-RSD 13 COMPREHENSIVE SCHOOL ENROLLMENT STUDY

October 2015 (Final Report)

Prepared for:

Regional School District 13

Prepared by:

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INTRODUCTION

Regional School District 13 (RSD 13) contracted with Milone & MacBroom, Inc. to conduct a comprehensive school enrollment analysis and to develop enrollment projections for the school district. The district-wide and school-specific projections in this report are meant to serve as a planning tool for the updated facility study as well as to represent the most likely direction of RSD 13 enrollment over the next ten years.

This report examines factors that influence school enrollments, namely trends in demographics, births, housing and development, and private school enrollments. These trends are accounted for in the methodology used to project district-wide enrollments on a grade-by-grade level. As with any enrollment projection report, RSD 13 should pay close attention to the variables that are discussed in this report, as changes can impact enrollment. Through annual updates, enrollment projections can be fine-tuned to increase accuracy, providing RSD 13 with an on-going planning tool to assist them in determining the future direction of the district.

DEMOGRAPHIC OVERVIEW

Following the nation's public school enrollment back over the last half century reveals demographic, economic, and social changes. The United States as a whole continues to undergo population shifts in public student enrollment, driven by past events including the baby boom, echo baby boom, sprawl and the development of suburbs, changing workforce composition, and technological advances. The baby boom of the late 1940s and 1950s was followed by the baby bust of the 1960s and 1970s. This gave rise to the echo baby boom of the 1980s, followed by the echo baby bust of the 1990s. Nationally, districts are experiencing the enrollment declines from the echo baby bust. Looking back, the baby bust of the 1960s and 70s lead to a rapid downsizing of the American family and the subsequent decline in school enrollment of the 1970s and 1980s. According to the 2010 Census, the size of a family as well as birth rate was at an all-time low in 2010.

According to the U.S. Census Bureau, Middlefield's population increased by 5.3% from 2000 to 2010, and Durham's population increased by 11.5% during the same period. This is compared to a 6.8% increase for Middlesex County and a 4.9% increase for the State during the same time period. This growth was just under 1,000 residents in the two Towns combined.

The Towns of Durham and Middlefield have a wide variety of neighborhood types, from more rural areas in the eastern portion of Durham with population densities of approximately 170 people per square mile, to the more densely settled village centers with more than 700 people per square mile. The *Population Density Map* on page A-1 shows where population concentrations are located within both towns.

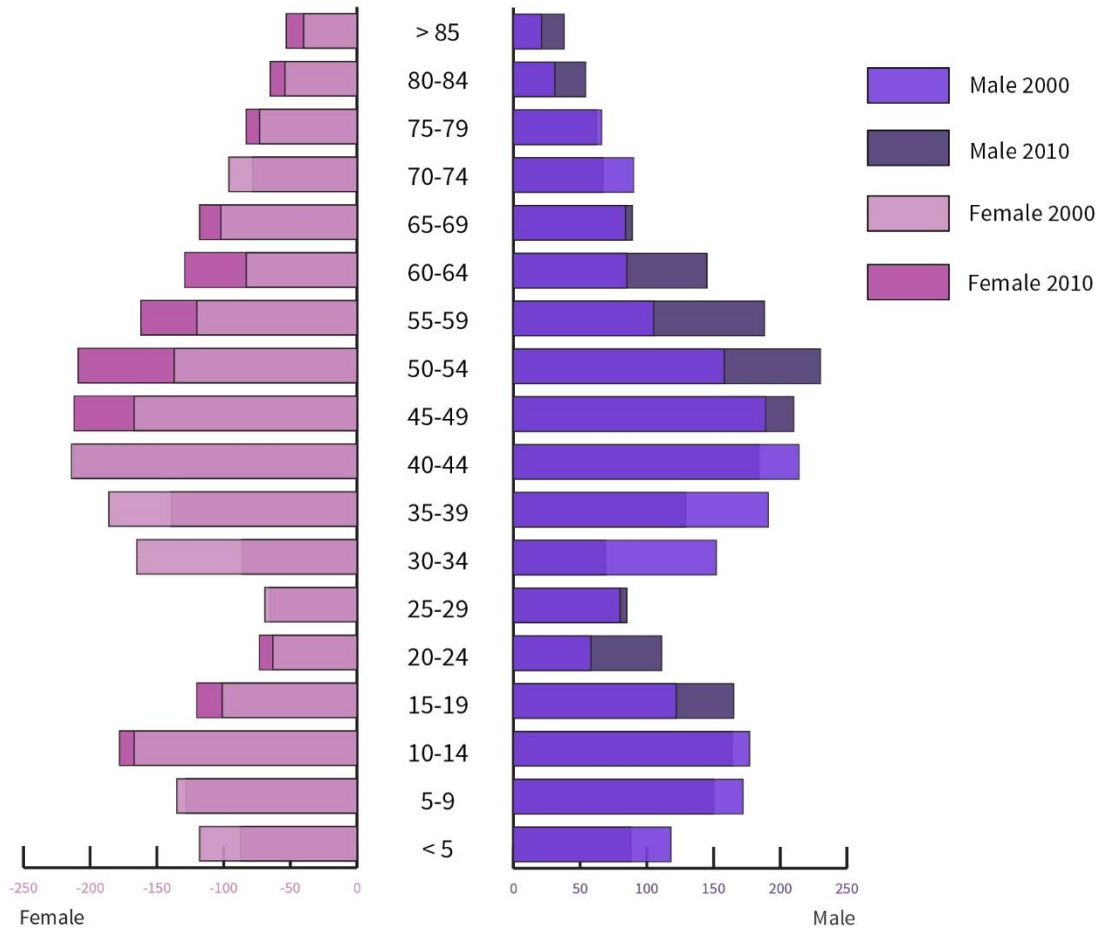FIGURE 1: US BIRTH RATES 1909-2008, WITH BABY BOOM PERIOD HIGHLIGHTED
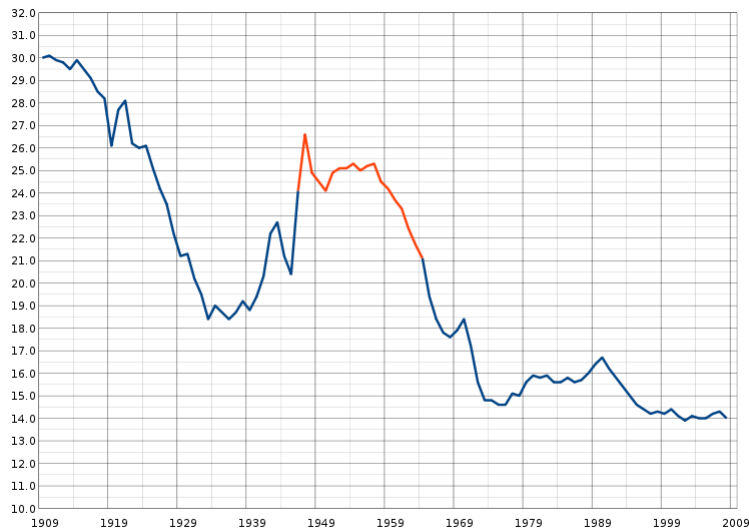
Source: Wikimedia.org. Data, US CDC

While the Towns' overall population remained relatively stable between 2000 and 2010, certain neighborhoods gained population, while others lost population. The *Population Change by Census Block Group* Map on page A-2 shows that most Block Groups saw a change of 150 persons or less. The exception is the eastern portion of Durham, generally east of 17/ 79 and south of Higganum Road, also including the areas of new development to the north of Millers Pond State Park. This area gained over 300 residents during the past 10 years, although because of the large State Park, it is still the least densely populated area of the Town. Most of the new development was of large lot single family housing, although there were some smaller, condominium style developments as well.

Additionally, although there has been overall population stability, the change in population of various age cohorts has not been as consistent. The following population trees show the shift in 5 year age cohorts between 2000 and 2010. As enumerated by the Census, the Towns' school-age population (5-17) increased by 137 students or 6.0% overall from 2000 to 2010. The under age 5 population decreased significantly, by 145 or 21.0%, indicating that the number of students in RSD 13 will most likely decline in the next five years as these younger cohorts of children enter the school system. The number of females of childbearing age (18-45) also decreased by almost 13.9%, indicating that lower birth rates can be expected for the next few years.

FIGURE 2: POPULATION BY AGE AND SEX OF MIDDLEFIELD IN 2000 AND 2010

Source: Census 2000 Summary File 1 (SF 1).
http://factfinder.census.gov/home/en/datanotes/expsf1u.htm.

Source: Census 2000 Summary File 1 (SF 1).
http://factfinder.census.gov/home/en/datanotes/expsf1u.ht
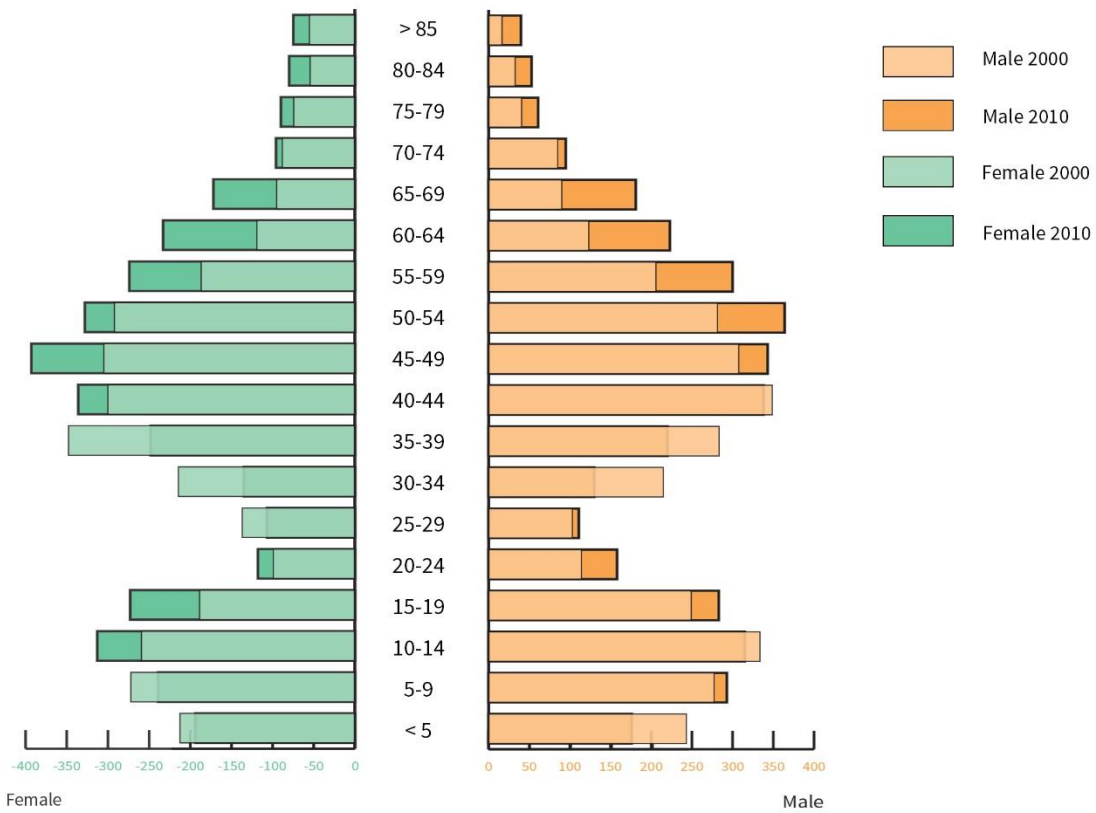
Population projections from the CT Connecticut Department of Transportation show stability in future total population. The projections show little growth (consistent with the last ten years). Given limited recent housing growth, discussed later in this report one can expect continued low birth rates.

Historic and Projected Population of Durham, Middlefield and RSD 13, 1960-2040

Sources: US Census. Projections from CT DOT, Bureau of Policy and Planning

Legend: Durham, Middlefield, RSD 13

Data values by year:
- 1960: 3096, 3255, 6,351
- 1970: 4,489, 4,132, 8,621
- 1980: 5,143, 3,796, 8,939
- 1990: 5,732, 3,925, 9,657
- 2000: 6,627, 4,203, 10,830
- 2010: 7,388, 4,425, 11,813
- 2020: 8062, 4,614, 12,676
- 2030: 8719, 4,798, 13,517
- 2040: 9363, 4,978, 14,341

ECONOMIC AND EMPLOYMENT TRENDS

Historically, while being subject to the same general economic peaks and troughs of Connecticut as a whole, both Durham and Middlefield's unemployment rates have been lower than that of the state as a whole. The impact of the Great Recession can be seen especially in the rapid increase of the unemployment rate in 2008 and 2009. While the unemployment rate roughly stayed between 1% and 3% from 1997 to 2000, and then flat-lined between 2% and 4% from 2001 to 2007, the unemployment rate suddenly climbed to nearly reach 8% in mid-2009. The unemployment rate has not substantially decreased since, with monthly rates varying between 3% and 6% into June of 2015, the latest data available from the Connecticut Department of Labor. Both Towns have experienced unemployment rates nearly 2 percentage points lower than the State as a whole for most of the past four years. This data is presented in Figure 5. Unemployment rate strongly tied to both housing sales and births, and so the continued elevated unemployment figures for the next several years suggest that housing sales and births may continue at lower levels.

According to State Labor Market Information, these terms are defined as follows:

> "Labor force measures are based on the civilian non-institutional population 16 years old and over. People with jobs are counted as employed. People who are jobless, looking for jobs, and available for work are regarded as unemployed, and people who are neither employed nor unemployed are considered not in the labor force. The unemployment rate represents the percentage of the labor force that is unemployed. Annual average data is published after benchmark revisions are made."

