



**Shrewsbury Public Schools  
Shrewsbury, MA**

**2022-23 Enrollment Projection Report**

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# Enrollment Summary

The global pandemic continues to influence our nation's public health and economic stability in unpredictable ways. As such, it is still too early to identify many of the factors that could impact school enrollments. Over the past school year, we have seen fluctuations in the real estate market and job trends, which have impacted student attendance patterns. Moreover, during the past school year, we have seen how school enrollment patterns can differ substantially from one district to another, with some districts losing students while others experience an influx of students.

We are pleased to send you this report displaying the past, present, and projected enrollments for the District. These ten-year projections are designed to provide the 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 have received the figures given to us by the District, and we assume that the method of collecting the enrollment 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 "Second Semester Refresher" enrollment projection at no cost to affiliates. (For more information please refer to the Reliability and Use of This Document section)

The NESDEC enrollment projection fell within 42 students of the K-12 total, 5,646 students projected vs. 5,688 enrolled. One variance of 45 students occurred at Kindergarten, 313 projected vs. 358 enrolled and another variance of 30 students at Grade 1, 402 projected vs. 372 enrolled. Ratios have been adjusted.

Births decreased by 37 from a previous ten-year average of 357 to a projected average of 320. 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 68 students per year.

Over the next three years, K-4 enrollments are projected to decrease by 62 students, Grades 5-6 enrollments are projected to decrease by 96 students, Grades 7-8 enrollments are projected to decrease by 28 students and Grades 9-12 enrollments are projected to increase by 16 students as students move through the grades.

# Historical Enrollment

School District: Shrewsbury, MA

11/20/2022

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
2007	364	2012-13	262	364	416	447	474	458	524	465	474	466	408	421	417	412	0	5746	6008
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	2	5690	5893

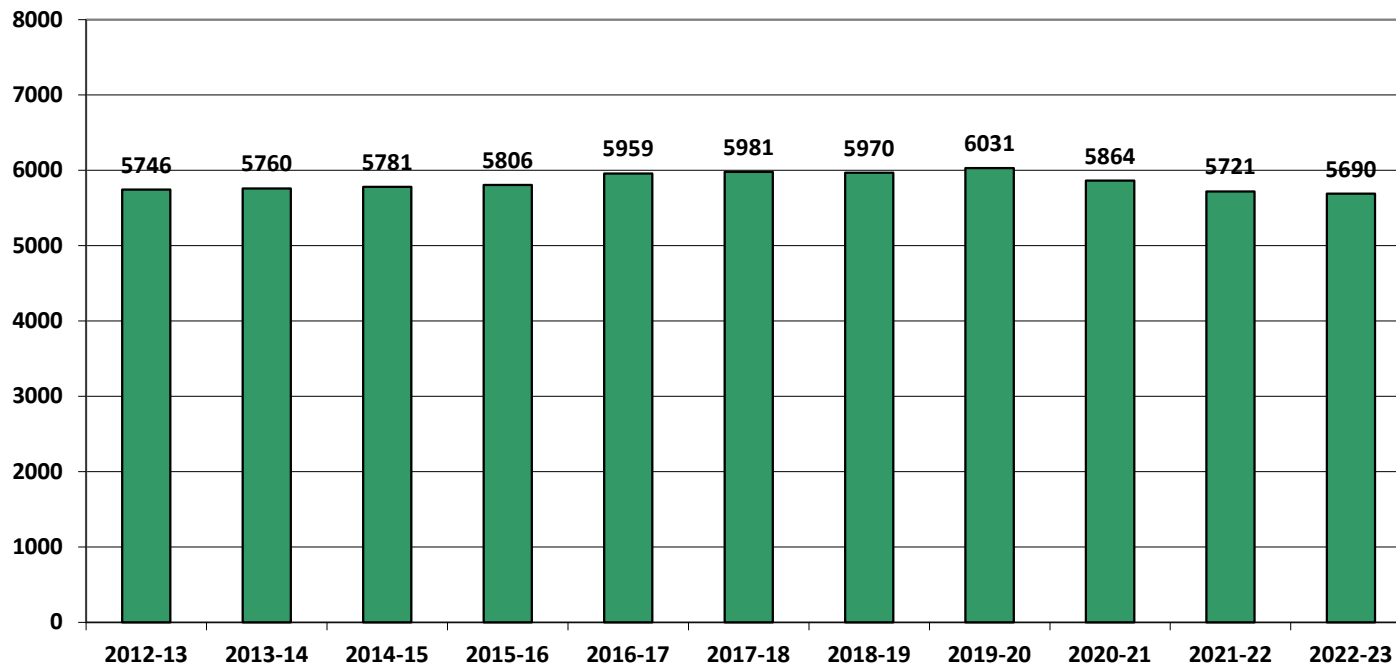
\*Birth data provided by Public Health Vital Records Departments in each state.

