

Southborough, MA Demographic Study

December 2020

NESDEC Project Team

- John H. Kennedy, M.A., Consultant
- Karen L. LeDuc, Ph.D., Consultant
- Donald G. Kennedy, Ed.D., Executive Consultant
- Arthur L. Bettencourt, Ed.D., Executive Director

Introduction



NESDEC entered into an agreement with the Public Schools of Northborough and Southborough to conduct a Demographic Study of Southborough. The goal of the project was to provide a basis for decision-making regarding future grade level re-configurations, building renovations and/or construction and alternative facility use.

Good long-range planning requires a specific mindset, temporarily casting aside more immediate concerns in order to think long-range. However, aspects of this report can be useful in making near-term decisions in two respects: 1) providing a better understanding of the long-term future of each building, thereby suggesting the assignment of grade levels to buildings in a manner that is consistent with the District's long-term plan; and 2) as a guide to budget planning, so funds can be earmarked for purposes that are consistent with intended long-range use of each facility.

Scope of Report

NESDEC was asked to prepare enrollment projections and to identify demographic factors that affect the student enrollments in the Southborough, MA schools.

The NESDEC Team analyzed District and municipal records, including data provided by school and town government officials; the U.S. Census Bureau; The Warren Group; HUD; and local realtors.

The Report opens with information pertaining to populations generally, as well as to school enrollments in particular. Data are presented regarding factors that influence school enrollments. A preliminary enrollment forecast begins on Slide 25.

Scope of Report and Adjustments for Pandemic Economy

This NESDEC Report and its enrollment projections are based upon data, interviews, and the most up-to-date information available as of our completion date in November 2020.

As districts prepared for the 2020-21 school year in the COVID-19 era, administrators were sensitive to the changing budget landscape and to the uncertainty that the next year or two may bring.

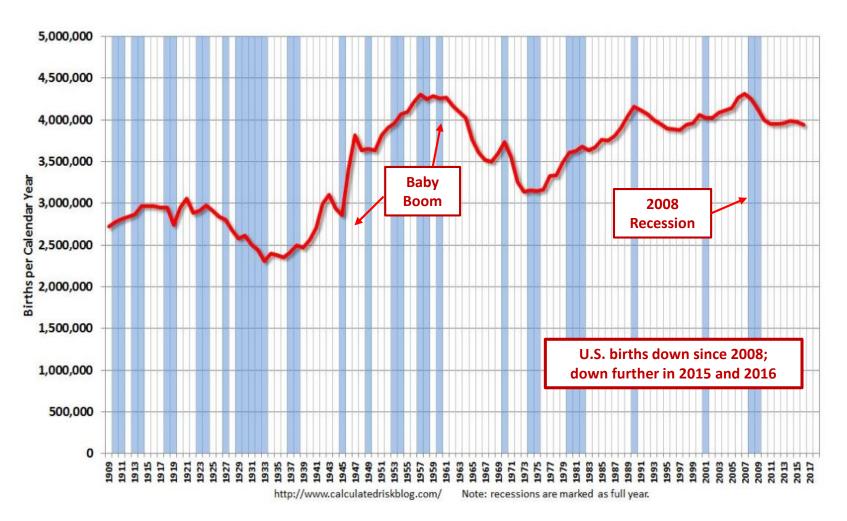
Many of the decisions that were made related to the start of the new school year; however, the NESDEC report can provide insight into more complex organizational issues that may take several years to implement.

Districts may need to make further adjustments for the Pandemic Economy.

Demographic Information



U. S. Births And Economic Cycles (Source: www.cdc.gov)



Demographic Analysis

Births – Data provided by the Massachusetts Department of Health

- Between 2008 and 2012, during the Great Recession,
 Southborough annual births averaged 80 per year.
- Between 2013 and 2017, annual births averaged 88.
- In 2018 and 2019, provisional birth totals were 86 and 99, respectively.

