



Avon, MA

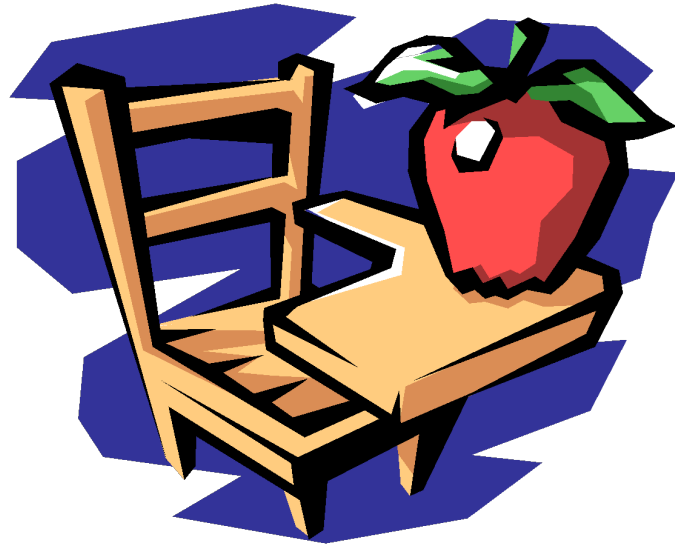
**Best Educational Use of
School Facilities Study**

December 2021

NESDEC Project Team

- **John H. Kennedy, M.A., Consultant**
- **Karen L. LeDuc, Ph.D., Consultant**
- **Nancy L. Gustafson, CAGS, Consultant**
- **Arthur L. Bettencourt, Ed.D., Executive Director**

Introduction



NESDEC entered into an agreement with the Avon School District to conduct a Facility Best Use Study. The goal of the project was to provide a basis for decision-making regarding future grade level reconfigurations, 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) by 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 Avon, MA School District.

The NESDEC Team analyzed District and municipal records, including data provided by District school and town government officials, the U.S. Census Bureau, The Warren Group, HUD, and local realtors. [The U.S. Census Bureau has not released a complete reporting of the 2020 Biennial Census. The partial data released on August 12, 2021, has been included.](#)

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 27.

Scope

Enrollment Trend Analysis

The NESDEC Team analyzed data and interviewed planners, realtors, relevant municipal officials, and others in order to plot future trends and the reasons for them. NESDEC provides an updated 10-year Enrollment Projection Report, including an analysis of any expected "student yield" from proposed residential construction.

Instructional Program Review and Facility Best Use Analysis

The study also included an analysis of present and planned school programs and the facilities needed to provide these programs. Members of the NESDEC Study Team conducted a site visit of Ralph D. Butler Elementary School and a virtual site visit of Avon Middle/High School. Key facility information was reviewed with administrators in each of the schools.

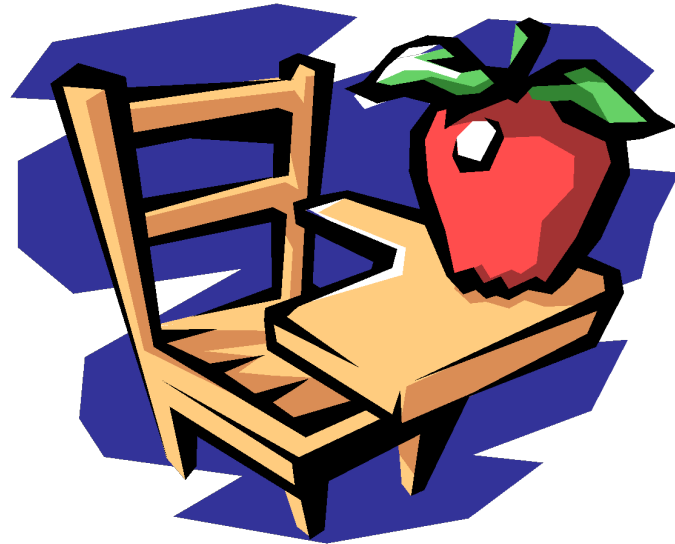
Although the study did not include a capital asset assessment, the NESDEC Team did review pertinent facility maintenance and capital improvement needs information provided by the District.

Options

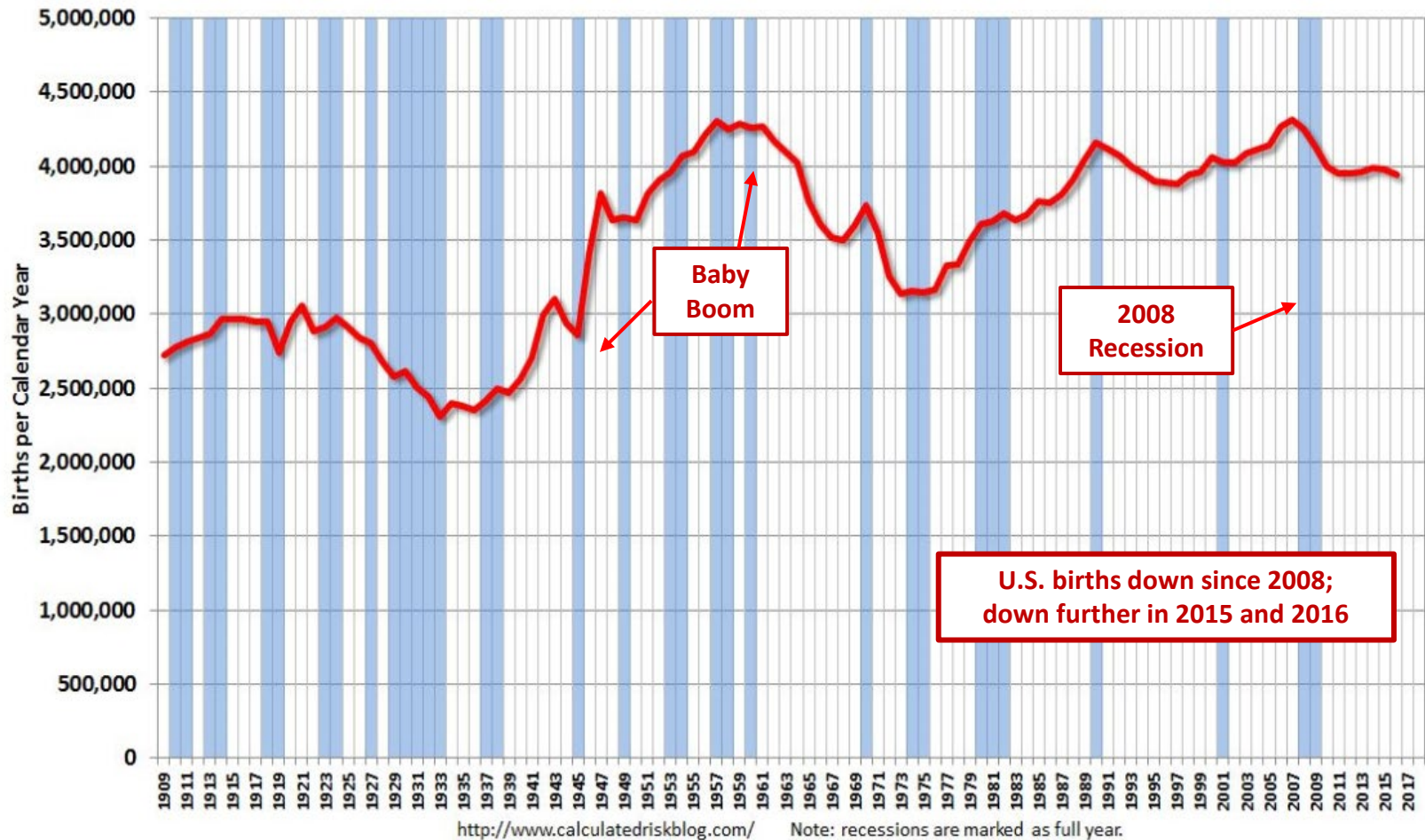
Using information gained from its analysis of the enrollment projection, coupled with facility capacity analysis and aligned with current programing, NESDEC developed potential alternatives for the District to review as it moves forward in the development of a Long-Range Facility Plan.