The unemployment rate does not capture people who are institutionalized, cannot work due to a disability, or are otherwise not in the labor force. It also counts anyone over the age of 16 having any job as being employed, and so includes people who may be working part-time or underemployed. These are important caveats to use this data.

FIGURE 5

SOURCE: CT DECD, 1994-2015, http://www1.ctdol.state.ct.us/lmi/laus/laustown.asp
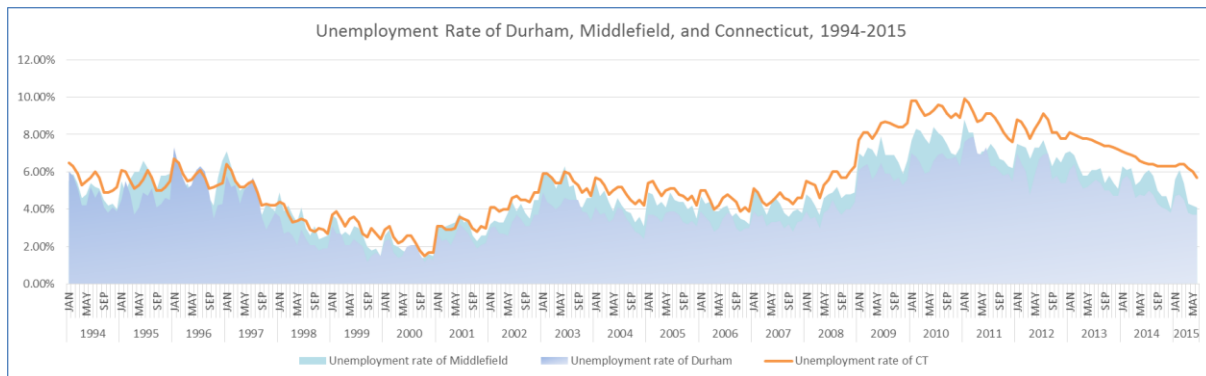
BIRTH TRENDS AND PROJECTIONS

During the late 1990s, annual births in RSD 13 averaged above 120 (see Figure 6). The annual birth rate began to decline during the first half of the 2000s, and in 2006, the number fell below 100 births per year and has averaged around 88 births per year since then. In 2012, the lowest number of births in the last 15 years occurred, with only 65 children being born, almost half of the average of ten years ago. Preliminary data for 2014 are reporting 75 births which is notably below the 91 that reported in 2013, and still well below the long term average.

The Census Bureau recently lowered its national population projections partially as a result of lower forecasted birth rates. In addition, some demographers have suggested that as more women enter college, and more households and families increasingly rely on female earnings, fertility rates may remain low.[1]

FIGURE 6
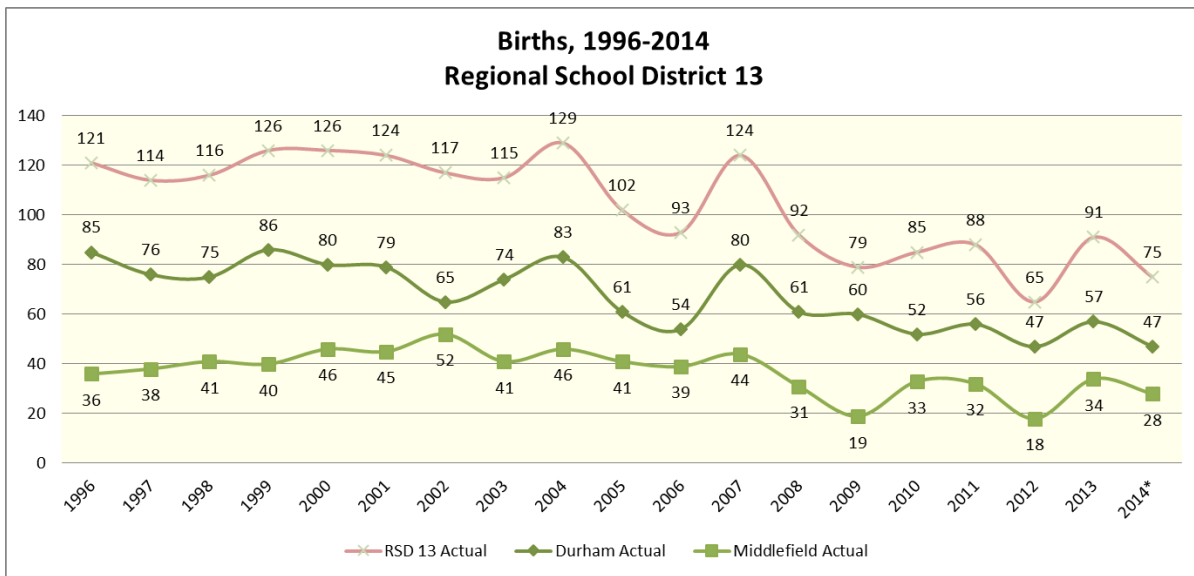
Note: Reported births for 2014 are still preliminary and may be subject to final adjustment by the CTDPH.
Sources: CT Dept. of Public Health (July 2015).

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[1] Mather, Mark. 2012. *Fact Sheet: The Decline in U.S. Fertility*, Population Research Bureau.

Childbearing-Age Women

Tables 1 & 2 below illustrate the historical data for the number of childbearing women in Durham and Middlefield for the years 2000 and 2010, and the projected number of childbearing women for the years 2015, 2020, and 2025. The number of childbearing age women in Durham is projected to decrease by 5.5% between 2010 and 2025 and in Middlefield by 15.3%. However, the age cohorts with the highest fertility rates (ages 20-34) are expected to increase substantially in Durham and moderately in Middlefield. Thus, after a significant period of decline, we can expect the number of births in RSD 13 to level off and then finally begin to rebound.

TABLE 1

Trend of Childbearing-Age Females Aged 15 to 49 Years, Durham, 2000-2025

Age Group	History		Projections			2010-2025 Change	
	2000	2010	2015	2020	2025	Number	Percent
15 to 19 years	189	273	355	324	293	20	7.3%
20 to 24 years	99	118	236	318	287	169	143.2%
25 to 29 years	137	107	45	163	244	137	128.0%
30 to 34 years	215	135	99	44	154	19	14.1%
35 to 39 years	349	248	167	131	76	(172)	-69.4%
40 to 44 years	301	336	312	231	195	(141)	-42.0%
45 to 49 years	306	393	377	353	273	(120)	-30.5%
TOTAL	**1,596**	**1,610**	**1,591**	**1,564**	**1,522**	**(88)**	**-5.5%**

Source: US Census, CT Data Center.

TABLE 2

Trend of Childbearing-Age Females Aged 15 to 49 Years, Middlefield, 2000-2025

Age Group	History		Projections			2010-2025 Change	
	2000	2010	2015	2020	2025	Number	Percent
15 to 19 years	101	120	195	164	130	10	8.3%
20 to 24 years	63	73	93	169	138	65	89.0%
25 to 29 years	69	65	34	54	129	64	98.5%
30 to 34 years	165	86	59	28	48	(38)	-44.2%
35 to 39 years	186	139	108	81	51	(88)	-63.3%
40 to 44 years	214	212	168	136	110	(102)	-48.1%
45 to 49 years	167	212	237	193	162	(50)	-23.6%
TOTAL	**965**	**907**	**894**	**825**	**768**	**(139)**	**-15.3%**

Source: US Census, CT Data Center.

Age-Specific Fertility Rates

In order to calculate the number of projected births in Durham and Middlefield for the future years of 2015, 2020 and 2025, age-specific fertility rates were applied to the projected age cohort population data for the number of childbearing women. Two sets of fertility rates were utilized to provide a reasonable range of projected births using this methodology. The first of these is the 2013 U.S. Non-Hispanic White fertility rates, as provided by the National Vital Statistics Report. Table 3 below presents these fertility rates. Non-Hispanic White fertility rates were selected as they most closely model the demographic characteristics of the population of RSD 13. As the data show, the age 25-29 and 30-34 age cohorts have become the cohorts with the highest fertility rates, and the 20-24 age cohort has been slightly increased in its fertility rate.

TABLE 3

2000-2013 Age-Specific Fertility Rate, U.S. Non-Hispanic White Fertility Rates				
	Babies born per 1,000 Non-Hispanic White Women (U.S.)			
Age Group	2000	2005	2010	2013*
15 to 19 years	47.7	26	23.5	24.9
20 to 24 years	91.2	82.7	74.9	78.5
25 to 29 years	109.4	111.7	105.8	108.3
30 to 34 years	93.2	98.4	99.9	101.3
35 to 39 years	38.8	46	44.1	49.6
40 to 44 years	7.3	8.3	9.2	10.1
45 to 49 years	0.4	0.5	0.6	0.7

*Note: *Preliminary 2013 Data.*
Source: National Vital Statistics Reports, Volume 64, Number 1, January 15, 2015, Table 4.

As a point of comparison, the fertility rates for Connecticut by age cohort for 2010 were calculated using data from the State of Connecticut Department of Public Health's annual Vital Statistics Registration Report. No breakdown by race was available, so the fertility rate by age cohort was calculated for all races. Table 4 presents this data. While these fertility rates differ somewhat from the national-level fertility rates, the 25-29 and 30-34 age cohorts still have the highest fertility rates, consistent with the national data.

T ABLE 4

Age-Specific Fertility Rates of Connecticut Population (All Races), 2012			
Age Group	2012 Births	2012 Females	CT Fertility Rate
15 to 19 years	1,889	124,986	15.1
20 to 24 years	6,099	110,187	55.4
25 to 29 years	9,483	108,559	87.4
30 to 34 years	11,486	108,167	106.2
35 to 39 years	5,947	105,998	56.1
40 to 44 years	1,473	128,768	11.4
45+ years	111	837,966	0.1
TOTAL, 15-44	**36,377**	**686,665**	**53.0**

Source: Prepared by MMI, based upon the CT Dept. of Public Health 2012 Vital Statistics Registration Report, Table 1 and Table 3.

Calculation of Births

With the projected number of childbearing women by age cohort for Durham and Middlefield and the two sets of fertility rates by age cohort, we are able to produce two sets of projected birth data for the years 2015, 2020, and 2025, as well as an estimate of what the births would have been projected to be in 2010 using this methodology. Tables 5 & 6 present the projected number of births by age cohort for each of the four selected points in time using the national-level fertility rates, along with a summary of the total births projected using the previously calculated Connecticut fertility rates.

TABLE 5

Calculation of Births Based on the Number of Childbearing Age Women and Age-Specific Fertility Rates, Durham, 2010-2025

Age Group	Projections				2010-2025 Change	
	2010	2015	2020	2025	Number	Percent
15 to 19 years	7	9	8	7	0	0.0%
20 to 24 years	9	19	25	23	14	155.6%
25 to 29 years	12	5	18	26	14	116.7%
30 to 34 years	14	10	4	16	2	14.3%
35 to 39 years	12	8	6	4	-8	-66.7%
40 to 44 years	3	3	2	2	-1	-33.3%
45 to 49 years	0	0	0	0	0	
Births estimated by US fertility rates	57	54	63	78	21	36.8%
Births by 20-34 years	35	34	47	65	30	85.7%
Percentage of total births	61.4%	63.0%	74.6%	83.3%		
Births estimated by CT fertility rates	52	46	52	63	11	21.2%

Source: Prepared by MMI, 07/2015.

TABLE 6

Calculation of Births Based on the Number of Childbearing Age Women and Age-Specific Fertility Rates, Middlefield 2010-2025

Age Group	Projections				2010-2025 Change	
	2010	2015	2020	2025	Number	Percent
15 to 19 years	3	5	4	3	0	0.0%
20 to 24 years	6	7	13	11	5	83.3%
25 to 29 years	7	4	6	14	7	100.0%
30 to 34 years	9	6	3	5	-4	-44.4%
35 to 39 years	7	5	4	3	-4	-57.1%
40 to 44 years	2	2	1	1	-1	-50.0%
45 to 49 years	0	0	0	0	0	
Births estimated by US fertility rates	34	29	31	37	3	8.8%
Births by 20-34 years	22	17	22	30	8	36.4%
% of total births	64.7%	58.6%	71.0%	81.1%		
Births estimated by CT fertility rates	31	25	26	30	-1	-3.2%

Source: Prepared by MMI, 07/2015.

This data indicates that the projected number of births in Durham using the national-level fertility rates will generally follow an upward trend through at least 2025, with a slight dip in the year 2015, increasing from a projected 57 births in 2010 to 78 births in 2025. The projected data using the Connecticut-specific fertility rates follows a very similar trend, with the number of births projected only varying slightly from the national-level data, although the variation increases in the year 2025. Again, births for 2010 have been projected here to test the model, however actual known births are used in the enrollment projections for all years they are known, including 2010.

The projected number of births in Middlefield using the national-level fertility rates will stay more stable, increasing from a projected 34 births in 2010, then dipping slightly from 2015-2020 and finally increasing to 37 in in 2025. The projected data using the Connecticut-specific fertility rates follows a very similar trend.

Projection of RSD 13 Births – Comparative Analysis

Milone and MacBroom also generated a mathematical 5 year moving averages model to compare to the projections based on the fertility rates. Table 7 compares the three different sets of birth projections. In addition, an average of the three sets of projections was also calculated and presented in Table 7 as a point of comparison. As this table illustrates, the projected number of births under the three methods mirror one another relatively closely. Because of the composition of RSD 13, the projections using the 2012 U.S. Non-Hispanic White fertility rates were considered to be the most probable, and are therefore highlighted in Table 7. These projections show a continued downward birth trend through 2015, when the rates will begin to recover to 2005 levels, by 2025. The mathematical projection is the most positive in the short term, but is simply based on the previous five years of data and is therefore not expected to be as accurate as the other models.

