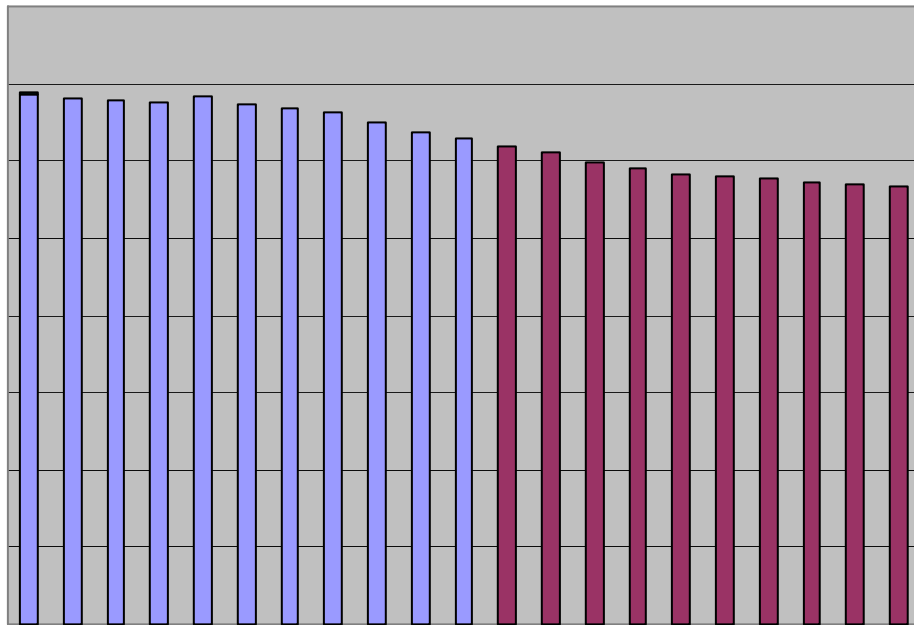


ENFIELD PUBLIC SCHOOLS ENROLLMENT PROJECTED TO 2018



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December 22, 2008

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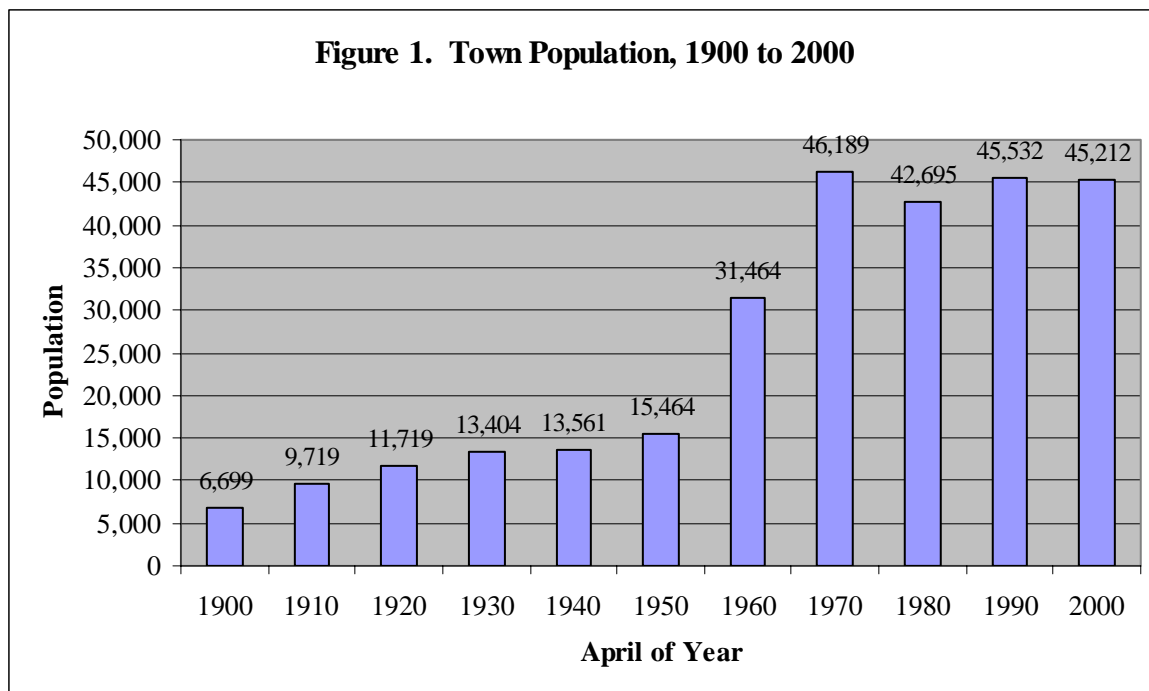
Introduction

This report presents a ten-year projection of enrollment for the Enfield Public Schools. It is based on residents and non-residents enrolled in the Enfield schools. The projections are divided into the three grade levels that represent how the Enfield schools are organized: K-6, 7-8 and 9-12. The report includes the population of the town of Enfield since 1900 and 38 years of enrollment to place the projection into a wider historical perspective. One of the primary drivers of future enrollment is births to residents. The report examines births and their relationship to kindergarten enrollment. Data on delayed entry into kindergarten (parent hold-outs) and retentions are provided. Several factors that influence school enrollment - housing, migration, employment, non-public enrollment, non-resident enrollment and resident enrollment in other public schools - are presented. Finally, the accuracy of earlier projections is examined.

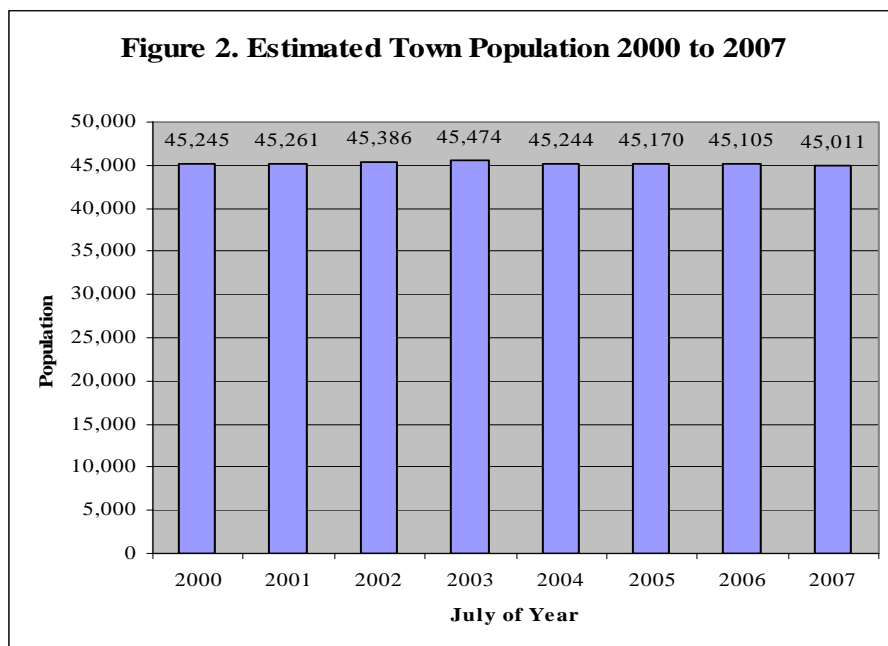
Enrollment projections are a valuable planning tool. For budgeting, the numbers can place requested expenditures into a per pupil context. This can inform the public about which expenditures represent continuing expenditures to support on-going programs and expenditures for school improvement and program expansion. They are an essential step in determining the staffing that will be needed in the future. This may facilitate the transfer of teachers from one grade to another or allow the hiring process to start earlier, which can increase the likelihood of attracting the best teachers in the marketplace. Projections are a critical and required step in planning for school facilities. The State of Connecticut requires eight-year projections as a critical component of determining the size of the project for which reimbursement is eligible. In some communities the projection can determine the number of places they can make available to urban students as part of a regional desegregation effort.

Perspective

Enrollment projections typically use the most recent five years of data. While the most recent past is viewed as the best predictor of the near future, it is informative to look at a broader perspective. Figure 1 shows the population in Enfield for the censuses conducted since 1900. The census data include both people living in households and group quarters such as prisons and nursing homes.



