BOTELLE ELEMENTARY SCHOOL ENROLLMENT PROJECTED TO 2023
Norfolk

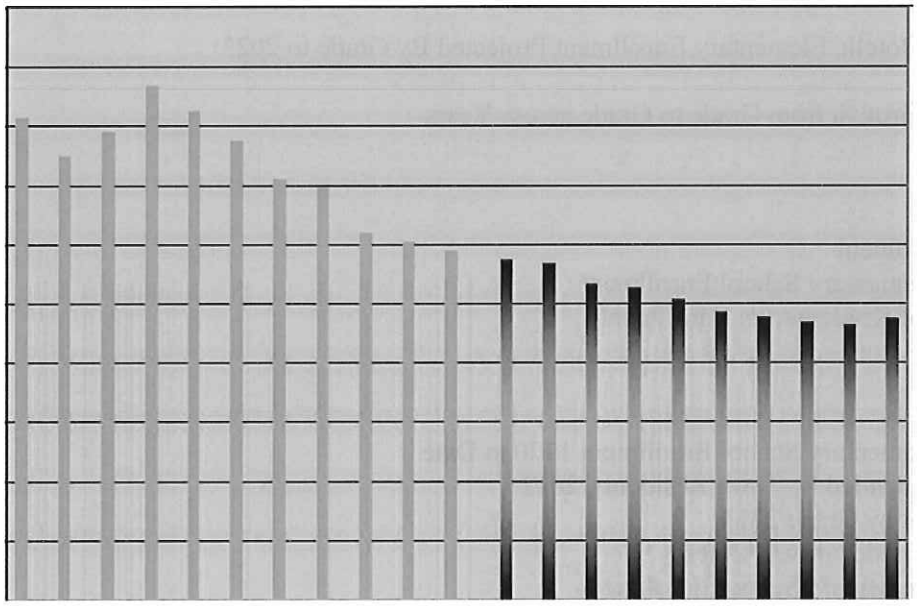

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Table of Contents

Section	Page
Introduction	1
Perspective	1
Current Enrollment	2
Projection Method	3
Botelle Elementary School Enrollment	5
Factors Affecting the Projection	6
Context of the Projection	8
Prior Projections of Enrollment	11
Summary	12
Appendix A. Botelle Elementary Enrollment Projected By Grade to 2023	13
Appendix B. Growth from Grade to Grade across Years	14

List of Tables

1. 2013 Enrollment 2
2. Botelle Elementary School Enrollment 5
3. Analysis of Kindergarten Enrollment 8

List of Figures

1. Botelle Elementary School Enrollment 1970 to Date 1
2. Schools Attended by Town Residents, 2012 2
3. Enrollment by Grade 2013 3
4. Grade to Grade Growth Rates 4
5. Botelle Elementary School Enrollment 5
6. Births since 1980 6
7. Kindergarten Yield from Birth Cohort 7
8. Estimated Population Growth, 2010 to 2012 8
9. Projected Norfolk Population Ages 0-14 8
10. Norfolk Women of Child-Bearing Age 9
11. Growth of the Labor Force 9
12. Net New Housing Units 9
13. Sales of Existing Homes 10
14. Non-Public K-6 School Enrollment 10
15. Estimated Student Migration 10
16. Prior Projections of Enrollment 11

Introduction

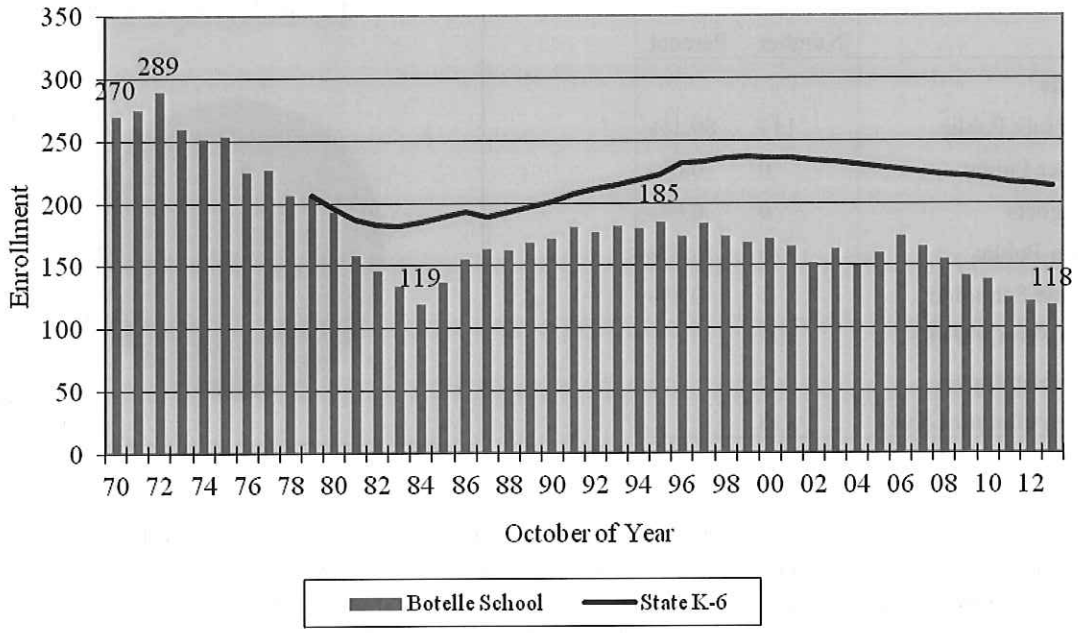
This report is a ten-year projection of enrollment for the Botelle Elementary School. It is based on residents attending the school in October of the school year. Children in the Bridges II program of Shared Services are included. The report includes 44 years of enrollment to place the projection into 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. Several factors that influence school enrollment - town population, women of child-bearing age, the labor force, housing, non-public enrollment and migration - 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. They are necessary component for school closing, consolidation or expansion. Projections are a critical and required step in planning for school facilities. The State of Connecticut requires eight-year school-based projections as a critical component of determining the size of the project for which reimbursement is eligible. This report is suitable for that purpose.

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 enrollment at the Botelle Elementary School in Norfolk from 1970 to date.

Figure 1. Enrollment from 1970 to Date



Enrollment in the school grew from 270 in 1970 to an all-time peak of 289 students in 1972. Between then and 1984, enrollment fell to 119 students. In those 12 years, enrollment declined by 170 students or 58.8 percent. Between 1984 and 1995 enrollment grew by 66 students, or 55.5 percent, and reached a secondary peak of 185 students. With the exception of 2005 and 2006, enrollment has been on the decline since. The 2013 enrollment was 118 students, 87 students (36.2 percent) below the 1995 level and is the lowest enrollment I have recorded to date.

The Botelle School's enrollment pattern was only roughly similar to that of the state's public schools in grades K-6. I have tracked public school elementary enrollment since 1979. Public school elementary enrollment bottomed in 1983, one year before Botelle. It reached a secondary peak in 1999. In those 16 years, state K-6 enrollment grew by 30.5 percent. Botelle's period of growth was slightly shorter than the state's, but more intense. The state's elementary enrollment has been declining for 14 years. Between 1999 and 2013, I estimate that it fell by 10.1 percent. Norfolk started the second downturn four years earlier than the state. The second decline at the Botelle School has been much steeper than the state's. Had the school followed the state pattern of enrollment since 1979, it would have had 214 students in October of 2013 instead of the 118 that were enrolled on that date.

Current Enrollment

Table 1 and Figure 2 provide a picture of where Norfolk residents attended elementary school in October of 2013. The non-public enrollment is estimated. They show that 89.1 percent of Norfolk's elementary school-age residents attended the Botelle Elementary School in 2013. A little over ten percent of the school-age residents attended non-public schools in state. No school-age residents attended magnet schools and no residents attended a public school in another district. One child was reported as being home schooled. There were five non-residents enrolled in the Botelle School in 2013. These students in the classroom rented by Shared Services for the Bridges II program are included in this analysis. The projections in this report are based off the 118 students who attended the Botelle School in October, 2013.