Historical Enrollment in Grade Combinations									
Year	K-4	PK-4	K-5	K-6	K-8	5-8	5-6	7-8	9-12
2012-13	2159	2421	2683	3148	4088	1929	989	940	1658
2013-14	2173	2423	2635	3153	4114	1941	980	961	1646
2014-15	2135	2369	2622	3091	4098	1963	956	1007	1683
2015-16	2139	2378	2611	3111	4138	1999	972	1027	1668
2016-17	2187	2419	2674	3164	4167	1980	977	1003	1792
2017-18	2174	2411	2638	3140	4149	1975	966	1009	1832
2018-19	2170	2413	2660	3128	4134	1964	958	1006	1836
2019-20	2152	2372	2645	3147	4139	1987	995	992	1892
2020-21	2042	2152	2515	3006	3991	1949	964	985	1873
2021-22	1955	2119	2439	2908	3887	1932	953	979	1834
2022-23	1975	2178	2415	2923	3867	1892	948	944	1821

Historical Percentage Changes			
Year	K-12	Diff.	%
2012-13	5746	0	0.0%
2013-14	5760	14	0.2%
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%
Change		-56	-1.0%

# Historical Enrollment

K-12, School Years 2012-13 to 2022-23



# Projected Enrollment

School District: Shrewsbury, MA

11/20/2022

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
2017	315		2022-23	203	358	372	375	425	445	440	508	465	479	486	452	430	453	2	5690	5893
2018	328		2023-24	205	330	412	391	379	436	455	449	509	466	450	486	445	428	2	5638	5843
2019	354		2024-25	207	356	380	433	395	388	446	464	450	510	438	450	479	443	2	5634	5841
2020	261		2025-26	209	263	409	399	437	405	397	455	465	451	479	438	443	477	2	5520	5729
2021	345	(prov.)	2026-27	211	347	302	429	403	448	414	405	456	466	424	479	431	441	2	5447	5658
2022	321	(est.)	2027-28	213	323	399	317	433	413	458	422	406	457	438	424	472	429	2	5393	5606
2023	322	(est.)	2028-29	215	324	371	419	320	444	423	467	423	407	429	438	418	470	2	5355	5570
2024	320	(est.)	2029-30	217	323	373	389	423	328	454	431	468	424	382	429	431	416	2	5273	5490
2025	314	(est.)	2030-31	219	316	371	392	393	434	336	463	432	469	398	382	423	429	2	5240	5459
2026	324	(est.)	2031-32	221	327	363	389	396	403	444	343	464	433	441	398	376	421	2	5200	5421
2027	320	(est.)	2032-33	223	322	376	381	393	406	412	453	344	465	407	441	392	375	2	5169	5392

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.

