Beecher Road School, Woodbridge, Enrollment Projected to 2034

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Updated November 24, 2024

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Introduction

This report is a ten-year projection of enrollment for Woodbridge's Beecher Road School. It is based on residents and non-residents attending the school on October 1 of the school year. The school used to be divided into primary and intermediate levels. It is now organized as a single school. This projection reflects that. The report includes 55 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, migration, non-public enrollment, non-resident enrollment in Woodbridge schools 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 an eight-year school-based projection 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.

The impact of the Covid-19 pandemic is pretty much behind us. Now the change in the kindergarten start age confronts us. The General Assembly at the end of the 2023 session modified C.G.S 10-15c to set the starting age of kindergarten at age 5. The law did give districts the option to evaluate students born between September 2 and December 31 for their readiness to enter kindergarten. This report assumes that Woodbridge will have fully shifted to a September to August calendar in the fall of 2028. In 2025, 2026, and 2027 I have simulated a phased elimination of the number of four-year-olds entering kindergarten and a 60% reduction in the percentage retained. It will take time and new data to determine how the change in the law actually impacts these patterns.

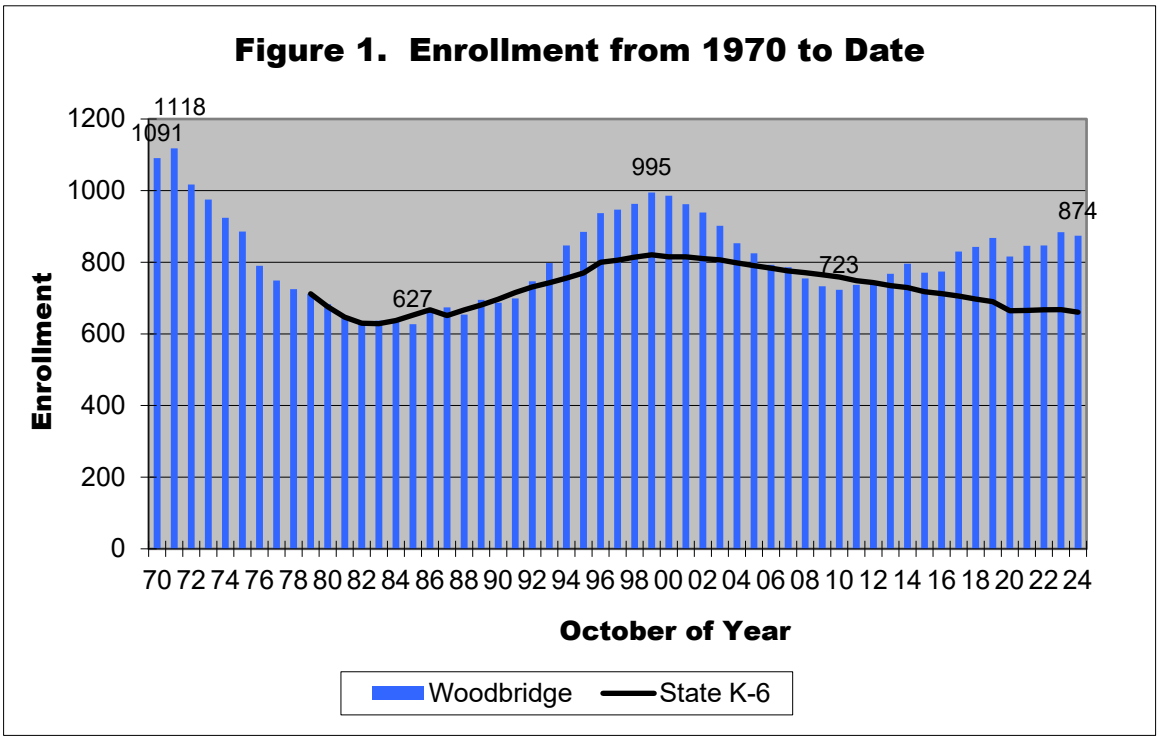
Perspective

Enrollment projections typically use the most recent three to 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 in Woodbridge from 1970 to date.

Enrollment in the Woodbridge Public Schools peaked at 1,129 students in 1969. Between 1969 and 1985, enrollment fell to 627 students. In those 16 years, enrollment declined by 502 students or 44.5 percent. Between 1985 and 1999 enrollment grew by 368 students, or 58.7 percent, and reached a secondary peak of 995 students. Enrollment fell to 723 students in 2010 but then grew to 868 students in 2019. Covid-19 caused a drop to 816 students in 2020, but there was a recovery to 874 students in 2024. The 2024 enrollment was 151 students (20.9 percent) above the 2010 low.