<u>|NESDEC</u>

New England's PK-12 Enrollments The "Big Picture"

From 2016 to 2028, the US Department of Education anticipates changes in PK-12 enrollment of +5.4% in the South; +2.1% in the West, -2.1% in the Midwest; and -3.7% in the Northeast.

State	Fall 2016 PK - 12	Fall 2028 Projected	PK-12 Decline	% Change, 2016-2028
СТ	535,118	471,100	-64,018	-12.0%
ME	180,512	171,600	-8,912	-5.0%
MA	964,514	939,400	-25,114	-2.6%
NH	180,888	161,000	-19,888	-11.0%
RI	142,150	135,700	-6,450	-4.5%
VT	88,428	80,400	-8,028	-9.0%

Source: USDE, National Center for Education Statistics, *Projections of Education Statistics to 2028*, Table 3, Pages 35-36; Published May 28, 2020.

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.

Population Trends

General Population: The U.S. Census Bureau estimated that Southborough had a population of 10,208 as of July 1, 2019, a 4.5% increase from the 2010 U.S. Census count.



Southborough, MA Population

Year	US Census	
1990	6,628	Actual Counts
2000	8,781	Actual Counts
2010	9,767	Actual Counts
2011	9,817	Estimated by US Census
2012	9,851	Estimated by US Census
2013	9,894	Estimated by US Census
2014	9,935	Estimated by US Census
2015	10,016	Estimated by US Census
2016	10,085	Estimated by US Census
2017	10,136	Estimated by US Census
2018	10,151	Estimated by US Census
2019	10,208	Estimated by US Census

Sources: U.S. Census Bureau

<u>NESDEC</u>

Southborough, MA Median Age of Population

	1990 Census	2000 Census	2010 Census	
United States	32.9 years	35.3 years	37.2 years	
Massachusetts	33.5 years	36.5 years	39.1 years	
Worcester county	33.0 years	36.3 years	39.2 years	
Southborough	32.8 years	36.9 years	41.7 years	

Median Age can be a factor in predicitng the number of future births.

Source: U.S. Census Bureau

Age Cohort Data - Southborough, MA

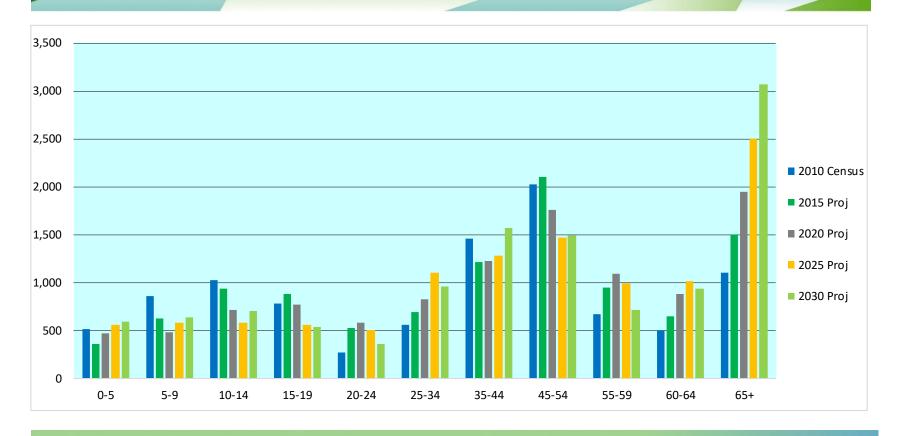
U.S Census July 1, 2019 est. = 10,208 July 1, 2020 est. will be released in July 2021

			SIZE OF COHOR	RT	
AGE	2010 Census	2015 Proj	2020 Proj	2025 Proj	2030 Proj
0-5	515	358	465	557	591
5-9	854	630	485	578	633
10-14	1,029	939	712	583	707
15-19	777	876	769	560	533
20-24	270	531	586	498	354
25-34	561	691	830	1,102	962
35-44	1,458	1,209	1,223	1,284	1,573
45-54	2,024	2,105	1,755	1,469	1,488
55-59	670	951	1,090	991	719
60-64	508	645	886	1,012	940
65+	1,101	1,507	1,943	2,505	3,068
Total	9,767	10,442	10,744	11,139	11,568