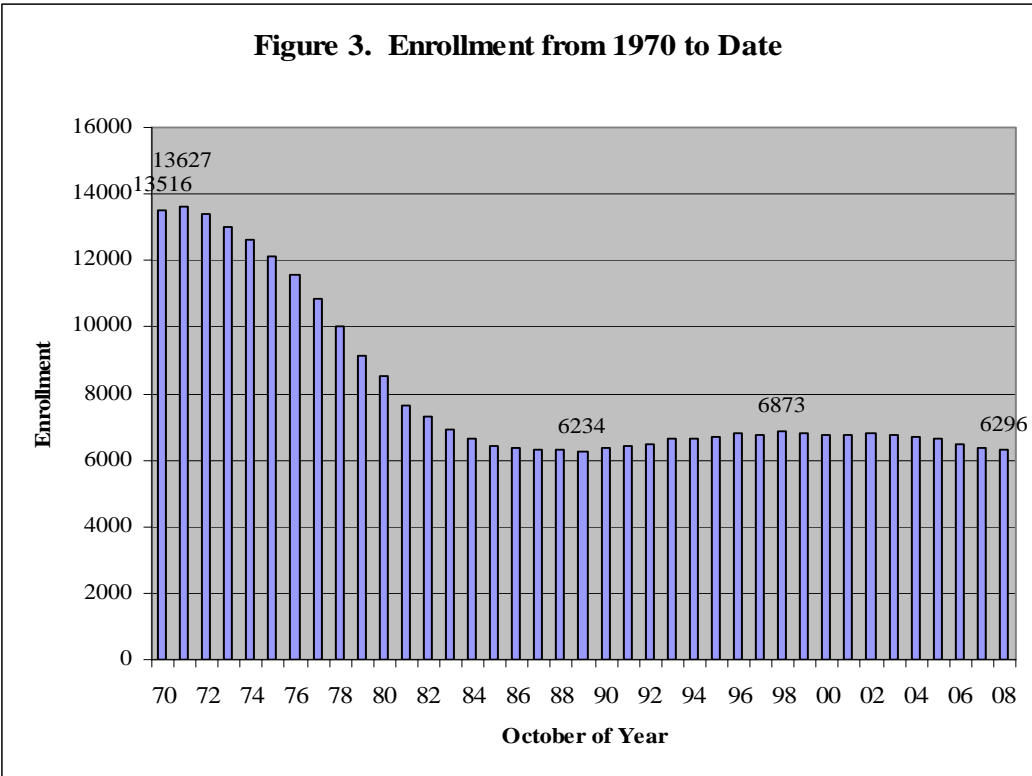
Between 1900 and 2000, the population of the town of Enfield grew from 6,699 to 45,212 residents. The 1950's were the period of greatest growth. The population more than doubled, increasing by 16,000 people in that decade. The growth continued in the 1960s. That decade had a population increase of over 14,700 people. Since then, the growth has slowed dramatically. Between 1970 and 1980 the town's population declined by almost 3,500 people. During the decade of the 1980s, the population increased by over 2,800 people. However, it declined by 320 people between 1990 and 2000. The increase in prison population masked some of the decline in the 1990s. The population living in households declined by more than 2,100 people in that decade. Figure 2 presents census estimates of Enfield population from 2000 to 2007. (The 2000 data in the two figures differ because the census population data are as of April 1 and Census estimates are as of July 1.)



It appears that the decline has continued, but at a slower rate. The US Census Bureau estimates that the population in the town of Enfield declined 0.5 percent between 2000 and 2007. The estimated population grew between 2000 and 2003, but has been declining since. The growth was the 161st ranked in the state. This contrasts to an estimated growth of 2.7 percent for the state, 2.1 percent for Hartford County and 3.5 percent for communities with similar socio-economic status.

In recent decades, enrollment has moved in a different pattern than the town's population. Figure 3 presents the enrollment in the Enfield Public Schools from 1970 to date. Enfield's all-time peak enrollment was 13,627 in 1971. Enrollment went through a decline that bottomed out in 1989 at 6,234 students. Between 1971 and 1989, enrollment fell by 54.3 percent. Enrollment then went through a period of growth that took it to 6,873 students in 1998. Between 1989 and 1998, enrollment rose by 10.3 percent. Between 1998 and 2008, enrollment declined 8.4 percent to 6,296 students. This contrasts to the statewide enrollment pattern. Between its 1971 peak and 1988, Connecticut public school enrollment declined by 31.5 percent. State enrollment hit a secondary peak in 2004. It grew 24.5 percent between the 1988 low and 2004. State enrollment declined by 1.8 percent between 2004 and 2008. While both the state and Enfield went through periods of decline and growth and decline again, Enfield's periods of decline were steeper than the state's and its growth was shallower.

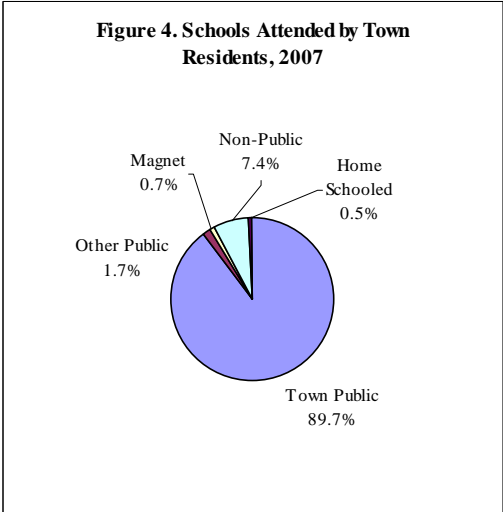
In recent years, Enfield's school population has changed at a slower rate than the town population. In 2000 the school population was 14.9 percent of the town's population. It eased to 14.0 percent in 2007. In comparison, it was 14.0 percent in 1990 and 20.0 percent in 1980. It still is well short of the 29.3 percent observed in 1970.



Current Enrollment

Data on the number attending non-public schools and home-schooled in 2008 are not yet available. Last year's data, however, should provide an adequate picture of where Enfield residents attend school. Table 1 and Figure 4 show that 89.7 percent of Enfield's school-age residents attended the Enfield public schools in 2007. Over seven percent of the school-age residents attended non-public schools in state. The number attending private schools out-of-state is not known. Other school-age residents attended magnet schools (0.7 percent) or public schools in other districts (1.7 percent). Few (33 children or 0.5 percent) were reported as being home schooled. There were 73 non-residents who attended the Enfield Public Schools under the Open Choice program. The projections in this report are based upon residents and non-residents who attend the Enfield Public schools. In 2007, there were 6,356 such students enrolled and in 2008 the figure was 6,296.

Table 1. 2007 Enrollment		
	Number	Percent
Residents		
A. Enfield Public	6283	89.7%
B. Other Public	121	1.7%
C. Magnets	48	0.7%
D. Non-Public	516	7.4%
E. Home Schooled	33	0.5%
Total (A+B+C+D+E)	7001	
F. Non-Residents	73	
Total Enrollment (A+F)	6356	



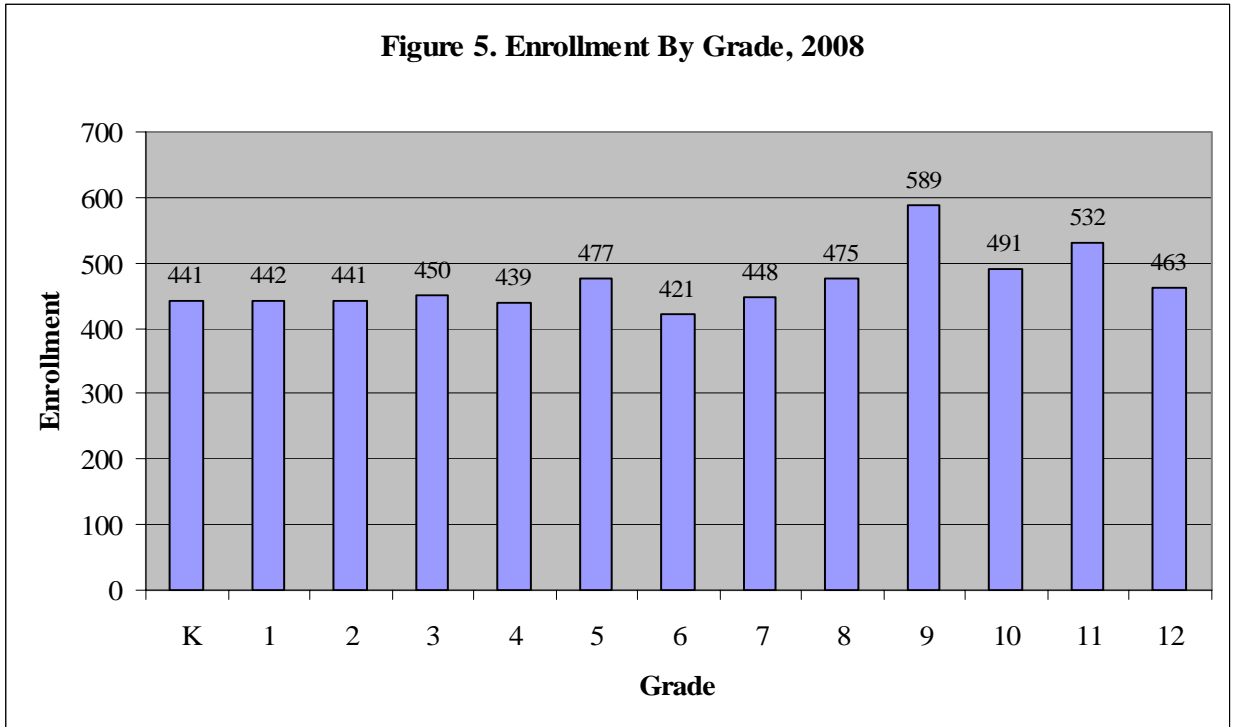


Figure 5 shows how the total enrollment of 6,109 students in grades K-12 was disbursed through the grades in 2008. The 187 children in pre-kindergarten programs are not shown. Grade 9 had the largest enrollment with 589 students followed by the 532 students in Grade 11. The smallest class was Grade 6 with 421 students. Enrollment in grades K-4 varied little and averaged 443 students. If current conditions continue, this year's Kindergarten class of 441 students will have 426 students when it enters middle school in 2015 and 495 members when it enters high school in 2017. This enrollment distribution is the starting point for the projection of enrollment. We then have to consider births and migration to and from Enfield. How these factors impact enrollment from this point onward is discussed below.