Table 1. 2013 Enrollment

	Number	Percent
Residents		
A. Norfolk Public	113	89.1%
B. Other Public	0	0.0%
C. Magnets	0	0.0%
D. Non-Public	*13*	*10.1%*
E. Home Schooled	1	0.8%
Total (A+B+C+D+E)	127	
F. Non-Residents	5	
Total Enrollment (A+F)	118	

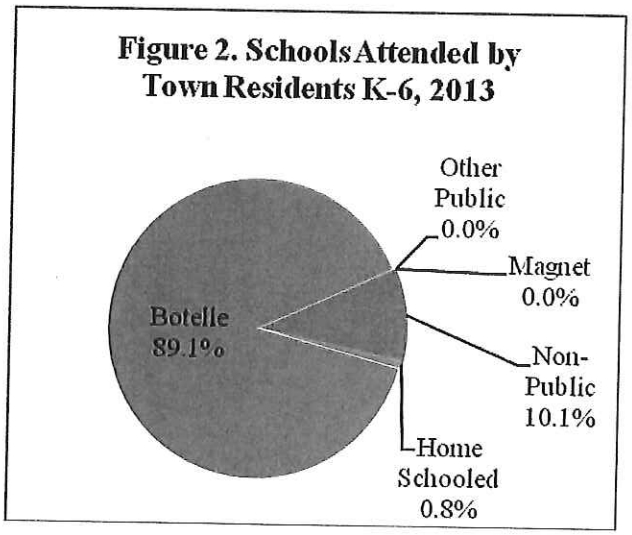
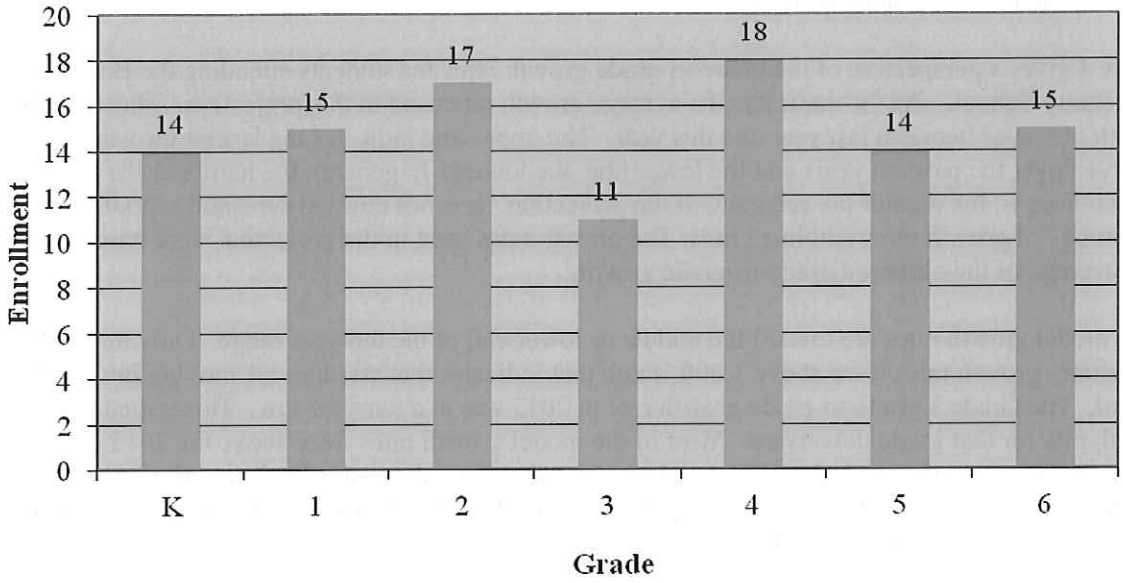


Figure 3 shows the October 2013 grade-by-grade enrollment by of students in the Botelle Elementary School. The children in pre-kindergarten programs are not shown. Grade 4 had the most students, 18. This was followed by Grade 2 with 17 students. Grade 3 was the smallest class with only 11 students followed by Kindergarten and Grade 5 with 14 students each. If current conditions continue, this year's Kindergarten class of 14 students will have 12 students when it enters Grade 6 in 2019. The current year enrollment by grade is the starting point for this projection. How it moves forward is discussed below.

Figure 3. Enrollment By Grade, 2013



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, I compute grade-to-grade growth rates for ten years (see Appendix B). For example, if the number of fifth graders this year is 21 and the number of fourth graders last year was 20, then the growth rate is 1.05. A growth rate above 1.000 indicates that students moved in, transferred from a non-public school or that they were retained. A growth rate below 1.000 means that students moved out, transferred or were not promoted from the prior grade. For each grade I calculate four different averages of the growth rates: a three-year average; a weighted three-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 rate for a grade is applied to the current enrollment from the prior grade. The projection builds grade by grade and year by year.

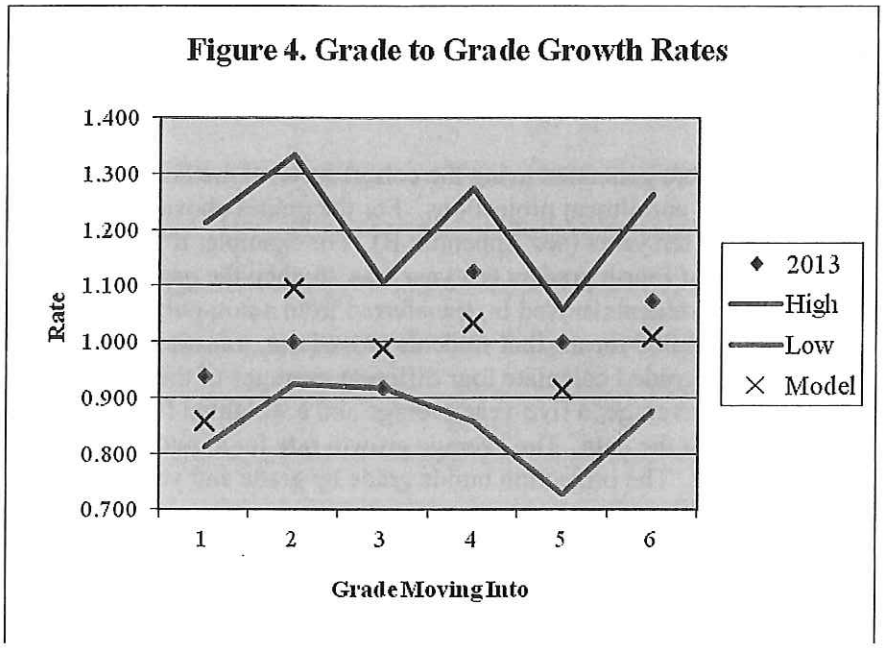
In the standard model, kindergarten enrollment is compared to births five years prior and some average of the observed growth or decline is used to project future kindergarten enrollment. My method breaks kindergarten enrollment into three parts: five-year olds; six-year olds entering kindergarten for the first time; and six-year old repeaters. Each component is analyzed separately and then combined to get total projected kindergarten. Births starting in 2010 are all likely to be ten or less. In only two times in the past 41 years have there been less than ten births per year. Thus, based on observations of kindergarten enrollment when births are less than 10, I modified my standard approach and simply added four children to births five years prior to get an estimate of kindergarten. Four was the average numerical growth between birth and kindergarten observed for the recent birth cohorts of 2003 and 2008.

To extend the projection beyond four years, I need to estimate births. The State Department of Public Health recorded 10 births to Norfolk residents in 2010. That is the latest official count. The preliminary counts for 2011 and 2012 are seven in each year. To estimate births in 2013, I used the eight recorded births in state through August and added the average number of births in 2011 and 2012 from September to December and the average number of out-of-state births in those two years. That yielded ten births in 2013. To estimate births in 2015, I took my calculation of the fertility rates in similar towns (DRG E) in

2010 and applied it to the Connecticut State Data Center's projection of Norfolk women of child-bearing ages in 2015. That yielded nine births in 2015. I prorated births in 2014. To estimate births in 2016 to 2020 I calculated the growth in projected births in 2015 and 2020, annualized it and applied it to the prior year's estimated births starting in 2015.

Figure 4 gives a perspective of the grade-to-grade growth rates for students attending the Botelle Elementary School. An "x" indicates the average growth rate used in this projection. The diamond is the growth observed between last year and this year. The upper line indicates the largest growth rate 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. It is not unusual for small schools to have a wide range of growth rates within a grade. The growth rates used in the projection were based on a five-year average of the observed grade-to-grade growth.

Most model growth rates are toward the middle or lower end of the ten-year range. Only three of the six elementary growth rates were above 1.000, a rate that indicates that children are moving into the Botelle School. The Grade 3 grade-to-grade growth rate in 2013 was at a ten-year low. This pulled the model growth rate for that grade downward. Most of the model growth rates were above the 2013 growth rate for the grade. Only the grade 2 and 3 model growth rates were above the 2013 growth rates. The average growth rate across grades 1-6 used for the projection was 0.982. The rate in 2013 was 1.008; the median rate over the past 20 years was 1.005.



Enrollment data from 2003 to 2012 were taken from the files of the Connecticut State Department of Education. The public school data are available on the Department's website at www.sde.ct.gov. Data for 2013 were provided by the Norfolk central office. All enrollment data after 2010 are subject to minor changes as they are reviewed and audited. Births from 1980 to 2013 were provided by the Healthcare Quality, Statistics, Analysis and Reporting Unit of the State Department of Public Health.