TABLE 7

Comparison of 3 Sets of Birth Projections by Different Methods and Assumptions RSD 13, 2015-2025						
	HISTORY			PROJECTIONS		
METHODOLOGY	2000	2005	2010	2015	2020	2025
MMI Mathematical Projection (5 year moving average)	126	102	86	81	80	
Population Projections US Fertility Rate	126	102	86	78	87	106
Population Projections CT Fertility Rates	126	102	86	75	83	98
AVERAGE	126	102	86	78	88	102

Sources: CT Dept. of Public Health (1999-2012, 2013 and 2014-Estimated Preliminary).
Prepared by MMI, 07/2015.

Births based on the 2012 U.S. Non-Hispanic White fertility rates were considered to be the most probable, and therefore were used for this analysis. Table 8 shows the known and projected births per year, used for the following enrollment projections.

TABLE 8

Known Births and Birth Projections by Year

YEAR	2008	2009	2010	2011	2012	2013	2014
BIRTHS ACTUAL	92	79	85	88	65	91	75
YEAR	2015*	2016	2017	2018	2019	2020	
BIRTHS PROJECTIONS	78	79	81	84	86	87	

Note: Based on US Non-Hispanic Fertility Rate projections. 2015* Births have been projected from July to December based on seasonal trends.
Sources: CT Dept. of Public Health (1999-2012, 2013 and 2014-Estimated Preliminary).

HOUSING

The amount of housing in Durham and Middlefield has increased at a slightly higher rate than the population for the last ten years. As shown in Table 9, between 2000 and 2010 the total population of both Towns grew by 9.1% and housing units grew by 11.4%. RSD 13's average household size declined slightly during the same period, from 2.71 in 2000 to 2.68 in 2010. This number is higher than the average for Middlesex County (2.39) or the State average (2.52). Both the County, State, and nation have also seen declining average household size during the last ten years.

TABLE 9

Summary of Population and Housing Change

	2000 Census Population	2010 Census Population	10-year Population Change (%)	2000 Housing Units	2010 Housing Units	10-year Housing Unit Change (%)
Middlefield	4,203	4,425	5.3%	1,740	1,863	7.1%
Durham	6,627	7,388	11.5%	2,349	2,694	14.7%
RSD 13	10,830	11,813	9.1%	4,089	4,557	11.4%

Source: U.S. Census Bureau, 2010 Census. 2000 and 2010 SF1 100% Data, DP-1.

The growth in housing units is at a slightly higher rate than the growth in households in RSD 13, as shown in Table 10. Between 2000 and 2010, RSD 13 gained 430 households, or 11.0%. The largest increase among household groups was among nonfamily households at 18%, which includes people living by themselves. Family households also grew during the period, at 9.0%; however, families with children under age 18 only grew by 2.4%. When considered separately, Middlefield grew much more slowly than Durham. Total household growth was 5.9%, with nonfamily households increasing 9.6%, all family households increased 4.5%, and families with related children under 18 years declined by 4.5%. In Durham, total households grew by 14.6%, nonfamily households grew by 27.1%, all family households grew by 11.9%, and families with related children under age 18 only grew by 6.5%.

TABLE 10

Household and Family Composition					
		2000	2010	Change	Change (%)
Middlefield	Total households	1,645	1,742	97	5.9%
	Family households	1,199	1,253	54	4.5%
	With related children under 18 years	559	534	-25	-4.5%
	Nonfamily households	446	489	43	9.6%
	Average household size	2.56	2.54	-0.02	-0.8%
	Average family size	3.03	2.99	-0.04	-1.3%
Durham	Total households	2,277	2,610	333	14.6%
	Family households	1,871	2,094	223	11.9%
	With related children under 18 years	938	999	61	6.5%
	Nonfamily households	406	516	110	27.1%
	Average household size	2.85	2.81	-0.04	-1.4%
	Average family size	3.17	3.14	-0.03	-0.9%
RSD 13	Total households	3,922	4,352	430	11.0%
	Family households	3,070	3,347	277	9.0%
	With related children under 18 years	1,497	1,533	36	2.4%
	Nonfamily households	852	1,005	153	18.0%
	Average household size	2.71	2.68	-0.03	-1.1%
	Average family size	3.10	3.07	-0.03	-1.1%

Source: U.S. Census Bureau, 2010 Census. 2000 and 2010 SF1 100% Data, DP-1.

Total housing units had an overall slight upward trend, growing by about 450 units between 2000 and 2010. Comparing the number of units to student enrollments shows that the students per unit have been decreasing recently, from 0.504 students per unit in 2004 to 0.408 students per unit in 2014. The standard residential demographic multipliers for new housing, developed by Rutgers University, for Connecticut Single Family Houses valued at between $257,500 and $356,500 is 0.4 public school-age children for 3 bedroom homes, or 0.62 for 4 bedroom homes under $435,500. According to the 2011 American Community Survey data, Durham and Middlefield homes together had an average of 3.0 bedrooms, suggesting that RSD 13 is slightly above the average for the number of students per unit of housing.

TABLE 11 OWNER OCCUPIED UNITS OF RSD 13 IN 2000 AND 2010

| | 2000 | | 2010 | |
	Housing Units	Owner Occupied Units	Housing Units	Owner Occupied Units
Durham	2,349	2,072	2,694	2,403
Middlefield	1,740	1,389	1,863	1,472
RSD 13	**4,089**	**3,461**	**4,557**	**3,875**

Source: U.S. Census Bureau, 2010 Census. 2000 and 2010 SF1 100% Data, DP-1.

FIGURE 7

Total Housing Units & Students Per Housing Unit, 1990 to 2014

Source: DECD, CeDAR
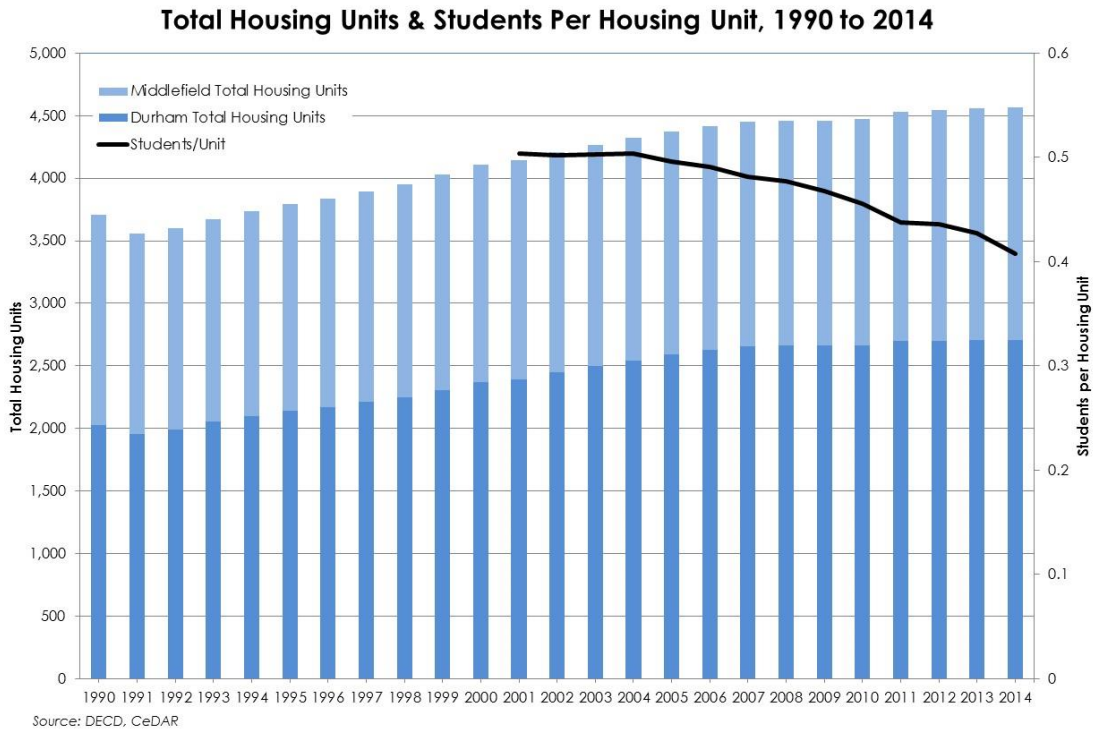
The Towns of Durham and Middlefield both currently have Plans of Conservation and Development (POCD) that are due soon for updating. Durham POCD was adopted in 2003, and Middlefield was adopted in 2002 and updated in 2008.

The Middlefield POCD specifies that the town is not in the position to supply public water or sewer, and so future residential development will be restricted to soil characteristics that can support onsite sewer capacities. The plan specifies that these areas are in Rockfall, along Main Street, south of Miller Road, and south of Laurel Brook Road and west of the reservoir.[2] It should be noted that this is the only area of either Town that shows a strong geographic preference to an elementary program. As show on the Map on page A-3, existing residents in this area strongly choose to attend Lyman.

Housing Starts and Permit Activity

While Census data is useful to show general housing trends, the location and extent of actual housing sales and construction, along with the type of this activity, is a more relevant indicator for school enrollments. As shown in Figure 8, during the last two decades, new residential construction permits peaked in the late 1990s at 84 units in 1999 (58 in Durham, while 26 in Middlefield), followed by a steady decline from 2002 to 2007, and a dramatic drop following the Great Recession to a low of 6 in 2008 - an 84% drop from the previous year and a 93% drop from the 1999 high of 84. Middlefield has historically had slow growth and relatively few permits per year, the Town has recovered up to the number of permits it issued in 2004. Durham's number of housing permits is still at historic lows, issuing fewer permits than smaller Middlefield in 2010 and 2012. Permits are still down, with only 10 permits (7 in Middlefield, and 3 in Durham), although 2013 permits show a slight uptick suggest a steady increase. Conversations with members of the Planning and Zoning Commissions affirm the reduced pace of proposals, and show no new large proposals currently being discussed that are not reflected in the data. It is helpful to remember that any new large scale development would take a minimum of five years from proposal to move-in ready and so the effect of any yet unknown developments will not likely impact enrollments during the projection window.

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[2] Town of Middlefield Plan of Conservation and Development, 2002/2008, VIII-1.

FIGURE 8

Annual Housing Permits, 1995- 2015
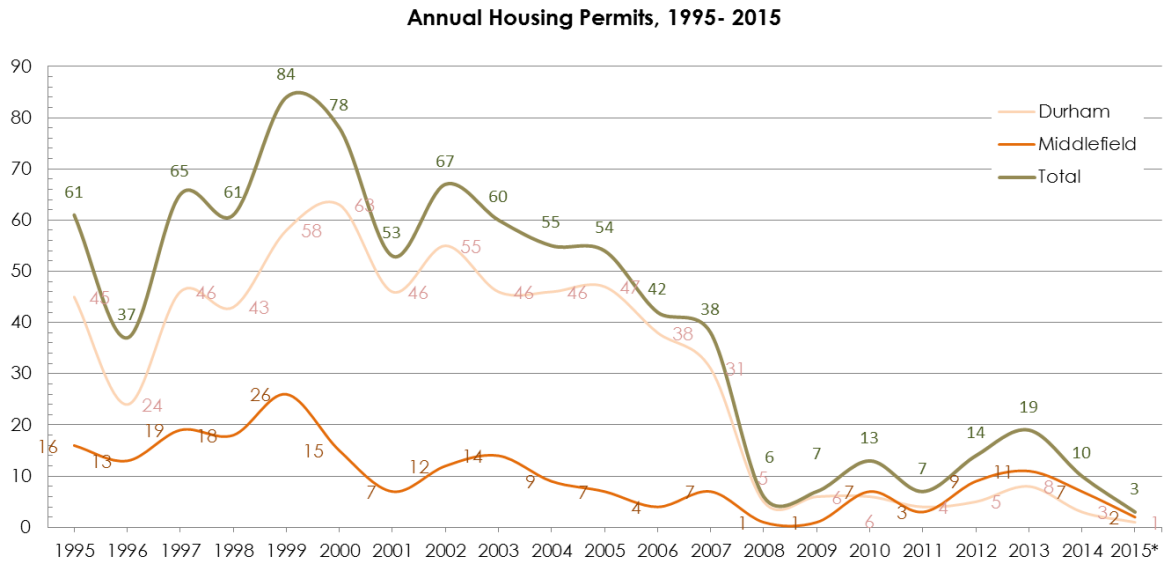

Source: CT DECD Annual Housing Permit Data

Notes: *Reporting monthly permit data beginning in 2015; due to Census revised sampling method.
Compiled by DECD Research.

Housing Sales

Housing sales were high throughout the 2000's and then dipped dramatically after 2008. This is true in both towns, but was more drastic in Durham, where the number of sales was initially higher. In general, Middlefield saw more stability in its housing market since 2000, as shown in Figures 9 & 10.

Median housing sales prices in Durham and Middlefield and the neighboring communities have been growing for the last 30 years, and despite taking a dip after 2008, appear to be slowly starting to rebound. Average single-family house prices have remained between $200,000 and $350,000 since the early 2000s. Compared to the neighboring communities in southern Middlesex County, and Madison and Guilford in New Haven County, RSD 13 offers a more affordable housing alternative for single-family houses. However, Wallingford offers a more affordable alternative overall. Due to the lack of available condo units in the area, Durham's condo prices tend to be the on par or higher than surrounding towns, however, as there are so few units in the Town, the fluctuation in prices may reflect the limited supply.