The alternatives that the NESDEC Team is presenting include a bulleted outline description of each option as well as a listing of advantages and challenges. The options are designed to serve as a catalyst for further analysis and discussion. *Thus, this document should be considered not as an end-product, but rather as a beginning point for future planning.*

Demographic Information



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



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%

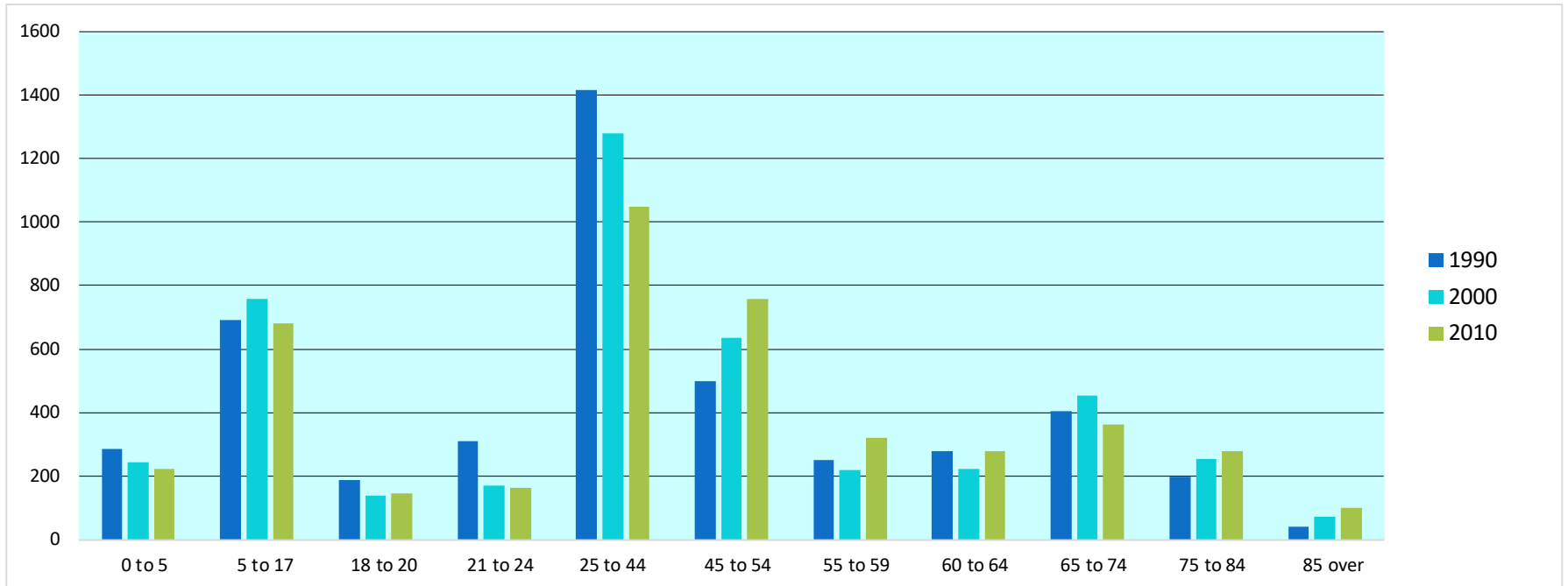
SOURCE: U.S. Department of Education, National Center for Education Statistics, Table 203.20, August 2020

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.

U.S. Census Age Cohort Data - Actual

1990 to 2010 *



Sources: U.S. Census Bureau; Summary Population and Housing Characteristics

* Note: 2020 age breakouts not released until late 2021 or early 2022.

Avon Population Trends

General Population – According to the U.S. Census Bureau, Avon, MA had a population of 4,777 as of April 1, 2020.

2020 age breakouts are not yet available. The 2019 U.S. Census American Community Survey estimated breakouts are as follows:

- Ages 5 and under: 5.6 %
- Ages 18 and under: 18.8%
- Ages 19 to 64: 66.9%
- Ages 65 older: 14.3%

** Source: U.S. Census Bureau, updated September 23, 2021*

Avon, MA

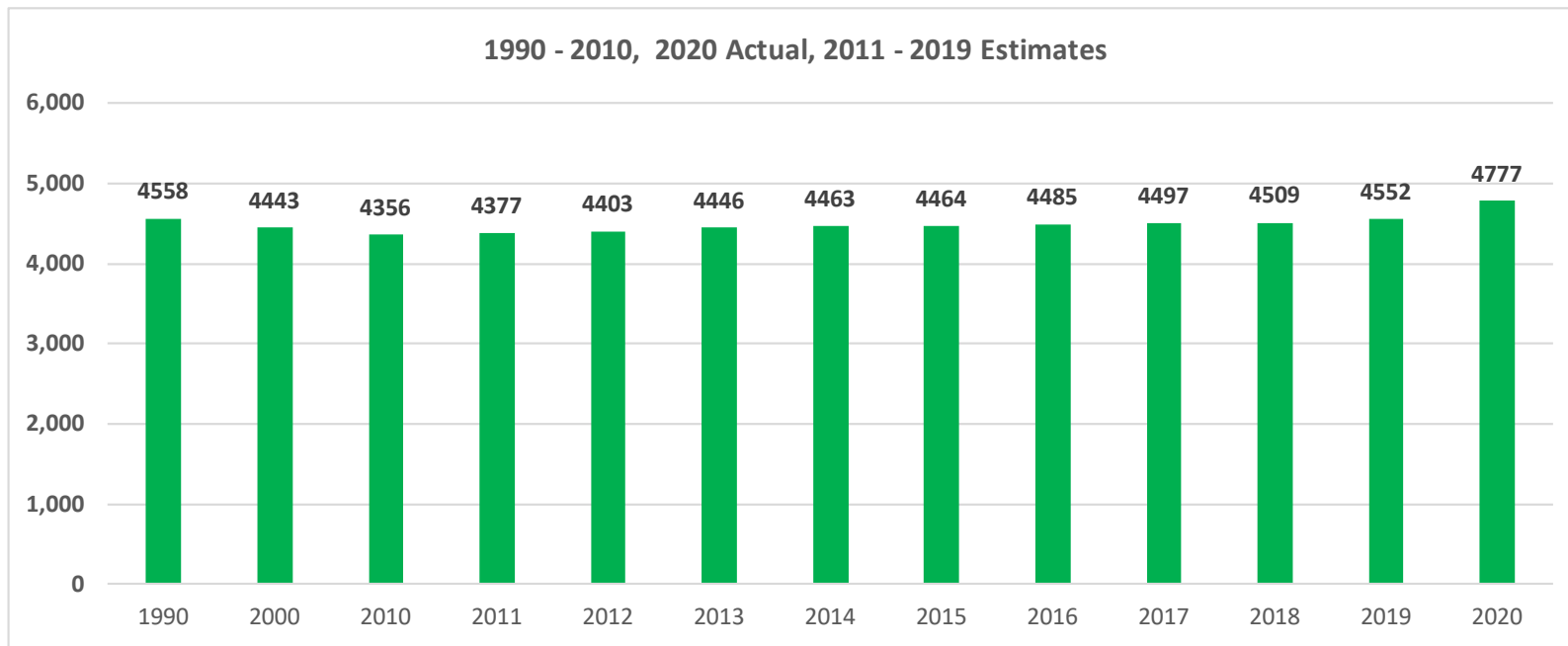
Median Age of Population (in years)

	1990 Census	2000 Census	2010 Census
United States	32.9	35.3	37.2
Massachusetts	33.5	36.5	39.1
Norfolk County	35.1	38.1	40.7
Avon	35.7	40.2	44.0

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

Source: U.S. Census Bureau

Town Population



Sources: U.S. Census Bureau, 2011 - 2019 Annual Estimates Populations, 4.20.21

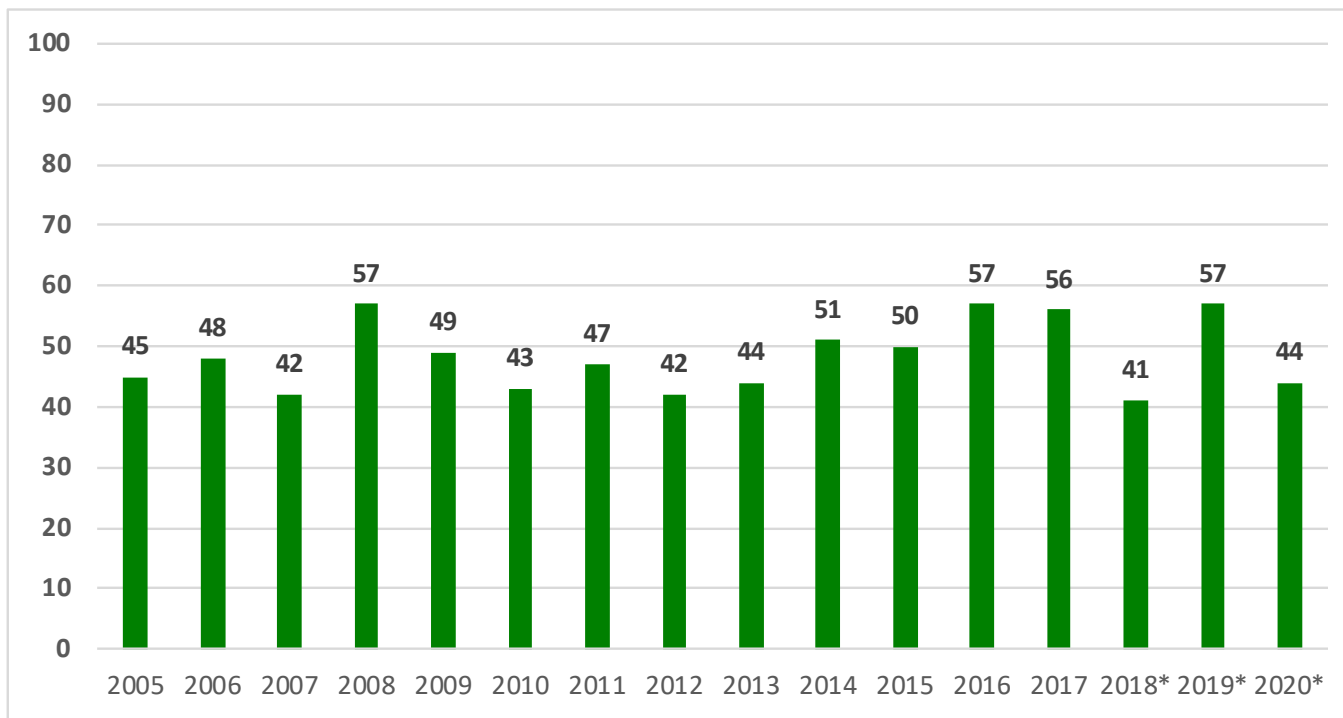
Umass Donahue Center, 8.18.21

Demographic Analysis

Births – Data provided by the Commonwealth of Massachusetts Vital Records Department

- Between 2005 – 2011, Avon births averaged 47 per year.
- From 2012 – 2017, the average annual birth rate increased to 50 per year.
- From 2018 – 2020, the average provisional of births was 47 per year.