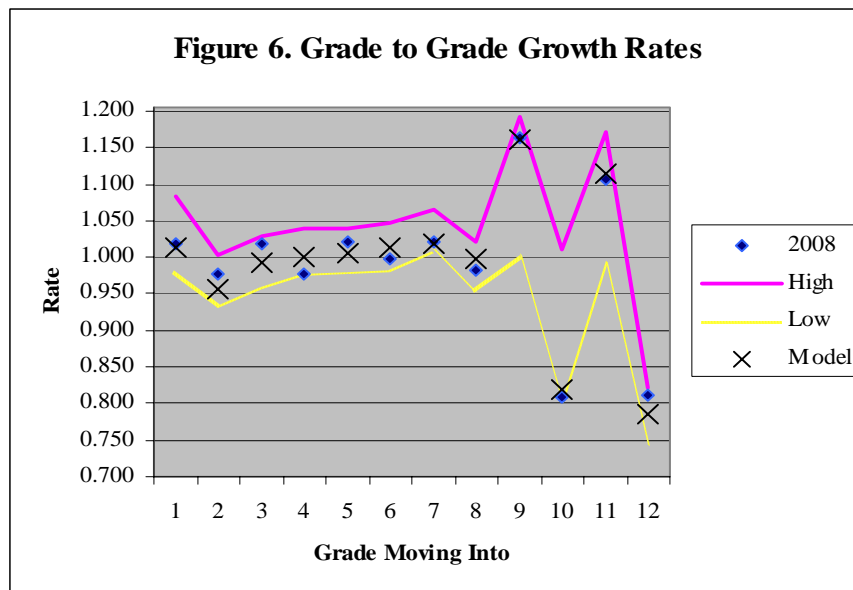
Projection Method

The projections in this report were generated using the cohort survival method. This is the standard method used by people running enrollment projections. For the grades above kindergarten, grade-to-grade growth factors for ten years are computed (see Appendix B). For example, if the number of fourth graders this year was 406 and the number of third graders last year was 400, then the growth factor is 1.015. Growth factors above one indicate that students moved in, transferred from non-public schools or that they were retained. Growth factors below one mean that students moved out, transferred to private school, dropped out, or were not promoted from the prior grade. For each grade I calculate four different averages: a ten-year median, a 3-year average, a five-year average and a weighted five year average. I choose the average that seems to best fit the data. The average growth factor for a grade is applied to the current enrollment from the prior grade. The projection builds grade by grade and year by year.

In the standard model, kindergarten enrollment is compared to births five years prior and some average of the observed growth or decline is used to project future kindergarten enrollment. My method breaks kindergarten enrollment into three parts: five-year olds, six-year olds entering kindergarten for the first time, and six-year old repeaters. Each component is analyzed separately and then combined to get total projected kindergarten. Kindergarten enrollment is notoriously difficult to predict. I feel that this component model can improve the predictability slightly.

To extend the projections beyond four years, I needed to project births. The Connecticut State Department of Public Health recorded 436 births to Enfield residents as their preliminary count for 2007. I tried to estimate 2008 births through a regression analysis of town clerk mid-year births against the State calendar year births. Unfortunately, the correlation between the two of 0.82 is a little low for a reliable estimate. To estimate births in 2008 to 2013, I utilized the Connecticut State Data Center's (CtSDC) projection of women of child-bearing in 2005, 2010 and 2015 and the estimated 2005 fertility rates of women in Enfield. Combined these produced estimated births in 2005, 2010 and 2015. I calculated the projected growth in these intervals, annualized them and applied them to the two year running averages of births starting with the observed births in 2006 and 2007.

Figure 6 gives a perspective of the Enfield's grade-to-grade growth factors. An "x" indicates the growth factor used in this projection. The diamond is the growth observed between last year and this year. The upper line indicates the largest growth factor observed over the past ten years and the lower line, the lowest. In general, the narrower the gap between the two lines is, the greater the accuracy of the projection. Large gaps may indicate a change in policy such as student retention or the opening or expansion of a regional magnet. Note that all the elementary and middle school growth rates are very close to 1.000. This is usually indicative of in-migration. The Grade 6 growth rate has been adjusted to account for students at regional magnets. The wide gaps in grades 9-11 are the result of the 2005 policy change which established that passing math and English was a prerequisite for moving on to Grade 10. Students who make up those courses are placed in Grade 11 the following year. This depresses the growth in Grade 10 and inflates it in Grade 11. The rates below one in Grades 10-12 reflect drop-outs, possibly some transfers to non-public schools and perhaps some out-migration.



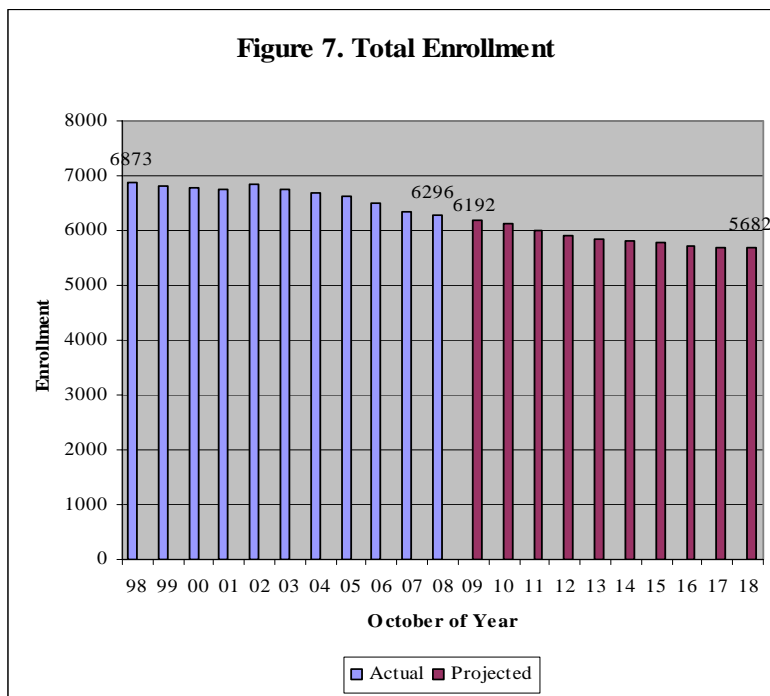
In this projection I used, in most cases, a weighted five-year average of the observed grade-to-grade growth. It gives the recent years a higher weight so that the projection responds more quickly to a possible shift in the growth rates. In kindergarten I assumed that Enfield would accept ten students from Hartford under the Open Choice program. I also assumed that 13 Grade 6 students would choose to enter the Metropolitan Learning Center or the Public Safety Academy. In high school I used a four-year weighted average to account for the 2005 policy change on assignment to grades.

Enrollment data from 1998 to 2008 were taken from the files of the Connecticut State Department of Education. The data are available on the Department's website at www.sde.ct.gov under the Grants Management section. All enrollment data after 2005 are subject to minor changes as they are reviewed and audited. Births from 1980 to 2007 are from the records of the State Department of Public Health.

Total Enrollment

Figure 7 and Table 2 present the observed total enrollment in Enfield from 1998 to 2008 and projected enrollment through 2018. Detailed grade-by-grade data may be found in Appendix A. Total enrollment in Enfield decreased from 6,873 in 1998 to 6,296 in 2008. Enrollment decreased by 577 students or 8.4 percent in those ten years. Statewide in that period, enrollment increased by 4.1 percent. Between 1998 and 2008, enrollment in Enfield declined at a higher rate than most of the similar (DRG F) towns in the region. Enfield's enrollment decline of 8.4 percent was less than that of Windsor Locks (-8.7 percent), but greater than that of Stafford (-5.7 percent), East Windsor (-5.6 percent), Plainville (-5.4 percent) and Thompson (-4.7 percent).

I project that enrollment will decline over the next ten years. Next year, I anticipate that total enrollment will decrease by about 100 students or 1.7 percent. I project that total enrollment will be about 5,680 students in 2018. That is 614 students or 9.8 percent below the current enrollment. Statewide, I project total enrollment will decline by 4.0 percent between 2008 and 2018. Total enrollment in Enfield should average 5,874 students over the ten-year projection period compared to an average total enrollment of 6,636 students over the past ten years.



