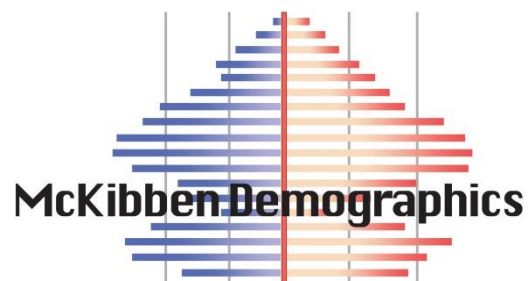# Colchester School District, VT Demographic Study

February 2017

Executive Summary

1.   The resident total fertility rate for the Colchester School District over the life of the forecasts is below replacement level. (1.71 vs. the replacement level of 2.1)

2.   Most in-migration to the district continues to occur in the 0-to-9 and 30-to-44 year old age groups.

3.   The local 18-to-24 year old population continues to leave the district, going to college or moving to other urbanized areas. This population group accounts for the largest segment of the district's out migration flow.

4.   The primary factors causing the district's enrollment to stabilize over the next 10 years are an increase in the number of "empty nest" households turning over, a relatively high number of existing housing units being put on the market and the smaller size of the graduating 12th grade classes.

5.   Changes in year-to-year enrollment over the next eight years will primarily be due to constantly sized cohorts entering and moving through the school system in conjunction with smaller cohorts leaving the system.

6.   The elementary enrollment will begin to stabilize after the 2020-21 school year. This will be due primarily to the fact that the cohort size entering and leaving will be roughly the same size.

7.   The median age of the population will increase from 35.4 in 2010 to 40.4 in 2025.

8.   Even if the district continues to have some of annual new home construction (even if that construction is rental units), the rate, magnitude and price of existing home sales will become the increasingly dominant factor affecting the amount of population and enrollment change.

9.   Total district enrollment is forecasted to decrease by 14 students, or -0.7%, between 2016-17 and 2021-22. Total enrollment is forecasted to decline by 19 students, or -0.9%, from 2021-22 to 2026-27.

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INTRODUCTION

By demographic principle, distinctions are made between projections and forecasts. A projection extrapolates the past (and present) into the future with little or no attempt to take into account any factors that may impact the extrapolation (e.g., changes in fertility rates, housing patterns or migration patterns) while a forecast results when a projection is modified by reasoning to take into account the aforementioned factors.

To maximize the use of this study as a planning tool, the ultimate goal is not simply to project the past into the future, but rather to assess various factors' impact on the future. The future population and enrollment changes of each school district are influenced by a variety of factors. Not all factors will influence the entire school district at the same level. Some may affect different areas at dissimilar magnitudes and rates causing changes at varying points of time within the same district. The forecaster's judgment, based on a thorough and intimate study of the district, has been used to modify the demographic trends and factors to more accurately predict likely changes. Therefore, strictly speaking, this study is a forecast, not a projection; and the amount of modification of the demographic trends varies between different areas of the district as well as within the timeframe of the forecast.

To calculate population forecasts of any type, particularly for smaller populations such as a school district, realistic suppositions must be made as to what the future will bring in terms of age specific fertility rates and residents' demographic behavior at certain points of the life course. The demographic history of the school district and its interplay with the social and economic history of the area is the starting point and the basis of most of these suppositions particularly on key factors such as the age structure of the area. The unique nature of each district's and attendance area's demographic composition and rate of change over time must be assessed and understood to be factors throughout the life of the forecast series. Moreover, no two populations, particularly at the school district, have exactly the same characteristics.

The manifest purpose of these forecasts is to ascertain the demographic factors that will ultimately influence the enrollment levels in the district's schools. There are of course, other non-demographic factors that affect enrollment levels over time. These factors include, but are not limited to: transfer policies within the district, student transfers to and from neighboring district, placement of "special programs" within school facilities that may serve students from outside the attendance area, state or federal mandates that dictate the movement of students from one facility to another (No Child Left Behind was an excellent example of this factor), the development of charter schools in the district; the prevalence of home schooling in the area, and the dynamics of local private schools.

Unless the district specifically requests the calculation of forecasts that reflect the effects of changes in these non-demographic factors, their influences are held constant for the life of the forecasts. Again, the main function of these forecasts is to determine what impact demographic changes will have on future enrollment. It is quite possible to calculate special "scenario" forecasts to measure the impact of school policy modifications as well as planned economic and financial changes. However in this case the results of these population and enrollment forecast are meant to represent the most likely scenario for changes over the next 10 years in the district and its attendance areas.

The first part of the report will examine the assumptions made in calculating the population forecasts for the Colchester School District. Since the results of the population forecasts drive the subsequent enrollment forecasts, the assumptions listed in this section are paramount to understanding the area's demographic dynamics. The remainder of the report is an explanation and analysis of the district's population forecasts and how they will shape the district's grade level enrollment forecasts.

DATA

The data used for the forecasts come from a variety of sources. The Colchester School District provided enrollments by grade and attendance center for the school years 2011-12 to 2016-17. Birth and death data for the years 2000 through 2013 were obtained from the Vermont Department of Health. The net migration values were calculated using Internal Revenue Service migration reports for the years 2000 through 2013. The data used for the calculation of migration models came from the United States Bureau of the Census, 2005 to 2010, and the models were designed using demographic and economic factors. The base age-sex population counts used are from the results of the 2010 Census.

Recently the Census Bureau began releasing annual estimates of demographic variables at the block group and tract level from the American Community

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Survey (ACS). There has been wide scale reporting of these results in the national, state and local media. However, due to the methodological problems the Census Bureau is experiencing with their estimates derived from ACS data, particularly in areas with a population of less than 60,000, the results of the ACS are not used in these forecasts. For example, given the sampling framework used by the Census Bureau, each year only 200 of the over 6,400 current households in the district would have been included. For comparison 1,100 households in the district were included in the sample for the long form questionnaire in the 2000 Census. As a result of this small sample size, the ACS survey result from the last 5 years must be aggregated to produce the tract and block group estimates.

