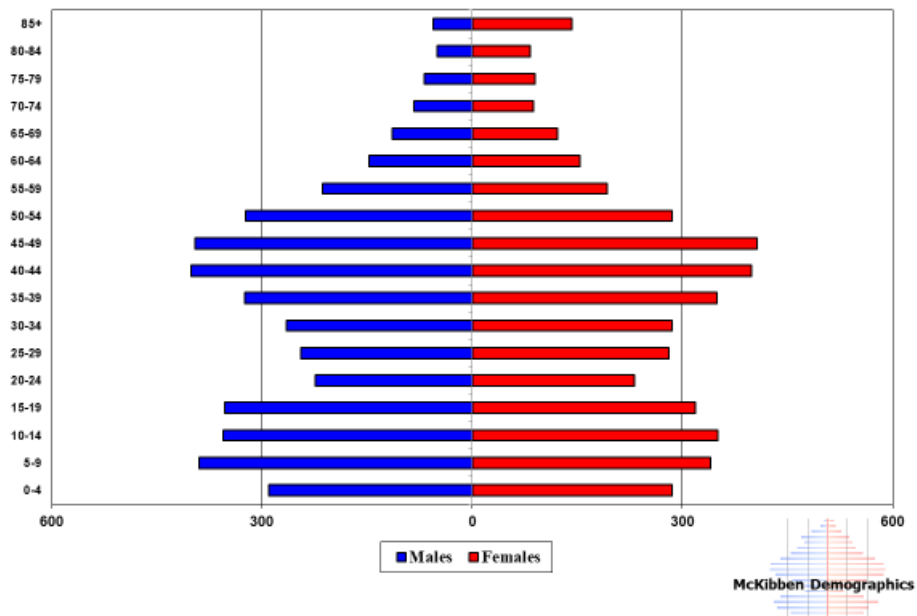
Shrewsbury School District -- Total Population 2020 Estimate



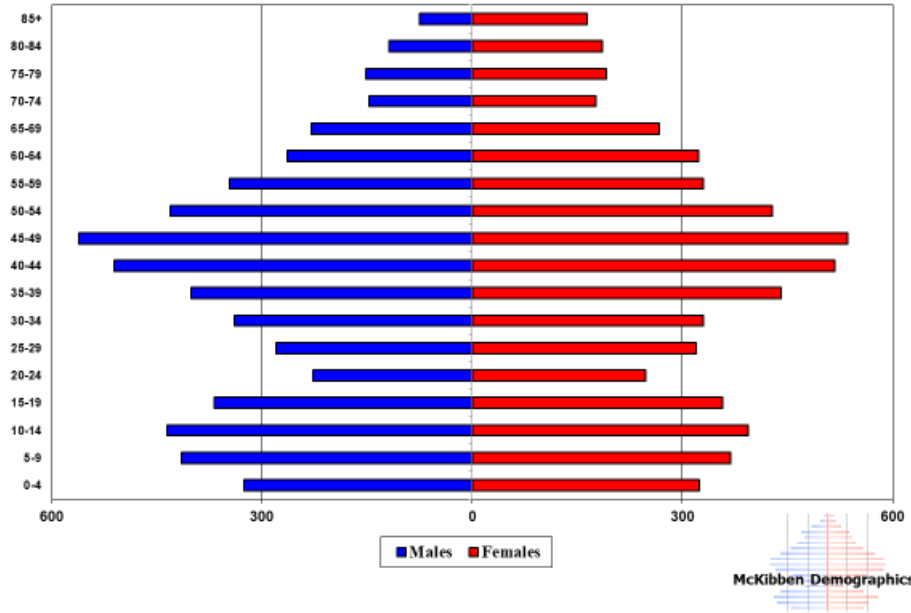
Coolidge Elementary -- Total Population 2010 Census



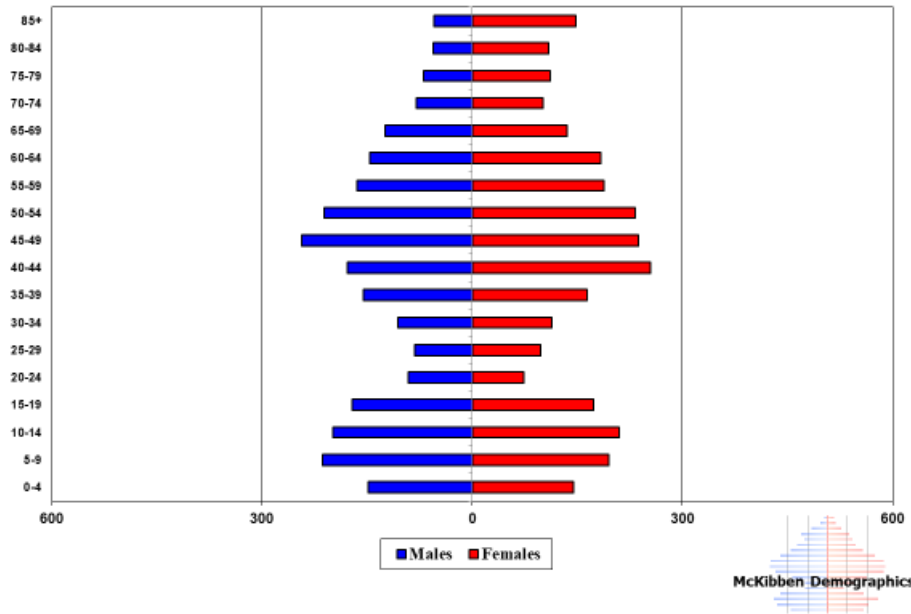
Floral Street Elementary -- Total Population 2010 Census



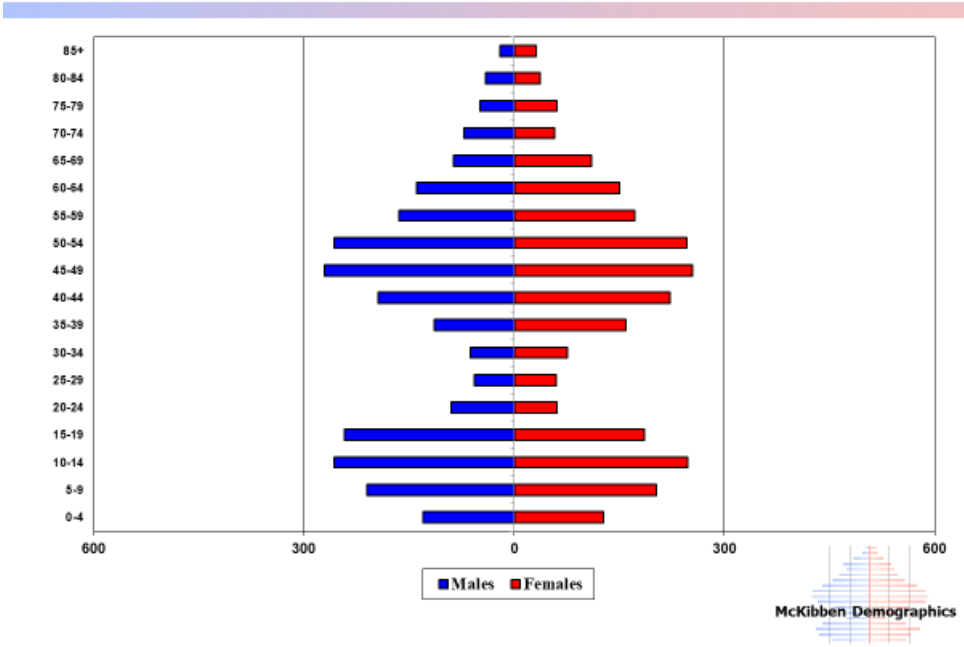
Beal Elementary -- Total Population 2010 Census