Woodbridge's enrollment pattern is different than 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, two years before Woodbridge. It reached a secondary peak in 1999. In those 16 years, state K-6 enrollment grew by 30.5 percent. Woodbridge's period of growth was slightly shorter than the state's, but much more intense. The state's elementary enrollment has been declining for 25 years. Between 1999 and 2024, it fell by 19.5 percent. Both Woodbridge and the state started the second downturn at the same

time. The second decline in Woodbridge through 2010 was steeper than the state's. The decline in Woodbridge is over, while the state's is still continuing. Had Woodbridge followed the state pattern of enrollment since 1979, it would have had only 661 students on October 1, 2024 instead of the 874 that were enrolled on that date



Current Enrollment

Table 1 and Figure 2 provide a picture of where Woodbridge residents attended school on October 1, 2023, the most recent data available. They show that 91.5 percent of Woodbridge's elementary school-age residents attended the Beecher Road School. Seventy-five students, 7.9 percent of the school-age residents, attended non-public schools in state at parents' expense. Four students (0.4 percent) attended area magnet schools. One child (0.1 percent) attended a public school in another district. There were 18 non-residents enrolled at the Beecher Road School in 2024 through the Open Choice program. On October 1, 2023 there were 884 residents and non-residents enrolled at the Beecher Road School (see "Total Enrollment" below). The comparable count for 2024 was 874 students.

Table 1. 2023 Enrollment

	Number	Percent
Residents		
A. Woodbridge Public	866	91.5%
B. Other Public	1	0.1%
C. Magnets	4	0.4%
D. Non-Public	75	7.9%
E. Non-Public SE	0	0.0%
Total (A+B+C+D+E)	946	
F. Non-Residents	18	
Total Enrollment (A+F)	884	

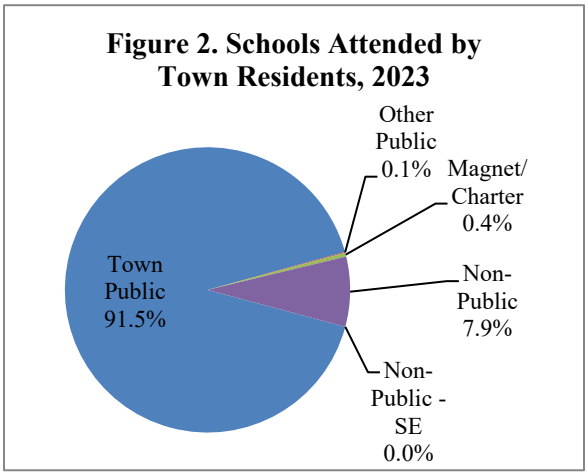
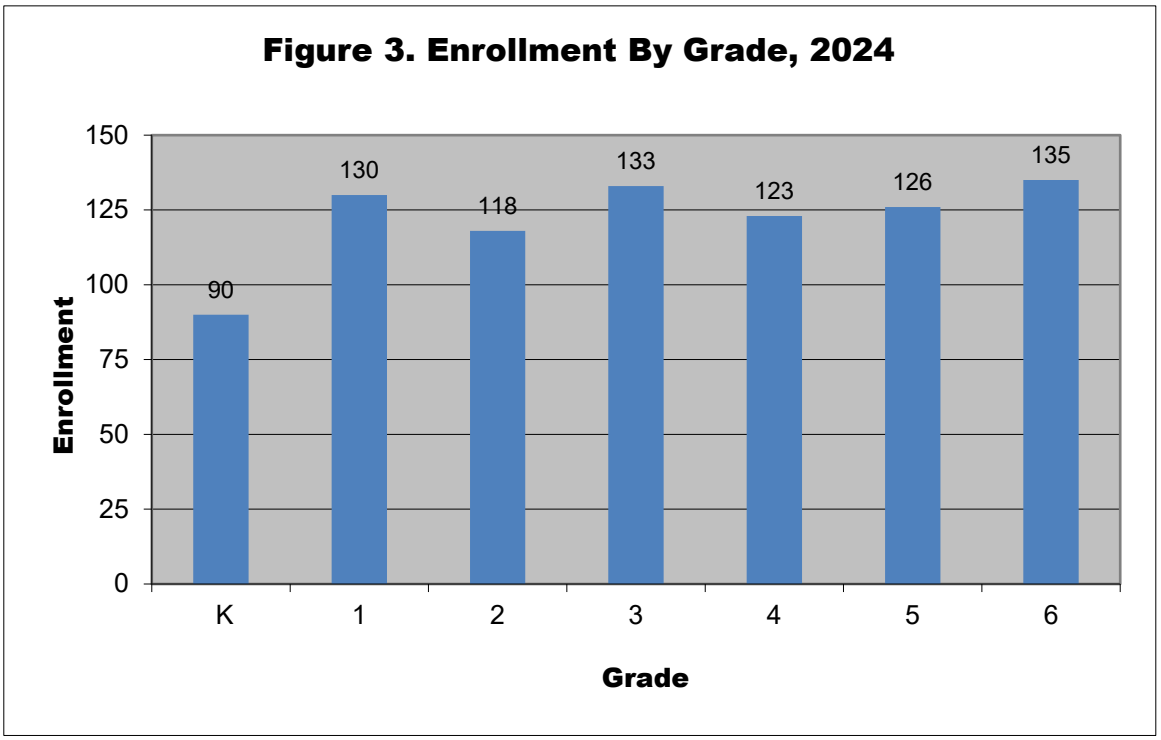