Avon, MA Births



Source: Commonwealth of Massachusetts Vital Records, 8/10/21

* 2018 to 2020 still provisional data.

Trends in Real Estate Sales

Every day across America, 10,000 “Baby Boomers” celebrate their 65th birthdays - a phenomenon which will continue for the next eight years. New England has a disproportionately large share of these senior citizens, many of whom had planned to “downsize” their living arrangements but postponed putting homes on the market due to the Great Recession. 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.

Millennials, many of whom postponed home buying due to college debt, now are purchasing single-family homes in record numbers.

School enrollments are influenced strongly by the number of real estate sales, as new families move into the district. In over 80% of districts, the number of real estate sales is 4-5 times larger than the number of building permits for new residential construction; thus, the number of real estate sales often is a more important factor than the number of building permits.

The global pandemic continues to influence our nation’s public health and economic stability in unpredictable ways, especially for our schools.

Residential Building Permits

Year	Single - Family	Multi-Units		Year	Single - Family	Multi-Units		Year	Single - Family	Multi-Units
1980	1	4		1994	6	0		2008	4	0
1981	0	0		1995	4	0		2009	2	0
1982	0	0		1996	6	0		2010	3	0
1983	3	0		1997	9	0		2011	1	0
1984	7	2		1998	1	0		2012	8	0
1985	4	0		1999	8	0		2013	2	0
1986	9	4		2000	5	0		2014	2	0
1987	6	0		2001	3	0		2015	8	2
1988	6	2		2002	3	0		2016	4	0
1989	6	8		2003	2	0		2017	7	0
1990	7	4		2004	2	0		2018	13	16
1991	2	0		2005	8	0		2019	10	0
1992	0	0		2006	5	0		2020	4	0
1993	3	0		2007	5	0		2021 *	3	0

Source: HUD - Does not include permits for renovations

* 2021 HUD data is preliminary and dependent upon town data submission to HUD.

Information Gained from the Avon Building Department

Approved Projects Under Construction:

76 units total:

- 9 single-family homes (3-bedroom)
- 11 duplexes (2-bedroom)
- 45 townhomes (2-bedroom)

No other Condo or Apartment Projects have been approved.

However, two projects are awaiting approval and might begin within the next five years.

Home and Condo Sales

Year	Single-Family	S-F Median Sales Price	# Condo Units	Year	Single-Family	S-F Median Sales Price	# Condo Units
1997	44	\$125,950	2	2010	27	\$270,000	
1998	40	\$131,250	2	2011	30	\$226,750	
1999	42	\$155,900	4	2012	58	\$185,500	1
2000	42	\$178,250		2013	48	\$267,500	1
2001	43	\$212,000		2014	49	\$264,000	1
2002	60	\$241,450		2015	58	\$260,000	
2003	58	\$276,000		2016	72	\$299,650	2
2004	57	\$290,000	4	2017	65	\$323,000	3
2005	67	\$320,000	1	2018	85	\$344,000	4
2006	44	\$312,500	1	2019	67	\$356,000	7
2007	39	\$291,000	3	2020	68	\$369,500	10
2008	31	\$277,000		2021	40	\$450,500	4
2009	29	\$236,000					

Source: The Warren Group, Banker & Tradesman

* As of August 2021

Residential Sales and Real Estate Information

Residential Sales

Warren Group Data – Single-Family Sales

- Between 2001 and 2007, Avon had an average of 52 single-family home sales, with an average sales price of \$277,000.
- From 2008-2012, during the housing downturn, Avon single-family home sales averaged 35 units, with an average sales price of \$239,000.
- From 2013-2020, single-family home sales in Avon increased to an average of 64 units per year, with an average sales price of \$310,000.
- For 2021, Avon has sold 40 single-family home sales as of August 2021, with an average sales price of \$450,500.

Additional Residential and Realtor Information

Realtor Information:

- Sales volume has increased significantly since 2012-13.
- Days on the market have continued to diminish.
- Multiple bid situations have been occurring if property is properly priced.
- Common selling price range is \$380K – \$420K.
- Boomers are downsizing and selling empty-nester 2- and 3-bedroom homes; families with children are often the buyers.
- Millennials are buying in the under \$300K - \$400K price range, often as first-time buyers.

Profile of the Town of Avon

Factors that benefit the town include:

- A combination of good highway access and convenient public transit service to Boston and Brockton, which supports economic growth and development
- Excellent community facilities and services
- Accessibility to health care, cultural, educational, and recreational resources
- A favorable tax base

Source: The Warren Group

Housing Details by Town

	Dwellings	Occupied	Owner-occupied	% units Owner-occupied	Renter-occupied	% units Renter-occupied	Vacant	For Seasonal use	Rental vacancy rate
2000	1,740	1,705	1,305	76.5%	400	23.5%	35	3	2.5%
2010	1,769	1,709	1,309	76.6%	400	23.4%	60	6	5.0%

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

Number of K-12 Students Per Household Unit

Commonwealth of Massachusetts:

YEAR	HOUSEHOLDS	PUBLIC K-12 ENROLLMENT	K-12 STUDENTS PER
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 Avon

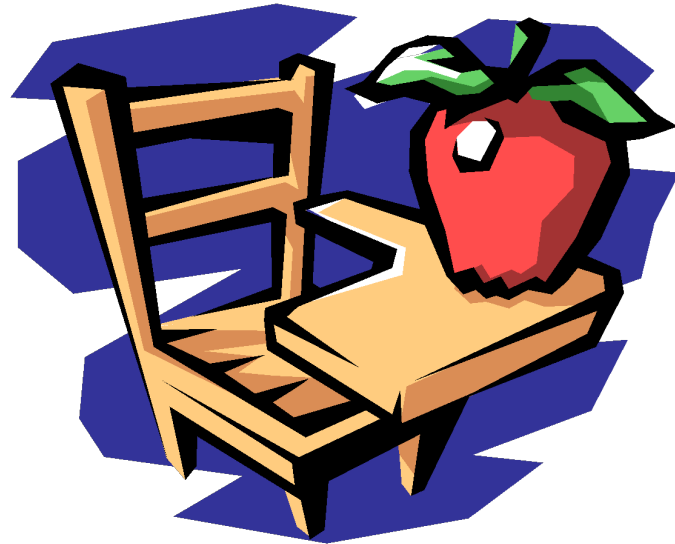
YEAR	HOUSEHOLDS	PUBLIC K-12 ENROLLMENT	K-12 STUDENTS PER
1990	1,666	585	0.35
2000	1,740	757	0.44
2010	1,769	772	0.44

Source: 1990, 2000, 2010 U.S. Census, MA DESE enrollment data 1990. 2000. 2010

Demographic Study and Enrollment Forecast Methodology

- NESDEC gathered and analyzed demographic and economic data from The U.S. Census, The Warren Group, *Banker & Tradesman*; Avon Public Schools, The Town Planner, The Building Department and local realtors.
- NESDEC analyzed public school enrollment data for the past ten years, with particular attention to the anticipated “student yield” of housing under construction. This analysis was informed by the current real estate market as confirmed by local realtors and Warren Group data.
- The “student yield” is calculated by considering the potential number of school age children who might occupy any housing under construction. It is distributed over a three-year period, based on anticipated occupancy. We assign the “student yield” to grade levels without certainty of the actual age of the potential students. Of note, the smaller the number of the “student yield”, the more difficult it is to forecast the enrollments.