Paton Elementary -- Total Population 2010 Census



Spring Street Elementary -- Total Population 2010 Census



Appendix D: Enrollment Forecasts

Shrewsbury Public Schools: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
PK	242	230	110	164	242	242	242	242	242	242	242	242	242	242
K	350	359	287	343	349	341	339	342	351	355	361	365	372	382
1	421	431	407	339	372	359	360	358	361	364	369	375	379	386
2	450	440	434	417	351	384	371	372	368	371	374	379	390	394
3	452	469	430	429	429	361	395	382	381	377	380	383	392	404
4	494	459	484	427	442	443	373	407	392	391	387	390	396	405
Total: PK-4	2409	2388	2152	2119	2185	2130	2080	2103	2095	2100	2113	2134	2171	2213
5	490	497	473	483	457	451	452	380	419	404	403	399	402	408
6	468	504	491	469	497	464	458	459	390	429	414	413	409	412
Total: 5-6	958	1001	964	952	954	915	910	839	809	833	817	812	811	820
7	511	480	502	481	483	512	478	472	473	402	442	426	425	421
8	494	514	483	498	491	493	522	488	481	482	410	451	435	434
Total: 7-8	1005	994	985	979	974	1005	1000	960	954	884	852	877	860	855
9	460	467	459	459	488	481	483	512	483	476	477	406	446	431
10	446	467	480	450	457	486	479	481	509	481	474	475	404	444
11	500	452	470	464	448	455	484	477	479	506	479	472	473	402
12	428	499	464	461	462	446	453	482	475	477	503	477	470	471
SP	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Total: 9-SP	1835	1885	1873	1835	1856	1869	1900	1953	1947	1941	1934	1831	1794	1749
Total: PK-SP	6207	6268	5974	5885	5969	5919	5890	5855	5805	5758	5716	5654	5636	5637
Change		61	-294	-89	84	-50	-29	-35	-50	-47	-42	-62	-18	1
%-Change		1.0%	-4.7%	-1.5%	1.4%	-0.8%	-0.5%	-0.6%	-0.9%	-0.8%	-0.7%	-1.1%	-0.3%	0.0%
Total: PK-4	2409	2388	2152	2119	2185	2130	2080	2103	2095	2100	2113	2134	2171	2213
Change		-21	-236	-33	66	-55	-50	23	-8	5	13	21	37	42
%-Change		-0.9%	-9.9%	-1.5%	3.1%	-2.5%	-2.3%	1.1%	-0.4%	0.2%	0.6%	1.0%	1.7%	1.9%
Total: 5-6	958	1001	964	952	954	915	910	839	809	833	817	812	811	820
Change		43	-37	-12	2	-39	-5	-71	-30	24	-16	-5	-1	9
%-Change		4.5%	-3.7%	-1.2%	0.2%	-4.1%	-0.5%	-7.8%	-3.6%	3.0%	-1.9%	-0.6%	-0.1%	1.1%
Total: 7-8	1005	994	985	979	974	1005	1000	960	954	884	852	877	860	855
Change		-11	-9	-6	-5	31	-5	-40	-6	-70	-32	25	-17	-5
%-Change		-1.1%	-0.9%	-0.6%	-0.5%	3.2%	-0.5%	-4.0%	-0.6%	-7.3%	-3.6%	2.9%	-1.9%	-0.6%
Total: 9-SP	1835	1885	1873	1835	1856	1869	1900	1953	1947	1941	1934	1831	1794	1749
Change		50	-12	-38	21	13	31	53	-6	-6	-7	-103	-37	-45
%-Change		2.7%	-0.6%	-2.0%	1.1%	0.7%	1.7%	2.8%	-0.3%	-0.3%	-0.4%	-5.3%	-2.0%	-2.5%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Shrewsbury Public Schools Demographic Study – March 2022

Coolidge Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	43	39	42	47	48	47	47	48	50	51	53	54	55	57
1	85	85	89	47	52	49	50	50	51	52	53	55	56	57
2	110	95	83	57	49	54	51	52	52	53	54	55	58	59
3	76	116	96	47	60	51	57	54	54	54	55	56	57	60
4	95	75	120	57	49	63	54	60	56	56	56	57	58	59
Total: K-4	409	410	430	255	258	264	259	264	263	266	271	277	284	292
Total: K-4	409	410	430	255	258	264	259	264	263	266	271	277	284	292
Change		1	20	-175	3	6	-5	5	-1	3	5	6	7	8
%-Change		0.2%	4.9%	-41%	1.2%	2.3%	-1.9%	1.9%	-0.4%	1.1%	1.9%	2.2%	2.5%	2.8%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Floral Street Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	0	0	0	106	102	97	95	94	94	94	95	95	96	98
1	111	121	114	85	107	104	101	99	98	97	97	98	98	99
2	201	180	180	107	88	111	108	105	102	101	100	100	102	102
3	211	207	172	102	110	91	114	111	107	104	103	102	103	105
4	197	218	213	108	105	113	94	117	113	109	106	105	105	106
Total: K-4	720	726	679	508	512	516	512	526	514	505	501	500	504	510
Total: K-4	720	726	679	508	512	516	512	526	514	505	501	500	504	510
Change		6	-47	-171	4	4	-4	14	-12	-9	-4	-1	4	6
%-Change		0.8%	-6.5%	-25%	0.8%	0.8%	-0.8%	2.7%	-2.3%	-1.8%	-0.8%	-0.2%	0.8%	1.2%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Shrewsbury Public Schools Demographic Study – March 2022

Beal Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	221	250	174	93	99	96	96	97	99	100	100	101	103	105
1	73	66	77	113	104	101	102	102	103	103	104	104	105	107
2	0	0	0	129	115	106	103	104	105	106	106	107	108	109
3	0	0	0	127	132	117	108	105	107	108	109	109	111	112
4	0	0	0	121	130	135	119	110	108	110	111	112	113	115
Total: K-4	294	316	251	583	580	555	528	518	522	527	530	533	540	548
Total: K-4	294	316	251	583	580	555	528	518	522	527	530	533	540	548
Change		22	-65	332	-3	-25	-27	-10	4	5	3	3	7	8
%-Change		7.5%	-21%	132%	-0.5%	-4.3%	-4.9%	-1.9%	0.8%	1.0%	0.6%	0.6%	1.3%	1.5%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Spring Street Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	42	41	39	44	50	50	50	51	53	55	56	57	59	61
1	69	79	60	50	53	51	52	52	53	54	56	57	58	60
2	72	73	83	59	52	55	53	54	53	54	55	57	59	60
3	76	79	72	82	61	54	57	55	55	54	55	56	59	61
4	105	80	78	62	84	63	56	59	56	56	55	56	58	61
Total: K-4	364	352	332	297	300	273	268	271	270	273	277	283	293	303
Total: K-4	364	352	332	297	300	273	268	271	270	273	277	283	293	303
Change		-12	-20	-35	3	-27	-5	3	-1	3	4	6	10	10
%-Change		-3.3%	-5.7%	-11%	1.0%	-9.0%	-1.8%	1.1%	-0.4%	1.1%	1.5%	2.2%	3.5%	3.4%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Shrewsbury Public Schools Demographic Study – March 2022

Paton Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	44	29	32	53	50	51	51	52	55	55	57	58	59	61
1	83	80	67	44	56	54	55	55	56	58	59	61	62	63
2	67	92	88	65	47	58	56	57	56	57	59	60	63	64
3	89	67	90	71	66	48	59	57	58	57	58	60	62	66
4	97	86	73	79	74	69	50	61	59	60	59	60	62	64
Total: K-4	380	354	350	312	293	280	271	282	284	287	292	299	308	318
Total: K-4	380	354	350	312	293	280	271	282	284	287	292	299	308	318
Change		-26	-4	-38	-19	-13	-9	11	2	3	5	7	9	10
%-Change		-6.8%	-1.1%	-11%	-6.1%	-4.4%	-3.2%	4.1%	0.7%	1.1%	1.7%	2.4%	3.0%	3.2%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Sherwood Middle School: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
5	490	497	473	483	457	451	452	380	419	404	403	399	402	408
6	468	504	491	469	497	464	458	459	390	429	414	413	409	412
Total: 5-6	958	1001	964	952	954	915	910	839	809	833	817	812	811	820
Total: 5-6	958	1001	964	952	954	915	910	839	809	833	817	812	811	820
Change		43	-37	-12	2	-39	-5	-71	-30	24	-16	-5	-1	9
%-Change		4.5%	-3.7%	-1.2%	0.2%	-4.1%	-0.5%	-7.8%	-3.6%	3.0%	-1.9%	-0.6%	-0.1%	1.1%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Oak Middle School: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
7	511	480	502	481	483	512	478	472	473	402	442	426	425	421
8	494	514	483	498	491	493	522	488	481	482	410	451	435	434
Total: 7-8	1005	994	985	979	974	1005	1000	960	954	884	852	877	860	855
Total: 7-8	1005	994	985	979	974	1005	1000	960	954	884	852	877	860	855
Change		-11	-9	-6	-5	31	-5	-40	-6	-70	-32	25	-17	-5
%-Change		-1.1%	-0.9%	-0.6%	-1.0%	3.2%	-0.5%	-4.0%	-0.6%	-7.3%	-3.6%	2.9%	-1.9%	-0.6%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Shrewsbury Public Schools Demographic Study – March 2022

Shrewsbury High School: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
9	460	467	459	459	488	481	483	512	483	476	477	406	446	431
10	446	467	480	450	457	486	479	481	509	481	474	475	404	444
11	500	452	470	464	448	455	484	477	479	506	479	472	473	402
12	428	499	464	461	462	446	453	482	475	477	503	477	470	471
SP	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Total: 9-SP	1835	1885	1873	1835	1856	1869	1900	1953	1947	1941	1934	1831	1794	1749
Total: 9-SP	1835	1885	1873	1835	1856	1869	1900	1953	1947	1941	1934	1831	1794	1749
Change		50	-12	-38	21	13	31	53	-6	-6	-7	-103	-37	-45
%-Change		2.7%	-0.6%	-2.0%	1.1%	0.7%	1.7%	2.8%	-0.3%	-0.3%	-0.4%	-5.3%	-2.0%	-2.5%

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.



**Shrewsbury Public Schools
Shrewsbury, MA**

School Year 2023-24 Enrollment Projection Report

Copyright, New England School Development Council, 2023

Table of Contents

Section	Page
Enrollment Summary.....	1
Historical Enrollment Table.....	2
Historical Enrollment Graph.....	3
Projected Enrollment Table.....	4
Projected Enrollment Graph.....	5
Historical & Projected Enrollment Graph.....	6
Historical & Projected Enrollment in Grade Combinations Line Graph.....	7
Historical & Projected Enrollment in Grade Combinations Stacked Column Graph.....	8
Birth to Kindergarten Relationship Graph.....	9
Additional Information	10
New England's PK-12 Enrollment Trends.....	11
Methodology, Reliability and Use of this Document.....	12

Enrollment Summary

NESDEC is pleased to send you this report displaying the past, present, and projected enrollments for your District. It is important to update enrollment projections every year to identify changes in enrollment patterns. Ten-year projections are designed to provide your District with yearly, up-to-date enrollment information that can be used by boards and administrators for effective planning and allocation of resources.