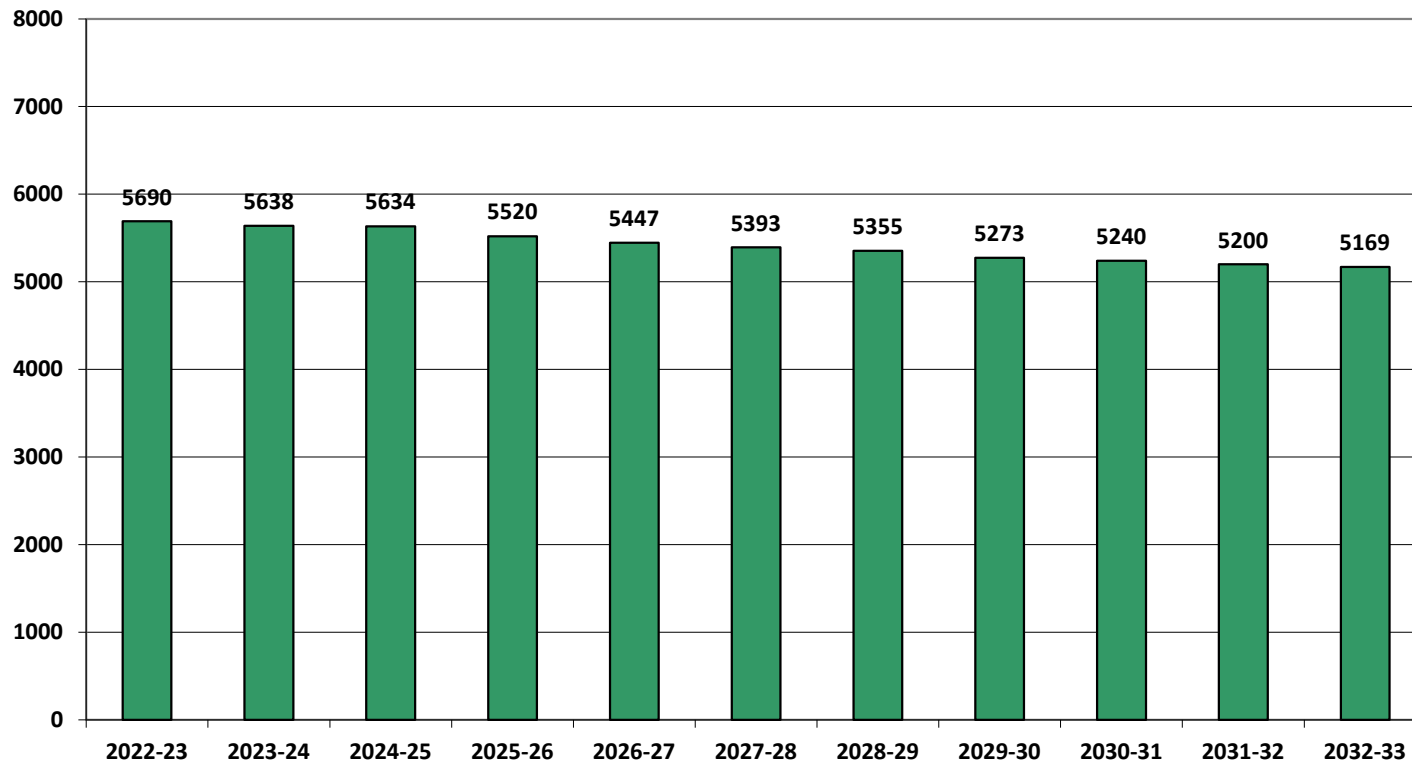
Projected Enrollment in Grade Combinations*									
Year	K-4	PK-4	K-5	K-6	K-8	5-8	5-6	7-8	9-12
2022-23	1975	2178	2415	2923	3867	1892	948	944	1821
2023-24	1948	2153	2403	2852	3827	1879	904	975	1809
2024-25	1952	2159	2398	2862	3822	1870	910	960	1810
2025-26	1913	2122	2310	2765	3681	1768	852	916	1837
2026-27	1929	2140	2343	2748	3670	1741	819	922	1775
2027-28	1885	2098	2343	2765	3628	1743	880	863	1763
2028-29	1878	2093	2301	2768	3598	1720	890	830	1755
2029-30	1836	2053	2290	2721	3613	1777	885	892	1658
2030-31	1906	2125	2242	2705	3606	1700	799	901	1632
2031-32	1878	2099	2322	2665	3562	1684	787	897	1636
2032-33	1878	2101	2290	2743	3552	1674	865	809	1615

Projected Percentage Changes			
Year	K-12	Diff.	%
2022-23	5690	0	0.0%
2023-24	5638	-52	-0.9%
2024-25	5634	-4	-0.1%
2025-26	5520	-114	-2.0%
2026-27	5447	-73	-1.3%
2027-28	5393	-54	-1.0%
2028-29	5355	-38	-0.7%
2029-30	5273	-82	-1.5%
2030-31	5240	-33	-0.6%
2031-32	5200	-40	-0.8%
2032-33	5169	-31	-0.6%
Change		-521	-9.2%