Sources: U.S. Census Bureau and Donahue Center, UMass

NESDEC

Age Cohort Data - Southborough, MA



Residential Sales Outlook

National And Regional Factors

On the national level, the "Baby Boomer" generation has begun turning 65 years of age at the rate of 10,000 per day, and this is projected to continue for the next nine years. According to regional and local realtors, many from this age cohort are likely to downsize to smaller homes. Thus, demand for apartment and condominium units is likely to increase, while the 3- and 4-bedroom homes vacated by the Boomers will most likely be purchased by families with children.

The Millennial Generation, born between 1980 and 1998, has been comparatively slow to become parents and purchase single-family homes. Many in this age group still have high college debt. However, many from this generation are now in their mid to late 30's, and they have decided to begin raising families and purchasing single-family homes.



Southborough, MA Housing Details

	Dwellings	Occupied	Owner- occupied	% units Owner- occupied	Renter- occupied	% units Renter- occupied	Vacant	For Seasonal use	Rental vacancy rate
2000	2,997	2,952	2,595	88.0%	357	12.0%	45	9	2.5%
2010	3,480	3,332	2,954	89.0%	378	24.0%	128	27	5.5%

Source: U.S. Census 2000, 2010 Housing Occupancy and Tenure

Kathy Cook noted error - owner occupied and renter occuppied % should add up to 100% as they do in 2000. (My calculation is 10.8%)

NESDEC

Number of K-12 Students Per Household Unit

Commonwealth of Massachusetts:

YEAR	HOUSEHOLDS	PUBLIC K-12	K-12 STUDENTS PER
		ENROLLMENT	HOUSEHOLD
1990	2,247,110	828,816	0.37
2000	2,443,580	959,655	0.39
2010	2,547,075	926,940	0.36

Town of Southborough

YEAR	HOUSEHOLDS	PUBLIC K-12	K-8 STUDENTS PER
		ENROLLMENT	HOUSEHOLD
1990	2,281	1,030	0.45
2000	2,952	1,786	0.61
2010	3,332	2,060	0.62

2010 Number of Family Households: 2,702

2010 Percentage of Family Households with

children under the age of 18 years: 55% *

*2010 43% of MA Statewide Households



Southborough, MA Home and Condo Sales

Year	Single- Family	S-F Median Sales Price	# Condo Units	ſ	Condo Median Iles Price	Year	Single- Family	S-F Median Sales Price	# Condo Units	N	Condo Median les Price
1997	161	\$299,730	14	\$	302,493	2009	88	\$395,000	9	\$	580,000
1998	159	\$325,000	19	\$	375,495	2010	96	\$540,000	20	\$	476,250
1999	185	\$365,000	69	\$	222,760	2011	105	\$490,000	11	\$	485,000
2000	152	\$411,000	36	\$	230,924	2012	113	\$430,000	21	\$	525,000
2001	139	\$440,000	16	\$	480,996	2013	131	\$485,000	7	\$	586,000
2002	116	\$475,500	32	\$	619,310	2014	124	\$599,250	18	\$	614,500
2003	130	\$529,000	32	\$	625,000	2015	133	\$540,000	16	\$	577,000
2004	188	\$513,125	50	\$	632,750	2016	143	\$509,900	20	\$	480,000
2005	143	\$565,500	25	\$	662,000	2017	146 <mark>(118)</mark>	\$563,000	22 (18)	\$	527,500
2006	96	\$575,125	12	\$	603,000	2018	144 (131)	\$618,500	29 (23)	\$	569,900
2007	98	\$500,000	15	\$	463,000	2019	126 (101)	\$657,500	23 (18)	\$	569,800
2008	75	\$520,000	21	\$	416,300	2020	111	\$770,000	30	\$	602,450

Source: The Warren Group, Banker and Trademan

Red data to October 31st of the year

Demographic Analysis – Cont.