To develop the population forecast models, past migration patterns, current age specific fertility patterns, the magnitude and dynamics of the gross migration, the age specific mortality trends, the distribution of the population by age and sex, the rate and type of existing housing unit sales, and future housing unit construction are considered to be primary variables. In addition, the change in household size relative to the age structure of the forecast area was addressed. While there was a slight drop in the average household size in the Colchester School District as well as most other areas of the state during the previous 20 years, the rate of this decline has been forecasted to slow over the next ten years.

ASSUMPTIONS

For these forecasts, the mortality probabilities are held constant at the levels calculated for the year 2010. While the number of deaths in an area are impacted by and will change given the proportion of the local population over age 65, in the absence of an extraordinary event such as a natural disaster or a breakthrough in the treatment of heart disease, death rates rarely move rapidly in any direction, particularly at the school district or attendance area level. Thus, significant changes are not foreseen in district's mortality rates between now and the year 2026. Any increases forecasted in the number of deaths will be due primarily to the general aging of the district's population and specifically to the increase in the number of residents aged 65 and older.

Similarly, fertility rates are assumed to stay fairly constant for the life of the forecasts. Like mortality rates, age specific fertility rates rarely change quickly or dramatically, particularly in small areas. Even with the recently reported rise in the fertility rates of the United States, overall fertility rates have stayed within a 10% range for most of the last 40 years. In fact, the vast majority of year to year change in an area's number of births is due to changes in the number of women in child bearing ages (particularly ages 20-34) rather than any fluctuation in an area's fertility rate.

The total fertility rate (TFR), the average number of births a woman will have while living in the school district during her lifetime, is estimated to be 1.71 for the total district for the ten years of the population forecasts. A TFR of 2.1 births per woman is considered to be the theoretical "replacement level" of fertility necessary for a population to remain constant in the absence of in-migration. Therefore, in the absence of migration, fertility alone would be insufficient to maintain the current level of population and enrollment within the Colchester School District over the course of the forecast period.

A close examination of data for the Colchester School District has shown the age specific pattern of net migration will be nearly constant throughout the life of the forecasts. While the number of in and out migrants has changed in past years for the Colchester School District (and will change again over the next 10 years), the basic age pattern of the migrants has stayed nearly the same over the last 30 years. Based on the analysis of data it is safe to assume this age specific migration trend will remain unchanged into the future. This pattern of migration shows most of the local out-migration occurring in the 18-to-24 year old age group as young adults leave the area to go to college or move to other urbanized areas. The second largest group of out-migrants are those householders aged 70 and older who are downsizing their residences. Most of the local in-migration occurs in the 0-to-9 and 30-to-44 age groups (the bulk of the which come from areas within 75 miles of the Colchester School District) primarily consisting of younger adults and their children.

As the Chittenden County area is not currently contemplating any major expansions or contractions, the forecasts also assume that the current economic, political, social, and environmental factors, as well as the transportation and public works infrastructure (with a few notable exceptions) of the Colchester School District and its attendance areas will remain the same through the year 2026. Below is a list of assumptions and issues that are specific to the Colchester School District. These issues have been used to modify the population forecast models to more accurately predict the impact of these factors on each area's population change. Specifically,

the forecasts for the Colchester School District assume that throughout the study period:

a. There will be no short term economic recovery in the next 18 months and the national, state or regional economy does not go into deep recession at any time during the 10 years of the forecasts; (Deep recession is defined as four consecutive quarters where the GDP contracts greater than 1% per quarter)

b. Interest rates have reached a historic low and will not fluctuate more than one percentage point in the short term; the interest rate for a 30 year fixed home mortgage stays below 5.0%;

c. The rate of mortgage approval stays at 1999-2003 levels and lenders do not return to "sub-prime" mortgage practices;

d. There are no additional restrictions placed on home mortgage lenders or additional bankruptcies of major credit providers;

e. The rate of housing foreclosures does not exceed 125% of the 2005-2007 average of Chittenden County for any year in the forecasts;

f. All currently planned, platted, and approved housing developments are built out and completed by 2025. All housing units constructed are occupied by 2026;

g. The unemployment rates for the Chittenden County and the Burlington Metropolitan Area will remain below 4.5% for the 10 years of the forecasts;

h. The rate of students transferring into and out of the Colchester School District will remain at the 2011-12 to 2016-17 average;

i. The inflation rate for gasoline will stay below 5% per year for the 10 years of the forecasts;

j. There will be no building moratorium within the district;

k. Businesses within the Colchester School District area will remain viable;

l. The number of existing home sales in the district that are a result of "distress sales" (homes worth less than the current mortgage value) will not exceed 20% of total homes sales in the district for any given year;

m. Housing turnover rates (sale of existing homes in the district) will remain at their current levels. The majority of existing home sales are made by home owners over the age of 60;

n. Private school and home school attendance rates will remain constant;

o. The rate of foreclosures for commercial property remains at the 2004-2008 average for Chittenden County;

If a major employer in the district or in the Greater Burlington Metropolitan Area closes, reduces or expands its operations, the population forecasts would need to be adjusted to reflect the changes brought about by the change in economic and employment conditions. The same holds true for any type of natural disaster, major change in the local infrastructure (e.g., highway construction, water and sewer expansion, changes in zoning regulations etc.), a further economic downturn, any additional weakness in the housing market or any instance or situation that causes rapid and dramatic population changes that could not be foreseen at the time the forecasts were calculated.

The high proportion of high school graduates from the Colchester School District that attend college or move to urban areas outside of the district for employment is a significant demographic factor. Their departure is a major reason for the extremely high out-migration in the 18 to 24 age group, and was taken into account when calculating these forecasts. The out-migration of graduating high school seniors is expected to continue over the period of the forecasts and the rate of out-migration has been forecasted to remain the same over the life of the forecast series.