Enrollment Projections



Historical Enrollment

School District: Avon, MA

10/22/2021

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	48	2011-12	22	41	55	55	54	54	62	62	66	65	61	46	65	48	0	734	756
2007	42	2012-13	20	43	47	57	56	58	60	60	63	67	60	51	48	53	3	726	746
2008	57	2013-14	10	40	57	52	58	62	59	62	65	63	64	56	45	44	3	730	740
2009	49	2014-15	19	43	53	60	58	58	63	59	62	60	61	50	50	42	3	722	741
2010	43	2015-16	20	49	53	53	53	62	57	63	66	63	51	48	49	43	2	712	732
2011	47	2016-17	17	46	51	52	53	57	60	59	59	61	53	49	48	45	4	697	714
2012	42	2017-18	19	48	55	61	53	56	63	59	65	59	39	53	54	39	3	707	726
2013	44	2018-19	17	42	51	53	61	58	60	64	57	66	56	42	47	51	3	711	728
2014	51	2019-20	22	48	53	57	59	64	55	58	62	62	50	47	40	47	1	703	725
2015	50	2020-21	12	42	45	51	54	51	62	56	59	61	54	49	49	41	0	674	686
2016	57	2021-22	30	51	45	45	53	59	62	62	51	57	66	49	45	48	4	697	727

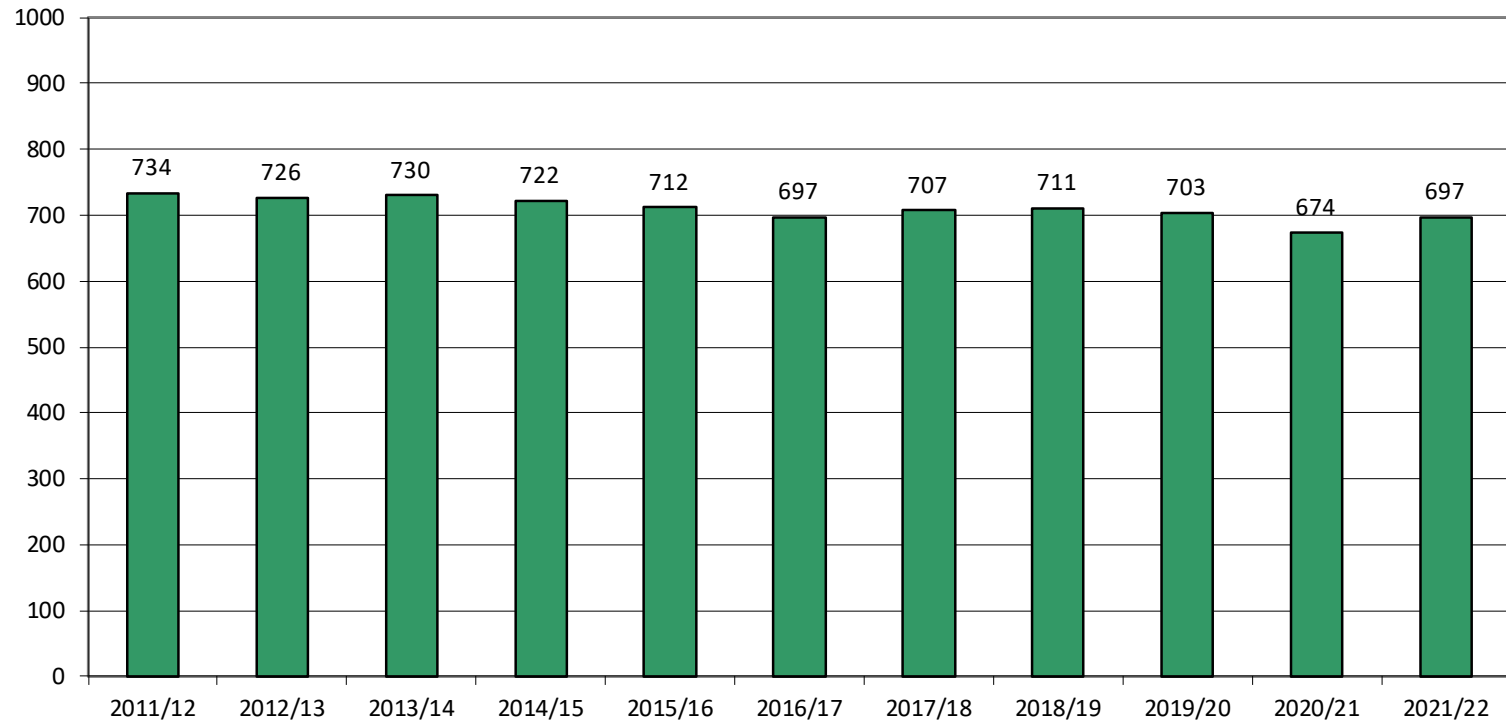
*Birth data provided by Public Health Vital Records Departments in each state.

Historical Enrollment in Grade Combinations									
Year	K-4	PK-6	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2011-12	259	405	383	514	255	193	131	351	220
2012-13	261	401	381	511	250	190	130	342	212
2013-14	269	400	390	518	249	190	128	337	209
2014-15	272	413	394	516	244	181	122	325	203
2015-16	270	410	390	519	249	192	129	320	191
2016-17	259	395	378	498	239	179	120	315	195
2017-18	273	414	395	519	246	183	124	309	185
2018-19	265	406	389	512	247	187	123	319	196
2019-20	281	416	394	518	237	182	124	308	184
2020-21	243	373	361	481	238	176	120	313	193
2021-22	253	407	377	485	232	170	108	316	208

Historical Percentage Changes			
Year	K-12	Diff.	%
2011-12	734	0	0.0%
2012-13	726	-8	-1.1%
2013-14	730	4	0.6%
2014-15	722	-8	-1.1%
2015-16	712	-10	-1.4%
2016-17	697	-15	-2.1%
2017-18	707	10	1.4%
2018-19	711	4	0.6%
2019-20	703	-8	-1.1%
2020-21	674	-29	-4.1%
2021-22	697	23	3.4%
Change		-37	-5.0%

Historical Enrollment

K-12, 2011-2021



Projected Enrollment

NOTE: Assumes increased residential construction

School District: Avon, MA

10/21/2021

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	57		2021-22	30	51	45	45	53	59	62	62	51	57	66	49	45	48	4	697	727
2017	56		2022-23	30	54	56	48	47	54	62	62	62	52	52	62	47	45	4	707	737
2018	41	(prov.)	2023-24	31	40	59	57	50	50	57	62	62	63	48	49	60	47	4	708	739
2019	57	(prov.)	2024-25	31	52	44	62	62	51	53	58	60	63	58	45	47	60	4	719	750
2020	44	(prov.)	2025-26	32	40	57	45	64	64	54	53	56	61	58	54	43	47	4	700	732
2021	51	(est.)	2026-27	32	47	44	58	47	66	67	54	51	57	56	54	52	43	4	700	732
2022	50	(est.)	2027-28	33	46	51	45	60	48	69	67	52	52	52	52	52	52	4	702	735
2023	49	(est.)	2028-29	33	45	50	52	47	62	50	69	65	53	48	49	50	52	4	696	729
2024	50	(est.)	2029-30	34	46	49	51	54	48	65	50	67	66	48	45	47	50	4	690	724
2025	49	(est.)	2030-31	34	45	50	50	53	55	50	65	48	68	60	45	43	47	4	683	717
2026	50	(est.)	2031-32	35	46	49	51	52	54	58	50	63	49	62	56	43	43	4	680	715

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.

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

Projected Enrollment in Grade Combinations*									
Year	K-4	PK-6	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2021-22	253	407	377	485	232	170	108	316	208
2022-23	259	413	383	497	238	176	114	320	206
2023-24	256	406	375	500	244	187	125	329	204
2024-25	271	413	382	505	234	181	123	333	210
2025-26	270	409	377	494	224	170	117	319	202
2026-27	262	415	383	491	229	162	108	313	205
2027-28	250	419	386	490	240	171	104	312	208
2028-29	256	408	375	493	237	187	118	317	199
2029-30	248	397	363	496	248	183	133	323	190
2030-31	253	402	368	484	231	181	116	311	195
2031-32	252	395	360	472	220	162	112	316	204