Included in this report are graphs representing historical and projected grade-by-grade enrollments, as well as historical and projected enrollments in grade combinations. We received the enrollment data from the District, and we assume that the method of collecting this data has been consistent from year to year.

Enrollment projections are more reliable in Years #1-4 in the future and less reliable in the “out-years.” Projections six to ten years out may serve as a guide to future enrollments and are useful for planning purposes. In light of this, NESDEC has added a “Spring Update Refresher” enrollment projection at no cost to affiliates. For more information, please refer to the Methodology, Reliability and Use of this Document section.

The NESDEC enrollment projection fell within 87 students of the K-12 total, 5,636 students projected vs. 5,723 enrolled. Shrewsbury has informed NESDEC that it has experienced an influx of families with children. These projections assume that these families will stay in Shrewsbury through 12th grade. Unknown at this time is if these new-to-Shrewsbury families will remain in the community or move to other communities during the school year. Also unknown is if this in-migration of families will continue over time.

Births decreased by 39 from a previous ten-year average of 353 to a projected average of 314. In most districts, Grades 1-8 are very stable in enrollments. However, there have been increases in 7 of the 8 most recent years, leading to a net increase averaging 67 students per year.

Over the next three years, Grades K-4 enrollments are projected to decrease by 5 students, Grades 5-6 enrollments are projected to decrease by 68 students, Grades 7-8 enrollments are projected to increase by 1 student, and Grades 9-12 enrollments are projected to decrease by 67 students, as students move through the grades.

Historical Enrollment

School District: Shrewsbury, MA

10/20/2023

Historical Enrollment By Grade																			
Birth Year	Births*	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2008	379	2013-14	250	392	399	450	452	480	462	518	490	471	420	406	419	401	0	5760	6010
2009	371	2014-15	234	346	430	430	462	467	487	469	529	478	432	423	409	419	0	5781	6015
2010	332	2015-16	239	355	425	446	439	474	472	500	480	547	413	441	411	403	0	5806	6045
2011	383	2016-17	232	388	418	459	460	462	487	490	511	492	513	428	441	410	0	5959	6191
2012	366	2017-18	237	355	424	437	476	482	464	502	493	516	451	513	429	439	0	5981	6218
2013	370	2018-19	243	351	424	447	454	494	490	468	511	495	460	447	501	428	0	5970	6213
2014	346	2019-20	220	363	426	439	469	455	493	502	478	514	470	469	452	501	0	6031	6251
2015	328	2020-21	110	287	407	434	430	484	473	491	502	483	459	480	470	464	0	5864	5974
2016	340	2021-22	164	343	339	417	429	427	484	469	481	498	459	450	464	461	0	5721	5885
2017	315	2022-23	203	358	372	375	425	445	440	508	465	479	486	452	430	453	< 10 **	5690	5893
2018	328	2023-24	202	359	392	400	390	449	470	450	483	460	491	507	438	434	17	5740	5942

*Birth data provided by Public Health Vital Records Departments in each state.

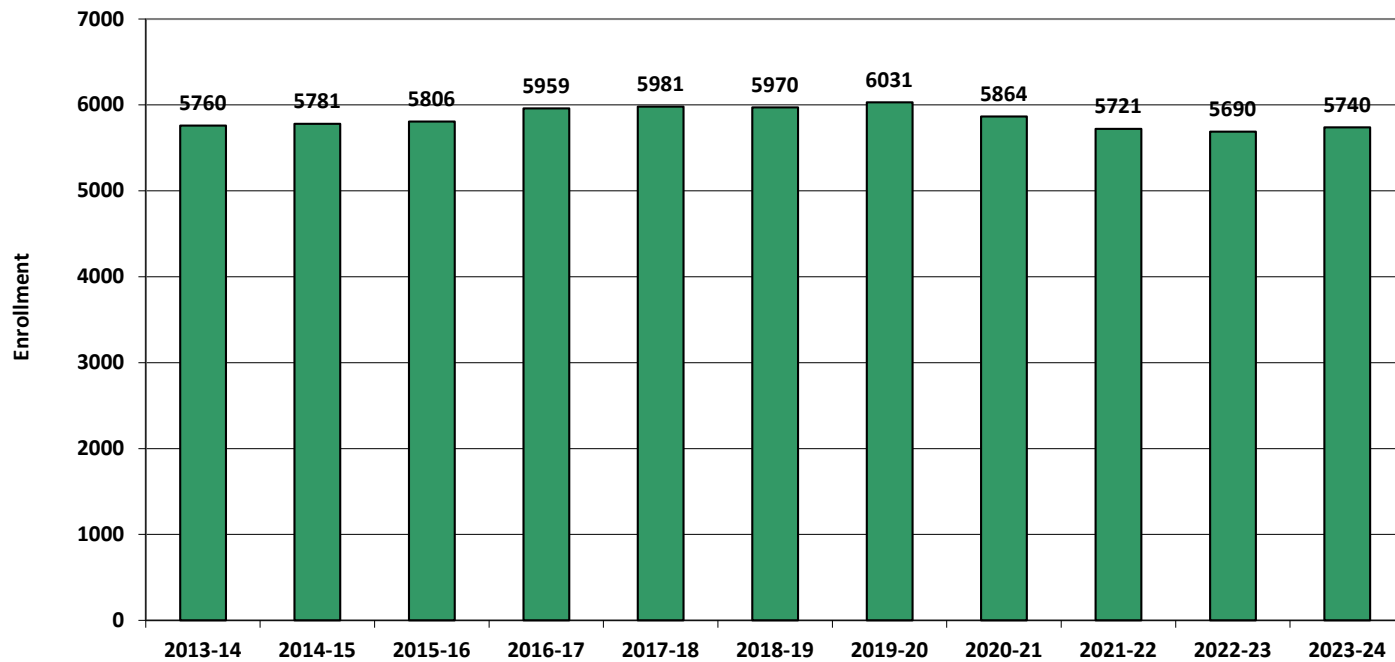
** < 10 Not reported, to protect subgroups with fewer than 10 students.

Historical Enrollment in Grade Combinations									
School Year	PK-4	K-4	5-6	K-6	K-8	5-8	7-8	7-12	9-12
2013-14	2423	2173	980	3153	4114	1941	961	2607	1646
2014-15	2369	2135	956	3091	4098	1963	1007	2690	1683
2015-16	2378	2139	972	3111	4138	1999	1027	2695	1668
2016-17	2419	2187	977	3164	4167	1980	1003	2795	1792
2017-18	2411	2174	966	3140	4149	1975	1009	2841	1832
2018-19	2413	2170	958	3128	4134	1964	1006	2842	1836
2019-20	2372	2152	995	3147	4139	1987	992	2884	1892
2020-21	2152	2042	964	3006	3991	1949	985	2858	1873
2021-22	2119	1955	953	2908	3887	1932	979	2813	1834
2022-23	2178	1975	948	2923	3867	1892	944	2765	1821
2023-24	2192	1990	920	2910	3853	1863	943	2813	1870

Historical Percentage Changes			
School Year	K-12	Diff.	%
2013-14	5760		
2014-15	5781	21	0.4%
2015-16	5806	25	0.4%
2016-17	5959	153	2.6%
2017-18	5981	22	0.4%
2018-19	5970	-11	-0.2%
2019-20	6031	61	1.0%
2020-21	5864	-167	-2.8%
2021-22	5721	-143	-2.4%
2022-23	5690	-31	-0.5%
2023-24	5740	50	0.9%
Change	-20		-0.3%

Historical Enrollment

Grades K-12, School Years 2013-14 to 2023-24



Projected Enrollment

School District: Shrewsbury, MA

10/20/2023

Enrollment Projections By Grade*																				
Birth Year	Births*		School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2018	328		2023-24	202	359	392	400	390	449	470	450	483	460	491	507	438	434	17	5740	5942
2019	354		2024-25	203	372	406	414	406	401	462	480	448	479	444	492	493	437	17	5751	5954
2020	261	(prov.)	2025-26	203	274	420	429	421	418	413	472	478	445	462	445	479	492	17	5665	5868
2021	345	(prov.)	2026-27	204	362	310	444	436	433	430	422	470	474	429	463	433	478	17	5601	5805
2022	294	(prov.)	2027-28	204	309	409	327	451	449	446	439	420	466	457	430	451	432	17	5503	5707
2023	316	(est.)	2028-29	205	332	349	432	332	464	462	455	437	417	450	458	419	450	17	5474	5679
2024	314	(est.)	2029-30	205	330	375	369	439	342	477	472	453	434	402	451	446	418	17	5425	5630
2025	306	(est.)	2030-31	206	321	373	396	375	452	352	487	470	450	419	403	439	445	17	5399	5605
2026	315	(est.)	2031-32	206	331	363	394	402	386	465	359	485	466	434	420	392	438	17	5352	5558
2027	309	(est.)	2032-33	207	325	374	383	400	414	397	475	357	481	450	435	409	391	17	5308	5515
2028	312	(est.)	2033-34	208	328	367	395	389	412	426	405	473	354	464	451	423	408	17	5312	5520

Note: Ungraded students (UNGR) often are high school students whose anticipated years of graduation are unknown, or students with special needs - UNGR not included in Grade Combinations for 7-12, 9-12, etc.