Botelle Elementary School Enrollment

Table 2 and Figure 5 present actual enrollment from 2003 to 2013 and projected enrollment through 2023 at the Botelle Elementary School. Between 2003 and 2006, the school's enrollment increased from 163 to 174 students. By 2013, enrollment had fallen to 118 students. In the past ten years, the school's enrollment declined by 45 students or 27.6 percent. State enrollment in grades K-6 is projected to fall 8.5 percent in that interval. The school's enrollment decline of 23.0 percent between 2002 and 2012 (the latest comparable data available) was larger than many comparable districts (schools) in the region. The enrollment declines in Canaan (-7.3 percent), Colebrook (-15.7 percent), Hartland (-15.9 percent) and Kent (-19.0 percent) were smaller. The declines Salisbury (-29.4 percent) and Sharon (-36.2 percent) were larger.

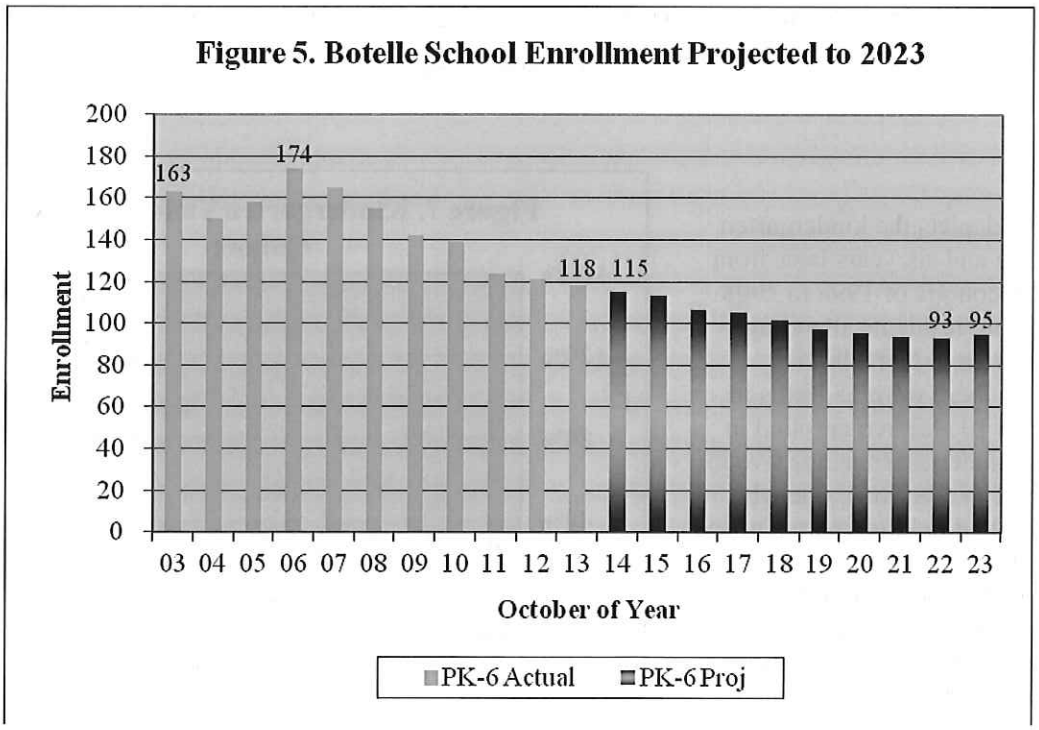
I project that next year's school enrollment will be three students less than this year's. I anticipate enrollment will bottom at 93 students in 2022. Enrollment should be 95 students in 2023. This will be 23 students (19.5 percent) below the October 2013 count. Statewide, I have projected an 11.6 percent decrease in grade K-6 enrollment in that period. In 2013 there was an average of 16.9 students per grade; in 2023 the average is projected to be 13.6 students. Over the ten-year projection period, I believe enrollment at the Botelle Elementary School will average 102 students. This is below the average of 145 students observed over the past ten years.

Table 2. Botelle Elementary School Enrollment

Year	Students	Percent Change
2003	163	
2004	150	-8.0%
2005	158	5.3%
2006	174	10.1%
2007	165	-5.2%
2008	155	-6.1%
2009	142	-8.4%
2010	139	-2.1%
2011	124	-10.8%
2012	121	-2.4%
2013	118	-2.5%
2014	115	-2.5%
2015	114	-1.3%
2016	107	-6.2%
2017	106	-0.9%
2018	102	-3.8%
2019	97	-4.4%
2020	96	-1.5%
2021	94	-2.0%
2022	93	-1.0%
2023	95	2.3%

These figures include pre-kindergarten children. From 2003 to 2013 pre-kindergarten enrollment ranged from 8 to 22 students and averaged 14 students. There were 14 children enrolled in these programs in 2013. My projection model keeps this figure constant for the next ten years

Figure 5. Botelle School Enrollment Projected to 2023



Factors Affecting the Projection

The primary reasons for elementary enrollment change lie in the births and yield from the birth cohort. Figure 6 presents the actual births from 1980 to 2010 and preliminary and estimated births through 2018. Births ranged from a low of nine in 2003 and again in 2008 to a high of 45 in 1988. The Society of Brothers likely accounted for many of the births prior to 2000. There were ten births recorded in 2010. There were seven in-state births in 2011 and 2012. Based on in-state births through August, I estimate there will be ten births in 2013. In the 1990s there was an average of 35 births annually. In the five years from 2004 to 2008 (this fall's kindergarten through 4th graders) births averaged 13.8. Births in the 2009 through 2013 period will likely average 9.4. The projection in years 2019 to 2023 assumes an average of 9.3 births annually between 2014 and 2018. This is based in part upon the 2010 DRG E fertility rates and the Connecticut State Data Center projection of Colebrook women of child-bearing ages in 2015 and 2020.

Figure 6. Births Since 1980

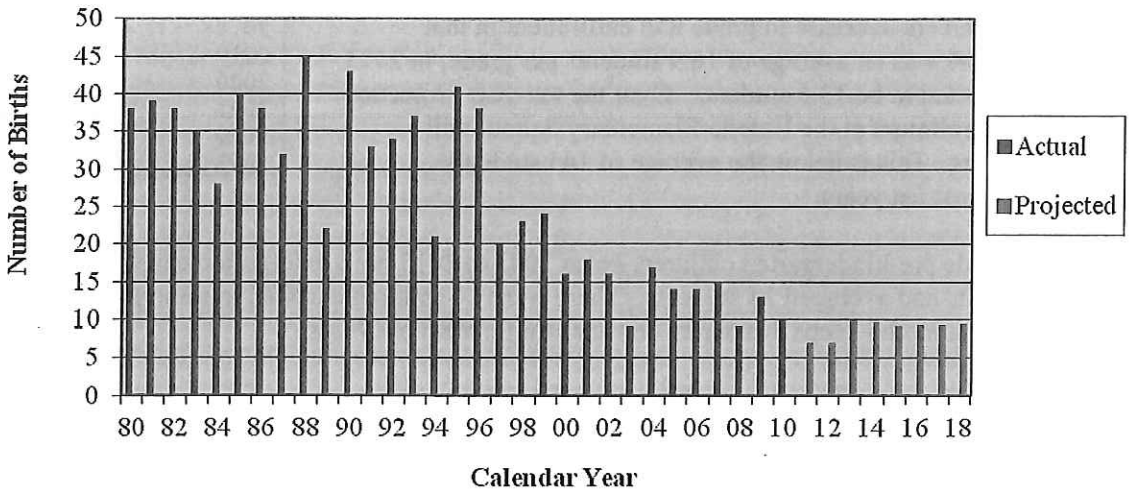
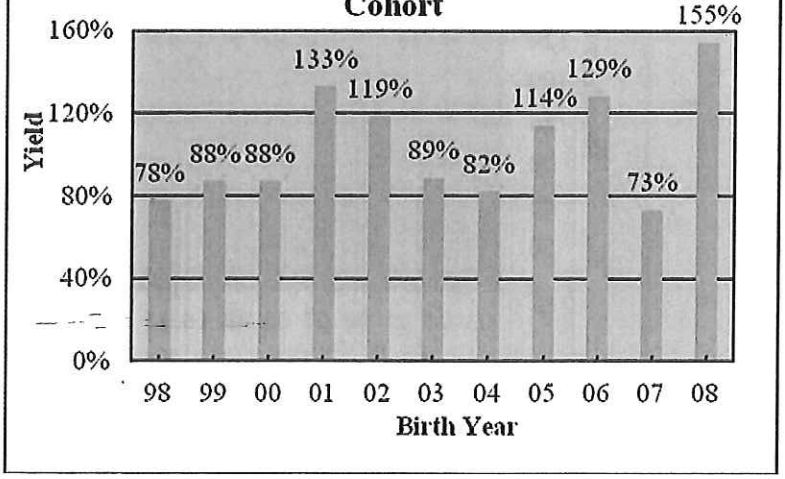


Figure 7 depicts the kindergarten yield five and six years later from the birth cohorts of 1998 to 2008 for Norfolk residents attending kindergarten in Norfolk. For example, there were 15 births in 2007 and 10 children enrolled in Botelle kindergarten at age five in 2012 and an additional one who first enrolled in kindergarten at age six in 2013. That is a yield of 73.3 percent. The yield from the birth cohort ranged from a low 73 percent in 1997 to a high of 133 percent in 2001. The estimated

Figure 7. Kindergarten Yield From Birth Cohort



yield from births in 2008 is 155 percent. Note that the 2008 yield is an estimate because we will not know the actual number of children who will enter kindergarten for the first time as six-year olds until October 2014. Yields below 100 percent generally mean that parents move out of town or enroll their child in another school system after giving birth in town. Yields above 100 percent generally mean that young families move into Norfolk after giving birth elsewhere. The average yield in the five-year look-back period for the projection was 111 percent.