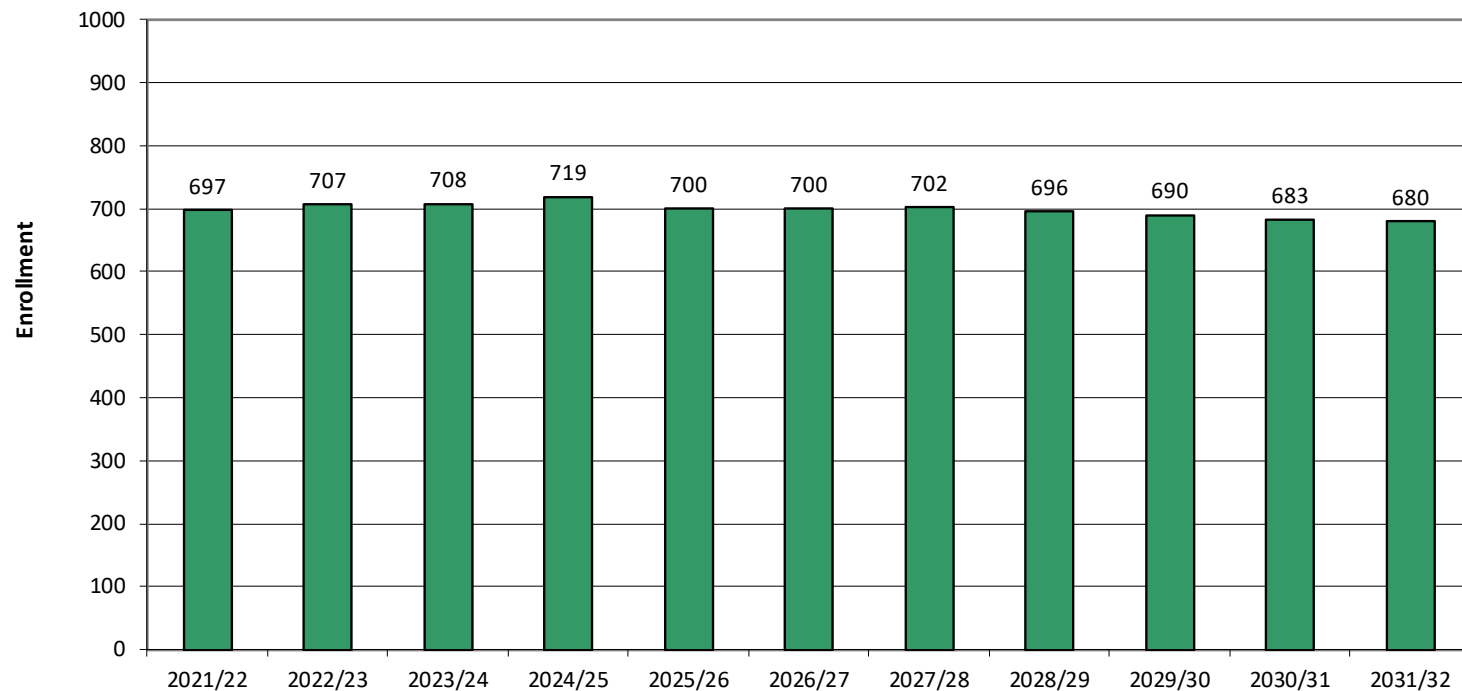
Projected Percentage Changes			
Year	K-12	Diff.	%
2021-22	697	0	0.0%
2022-23	707	10	1.4%
2023-24	708	1	0.1%
2024-25	719	11	1.6%
2025-26	700	-19	-2.6%
2026-27	700	0	0.0%
2027-28	702	2	0.3%
2028-29	696	-6	-0.9%
2029-30	690	-6	-0.9%
2030-31	683	-7	-1.0%
2031-32	680	-3	-0.4%
Change		-17	-2.4%

*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

NOTE: Assumes increased residential construction

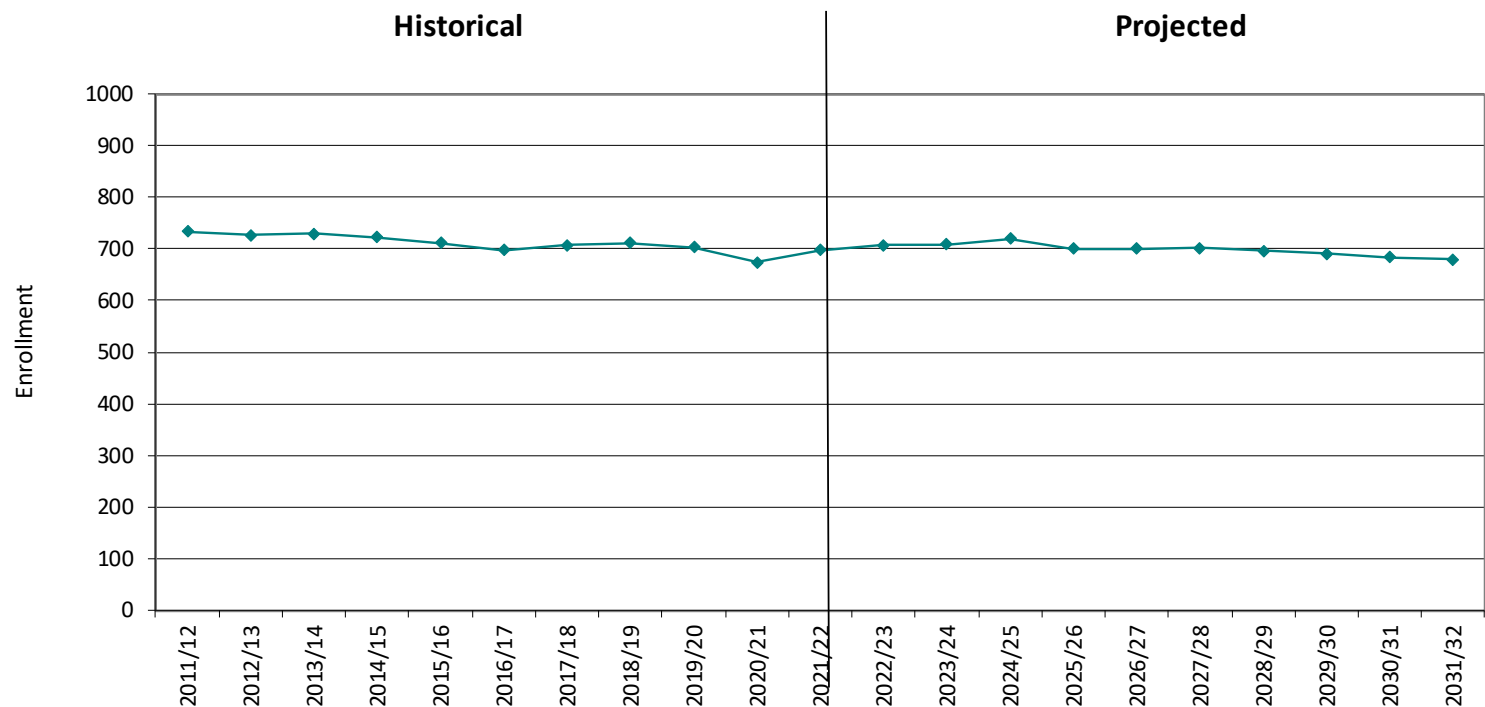
K-12 To 2031 Based On Data Through School Year 2021-22



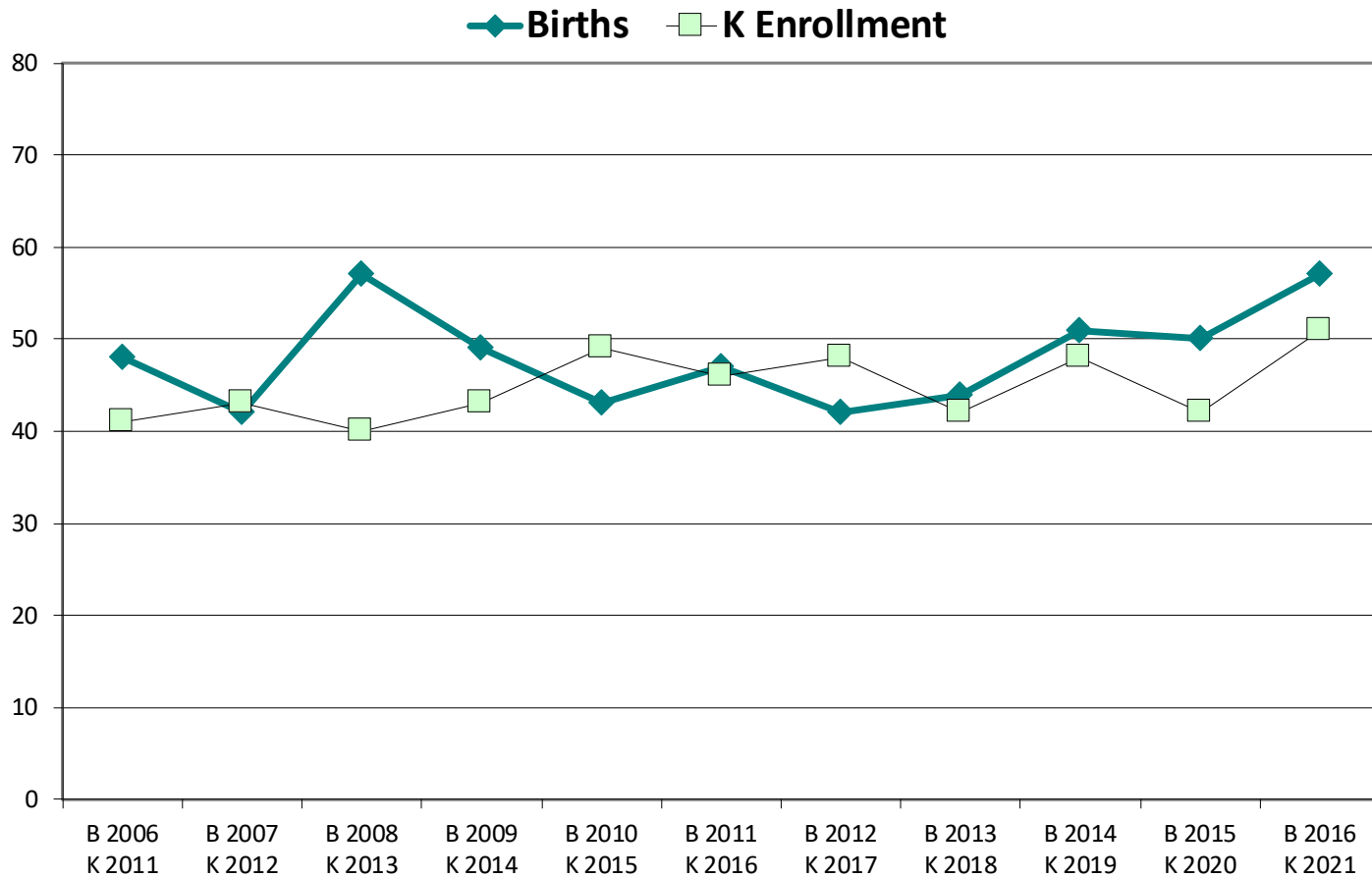
Historical & Projected Enrollment

NOTE: Assumes increased residential construction

K-12, 2011-2031



Birth-to-Kindergarten Relationship



Additional Data

Building Permits Issued (Source: HUD)		
Year	Single-Family	Multi-Units
2011	1	0
2017	7	0
2018	13	16
2019	10	0
2020	4	0
2021	3 to date	0 to date