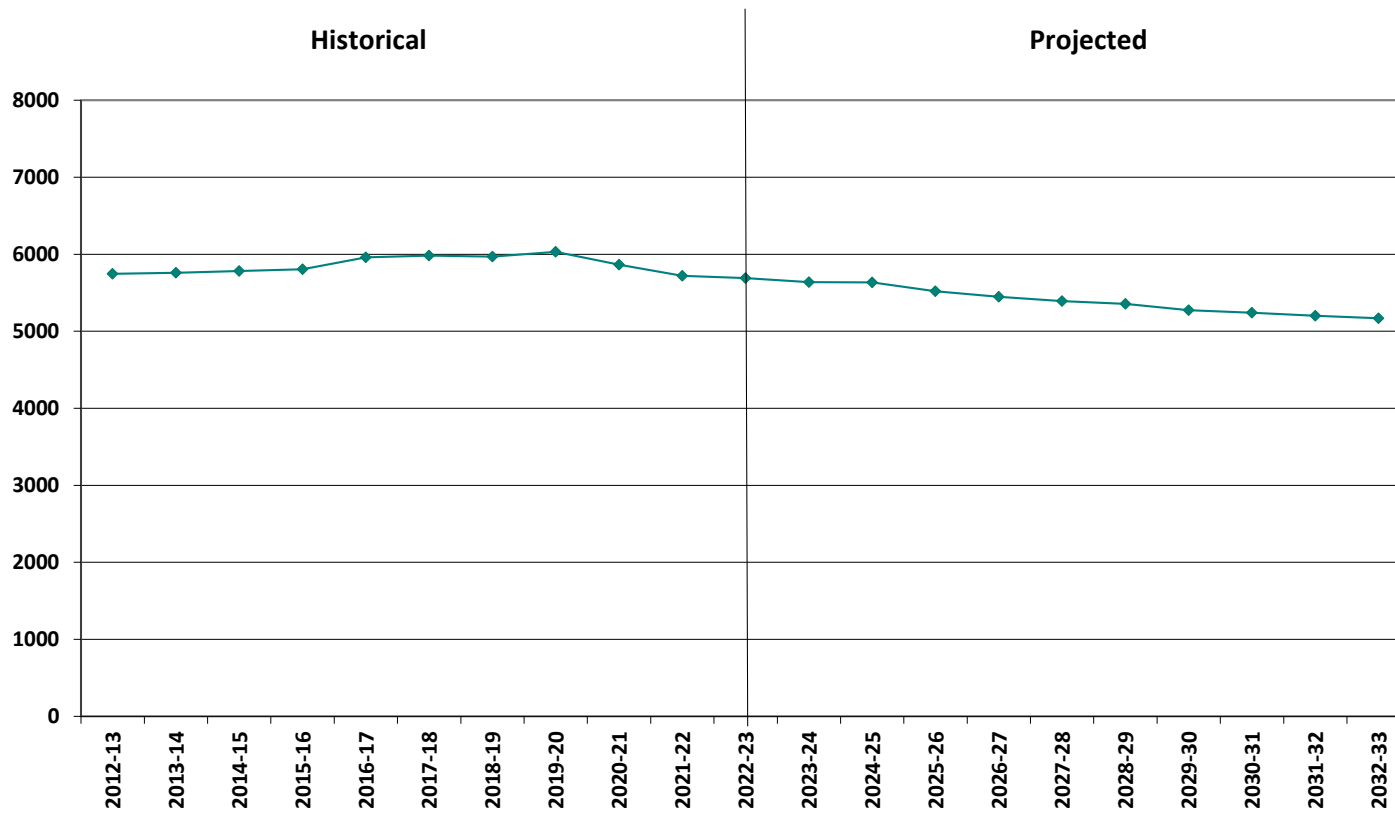
\*Projections should be updated annually to reflect changes in in/out-migration of families, real estate sales, residential construction, births, and similar factors.