Table 3 gives a history of enrollment in kindergarten since 2003 and relates the components of kindergarten enrollment back to the appropriate birth cohort. Retention is tied to the prior year's kindergarten enrollment. To estimate kindergarten enrollment, I used when births were more than ten, the five-year average of retentions, and yields from births five and six years ago. In 2014 I estimated kindergarten from 94.2 percent of births five years ago, 10.1 percent of births six years ago, and 11.5 percent of current Kindergarten students retained. When births were ten or less (the kindergarten classes starting in 2015) I simply added four to the births five years prior to estimate kindergarten enrollment. Over the projection period, this adjustment resulted in an average growth from birth to kindergarten of 36 percent. This is greater than the growth form my standard approach.

Table 3. Analysis of Kindergarten Enrollment

Year	Birth Year	Births	K	Retained From Prior Year	Non-Retained - Born 5-Years Prior Resident	Non-Retained - Born 5-Years Prior Non-Resident	Non-Retained - Born 6 Years Prior	Percent Retained	Yield From Births 5-Years Prior	Yield From Births 6-Years Prior	Total Yield From Birth Cohort
2003	1998	23	17	0	16	0	*1*	0.0%	69.6%	5.0%	78.3%
2004	1999	24	19	0	17	0	2	0.0%	70.8%	8.7%	87.5%
2005	2000	16	15	0	11	0	4	0.0%	68.8%	16.7%	87.5%
2006	2001	18	28	0	24	0	3	0.0%	133.3%	18.8%	133.3%
2007	2002	16	18	0	18	0	0	0.0%	112.5%	0.0%	118.8%
2008	2003	9	11	2	8	0	1	11.1%	88.9%	6.3%	88.9%
2009	2004	17	15	2	13	0	0	18.2%	76.5%	0.0%	82.4%
2010	2005	14	16	1	14	0	1	6.7%	100.0%	5.9%	114.3%
2011	2006	14	20	3	15	0	2	18.8%	107.1%	14.3%	128.6%
2012	2007	15	16	3	10	0	3	15.0%	66.7%	21.4%	73.3%
2013	2008	9	14	0	13	0	1	0.0%	144.4%	6.7%	*154.6%*
3-Year Average								11.5%	100.0%	14.0%	118.8%
Weighted 3-Year Average								8.1%	112.3%	12.9%	123.2%
5-Year Average								**11.5%**	**94.2%**	**10.1%**	**110.6%**
Weighted 5-Year Average								9.9%	105.8%	11.6%	117.5%

The correlation between births and kindergarten enrollment five-year later was a moderate 0.64 over the 2005 to 2013 period. (I normally take the data back to 1985, but the births to members of the Society of Brothers would have distorted the analysis.) If this relationship were used to predict kindergarten enrollment, the estimate would have been off by an average of three children annually over the past ten years. The cohort survival method, even with my breakout into five-year olds, six-year old delayed entrants and children retained, cannot overcome the underlying unpredictability of kindergarten enrollment from earlier births.

Context of the Projection

The cohort-survival method 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. Analyzing how the factors underlying the projection changed in the prior year can be an important step in this process.

To assist in this endeavor, this report examines seven factors that could affect enrollment: town population; women of child-bearing age; people in the labor market; new home construction; sales of existing homes; non-public enrollment and student migration.

Figure 8 presents the US Census Bureau estimate of Norfolk population growth between July, 2010 and 2012. In that period, the town population is estimated to have declined by 22 people. The population loss of 1.29 percent was the 159th ranked in the state. In contrast, Litchfield County declined by 1.17 percent, the state grew by 0.42 percent and communities with similar economic and need characteristics declined by 0.02 percent. The 2010 census shows that from April 2000 to April 2010 Norfolk's population grew from 1,660 people to 1,709. The 49-person growth was the first growth in the past three decades. The 3.0 percent increase between 2000 and 2010 was the 120th ranked in the state.

Figure 8. Estimated Population Growth, 2010 to 2012

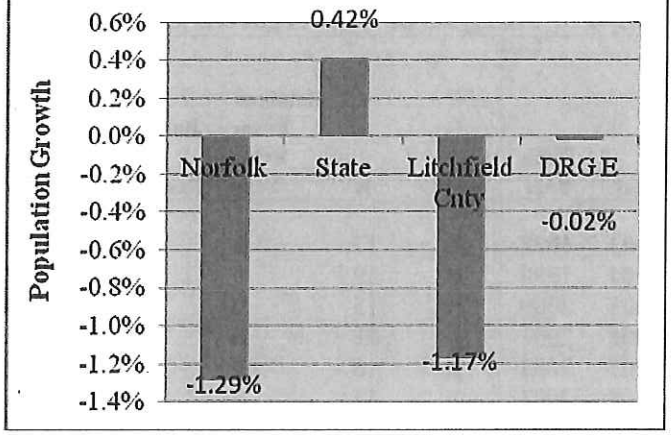


Figure 9 presents the Connecticut State Data Center's population projections for Norfolk's residents 0-14 years of age in the years 2015 and 2020 along with the 2010 Census population. They project that population ages 0-4 will fall from 71 children in 2010 to 45 children in 2020. The population ages 5-9 is projected to decline by 41 percent, going from 87 in 2010 to 76 in 2015 and 51 in 2020. The number of children ages 10-14 is projected to decline from 139 in 2010 to 92 in 2020. This independent projection supports the enrollment decline projected in this report.

Figure 9. Projected Norfolk Population Ages 0-14

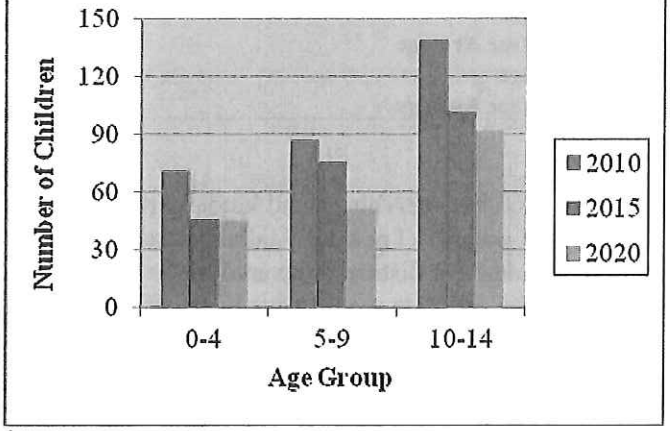


Figure 10 presents the number of women of child-bearing age from the 2000 and 2010 censuses and projected counts for 2015. There were 16 births to Norfolk residents in 2000 and 10 in 2010. In communities such as yours, women in the 25-29 age group have the highest rate of births. The number of women in this group was down from 42 in 2000 to 27 in 2010 and is projected to remain at that level in 2015. The second highest birth rate in communities like yours is women ages 30-34. The number in that age range was also down significantly from 42 in 2000 to 25 in 2010 and is projected to be 24 in 2015. The number of women 15-24 is increasing and the number 35 to 45 is decreasing.

Figure 10. Women of Child-Bearing Age

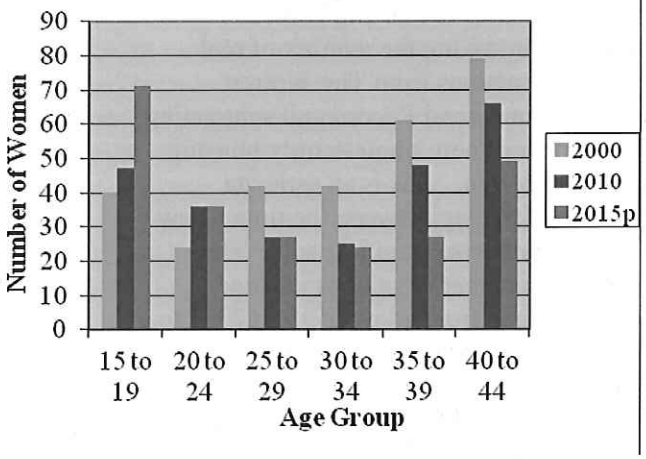


Figure 11 examines the number of people in the labor force from the US Department of Labor, Bureau of Labor Statistics. These are people 16 years of age or older working or actively seeking employment. Since it excludes most students and the elderly, I find it a very rough proxy of the number of school-age families. The Norfolk labor force increased 2.6 percent between 2008 and 2012. This was higher than the state (0.3 percent) and Litchfield County (-1.0 percent). The 2012 unemployment rate of 6.6 percent was down 0.9 percentage points from the 2010 high. The town rate is better than the state rate of 8.4 percent and the Litchfield County rate of 7.7 percent.