Figure 3 shows the October 2024 grade-by-grade enrollment of students in the Beecher Road School. The children in pre-kindergarten programs are not shown. Grade 6 had the largest enrollment with 135 students. It was followed by grade 3 with 133 students. Kindergarten was the smallest class with 90 students. This class is artificially low because of the impact of the law changing the kindergarten start age. The next smallest class was grade 2 with 118 students. If current conditions continue, this year's kindergarten class of 90 students could have 105 students when it enters grade 6 in 2030. The current year enrollment by grade is the starting point for this projection. How it moves forward 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, I compute grade-to-grade growth rates for ten years (see Appendix B). For example, if the number of fifth graders this year is 123 and the number of fourth graders last year was 120, then the growth rate is 1.025. A growth rate above 1.000 indicates that students moved in, transferred from a non-public school, returned from home-schooling, or were retained. A growth rate below 1.000 means that students moved out of town, left for home-schooling, transferred or were not promoted from the prior grade. For each grade I calculated five different averages of the growth rates: a three-year average; a weighted three-year average; a covid-19/CGS 10-15c average based on 2019, 2022, 2023 and 2024, a five-year average and a ten-year median. I choose the average that seems to best fit the data. The average growth rate for a grade is applied to the enrollment from the prior grade. The projection builds grade by grade and year by year.

Because Woodbridge participates in the Open Choice Program, I broke the projection into resident and non-resident components. I calculated the annual growth rates for residents only. To project enrollment in 2025 to 2027, I applied the average resident growth rates from 2019, 2022, 2023 and 2024 to the number of students from Woodbridge and then added in the non-residents. I assumed all non-residents would continue or be replaced. To project enrollment in 2028-2034, I used the very slightly more conservative 10-year median.

The change in CGS-15c necessitated that I change how I project kindergarten. The change started in 2024. In that year I estimated that 45.0 percent of the birth cohort of September and December of 2019 entered kindergarten early. The prior year's percentage was 66.7 percent. I assumed the percentage would be 30.2 in 2025, 14.9 in 2026 and zero in 2027. The formula for kindergarten enrollment also includes growth from births between January and August five years prior, children who deferred enrollment from the year in which they were first eligible, retentions from the prior year's kindergarten class and children in the Open Choice program. In 2025 -2027, I used a birth to kindergarten enrollment growth of 163.6 percent from January to August births five-years prior. This was the rate observed for the kindergarten classes of 2021 to 2023. The observed retention rate for the kindergarten classes over the past five years was 4.6 percent. I assumed it would be 80 percent of that in 2025, 60 percent in 2026 and 40 percent in 2027 forward. I set kindergarten enrollment in the Open Choice program at the number needed to fill 18 seats total. Starting in 2028, I based kindergarten enrollment on births from September to August and the median 10-year growth from birth to eventual kindergarten enrollment.