# Projected Enrollment

K-12, School Years 2022-23 to 2032-33

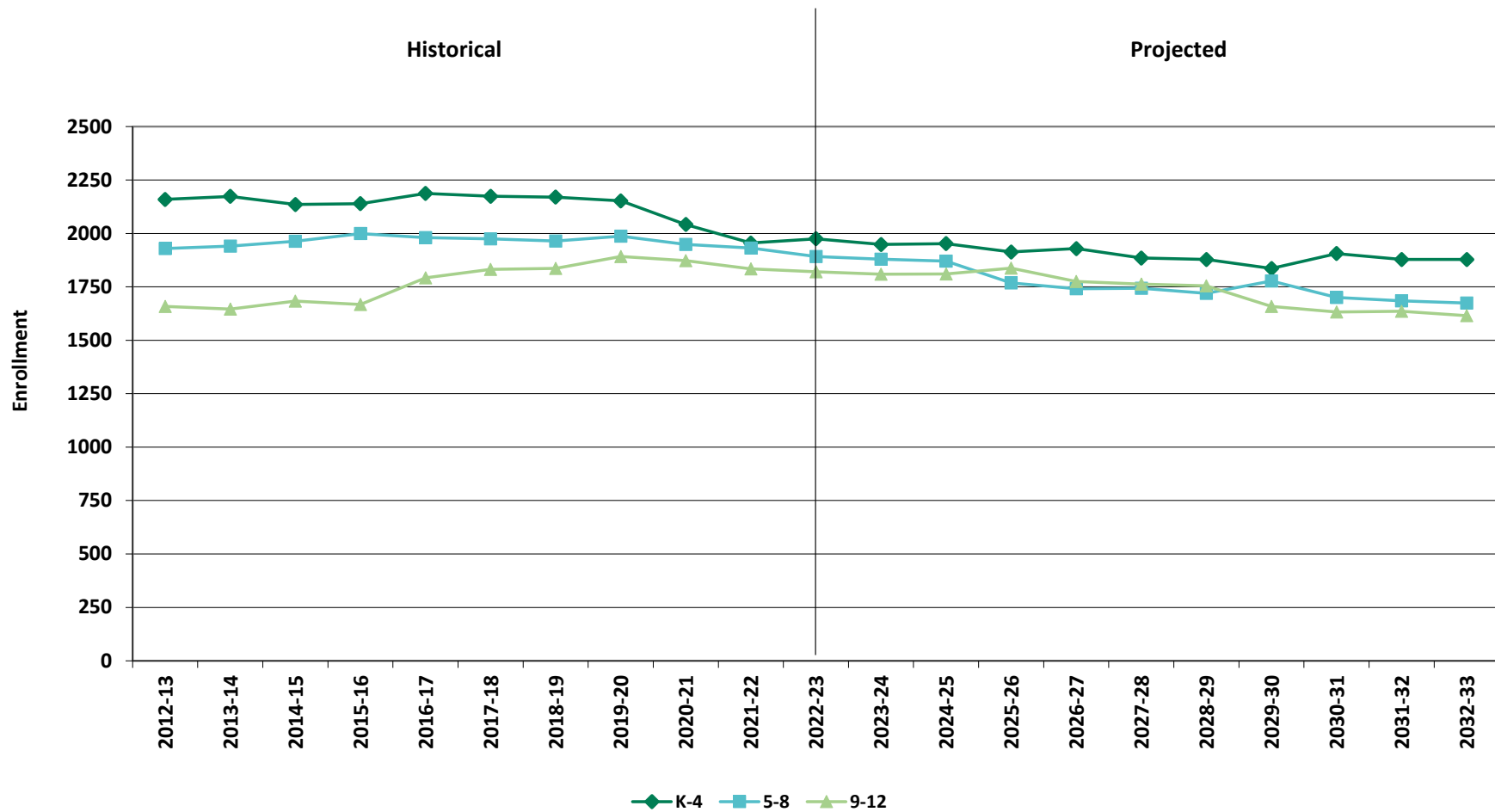


# Historical & Projected Enrollment



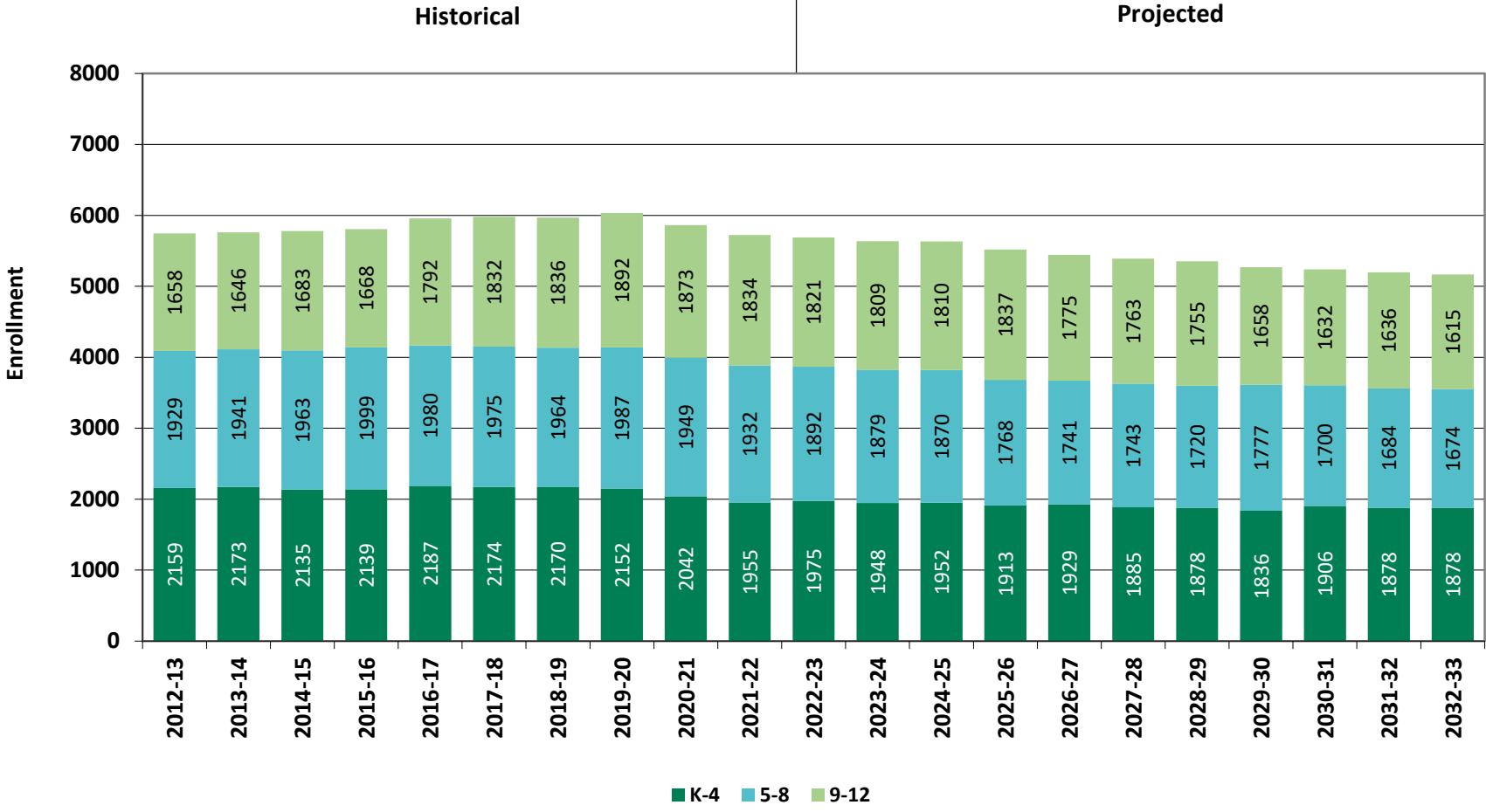


## Historical & Projected Enrollments in Grade Combinations

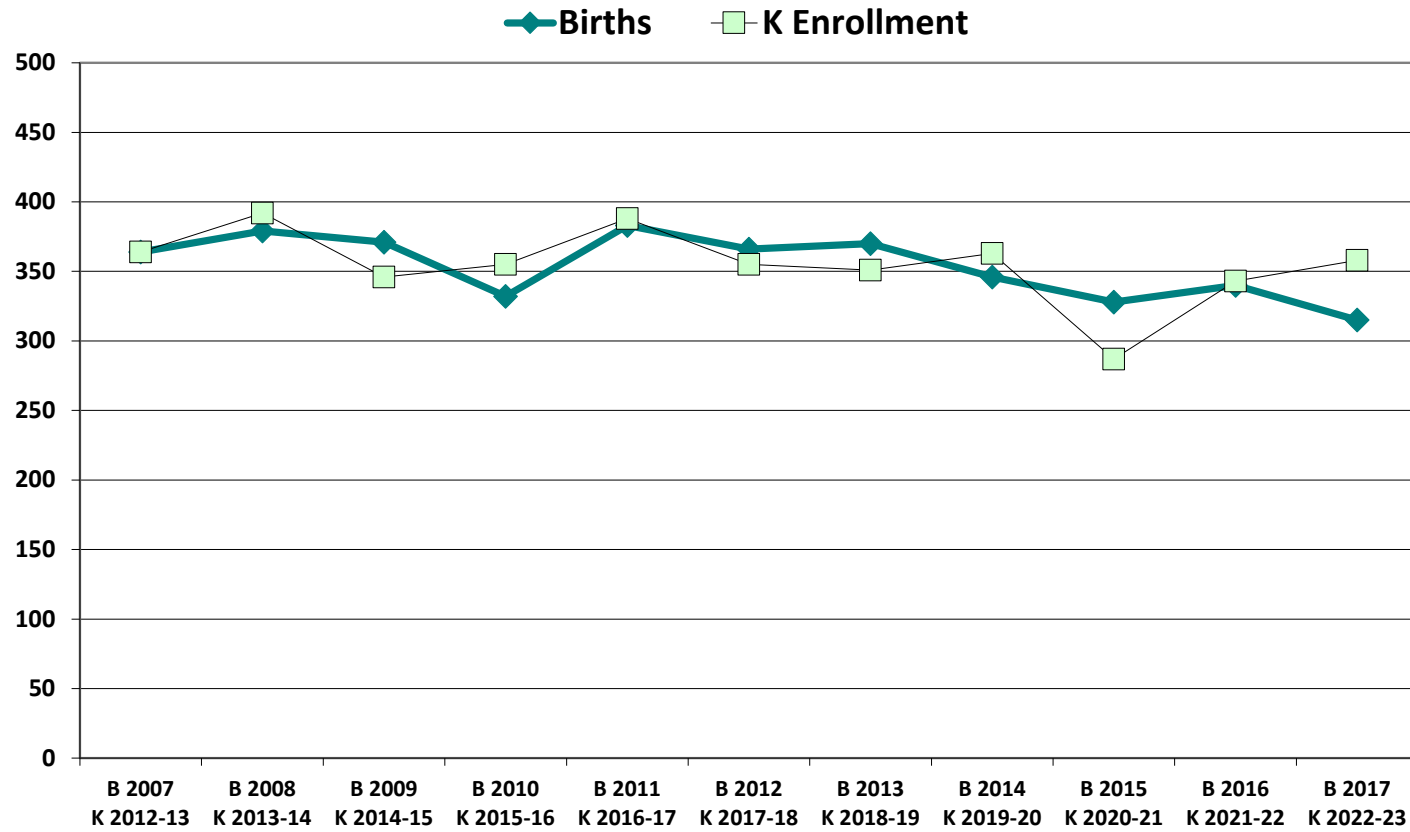




# Historical & Projected Enrollments in Grade Combinations



# Birth-to-Kindergarten Relationship



# Additional Information

Building Permits Issued (Source: HUD)		
Year	Single-Family	Multi-Units
2012	66	4
2018	35	262
2019	34	318
2020	35	256
2021	40	328
2022	28 to date	213 to date

Enrollment History*		
Year	Career-Tech 9-12 Total	Non-Public K-12 Total
2012-13	127	865
2018-19	107	n/a
2019-20	103	330
2020-21	113	555
2021-22	96	553
2022-23	63	n/a

