

# Madison Public Schools Madison, CT

**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)

NESDEC is pleased to provide the Madison Public Schools with an enrollment projection report for School Year 2022/2023.

Births increased by 29 from a previous ten-year average of 93 to a projected average of 122. In most districts, enrollments in Grades 1-8 are very stable environments. However, there have been increases in 7 of the 8 most recent years, leading to a net increase averaging 29 students per year.

Over the next three years, K-3 enrollments are projected to increase by 146 students, Grades 4-5 enrollments are projected to increase by 18 students, Grades 6-8 enrollments are projected to increase by 35 students, and Grades 9-12 enrollments are projected to decrease by -81 students, as students move through the grades.



## **Historical Enrollment**

School District: Madison, CT 11/17/2022

								Histo	orical En	rollmen	t By Grad	le							
Birth Year	Births*	School Year	PK	К	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2007	97	2012-13	48	147	176	167	203	259	269	264	294	297	314	311	311	319	0	3331	3379
2008	104	2013-14	45	153	162	178	181	207	267	279	268	292	308	312	318	313	0	3238	3283
2009	85	2014-15	43	134	171	168	190	188	213	275	286	267	308	299	305	317	0	3121	3164
2010	86	2015-16	43	137	150	182	175	191	203	213	276	280	271	294	301	298	0	2971	3014
2011	111	2016-17	46	153	148	160	187	184	207	208	216	273	287	273	296	303	0	2895	2941
2012	84	2017-18	40	164	152	156	163	186	181	213	217	219	279	292	277	296	0	2795	2835
2013	83	2018-19	50	144	165	157	161	171	194	187	210	214	228	290	291	275	0	2687	2737
2014	98	2019-20	43	158	146	171	159	162	174	193	182	214	214	231	289	290	0	2583	2626
2015	94	2020-21	38	139	156	144	162	157	161	174	186	188	221	218	233	286	0	2425	2463
2016	94	2021-22	51	160	154	162	164	172	166	168	180	191	202	219	221	235	0	2394	2445
2017	94	2022-23	44	170	173	166	169	166	188	169	168	185	195	201	214	218	0	2382	2426

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

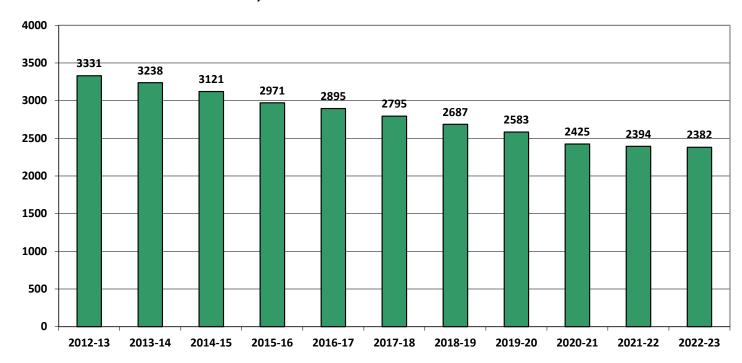
	Historical Enrollment in Grade Combinations									
Year	PK-5	K-5	PK-3	K-3	4-5	6-8	PK-8	K-8	9-12	
2012-13	1269	1221	741	693	528	855	2124	2076	1255	
2013-14	1193	1148	719	674	474	839	2032	1987	1251	
2014-15	1107	1064	706	663	401	828	1935	1892	1229	
2015-16	1081	1038	687	644	394	769	1850	1807	1164	
2016-17	1085	1039	694	648	391	697	1782	1736	1159	
2017-18	1042	1002	675	635	367	649	1691	1651	1144	
2018-19	1042	992	677	627	365	611	1653	1603	1084	
2019-20	1013	970	677	634	336	589	1602	1559	1024	
2020-21	957	919	639	601	318	548	1505	1467	958	
2021-22	1029	978	691	640	338	539	1568	1517	877	
2022-23	1076	1032	722	678	354	522	1598	1554	828	