Figure 11. Recent Changes in the Labor Force

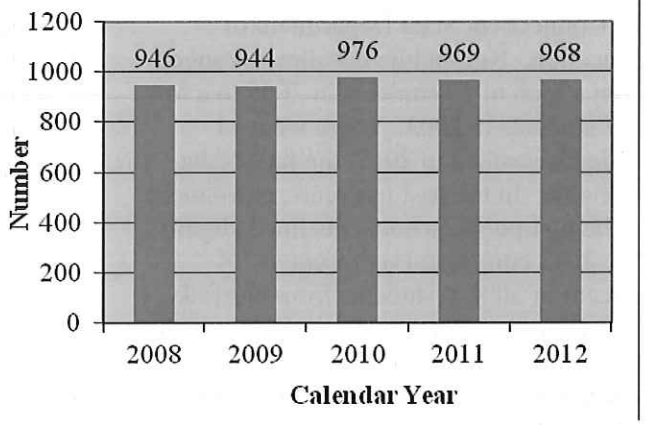


Figure 12 presents the net new housing units constructed from 2002 to 2012 from the State Department of Economic and Community Development. In the past ten years the number of net (of demolitions) new housing units constructed in Norfolk ranged from a high 7 in 2005 down to a low of -1 in 2009. There was one house permitted in 2012. In the five-year look-back period for this projection, there was an average of one net new housing unit constructed. The 2010 census indicated that Norfolk had 967 housing in April 2010of which 74.5 percent were occupied. There was an average of 2.37 occupants per occupied dwelling. Only 26.9 percent of the households had children under 18 years old.

Figure 12. Net New Housing Units

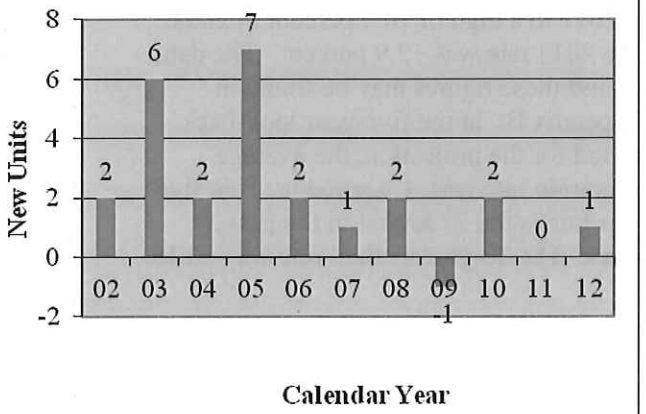


Figure 13 presents my estimate of the number of sales of existing homes. I derived it by taking the number of real estate transactions from The Warren Group/Commercial Record and subtracting the number of new single-family housing units authorized. This is an estimate because of the lag between the time a new house is authorized and it is sold. The estimated number of sales of existing homes ranged from a low of 19 in 2011 to a high of 47 in 2006. There were 27 sales of existing homes in 2012. In the five-year look back period for the projection, there were 23 sales annually.

Figure 13. Sales of Existing Homes

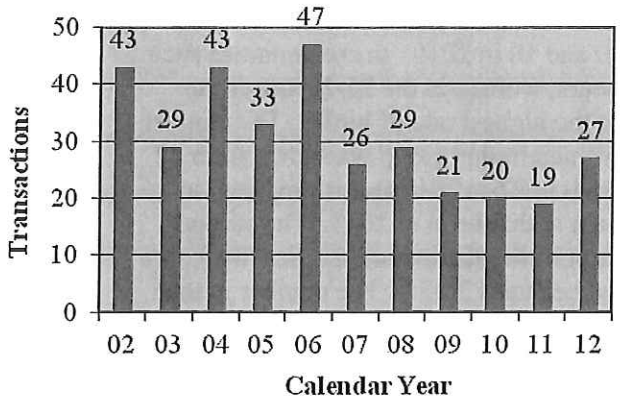


Figure 14 presents the non-public elementary school enrollment over the past ten years for students from the town of Norfolk. The data are from the records of the Connecticut State Department of Education. Non-public enrollment ranged from a high of 17 students in 2005 to a low of 7 students in 2003. There were 11 students enrolled in 2012, the latest data available. In the past ten years, enrollment in the non-public schools declined slightly. The 2012 enrollment represented 7.4 percent of all K-6 students from Norfolk. That is down from 9.4 percent recent high set in 2005. I expect the non-public enrollment from Norfolk will be about the same in 2013.

Figure 14. Non-Public School K-6 Enrollment

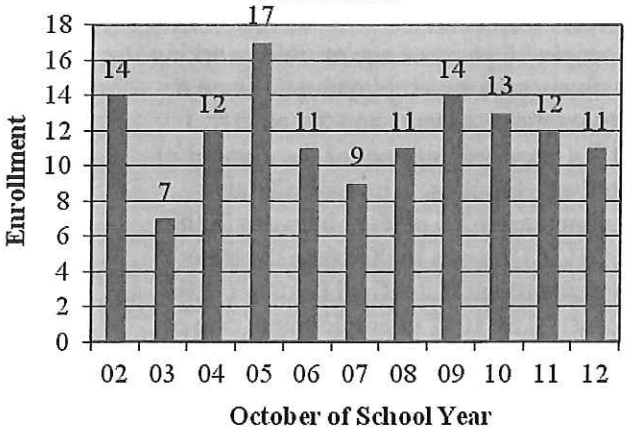
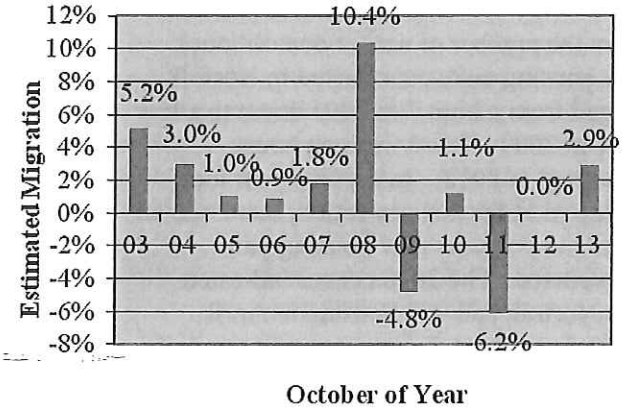


Figure 15 presents the estimated migration of students from Norfolk. Estimated migration ranged from a low of -6.2 percent in 2011 to a high of 10.4 percent in 2008. The 2013 rate was +2.9 percent. The data behind these figures may be found in Appendix B. In the five-year look-back period for the projection, the average migration rate was -1.4 percent. That five-year rate is the 7th lowest in the past 24 years. The 20-year median rate was +0.18.

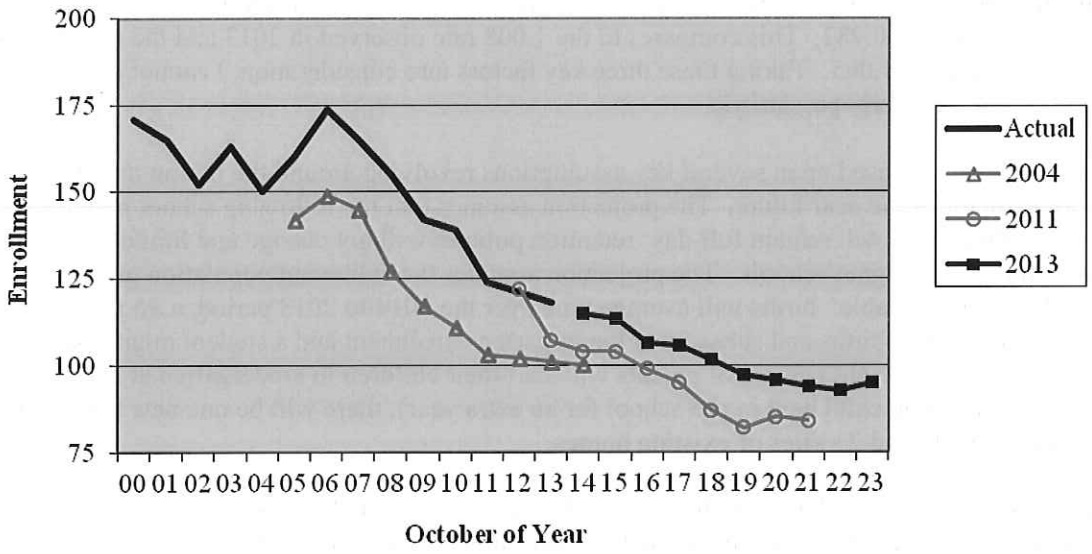
Figure 15. Estimated Student Migration



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 16 presents the enrollment projections that I have run for Norfolk since 2003. The average one-year error rate for the two projections I ran between 2003 and 2011 was 6.0 percent. The five-year error rate for the 2004 projection was 17.6 percent or 3.3 percent per year. My 2011 projection is running 9.3 percent low after two years. In that analysis, I projected that 2013 K-6 enrollment would be 96 students. The actual enrollment of 104 students was 8 students more than projected. That was an annual error rate of 3.9 percent. In the 2011 projection, I held pre-kindergarten enrollment constant at 11 children. There were 14 children enrolled in 2013.