 Based on an estimate of births

 Based on children already born

 Based on students already enrolled

*Birth data provided by Public Health Vital Records Departments in each state.

** < 10 Not reported, to protect subgroups with fewer than 10 students.

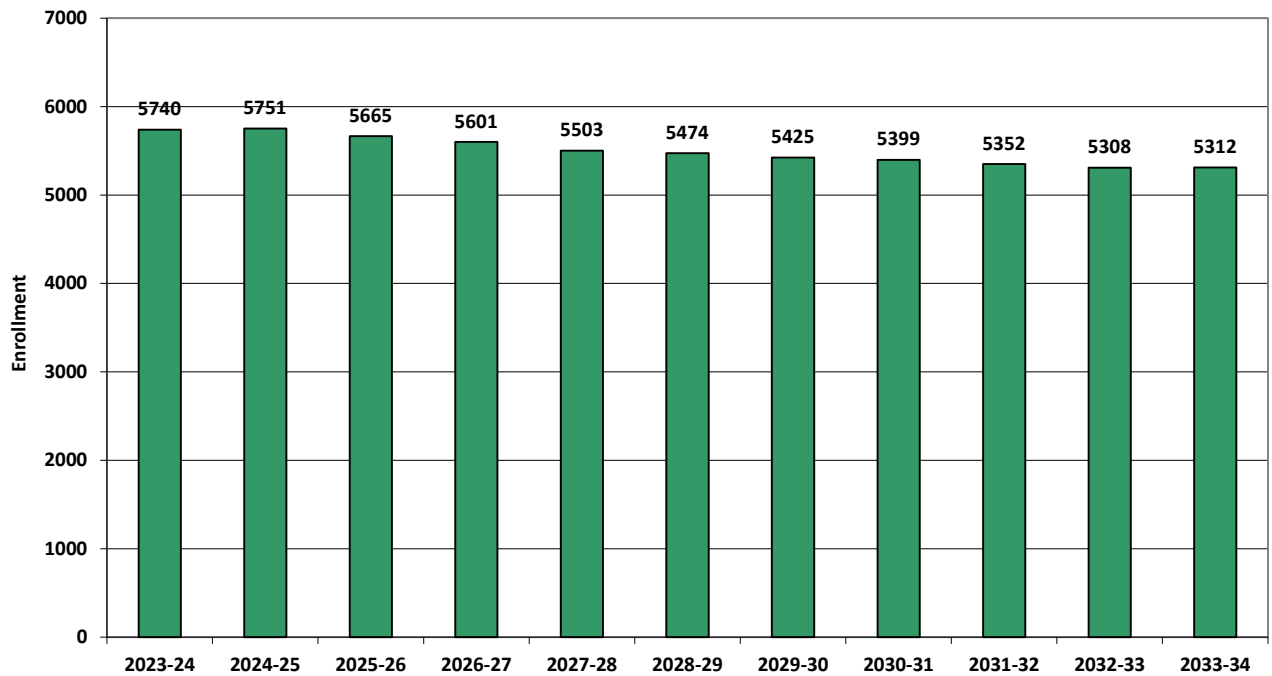
Projected Enrollment in Grade Combinations*									
School Year	PK-4	K-4	5-6	K-6	K-8	5-8	7-8	7-12	9-12
2023-24	2192	1990	920	2910	3853	1863	943	2813	1870
2024-25	2202	1999	942	2941	3868	1869	927	2793	1866
2025-26	2165	1962	885	2847	3770	1808	923	2801	1878
2026-27	2189	1985	852	2837	3781	1796	944	2747	1803
2027-28	2149	1945	885	2830	3716	1771	886	2656	1770
2028-29	2114	1909	917	2826	3680	1771	854	2631	1777
2029-30	2060	1855	949	2804	3691	1836	887	2604	1717
2030-31	2123	1917	839	2756	3676	1759	920	2626	1706
2031-32	2082	1876	824	2700	3651	1775	951	2635	1684
2032-33	2103	1896	872	2768	3606	1710	838	2523	1685
2033-34	2099	1891	831	2722	3549	1658	827	2573	1746

Projected Percentage Changes			
School Year	K-12	Diff.	%
2023-24	5740	0	0.0%
2024-25	5751	11	0.2%
2025-26	5665	-86	-1.5%
2026-27	5601	-64	-1.1%
2027-28	5503	-98	-1.7%
2028-29	5474	-29	-0.5%
2029-30	5425	-49	-0.9%
2030-31	5399	-26	-0.5%
2031-32	5352	-47	-0.9%
2032-33	5308	-44	-0.8%
2033-34	5312	4	0.1%
Change		-428	-7.5%

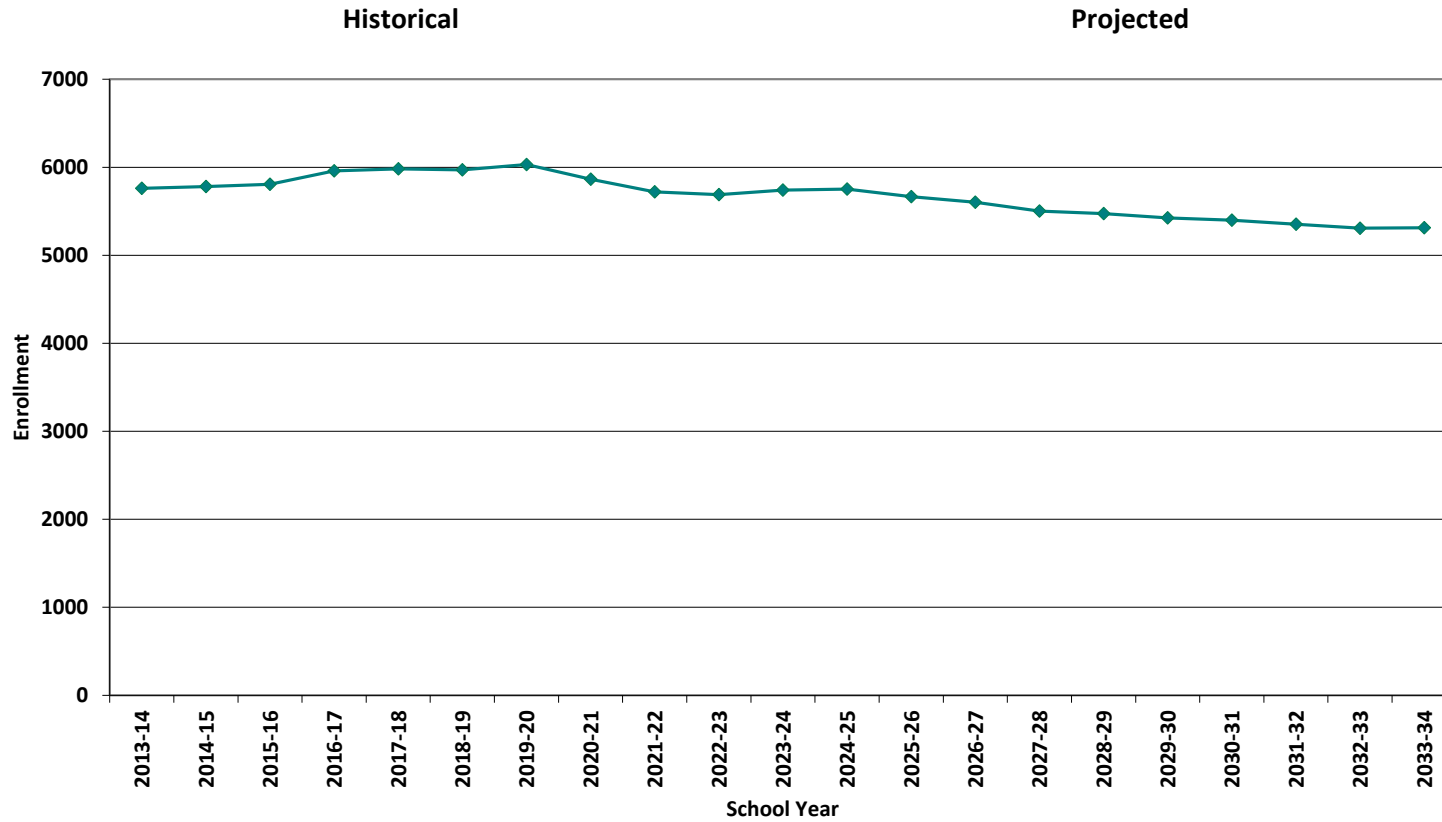
*Projections should be updated annually to reflect changes in in/out-migration of families, real estate sales, residential construction, births, and similar factors.