Finally, all demographic trends (i.e., births, deaths, and migration) are assumed to be linear in nature and annualized over the forecast period. For example, if 1,000 births are forecasted for a 5-year period, an equal number, or proportion of the births are assumed to occur every year, 200 per year. Actual year-to-year variations do and will occur, but overall year to year trends are expected to be constant.

METHODOLOGY

The population forecasts presented in this report are the result of using the Cohort-Component Method of population forecasting (Siegel, and Swanson, 2004: 561-601) (Smith et. al. 2004). As stated in the **INTRODUCTION**, the difference between a projection and a forecast is in the use of explicit judgment based upon the unique features of the area under study. Strictly speaking, a cohort projection refers to the future population that would result from a mathematical extrapolation of historical trends. Conversely, a cohort-component forecast refers to the future population that is expected because of a studied and purposeful

selection of the components of change (i.e., births, deaths, and migration) and forecast models are developed to measure the impact of these changes in each specific geographic area.

Five sets of data are required to generate population and enrollment forecasts. These five data sets are:

1. a base-year population (here, the 2010 Census population for Colchester School District and the attendance areas);
2. a set of age-specific fertility rates for the district and the attendance areas to be used over the forecast period;
3. a set of age-specific survival (mortality) rates for the district and the attendance areas;
4. a set of age-specific migration rates for the district and the attendance areas, and;
5. the historical enrollment figures by grade.

The most significant and difficult aspect of producing enrollment forecasts is the generation of the population forecasts in which the school age population (and enrollment) is embedded. In turn, the most challenging aspect of generating the population forecasts is found in deriving the rates of change in fertility, mortality, and migration. From the standpoint of demographic analysis, the Colchester School District is classified as a "small area" population (as compared to the population of the state of Vermont or to that of the United States). Small area population forecasts are more complicated to calculate because local variations in fertility, mortality, and migration may be more irregular than those at the regional, state or national scale. Especially challenging is the forecast of the migration rates for local areas, because changes in the area's socioeconomic characteristics can quickly change from past and current patterns (Peters and Larkin, 2002.)

The population forecasts for Colchester School District were calculated using a cohort-component method with the populations divided into male and female groups by five-year age cohorts that range from 0-to-4 years of age to 85 years of age and older (85+). Age- and sex-specific fertility, mortality, and migration models were constructed to specifically reflect the unique demographic characteristics of each of the attendance areas in the Colchester School District.

The enrollment forecasts were calculated using a modified average survivorship method. Average survivor rates (i.e., the proportion of students who

progress from one grade level to the next given the average amount of net migration for that grade level) over the previous five years of year-to-year enrollment data were calculated for grades two through twelve. This procedure is used to identify specific grades where there are large numbers of students changing facilities for non-demographic factors, such as private school transfers or enrollment in special programs.

The survivorship rates were modified or adjusted to reflect the average rate of forecasted in and out-migration of 5-to-9, 10-to-14 and 15-to-17 year old cohorts to each of the attendance centers in Colchester School District for the period 2011 to 2016. These survivorship rates then were adjusted to reflect the forecasted changes in age-specific migration the district should experience over the next five years. These modified survivorship rates were used to project the enrollment of grades 2 through 12 for the period 2017 to 2021. The survivorship rates were adjusted again for the period 2022 to 2026 to reflect the predicted changes in the amount of age-specific migration in the district for the period.

The forecasted enrollments for kindergarten and first grade are derived from the 5-to-9 year old population of the age-sex population forecast at the elementary attendance center district level. This procedure allows the changes in the incoming grade sizes to be factors of forecasted population change and not an extrapolation of previous class sizes. Given the potentially large amount of variation in Kindergarten enrollment due to parental choice, changes in the state's minimum age requirement, and differing district policies on allowing children to start Kindergarten early, first grade enrollment is deemed to be a more accurate and reliable starting point for the forecasts. (McKibben, 1996) The level of the accuracy for both the total population and total enrollment forecasts at the school district level is estimated to be $\pm2.0\%$ for the life of the forecasts.

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Appendix A: Additional Tables

Table 1: Forecasted District Population Change, 2010 to 2020

	2010	2015	*2010-2015 Change*	2020	*2015-2020 Change*	*2010-2020 Change*
Porters Point	7,337	7,520	*2.4%*	7,620	*1.3%*	*3.9%*
Union Memorial	9,730	10,020	*2.9%*	10,260	*2.4%*	*5.4%*
District Total	**17,067**	**17,540**	*2.7%*	**17,880**	*1.9%*	*4.8%*

Table 2: Household Characteristics by Elementary Area, 2010 Census

	HH w/ Pop Under 18	% HH w/ Pop Under 18	Total Households	Household Population	Persons Per Household
Porters Point	980	33.5%	2925	7337	2.51
Union Memorial	979	28.9%	3389	7897	2.33
District Total	**1959**	**31.0%**	**6314**	**15234**	**2.41**

Table 3: Householder Characteristics by Elementary Area, 2010 Census

	Percentage of Householders aged 35-54	Percentage of Householders aged 65+	Percentage of Householders Who Own Homes
Porters Point	44.3%	17.5%	75.2%
Union Memorial	42.4%	14.6%	68.2%
District Total	**43.3%**	**15.9%**	**71.4%**

Table 4: Percentage of Households that are Single Person Households and Single Person Households that are over age 65 by Elementary Area , 2010 Census

	Percentage of Single Person Households	Percentage of Single Person Households and are 65+
Porters Point	20.7%	5.8%
Union Memorial	27.6%	5.8%
District Total	**24.4%**	**5.8%**

Table 5: Elementary Enrollment, 2016, 2021, 2026

	2016	2020	2016-2021 Change	2026	2021-2026 Change	2016-2026 Change
Porters Point	233	223	-4.3%	217	-2.7%	-6.9%
Union Memorial	253	252	-0.4%	242	-4.0%	-4.3%
District Total	**486**	**475**	**-2.3%**	**459**	**-3.4%**	**-5.6%**

Table 6: Age Under One to Age Ten Population Counts, by Year of Age, by Elementary Area: 2010 Census