Figure 16. Prior Projections of Norfolk K-6 Enrollment



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 2004. I found for the 67 district-level projections that I ran in 2004 the median projection was 5.5 high in predicting 2012 enrollment. That is an annual error rate of 0.7 percent. The absolute error rate (regardless of whether it was high or low) averaged 8.6 percent. That error was less than five percent in 46 percent of the projections and more than 15 percent in 15percent of the projections. Among the 87 elementary projections run, the median projection was 9.5 percent high (1.1 percent annually). Among the 70 middle school projections run, the median projection was 8.2 percent high (1.0 percent annually). This illustrates what an economic downturn can do to projections run with the cohort-survival method.

Summary

Botelle Elementary School enrollment has been moving irregularly lower since 1996. I anticipate the decline will continue through 2022. I project that enrollment will decline 19.5 percent from 118 in 2013 to 95 students in 2023. In 2013 there was an average of 16.9 students per grade; in 2023 the average is projected to be 13.6 students.

This report is projecting a continued slow decline in enrollment. It is critical to remember that a projection is just a moving forward of recent trends. Is the forecast realistic? In the five years from 2004 to 2008 (this fall's kindergarten through 4th graders) births averaged 13.8. Births in the 2009 through 2013 period will average 9.4. This pattern of births, which except for the last half of 2013 have already happened, support the decline. My model assumes an average of 9.3 births in the 2014 to 2018 period. This change was based on the fertility rates in 2010 from similar towns (DRG E) and on the Connecticut State Data Center projection of Norfolk women of child-bearing age in 2015 and 2020. I adapted my kindergarten model to take into account the relatively few births expected in the upcoming years. On average kindergarten enrollment will be 3.4 students more than births five-years prior, a growth of 36 percent over the ten-year projection period. The median growth between births and kindergarten enrollment over the past 16 years was 5.8 percent. The average growth rate over grades 1-6 used to project enrollment was 0.982. This compares to the 1.008 rate observed in 2013 and the twenty-year median growth rate of 1.005. Taking these three key factors into consideration, I cannot consider the projected decline as overly pessimistic.

These projections are based upon several key 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 full-day; retention policies will not change and limited enrollment of Norfolk residents in magnet schools. The projection assumes the following population growth factors will not change appreciable: births will average nine over the 2014 to 2018 period, a 36 percent increase between the number of births and subsequent kindergarten enrollment and a student migration of -1.4 percent. Additionally, eight percent of parents will start their children in kindergarten at age six (or have had a special education child held in pre-school for an extra year); there will be one new housing unit constructed annually and 23 sales of existing homes.

It is important to remember that the cohort survival method relies on observed data from the recent past. Its key assumption is that those conditions will persist. It does not try to predict when the economic conditions might change. We cannot know today how long these conditions will continue. 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 Norfolk and then make adjustments as necessary.

Appendix A. Botelle Elementary School Enrollment Projected By Grade to 2023

School Year	Birth Year[1]	Births	K[2]	1	2	3	4	5	6	PreK	PK-6 Total
2003-04	1998	23	17	23	28	17	11	21	25	21	163
2004-05	1999	24	19	17	25	28	19	8	23	11	150
2005-06	2000	16	15	23	19	24	29	19	7	22	158
2006-07	2001	18	28	14	24	21	23	29	18	17	174
2007-08	2002	16	18	26	16	24	18	23	32	8	165
2008-09	2003	9	11	16	28	17	25	19	29	10	155
2009-10	2004	17	15	9	17	29	15	21	20	16	142
2010-11	2005	14	16	13	12	17	29	14	20	18	139
2011-12	2006	14	20	13	15	11	15	25	14	11	124
2012-13	2007	15	16	17	12	16	14	14	24	8	121
2013-14	2008	9	14	15	17	11	18	14	15	14	118
Projected											
2014-15	2009	13	15	12	16	17	11	16	14	14	115
2015-16	2010	10	*14*	13	13	16	18	10	16	14	114
2016-17	2011	7	*11*	12	14	13	17	16	10	14	107
2017-18	2012	7	*11*	9	13	14	13	16	16	14	106
2018-19	2013	10	*14*	9	10	13	14	12	16	14	102
2019-20	2014	10	*13*	12	10	10	13	13	12	14	97
2020-21	2015	9	*13*	11	13	10	10	12	13	14	96
2021-22	2016	9	*13*	11	12	13	10	9	12	14	94
2022-23	2017	9	*13*	11	12	12	13	9	9	14	93
2023-24	2018	9	*13*	11	12	12	12	12	9	14	95

[1] 1998 to 2012 births from the State Department of Public Health. Births in 2011 and 2012 are preliminary. Births in 2013 were estimated from in-state births through August. Births in 2015 were set to the product of DRG E 2010 fertility rates and the Connecticut State Data Center projections of Norfolk women of child-bearing ages In 2015.

[2] Based on 5-year averages of births 5- and 6- years ago and retention in 2014 and on an increase of four children over births five-years prior in 2015 to 2023 .

Appendix B. Growth from Grade to Grade across Years

October of Year	K	1	2	3	4	5	6	PreK	Average	Estimated Migration[1]
2004	0.792	1.000	1.087	1.000	1.118	0.727	1.095		1.005	3.00%
2005	0.938	1.211	1.118	0.960	1.036	1.000	0.875		1.033	1.03%
2006	1.556	0.933	1.043	1.105	0.958	1.000	0.947		0.998	0.88%
2007	1.125	0.929	1.143	1.000	0.857	1.000	1.103		1.005	1.80%
2008	1.222	0.889	1.077	1.063	1.042	1.056	1.261		1.064	10.38%
2009	0.882	0.818	1.063	1.036	0.882	0.840	1.053		0.949	-4.81%
2010	1.143	0.867	1.333	1.000	1.000	0.933	0.952		1.014	1.15%
2011	1.429	0.813	1.154	0.917	0.882	0.862	1.000		0.938	-6.17%
2012	1.067	0.850	0.923	1.067	1.273	0.933	0.960		1.001	0.00%
2013	1.556	0.938	1.000	0.917	1.125	1.000	1.071		1.008	2.90%
3-Year Ave.	1.350	0.867	1.026	0.967	1.093	0.932	1.010		0.982	
Weighted 3-year	1.371	0.888	1.000	0.967	1.134	0.955	1.022		0.994	
5-Year Ave.	1.215	**0.857**	**1.095**	**0.987**	**1.032**	**0.914**	**1.007**		0.982	
Weighted 5-year	1.300	0.872	1.059	0.976	1.083	0.935	1.010		0.989	
Enrollment Multiplier		1.015	0.950	1.030	0.959	1.007	0.976			

[1] Based on enrollment in grades 3-6 one year compared to enrollments in grades 2-5 the previous year with an adjustment for Norfolk residents enrolled in other public schools.

NORFOLK/COLEBROOK SCHOOL STUDY COMMITTEE
MONDAY, NOVEMBER 18, 2013
6:30 PM BOTELLE SCHOOL

Agenda:

Minutes: October 23, 2013

Project Schedule

Education/Curriculum

Facilities and Transportation

Governance and Legal

Fiscal and Budgets

Susan M. Dyer, Secretary
Norfolk/Colebrook School Study Committee

NORFOLK/COLEBROOK SCHOOL STUDY COMMITTEE
Monday, November 18, 2013

Present: J. Millar, M. Sconyers, J. Jones, S. Carr, S. Dyer, H. Carfiro, T. McKeon, S. Gray and J. Hall

Absent: W. Brodnitzki

Non-Members: J. Costa, G. Counter, J. Chitthum and M. Venhorst

Others: S. Hooker, P. Bernard, P. Vosburgh, V.Pac and L. Allyn

H. Carfiro moved to accept the minutes of the October 23, 2013 meeting. J. Millar seconded the motion. Motion carried.

A copy of the final report from Regional #14 was provided by M. Venhorst.