Warren Group Data Single-Family Sales

- Between 1998 and 2005, during the housing boom, Southborough experienced an average annual single-family sales total of 151 units per year.
- From 2006-2012, during the housing downturn, annual singlefamily sales in Southborough declined to an average of 95 units per year.
- From 2013-2019, single-family annual sales averaged 135 per year.
- From January through October of 2020, single-family home sales in Southborough totaled 111 units.

Condominium Sales

- From 2013-2019, annual condominium sales in Southborough averaged 19 units per year.
- From January through October of 2020, condo sales totaled 30 units.

Demographic Analysis – Cont.

Realtors

NESDEC's interviews with local realtors indicated the following:

- Days on the market have declined significantly.
- Many of the buyers are leaving cities to take advantage of workfrom-home opportunities, suburban and rural settings, social distancing, and lower home pricing. WiFi accessibility is also very important.
- Inventory is very tight.
- If a home is properly priced, there are often multiple bids. This is reported to be occurring at all price ranges at or under \$1,000,000.
- Families with children are often the buyers of the single-family homes.
- Boomers are looking to downsize. When they do sell, they are vacating three- and four-bedroom homes that are typically purchased by families with children.



Southborough, MA Residential Building Permits

Year	Single - Family	Multi- Units	Year	Single - Family	Multi- Units	Year	Single - Family	Multi- Units
1980	17	0	1994	104	0	2008	10	0
1981	41	0	1995	55	0	2009	6	0
1982	25	6	1996	91	4	2010	14	0
1983	37	0	1997	70	0	2011	6	2
1984	58	0	1998	96	12	2012	9	2
1985	48	0	1999	84	42	2013	11	4
1986	63	0	2000	48	9	2014	31	0
1987	68	0	2001	42	14	2015	28	0
1988	51	0	2002	45	36	2016	9	0
1989	41	0	2003	55	10	2017	8	0
1990	13	0	2004	25	0	2018	32	0
1991	29	0	2005	26	0	2019	21	0
1992	65	0	2006	19	0	Kathy Coo	k noted that	it looks like
1993	109	0	2007	29	0		lace wasn't	

Source: HUD - Does not include permits for renovations

Demographic Analysis – Cont.

Information provided by the Southborough Planning Department indicates that the following residential projects have been approved and are either under construction or awaiting construction:

- Stonebrook Court: Five 2-unit townhouse buildings and five single-family dwellings
- <u>Cain Circle</u>: Three 2-unit townhouses and two single-family dwellings
- Boston Road: Two 2-unit townhouses and two single-family dwellings
- <u>Fayville Lane</u>: Eight 2-unit townhouses
- <u>Dairy Farm/Chestnut Hill Farm</u>: Eleven single-family dwellings

Please Note: NESDEC Enrollment Projections include new residences that have received official municipal government permitting approval and are either awaiting construction or are under construction. NESDEC Enrollment Projections do not include housing proposals that are "in process" or in litigation. For information regarding these latter proposals, please consult the Municipal Planning Department, the Municipal Administrator and/or the Municipal Town Counsel.

Assumptions Of The NESDEC Enrollment Projections

The NESDEC enrollment forecast for Southborough was based upon the cumulative effect of several factors, including:

- Strong single-family housing sales beginning in 2013 and continuing for the foreseeable future (see data above)
- Realtor and Southborough Planning Department Information (see information above)
- Continued economic stability on the national and regional levels