	Under 1 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
Porters Point	71	79	71	96	83	95	98	83	85	82	105
Union Memorial	91	96	87	90	76	74	79	81	79	91	99
District Total	**162**	**175**	**158**	**186**	**159**	**169**	**177**	**163**	**164**	**173**	**204**

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Table 7: Comparison of District Enrollment by Grade with 2010 Census Counts by Age, 2010-2016

2010 Census	Under 1 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
Colchester School District	**162**	**175**	**158**	**186**	**159**	**169**	**177**	**163**	**164**	**173**	**204**	**196**	**189**	**176**
2016 Enrollment	162	162	171	168	153	153	145	150	138	173	166	194		
	100.00%	92.57%	108.23%	90.32%	96.23%	90.53%	81.92%	92.02%	84.15%	100.00%	81.37%	98.98%		
2015 Enrollment	168	157	178	173	150	154	147	151	127	175	169	202	187	
	103.70%	89.71%	112.66%	93.01%	94.34%	91.12%	83.05%	92.64%	77.44%	101.16%	82.84%	103.06%	98.94%	
2014 Enrollment		151	170	166	151	156	150	153	125	166	165	202	182	172
		86.29%	107.59%	89.25%	94.97%	92.31%	84.75%	93.87%	76.22%	95.95%	80.88%	103.06%	96.30%	97.73%
2013 Enrollment			185	172	153	160	147	156	123	166	159	199	174	175
			117.09%	92.47%	96.23%	94.67%	83.05%	95.71%	75.00%	95.95%	77.94%	101.53%	92.06%	99.43%
2012 Enrollment				174	155	159	146	149	121	168	153	189	182	174
				93.55%	97.48%	94.08%	82.49%	91.41%	73.78%	97.11%	75.00%	96.43%	96.30%	98.86%
2011 Enrollment					153	161	149	148	123	165	153	195	166	175
					96.23%	95.27%	84.18%	90.80%	75.00%	95.38%	75.00%	99.49%	87.83%	99.43%

Appendix B: Population Forecasts

Colchester School District: Total Population

Males	2010	2015	2020	2025
0-4	427	420	400	350
5-9	468	450	440	420
10-14	497	470	450	440
15-19	771	770	740	730
20-24	1,044	980	990	970
25-29	558	550	480	490
30-34	512	580	580	510
35-39	470	550	620	600
40-44	589	490	560	630
45-49	638	580	480	560
50-54	672	630	570	470
55-59	582	650	610	550
60-64	481	540	620	570
65-69	311	420	490	550
70-74	180	270	370	440
75-79	125	140	220	310
80-84	82	90	110	170
85+	61	80	90	100
Total	8,468	8,660	8,820	8,860

Females	2010	2015	2020	2025
0-4	413	400	380	350
5-9	378	440	420	400
10-14	446	380	440	420
15-19	822	740	670	730
20-24	1,034	1,020	950	890
25-29	597	550	530	450
30-34	493	630	570	560
35-39	510	530	660	600
40-44	602	530	540	680
45-49	657	600	520	540
50-54	665	650	600	520
55-59	592	660	640	580
60-64	515	570	630	620
65-69	296	470	530	580
70-74	206	270	440	480
75-79	142	180	240	390
80-84	132	110	140	190
85+	99	150	160	190
Total	8,599	8,880	9,060	9,170

Total	2010	2015	2020	2025
0-4	840	820	780	700
5-9	846	890	860	820
10-14	943	850	890	860
15-19	1,593	1,510	1,410	1,460
20-24	2,078	2,000	1,940	1,860
25-29	1,155	1,100	1,010	940
30-34	1,005	1,210	1,150	1,070
35-39	980	1,080	1,280	1,200
40-44	1,191	1,020	1,100	1,310
45-49	1,295	1,180	1,000	1,100
50-54	1,337	1,280	1,170	990
55-59	1,174	1,310	1,250	1,130
60-64	996	1,110	1,250	1,190
65-69	607	890	1,020	1,130
70-74	386	540	810	920
75-79	267	320	460	700
80-84	214	200	250	360
85+	160	230	250	290
Total	17,067	17,540	17,880	18,030
Median Age	35.4	36.8	38.5	40.4

	2010 to 2015	2015 to 2020	2020 to 2025
Births	770	740	680
Deaths	480	560	660
Nat Incr	290	180	20
Net Migr	160	150	140
Change	450	330	160

Differences between period Totals may not equal Change due to rounding.

Porters Point Area Population

Males	2010	2015	2020	2025
0-4	204	190	180	150
5-9	252	230	210	200
10-14	256	250	230	210
15-19	231	230	230	210
20-24	195	160	170	180
25-29	215	220	180	190
30-34	213	230	240	200
35-39	221	240	260	260
40-44	302	240	250	270
45-49	310	300	240	250
50-54	319	310	290	230
55-59	276	310	300	280
60-64	246	260	300	280
65-69	157	220	240	270
70-74	97	140	200	220
75-79	59	80	120	170
80-84	40	40	60	90
85+	30	40	40	50
Total	3,624	3,690	3,740	3,710

Females	2010	2015	2020	2025
0-4	197	180	170	150
5-9	192	220	200	190
10-14	224	190	220	200
15-19	238	200	170	200
20-24	178	170	140	120
25-29	236	210	190	160
30-34	236	260	220	210
35-39	253	260	280	240
40-44	299	270	270	290
45-49	325	300	270	270
50-54	332	320	300	270
55-59	290	330	320	290
60-64	281	280	320	310
65-69	155	260	270	300
70-74	104	150	250	250
75-79	81	100	130	230
80-84	56	70	80	110
85+	37	60	80	100
Total	3,713	3,830	3,880	3,890

Total	2010	2015	2020	2025
0-4	401	370	350	300
5-9	444	450	410	390
10-14	479	440	450	410
15-19	469	430	400	410
20-24	374	330	310	300
25-29	451	430	370	350
30-34	449	490	460	410
35-39	474	500	540	500
40-44	601	510	520	560
45-49	635	600	510	520
50-54	651	630	590	500
55-59	566	640	620	570
60-64	527	540	620	590
65-69	313	480	510	570
70-74	202	290	450	470
75-79	140	180	250	400
80-84	96	110	140	200
85+	67	100	120	150
Total	7,337	7,520	7,620	7,600
Median Age	41.1	43.1	45.0	46.6

	2010 to 2015	2015 to 2020	2020 to 2025
Births	340	310	280
Deaths	230	280	340
Nat Incr	110	30	-60
Net Migr	70	60	50
Change	180	90	-10

Differences between period Totals may not equal Change due to rounding.

