

# Sudbury Public Schools Sudbury, 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. (Please note the last page: Reliability and Use of This Document.) In light of this, NESDEC has added a "Second Semester refresher" enrollment projection at no cost to affiliates.

The NESDEC enrollment projection fell within 35 students of the K-8 total, 2447 students projected vs. 2482 enrolled. One variance of 21 students occurred in Kindergarten, 252 projected vs. 273 enrolled. Ratios have been adjusted.

Births increased by 7 from a previous ten-year average of 139 to a projected average of 146. In most districts, Grades 1-8 are very stable in enrollments. However, there have been increases in 6 of the 8 most recent years, leading to a net increase averaging 14 students per year.

Over the next three years, K-5 enrollments are projected to increase by +41 students, and Grades 6-8 enrollments are projected to decrease by -4 students, as students move through the grades.



## **Historical Enrollment**

School District: Sudbury, MA 10/27/2022

								Hist	orical Er	ırollmen	t By Grad	de							
Birth Year	Births*	School Year	PK	К	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-8	PK-8
2007	164	2012-13	55	272	290	320	324	340	341	357	323	385	0	0	0	0	0	2952	3007
2008	147	2013-14	57	262	293	300	320	330	340	330	359	332	0	0	0	0	0	2866	2923
2009	138	2014-15	59	247	279	312	317	309	341	328	325	357	0	0	0	0	0	2815	2874
2010	138	2015-16	61	268	264	293	325	318	302	336	339	316	0	0	0	0	0	2761	2822
2011	127	2016-17	75	244	287	279	296	330	322	305	333	339	0	0	0	0	0	2735	2810
2012	127	2017-18	49	242	259	301	283	293	331	309	303	330	0	0	0	0	0	2651	2700
2013	149	2018-19	48	239	260	274	309	279	302	335	310	298	0	0	0	0	0	2606	2654
2014	132	2019-20	44	281	262	264	282	312	283	296	344	307	0	0	0	0	0	2631	2675
2015	131	2020-21	41	205	286	258	264	280	292	279	294	339	0	0	0	0	0	2497	2538
2016	140	2021-22	66	251	227	300	259	274	278	290	287	294	0	0	0	0	0	2460	2526
2017	138	2022-23	73	273	265	242	310	269	273	272	291	287	0	0	0	0	0	2482	2555

<sup>\*</sup>Birth data provided by Public Health Vital Records Departments in each state.

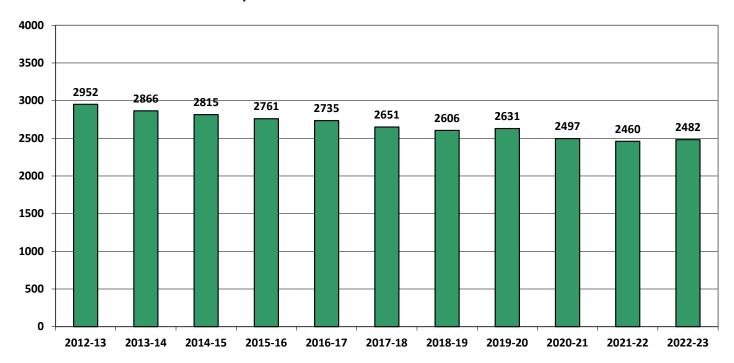
	Historical Enrollment in Grade Combinations									
Year	PK-5	K-5	PK-8	K-8	6-8	0	0	0	0	
2012-13	1942	1887	3007	2952	1065	0	0	0	0	
2013-14	1902	1845	2923	2866	1021	0	0	0	0	
2014-15	1864	1805	2874	2815	1010	0	0	0	0	
2015-16	1831	1770	2822	2761	991	0	0	0	0	
2016-17	1833	1758	2810	2735	977	0	0	0	0	
2017-18	1758	1709	2700	2651	942	0	0	0	0	
2018-19	1711	1663	2654	2606	943	0	0	0	0	
2019-20	1728	1684	2675	2631	947	0	0	0	0	
2020-21	1626	1585	2538	2497	912	0	0	0	0	
2021-22	1655	1589	2526	2460	871	0	0	0	0	
2022-23	1705	1632	2555	2482	850	0	0	0	0	

Histori	cal Perce	ntage Ch	anges
Year	K-8	Diff.	%
2012-13	2952	0	0.0%
2013-14	2866	-86	-2.9%
2014-15	2815	-51	-1.8%
2015-16	2761	-54	-1.9%
2016-17	2735	-26	-0.9%
2017-18	2651	-84	-3.1%
2018-19	2606	-45	-1.7%
2019-20	2631	25	1.0%
2020-21	2497	-134	-5.1%
2021-22	2460	-37	-1.5%
2022-23	2482	22	0.9%
Change		-470	-15.9%