Year	Students	Percent Change
1998	6873	
1999	6809	-0.9%
2000	6771	-0.6%
2001	6752	-0.3%
2002	6837	1.3%
2003	6744	-1.4%
2004	6688	-0.8%
2005	6618	-1.0%
2006	6491	-1.9%
2007	6356	-2.1%
2008	6296	-0.9%
2009	6192	-1.7%
2010	6122	-1.1%
2011	5991	-2.1%
2012	5907	-1.4%
2013	5832	-1.3%
2014	5807	-0.4%
2015	5778	-0.5%
2016	5723	-1.0%
2017	5702	-0.4%
2018	5682	-0.4%

K-6 Enrollment

Figure 8 and Table 3 present enrollment in grades K-6. Enrollment by grade may be found in Appendix A. Enrollment in grades K-6 moved from 3,581 students in 1998 to 3,111 students in 2008. The 470-pupil loss between 1998 and 2008 represented 13.1 percent of the 1998 elementary enrollment. Statewide, K-6 enrollment declined 4.6 percent between 1998 and 2008.

I anticipate that the decline will continue, but at a slower rate. I believe that October 2009 elementary enrollment will be about 20 students more than this year's. I project that elementary enrollment will bottom out at 2,890 students in 2017. The enrollment in 2018 should be between 2,930 and 2,940 students. Between 2008 and 2018 the projected decline is almost 180 students or 5.8 percent. Statewide, I am projecting a 2.2 percent decline in K-6 enrollment between 2008 and 2018. Over the ten-year projection period, I believe elementary enrollment will average about 2,980 students compared to the average of 3,329 K-6 students observed over the past ten years.

These figures exclude pre-kindergarten children. In the past ten years, pre-kindergarten enrollment increased from 92 to 187 children. My projection model keeps pre-kindergarten enrollment constant at 187 children throughout the projection. In 2007, 54 Enfield residents attended prekindergarten in non-public elementary schools in Connecticut.

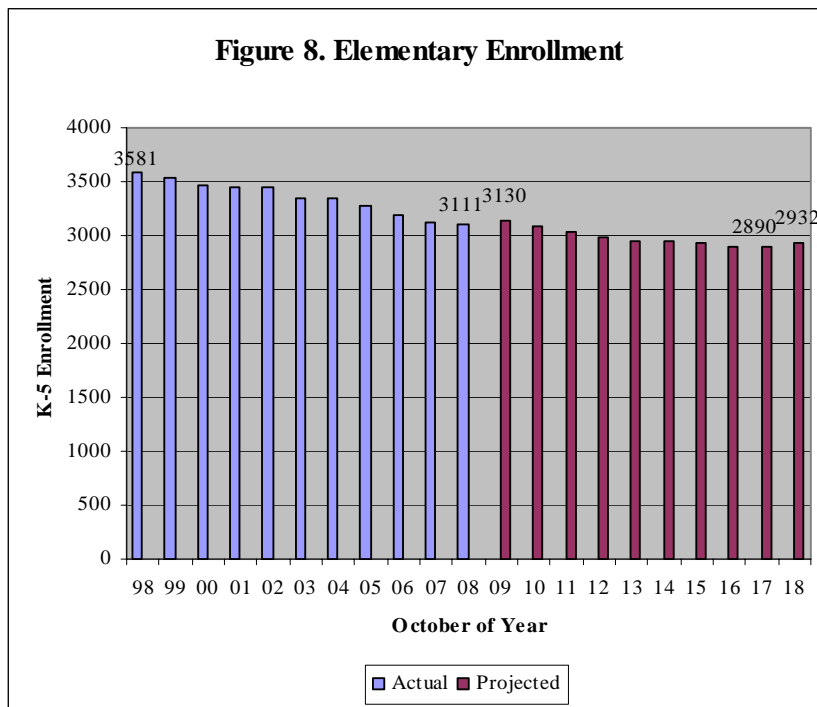


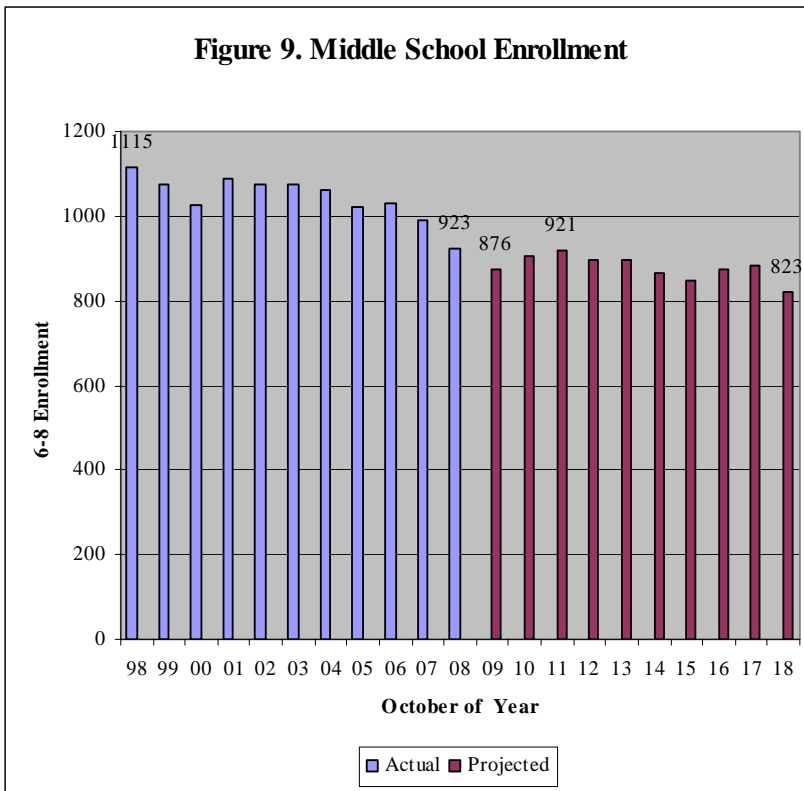
Table 3. K-6 Enrollment

Year	Students	Percent Change
1998	3581	
1999	3531	-1.4%
2000	3467	-1.8%
2001	3452	-0.4%
2002	3456	0.1%
2003	3352	-3.0%
2004	3343	-0.3%
2005	3270	-2.2%
2006	3188	-2.5%
2007	3123	-2.0%
2008	3111	-0.4%
2009	3130	0.6%
2010	3090	-1.3%
2011	3034	-1.8%
2012	2990	-1.5%
2013	2953	-1.2%
2014	2944	-0.3%
2015	2931	-0.4%
2016	2903	-1.0%
2017	2890	-0.4%
2018	2932	1.5%

Middle School Enrollment

Figure 9 and Table 4 present enrollment in grades 7-8. Grade-by-grade may be found in Appendix A. Between 1998 and 2008 enrollment at the John F. Kennedy Middle School declined from 1,115 to 923 students. Enrollment decreased by 192 students or 17.2 percent. Statewide, enrollment in grades 7-8 grew 5.8 percent between 1998 and 2008.

I anticipate that the next ten years will be a period decline with a couple of spurts of growth mixed in. Next year's enrollment should be 45-50 less than this year. Peak enrollment over the next ten years should come in 2011 at about 920 students. I feel that by 2018, enrollment at the John F. Kennedy Middle School will be about 820 students. Between 2008 and 2018, I expect enrollment will decline by 100 students, or 10.8 percent. Statewide, I have projected a 6.8 percent decline in grade 7-8 enrollment between 2008 and 2018. Over the ten-year projection period, enrollment in middle school is expected to average nearly 880 students compared to the average of 1,037 students in grades 7-8 in 1998 to 2008.



Year	Students	Percent Change
1998	1115	
1999	1073	-3.8%
2000	1028	-4.2%
2001	1087	5.7%
2002	1076	-1.0%
2003	1076	0.0%
2004	1063	-1.2%
2005	1021	-4.0%
2006	1032	1.1%
2007	991	-4.0%
2008	923	-6.9%
2009	876	-5.1%
2010	906	3.4%
2011	921	1.7%
2012	897	-2.6%
2013	896	-0.1%
2014	864	-3.6%
2015	848	-1.9%
2016	874	3.1%
2017	884	1.1%
2018	823	-6.9%

High School Enrollment

Grade 9 is a time when students exercise a wide range of options about where to attend high school. The State Technical High Schools and vocational-agriculture centers are two options that are not available before Grade 9. Figure 10 presents what schools Enfield residents enrolled in Grade 9 chose to attend in 2007 (the latest data available). Fully 93.6 percent attended Enfield high schools. The balance attended non-public schools in state (1.6 percent), the State Technical Schools (2.4 percent) or other public schools (2.4 percent).

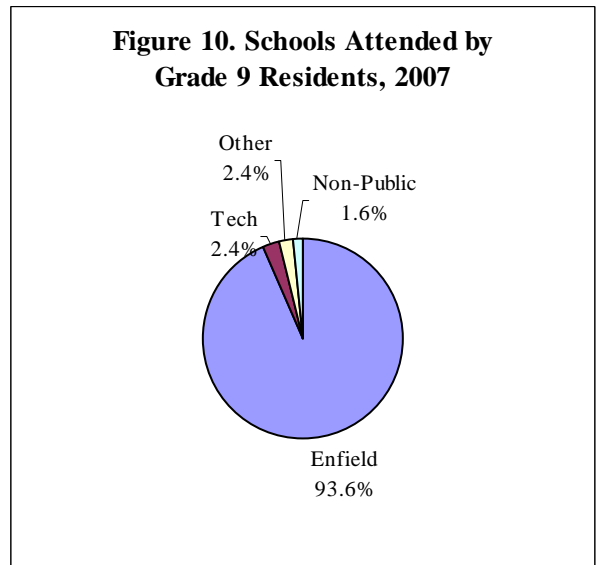


Figure 11 and Table 5 present enrollment in grades 9-12. Between 1998 and 2000, enrollment in Enfield high schools increased from 2,085 to 2,182 students. In 2008, enrollment was 2,075 students, 0.5 percent below the 1998 level. High school enrollment statewide increased 20.1 percent in the past ten years.