NESDEC **Projected Enrollment**

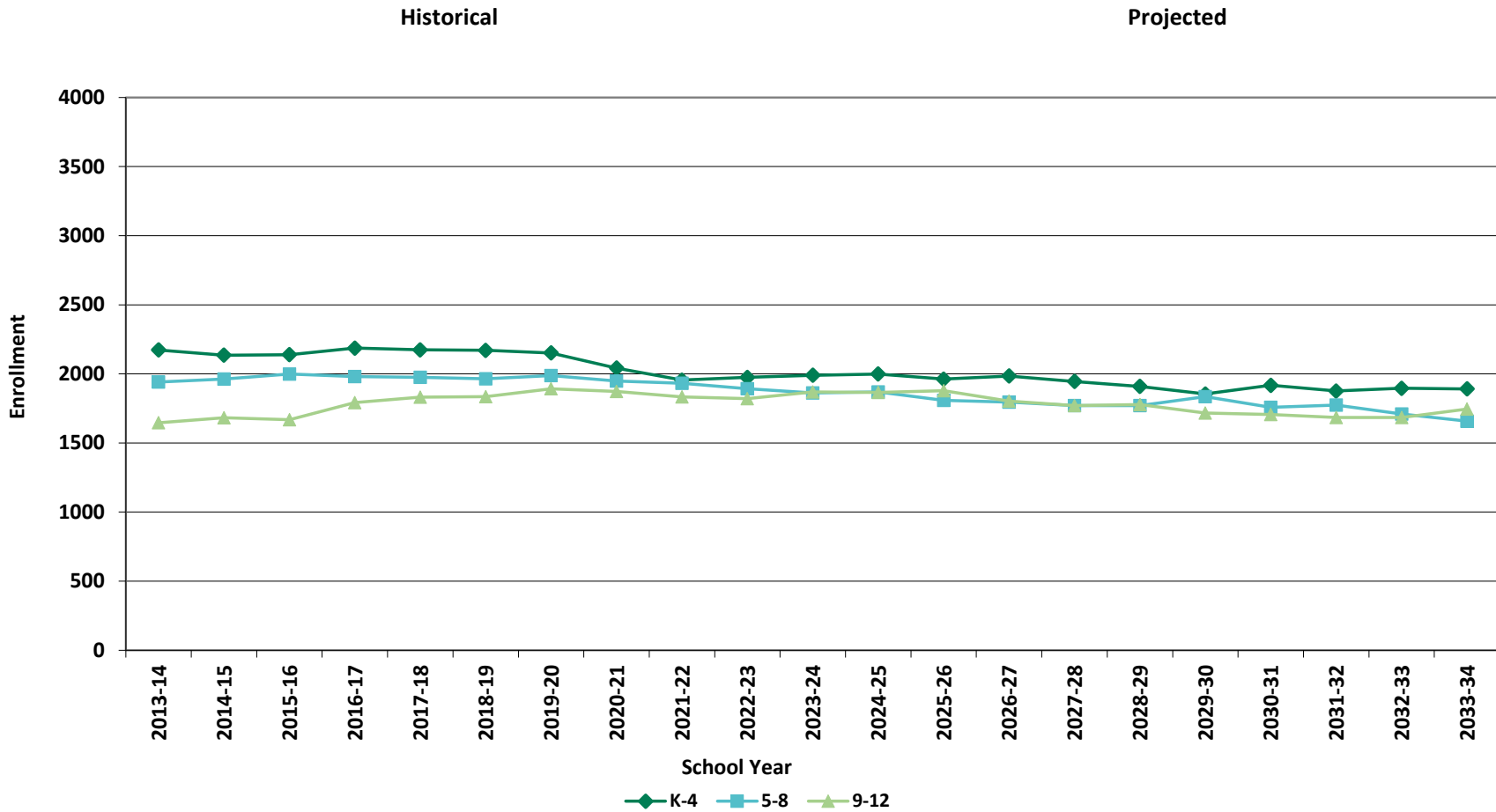
Grades K-12, School Years 2023-24 to 2033-34



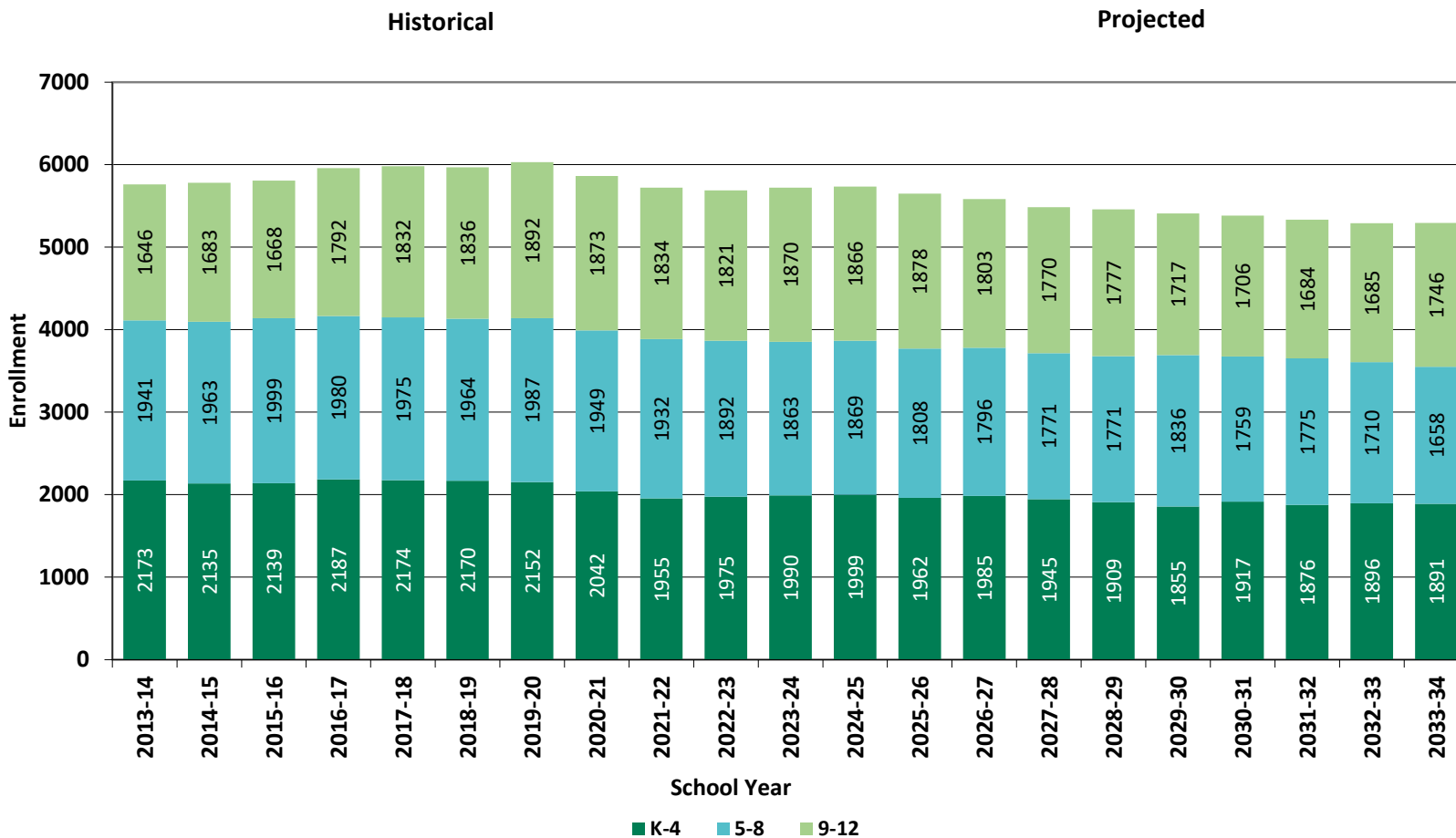
Historical & Projected Enrollment



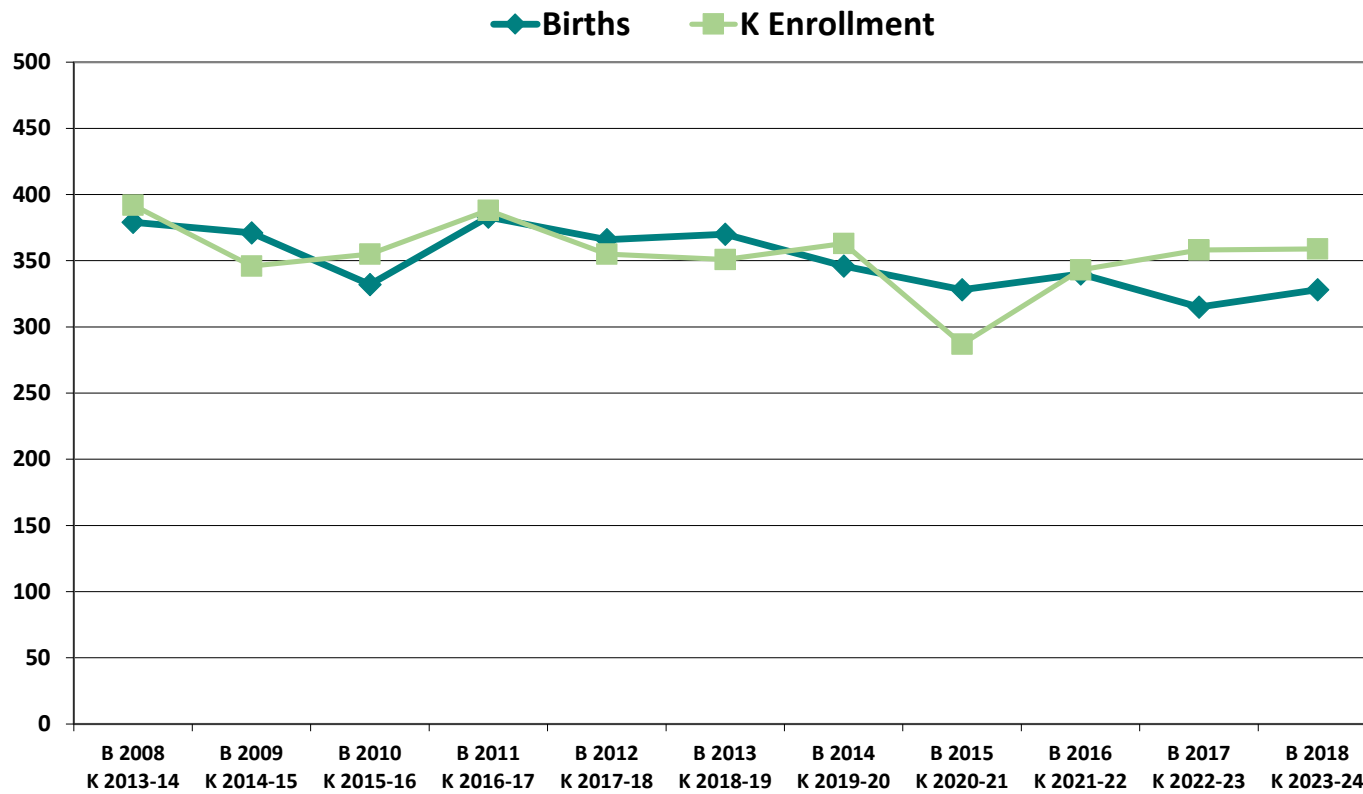
Historical & Projected Enrollments in Grade Combinations