# **Historical Enrollment**

K-8, School Years 2012-13 to 2022-23





# **Projected Enrollment**

School District: Sudbury, MA 10/27/2022

								En	rollment	t Project	ions By G	irade*								
Birth Year	Births*		School Year	PK	к	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-8	PK-8
2017	138		2022-23	73	273	265	242	310	269	273	272	291	287	0	0	0	0	0	2482	2555
2018	135		2023-24	73	251	292	276	247	317	267	269	274	290	0	0	0	0	0	2483	2556
2019	144		2024-25	74	268	269	304	282	253	315	263	271	273	0	0	0	0	0	2498	2572
2020	137		2025-26	74	255	287	280	311	289	251	311	265	270	0	0	0	0	0	2519	2593
2021	168	(prov.)	2026-27	75	312	273	299	286	318	287	247	314	264	0	0	0	0	0	2600	2675
2022	144	(est.)	2027-28	75	269	334	285	306	293	316	283	249	312	0	0	0	0	0	2647	2722
2023	146	(est.)	2028-29	76	271	288	348	291	313	291	312	285	248	0	0	0	0	0	2647	2723
2024	148	(est.)	2029-30	76	275	290	300	356	298	311	287	315	284	0	0	0	0	0	2716	2792
2025	149	(est.)	2030-31	77	276	294	302	307	364	296	307	289	313	0	0	0	0	0	2748	2825
2026	151	(est.)	2031-32	77	281	295	306	309	314	362	292	310	288	0	0	0	0	0	2757	2834
2027	147	(est.)	2032-33	78	274	301	308	313	316	312	357	294	308	0	0	0	0	0	2783	2861

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

<sup>\*</sup>Birth data provided by Public Health Vital Records Departments in each state.

	Projected Enrollment in Grade Combinations*									
Year	PK-5	K-5	PK-8	K-8	6-8	0	0	0	0	
2022-23	1705	1632	2555	2482	850	0	0	0	0	
2023-24	1723	1650	2556	2483	833	0	0	0	0	
2024-25	1765	1691	2572	2498	807	0	0	0	0	
2025-26	1747	1673	2593	2519	846	0	0	0	0	
2026-27	1850	1775	2675	2600	825	0	0	0	0	
2027-28	1878	1803	2722	2647	844	0	0	0	0	
2028-29	1878	1802	2723	2647	845	0	0	0	0	
2029-30	1906	1830	2792	2716	886	0	0	0	0	
2030-31	1916	1839	2825	2748	909	0	0	0	0	
2031-32	1944	1867	2834	2757	890	0	0	0	0	
2032-33	1902	1824	2861	2783	959	0	0	0	0	

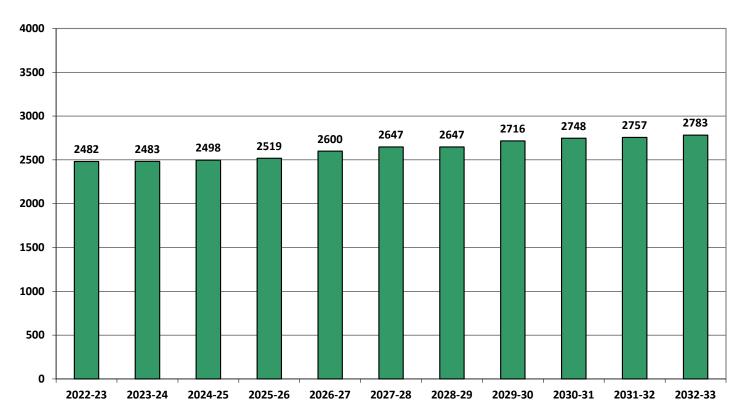
Proje	cted Perce	entage Ch	anges
Year	K-8	Diff.	%
2022-23	2482	0	0.0%
2023-24	2483	1	0.0%
2024-25	2498	15	0.6%
2025-26	2519	21	0.8%
2026-27	2600	81	3.2%
2027-28	2647	47	1.8%
2028-29	2647	0	0.0%
2029-30	2716	69	2.6%
2030-31	2748	32	1.2%
2031-32	2757	9	0.3%
2032-33	2783	26	0.9%
Change		301	12.1%