Histori	cal Perce	ntage Ch	anges
Year	K-12	Diff.	%
2012-13	3331	0	0.0%
2013-14	3238	-93	-2.8%
2014-15	3121	-117	-3.6%
2015-16	2971	-150	-4.8%
2016-17	2895	-76	-2.6%
2017-18	2795	-100	-3.5%
2018-19	2687	-108	-3.9%
2019-20	2583	-104	-3.9%
2020-21	2425	-158	-6.1%
2021-22	2394	-31	-1.3%
2022-23	2382	-12	-0.5%
Change		-949	-28.5%



## **Historical Enrollment**

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





## **Projected Enrollment**

School District: Madison, CT 11/17/2022

	Enrollment Projections By Grade*																			
Birth Year	Births*		School Year	PK	К	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2017	94		2022-23	44	170	173	166	169	166	188	169	168	185	195	201	214	218	0	2382	2426
2018	117		2023-24	45	195	179	179	172	172	173	192	169	173	191	196	201	213	0	2405	2450
2019	115		2024-25	46	191	205	185	185	176	179	177	192	174	179	192	196	200	0	2431	2477
2020	132		2025-26	47	220	201	212	191	189	183	183	177	197	180	180	192	195	0	2500	2547
2021	140	(prov.)	2026-27	48	233	231	208	219	195	197	187	183	182	204	181	180	191	0	2591	2639
2022	120	(est.)	2027-28	49	199	245	239	215	223	203	201	187	188	188	205	181	179	0	2653	2702
2023	125	(est.)	2028-29	50	207	209	253	247	219	232	207	201	192	195	189	205	180	0	2736	2786
2024	126	(est.)	2029-30	51	210	217	216	262	252	228	237	207	207	199	196	189	204	0	2824	2875
2025	129	(est.)	2030-31	52	214	221	224	224	267	262	233	237	213	214	200	196	188	0	2893	2945
2026	128	(est.)	2031-32	53	213	225	229	232	229	278	267	233	244	220	215	200	195	0	2980	3033
2027	125	(est.)	2032-33	54	209	224	233	237	237	238	284	267	239	253	221	215	199	0	3056	3110

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-3	K-3	4-5	6-8	PK-8	K-8	9-12	
2022-23	1076	1032	722	678	354	522	1598	1554	828	
2023-24	1115	1070	770	725	345	534	1649	1604	801	
2024-25	1167	1121	812	766	355	543	1710	1664	767	
2025-26	1243	1196	871	824	372	557	1800	1753	747	
2026-27	1331	1283	939	891	392	552	1883	1835	756	
2027-28	1373	1324	947	898	426	576	1949	1900	753	
2028-29	1417	1367	966	916	451	600	2017	1967	769	
2029-30	1436	1385	956	905	480	651	2087	2036	788	
2030-31	1464	1412	935	883	529	683	2147	2095	798	
2031-32	1459	1406	952	899	507	744	2203	2150	830	
2032-33	1432	1378	957	903	475	790	2222	2168	888	

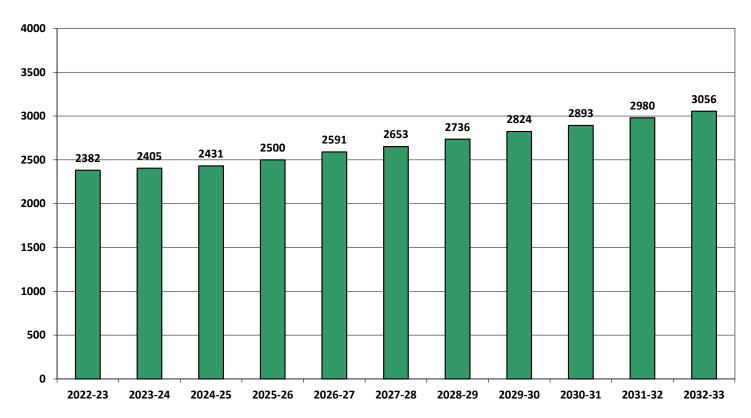
Projec	ted Perce	entage Ch	anges
Year	K-12	Diff.	%
2022-23	2382	0	0.0%
2023-24	2405	23	1.0%
2024-25	2431	26	1.1%
2025-26	2500	69	2.8%
2026-27	2591	91	3.6%
2027-28	2653	62	2.4%
2028-29	2736	83	3.1%
2029-30	2824	88	3.2%
2030-31	2893	69	2.4%
2031-32	2980	87	3.0%
2032-33	3056	76	2.6%
Change		674	28.3%