Historical & Projected Enrollments in Grade Combinations



Birth-to-Kindergarten Relationship



Additional Information

Building Permits Issued (Source: HUD)		
Year	Single-Family	Multi-Units
2019	34	318
2020	35	256
2021	40	328
2022	34	266
2023	13 to date	0 to date

School Year	9 - 12 CTE	K - 12 Non-Public	K - 12 Choice-In	K - 12 Choice-Out	K - 12 Out-of-District SPED	K - 12 Homeschool
2019-20	103	330	24	23	61	18
2020-21	113	555	24	20	55	40
2021-22	96	553	22	78	62	29
2022-23	63	n/a	20	20	62	31
2023-24	47	121	13	< 10 **	48	27

*The above data was provided by the District, with the exception of building permit data (provided by HUD).

"n/a" signifies that information was not provided by District.

** < 10 Not reported, to protect subgroups with fewer than 10 students.

New England's PK-12 Enrollments Trends

From 2021 to 2030, the US Department of Education anticipates changes in PK-12 enrollment of -3.2% in the South, -6.0% in the West, -3.9% in the Midwest, -6.0% in the Northeast, and a total of -4.4% nationwide.

State	Fall 2021 PK - 12	Fall 2030 Projected	PK-12 Decline	% Change 2021-2030
USA	49,452,864	47,252,500	-2,200,364	-4.4%
CT	508,686	475,600	-33,086	-6.5%
ME	173,215	161,800	-11,415	-6.6%
MA	921,180	879,900	-41,280	-4.5%
NH	170,005	144,600	-25,405	-14.9%
RI	138,566	130,200	-8,366	-6.0%
VT	83,975	74,600	-9,375	-11.2%

Source: U.S. Department of Education, National Center for Education Statistics, Enrollment in public elementary and secondary schools, by region, state, and jurisdiction: Selected years, fall 1990 through fall 2030, Table 203.20, March 2023.

Although most New England Districts are seeing a decline in the number of births, NESDEC's experience indicates that the impact on enrollment varies from District to District. Almost half of New England Districts have been growing in PK-12 enrollment, and a similar number are declining (often in rural areas), with the other Districts remaining stable.

Methodology, Reliability and Use of this Document

PROJECTION METHODOLOGY

Cohort component (survival) technique is a frequently used method of preparing enrollment forecasts. NESDEC uses this method, but modifies it in order to move away from forecasts that are wholly computer- or formula-driven. Such modification permits the incorporation of important, current district-specific demographic information into the generation of enrollment forecasts (such as in/out-migration of students, resident births, HUD-reported building permits, etc.). Percentages are calculated from the historical enrollment data to determine a reliable percentage of increase or decrease in enrollment between any two grades. For example, if 100 students enrolled in Grade 1 in 2022-23 increased to 104 students in Grade 2 in 2023-24, the percentage of survival would be 104%, or a ratio of 1.04. Ratios are calculated between each pair of grades or years in school over several recent years.

After study and analysis of the historical ratios, and based upon a reasonable set of assumptions regarding births, migration rates, retention rates, etc., ratios most indicative of future growth patterns are determined for each pair of grades. The ratios thus selected are applied to the present enrollment statistics to project into future years. The ratios are the key factors in the reliability of the projections, assuming validity of the data at the starting point.

RELIABILITY OF ENROLLMENT PROJECTIONS

Projections can serve as useful guides to school administrators for educational planning. Enrollment projections are more reliable in Years #1-4 in the future and less reliable in the "out-years." Projections six to ten years out may serve as a guide to future enrollments and are useful for planning purposes, but they should be viewed as subject to change given the likelihood of potential shifts in underlying assumptions/trends, such as student migration, births as they relate to Kindergarten enrollment, and other factors.

Projections that are based upon **the children who already are in the district** (the current K-12 population only) will be the most reliable. The second level of reliability will be for those children already **born into the community but not yet old enough to be in school**. The least reliable category is the group for which an estimate must be made **to predict the number of births**, thereby adding additional uncertainty. See these three multi-colored groupings on the "Projected Enrollment" tab.

Annual updates allow for early identification of recent changes in historical trends. When the actual enrollment in a grade is significantly different (higher or lower) from the projected number, it is important (yet difficult) to determine whether this is a one-year aberration or whether a new trend may have begun. **In light of this possibility, NESDEC urges all school districts to have updated enrollment forecasts developed by NESDEC each October.** This service is available at no cost to affiliated school districts.

USING THIS INFORMATION ELECTRONICALLY

If you would like to extract the information contained in this report for your own documents or presentations, you can use screenshots, which can be inserted into PowerPoint slides, Word documents, etc. Because screenshots create graphics, the image is not editable. Please feel free to contact us if you need assistance in this matter, by phone (508-481-9444) or by email (ep@nesdec.org).

Town Manager Enrollment Projection- Fall 2023																					
	k	1	2	3	4	k-4	5	6	5-6	7	8	7-8	9	10	11	12	9-12	TOTAL*	preschool		
2002	407	442	483	442	488	2,262	428	423	851	426	395	821	343	330	287	274	1234	5246	150	5396	
2003	398	484	464	480	464	2,290	494	436	930	438	437	875	356	343	324	289	1312	5522	157	5679	
2004	384	449	489	464	504	2,290	463	492	955	444	441	885	413	360	334	320	1427	5646	174	5820	
2005	394	452	466	502	466	2,280	502	461	963	486	443	929	425	402	345	344	1516	5755	188	5943	
2006	378	440	468	452	507	2,245	462	488	950	449	501	950	408	436	388	351	1583	5774	173	5947	
2007	376	439	454	482	454	2,205	496	450	946	485	449	934	419	404	423	383	1629	5724	181	5905	
2008	342	476	456	459	478	2,211	456	461	917	453	489	942	393	429	390	427	1639	5695	196	5891	
2009	348	426	493	465	459	2,191	473	436	909	466	439	905	421	398	415	391	1625	5623	211	5834	
2010	372	429	448	515	472	2,236	469	465	934	435	479	914	401	417	390	410	1618	5702	241	5943	
2011	341	429	457	464	516	2,207	485	476	961	462	443	905	414	414	413	390	1631	5704	243	5947	
2012	364	416	447	474	458	2,159	524	465	989	474	466	940	408	421	417	413	1659	5747	262	6009	
2013	392	399	450	452	480	2,173	462	518	980	490	471	961	420	406	419	402	1647	5761	250	6011	
2014	346	430	430	462	467	2,135	487	469	956	529	478	1007	432	423	409	420	1684	5782	234	6016	
2015	356	425	446	439	474	2,140	472	500	972	480	547	1027	413	441	411	403	1668	5807	238	6045	
2016	388	418	459	460	463	2,188	487	490	977	511	492	1003	513	428	441	410	1792	5960	232	6192	
2017	355	424	437	476	482	2,174	464	502	966	493	516	1009	451	513	429	439	1832	5981	237	6218	
2018	351	424	447	454	494	2,170	490	468	958	511	495	1006	460	447	501	429	1837	5971	243	6214	
2019	362	426	439	470	455	2,152	493	502	995	478	514	992	470	469	452	501	1892	6031	220	6251	
2020	287	407	434	430	484	2,042	473	491	964	502	483	985	459	480	470	464	1873	5864	118	5982	
2021	343	339	417	429	427	1,955	484	469	953	481	498	979	459	450	464	461	1834	5721	164	5885	
2022	358	372	375	425	445	1,975	440	508	948	465	479	944	486	452	430	453	1821	5688	203	5891	
2023	359	392	400	390	449	1,990	470	450	920	483	460	943	491	507	438	434	1870	5723	202	5925	
2024	396	409	412	406	399	2,022	460	478	938	445	482	927	441	496	497	437	1871	5758			
2025	292	451	430	418	416	2,007	409	468	877	472	444	917	462	445	487	496	1891	5692			
2026	386	332	475	437	428	2,059	426	416	842	463	472	934	426	467	437	486	1816	5651			
2027	334	440	350	482	447	2,054	439	433	872	411	462	873	452	430	458	436	1777	5576			
2028	352	381	463	355	494	2,045	459	446	905	428	411	839	443	457	422	457	1779	5568			
2029	352	401	401	470	364	1,988	506	466	972	441	428	869	394	447	448	421	1710	5540			
2030	352	401	422	407	482	2,064	373	515	887	461	441	902	410	397	439	448	1694	5547			
2031	352	401	422	429	417	2,021	493	379	872	509	460	969	423	414	390	438	1665	5528			
2032	352	401	422	429	439	2,044	427	502	929	375	508	883	441	427	406	389	1664	5519			