FIGURE 9

Median Housing Sales Prices, 1987-2015*
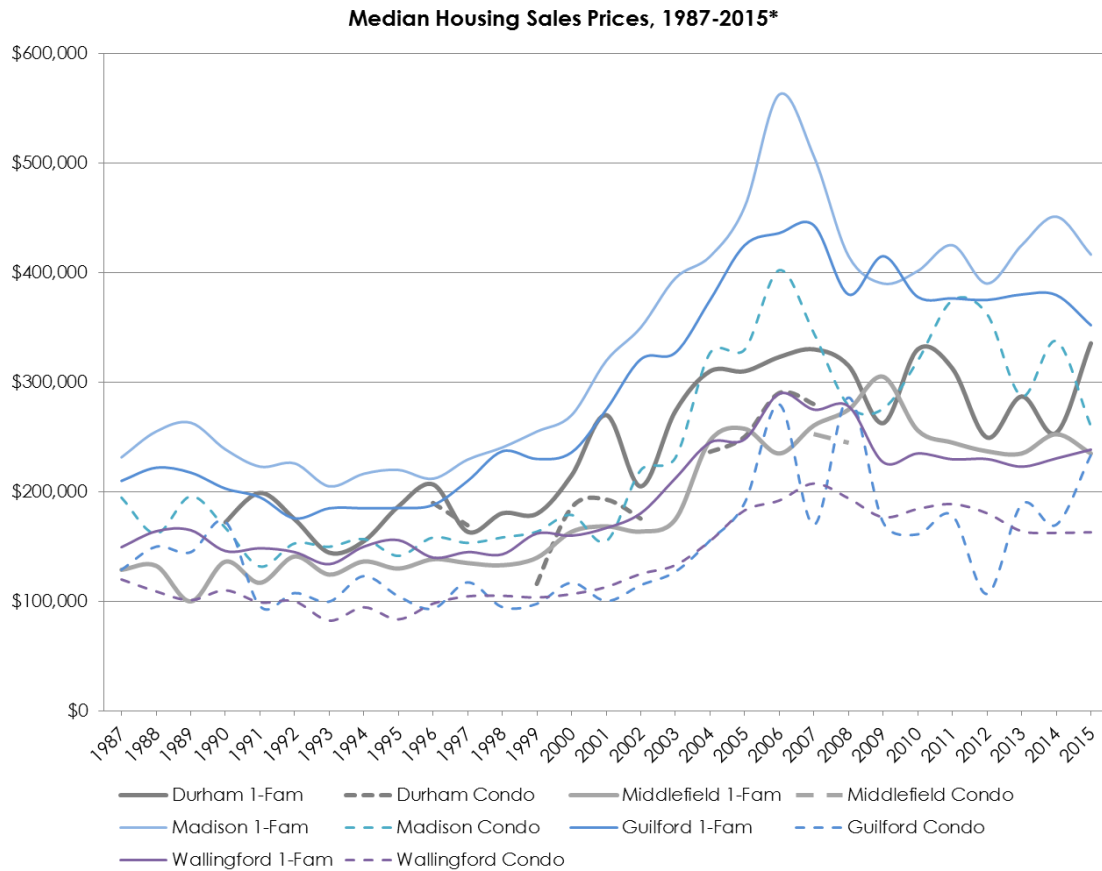
*Note: *All data is for Jan. – June.*
Source: The Warren Group.

Housing sales data from 2013 to 2014 and has shown a marginal uptick, outpacing the previous three years. From January to June 2015, there were 48 home sales, which is less sales than for the same time period in 2014 showing less stability than in previous years (see Figure 10 & 11).

As is the case with many Connecticut communities, ownership by those over age 65 has increased throughout Region 13 by 22.7% between 2000 and 2010, as the median age increased by over 4 years in each town to 44.7 in Middlefield and 42.8 in Durham (compared to the Connecticut average of 40.0). This aging of the population is coupled with a decrease in the number of householders between 25 and 44 by 28.9% in RSD 13.

FIGURE 10

Housing Sales
Jan. - Dec., 1990 to 2015

Note:* 2015 data is estimate, according to the info from the previous years.
Source: The Warren Group.

FIGURE 11

Year to Date Housing Sales
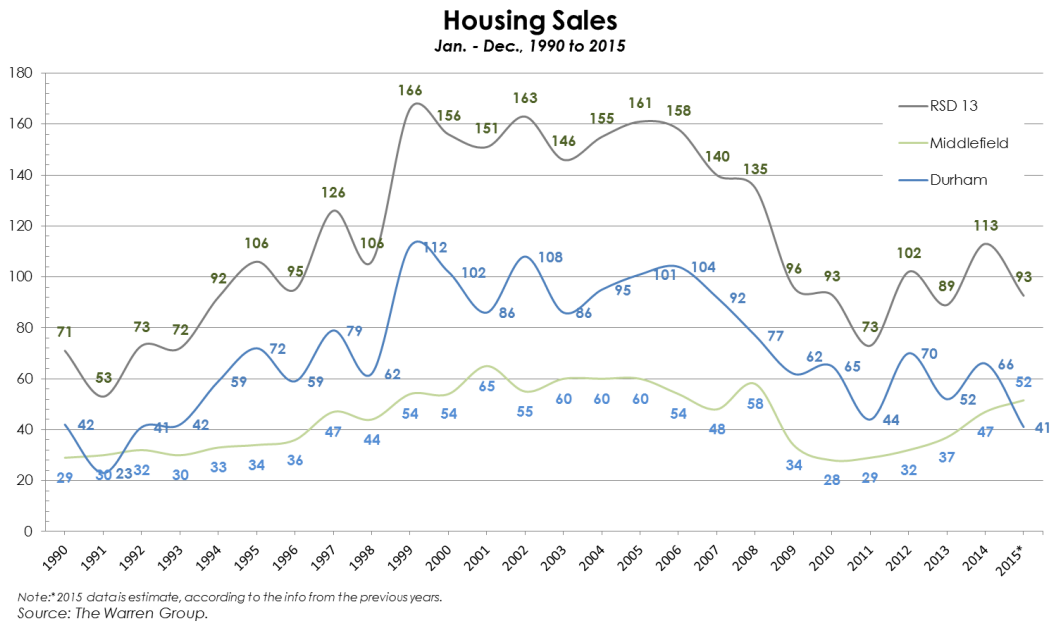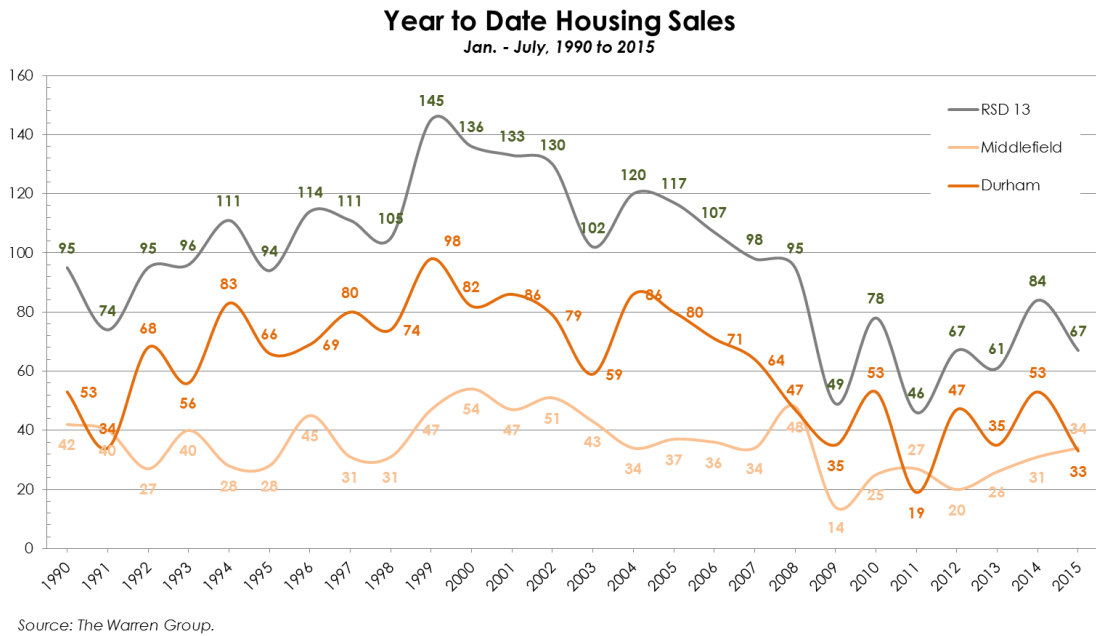*Jan. - July, 1990 to 2015*

Source: The Warren Group.

ENROLLMENT HISTORY & TRENDS

Enrollments for RSD 13 were extremely stable from 2001 until 2010, with a median of 2,086 students during that period but never diverging more than 60 students from that median. These stable enrollments were despite extremely strong periods of economic growth, especially in the housing market in the towns. The enrolment trends are reflective of a period of stable births in RSD 13, averaging 120 births each year from 1996 to 2004 (with births appearing as kindergarten students five years later). After 2004, births dropped tremendously, leading to the beginning of the enrollment decline post 2010, which has continued.

The total PreK– 12th grade enrollment in RSD 13 has declined steadily since its peak from 2004-2007. In 2009, it fell below the historic median, and has decreased by an average of 50-70 students each year since then. Enrollments declined despite flat births for the five years that precede this period, suggesting that the decrease in enrollments is not merely a result of declining births, and that the decline in births that has occurred since 2009 (who would be Kindergarteners in 2014) will further influence already declining enrollments.
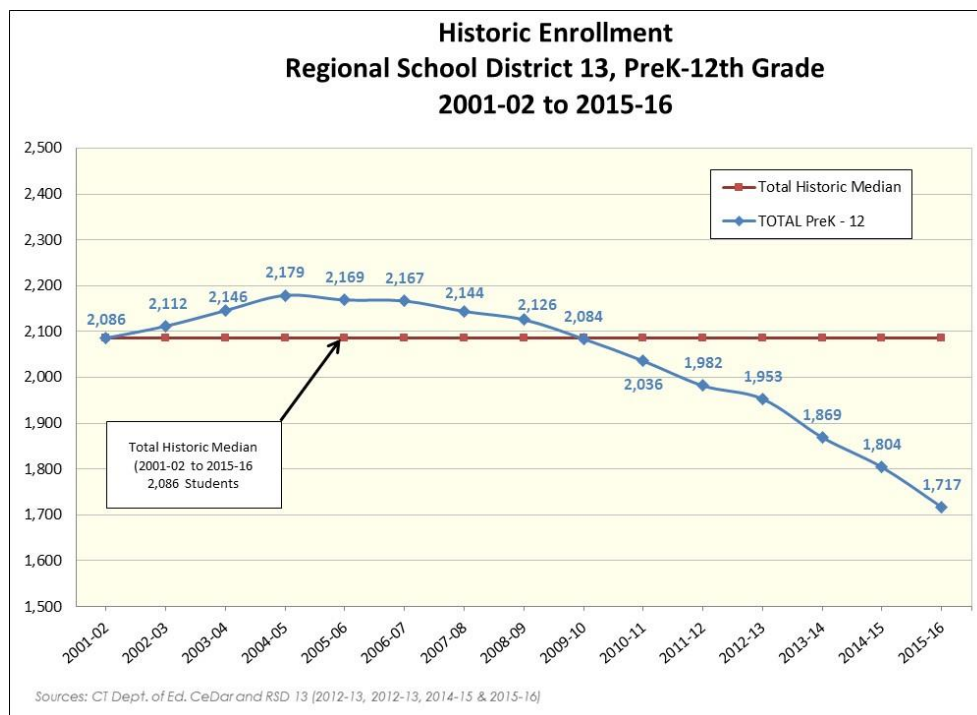
FIGURE 12

Table 12 shows by-grade historic enrollments for the district, along with births five years earlier. Between 1999 and 2001, there was an increase of 10 annual births, however they have been falling every year since, with the exception of 2004 and 2007. The number of kindergarteners entering the system exceeded the number of births in Town five years prior for every cohort born since 1996, with the exception of the last two school years, and the 2009-10 school year indicating in-migration through housing construction and turnover. Note that there was full day kindergarten for the 2008-2009 school year, and then beginning in 2012-13, and so the uptick kindergarten cohort for those years is influenced by that programming change.

TABLE 12 RSD 13 ENROLLMENTS 2001-2016

RSD 13 Enrollments 2001-2016																		
School Year	Birth Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	Total PK-12
2001-02	1996	121	148	177	166	170	192	171	177	153	151	155	159	126	123	18	2,068
2002-03	1997	114	148	165	183	164	170	192	166	187	153	144	146	153	128	13	2,099
2003-04	1998	116	146	168	162	182	170	169	184	170	188	143	138	144	153	29	2,117
2004-05	1999	126	160	156	179	164	192	177	176	189	173	162	134	134	147	36	2,143
2005-06	2000	126	141	183	162	178	170	192	173	177	191	145	162	127	131	37	2,132
2006-07	2001	124	152	152	188	169	181	173	187	176	176	164	134	160	121	34	2,133
2007-08	2002	117	131	169	152	186	174	183	166	182	178	146	159	134	148	36	2,108
2008-09	2003	115	149	153	173	154	187	174	179	166	184	143	145	157	124	38	2,088
2009-10	2004	129	118	168	158	178	153	187	173	180	166	150	138	142	148	25	2,059
2010-11	2005	102	125	131	162	161	183	149	185	172	178	141	153	143	132	21	2,015
2011-12	2006	93	101	134	130	171	160	182	143	184	174	150	136	155	141	21	1,961
2012-13	2007	124	123	115	136	128	171	160	183	147	187	143	149	134	151	26	1,927
2013-14	2008	92	89	138	112	139	126	171	160	180	150	159	139	146	134	26	1,843
2014-15	2009	79	105	95	134	112	136	127	166	161	177	126	151	140	139	35	1,769
2015-16	2010	85	103	105	95	135	113	141	125	162	156	142	127	146	141	26	1,691

Sources: CT Dept. of Ed. CeDar and RSD 13 (2012-13 to 2015-16).