Enrollment Projections





Southborough, MA Historical Enrollment

School Dist	rict:		Southbo	orough,	MA - PK	TO 8 ON	.Υ								12/21/2020
	Historical Enrollment By Grade														
Birth Year	Births	School Year	PK	К	1	2	3	4	5	6	7	8	UNGR	K-8	PK-8
2005	92	2010-11	45	113	161	151	157	180	188	178	156	174	0	1458	1503
2006	120	2011-12	37	129	115	160	150	157	183	186	164	159	0	1403	1440
2007	98	2012-13	42	110	139	119	165	151	161	176	188	167	0	1376	1418
2008	84	2013-14	43	93	123	141	130	170	150	159	177	187	0	1330	1373
2009	77	2014-15	40	119	107	126	152	128	166	152	160	181	0	1291	1331
2010	95	2015-16	40	128	121	110	131	159	138	161	156	164	0	1268	1308
2011	76	2016-17	49	119	136	127	118	137	161	143	157	159	0	1257	1306
2012	68	2017-18	87	130	120	138	128	121	137	159	146	156	0	1235	1322
2013	91	2018-19	83	111	133	124	134	129	129	136	152	143	0	1191	1274
2014	80	2019-20	84	140	117	138	120	135	133	129	135	153	0	1200	1284
2015	93	2020-21	87	104	143	120	134	123	129	132	123	127	0	1135	1222

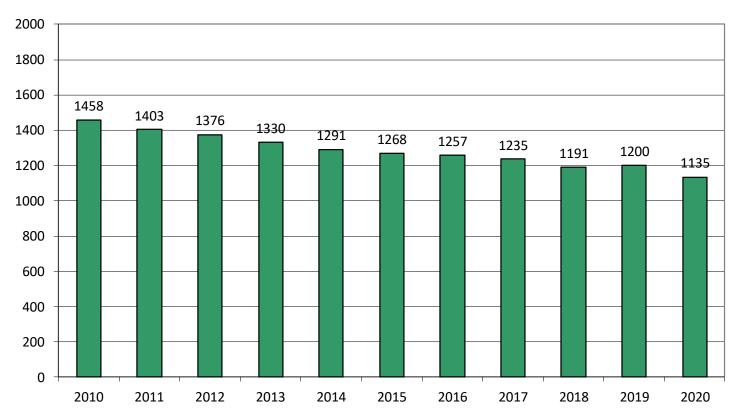
		Historical I	Enrollm	ent in (Grade Co	mbinat	ions		
Year	PK-5	K-5	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2010-11	995	950	1128	1458	696	508	330	330	0
2011-12	931	894	1080	1403	692	509	323	323	0
2012-13	887	845	1021	1376	692	531	355	355	0
2013-14	850	807	966	1330	673	523	364	364	0
2014-15	838	798	950	1291	659	493	341	341	0
2015-16	827	787	948	1268	619	481	320	320	0
2016-17	847	798	941	1257	620	459	316	316	0
2017-18	861	774	933	1235	598	461	302	302	0
2018-19	843	760	896	1191	560	431	295	295	0
2019-20	867	783	912	1200	550	417	288	288	0
2020-21	840	753	885	1135	511	382	250	250	0

Histori	ical Perc	entage Ch	anges
Year	K-8	Diff.	%
2010-11	1458	0	0.0%
2011-12	1403	-55	-3.8%
2012-13	1376	-27	-1.9%
2013-14	1330	-46	-3.3%
2014-15	1291	-39	-2.9%
2015-16	1268	-23	-1.8%
2016-17	1257	-11	-0.9%
2017-18	1235	-22	-1.8%
2018-19	1191	-44	-3.6%
2019-20	1200	9	0.8%
2020-21	1135	-65	-5.4%
Change		-323	-22.2%