Discussion was held regarding benchmark dates for the Committee. The following is a timeline template:

Committees: Research & Information gathering; deliberation and decision making February 1st – April 1, 2014
Reporting back to Full Committee: 4/1/14
Changes & Alterations-Drafting and Feedback from the public 5/1/14
Final Production, Committee Approval to send to the State 6/1/14

It was noted that to date J. Costa has 7 days out of 13 days that the grant will pay.

It was noted that Norfolk and Colebrook allotted $10,000 per town to cover any additional expense for outside consultants.

M. Sconyers moved that the Facilities Committee is hereby authorized to expend no more that $5,000 for an architectural consultant without coming back to the full committee. J. Millar seconded the motion. Motion carried.

The contract would be with the Regional School Study Committee, J. Jones signing as chair and the invoice to be split in two.

Facilities Committee: There are 7 classrooms in use at each school. There would be a need for possibly 14 classrooms initially, plus additional classrooms for Shared Service, Music, Pre-K, Art, Media Center and auxiliary space for Special Education. The Facilities Committee will be looking at how Botelle could be utilized if consolidated using the first year of use and working out using the enrollment figures provided by Prowda. Currently the facilities committee is using the following classroom size: K-1 18 students—2nd-3rd ---22 students----4th-6th---24 students. The Facilities committee will also be considering the following; Bus route-time and distance; Fire Marshal

concerns; Potential use of skating rink; Outstanding Bond Issue; Condition of infrastructure; school security; solutions pertaining to a large Pre-K

Governance: Union Contracts
State Information

Budget: Need input from other committees, create a combo budget, and convert to a single chart of accounts, a goal for the December meeting would be to have input from other committees, any potential savings, making sure line items compare for each school.

L. Allyn stated that the teachers of Botelle could be a free resource of information and advice.

J. Chitthum recommended the use of a static schedule.

Next meeting:
Narrative Educational Report
Information or other data needed to complete work at hand
Committee Reports

Next meeting is Wednesday, December 18, 2013 at Colebrook in the school library at 6:30 PM. If anyone is interested in touring the Colebrook facility come early for a tour.

M. Sconyers moved to adjourn at 8:00 PM. S. Carr seconded. Motion carried.

Submitted:

Susan M. Dyer, Secretary
Norfolk/Colebrook School Study Committee

Norfolk/Colebrook School Study Committee
6:30 PM Wednesday, December 18, 2013
Colebrook Consolidated School

PLEASE NOTE LOCATION OF MEETING

Agenda:

Public Comment

Minutes: November 18, 2013

Narrative Educational Report

Committee Reports

Information or other data needed to complete work at hand

Susan M. Dyer, Secretary
Norfolk/Colebrook Study Committee

Norfolk/Colebrook School Study Committee
Wednesday, December 18, 2012

Present: J. Jones, S. Dyer, H. Cafiro, S. Gray, T. McKeon, S. Carr, B. Brodnitzki, J. Millar, J. Hall

Non-Voting Members: J. Chitthum, G. Counter, J Costa and M. Venhorst

Absent: M. Sconyers

Others: L. Hannafin, V. Pac and W. Wood

Motion: H. Cafiro moved to accept the minutes of the November 18, 2013 meeting as presented. S. Gray seconded the motion. Motion carried.

S. Gray gave a brief report on the Facilities Committee. Architects were interviewed and Jim Lawlor has been selected; currently awaiting a contract from Mr. Lawlor. The committee agreed that they would be looking to solidify the space at Botelle School to its best use now and for the future. The Bridges Program would remain. The Committee is waiting for the Transportation Plan from All Star. The question was asked if there would be a cost estimate with the plan. No there won't but the Finance Committee could use how many buses are used currently in each town and then estimate the cost using the per bus cost. The Facilities Committee indicated that they will be having 2 meetings in January prior to full Committee meeting on January 29th.

J. Costa indicated that he has 4 days left on the original grant. The State is opening up a second round of funding and Jonathan is going to apply for $20,000; $10,000 of which would be for the Norfolk/Colebrook Project.

S. Carr gave a brief report on the Governance and Legal Committee. L. Hannafin was added as another member. Discussion was held on the appraised value of Botelle School. J. Scharnberg is chairman. There next meeting is January 9th.

J. Millar updated the Committee on the financial aspect. There will be a 5 year history of the combined schools. A model of the school schedule is necessary to build out a financial model for the future. There will be a need to include line items that are currently not in either budget; i.e. insurance and plowing. There will be incidental expenditures that will need to be defined; i.e. moving; staff development for transition and maybe transportation to Camp Jewel. S. Gray indicated that Camp Jewel is interested in providing enhancement programs to both schools should the schools combine.

J. Costa presented the draft of the Proposed Education Program. He indicated that this committee doesn't have the responsibility of designing the curriculum. What the committee needs is to provide a sense of what we would like to see. In other words, the

curriculum of the two schools would be the same combined and could be enhanced. The new board of education will be responsible to see that the curriculum is carried out.

The draft included the schedules for the 2nd and 5th grades since those are the classes that the State of Connecticut requires reports on instructional data for the SSP report (Strategic School Profile).

Further discussion held on the draft education proposal regarding FTE and PT personnel and whether that would include expanded benefits.

M. Venhorst handed out information regarding Connecticut Education Laws and a study regarding regional governance. He noted that the "Plan" would be an important part of this study.

It was noted that the information provided is a draft and any corrections or errors be brought to J. Costa's attention.

J. Costa will address:

Staffing schedule based on narrative options for dedicated science personnel.
Financial implications of benefits for specials and what could be done keeping the specials at .5
Developmental guidance as a classroom
Gather the latest data regarding the SSP

The timeline was discussed. It was noted that for the most part many of the committees probably will have their work done sometime in March and if that is the case then the Governance and Legal Committee could come back to the full Committee to handle as the full Committee handled the curriculum.

J. Millar moved to adjourn at 7:55 PM. H. Cafiro seconded the motion. Motion carried.

Submitted by:

Susan M. Dyer, Secretary
Norfolk/Colebrook School Study Committee

Norfolk/Colebrook School Study Committee
Wednesday, January 29, 2014
6:30 PM Botelle School

Agenda:

Public Comment

Minutes: December 18, 2013

Committee Reports

Susan M. Dyer, Secretary
Norfolk/Colebrook School Study Committee

Norfolk/Colebrook School Study Committee
Wednesday, January 29, 2014

Present: T. McKeon, S. Gray, S. Dyer, H. Cafiro, S. Carr, J. Jones, W. Brodnitzki, J. Hall, M. Sconyers and J. Millar

Non-Voting Members: J. Costa, G. Counter, J. Chitthum and M. Venhorst

Others: L. Hannafin, J. Scharnberg, V. Pac, T. Briggs and W. Wood

Minutes: S. Gray moved to accept the minutes with a spelling correction of the word there to their. J. Millar seconded the motion. Motion passed.

J. Costa thanked the Committees for their hard work to date.
J. Costa indicated that there were two resignations from E. Allyn and T. Olsen. He understood their frustration but felt that they would be very useful to the new board of education in the future should the consolidation proposal pass. It's been suggested that a letter be sent.

Reports from Sub-Committees

Facility: Held their meeting on January 15th with James Lawlor, the architect. G. Counter has provided Mr. Lawlor the items he requested. The next meeting is February 13th with Lawlor to discuss the building and with Allstar and Whalen Transportation to discuss transportation issues.

Finance: Met January 14th with a preliminary budget; which fell short of the estimated 10% savings illustrated by a previous report due to staff additions for science, gifted and preschool. J. Millar and others met with J. Costa to make sure that all budget items had been considered. J. Millar met with S. Dyer regarding the in-kind services currently paid through each town's general budget that would have to be assumed by the new board of education. It was suggested that for illustrative purposes that the budget could be presented with three columns; one combined with program enhancements, another combined without program enhancements and the third column representing the current budgets. Certain assumptions could be made and have the budget illustration forecasted out for approximately 10 years. It was also noted that any recommended curriculum enhancements will be the responsibility of the new board of education.

Governance: The governance committee recommended the following; 8 member board with 4 from each town; weighted voting by federal census population, 6 for a quorum with a crossover provision for capital improvements. Discussion held on the bargaining contracts regarding the transition period should this consolidation go forward. M. Sconyers moved to engage Fred Dorsey to give the committee a written opinion regarding the collective bargaining units. T. McKeon seconded the motion. The motion carried.

Discussion held on the equalization of assets and that the Governance Committee recommended that a commercial appraiser be hired. M. Sconyers moved to defer the hiring of an appraiser until a later date. T. McKeon seconded the motion. The motion carried; voting against the motion was S. Carr and J. Hall.