Residents in Non-Public Independent and Parochial Schools (General Education)*														
Jan. 1, 2022	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	24	29	38	30	33	33	27	51	41	61	69	55	62	553

K-12 Home-Schooled Students*	
2022	31

K-12 Residents in Charter or Magnet Schools, or Choiced-out*	
2022	20

K-12 Special Education Outplaced Students*	
2022	62

K-12 Tuitioned-In, Choiced-In, & Other Non-Residents*	
2022	20

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

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

## New England's PK-12 Enrollment Trends

From 2020 to 2030, the US Department of Education anticipates changes in PK-12 enrollment of -2.4% in the South, -6.5% in the West, -3.8% in the Midwest, -6.2% in the Northeast, and a total of -4.3% nationwide.

State	Fall 2020 PK - 12	Fall 2030 Projected	PK-12 Decline	% Change 2020-2030
CT	509,058	475,600	-33,458	-6.6%
ME	172,455	161,800	-10,655	-6.2%
MA	921,712	879,900	-41,812	-4.5%
NH	169,027	144,600	-24,427	-14.5%
RI	139,184	130,200	-8,984	-6.5%
VT	82,401	74,600	-7,801	-9.5%

**Source:** U.S. Department of Education, National Center for Education Statistics, *Enrollment In Public Schools fall 1990 to fall 2030*, Table 203.20, March 2022.

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.

# 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 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 2018-19 increased to 104 students in Grade 2 in 2019-20, 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](mailto:ep@nesdec.org)).