Southborough, MA Historical Enrollment

K-8, 2010-2020





Southborough, MA Projected Enrollment

ichool District: Southborough, MA - PK TO 8 ONLY 12/21/2020									/2020							
	Enrollment Projections By Grade*															
Birth Year	Births		School Year	PK	К	1	2	3	4	5	6	7	8	UNGR	K-8	PK-8
2015	93		2020-21	87	104	143	120	134	123	129	132	123	127	0	1135	1222
2016	103		2021-22	88	168	107	148	116	136	125	128	128	120	0	1176	1264
2017	77		2022-23	89	125	174	110	144	118	138	124	124	125	0	1182	1271
2018	86	(prov.)	2023-24	90	140	129	180	107	146	120	137	120	121	0	1200	1290
2019	99	(prov.)	2024-25	91	161	145	133	175	108	149	119	133	117	0	1240	1331
2020	92	(est.)	2025-26	92	149	166	150	129	177	110	148	115	130	0	1274	1366
2021	91	(est.)	2026-27	93	149	154	171	145	131	180	109	143	112	0	1294	1387
2022	89	(est.)	2027-28	94	145	154	159	166	147	133	179	105	140	0	1328	1422
2023	91	(est.)	2028-29	95	149	150	159	154	168	150	132	173	102	0	1337	1432
2024	92	(est.)	2029-30	96	150	154	155	154	156	171	149	128	169	0	1386	1482
2025	91	(est.)	2030-31	97	148	155	159	150	156	159	170	144	125	0	1366	1463

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

Projected Enrollment in Grade Combinations*									
Year	PK-5	K-5	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2020-21	840	753	885	1135	511	382	250	250	0
2021-22	888	800	928	1176	501	376	248	248	0
2022-23	898	809	933	1182	511	373	249	249	0
2023-24	912	822	959	1200	498	378	241	241	0
2024-25	962	871	990	1240	518	369	250	250	0
2025-26	973	881	1029	1274	503	393	245	245	0
2026-27	1023	930	1039	1294	544	364	255	255	0
2027-28	998	904	1083	1328	557	424	245	245	0
2028-29	1025	930	1062	1337	557	407	275	275	0
2029-30	1036	940	1089	1386	617	446	297	297	0
2030-31	1024	927	1097	1366	598	439	269	269	0

Projected Percentage Changes						
Year	K-8	Diff.	%			
2020-21	1135	0	0.0%			
2021-22	1176	41	3.6%			
2022-23	1182	6	0.5%			
2023-24	1200	18	1.5%			
2024-25	1240	40	3.3%			
2025-26	1274	34	2.7%			
2026-27	1294	20	1.6%			
2027-28	1328	34	2.6%			
2028-29	1337	9	0.7%			
2029-30	1386	49	3.7%			
2030-31	1366	-20	-1.4%			
Change		231	20.4%			

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

Subcommittee debated whether the 168 for 2021-22 K projection included bump from Covid.

Regardless Greg
Martineau said K
population projected is
about 20% higher than
they are currently
projecting. (That includes
the about 15-20 families
held back kids that had
been registered for this
year to wait until next
fall.)

Those figures roll all the way through 8th grade figures.

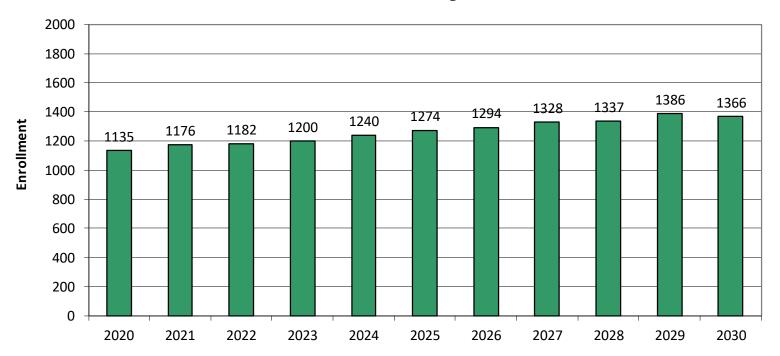
Keturah noted that some families could have moved in this summer and never registered.

By April, the district will have a much better handle on next year's actual enrollment.



