



**Natick Public Schools
Natick, MA**

2021-22 Enrollment Projection Report

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 the past, present, and projected enrollments for your District. New this year, we have added graphs that highlight 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.

Of note, projections are generally more reliable when they are closest in time to the current year. Projections four to ten years out may serve as a guide to future enrollments. In light of this, NESDEC has added a "Second Semester refresher" enrollment projection at no cost to affiliates.

The NESDEC enrollment projection for fell within 48 students of the K-12 total (5,169 projected vs 5,217 enrolled). One variance of 30 students occurred at Grade 1, 332 projected vs. 362 enrolled. This variance could be attributed to family indecision regarding the pandemic.

Births decreased by 40 from a previous ten-year average of 434 to a projected average of 394. Enrollment in Grades 1-8 is usually pretty stable and a good predictor of enrollment stability. For the past eight years, grades 1-8 were losing an average of 40 net "move-outs" of students in the following year. It might be beneficial for the District to continue monitoring homeschool students for potential return to the District, as in 2021, 59 K-12 students were reported.

Over the next three years, K-4 enrollments are projected to decrease by a total of 89 students, Grades 5-8 enrollments are projected to decrease by a total of 155 students, and Grades 9-12 enrollments are projected to increase by a total of 128 students, as student pass through the grades.

Historical Enrollment

School District: Natick, MA

12/20/2021

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
2006	427	2011-12	87	420	406	381	419	433	382	383	355	374	330	331	322	316	0	4852	4939
2007	452	2012-13	102	413	423	414	377	414	437	372	384	356	386	331	327	321	0	4955	5057
2008	454	2013-14	108	462	421	443	406	385	418	431	388	388	373	381	339	336	0	5171	5279
2009	432	2014-15	110	453	454	441	435	395	376	405	429	377	396	367	380	350	0	5258	5368
2010	408	2015-16	113	435	455	462	441	418	407	372	402	418	381	394	361	383	0	5329	5442
2011	439	2016-17	126	447	433	441	464	419	414	387	364	391	415	353	372	358	0	5258	5384
2012	421	2017-18	127	422	436	428	433	457	417	401	367	361	388	423	361	385	10	5289	5416
2013	429	2018-19	135	424	436	434	428	445	451	407	402	383	384	407	431	377	0	5409	5544
2014	463	2019-20	136	407	420	423	425	429	441	421	406	388	393	387	408	440	0	5388	5524
2015	415	2020-21	76	332	393	417	405	414	422	430	411	401	379	380	383	408	0	5175	5251
2016	426	2021-22	132	407	362	380	424	396	412	412	440	419	398	391	389	387	0	5217	5349