Enrollment History*		
Year	Career-Tech 9-12 Total	Non-Public K-12 Total
2011	n/a	n/a
2017	n/a	n/a
2018	n/a	49
2019	65	n/a
2020	56	46
2021	n/a	n/a

Residents in Non-Public Independent and Parochial Schools (General Education)*														
Enrollments as of 1/1/21	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	3	0	3	3	1	2	1	3	4	3	10	8	5	46

K-12 Home-Schooled Students*	
1/1/2021	16

K-12 Residents in Charter or Magnet Schools, or Choiced-out*	
1/1/2021	20

K-12 Special Education Outplaced Students*	
1/1/2021	6

K-12 Tuitioned-In, Choiced-In, & Other Non-Residents*	
10/1/2021	168

*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.

Status Quo: Does not include the recently increased pace of residential construction.



Projected Enrollment

School District: Avon, MA

10/22/2021

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	57		2021-22	30	51	45	45	53	59	62	62	51	57	66	49	45	48	4	697	727
2017	56		2022-23	30	52	56	46	47	54	62	62	60	52	52	62	47	45	4	701	731
2018	41	(prov.)	2023-24	31	38	57	57	48	48	57	62	60	61	48	49	60	47	4	696	727
2019	57	(prov.)	2024-25	31	52	41	58	59	49	50	57	60	61	56	45	47	60	4	699	730
2020	44	(prov.)	2025-26	32	40	57	42	60	60	51	50	55	61	56	52	43	47	4	678	710
2021	51	(est.)	2026-27	32	47	44	58	44	62	63	51	48	56	56	52	50	43	4	678	710
2022	50	(est.)	2027-28	33	46	51	45	60	45	65	63	49	49	51	52	50	50	4	680	713
2023	49	(est.)	2028-29	33	45	50	52	47	62	47	65	61	50	45	48	50	50	4	676	709
2024	50	(est.)	2029-30	34	46	49	51	54	48	65	47	63	62	46	42	46	50	4	673	707
2025	49	(est.)	2030-31	34	45	50	50	53	55	50	65	45	64	57	43	40	46	4	667	701
2026	50	(est.)	2031-32	35	46	49	51	52	54	58	50	63	46	59	53	41	40	4	666	701

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-6	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2021-22	253	407	377	485	232	170	108	316	208
2022-23	255	409	379	491	236	174	112	318	206
2023-24	248	398	367	488	240	183	121	325	204
2024-25	259	397	366	487	228	178	121	329	208
2025-26	259	392	360	476	217	166	116	314	198
2026-27	255	401	369	473	218	155	104	305	201
2027-28	247	408	375	473	226	161	98	301	203
2028-29	256	401	368	479	223	176	111	304	193
2029-30	248	394	360	485	237	172	125	309	184
2030-31	253	402	368	477	224	174	109	295	186
2031-32	252	395	360	469	217	159	109	302	193

Projected Percentage Changes			
Year	K-12	Diff.	%
2021-22	697	0	0.0%
2022-23	701	4	0.6%
2023-24	696	-5	-0.7%
2024-25	699	3	0.4%
2025-26	678	-21	-3.0%
2026-27	678	0	0.0%
2027-28	680	2	0.3%
2028-29	676	-4	-0.6%
2029-30	673	-3	-0.4%
2030-31	667	-6	-0.9%
2031-32	666	-1	-0.1%
Change	-31		-4.4%

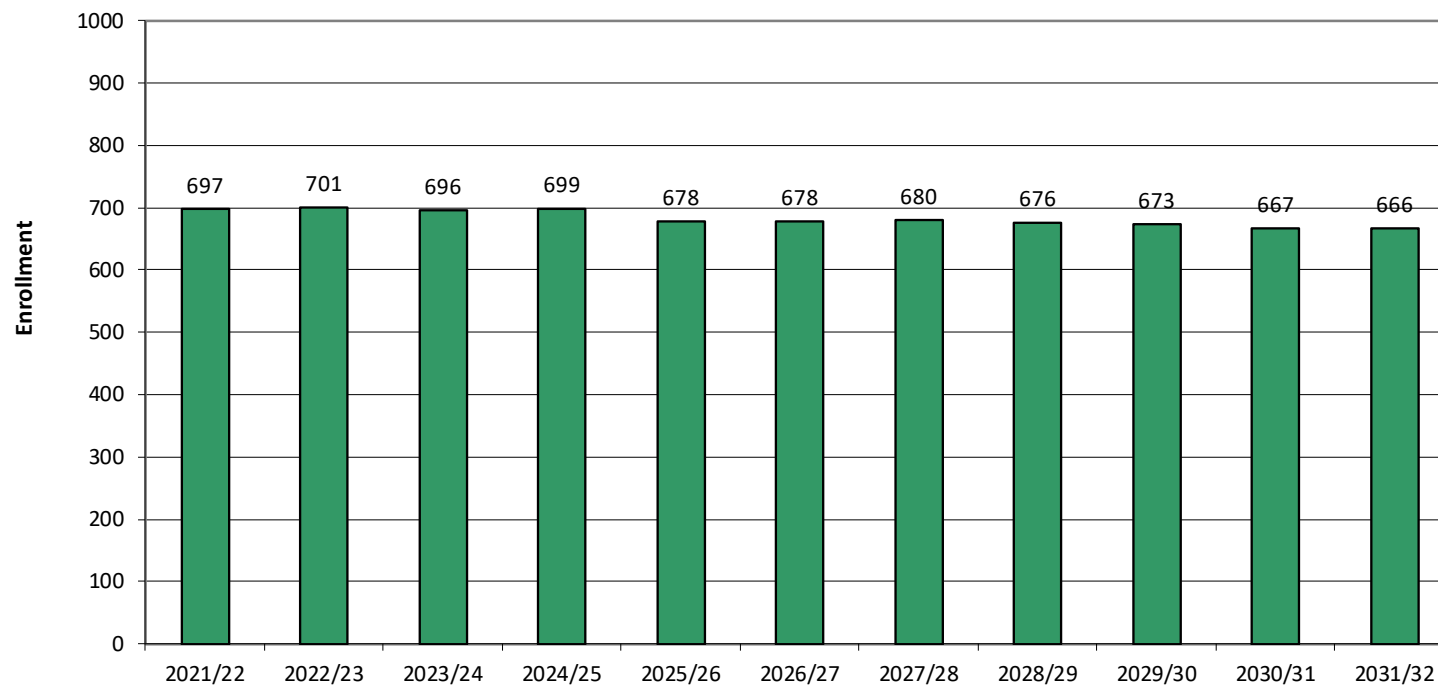
*Projections should be updated annually to reflect changes in in/out-migration of families, real estate sales, residential construction, births, and similar factors.

Status Quo: Does not include the recently increased pace of residential construction.