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



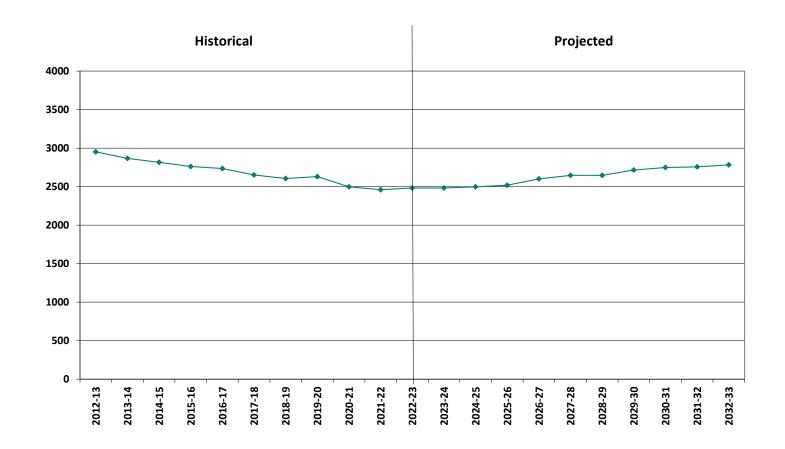
# **Projected Enrollment**

K-8, School Years 2022-23 to 2032-33



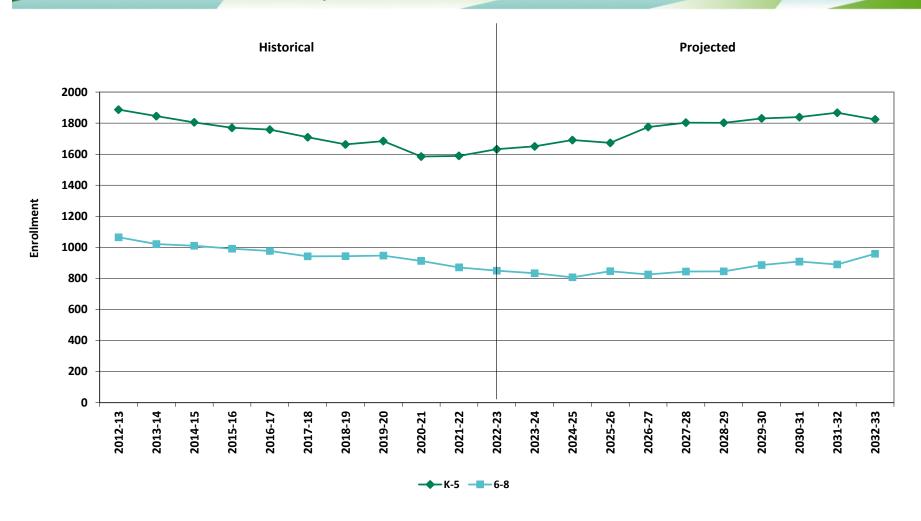


# **Historical & Projected Enrollment**



#### NESDEC

## **Historical & Projected Enrollments in Grade Combinations**



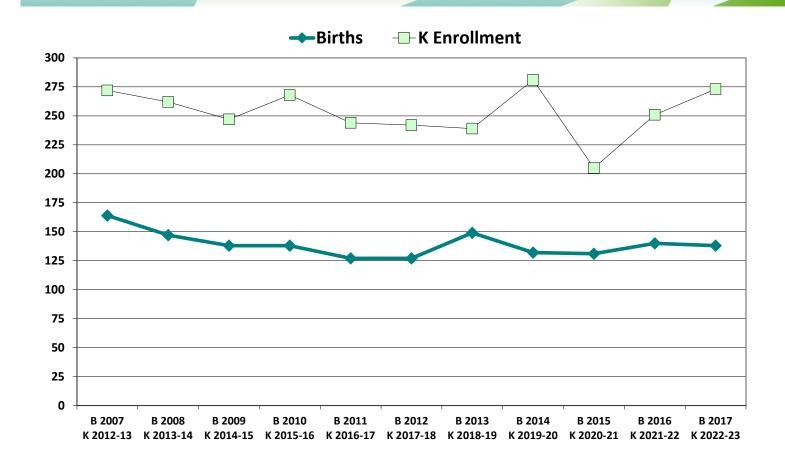
#### NESDEC

# **Historical & Projected Enrollments in Grade Combinations**





# **Birth-to-Kindergarten Relationship**





# **Additional Information**

Building Permits Issued (Source: HUD)										
Year	Single-Family	Multi-Units								
2012	2012 48 0									
2018	14	51								
2019	11	0								
2020	157									
2021	2021 6 19									
2022	2022 8 to date 32 to date									

Enrollment History*											
Career-Tech Non-Public											
Year	9-12 Total	K-8 Total									
2012-13	n/a	n/a									
2018-19	n/a	117									
2019-20	n/a	n/a									
2020-21	n/a	114									
2021-22	n/a	n/a									
2022-23	n/a	104									

	Residents in Non-Public Independent and Parochial Schools (General Education)*													
Oct. 1	К	1	2	3	4	5	6	7	8	9	10	11	12	K-8 TOTAL
Enrollment	0	8	8	7	14	11	10	24	22	0	0	0	0	104

	me-Schooled udents*						
2022 20							

	Charter or Magnet Choiced-out*							
2022 11								

K-8 Special Education Outplaced Students*			
2022	16		

K-8 Tuitioned-In, Choiced-In, & Other Non-Residents*				
2022	0			

<sup>\*</sup>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).