Enrollment is expected to decline over the next ten years. Next year I anticipate a decrease of about 75 students. By 2018, I anticipate high school enrollment will be 1,740 students or 16.1 percent below the current level. Statewide, I project that high school enrollment will drop 9.1 percent between 2008 and 2018. The projection assumes a 116.2 percent yield from Grade 8. This is a combination of Grade 8 students moving up, transfers from non-public schools, student migration in and out, and Grade 9 students retained.

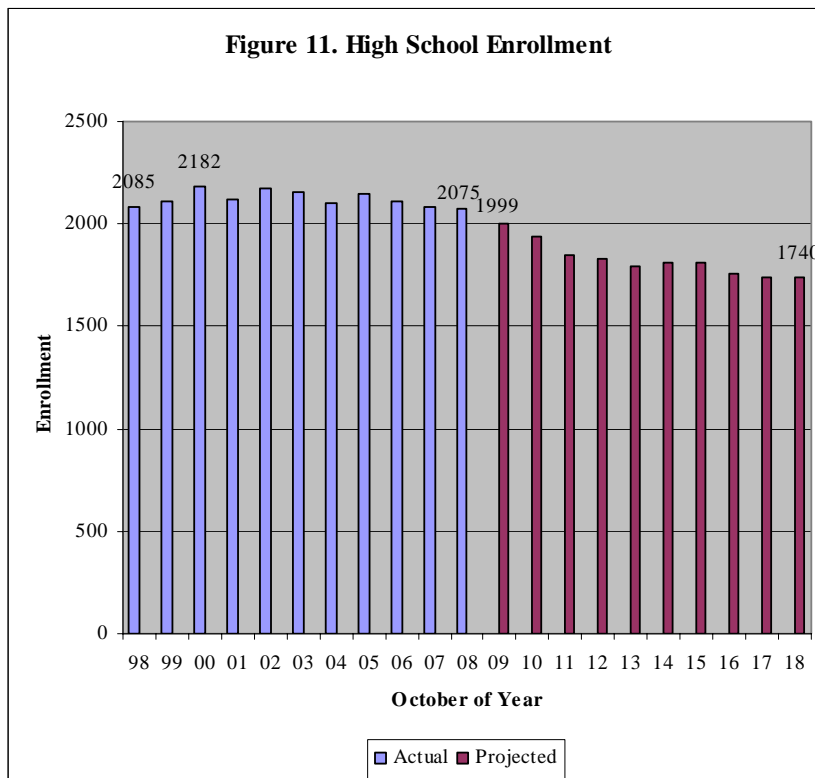
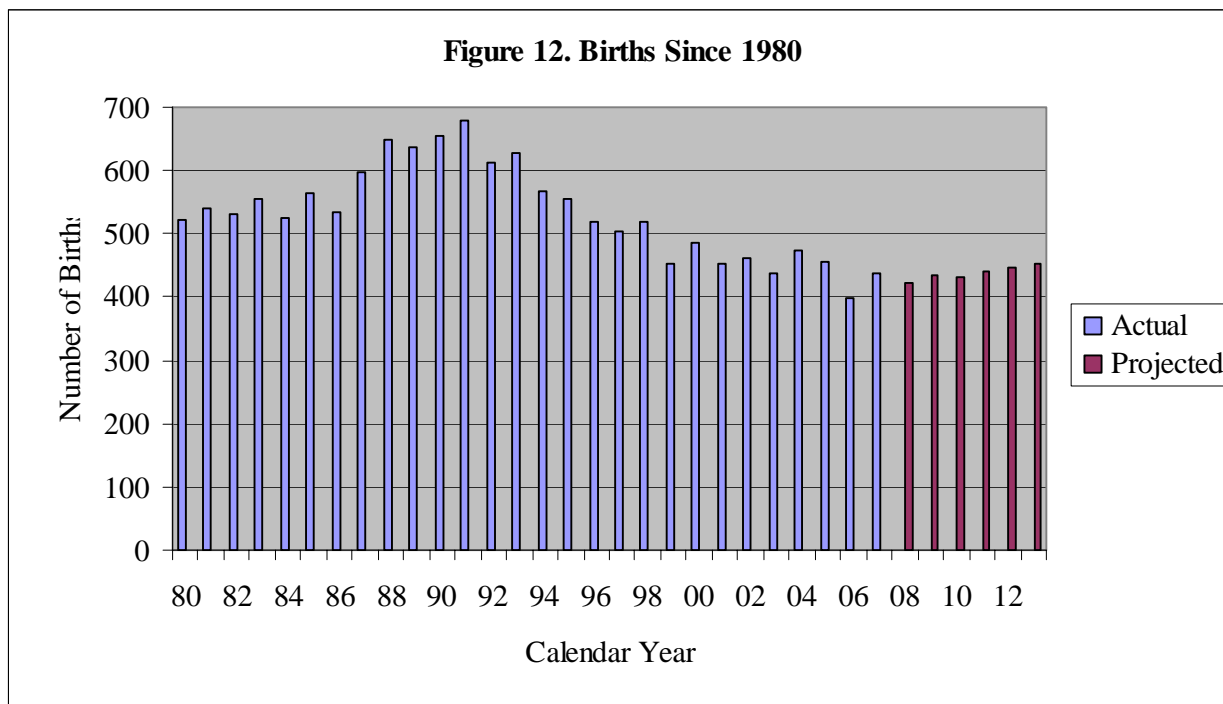


Table 5. High School Enrollment		
Year	Students	Percent Change
1998	2085	
1999	2112	1.3%
2000	2182	3.3%
2001	2118	-2.9%
2002	2170	2.5%
2003	2152	-0.8%
2004	2102	-2.3%
2005	2145	2.0%
2006	2114	-1.4%
2007	2083	-1.5%
2008	2075	-0.4%
2009	1999	-3.7%
2010	1939	-3.0%
2011	1849	-4.6%
2012	1833	-0.9%
2013	1796	-2.0%
2014	1812	0.9%
2015	1812	0.0%
2016	1759	-2.9%
2017	1741	-1.0%
2018	1740	-0.1%

Factors Affecting the Elementary Projection

The primary reasons for elementary enrollment change lie in the births and total yield from the birth cohort. Figure 12 presents the births from 1980 to 2007 and projected births through 2013. Births ranged from a low of 399 in 2006 to a high of 678 in 1991. There were 436 births in 2007. In the five years from 1999 to 2003 (this fall's kindergarten through 4th graders) births averaged 458. My data indicate that births in the 2004 through 2008 period will average 437. The projection in years 2014 to 2018 assumes an average of 441 births annually between 2009 and 2013. This is based in part upon the Connecticut State Data Center projection of Enfield women of child-bearing age (15 to 44). They have projected a 26.6 percent decline in this age group between 2000 and 2015. In 2008 your town clerk recorded 173 births through June 30 compared to 187 for the corresponding period in 2007. Unfortunately, the correlation between mid-year and calendar year births was not quite high enough to utilize. My model estimates there will be 422 births to Enfield residents in 2008



Most models project kindergarten directly from births five-years prior. My model breaks kindergarten enrollment into its component parts and bases the projection on an analysis of each part. Figure 13 gives the breakdown of the 2008 kindergarten enrollment. That class of 441 children had 373 resident five-year olds, 30 resident six-year olds who had entered kindergarten for the first time (parent hold-outs), 28 six-year old repeaters and 10 children from Hartford. Seven percent of kindergarteners were parent hold-outs. In DRG F towns in 2007 (the latest information available) 90.1 percent of kindergartners were the standard age, 4.9 percent were parent holdouts and 5.0 percent were retained.