Figures 13-16 show RSD 13's historic enrollments. In general, the system has experienced a 34% decrease in elementary enrollments since the peak in 2006-07, a 18% decrease in middle school (5th-8th) enrollment since the peak in 2007-08, and the high school has been stable during 2002-03 to 2013-14, since then the high school enrollment dropped approximately four percent. The leading edge of the elementary decline was evident in 2009-10 kindergarten enrollments with a 21% decline from the previous year. Kindergarten enrollment decline has continued well below historic levels with 2013-14 kindergarten enrollment of 89, 39% less than a decade ago. This loss has yet to impact middle and high school enrollments, as some extremely large cohort groups (highlighted in green in Table 12) are replaced by much smaller cohorts now entering the elementary system (highlighted in orange in Table 12). As these small classes of elementary students move through the school system, it is expected that the middle and high school enrollment declines will be more pronounced, even if elementary enrollments stabilize or even rebound.
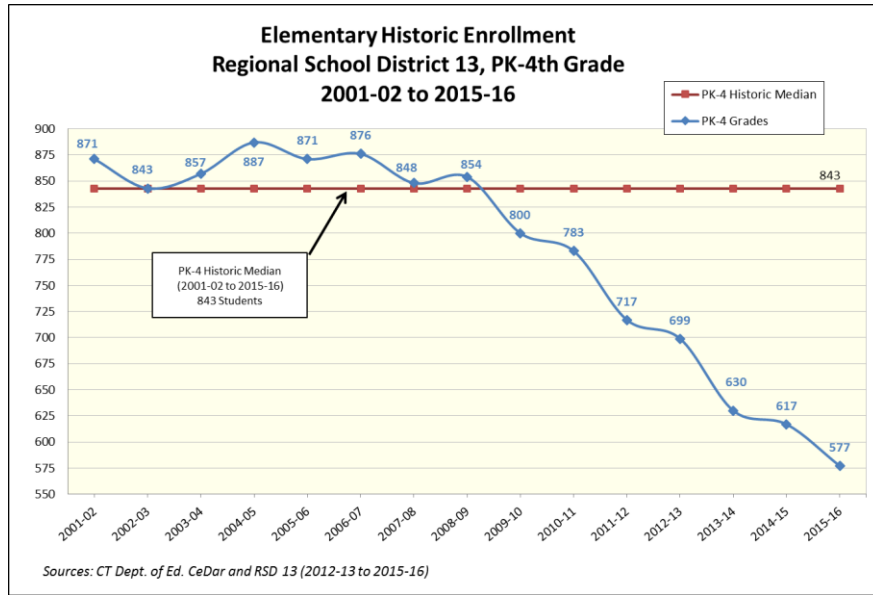
FIGURE 13

Elementary Historic Enrollment
Regional School District 13, PK-4th Grade
2001-02 to 2015-16

Sources: CT Dept. of Ed. CeDar and RSD 13 (2012-13 to 2015-16)

FIGURE 14

Middle School Historic Enrollment
Regional School District 13, 5th-6th Grades
2001-02 to 2015-16

Sources: CT Dept. of Ed. CeDar and RSD 13 (2012-13 to 2015-16).

FIGURE 15

Middle School Historic Enrollment
Regional School District 13, 7th-8th Grades
2001-02 to 2015-16

FIGURE 16

High School Historic Enrollment
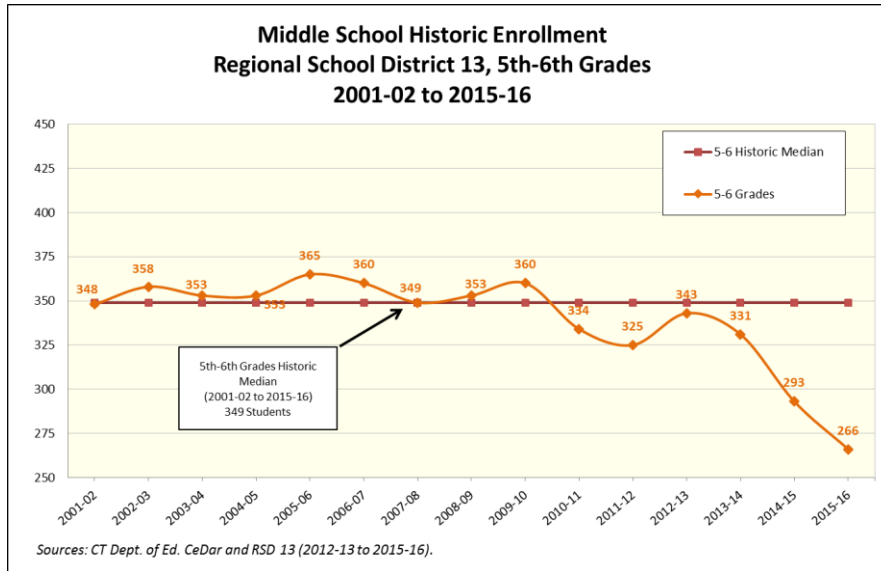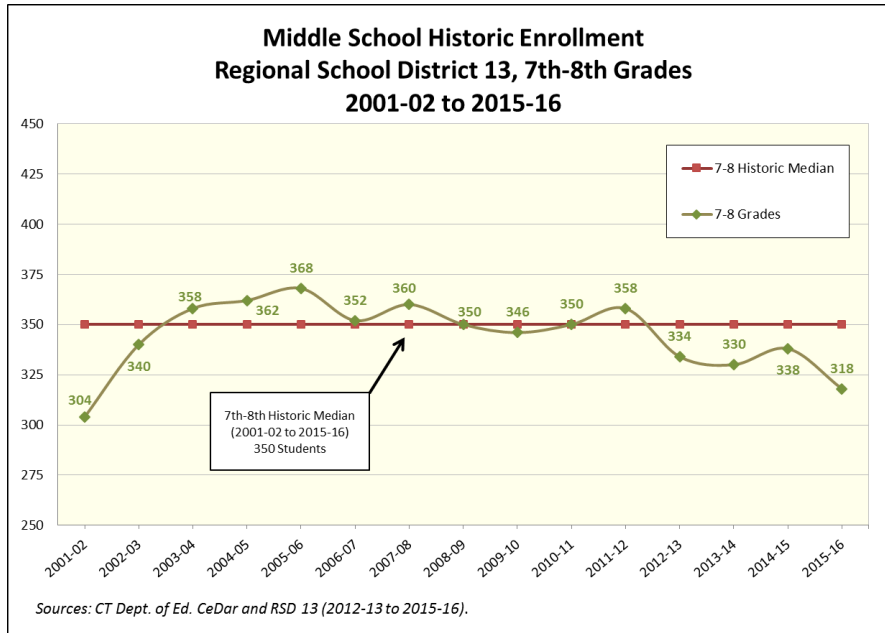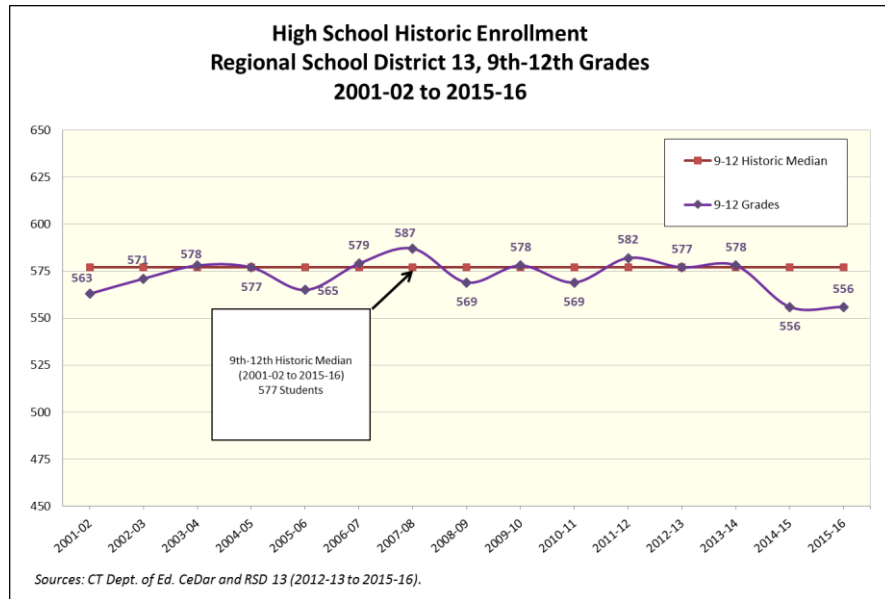Regional School District 13, 9th-12th Grades
2001-02 to 2015-16

Elementary students in RSD 13 have a choice of two educational programs, Integrated Day at the John Lyman School, and the Contemporary program at Brewster and Francis Korn. The district allows parents to choose which program they would prefer to send their children to, and does not limit enrollment in either program. It is assumed that some parents choose a program based on programmatic and educational differences, some choose based on the location of the school (proximity to their residence), and some choose based on social reasons, such as the attendance of friends or relatives. Nevertheless, historic subscription in the programs has been extremely stable. As shown in the following tables, Lyman attracts a steady 43-47% of its students from Middlefield (where it is located) and Brewster/ Korn attract 72%-74% from Durham (where they are located). Keeping in mind that Durham has a significantly larger population, it still sends 65%-67% of its resident students to Brewster/ Korn, while 33%-35% choose Lyman. Middlefield, like Lyman, is nearly equally split.

The map showing *Elementary Enrollment by School* on A-3 shows current students by elementary attendance and suggests that although there is some locational preferences within the towns, the strongest locational preference is of the families located very near Lyman and Brewster.

TABLE 13

Enrollment By Elementary School				
	Lyman		Brewster/Korn	
	% Middlefield	% Durham	% Middlefield	% Durham
2014-15	43.28%	56.72%	25.96%	74.04%
2013-14	46.46%	52.36%	26.33%	73.40%
2012-13	44.17%	54.77%	27.40%	71.88%
2011-12	45.00%	54.33%	26.00%	73.54%
2010-11	47.34%	52.35%	24.73%	74.20%

Elementary Enrollment by Town				
	Middlefield		Durham	
	% Lyman	% Brewster/Korn	% Lyman	% Brewster/Korn
2014-15	53.93%	46.07%	34.97%	65.03%
2013-14	54.38%	45.62%	32.52%	67.48%
2012-13	52.30%	47.70%	34.14%	65.86%
2011-12	54.88%	45.12%	34.17%	65.83%
2010-11	56.55%	43.45%	32.43%	67.57%

Sources: CT Dept. of Ed. CeDar and RSD 13 (2012-13 to 2014-15)

Changes in non-public school enrollment and regional public school enrollments are also influencing total enrollments at RSD 13. The following figure of *Durham and Middlefield Resident Students Enrolled in Non-Public Schools* highlights the steady enrollment of private and parochial school enrollments in the region. Enrollments of resident students in other public schools has been decreasing steadily during the same period, as shown in the Figure 21, however they still represent very few students overall. Most of these students are High School students who attend the Technical High School in Middletown. RSD 13 has not lost significant numbers of students to large urban Magnet programs, such as New Haven, that other districts have seen, possibly due to proximity and seat selection criteria (see Figure 17).

FIGURE 17

Durham and Middlefield Resident Students Enrolled in Non-Public Schools, 2006-07 to 2013-14
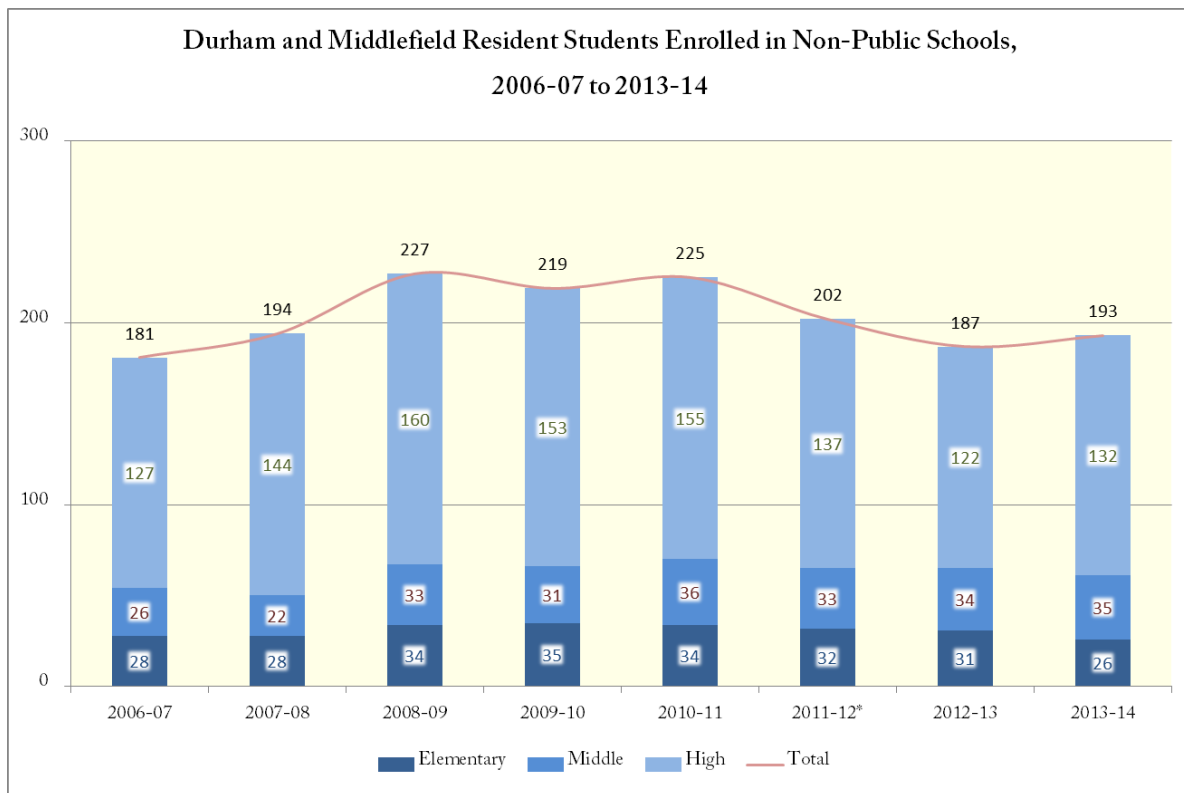
Note: *The raw data from State incorrectly counts the Elementary and Middle school in 2011-12 of Middlefield Resident students enrolled in private schools, so total enrollment of Middlefield Elementary and Middle students were assumed in 2011-12 by using the average from previous years.