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

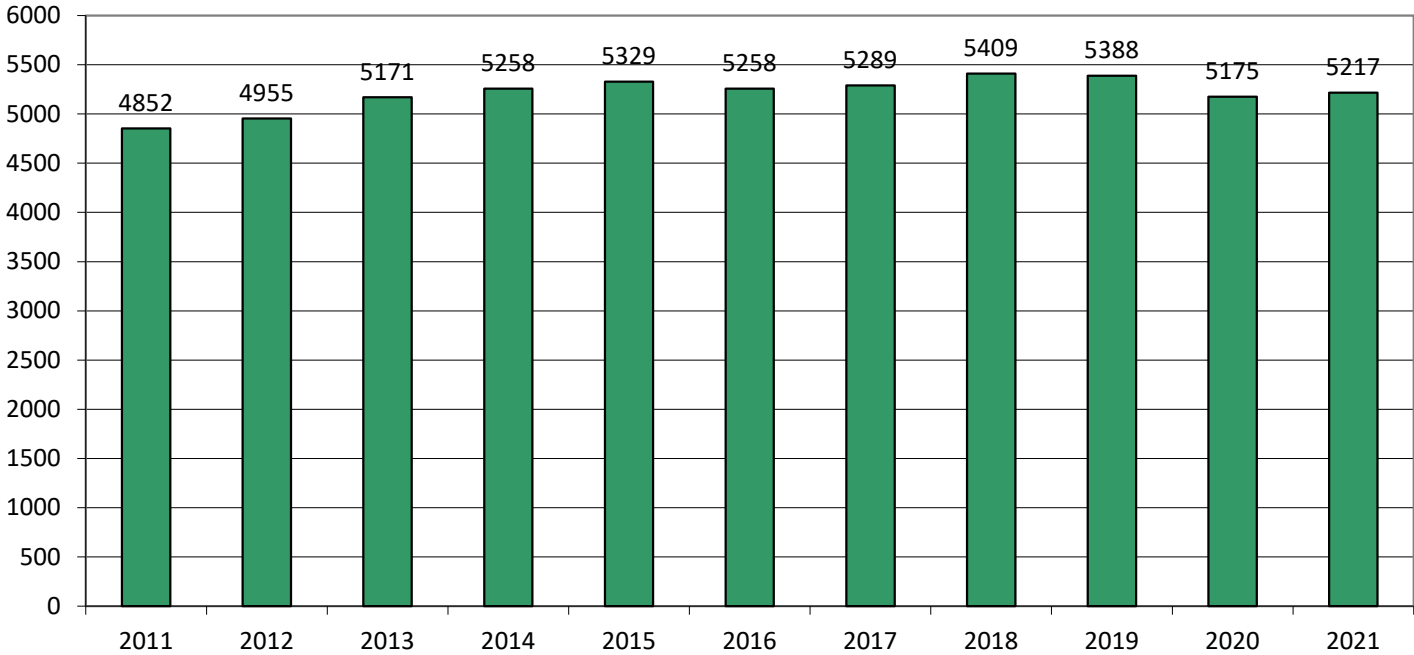
Historical Enrollment in Grade Combinations									
Year	K-4	PK-4	K-5	PK-5	K-8	PK-8	5-8	5-12	9-12
2011-12	2059	2146	2441	2528	3553	3640	1494	2793	1299
2012-13	2041	2143	2478	2580	3590	3692	1549	2914	1365
2013-14	2117	2225	2535	2643	3742	3850	1625	3054	1429
2014-15	2178	2288	2554	2664	3765	3875	1587	3080	1493
2015-16	2211	2324	2618	2731	3810	3923	1599	3118	1519
2016-17	2204	2330	2618	2744	3760	3886	1556	3054	1498
2017-18	2176	2303	2593	2720	3722	3849	1546	3103	1557
2018-19	2167	2302	2618	2753	3810	3945	1643	3242	1599
2019-20	2104	2240	2545	2681	3760	3896	1656	3284	1628
2020-21	1961	2037	2383	2459	3625	3701	1664	3214	1550
2021-22	1969	2101	2381	2513	3652	3784	1683	3248	1565

Historical Percentage Changes			
Year	K-12	Diff.	%
2011-12	4852	0	0.0%
2012-13	4955	103	2.1%
2013-14	5171	216	4.4%
2014-15	5258	87	1.7%
2015-16	5329	71	1.4%
2016-17	5258	-71	-1.3%
2017-18	5289	31	0.6%
2018-19	5409	120	2.3%
2019-20	5388	-21	-0.4%
2020-21	5175	-213	-4.0%
2021-22	5217	42	0.8%
Change	365		7.5%

NESDEC

Historical Enrollment

K-12, 2011-2021



Projected Enrollment

School District: Natick, MA

12/20/2021

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
2016	426		2021-22	132	407	362	380	424	396	412	412	440	419	398	391	389	387	0	5217	5349
2017	390		2022-23	133	374	413	354	374	421	392	398	404	436	423	402	393	401	0	5185	5318
2018	394		2023-24	134	378	380	403	349	372	417	379	390	400	440	427	404	405	0	5144	5278
2019	397		2024-25	135	381	384	371	397	347	368	403	371	386	404	444	429	416	0	5101	5236
2020	364	(prov.)	2025-26	136	349	387	375	365	394	344	355	395	368	390	408	446	442	0	5018	5154
2021	394	(est.)	2026-27	137	378	354	378	369	363	390	332	348	391	372	394	410	459	0	4938	5075
2022	388	(est.)	2027-28	138	372	384	346	372	367	359	377	325	345	395	376	396	422	0	4836	4974
2023	387	(est.)	2028-29	139	372	378	375	341	370	363	347	369	322	348	399	378	408	0	4770	4909
2024	386	(est.)	2029-30	140	371	378	369	369	339	366	351	340	366	325	351	401	389	0	4715	4855
2025	384	(est.)	2030-31	141	369	377	369	363	367	336	354	344	337	370	328	353	413	0	4680	4821
2026	388	(est.)	2031-32	142	372	375	368	363	361	363	325	347	341	340	374	330	364	0	4623	4765

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.