<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.



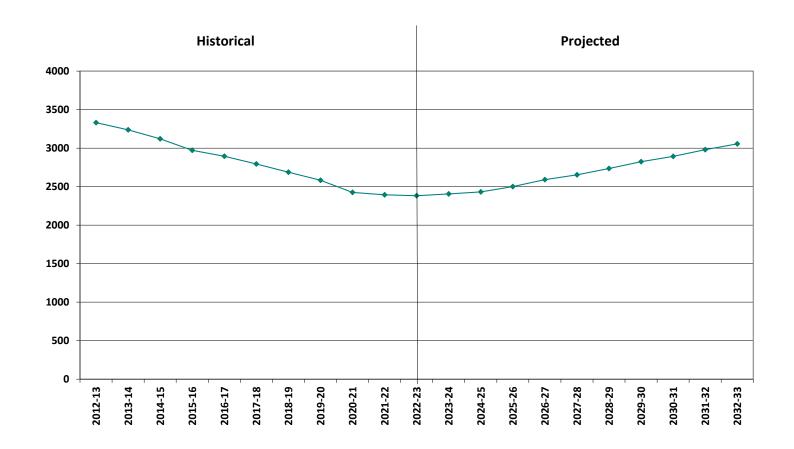
## **Projected Enrollment**

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



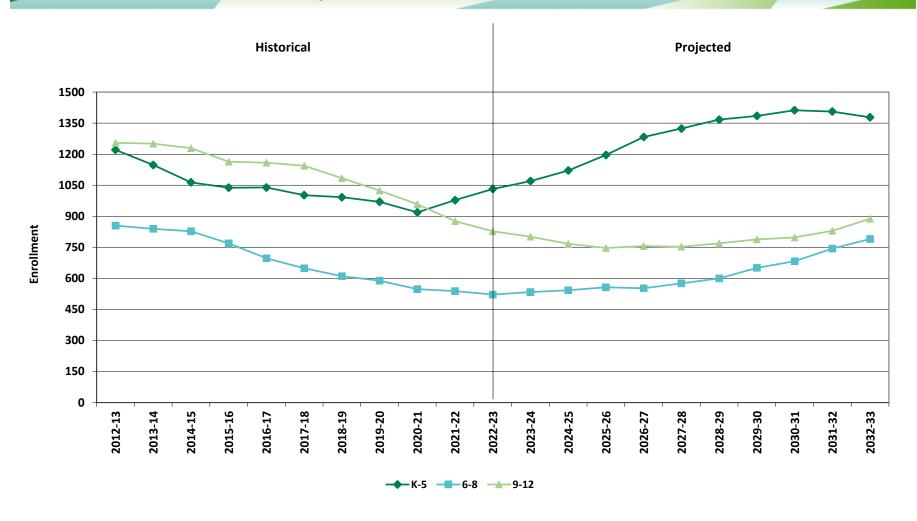


## **Historical & Projected Enrollment**



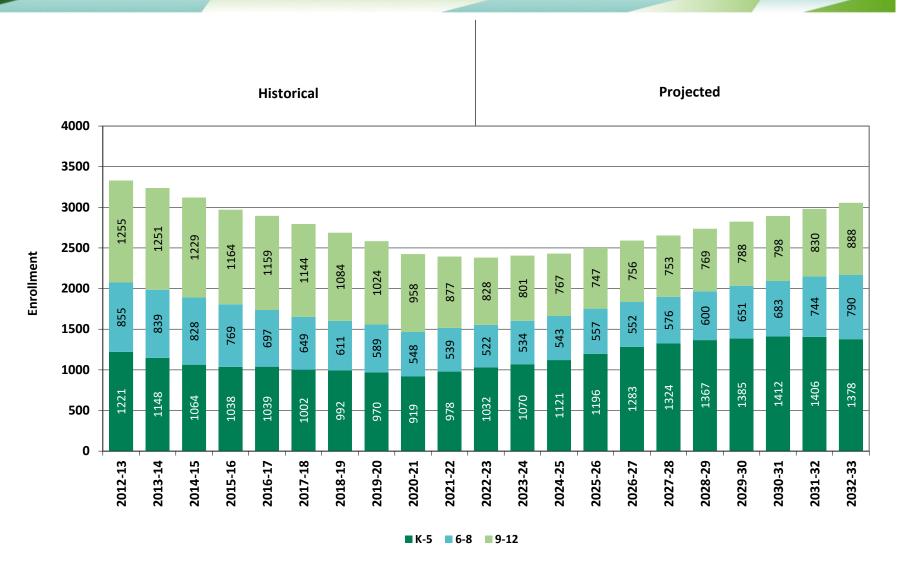
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## **Historical & Projected Enrollments in Grade Combinations**



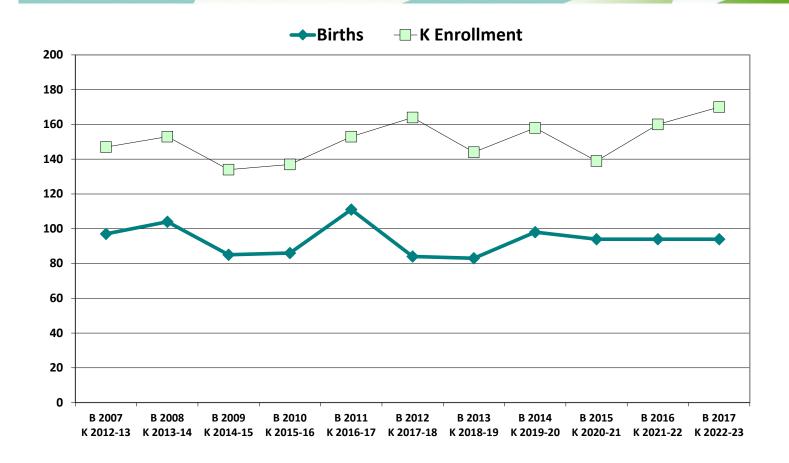
### NESDEC

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





## **Birth-to-Kindergarten Relationship**





## **Additional Information**

Building Permits Issued (Source: HUD)										
Year	ar Single-Family Multi-Units									
2012	20	0								
2018	11	0								
2019	11	0								
2020	11	0								
2021	13	0								
2022	13 to date	0 to date								

	Enrollment History*											
Career-Tech Non-Public												
Year	9-12 Total	K-12 Total										
2012-13	n/a	n/a										
2018-19	n/a	n/a										
2019-20	n/a	n/a										
2020-21	5	128										
2021-22	n/a	n/a										
2022-23	2	82										

	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-12 TOTAL
Enrollment	2	7	9	10	7	5	16	13	13	0	0	0	0	82

	me-Schooled udents*
2022	16

K-12 Residents in Charter or Magnet Schools, or Choiced-out*							
2022 6							

•	pecial Education aced Students*
2022	34

K-12 Tuitioned-In, Choiced-In, & Other Non-Residents*				
2022	5			

<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
СТ	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).