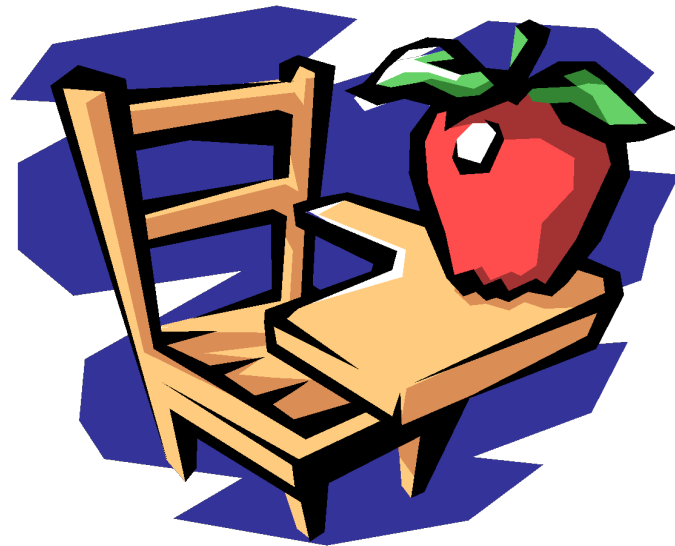
NESDEC

Projected Enrollment

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



Capacity Analysis



Defining “Capacity”

- Architects depend heavily on square footage; NESDEC also counts rooms, using the perspective of a school principal who is creating a schedule for the building.
- Current Operating Capacity (C.O.C.):
 - Maximum class size (PK = 15; K = 16; Grades 1-3 = 18, Grades 4-6 = 21, Grades 7 – 12 = 25)
 - Current building use, including deficiencies and portable classrooms
- Planned Operating Capacity (P.O.C.) for a 21st Century Educational Program:
 - For future planning/construction purposes
 - Identifies deficiencies; keeps current programs
 - Provides appropriate core and specialized facilities
 - Adjusting for parity/equity among all buildings
 - **NESDEC advises that for long-term planning, districts maintain a minimum of a 10% capacity cushion to accommodate future growth (calculated as POC total less 10%).**

School Facilities Review and Capacity Analysis

NESDEC conducted a review of each school facility, with these areas in mind:

- Instructional Spaces
- Core Facilities
- Administrative Spaces
- Support Staff
- Instructional/Administrative Technology
- ADA/Handicapped Access
- Major Systems and Maintenance
- Site Information
- Storage

Each of these areas support student learning.

Ralph D. Butler Elementary School



School Facility Review and Capacity Analysis

Ralph D. Butler Elementary School

Grades	PK - 6
Site Acreage	28.3 acres
Built	1963
Addition/Renovation	2004 -modular wing with brick exterior that houses classrooms, including grades 4 - 6
Square Footage	48,000 sq. ft. with modular wing
# Interchangeable Classrooms	22
Oct. 1, 2021 Enrollment	PK-6 407, K-6 377

Current And Planned Operating Capacity: Ralph D. Butler Elementary School

Current Operating Capacity (COC)	Planned Operating Capacity (POC)
1 full-day PK x 15 = 15 3 Grade K x 16 = 48 9 Grades 1 - 3 x 18 = 162 9 Grades 4 - 6 x 21 = 189 1 Special Ed. x 9 = 9	1 full-day PK x 15 = 15 3 Grade K x 16 = 48 9 Grades 1 - 3 x 18 = 162 3 Grades 4 - 6 x 21 = 63 1 Special Ed. x 9 = 9
Total COC: 416 Students	Total POC: 290 Students
NOTE: 10 interchangeable classrooms are housed in a modular unit (2004) that is permanently attached to the building and has a brick exterior. Modular classrooms years of use is typically 20 years.	Note: Six classrooms taken offline for Specialist Classrooms that are currently on carts or in shared spaces such as Art, Music, Technology, ELL, Reading and for the Integrated PK program currently at the High School. See options starting on page 61.

Ralph D. Butler Elementary School – Cont.

Instructional Spaces:

- 22 interchangeable classrooms, NOTE: 10 interchangeable classrooms are housed in a modular unit (2004) that is permanently attached to the building and has a brick exterior
- 1 self-contained special education classroom
- 1 dedicated special education resource room, space is adequate for 1 educator; NOTE: There are 3 special educators, 2 for whom the space is inadequate
- 1 full-time Art educator, no dedicated classroom, space is inadequate
- 1 full-time Music educator, no dedicated classroom, space is inadequate
- 1 full Technology educator, no dedicated classroom, space is inadequate
- 1 full-time and 1 part-time ELL educator, 1 space is adequate, 2nd space is inadequate

Ralph D. Butler Elementary School – Cont.

Core Facilities:

- 1 Cafeteria/Gymnasium/Auditorium separated by partition; contains full kitchen; meals prepared onsite; 4 lunch sections; one serving line; serves 110 – 125 students
- 1 FTE Physical Education teacher; 1 teaching station; adequate storage; NOTE: due to COVID restrictions, PE is not currently using this space; stage is Handicapped Accessible (HC).
- There is no Library

Ralph D. Butler Elementary School – Cont.

Administrative Space:

- 1 Principal's office, space is adequate
- 1 Assistant Principal's office, space is inadequate
- 2 Administrative Assistant's office, space is adequate
- No Conference rooms, space is inadequate
- Nurse's office contains 2 day beds, no private exam space
- Teacher lunchroom/workroom, space is adequate

Support Staff:

- 1 full-time School Adjustment Counselor, space is adequate
- 1 full-time School Psychologist, space is adequate
- 1 full-time OT, shared space with 1 part-time PT, space is inadequate
- 1 full-time and 1 part-time Speech and Language educators, space is inadequate
- 1 full-time Title I Literacy educator, space is shared with 2 Special Education educators and offices for Art and Technology educators, space is inadequate

Ralph D. Butler Elementary School – Cont.

Instructional/Administrative Technology:

- 1:1 computers for all K-6 students
- (2) Laptop carts with 20 computers
- Educators have laptops
- Classrooms have interactive projection devices: Apple TVs and document cameras
- Electronic texts are used for Literacy, Math, Social Studies, Science
- Wi-Fi access is reliable
- Special Ed plans, health records, grading and attendance are computerized

ADA/Handicapped Access:

- Curb cuts and handicapped parking spaces are available
- 2 staff restrooms
- Route of travel in the building does require stairs; ramp in place

Ralph D. Butler Elementary School – Cont.

Site Information:

- Parking and event parking is noted as adequate; new parking lot just completed
- Field and play is reported as satisfactory, owned by town
- Drop-off and pick-up areas noted as adequate

Storage:

- Storage for classroom supplies is reported as adequate
- Storage for custodial supplies is reported as adequate
- Storage for administrative supplies/records is noted as adequate
- Storage for kitchen supplies is reported as adequate

Ralph D. Butler Elementary School – Cont.

Major Systems & Maintenance:

- The roof is reported as needs improvement; leaks in modulares; issues addressed as they arise; July 2011 roof replacement on the main building
- Flooring is reported as needs improvement; needs replacement in the main building
- Plumbing is reported as adequate
- HVAC is reported as adequate; 2009 and 2015 updates to boilers, classroom heat exchangers, heating ventilation unit for gym and cafeteria
- Electrical systems are reported as adequate
- The windows and doors are noted as adequate and energy-efficient; 2004 and 2007 replacements
- The walls are reported as adequate

Avon Middle/High School



Facility Profile: Avon Middle/High School

Grades	7 - 12
Site Acreage	8.6 acres
Built	1955
Addition/Renovation	Addition in 1973 – added 23,000 sq. ft. 2005 Renovation of roof, floors, walls, ceiling surfaces, windows, doors, masonry, plumbing, fire protection, heating, ventilation, electrical system, and interior wall teaching surfaces
Square Footage	100,000 sq. ft.
# Interchangeable Classrooms	27 interchangeable classrooms
Oct. 1, 2021 Enrollment	108 in MS, 208 in HS = 316 Total students

Avon Middle/High School Current/Planned Operating Capacity

Room Description	Rooms/ Teaching Stations	Student Stations	Total
Middle High School			
Regular Interchangeable Classrooms (English, Mathematics, Social Studies, Foreign Languages)	19	25	475
Science rooms	4	25	100
Arts room (Shared with Middle School)	1	25	25
Computer Science	1	25	25
Engineering Technology	1	25	25
Band, Chorus, Orchestra (Shared with Middle School)	1	25	25

Avon Middle/High School Current/Planned Operating Capacity

Room Description	Rooms/ Teaching Stations	Student Stations	Total
Physical Education – Gym and Auxiliary Gym (Shared with Middle School)	2	25	50
Special Needs (Self-contained)	2	10	20
School Total			745
School COC		745 x .75 programming/utilization factor	559
School – POC		2 classrooms off-line to accommodate teacher instructional prep work spaces, OT/PT and storage shortages $745 - 50 = 695$ $695 \times .75 = 521$	521

Avon Middle/High School

Instructional Spaces:

- 19 interchangeable classrooms
- 8 Specialized Classrooms (UAs and Science)
- 4 Special Education Classrooms
- 1 room for Art used by both HS & MS
- 1 room for Chorus and Band used by HS & MS
- No OT/PT space
- 1 Technology classroom used by HS & MS
- 1 Technology/Engineering Education (previously a Woodworking Shop)
- 1 Kitchen available as a project room

Avon Middle/High School – Cont.

Core Facilities serve both MS and HS:

- 1 Gym with a divider: 500 seating in bleachers, Handicapped seating is available
- Locker room and 2 restrooms that are Handicapped-Accessible (HC)
- Cafeteria with full kitchen: currently 3 lunch periods, 1 serving line, 300 serving capacity, Handicapped seating; not used for instruction
- Auditorium- seats 451; Handicapped seating and access; stage; adequate lighting and sound
- Library/Media Center: capacity 85; used for lunch this year, as well as for instruction for 5 periods; not available for teachers to bring a class in due to use for distancing for pandemic lunches

Avon Middle/High School – Cont.