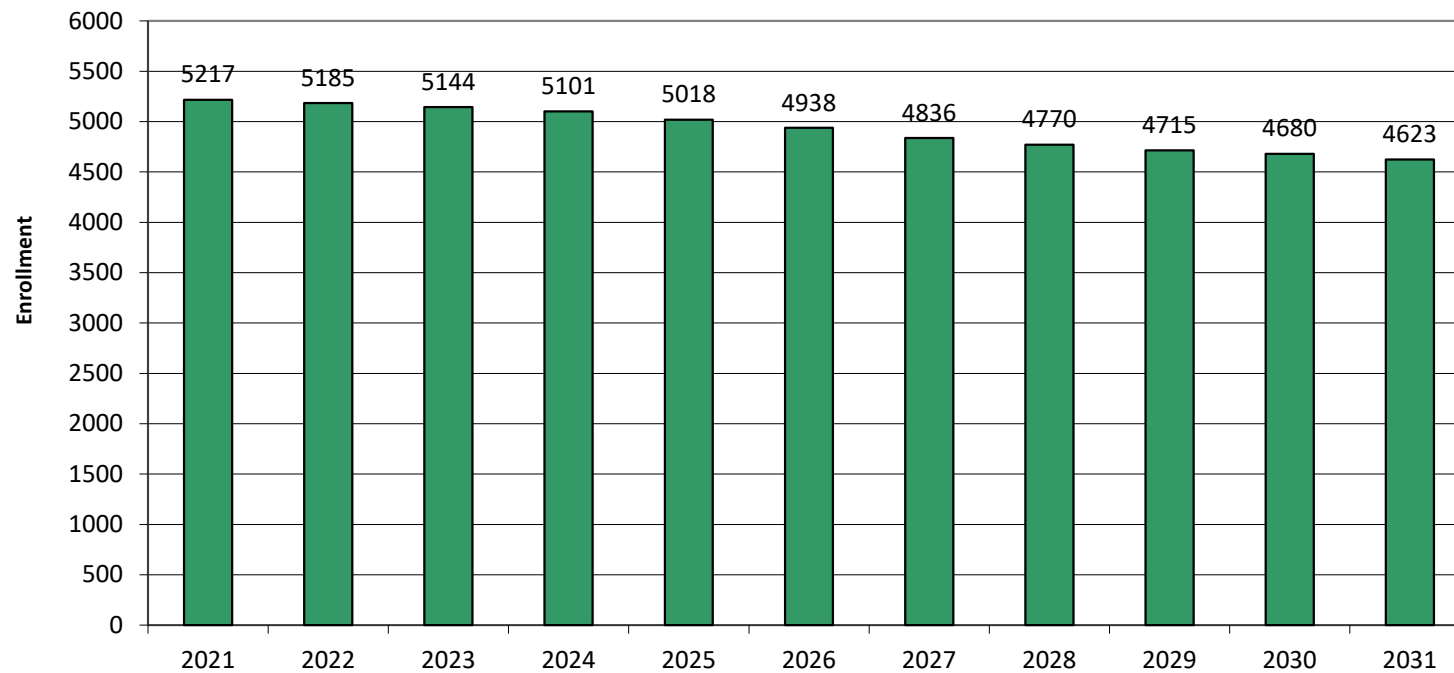
Projected Enrollment in Grade Combinations*									
Year	K-4	PK-4	K-5	PK-5	K-8	PK-8	5-8	5-12	9-12
2021-22	1969	2101	2381	2513	3652	3784	1683	3248	1565
2022-23	1936	2069	2328	2461	3566	3699	1630	3249	1619
2023-24	1882	2016	2299	2433	3468	3602	1586	3262	1676
2024-25	1880	2015	2248	2383	3408	3543	1528	3221	1693
2025-26	1870	2006	2214	2350	3332	3468	1462	3148	1686
2026-27	1842	1979	2232	2369	3303	3440	1461	3096	1635
2027-28	1841	1979	2200	2338	3247	3385	1406	2995	1589
2028-29	1836	1975	2199	2338	3237	3376	1401	2934	1533
2029-30	1826	1966	2192	2332	3249	3389	1423	2889	1466
2030-31	1845	1986	2181	2322	3216	3357	1371	2835	1464
2031-32	1839	1981	2202	2344	3215	3357	1376	2784	1408