Southborough, MA Projected Enrollment

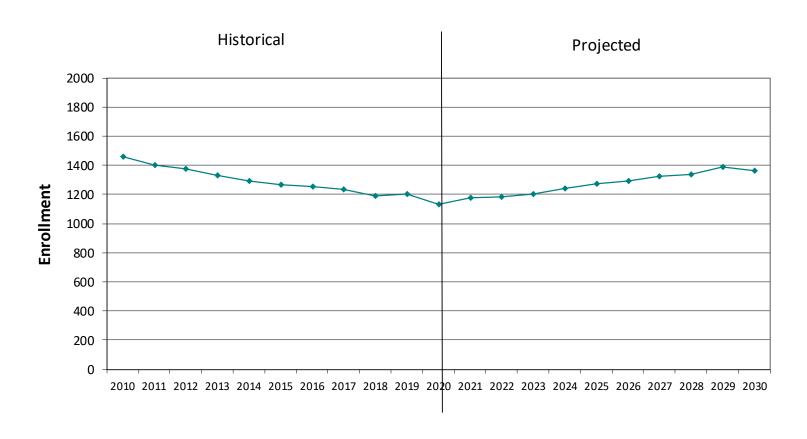
K-8 To 2030 Based On Data Through School Year 2020-21





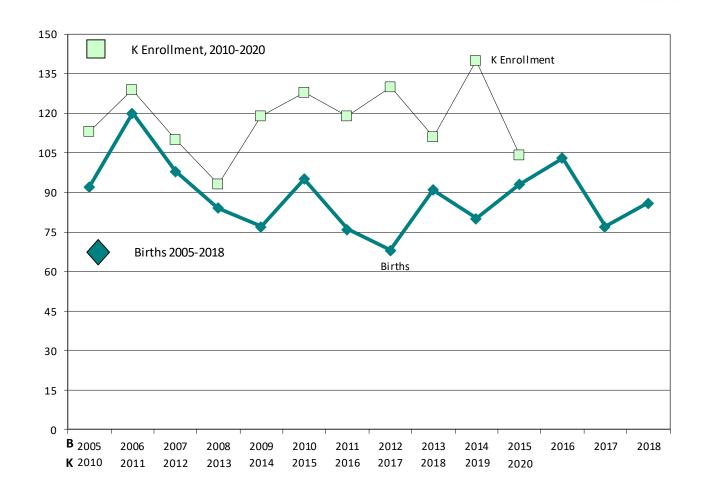
Southborough, MA Historical & Projected Enrollment

K-8, 2010-2030





Southborough, MA Birth-to-Kindergarten Relationship





Southborough, MA Additional Data

Building Permits Issued							
Year	Single-Family	Multi-Units					
2005	26	0					
2016	9	0					
2017	8	0					
2018	32	0					
2019	21	0					
2020	0 to date	0 to date					

Enrollment History					
Year	Career-Tech 9-12 Total	Non-Public K-12 Total			
2005-06	10	156			
2016-17	18	233			
2017-18	18	231			
2018-19	17	217			
2019-20	22	219			
2020-21	n/a	n/a			

Source: HUD and Building Department

	Residents in Non-Public Independent and Parochial Schools (General Education)													
Enrollments	К	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
as of Jan. 1, 2020	7	8	5	14	9	10	15	25	18					219

K-12 Home-S	Schooled Students
2020	3

K-12 Residents in Charter or Magnet				
Schools, or "Choiced-out"				
2020	5			

	pecial Education laced Students
2020	14

K-12 Tuitioned-In, Choiced-In, & Other Non-					
Residents					
2020	2				

The above data were used to assist in the preparation of the enrollment projections. If additional demographic work is needed, please contact our office.

The Public Schools of Northborough and Southborough deserve to be commended for commissioning this study. The District is engaged in thoughtful, data-based planning and prudent use of available resources. Planning for municipal and school needs begins with a firm grounding in community data and accurate forecasting of future population and school enrollments.



Questions