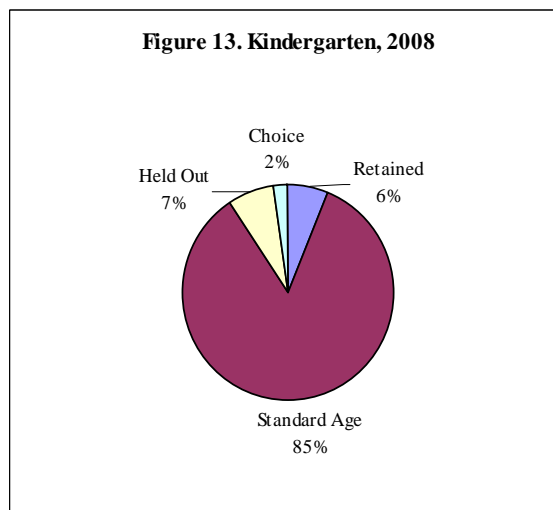
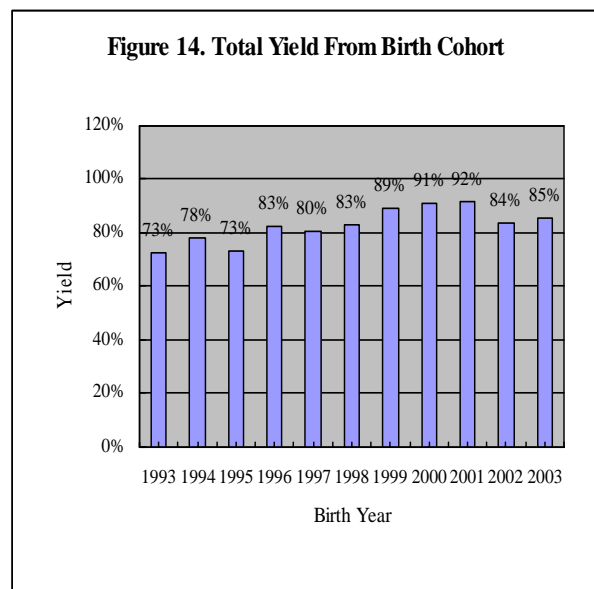


Table 6 gives a history of enrollment in kindergarten since 1998 for Enfield and relates the components of kindergarten enrollment back to the appropriate birth cohort. Retention is tied to the prior year's kindergarten enrollment. Enfield kindergarten is both half- and full-day. To estimate kindergarten enrollment, I used the five-year weighted average of retentions, and yields from births five and six years ago plus ten Hartford students under the Open Choice program.

Year	Birth Year	Births	K	---- Non-Retained ----			Yield From Births 5-Years Prior	Yield From Births 6-Years Prior	Total Yield From Birth Cohort		
				Retained From Prior Year	Born 5-Years Prior Resident	Born 6 Years Prior Non-Resident					
1997	1992	612	474								
1998	1993	627	502	25	430	0	47	5.3%	68.5%	7.7%	72.9%
1999	1994	566	470	29	414	0	27	5.8%	73.1%	4.3%	78.3%
2000	1995	556	430	26	375	0	29	5.5%	67.4%	5.1%	73.0%
2001	1996	520	459	25	403	0	31	5.8%	77.5%	5.6%	82.7%
2002	1997	505	434	26	381	0	27	5.7%	75.4%	5.2%	80.4%
2003	1998	520	451	23	403	0	25	5.3%	77.5%	5.0%	82.9%
2004	1999	452	462	37	381	16	28	8.2%	84.3%	5.4%	88.9%
2005	2000	486	469	24	417	7	21	5.2%	85.8%	4.6%	91.4%
2006	2001	454	460	27	397	9	27	5.8%	87.4%	5.6%	91.6%
2007	2002	463	434	49	357	9	19	10.7%	77.1%	4.2%	83.6%
2008	2003	437	441	28	373	10	30	6.5%	85.4%	6.5%	85.4%
3-Year Average								7.6%	83.2%	5.4%	86.9%
Weighted 3-Year Average								7.7%	83.0%	5.6%	85.8%
5-Year Average								7.2%	84.0%	5.3%	88.2%
Weighted 5-Year Average								7.4%	83.6%	5.4%	87.2%

To give a simple picture of the growth between birth and kindergarten, I calculate the total yield from the birth cohort. This is the percentage of a given birth year who enter your school as five- or six-year olds. The 2002 birth cohort of 463 children had 357 enter kindergarten in 2007 as five-year olds and 30 enter kindergarten in 2008 as six-year olds. This computes to an 83.6 percent yield. Figure 14 shows how the total yield from the birth cohort has been variable in recent years. The yield ranged from 73 percent for the 1993 birth cohort to 92 percent for the 2001 birth cohort. I estimate the yield will be 85.4 percent for the 2003 birth cohort. Yields below 100 percent are an indication that families with young children are moving out Enfield after giving birth in town or choosing non-public schools. The projection uses a yield of 87.2 percent plus 7.4 percent retention from the prior year's kindergarten.



Births five-years prior is the key component of the three I use to project kindergarten enrollment. How accurately kindergarten enrollment can be projected is illustrated by the relationship between births and kindergarten enrollment. For the period 1990 to 2008, the correlation between births and kindergarten enrollment five years later was a moderate 0.66. This means that births five years prior to kindergarten explained 44 percent of the movement of kindergarten enrollment. Other factors such as migration, retention and parent hold-outs contributed to the balance. On average, over the 1990 to 2008 period, kindergarten enrollment differed by 22 children from the level predicted using regression analysis of births five years prior.

Context of the Projection

The cohort-survival method typically needs only births and a few years of recent enrollment data to generate a projection. Mathematically, nothing else matters. But enrollment changes do not occur in a vacuum. Events and policies in the district, community and region all have some bearing on enrollment. Remember that a basic assumption of the cohort-survival method is that the recent past can be a good predictor of the near future. It is incumbent for every receiver of a projection to determine what events happened in the past five years and whether they are likely to change.

To assist in this endeavor, this report examines seven factors that could affect enrollment: new home construction; sales of existing homes; people in the labor market; non-public enrollment; student migration; non-resident enrollment in Enfield schools and resident enrollment in other public schools.

Figure 15 presents the net new housing units constructed from 1997 to 2007 from the State Department of Economic and Community Development. In the past ten years the number of net (of demolitions) new housing units constructed in Enfield ranged from 86 in 1998 to 15 in 2007. In the five-year look-back period for this projection, there was an average of 30 net new housing units constructed.

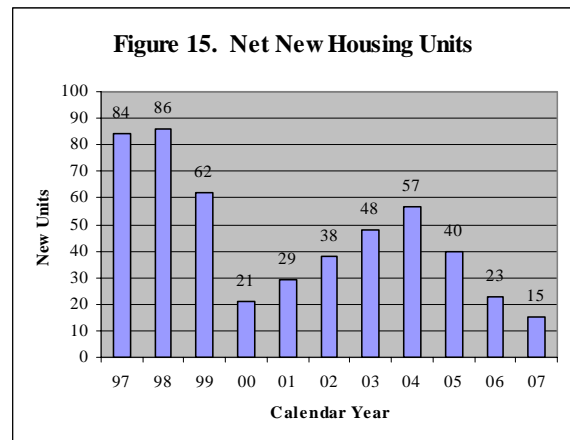
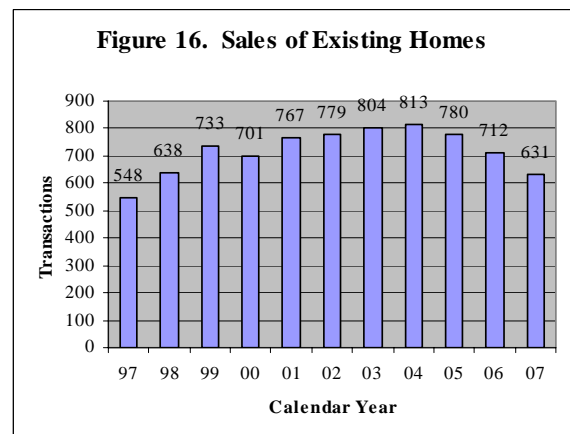


Figure 16 presents my estimate of the number of sales of existing homes. I derived it by taking the number of real estate transactions from The Warren Group/Commercial Record and subtracting the number of new single-family housing units authorized. This is an estimate because of the lag between the time a new house is authorized and it is sold. The estimated number of sales of existing homes ranged from 548 in 1997 to 813 in 2004. There were 631 sales of existing homes in 2007. The projection assumes 718 sales annually. Preliminary sales through October of 2008 indicate that sales for the entire year could fall to the 570 range.



Seniors downsizing their houses can open up opportunities for families with children. According to the 2000 Census there were 3,130 owner-occupied dwellings with owners 65 years or older. This represented 25.2 percent of the owner-occupied housing, the same as the state average. In fully 2,745 of those homes, the owners moved into town more than 20 years ago. Those who have remained in town are now at least 72 years old. The fact that 1,085 houses in 2000 were still occupied by long-term residents 75 years and older, means only a portion of those houses will be coming on the market.

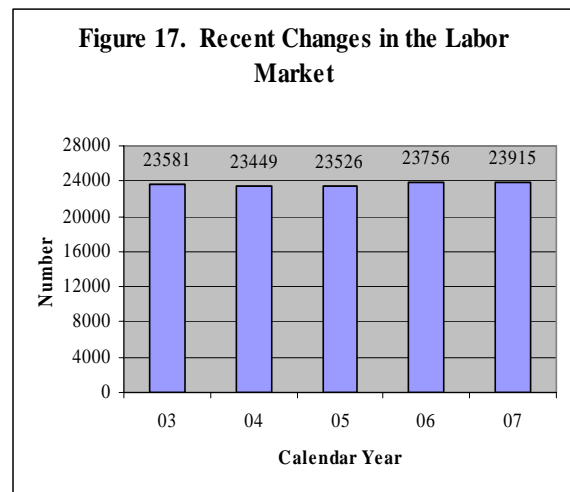


Figure 17 examines the number of people in the labor market from the US Department of Labor, Bureau of Labor Statistics. These are people 16 years of age or older who were working or actively seeking employment. Since it excludes most students and the elderly, I find it a very rough proxy of the number of school-age families. The Enfield labor force increased 1.4 percent between 2003 and 2007. This was lower than the state (3.4 percent) and Hartford County (3.9 percent).