Union Memorial Area Population

Males	2010	2015	2020	2025
0-4	223	230	220	200
5-9	216	220	230	220
10-14	241	220	220	230
15-19	540	540	510	520
20-24	849	820	820	790
25-29	343	330	300	300
30-34	299	350	340	310
35-39	249	310	360	340
40-44	287	250	310	360
45-49	328	280	240	310
50-54	353	320	280	240
55-59	306	340	310	270
60-64	235	280	320	290
65-69	154	200	250	280
70-74	83	130	170	220
75-79	66	60	100	140
80-84	42	50	50	80
85+	31	40	50	50
Total	4,844	4,970	5,080	5,150

Females	2010	2015	2020	2025
0-4	216	220	210	200
5-9	186	220	220	210
10-14	222	190	220	220
15-19	584	540	500	530
20-24	856	850	810	770
25-29	361	340	340	290
30-34	257	370	350	350
35-39	257	270	380	360
40-44	303	260	270	390
45-49	332	300	250	270
50-54	333	330	300	250
55-59	302	330	320	290
60-64	234	290	310	310
65-69	141	210	260	280
70-74	102	120	190	230
75-79	61	80	110	160
80-84	76	40	60	80
85+	62	90	80	90
Total	4,886	5,050	5,180	5,280

Total	2010	2015	2020	2025
0-4	439	450	430	400
5-9	402	440	450	430
10-14	464	410	440	450
15-19	1,124	1,080	1,010	1,050
20-24	1,704	1,670	1,630	1,560
25-29	704	670	640	590
30-34	556	720	690	660
35-39	506	580	740	700
40-44	590	510	580	750
45-49	660	580	490	580
50-54	686	650	580	490
55-59	608	670	630	560
60-64	469	570	630	600
65-69	295	410	510	560
70-74	184	250	360	450
75-79	127	140	210	300
80-84	118	90	110	160
85+	93	130	130	140
Total	9,730	10,020	10,260	10,430
Median Age	30.2	32.0	33.8	35.5

	2010 to 2015	2015 to 2020	2020 to 2025
Births	430	430	400
Deaths	250	280	320
Nat Incr	180	150	80
Net Migr	90	90	90
Change	270	240	170

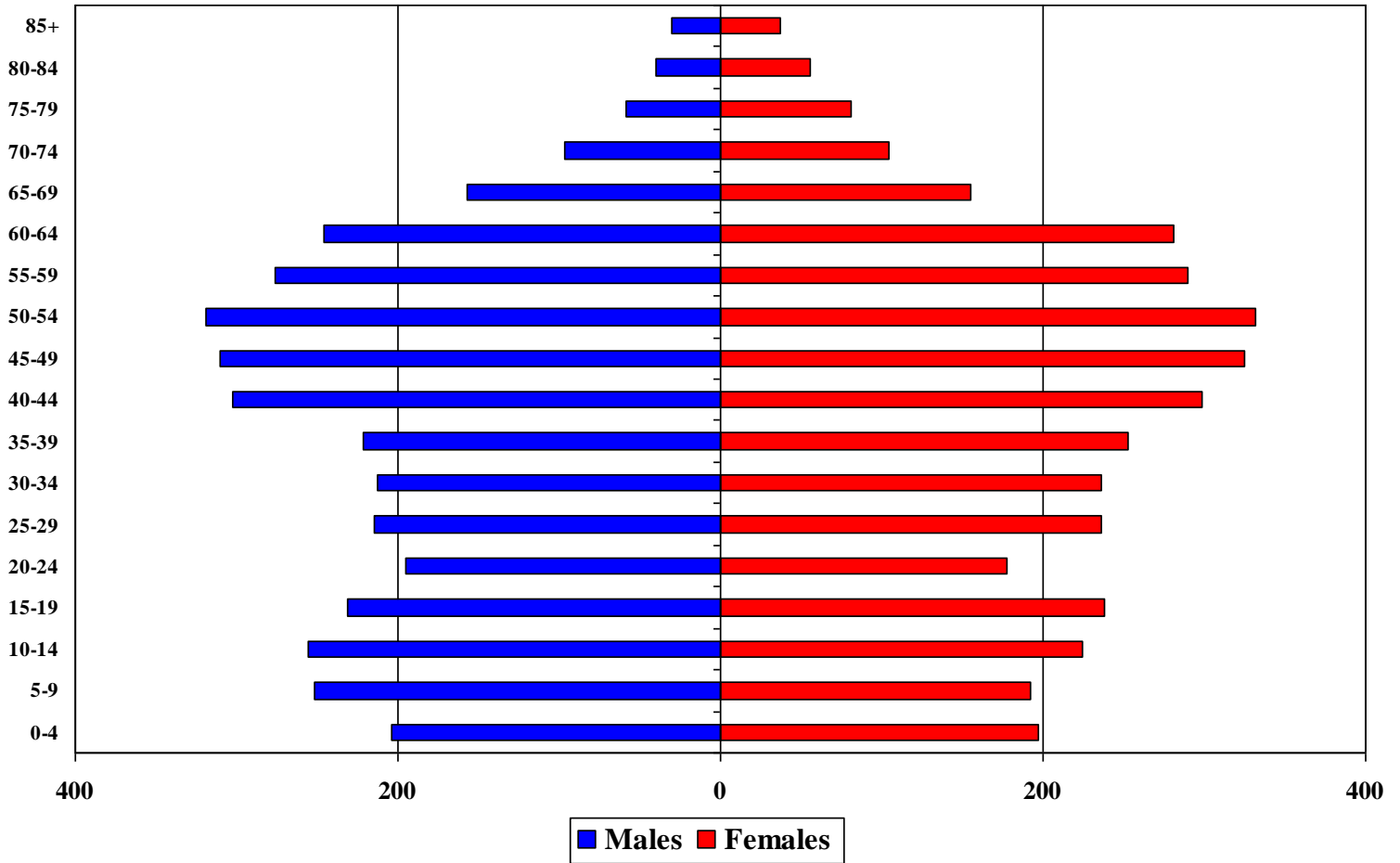Differences between period Totals may not equal Change due to rounding.