Projected Percentage Changes			
Year	K-12	Diff.	%
2021-22	5217	0	0.0%
2022-23	5185	-32	-0.6%
2023-24	5144	-41	-0.8%
2024-25	5101	-43	-0.8%
2025-26	5018	-83	-1.6%
2026-27	4938	-80	-1.6%
2027-28	4836	-102	-2.1%
2028-29	4770	-66	-1.4%
2029-30	4715	-55	-1.2%
2030-31	4680	-35	-0.7%
2031-32	4623	-57	-1.2%
Change	-594		-11.4%

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

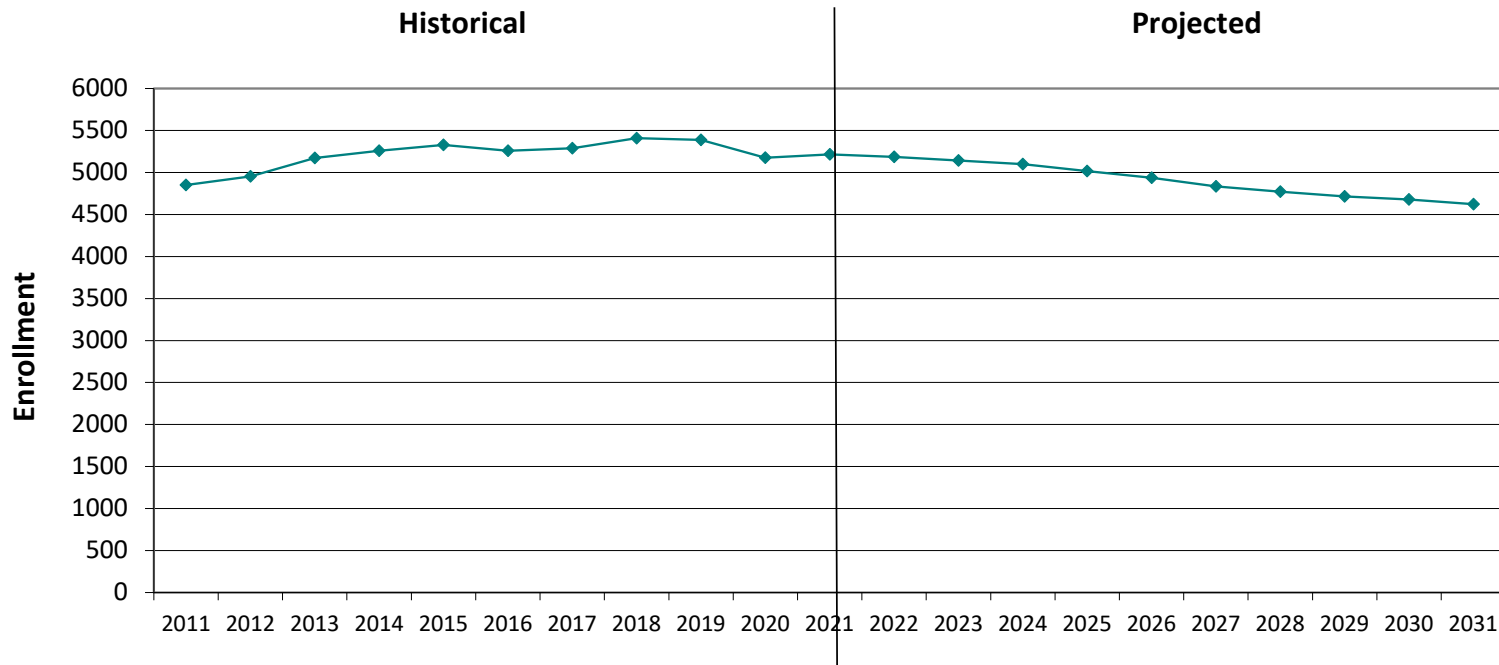
Projected Enrollment

K-12 To 2031 Based On Data Through School Year 2021-22

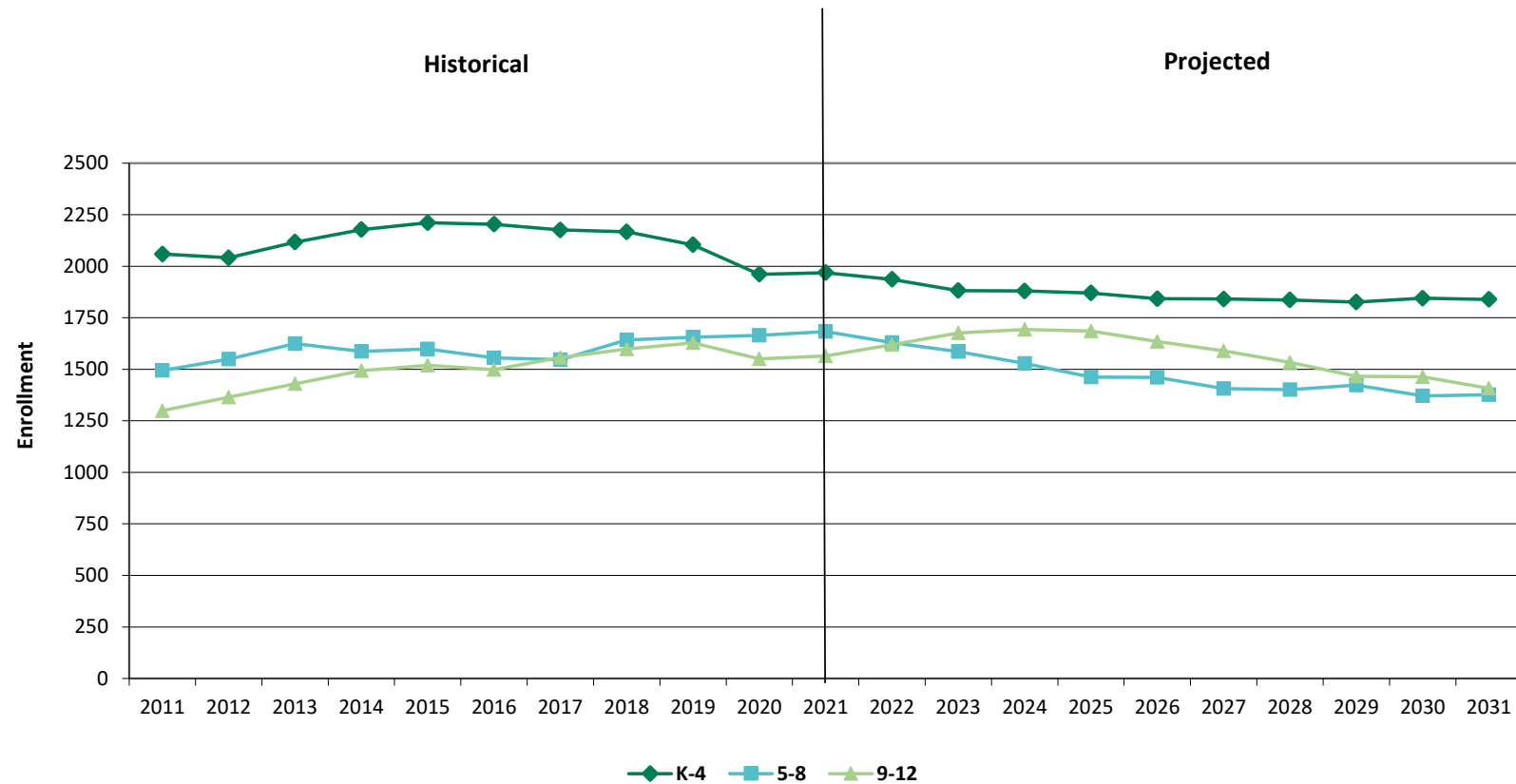


Historical & Projected Enrollment

K-12, 2011-2031

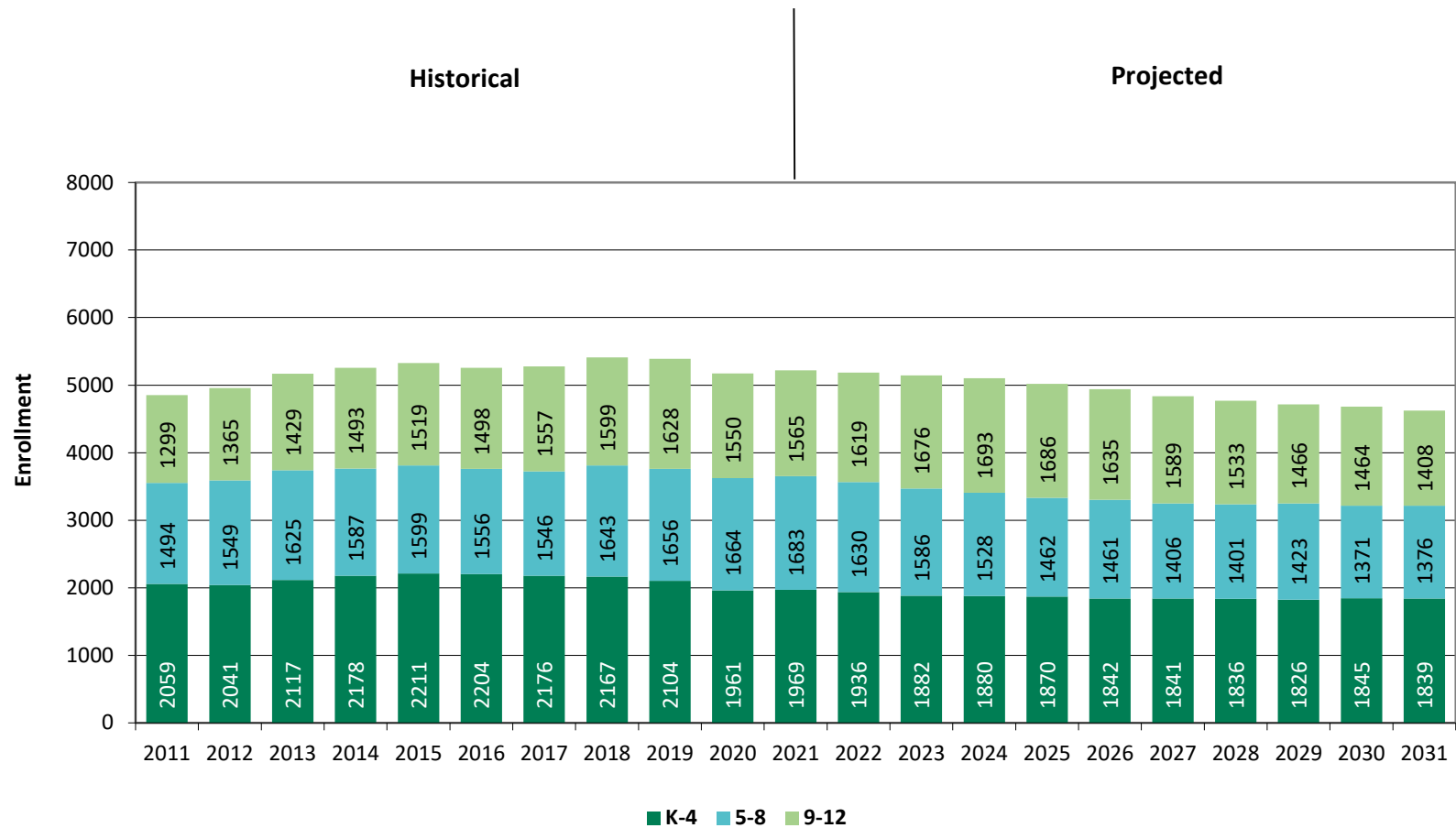


Historical & Projected Enrollments in Grade Combinations

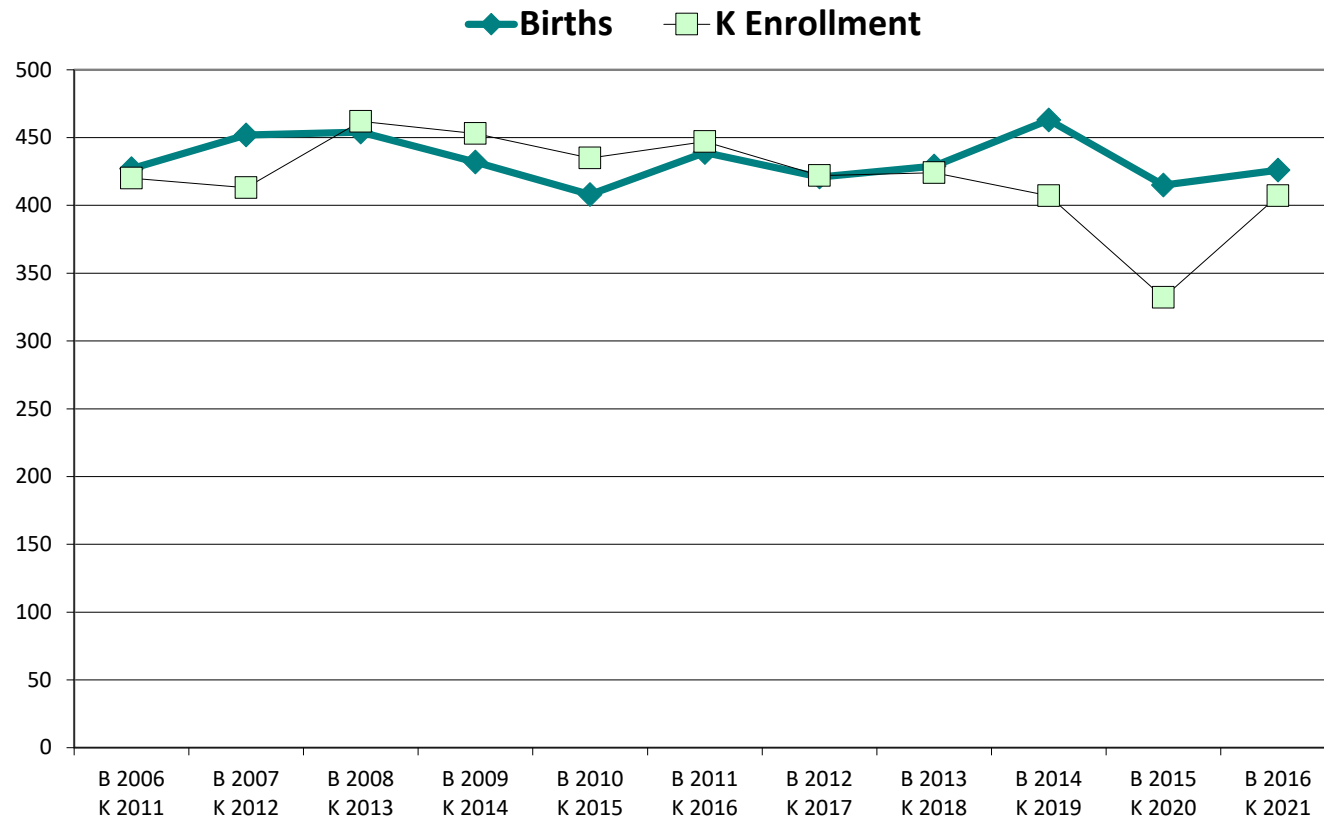