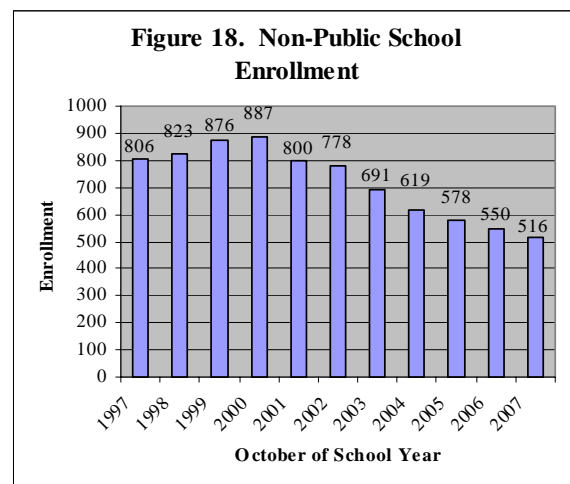


Figure 18 presents the non-public enrollment over the past ten years for students from the town of Enfield. The data are from the records of the Connecticut State Department of Education. Non-public enrollment ranged from a high of 887 students in 2000 to a low of 516 students in 2007. The 2007 enrollment represented 7.5 percent of the combined public and non-public enrollment, compared to a peak of 11.6 percent in 2000.

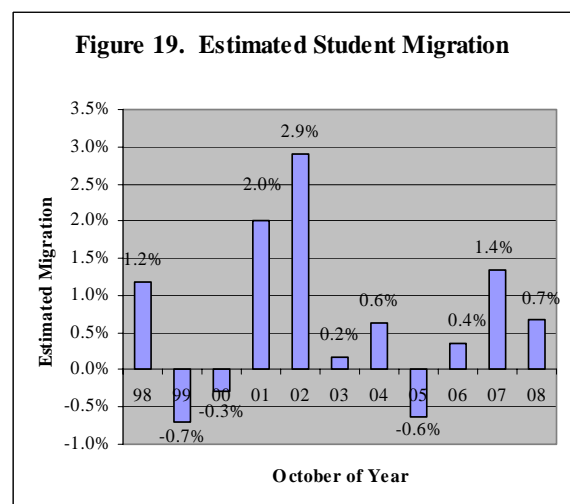


Figure 19 presents the estimated student migration for the 1998 to 2008 period. It is based on observed enrollment in the Enfield public schools with an adjustment for residents attending other public schools and non-residents attending Enfield schools. Estimated migration ranged from a high of 2.9 percent in 2002 to a low of -0.7 percent in 1999. In eight of the past 11 years, migration has been positive. The estimated rate in 2008 was +0.7 percent. The projection assumes an average in-migration of 0.61 percent.

Figure 20 presents Enfield enrollment in other public schools. This would include full-time magnet schools run by the Capitol Region Education Council (CREC) or the Hartford school district, the State Technical High Schools and vocational-agriculture centers. The number of Enfield residents attending a public school other than the Enfield Public Schools rose from 138 in 2002 to 183 in 2008. In 2008 a total of 49 Enfield students attended a state technical high school, 45 attended a vocational-agriculture center, 42 attended the Metropolitan Learning Center, 32 attended another magnet or charter school and 15 attended some other public school. These data were extracted from the Public School Information System (PSIS) of the Connecticut State Department of Education.

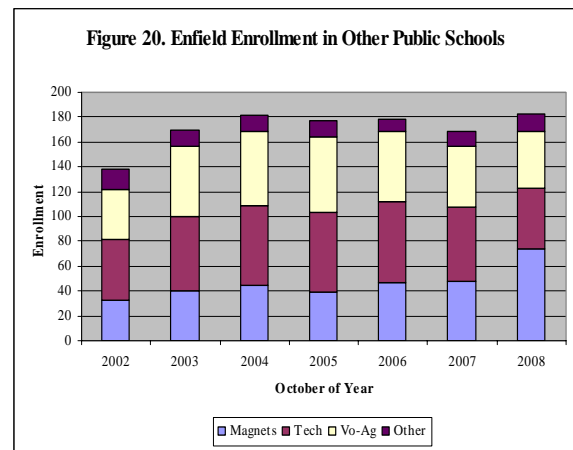
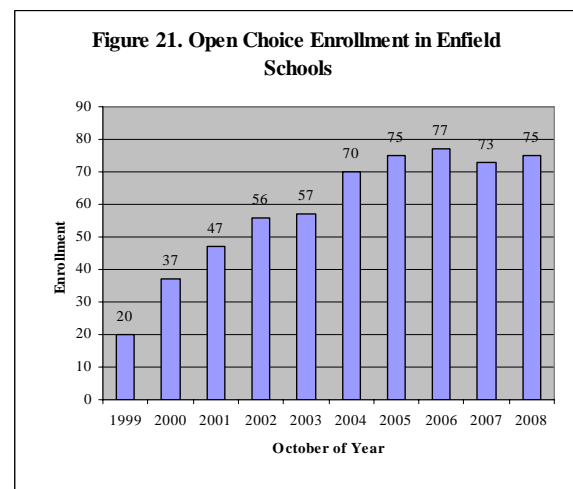


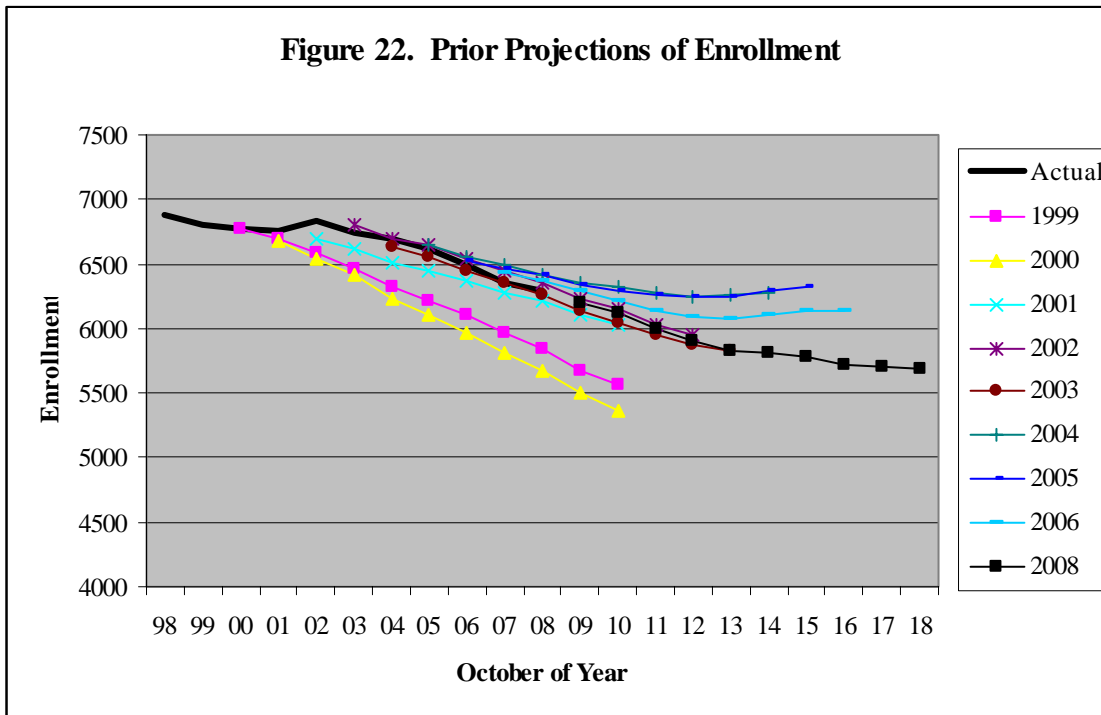
Figure 21 shows the enrollment of non-resident students in the Enfield public schools under the Open Choice Program. Enfield participation in the Open Choice program has grown from 20 students in 1999 to 75 Hartford residents in this program in 2008. Peak enrollment was 77 students in 2006. The projection assumes that 10 Hartford residents will enter the Enfield schools annually in kindergarten. Greater participation by Hartford-area towns is anticipated as part of the April 2008 Stipulation and Proposed Order of the Sheff v O'Neill case. In an effort to get more participation, Public Act 07-3 raised the average transportation grant for the Open Choice program from \$2,100 to \$3,250 and increased the per pupil grant to receiving districts from \$2,000 to \$2,500.



Prior Projections of Enrollment

The cohort-survival projection method works by moving forward the pattern of recent events that are subsumed within the grade-by-grade enrollment. This works very well when communities are stable. That includes places that are growing or declining at a steady rate. One way to know if that assumption is valid is to examine how past projections have fared. Figure 22 presents the enrollment projections that I have run for Enfield since 1999. The eight enrollment projections that I did between 1999 and 2006 had one-year error rates that averaged 0.9 percent. The five projections done between 1999 and 2003 had an average five-year error rate of 3.4 percent, which is 0.67 percent annualized. My last projection for Enfield, which I did in 2006, is running 1.1 percent high after two years.