Appendix C: Population Pyramids

Colchester School District, VT Total Population – 2010 Census

■ Males ■ Females

McKibben Demographics
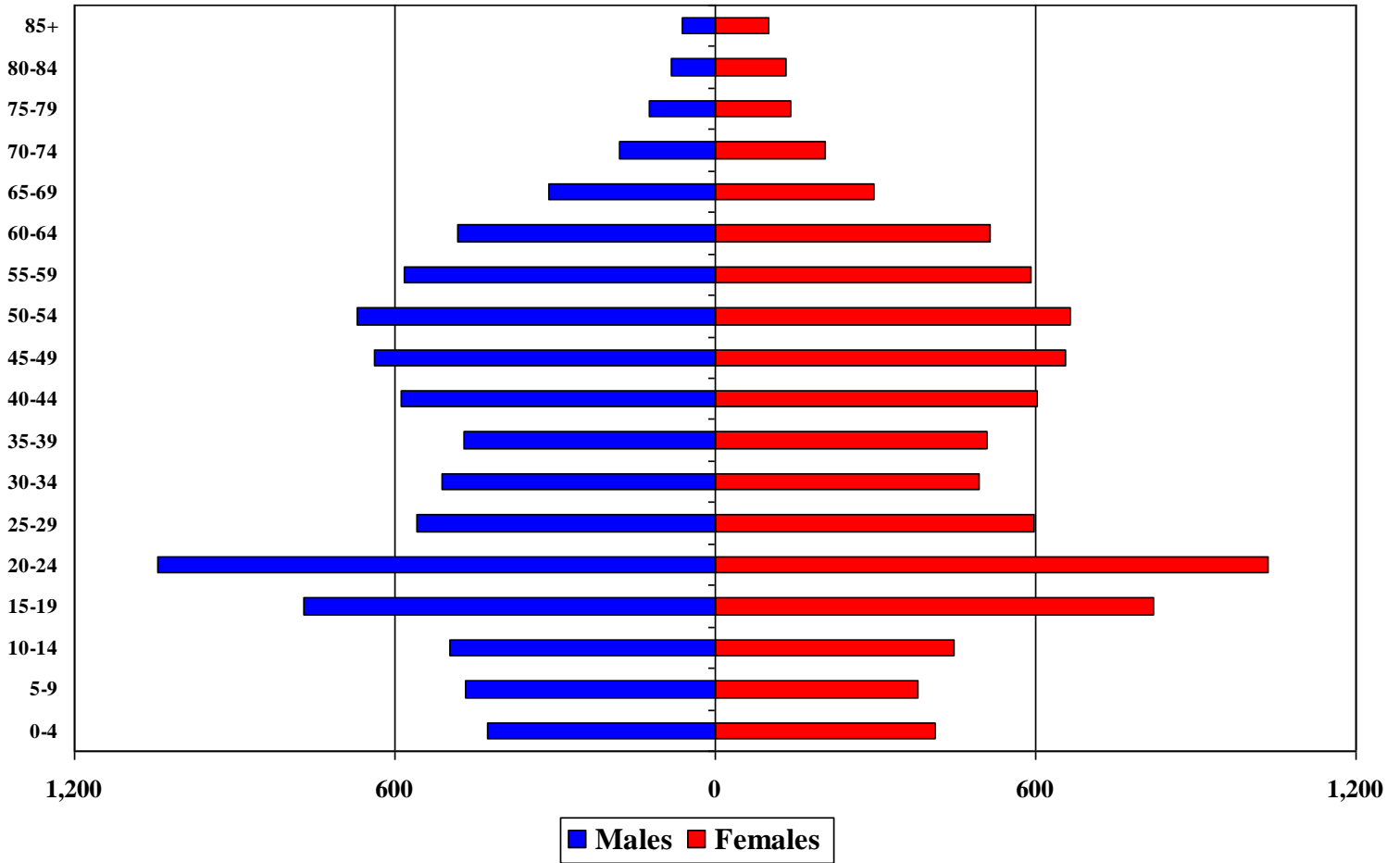
Porters Point Area Total Population – 2010 Census