Historical & Projected Enrollments in Grade Combinations



Birth-to-Kindergarten Relationship



Additional Data

Building Permits Issued (Source: HUD)		
Year	Single-Family	Multi-Units
2011	29	36
2017	29	9
2018	33	4
2019	24	8
2020	27	0
2021	24 to date	2 to date

Enrollment History*		
Year	Career-Tech 9-12 Total	Non-Public K-12 Total
2011-12	65	621
2017-18	75	n/a
2018-19	70	485
2019-20	64	533
2020-21	58	503
2021-22	58	n/a

Residents in Non-Public Independent and Parochial Schools (General Education)*														
Enrollments as of Jan. 1 2021	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	24	28	33	31	35	36	26	42	41	51	55	52	49	503

K-12 Home-Schooled Students*	
11/2/2021	34

K-12 Residents in Charter or Magnet Schools, or Choiced-out*	
2021	28

K-12 Special Education Outplaced Students*	
2021	67

K-12 Tuitioned-In, Choiced-In, & Other Non-Residents*	
2021	92

*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 Enrollments The "Big Picture"

From 2018 to 2029, the U.S. Department of Education anticipates changes in PK-12 enrollment of +3.3% in the South; +0.9% in the West, -1.8% in the Midwest; and -2.6% in the Northeast.

State	Fall 2018 PK - 12	Fall 2029 Projected	PK-12 Decline	% Change, 2018-2029
CT	526,634	478,000	-48,634	-9.2%
ME	180,461	174,500	-5,961	-3.3%
MA	962,297	945,400	-16,897	-1.8%
NH	178,515	166,100	-12,415	-6.9%
RI	143,436	139,900	-3,536	-2.5%
VT	87,074	82,000	-5,074	-5.8%

SOURCE: U.S. Department of Education, National Center for Education Statistics, Table 203.20, August 2020

Note: Data collected prior to 2020 Coronavirus pandemic.

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 one district to the next. 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. Projections are generally most reliable when they are closest in time to the current year, and the more stable the variables noted above, the easier and more reliable the projections. Projections six to ten years out may serve as a guide to future enrollments and are useful for facility planning purposes, but they should be viewed as subject to change, given the likelihood of changes in the underlying assumptions/trends.

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" slide/page.

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).