To extend the projection beyond four years, I need to estimate births. The State Department of Public Health reported a preliminary count of 73 calendar-year births in 2023. This count of births is unlikely to change much if at all. Based on recorded in-state births through September and the five-year pattern of October to December births relative to January to September births, I estimated there would be only 60 births in 2024. I did not use the Connecticut State Data Center's 2017 projections of women of child-bearing ages in 2020, 2025 and 2030 because their projection of the number of women ages 20-29 in 2020 was about 40 percent below the census count. I set births in 2025-29 to the average of 2020-24. That resulted in an average of 69 September to August births annually in the 2025 to 2029 period.

Enrollment data from 2014 to 2023 were taken from files provided by the Connecticut State Department of Education. The Woodbridge Central Office provided enrollments in 2024. Note that current district-level data on the Department's website may include special education students educated outside of the district. This differs from how the Department used to report enrollment data. Projections require consistency. The data I have chosen for this analysis **exclude** special education students educated outside of the district. Enrollment data can change daily until an audited final file is closed. This process can take up to two years. Thus, it is possible that the enrollment data in this report could differ slightly from data in earlier reports and that may have been reported by your Board of Education to the public. Births from 1980 to 2024 were provided by the Healthcare Quality, Statistics, Analysis and Reporting Unit of the State Department of Public Health.

Beecher Road School Enrollment

Table 2 and Figure 4 present the observed total enrollment at the Beecher Road School from 2014 to 2024 and projected enrollment through 2034. Detailed grade-by-grade data may be found in Appendix A. Between 2014 and 2024 enrollment rose from 796 to 874 students. That was a net gain of 78 students or 9.8 percent. Statewide in that period, I project that grade K-6 enrollment will have decreased by 9.4 percent.

Table 2. Beecher Road School Enrollment

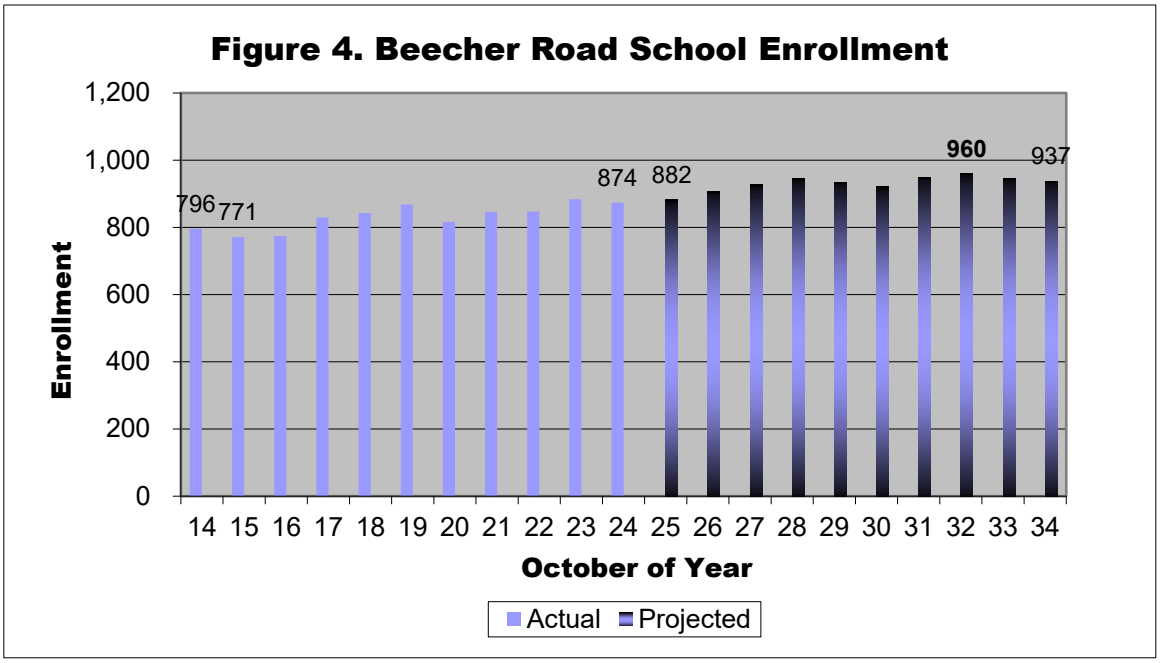
Year	Students	Percent Change
2014	796	
2015	771	-3.1%
2016	774	0.4%
2017	830	7.2%
2018	843	1.6%
2019	868	3.0%
2020	816	-6.0%
2021	846	3.7%
2022	847	0.1%
2023	884	4.4%
2024	874	-1.1%
2025	882	0.9%
2026	908	3.0%
2027	927	2.0%
2028	945	2.0%
2029	934	-1.1%
2030	920	-1.5%
2031	949	3.2%
2032	960	1.2%
2033	946	-1.5%
2034	937	-1.0%