Discussion was held on the recommendation of the sub-committee regarding the makeup of the board. M. Sconyers moved the recommendation of the governance committee for placement in the final report the following; 8 member board with 4 members from each town; weighted vote based on federal census with a carry over provision for capital expenditures and a 6 member quorum. J. Jones seconded the motion. Discussion followed regarding the need of further information from other communities that have done similar consolidations. M. Sconyers withdrew his motion and J. Jones withdrew her second. The motion was withdrawn and not acted upon.

It was noted that the final report can be amended up until the final report has been approved; then it becomes the Regional School Plan. At which point any change to the plan has to be voted on by both towns.

The next meeting is Wednesday, February 26, 2014

Submitted,

Susan M. Dyer, Secretary

NORFOLK/COLEBROOK
SCHOOL STUDY COMMITTEE
WEDNESDAY, FEBRUARY 26, 2014
6:30 PM BOTELLE SCHOOL

Agenda:

Public Comment

Minutes: January 29, 2014

Committee Reports:

Attorney Dorsey

Susan M. Dyer, Secretary
Norfolk/Colebrook School Study Committee

Norfolk/Colebrook School Study Committee
Wednesday, February 26, 2014

Present: W. Brodnitzki, S. Dyer, H. Cafiro, J. Hill, J. Jones, M. Sconyers, J. Millar, S. Carr, S. Gray, T. McKeon

Non-Voting Members: G. Counter, M. Venhorst, J. Chitthum, J. Costa

Others: K. Moffitt, V. Pac

H. Cafiro moved to accept the minutes as presented. J. Millar seconded the motion. The motion carried unanimously.

Reports from Sub-Committees

Governance Committee: M. Sconyers reported that the committee met on the 10th and 25th of February. They are working through the statutory language, looking at regional models throughout the state and discussing the need of an attorney regarding union contracts.

Facilities Committee: S. Gray reported that they met with Dufour Bros. Dufour reported that 7 should be adequate and that the longest run should not be more than 60 minutes. The longest current rides in Norfolk and Colebrook run as long as 45 to 55 minutes. Dufour did indicate that until a region is formed and the Board of Education goes out to bid that would be the final indicator as to runs and price. The committee further reported that J. Lawer presented simple plans; most of the change would occur in the vestibule area for security reasons. The committee will meet again in March prior to the March 26th meeting at which time J. Lawler will present his plans to the entire committee.

Frederick Dorsey of Kainen, Escalera & McHale, was invited to speak. Mr. Dorsey explained that his expertise is educational law, contracts, special education, transportation, boards of education. A lengthy discussion followed covering basic information on union contracts, the building and the equalization between the towns. Mr. Dorsey left the meeting.

Finance Committee: J. Millar reported that the committee met on February 4th and discussed the budget forecast. The committee also discussed the possible one time costs that could occur such as moving expenses, attorney fees, transition planning, building renovations, and possible severance packages. J. Millar indicated that it would be important for Colebrook to find out what it would cost to upgrade the current school building. The committee meets again on March 5th. It should be noted that the cost per pupil that is published by the state backs out the costs of transportation and special education rather than taking the number of students attending the school and dividing that number into the bottom line of the budget.

J. Costa reported that an estimated time frame, to be used for reference, could be as follows: Committee Reports due March 26th, 1st draft of the report due to the State Board of Education due April 30th, May have the public hearings and vote on the final draft on May 28th. Letters were sent to the members who resigned from the Education Committee.

Discussion held on whether to hire the services of an attorney. M. Sconyers moved to engage the services of Kainen, Excalera and McHale as the committees' legal advisor not to exceed billing costs of $7500.00 without getting approval from the entire committee and to work with the governance committee through J. Costa. S. Carr seconded the motion. Motion passed unanimously.

Further discussion was held and that J. Costa would contact Mr. Dorsey to begin what he believes would be a transition plan with legal benchmarks regarding the committee and the 2 towns.

J. Costa also complimented all the sub committees for working hard and producing quality information for the entire committee.

M. Sconyers moved to adjourn the meeting at 7:46 P.M. S. Carr seconded the motion. The motion carried.

NORFOLK/COLEBROOK
SCHOOL STUDY COMMITTEE
Wednesday, March 26, 2014
6:30 PM Botelle School

Agenda:

Public Comment

Minutes: February 26, 2014

Committee Reports:

Governance

Facilities

Finance

Update: J. Costa

2/3 Vote

Susan M. Dyer, Secretary

Norfolk/Colebrook
School Study Committee
Wednesday, March 26, 2014

Present: H. Carfiro, J. Jones, S. Dyer, S. Carr, W. Brodnitzki, J. Hall, J. Millar, M. Sconyers, S. Gray, T. McKeon

Non-Voting Members: G. Counter, J. Chitthum, J. Costa, Absent-M. Venhorst
Others: Beth Kelley, J. Scharnburg, P. Vosburgh

S. Gray moved to accept the minutes with corrections. J. Millar seconded the motion. The minutes were corrected as follows: "Dufour reported that 7 **buses** should be adequate…."; and the following paragraph "Discussion held on whether to hire the services of an attorney. M. Sconyers moved to engage the services of Kainen, Excalera and McHale as the committee's legal advisor with billing costs not to exceed $7500 without approval from the entire committee and to work with the governance committee through J. Costa. S. Carr seconded the motion. The motion passed." The motion to approve the minutes of the February 26th meeting was passed.

Governance Committee:
J. Scharnburg reported that they would like to discuss with the business manager of Region #12 what works well or not works well with the Region 12 lease. The committee is still looking to have 3 questions answered regarding the collective bargaining agreements from Mr. Dorsey. The committee is rescheduling their meeting for April 14th.

Facilities Committee:
S. Gray reported that J. Lawlor attended their meeting on the 18th. The general consensus of the committee was that the current Computer/Media Center would need to become two classrooms and that estimated cost would be $25,000. The vestibule security should be allotted to a Capital Plan. Transportation was discussed. The bus company, All Star, brought a bus to Botelle and indicated that there was enough room for the buses to maneuver. They also indicated that there appeared to be enough turn around time from Regional #7 for pick up of the elementary students. The estimated cost for budget purposes used was $31,000 per bus. The committee believes that this is as close as they can get without going to bid. There are a couple of unknowns, the cafeteria and storage. There will be 2 rooms for every grade plus a music room for the first year or two and more will become available through attrition.

Finance Committee:
J. Costa reported that the additional grant was approved and that the monies should be forthcoming.
J. Millar passed out a summary of the Preliminary Budget Forecast and explained the process on how the committee reached its conclusion. It was explained that the committee as a whole will have to make a decision from the options presented. Five options were presented; Option #1 combining both schools; Option #2 combining both

schools with added enhanced programs; Option #3 combining both schools with added enhanced programs and a science program; Option #4 combining both schools with added enhanced programs, science program and debt; Option #5 combining both schools and adding only the debt. Discussion ensued. It was noted that the pro forma budget summary should begin with the fiscal year 15/16 and go forward. J. Costa told the committee that we should select an option to present to the public and that we need to strike a balance that will appeal to everyone involved. A short discussion was held regarding the current debt and whether or not that should be handled by the Governance Committee linking the debt service to the lease. M. Sconyers noted should this proposal pass a lease should be negotiated by the Board of Selectmen and the Board of Finance. The Governance Committee could present bullet points as to what should be in a lease. Enhancement programs could be phased in i.e., the science teacher when a room becomes available. These are all possible considerations. J. Millar noted that further information would be needed for Colebrook as to what the future cost could be should the community decide not regionalize.

S. Carr brought her concern to the table wanting to know what Colebrook was going to contribute. J. Chitthum and J. Costa concurred responded that by combining the two schools, Colebrook would be reducing Norfolk's per pupil cost.

J. Costa asked that we try to make our decision at the April 30th meeting so that he can compile a draft report to be reviewed at a meeting in early May after which the committee would present to the public. The committee determined the following schedule:

April 30th	Final Decision
May 13th	Committee Meeting
May 20th	Public Hearing Norfolk
May 22nd	Public Hearing Colebrook
May 27th	Committee Meeting

Having completed business; the committee adjourned at 7:50 PM.

Susan M. Dyer, Secretary

NORFOLK/COLEBROOK SCHOOL STUDY COMMITTEE

Wednesday, April 30, 2014

6:30 PM Botelle School

Agenda:

Public Comments

Minutes: March 26, 2014

Committee Reports: Governance
Facilities
Fiscal

J. Costa: Update
Key decisions on proposed model
Communications strategy for May hearings

2/3 Vote

Susan M. Dyer, Secretary

Norfolk/Colebrook School Study Committee

Tuesday,May 13, 2014

6:30 PM Botelle School

Agenda:

Minutes: April 30th

Review and approve documents:

Supporting Data and Proposal to State Board of Education

Discuss Public Hearings

Susan M. Dyer, Secretary