Sources: CT Dept. of Ed. CeDar and RSD 13 (2012-13, 2012-13 & 2013-14).

FIGURE 18

Durham and Middlefield Resident
K-12 Enrollment in Other
Public Schools, 2006-07 to 2013-14
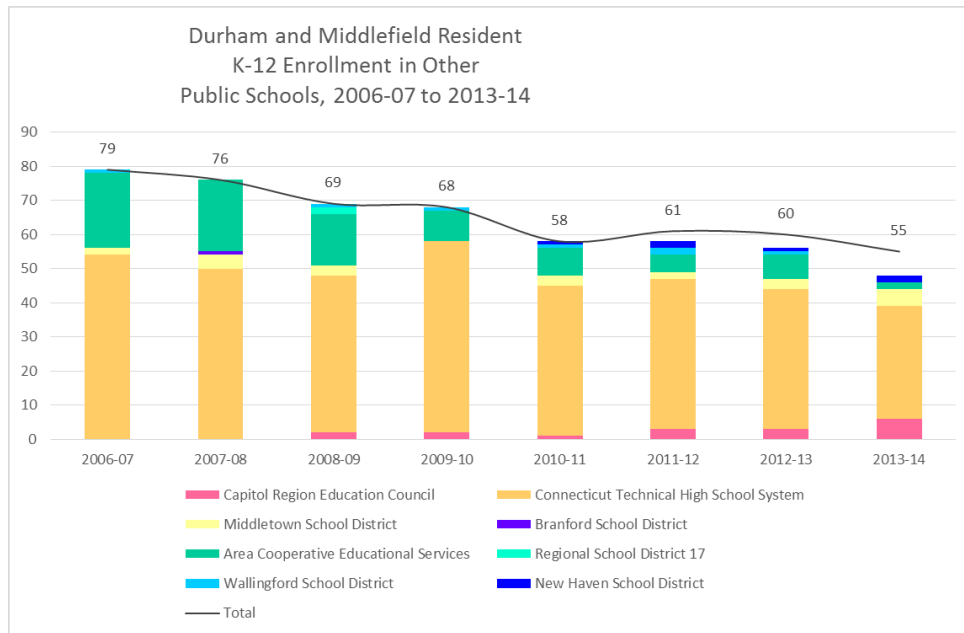
Sources: CT Dept. of Ed. CeDar and RSD 13 (2012-13, 2012-13 & 2013-14).

ENROLLMENT PROJECTIONS

The cohort-survival methodology, with some modifications, was used develop projections in this report. This is a standard methodology for projecting populations and student enrollments. It is important to remember that the foundation of the cohort-survival methodology is the recent past can be a good predictor of the near future, and therefore this methodology works well for stable populations, including those that are growing or declining at a steady rate. The persistency ratios calculated in this method account for the sets of known external data points which have an effect on enrollments, including housing development, economic conditions, student transfers, and mobility into and out of a school district. Accurate birth and enrollment data used in this projection methodology are critical to its overall accuracy, as each year builds upon the last. Kindergarten enrollments are based on the number of births five years previous. In addition, events and policies locally, regionally and nationally all exert influence on enrollment. With that said, the economic recession, local employment and housing market conditions in Durham and Middlefield are factors that contribute to a much different enrollment climate than just five years ago. Therefore, assumptions were made in the projections to adequately capture these external factors. For the purpose of this enrollment projection report, Milone & MacBroom Inc. has been asked to prepare projections based on a ten-year time horizon.

Persistency ratios were calculated based on historic enrollment data to determine growth or loss in a class as it progresses through the school system. Persistency ratios of 1.00 mean that the class size remains the same as it advances from one grade to the next. A persistency ratio of 1.05 means the class size increases by 5% or a class of 100 gains five additional students the next year. Enrollment data from 2001-02 through 2013-14 combined with birth data from 1996 to the present were used to calculate Birth-K and grade-to-grade persistency ratios. Table 14 shows the calculated ratios.

PERSISTENCY RATIOS

The dramatic change in the persistency ratio for Birth-K in 2014-15 is frequently seen when a district implements full-day kindergarten, however, that is not the case in RSD 13. As shown in Table 13, the Birth-K ratios for the last year and the preliminary estimates for the 2015-16 school year are significantly higher than the previous three years. As noted in the housing section of this report, Region 13's housing market, in particular, total sales have been rebounding slowly. This may be indicative of families purchasing homes in RSD 13 with young children (0-4 yrs) about to enter the school system as kindergarteners. At this time, there are too few data points to determine if the increase in Birth-K is a new trend or an anomalous bubble. This analysis indicates that recent housing market conditions may be a driver for this increase in growth ratios, in particular the growth in the Birth-K ratio. Therefore, the more moderate five year ratio has been chosen for these projections. Once the 2015-16 enrollment becomes official, the persistency ratios will be re-evaluated. Of particular note in the persistency ratios for RSD 13 is low 8-9 ratio, suggesting that a relatively large percentage of families choose to not attend Coginchaug Regional High School. This historic trend reflects the prevalence of families opting to send children to private high schools in the region.

The following section shows projected enrollments at the district-wide and current grade configuration levels. The following inherent assumptions were built into the projections, and therefore any large divergences from these assumptions would necessitate new projections.

Assumptions:

- Programming will remain the same, including continuation of full day Kindergarten
- Annual births in Durham will range from 50-75 and in Middlefield will range from 25-35
- The average annual unemployment rate will stay between 6% and 7%
- Housing sales will stay between 90-120 annually
- Housing permits will range between 7-20 per year

Kindergarten through 12th Grade Persistency Ratios by School Year, 2002-03 to 2015-16

Year	Birth-K	K-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	Estimated Migration[1]
2002-03	1.298	1.115	1.034	0.988	1.000	1.000	0.971	1.056	1.000	0.954	0.942	0.962	1.016	0.29%
2003-04	1.259	1.135	0.982	0.995	1.037	0.994	0.958	1.024	1.005	0.935	0.958	0.986	1.000	0.09%
2004-05	1.270	1.068	1.065	1.012	1.055	1.041	1.041	1.027	1.018	0.862	0.937	0.971	1.021	3.28%
2005-06	1.119	1.144	1.038	0.994	1.037	1.000	0.977	1.006	1.011	0.838	1.000	0.948	0.978	0.37%
2006-07	1.226	1.078	1.027	1.043	1.017	1.018	0.974	1.017	0.994	0.859	0.924	0.988	0.953	0.95%
2007-08	1.120	1.112	1.000	0.989	1.030	1.011	0.960	0.973	1.011	0.830	0.970	1.000	0.925	-0.47%
2008-09	1.296	1.168	1.024	1.013	1.005	1.000	0.978	1.000	1.011	0.803	0.993	0.987	0.925	0.10%
2009-10	0.915	1.128	1.033	1.029	0.994	1.000	0.994	1.006	1.000	0.815	0.965	0.979	0.943	0.39%
2010-11	1.225	1.110	0.964	1.019	1.028	0.974	0.989	0.994	0.989	0.849	1.020	1.036	0.930	-0.10%
2011-12	1.086	1.072	0.992	1.056	0.994	0.995	0.960	0.995	1.012	0.843	0.965	1.013	0.986	0.20%
2012-13	0.992	1.139	1.015	0.985	1.000	1.000	1.005	1.028	1.016	0.822	0.993	0.985	0.974	0.62%
2013-14	0.967	1.122	0.974	1.022	0.984	1.000	1.000	0.984	1.020	0.850	0.972	0.980	1.000	0.11%
2014-15	1.329	1.067	0.971	1.000	0.978	1.008	0.971	1.006	0.983	0.840	0.950	1.007	0.952	-1.01%
2015-16	1.212	1.000	1.000	1.007	1.009	1.037	0.984	0.976	0.969	0.802	1.008	0.967	1.007	-0.48%
Long Term Average	1.1653	1.1041	1.0085	1.0109	1.0120	1.0056	0.9830	1.0066	1.0028	0.8501	0.9712	0.9864	0.9721	
Last 5-Yr Average	1.1172	1.0800	0.9904	1.0140	0.9930	1.0080	0.9840	0.9978	1.0000	0.8314	0.9776	0.9904	0.9838	
Last 3-Yr Average	1.1693	1.0630	0.9817	1.0097	0.9903	1.0150	0.9850	0.9887	0.9907	0.8307	0.9767	0.9847	0.9863	
Last 3-YR WTD B-K & 5-Yr Avg	1.2102	1.0800	0.9904	1.0140	0.9930	1.0080	0.9840	0.9978	1.0000	0.8314	0.9776	0.9904	0.9838	

Source: Calculated by MMI from State Department of Education, Public School Information System (2001-02 to 2010-11), RSD 13 12-13, 13-14 and 14-15, and CT Department of Public Health (CT DPH) Birth Data. 1. Derived from the comparison of 3-8 enrollment aggregates one year to the 2-7 aggregate from the previous year

DISTRICT-WIDE ENROLLMENT PROJECTIONS

The following Tables 15 presents the summary of the enrollment projections by grade grouping. They are based on the 3-year weighted avererage for births to kindergarteners and 5-year average persistency ratios for the rest, shown in the previous Table 14. The projections strongly reflect both the sharp recent decrease in births and the last five years of low elementary enrollments matriculating though the school system. 2016-2021 are based on actual births and are therefore the most accurate. The five subsequent years of enrollment projections through 2025 are based on birth projections and the assumptions that govern them.

TABLE 15 TEN-YEAR ENROLLMENT PROJECTIONS

| School Year	Birth Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	PK	K-12
2016-17	2011	88	106	111	104	96	134	114	139	125	162	130	139	126	144	35	1,630
2017-18	2012	65	79	114	110	105	95	135	112	139	125	135	127	138	124	35	1,538
2018-19	2013	91	110	85	113	112	104	96	133	112	139	104	132	126	136	35	1,502
2019-20	2014	75	91	119	84	115	111	105	94	133	112	116	102	131	124	35	1,437
2020-21	2015	81	98	98	118	85	114	112	103	94	133	93	113	101	129	35	1,391
2021-22	2016	80	97	106	97	120	84	115	110	103	94	111	91	112	99	35	1,339
2022-23	2017	78	94	105	105	98	119	85	113	110	103	78	109	90	110	35	1,319
2023-24	2018	81	98	102	104	106	97	120	84	113	110	86	76	108	89	35	1,293
2024-25	2019	79	96	106	101	105	105	98	118	84	113	91	84	75	106	35	1,282
2025-26	2020	80	97	104	105	102	104	106	96	118	84	94	89	83	74	35	1,256

Source: prepared by MMI, 10/2015.

TABLE 16 TEN-YEAR ENROLLMENT PROJECTIONS AND PERCENTAGE CHANGE

School Year	PK-12th		PK-4th		5th-6th		7th-8th		9th-12	
	TOTAL	% Change	PK-4 Total	% Change	5-6 Total	% Change	7-8 Total	% Change	9-12 Total	% Change
2015-16	1,717	-4.82%	577	-6.48%	266	-9.22%	318	-5.92%	556	0.00%
2016-17	1,665	-3.03%	586	1.56%	253	-4.89%	287	-9.75%	539	-3.06%
2017-18	1,573	-5.53%	538	-8.19%	247	-2.37%	264	-8.01%	524	-2.78%
2018-19	1,537	-2.29%	559	3.90%	229	-7.29%	251	-4.92%	498	-4.96%
2019-20	1,472	-4.23%	555	-0.72%	199	-13.10%	245	-2.39%	473	-5.02%
2020-21	1,426	-3.13%	548	-1.26%	215	8.04%	227	-7.35%	436	-7.82%
2021-22	1,374	-3.65%	539	-1.64%	225	4.65%	197	-13.22%	413	-5.28%
2022-23	1,354	-1.46%	556	3.15%	198	-12.00%	213	8.12%	387	-6.30%
2023-24	1,328	-1.92%	542	-2.52%	204	3.03%	223	4.69%	359	-7.24%
2024-25	1,317	-0.83%	548	1.11%	216	5.88%	197	-11.66%	356	-0.84%
2025-26	1,291	-1.97%	547	-0.18%	202	-6.48%	202	2.54%	340	-4.49%
1st 5-YR Percent Change	-16.95%		-5.03%		-19.17%		-28.62%		-21.58%	
2nd 5-YR Percent Change	-9.47%		-0.18%		-6.05%		-11.01%		-22.02%	
10-YR Percent Change	-24.81%		-5.20%		-24.06%		-36.48%		-38.85%	

Source: prepared by MMI, 10/2015.