Woodbridge's growth of 14.8 percent between 2013 and 2023, the latest comparable data available, was the second highest of similar districts in the region. Only the 16.9 percent growth in Monroe was greater. Enrollment in grades PK-6 grew by 7.6 percent in Orange and 2.9 percent in Bethany. It decreased by 9.2 percent in Chester, 12.4 percent in Madison and 14.7 percent in Guilford.

If families with pre-school young children continue to move into Woodbridge, I anticipate that enrollment will resume its move upward. Next year I anticipate that total enrollment could grow by about 10 students. I anticipate it could reach 960 students in by 2032. Enrollment was last near that level in 2000. The total ten-year projected gain of about 65 students would be 7.2 percent above the current enrollment. I have projected that K-6 enrollment statewide will be up 1.5 percent in that period. The peak growth over the next eight years for a school construction grant is 960 students. The school's enrollment could average about 930 students over the ten-year projection period. This compares to an average enrollment of 835 students over the past ten years.

These figures include pre-kindergarten children. In the past ten years, pre-kindergarten enrollment ranged from 18 to 30 children. Based upon births three and four-years prior. I project 22 in October 2025 and an average enrollment of 21 children over the next ten years.

Figure 4. Beecher Road School Enrollment



Factors Affecting the Projection

The key reasons for elementary enrollment change lie in births the kindergarten yield from the birth cohort and migration. Figure 5 presents the recorded and provisional births from 1980 to 2023 and estimated births through 2029. Births ranged from a low of 46 in 2014 to a high of 106 in 1987. There was a provisional count of 73 births recorded in 2023. Based on in-state births through June of 2024, I estimated there could be only 64 births in that year. Between 2000 and 2009 there was an average of 58 births annually. In the five years from 2015 to 2019 (this fall's kindergarten through 4th graders) births averaged 63. Births in the 2020 through 2024 period will average close to 70. The projection in years 2030 to 2034 assumes an average of 70 calendar-year births and September to August births between 2025 and 2029.