In my work I have found the cohort-survival method provides estimates that are sufficiently accurate for intermediate-range policy planning. The eight-year planning horizon for school construction grants is at the limit of the useful accuracy of the method. I analyzed the eight-year accuracy of the district projections from across the state that I ran in 1999. I found for the 66 district-level projections, the 1999 projection had a 7.5 percent error rate in predicting 2007 enrollment. The error was less than five percent in 38 percent of the projections and more than 15 percent in 11 percent of the projections. The 1999 projections under-estimated the 2007 enrollment by an average of 1.7 percent.



Summary

Total enrollment is projected to decline 9.8 percent, going from 6,296 students in 2008 to about 5,680 students in 2018. Grade K-6 enrollment is projected to decrease by 5.8 percent from the October 2008 level of 3,111 students to around 2,930 students in 2018. Enrollment at the John F. Kennedy Middle School is projected to decline by 10.8 percent from 923 students in the fall of 2008 to about 825 students in 2018. High school enrollment is projected to decrease by 335 students (16.1 percent) to 1,740 students over the next decade.

These projections are based upon several other assumptions revolving around the notion that the recent past is a good predictor of the near future. The projection assumes that the following school policies will continue: kindergarten will remain a mixture of half- and full-day; retention policies will not change; no new magnet schools in the region and no change in the drop-out rate. The projection assumes the following population growth factors will not change appreciably: births will average 441 over the 2009 to 2013 period; a 12.8 percent decrease between the number of births and kindergarten enrollment; and a student migration of +0.61 percent. Additionally, there will be a proportionate change in non-public school enrollment; seven percent of parents will start their children in kindergarten at age six; 30 new housing units will be constructed annually; there will be an average of 718 sales of existing homes and a slowly increasing labor force.

There are some other factors beyond the scope of this report that can influence enrollment. Has the perceived quality of the school district changed absolutely or relative to neighboring communities? Are the schools well maintained? Is there on-going school construction? What is the regional job outlook? What are your taxes relative to neighboring towns? Is there land available for residential development?

This is an incredibly difficult time to predict future enrollment. Tight credit, mortgage foreclosures, an increasing unemployment rate, a recession and the financial turmoil on Wall Street all make conditions today different than a couple of years ago. These conditions are only a part of the five-year enrollment history that is used to look forward to the next ten years. We have not yet fully seen how they will impact enrollment. We cannot know today how long these conditions will remain, whether they will increase in severity and when they might end. It is very likely they will impact any enrollment projection made today. Just how they will impact Connecticut enrollment in general or in Enfield in particular is a matter of speculation. The cohort survival method relies on observed data from the recent past. The method is somewhat unresponsive to change. However, I know of no alternative data-based model that is responsive and produces grade-level data.

This projection should be used as a starting point for local planning. Examine the factors and assumptions underlying the method. You know your community best. Apply your knowledge of the specific conditions in Enfield and then make adjustments as necessary.

Appendix A. Enfield Enrollment Projected by Grade to 2018

School Year	Birth Year	Births ¹	K	1	2	3	4	5	6 ²	7	8	9	10	11	12	PreK	K-6	7-8	9-12	Total
1998-99	1993	627	501	505	538	486	538	518	495	573	542	547	555	540	443	92	3581	1115	2085	6873
1999-00	1994	566	470	504	494	543	487	531	502	527	546	575	543	550	444	93	3531	1073	2112	6809
2000-01	1995	556	430	492	491	494	541	494	525	521	507	579	569	588	446	94	3467	1028	2182	6771
2001-02	1996	520	459	460	487	500	498	554	494	555	532	523	565	589	441	95	3452	1087	2118	6752
2002-03	1997	505	434	491	461	498	520	507	545	522	554	556	528	606	480	135	3456	1076	2170	6837
2003-04	1998	520	451	467	458	474	493	519	490	565	511	554	541	577	480	164	3352	1076	2152	6744
2004-05	1999	452	462	488	451	444	471	512	515	506	557	529	534	586	453	180	3343	1063	2102	6688
2005-06	2000	486	469	482	465	433	445	478	498	519	502	630	459	605	451	182	3270	1021	2145	6618
2006-07	2001	454	460	469	454	458	437	436	474	503	529	598	528	538	450	157	3188	1032	2114	6491
2007-08	2002	463	434	451	442	449	467	434	446	483	508	608	481	571	423	159	3123	991	2083	6356
2008-09	2003	437	441	442	441	450	439	477	421	448	475	589	491	532	463	187	3111	923	2075	6296
Projected																				
2009-10	2004	473	461	446	423	438	450	442	470	428	448	552	482	547	418	187	3130	876	1999	6192
2010-11	2005	456	450	467	427	420	438	453	435	478	428	520	452	537	430	187	3090	906	1939	6122
2011-12	2006	399	401	455	447	424	420	441	446	443	478	497	426	504	422	187	3034	921	1849	5991
2012-13	2007	436	425	406	435	444	424	422	434	454	443	555	407	475	396	187	2990	897	1833	5907
2013-14	2008	422	417	430	389	432	444	426	415	442	454	515	454	454	373	187	2953	896	1796	5832
2014-15	2009	433	426	422	412	386	432	447	419	422	442	527	422	506	357	187	2944	864	1812	5807
2015-16	2010	432	426	431	404	409	386	435	440	426	422	513	431	470	398	187	2931	848	1812	5778
2016-17	2011	442	434	431	412	401	409	388	428	448	426	490	420	480	369	187	2903	874	1759	5723
2017-18	2012	446	438	439	412	409	401	411	380	436	448	495	401	468	377	187	2890	884	1741	5702
2018-19	2013	453	445	443	420	409	409	403	403	387	436	520	405	447	368	187	2932	823	1740	5682

¹2007 births are preliminary from the State department of Public Health. 2008 - 2013 births were derived from the estimated 2005 fertility rates of women in Enfield and the Connecticut State Data Center projection of women of child-bearing age in Enfield applied to the moving average of births the past two years.

²Assumes 13 students will leave for the Metropolitan Learning Center or Public Safety Academy.

Appendix B. Growth from Grade to Grade across Years

October of Year	Grade Moved Into from Prior Year													PreK	Average	Estimated Migration ¹
	K	1	2	3	4	5	6	7	8	9	10	11	12			
1999	0.830	1.006	0.978	1.009	1.002	0.987	0.983	1.065	0.953	1.061	0.993	0.991	0.822	0.975	-0.70%	
2000	0.773	1.047	0.974	1.000	0.996	1.014	1.004	1.038	0.962	1.060	0.990	1.083	0.811	0.981	-0.29%	
2001	0.883	1.070	0.990	1.018	1.008	1.024	1.012	1.057	1.021	1.032	0.976	1.035	0.750	0.990	2.00%	
2002	0.859	1.070	1.002	1.023	1.040	1.018	1.002	1.057	0.998	1.045	1.010	1.073	0.815	1.001	2.90%	
2003	0.867	1.076	0.933	1.028	0.990	0.998	0.986	1.037	0.979	1.000	0.973	1.093	0.792	0.981	0.16%	
2004	1.022	1.082	0.966	0.969	0.994	1.039	1.010	1.033	0.986	1.035	0.964	1.083	0.785	0.997	0.64%	
2005	0.965	1.043	0.953	0.960	1.002	1.015	0.988	1.008	0.992	1.131	0.868	1.133	0.770	0.987	-0.62%	
2006	1.013	1.000	0.942	0.985	1.009	0.980	1.013	1.010	1.019	1.191	0.838	1.172	0.744	0.994	0.35%	
2007	0.937	0.980	0.942	0.989	1.020	0.993	1.046	1.019	1.010	1.149	0.804	1.081	0.786	0.981	1.35%	
2008	1.009	1.018	0.978	1.018	0.978	1.021	0.998	1.022	0.983	1.163	0.808	1.106	0.811	0.993	0.67%	
5 Year Ave.	0.989	1.025	0.956	0.984	1.001	1.010	1.011	1.018	0.998	1.134	0.856	1.115	0.779	0.991		
3 Year Ave.	0.987	1.000	0.954	0.997	1.002	0.998	1.019	1.017	1.004	1.168	0.817	1.120	0.780	0.989		
Weighted 5 year	0.986	1.012	0.957	0.993	1.000	1.006	1.013	1.018	0.999	1.152	0.831	1.115	0.784	0.990		
Median, past 10 years	0.910	1.045	0.970	1.005	1.002	1.015	1.003	1.035	0.989	1.061	0.968	1.083	0.789	0.990		
Enrollment Multiplier ²	³	1.012	0.957	0.993	1.000	1.006	1.013	1.018	0.999	1.162	0.819	1.115	0.786	1.000	0.990	

¹ Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year.

² Based on five-year weighted averages for grades 1-8 and 4-year weighted averages for grades 9-12 to account for recent policy change in grade assignment.

³ Based on five-year weighted averages of births five- and six- years ago plus retentions and enrollment of 10 students in the Open Choice program.