FIGURE 19

**Historic and Projected Enrollments
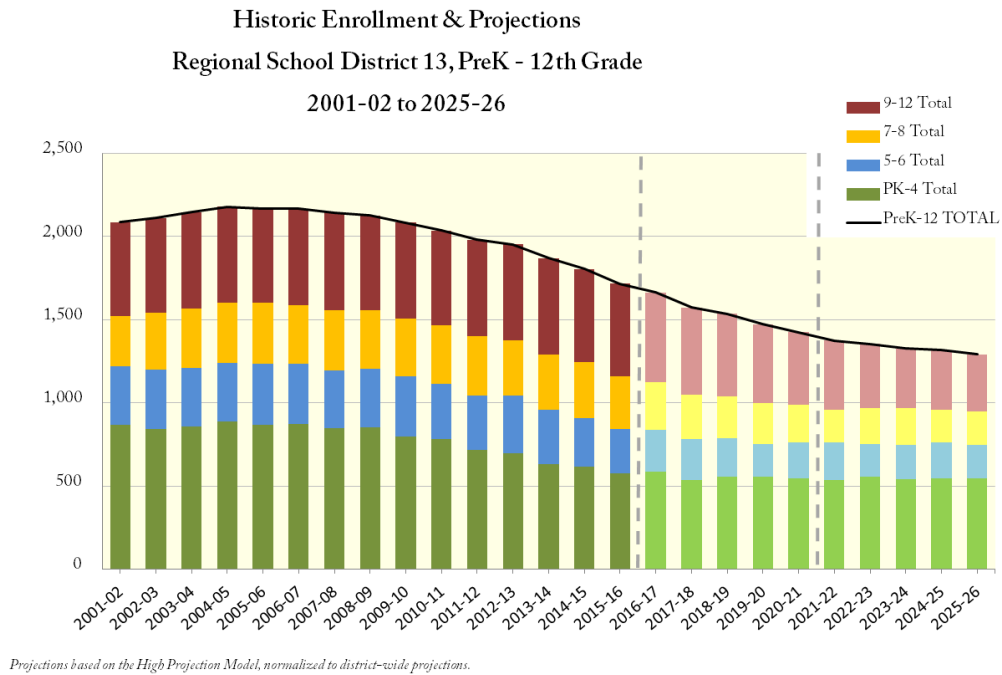RSD 13, PreK-12th Grade
2001-02 to 2025-26**
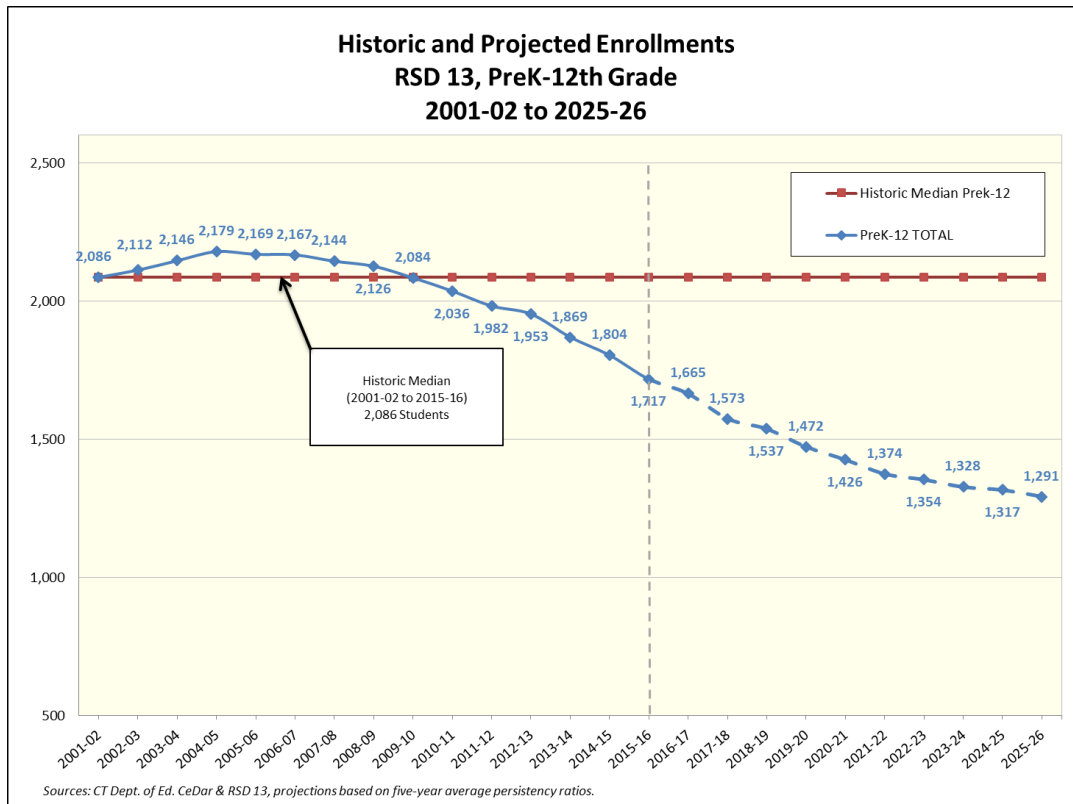
All district-wide projections show a continuation of the ten year trend of declining enrollment in the district. The PreK-12 enrollment is projected to decline around 25% over the next ten years to approximately 1,300 students district-wide. The rate of decline is expected to increase from -4.8% in 2015-16 to more than -5.5% and -4.2% in 2017-18 and 2019-20 respectively, before it starts to slow at around -2% to -3% from 2020-21.

The enrollment decreases are projected to vary slightly among the grade groups, with the largest decline among middle enrollments and the least decline among the elementary school enrollments, which have already seen much of their decline. Additionally the elementary enrollments are expected to "bottom-out" during the second half of the ten-year horizon, and are projected to increase slightly after 2022-23, although the rate of this increase is strongly tied to the birth projections.

Over the next five years, while elementary enrollments are projected to decline 5%, both 5th-6th grade and 7th-8th enrollment are to projected to decline about 20% and 29% respectively, and high school enrollments to decline by 22%. However, the second five-year window paints a much different picture. Elementary enrollments are projected to decline 0.2%; whereas, 5th-6th grade and 7th-8th enrollment are projected to fall to 6% and 11% respectively; while high school experiences a continued significant declines of 22%. The continued steep decline in high school results from the leading edge of the current elementary decline matriculating through the system. The reported births for 2012 were 65, which is an historic low. Due to the historic low births of the last five years and the time lag for full matriculation into the middle school from the elementary school system, the full impact will not be felt at the high school during this 10-year horizon. As apparent in Figure 20 below, the elementary trough is projected to occur in the next five years. If assumptions are proven accurate, the stabilization and possible increases in the elementary enrollments will not be felt in the middle nor high school projections until well outside of the projection study window.

FIGURE 20

Historic Enrollment & Projections
Regional School District 13, PreK - 12th Grade
2001-02 to 2025-26

Projections based on the High Projection Model, normalized to district-wide projections.

SCHOOL BY SCHOOL ENROLLMENT PROJECTIONS

Elementary Schools

As with the district-wide enrollment projections, the cohort-survival methodology has been utilized to create projections for each of the two Elementary programs in Region 13, Integrated Day at the John Lyman School, and the Contemporary program at Brewster and Francis Korn. There is no division of students for grades 5-12 so the enrollments projections for Coginchaug Regional High School, Memorial Middle School and Strong Middle School are the same as the forecasts for grades 5-12 in the district-wide enrollment projections.

Creating enrollment projections for individual schools can prove challenging due to smaller number of data points, which may lead to a greater percentages of error than for the larger area projections. For this reason, the individual school-by-school projections have been normalized against the district-wide projections so that the individual schools projections collectively equal the district-wide projections. In addition to the various limitations and considerations of the individual school projections, they too must be governed by additional assumptions. These assumptions include:

- The district policy of open choice between the two elementary programs will not change during the projected time horizon;
- Full-day kindergarten will remain in place;
- There will not be significant changes to deployment of pre-kindergarten programs;
- Recent private school enrollment trends will remain stable;
- The historic balance of students between the two programs will remain.

Enrollment projections for the two elementary programs was done using a similar methodology as for the entire district. Persistency ratios were developed to determine how student cohorts survive through the system from year to year and are shown in Table 17. The numbers represent how externalities, including the interest in programming, affect how students in Region 13 progress through elementary school. This includes, but is not limited to the in and out migration of students to other towns and districts spurred by programmatic choice, housing markets, and economic activity; and the movement of students between school programs from year to year for social or education reasons. These factors affect each Town and each school differently, and so the effect of these externalities results in significantly different persistency ratios.

TABLE 17 ELEMENTARY INDIVIDUAL PERSISTENCY RATIOS

3-Year Average	Birth-K	K-1	1-2	2-3	3-4
Lyman	0.4960	1.0883	0.9830	1.0167	1.0190
Brewster/Korn	0.6730	1.0467	0.9823	1.0057	0.9717

5-Year Average	Birth-K	K-1	1-2	2-3	3-4
Lyman	0.4638	1.1030	0.9896	1.0326	1.0142
Brewster/Korn	0.6532	1.0638	0.9922	1.0026	0.9786

Long Term	Birth-K	K-1	1-2	2-3	3-4
Lyman	0.4789	1.1028	1.0046	1.0343	1.0117
Brewster/Korn	0.6673	1.1006	1.0122	1.0022	1.0116

Source: prepared by MMI, 10/2015.

Table 18 presents the results of the ten-year enrollment projections for each elementary school. With a continued projected decline in the elementary enrollment at the district level, it is not surprising that both elementary schools will decline over the next five years. It should be noted that the first five-year projection horizon relies on students in the system and reported births. The reported births for the 2012 were 65, which is an historic low.

The enrollment decline for the second five-year time horizon shows a much more moderate decline, flattening, and the start of a rebound. As with any projections out past five years, the accuracy of the next five years is predicated on the aforementioned assumptions holding true and proving to be accurate. The second five year projections, especially at the individual school level, are influenced by the accuracy of the projected births, birth estimate allocation at individual schools and local growth factors. With that said, Figure 21 illustrates the projections model which indicates a flattening and the early stages of a rebound.
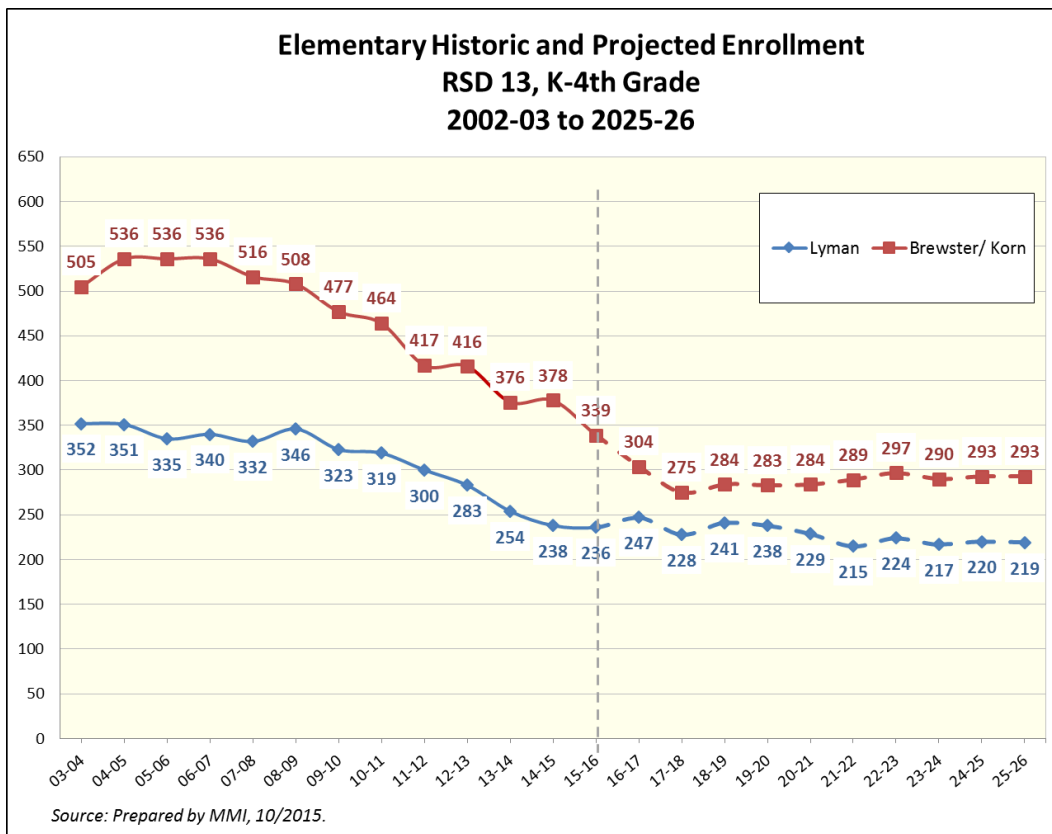
TABLE 18

Elementary K-4th by School Ten-Year Enrollment Projections											
Elementary School	**2016-17**		**2017-18**		**2018-19**		**2019-20**		**2020-21**		**1st Five Year**	
	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change
Lyman	247	4.66%	228	-7.69%	241	5.70%	238	-1.24%	229	-3.78%	-18	-7.29%
Brewster/ Korn	304	-10.32%	275	-9.54%	284	3.27%	283	-0.35%	284	0.35%	-20	-6.58%

Elementary School	**2021-22**		**2022-23**		**2023-24**		**2024-25**		**2025-26**		**2nd Five Year**	
	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change	Total	% Change
Lyman	215	-6.11%	224	4.19%	224	0.00%	217	-3.13%	220	1.38%	5	2.33%
Brewster/ Korn	289	1.76%	297	2.77%	297	0.00%	290	-2.36%	293	1.03%	4	1.38%

Source: Prepared by MMI, 10/2015.