Administrative Space:

- 1 Principal's office, 1 Assistant Principal's office; overall adequate space
- 2 Administrative Assistants' stations: adequate
- 2 Conference spaces: adequate
- Nurse's office: 2 Exam Rooms; 4 day beds; restroom is handicapped-accessible; space is adequate
- 2 Teachers' room: workspace is adequate

Support Staff:

- 1 Guidance office: space is adequate
- 1 Social worker: space is adequate
- 1 Psychologist: space is adequate
- 1 ELL space: part-time; adequate; also used by SpEd.
- 1 Speech: must use conference room

Avon Middle/High School – Cont.

Instructional/Administrative Technology:

- 1:1 Computers for students and staff
- Every classroom has an interactive projection device (Apple TV)
- Wi-Fi and internet access is reliable
- Electronic texts are used
- Special Education plans, grading, attendance, and health records are computerized

ADA/Handicapped Access:

- There are ADA Curb cuts and handicapped-accessible parking spaces
- Restrooms are handicapped-accessible for both students and staff
- Doors have levered handles, and external doors have “closed fist” crash bars
- Route of travel in the building does require stairs; elevator is available to all 4 levels

Avon Middle/High School – Cont.

Site Information:

- School day parking is adequate for staff
- Event parking: must use public library parking area for large events
- Field/play space is spread around town, and district must use transportation for some practices
- Area for drop off and pick up gets crowded in front of the building
- Proximity to traffic is satisfactory

Storage:

- Storage for classroom supplies, kitchen supplies, custodial supplies and equipment, and for administrative supplies/records, is adequate

Avon Middle/High School – Cont.

Major Systems & Maintenance:

- All systems are satisfactory except for roof that leaks and must be addressed frequently

Other Notes:

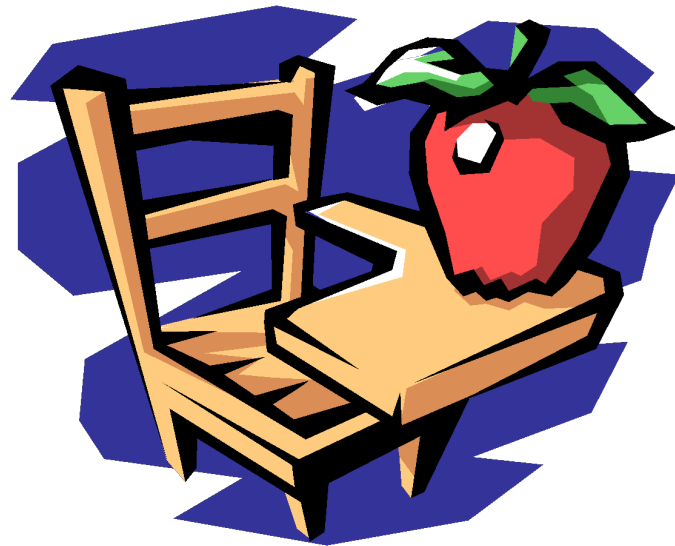
- Two of the Science rooms (Chemistry and Physics) have only built-in bench tables and no room for desks
- The Tech. Ed/ Engineering room has older equipment and an older ventilation system; floor is unsatisfactory

Capacity Analysis - Conclusion

Using information gained from its analysis of the enrollment projection, coupled with its Instructional Programming/Facility Capacity Analysis, NESDEC has analyzed potential alternatives for the District to review as it moves forward in the development of a Long-Range Facility Plan.

- *The alternatives that the NESDEC Team presents include a bulleted outline description of each option as well as a listing of advantages and challenges. The options are designed to serve as a catalyst for further analysis and discussion. Thus, this document should be considered not as an end-product, but rather as a beginning point for future planning.*
- *Option implementation typically takes a minimum of 1-2 years.*

Options



Option 1

Description:

Move Grade 6 to the MS/HS Building and move the PK classroom at the High School to Butler Elementary School.

Grade Level Alignment:

- Grades PK-5 at Butler Elementary School
- Grades 6-12 at Avon Middle High School Building

Option 1 - Cont.

Advantages:

- Grades PK-5 configuration at Butler Elementary allows for expanded classroom use for students, and services.
- Intermediate grade level students (Gr. 6) may benefit from access to a broader array of electives and unified arts, such as Media, Technology/Engineering, etc.
- Allows for more efficient use of space at the MS/HS during teacher preparation periods.
- Moving the PK classroom to the elementary building that houses the other PK classroom allows for PK teachers to collaborate and for integration of PK students with elementary programs.

Option 1 - Cont.

Challenges:

- Advanced planning for realignment and accommodation of current MS/HS spaces to support Grade 6 programming and maintain adequate grade level and program separation
- Advanced planning and organization to accommodate Grade 6 use of shared current MS/HS spaces; for example, Nurse's Office, Library, Cafeteria, etc.
- Need for planning and to verify that there are sufficient space and staff at the MS/HS to accommodate Grade 6 in areas such as Art, Music, Physical Education, and other specialized areas
- Need to verify that there are sufficient space and staff for Special Education programming and related services, such as OT, PT, Speech and Language
- Potential need to restructure and/or expand some transportation routes
- Costs associated with reconfiguring spaces at the MS/HS, if needed

Option 1 - Cont.

Challenges: - Cont.

- To reduce the number of instructional spaces that need to be accommodated, it would be advantageous to adjust scheduling for instruction to use classrooms that are currently vacant during teacher preparation periods
- Lack of permanent space for classes and services such as Library, Music, Art, Technology, Health, Literacy support, ELL & Speech
- Moving Grade 6 would only free up 3 classrooms

Option 2

Description:

Renovation and addition to Butler Elementary School, move PK classroom currently at the High School to Butler Elementary.

Grade Level Alignment:

- Grades PK-6 at Butler Elementary School
- Grades 7-12 at the MS/HS Building

Option 2 – Cont.

Advantages:

- Grades PK-6 configuration at Butler Elementary allows for elementary programming to remain
- Addresses crowding at the elementary building and the lack of permanent space for classes and services such as Library, Music, Art, Technology, Health, Literacy support, ELL & Speech
- An addition with possible renovation may eliminate modular classrooms that have an estimated life-span of 20 years, or address structural issues
- Allows the MS/HS to remain less congested
- Moving the PK classroom to the elementary building that houses the other PK classroom allows for PK teacher collaboration and integration of PK students with elementary programs

Option 2 – Cont.

Challenges:

- Costs associated with renovation and addition to Butler Elementary
- Costs associated with reconfiguring spaces in current building, if needed
- Need to verify that current Butler Elementary site can support an addition
- Work on the addition project might not be able to occur while instruction is taking place in that area of the building
- To reduce the number of instructional spaces that need to be accommodated, it would be advantageous to adjust scheduling for instruction, to use classrooms that are currently vacant during teacher preparation periods

Option 3

Description:

Move Grade 6 to the Middle/High School, Renovation and addition to Butler Elementary School, move PK classroom currently at the High School to Butler Elementary.

Grade Level Alignment:

- Grades PK-5 at Butler Elementary School
- Grades 6-12 at Avon Middle High School Building

Option 3 – Cont.

Advantages:

- Addresses crowding at the elementary building and the lack of permanent space for classes and services such as Library, Music, Art, Technology, Health, Literacy support, ELL & Speech
- An addition with possible renovation may eliminate modular classrooms that have an estimated life-span of 20 years, or address structural issues
- Moving the PK classroom to the elementary building that houses the other PK classroom allows for PK teachers to collaborate and for integration of PK students with elementary programs
- Intermediate grade level students (Grade 6) may benefit from access to a broader array of electives and unified arts, such as Media, Technology/Engineering, etc.
- To reduce the number of instructional spaces that need to be accommodated or added, it may be advantageous to adjust scheduling for instruction at the Middle/High School, to use classrooms that are currently vacant during teacher prep periods

Option 3 – Cont.

Challenges:

- Costs associated with renovation and addition to Butler Elementary
- Costs associated with reconfiguring spaces in current elementary building, if needed
- Need to verify that current Butler Elementary site can support an addition
- Work on the addition project might not be able to occur while instruction is taking place in that area of the building
- To reduce the number of instructional spaces that need to be accommodated, it would be advantageous to adjust scheduling for instruction, to use classrooms that are currently vacant during teacher preparation periods
- Advanced planning for realignment and accommodation of current MS/HS spaces to support Grade 6 programming and maintain adequate grade level and program separation

Option 3 – Cont.

Challenges: - Cont.

- Advanced planning and organization to accommodate Grade 6 use of shared current MS/HS spaces; for example, Nurse's Office, Library, Cafeteria, etc.
- Need for planning and to verify that there are sufficient space and staff at the MS/HS to accommodate Grade 6 in areas such as Art, Music, Physical Education, and other specialized areas
- Need to verify that there are sufficient spaces and staff for Special Education programming and related services, such as OT, PT, Speech and Language
- Potential need to restructure and/or expand some transportation routes (cost)
- Costs associated with reconfiguring spaces at the MS/HS, if needed

The Avon School District deserves to be commended for commissioning this study. The town 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.



New England School Development Council

School Board Questions