Class of 2032 tracked over the duration of their school years



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **VIII. Old Business**

MEETING DATE: **11/29/23**

BACKGROUND INFORMATION:

ACTION RECOMMENDED:

MEMBERS/STAFF AVAILABLE FOR PRESENTATION:



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **IX. New Business**
A. Superintendent's Goals: Vote

MEETING DATE: **11/29/23**

BACKGROUND INFORMATION:

Each year, the Superintendent of Schools presents performance goals to the School Committee as part of the evaluation process. Consistent with the evaluation process mandated by the Department of Elementary & Secondary Education, Dr. Sawyer will present his proposed goals for the School Committee's review and approval. A memo from Dr. Sawyer is enclosed.

ACTION RECOMMENDED:

That the Committee review and vote to approve the Superintendent's Goals for the 2023-2024 school year as presented.

STAFF AVAILABLE FOR PRESENTATION:

Dr. Joseph M. Sawyer, Superintendent of Schools



Shrewsbury Public Schools

Joseph M. Sawyer, Ed.D.
Superintendent

November 22, 2023

To: School Committee
From: Joe Sawyer
Re: Proposed Goals for the 2023-2024 School Year

With the district's strategic goals and action steps for 2023-2024 approved on November 15, in turn I am submitting my personal goals for this school year. Per the Department of Elementary and Secondary Education's framework for evaluating the superintendent of schools, the superintendent is responsible for the district's goals, as well as two categories of individual goals, one for student learning and one for professional practice. These goals are designed to be completed by early April so that they can be included in my summative evaluation, which is to be completed prior to the next School Committee election.

The format of the following goals is in keeping with the guidelines provided by the Department of Elementary & Secondary Education for performance goals to be "S.M.A.R.T.", i.e., S=Specific and Strategic; M=Measurable; A=Action Oriented; R=Rigorous, Realistic, and Results-Focused; T=Timed and Tracked.

Because the district goals are very specific regarding a number of metrics for student learning, and some will not be complete at the point of my summative evaluation, this student learning goal focuses on creating the conditions for improved student learning by communicating about and garnering support for adequate fiscal resources to advance our strategic priorities under our district's "commitment to educational excellence."

The professional practice goal is the same as the one I proposed last year, as I did not make the progress I had hoped regarding improving communications protocols. However, I believe this remains an important facet of developing my own professional practice, and the collective practice of the district, and since it is work that I am still engaged with I believe maintaining this goal is appropriate.

Student Learning S.M.A.R.T. Goal

By April 2024, the Superintendent of Schools will have presented a Fiscal Year 2025 budget plan that outlines the district's fiscal priorities for advancing student learning and, in collaboration with other district leaders, will have effectively communicated these priorities to stakeholders in order to gain support for the budget plan.

Actions to achieve this goal:

- Work with district leaders to develop a Fiscal Year 2025 budget plan that makes investments in the strategic priorities for the district's commitment to educational excellence
- Present the plan in a manner that clearly articulates key investments designed to advance student learning
- Communicate the importance of these investments through public presentations and written documents shared with stakeholder groups in order to gain support for the Fiscal 2025 budget plan

Professional Practice S.M.A.R.T. Goal

By April 2024, the Superintendent of Schools will have developed and implemented updates to both external and internal communications protocols, in order to improve the effectiveness of communications with families and with staff.

Actions to achieve this goal:

Work with the leadership team, and various stakeholder advisory groups to:

- Identify ways in which both external and internal communications can be most helpful and effective for the needs of different staff stakeholder groups
- Consider exemplar processes from other school districts and other organizations, including participating in a national superintendent professional development cohort through the *Leading Now* organization
- Establish protocols for communications and build a routine for predictable distribution and archiving of information in various formats
- Once implemented, collect feedback from families and staff to determine the effectiveness of changes to communications



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **X. Approval of Minutes**

MEETING DATE: **11/29/23**

BACKGROUND INFORMATION:

The minutes from the School Committee Workshop held on November 8, and the School Committee Meeting held on November 15, 2023, are enclosed.

ACTION RECOMMENDED:

That the Committee accept the minutes from the School Committee Workshop held on November 8, 2023, and the minutes from the School Committee Meeting held on November 15, 2023.

STAFF AVAILABLE FOR PRESENTATION:

Ms. Sandra Fryc, Chairperson

Mr. Jon Wensky, Secretary

SHREWSBURY PUBLIC SCHOOLS
MINUTES OF THE SCHOOL COMMITTEE WORKSHOP
Wednesday, November 8, 2023
Shrewsbury High School - 75 Cypress Avenue
Room M126D - Pricipal's Conference Room

Start Time: 5:36pm

Present: Ms. Sandy Fryc, Chairperson; Ms. Erin Boucher, Vice Chairperson; Mr. Jonathan Wensky, Secretary; Ms. Lynsey Heffernan; Ms. Rachel Sharifipour; Dr. Joseph Sawyer, Superintendent of Schools.

Discussion of revisions to District Strategic Goals and Action Steps for 2023-2024

Dr. Sawyer provided an update regarding the feedback received from the Senior Leadership Team (SLT) since the October 18 Workshop. This feedback resulted in revising the Strategic Goals for the 2023-2024 school year. The key revisions to the plan include clearly stating each strategic priority followed by action steps and noting the staff responsible for driving each goal. The SLT worked on aligning goals with key initiatives that are in progress as well as new initiatives.

Ms. Heffernan recommended adding a “big picture” introduction followed by the review of Strategic Plan goals for the year. Dr. Sawyer recommended an Executive Summary with key performance indicators to accommodate this recommendation. The School Committee and Dr. Sawyer completed review of the revised plan. It will be prepared for a presentation and a vote at the November 15 General Meeting.

Adjournment

Motion to adjourn the workshop into Executive Session:

A. For the purpose of addressing G.L. c. 30A, § 21(a)(7) “[t]o comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements” (“Purpose 7”), Open Meeting Law, G.L. c. 30A, §§ 22(f), (g) – for the purpose of reviewing, approving, and/or releasing executive session minutes.

B. For the purpose of addressing G.L. c. 30A, § 21(a)(3) “to discuss strategy with respect to collective bargaining or litigation if an open meeting may have a detrimental effect of the bargaining or litigating position of the public body and the chair so declares” (“Purpose 3”) - the Shrewsbury Education Association Units A and/or B, the Shrewsbury Paraprofessional Association, and/or the Cafeteria Workers Association

On a motion by Ms. Heffernan; Seconded by Ms. Sharifipour; on a Roll Call Vote: Ms. Sharifipour: Yes; Ms. Heffernan: Yes; Mr. Wensky: Yes; Ms. Boucher, Yes; and Ms. Fryc: Yes,

the Workshop adjourned into Executive Session at 7:07pm.

School Committee Workshop Adjournment

Motion to adjourn the School Committee Workshop: On a motion by Mr. Wensky; Seconded by Ms. Boucher; on a Roll Call Vote: Ms. Sharifipour: Yes; Ms. Heffernan: Yes; Mr. Wensky: Yes; Ms. Boucher, Yes; and Ms. Fryc: Yes,

the School Committee Workshop adjourned at: 7:16pm.

Documents referred to: DRAFT District Strategic Goals and Action Steps for 2023-2024 (Updated November 8, 2023)

**SHREWSBURY PUBLIC SCHOOLS
100 MAPLE AVENUE
SHREWSBURY, MASSACHUSETTS**

MINUTES OF SCHOOL COMMITTEE MEETING

Wednesday, November 15, 2023

Present: Ms. Sandra Fryc, Chairperson; Ms. Erin Boucher, Vice Chairperson; Ms. Lynsey Heffernan; Ms. Rachel Sharifipour; Mr. Christian Girardi, Assistant Superintendent for Finance and Operations; Ms. Meg Belsito, Assistant Superintendent for Student Services; Dr. Jane Lizotte, Assistant Superintendent for Community Partnerships & Well-Being; Ms. Barb Malone, Executive Director of Human Resources; and Dr. Joseph Sawyer, Superintendent of Schools.

Not present: Mr. Jon Wensky, Secretary.

A complete audio/visual recording of this meeting is available on the Shrewsbury Public Schools website.

The meeting was convened by Ms. Fryc at 7:00 pm.

I. Public Participation

None.