FIGURE 21

**Elementary Historic and Projected Enrollment
RSD 13, K-4th Grade
2002-03 to 2025-26**

Source: Prepared by MMI, 10/2015.

APPENDIX
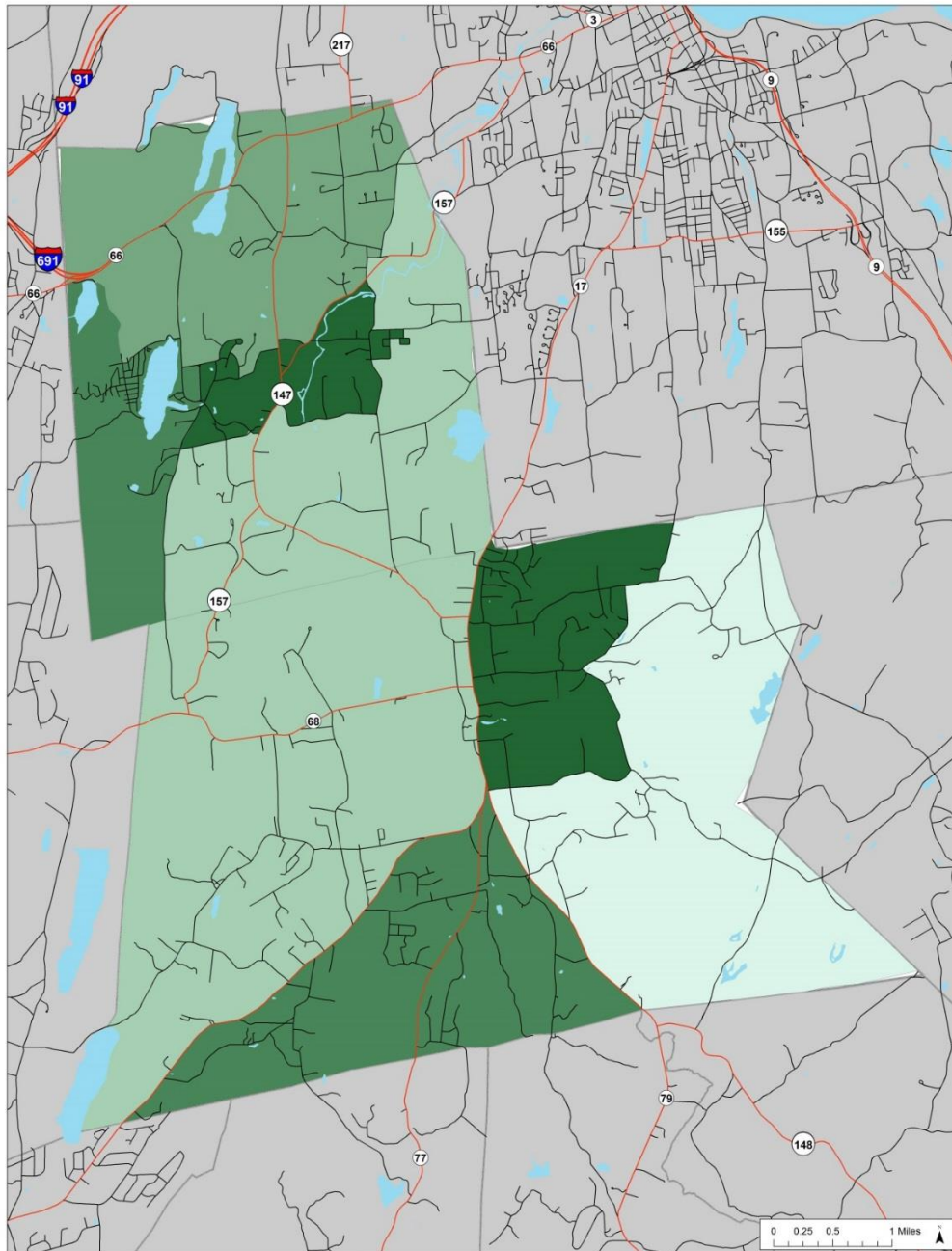
Regional School District 13
Comprehensive Enrollment Analysis

Housing Unit Density 2010
by Census Block Group
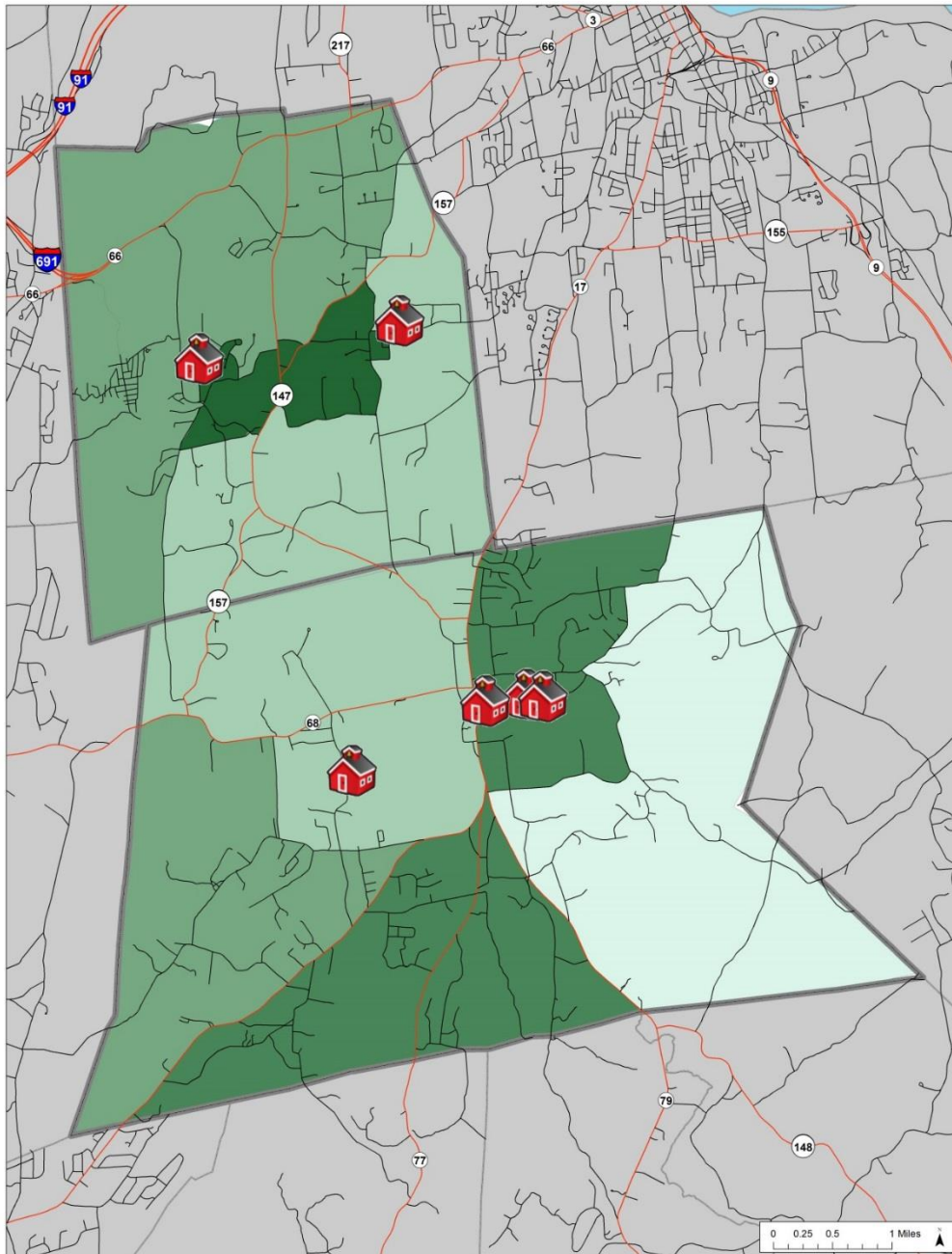
Housing Units per Square Mile

- < 65.0
- 65 - 100
- 101 - 150
- 151 - 175
- > 176

Sources:
* Base Map Data, CT DEEP, 2012.
* Streets, StreetMaps USA, 2012.

This map is intended for planning purposes only. Delineations may not be exact.
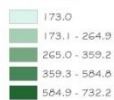
September 2013

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Comprehensive Enrollment Analysis

Population Density 2010
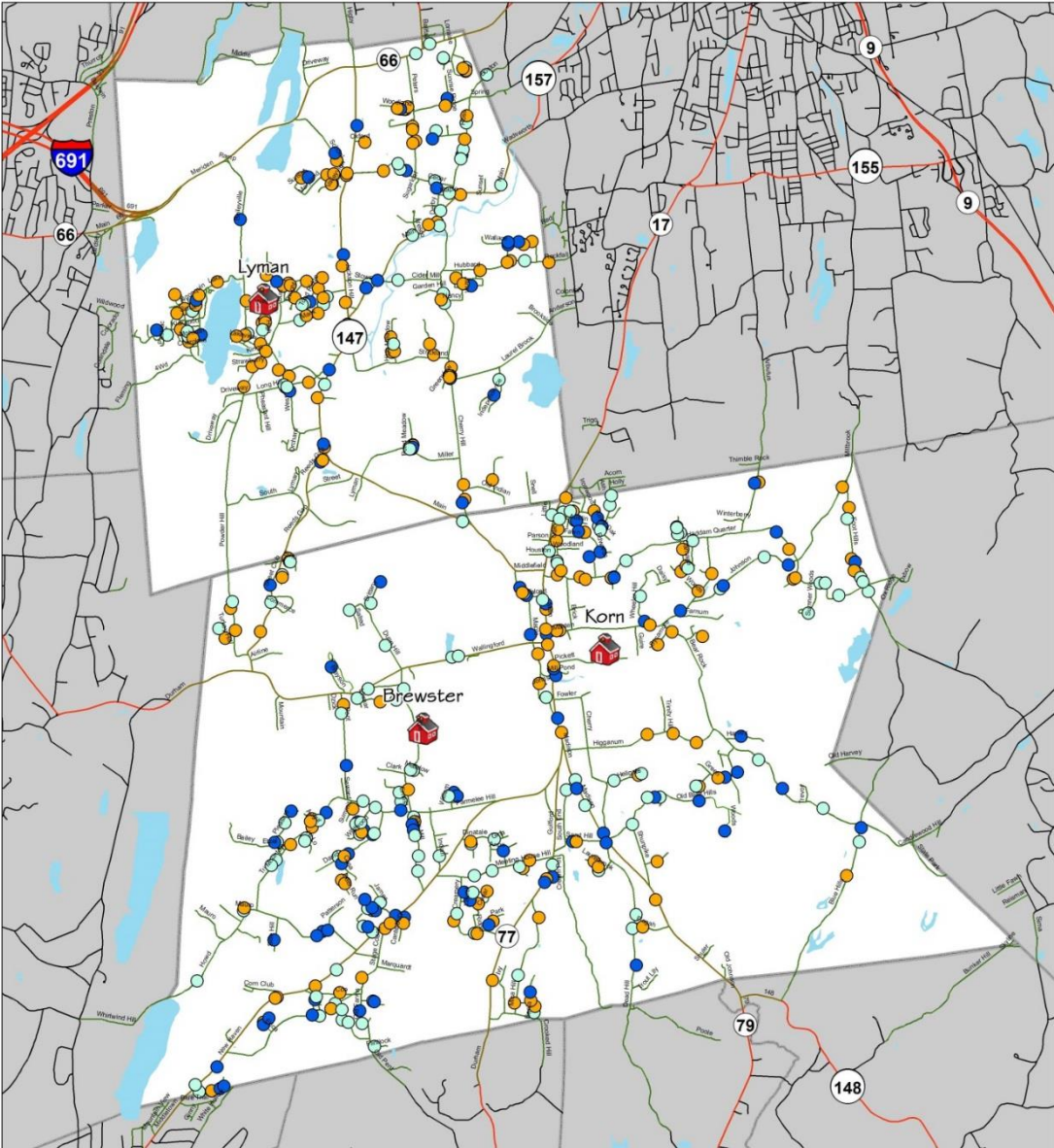by Census Block Group

Persons per Square Mile

- 173.0
- 173.1 - 264.9
- 265.0 - 359.2
- 359.3 - 584.8
- 584.9 - 732.2

Sources:
* Base Map Data, CT DEEP, 2012.
* Streets, StreetMaps USA, 2012.

This map is intended for planning purposes only. Delineations may not be exact.

September 2013

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Regional School District 13
Comprehensive Enrollment Analysis

Elementary Enrollment
by School
2013-2014

Elementary Students

○ Brewster
● Korn
● Lyman

Sources:
* Base Map Data, CT DEEP, 2012
* Streets, StreetMaps USA, 2012.
* RSD13 Oct 1 Enrollments

This map is intended for planning
purposes only. Delineations may not
be exact.

December 2013

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0   0.25 0.5   1 Miles