Males ■ Females

Union Memorial Area Total Population – 2010 Census

	Males	Females

McKibben Demographics
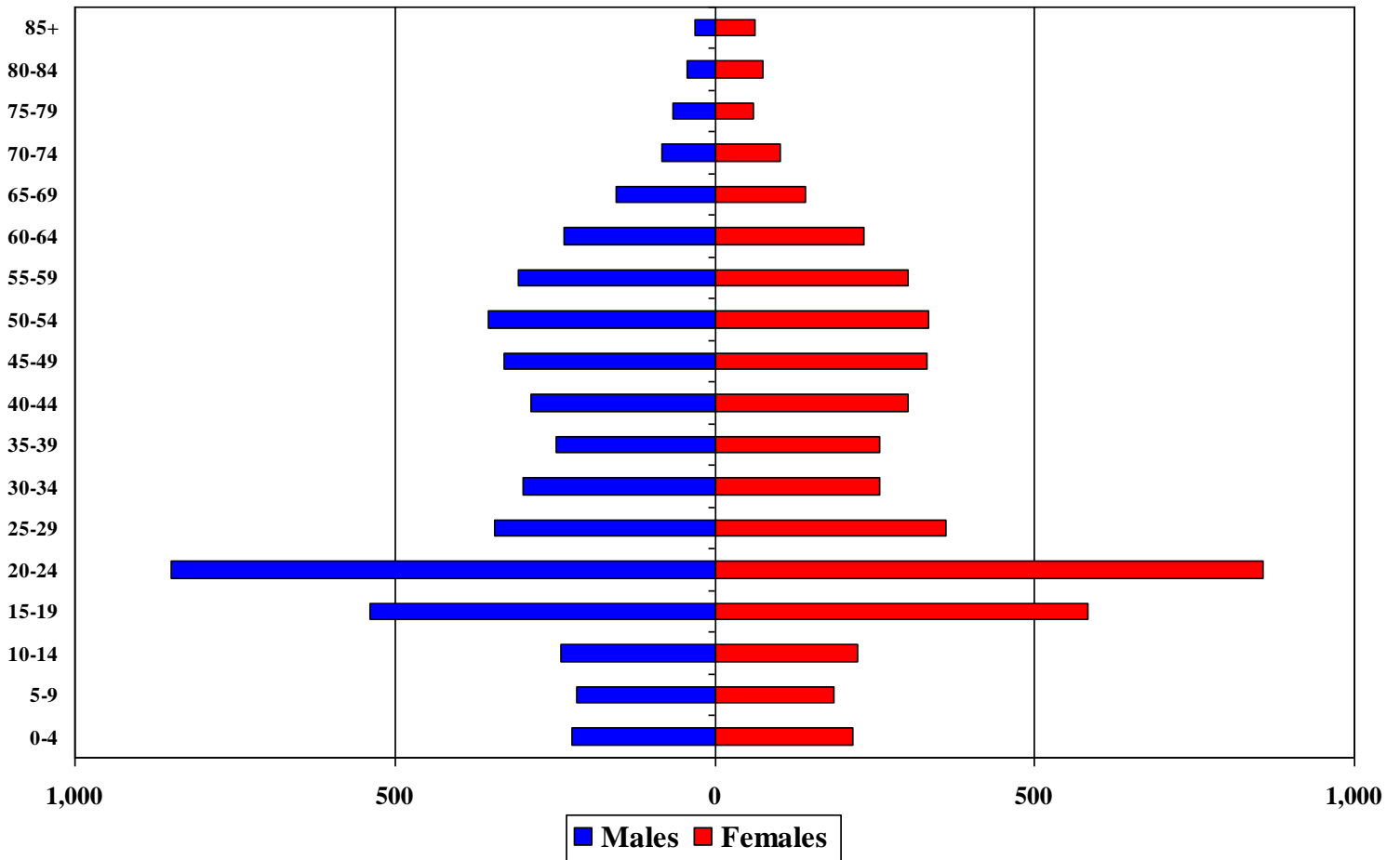
Appendix D: Enrollment Forecasts

Colchester School District: Total District Enrollment

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
K	153	174	185	151	168	162	161	160	159	158	156	156	154	153	151	153
1	161	155	172	170	157	162	160	159	158	157	156	154	154	152	151	149
2	149	159	153	166	178	162	167	165	164	164	163	162	160	160	158	157
Total: K-2	463	488	510	487	503	486	488	484	481	479	475	472	468	465	460	459
3	148	146	160	151	173	171	160	165	163	162	162	161	160	158	158	156
4	123	149	147	156	150	168	169	158	163	161	160	160	159	158	156	156
5	165	121	156	150	154	153	170	171	160	165	163	162	162	161	160	158
Total: 3-5	436	416	463	457	477	492	499	494	486	488	485	483	481	477	474	470
6	153	168	123	153	147	153	151	168	169	158	163	161	160	160	159	158
7	195	153	166	125	151	145	151	149	166	167	156	161	159	158	158	157
8	166	189	159	166	127	150	144	149	148	164	165	154	159	157	156	156
Total: 6-8	514	510	448	444	425	448	446	466	483	489	484	476	478	475	473	471
9	175	182	199	165	175	138	161	154	159	160	177	178	166	172	170	168
10	174	174	174	202	169	173	137	159	152	157	158	175	176	164	170	168
11	185	159	175	182	202	166	171	136	157	150	155	156	173	174	162	168
12	184	184	161	172	187	194	164	169	135	155	149	153	154	171	172	160
Total: 9-12	718	699	709	721	733	671	633	618	603	622	639	662	669	681	674	664
Total: K-12	2,131	2,113	2,130	2,109	2,138	2,097	2,066	2,062	2,053	2,078	2,083	2,093	2,096	2,098	2,081	2,064
Total: K-12	2,131	2,113	2,130	2,109	2,138	2,097	2,066	2,062	2,053	2,078	2,083	2,093	2,096	2,098	2,081	2,064
Change		-18	17	-21	29	-41	-31	-4	-9	25	5	10	3	2	-17	-17
%-Change		-0.8%	0.8%	-1.0%	1.4%	-1.9%	-1.5%	-0.2%	-0.4%	1.2%	0.2%	0.5%	0.1%	0.1%	-0.8%	-0.8%
Total: K-2	463	488	510	487	503	486	488	484	481	479	475	472	468	465	460	459
Change		25	22	-23	16	-17	2	-4	-3	-2	-4	-3	-4	-3	-5	-1
%-Change		5.4%	4.5%	-4.5%	3.3%	-3.4%	0.4%	-0.8%	-0.6%	-0.4%	-0.8%	-0.6%	-0.8%	-0.6%	-1.1%	-0.2%
Total: 3-5	436	416	463	457	477	492	499	494	486	488	485	483	481	477	474	470
Change		-20	47	-6	20	15	7	-5	-8	2	-3	-2	-2	-4	-3	-4
%-Change		-4.6%	11.3%	-1.3%	4.4%	3.1%	1.4%	-1.0%	-1.6%	0.4%	-0.6%	-0.4%	-0.4%	-0.8%	-0.6%	-0.8%
Total: 6-8	514	510	448	444	425	448	446	466	483	489	484	476	478	475	473	471
Change		-4	-62	-4	-19	23	-2	20	17	6	-5	-8	2	-3	-2	-2
%-Change		-0.8%	-12.2%	-0.9%	-4.3%	5.4%	-0.4%	4.5%	3.6%	1.2%	-1.0%	-1.7%	0.4%	-0.6%	-0.4%	-0.4%
Total: 9-12	718	699	709	721	733	671	633	618	603	622	639	662	669	681	674	664
Change		-19	10	12	12	-62	-38	-15	-15	19	17	23	7	12	-7	-10
%-Change		-2.6%	1.4%	1.7%	1.7%	-8.5%	-5.7%	-2.4%	-2.4%	3.2%	2.7%	3.6%	1.1%	1.8%	-1.0%	-1.5%