II. Chairperson's Report & Members' Reports

None.

III. Superintendent's Report

Dr. Sawyer expressed appreciation to all parties who helped observe Veterans Day - including an annual assembly held at Oak Middle School and a Paton Pride/All-School Meeting - at schools in the district.

IV. Time Scheduled Appointments:

A. RISE Program Update: Report

The report was given by Ms. Meg Belsito; Ms. Meghan Bartlett, Assistant Director of Special Education; Ms. Christine Pellerin, RISE Program Coordinator; Ms. Jennifer Tabor, "Maple & Main" Retail Manager; and RISE Special Education Teachers Ms. Erin Hruskoci and Ms. Kristi Menard. The report included a brief overview of the Reaching Independence through Supported Employment (RISE) Program and a description of its move to the "Maple & Main" retail business/education space at 557 Main Street, Shrewsbury; video footage from the "Maple & Main" Grand Opening and ribbon cutting ceremony in November; program projected enrollment, activities, budget and funding sources, and building maintenance/operation/security; and a description of the Capital Campaign that will provide additional funding to expand the program.

In response to questions from the Committee, the presenters advised that a Capital Campaign account had been set up exclusively for RISE donations; students were adapting quickly to working with customers and the store's point-of-sale system; building capacity is currently approximately 30 students; and there is potential for out-of-district students to attend the program (on a tuition basis) in the future.

B. SHS Career Technical Education & Career Exploration: Report

Dr. Lizotte and Shrewsbury High School (SHS) Principal Mr. Todd Bazydlo gave the report; Ms. Angie Flynn, SHS Director of School Counseling, was not able to attend the meeting. Their report included information on curricular offerings/pathways for students; experiential learning activities available during the 2023-2024 school year; *Lunch and Learn* conversations with guest speakers; expanding business partnerships; job fairs; funding opportunities and sources; and next steps.

In response to questions from the Committee, Mr. Bazydlo and Dr. Lizotte advised that potential challenges around providing these types of opportunities include having adequate resources for grant procurement and reporting and coordination of the programming, maintaining relationships with business partners, and knowing/understanding student needs.

C. Future Plans of the SHS Class of 2023: Report

Mr. Bazydlo gave the report; Ms. Angie Flynn, SHS Director of School Counseling, was not able to attend the meeting. After summarizing current trends in college admissions, Mr. Bazydlo provided information on the Class of 2023's public and private two- and four-year matriculations; future plans by student gender, Special Education, Free/Reduced Lunch, and English Learner status; race/ethnicity data; college applications, acceptances, and enrollments; and matriculation by college/university geographic region. Mr. Bazydlo also presented data on SHS enrollment and School Counselor caseloads that included a comparison with other districts.

In response to questions from the Committee Mr. Bazydlo provided information on the overall responsibilities of School Counselors, and Dr. Sawyer detailed how the district identifies students eligible for free or reduced-cost opportunities based on financial need through direct certification by the state, and by families submitting applications to the district.

V. Curriculum

None.

VI. Policy

A. District Strategic Goals and Action Steps for 2023-2024: Report & Vote

Dr. Sawyer began the report by using the acronym VUCA to describe what is currently being experienced in public education (Volatility, Uncertainty, Complexity, Ambiguity) as well as the district's response to this environment (Vision, Understanding, Clarity, Agility). Dr. Sawyer went on to examine the district's response in the context of the 2023-2027 Strategic Plan Commitments; shared examples of proposed 2023-2024 Process Goals for Developing Systems and Performance Goals for Determining Progress; provided caveats relative to the goals and summarized their intent; provided details on the proposed 2023-2024 Strategic Goals and Action Steps (noting the associated Staff Responsible) for each of the Priorities associated with the three Strategic Plan Commitments; and recommended that the Committee vote to approve the proposed goals and action steps. Committee members shared their perspectives in turn, with all expressing support for the draft. On a motion by Ms. Boucher, seconded by Ms. Sharifipour, the Committee voted unanimously to approve the enclosed proposed District Strategic Goals and Action Steps for the 2023-2024 school year as presented.

VII. Finance & Operations

A. FY25 Budget Priorities, Guidance, & Calendar: Vote

Ms. Fryc and Mr. Girardi advised that no feedback from the public had been received since the draft of Budget Guidelines and Priorities for the Fiscal Year 2025 was posted after being presented at the School Committee meeting on October 25, 2023. There were no questions from the Committee. On a motion by

Ms. Boucher, seconded by Ms. Sharifipour, the Committee voted unanimously to approve the Fiscal Year 2025 Budget Priorities & Guidance as presented. He noted the written report included

VIII. Old Business

None.

IX. New Business

A. Assabet Valley Collaborative: Update

Dr. Sawyer described the different types of programs the Assabet Valley Collaborative (AVC) offers to member and non-member districts, and noted Shrewsbury Public Schools utilizes AVC for cost-effective specialized student transportation to out-of-district placements. There were no questions from the Committee.

X. Approval of Minutes

Without objections from the Committee, the minutes from the School Committee Workshop held on October 18, and the School Committee Meeting held on October 25, 2023, were accepted as distributed.

XI. Executive Session

Ms. Fryc requested a motion to adjourn to Executive Session:

A. For the purpose of addressing G.L. c. 30A, § 21(a)(7) “[t]o comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements” (“Purpose 7”), Open Meeting Law, G.L. c. 30A, §§ 22(f), (g) – for the purpose of reviewing, approving, and/or releasing executive session minutes, and

B. For the purpose of addressing G.L. c. 30A, § 21(a)(3) “to discuss strategy with respect to collective bargaining or litigation if an open meeting may have a detrimental effect of the bargaining or litigating position of the public body and the chair so declares” (“Purpose 3”) - the Shrewsbury Education Association Units A and/or B, the Shrewsbury Paraprofessional Association, and/or the Cafeteria Workers Association, where deliberation in an open meeting may have a detrimental effect on the bargaining position of the public body; and return to Open Session only for the purpose of adjourning for the evening. On a motion by Ms. Boucher, seconded by Ms. Sharifipour, on a roll call vote:

Ms. Sharifipour, yes; Ms. Boucher, yes; Ms. Heffernan, yes; and Ms. Fryc, yes, the School Committee voted to adjourn to Executive Session at 9:05 pm.

XII. Adjournment

On a motion by Ms. Sharifipour, seconded by Ms. Boucher, the committee unanimously agreed to adjourn the meeting at 9:48 pm. Roll call votes were as follows: Ms. Sharifipour, yes; Ms. Boucher, yes; Ms. Heffernan, yes; and Ms. Fryc, yes.

Respectfully submitted,

Elizabeth McCollum, Clerk

Documents referenced:

RISE Program Update Report

RISE Program Update Slide Presentation
SHS Career Technical Education & Career Exploration Report
SHS Career Technical Education & Career Exploration Slide Presentation
SHS Class of 2023 Future Plans Report
SHS Class of 2023 Future Plans Slide Presentation
Proposed 2023-2024 District Strategic Goals and Action Steps
Proposed 2023-2024 District Strategic Goals and Action Steps Slide Presentation
FY25 Draft Budget Priorities & Guidance
FY25 Draft Budget Calendar
Assabet Valley Collaborative Update Report
Set(s) of minutes as referenced above



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **XI. Executive Session**

MEETING DATE: **11/29/23**

- A. For the purpose of addressing G.L. c. 30A, § 21(a)(7) “[t]o comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements” (“Purpose 7”), Open Meeting Law, G.L. c. 30A, §§ 22(f), (g) – for the purpose of reviewing, approving, and/or releasing executive session minutes.**
- B. For the purpose of addressing G.L. c. 30A, § 21(a)(3) “to discuss strategy with respect to collective bargaining or litigation if an open meeting may have a detrimental effect of the bargaining or litigating position of the public body and the chair so declares” (“Purpose 3”) - the Shrewsbury Education Association Units A and/or B, the Shrewsbury Paraprofessional Association, and/or the Cafeteria Workers Association.**

BACKGROUND INFORMATION:

Executive Session is warranted for these purposes

ACTION RECOMMENDED:

Request a motion to adjourn to Executive Session:

- A. For the purpose of addressing G.L. c. 30A, § 21(a)(7) “[t]o comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements” (“Purpose 7”), Open Meeting Law, G.L. c. 30A, §§ 22(f), (g) – for the purpose of reviewing, approving, and/or releasing executive session minutes; and
- B. For the purpose of addressing G.L. c. 30A, § 21(a)(3) “to discuss strategy with respect to collective bargaining or litigation if an open meeting may have a detrimental effect of the bargaining or litigating position of the public body and the chair so declares” (“Purpose 3”) - the Shrewsbury Education Association Units A and/or B, the Shrewsbury Paraprofessional Association, and/or the Cafeteria Workers Association, where deliberation in an open meeting may have a detrimental effect on the bargaining position of the public body; and return to Open Session only for the purpose of adjourning for the evening.

STAFF AVAILABLE FOR PRESENTATION:

Dr. Joseph M. Sawyer, Superintendent of Schools
Ms. Barbara A. Malone, Executive Director of Human Resources
Mr. Chris Girardi, Assistant Superintendent for Finance and Operations



**SHREWSBURY PUBLIC SCHOOLS
SCHOOL COMMITTEE MEETING**

ITEM NO: **XII. Adjournment**