Forecasts Developed February 2017

Green Cells (2016-17 and earlier) are historical data

Blue Cells (2017-18 and later) are forcasted years

Porters Point

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
K	82	86	97	67	87	76	75	75	74	74	73	73	72	72	71	72
1	85	79	87	90	70	81	75	74	74	73	73	72	72	71	71	70
2	78	81	79	87	96	76	85	79	78	78	77	77	76	76	75	75
Total: K-2	245	246	263	244	253	233	235	228	226	225	223	222	220	219	217	217

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total: K-2	245	246	263	244	253	233	235	228	226	225	223	222	220	219	217	217
Change		1	17	-19	9	-20	2	-7	-2	-1	-2	-1	-2	-1	-2	0
% Change		0.4%	6.9%	-7.2%	3.7%	-7.9%	0.9%	-3.0%	-0.9%	-0.4%	-0.9%	-0.4%	-0.9%	-0.5%	-0.9%	0.0%

Forecasts Developed February 2017

Green Cells (2016-17 and earlier) are historical data

Blue Cells (2017-18 and later) are forcasted years

Union Memorial

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
K	71	88	88	84	81	86	86	85	85	84	83	83	82	81	80	81
1	76	76	85	80	87	81	85	85	84	84	83	82	82	81	80	79
2	71	78	74	79	82	86	82	86	86	86	86	85	84	84	83	82
Total: K-2	218	242	247	243	250	253	253	256	255	254	252	250	248	246	243	242

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total: K-2	218	242	247	243	250	253	253	256	255	254	252	250	248	246	243	242
Change		24	5	-4	7	3	0	3	-1	-1	-2	-2	-2	-2	-3	-1
% Change		11.0%	2.1%	-1.6%	2.9%	1.2%	0.0%	1.2%	-0.4%	-0.4%	-0.8%	-0.8%	-0.8%	-0.8%	-1.2%	-0.4%

Forecasts Developed February 2017

Green Cells (2016-17 and earlier) are historical data

Blue Cells (2017-18 and later) are forcasted years

Mallets Bay Intermediate

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
3	148	146	160	151	173	171	160	165	163	162	162	161	160	158	158	156
4	123	149	147	156	150	168	169	158	163	161	160	160	159	158	156	156
5	165	121	156	150	154	153	170	171	160	165	163	162	162	161	160	158
Total 3-5	436	416	463	457	477	492	499	494	486	488	485	483	481	477	474	470

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total 3-5	436	416	463	457	477	492	499	494	486	488	485	483	481	477	474	470
Change		-20	47	-6	20	15	7	-5	-8	2	-3	-2	-2	-4	-3	-4
% Change		-4.6%	11.3%	-1.3%	4.4%	3.1%	1.4%	-1.0%	-1.6%	0.4%	-0.6%	-0.4%	-0.4%	-0.8%	-0.6%	-0.8%

Forecasts Developed February 2017

Green Cells (2016-17 and earlier) are historical data

Blue Cells (2017-18 and later) are forcasted years

Revised: 02/04/2017

McKibben Demographics

Colchester Junior High

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
6	153	168	123	153	147	153	151	168	169	158	163	161	160	160	159	158
7	195	153	166	125	151	145	151	149	166	167	156	161	159	158	158	157
8	166	189	159	166	127	150	144	149	148	164	165	154	159	157	156	156
Total: 6-8	514	510	448	444	425	448	446	466	483	489	484	476	478	475	473	471

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total: 6-8	514	510	448	444	425	448	446	466	483	489	484	476	478	475	473	471
Change		-4	-62	-4	-19	23	-2	20	17	6	-5	-8	2	-3	-2	-2
% Change		-0.8%	-12.2%	-0.9%	-4.3%	5.4%	-0.4%	4.5%	3.6%	1.2%	-1.0%	-1.7%	0.4%	-0.6%	-0.4%	-0.4%

Forecasts Developed February 2017

Green Cells (2016-17 and earlier) are historical data

Blue Cells (2017-18 and later) are forcasted years

Colchester High

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
9	175	182	199	165	175	138	161	154	159	160	177	178	166	172	170	168
10	174	174	174	202	169	173	137	159	152	157	158	175	176	164	170	168
11	185	159	175	182	202	166	171	136	157	150	155	156	173	174	162	168
12	184	184	161	172	187	194	164	169	135	155	149	153	154	171	172	160
Total: 9-12	718	699	709	721	733	671	633	618	603	622	639	662	669	681	674	664

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total: 9-12	718	699	709	721	733	671	633	618	603	622	639	662	669	681	674	664
Change		-19	10	12	12	-62	-38	-15	-15	19	17	23	7	12	-7	-10
% Change		-2.6%	1.4%	1.7%	1.7%	-8.5%	-5.7%	-2.4%	-2.4%	3.2%	2.7%	3.6%	1.1%	1.8%	-1.0%	-1.5%

Forecasts Developed February 2017

Green Cells (2016-17 and earlier) are historical data

Blue Cells (2017-18 and later) are forcasted years

Revised: 02/04/2017