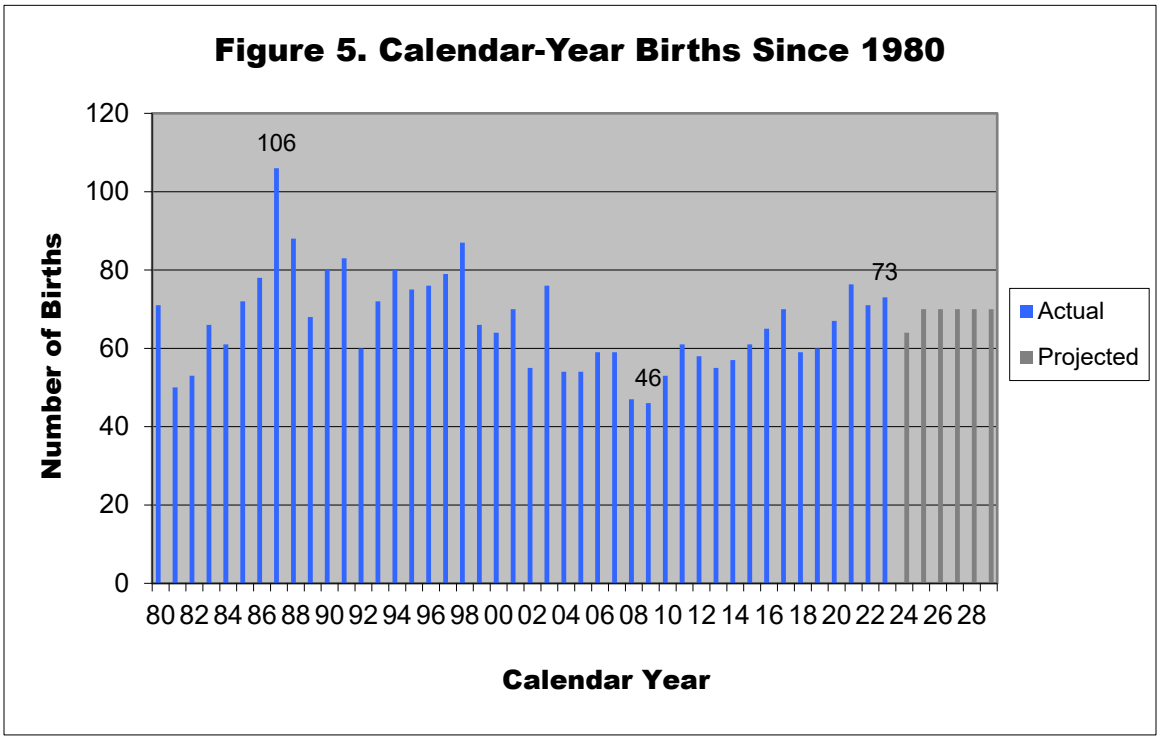
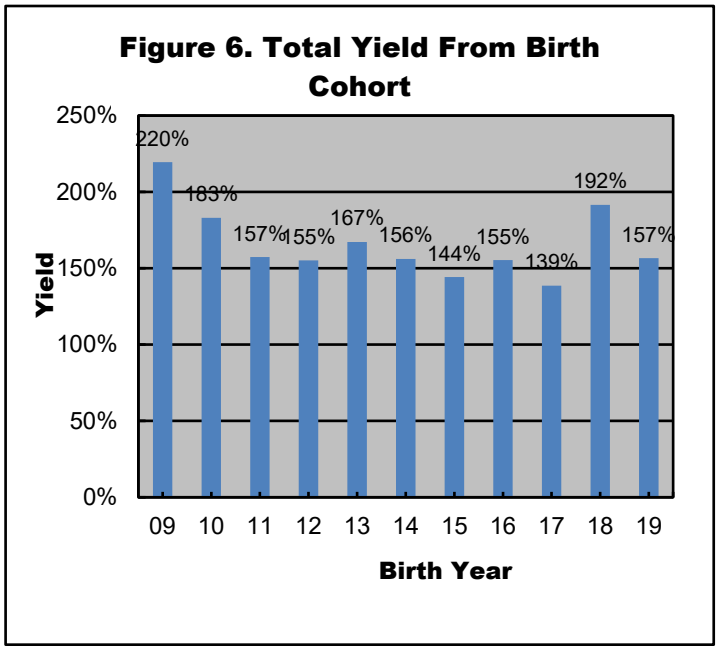


Figure 6 depicts the kindergarten yield five and six years later from the birth cohorts of 2009 to 2019 for Woodbridge residents attending kindergarten at Beecher Road. There were 59 births in 2018 and 102 resident children enrolled in the school's kindergarten at age five in 2023 and an additional 11 who first enrolled in kindergarten at age six in 2024. That is a yield of 192 percent. The recent yield from the birth cohort ranged from a low 139 percent in 2017 to a high of 220 percent in 2009. The estimated yield for births in 2019 was 157 percent. Note that the 2019 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 2025. Yields above 100 percent generally mean that parents with young children move into town after giving birth elsewhere.

Table 6 gives a history of enrollment in kindergarten since 2014 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 the 10-year median Total Yield from the Birth Cohort to generate kindergarten enrollment in 2028 to 2034 along with the Covid-19/CGS 10-15c adjusted retention rate reduced by 20 percent in 2025, 40 percent in 2026 and 60 percent in 2027 forward.

Table 3. Analysis of Kindergarten Enrollment

Oct. Year	Birth Year	Births	K	Retained From Prior Year	- - - - Non-Retained - - - - Born 5-Years Prior Resident	Non-Resident	Born 6 Yrs. Prior	Percent Retained	Yield From Births 5-Yrs. Prior	Yield From Births 6-Yrs. Prior	Total Yield From Birth Cohort
2014	2009	46	111	6	90	2	13	5.0%	195.7%	27.7%	219.6%
2015	2010	53	102	6	82	3	11	5.4%	154.7%	23.9%	183.0%
2016	2011	61	97	7	74	1	15	6.9%	121.3%	28.3%	157.4%
2017	2012	58	100	8	69	1	22	8.2%	119.0%	36.1%	155.2%
2018	2013	55	108	6	80	1	21	6.0%	145.5%	36.2%	167.3%
2019	2014	57	98	11	72	3	12	10.2%	126.3%	21.8%	156.1%
2020	2015	61	99	5	75	2	17	5.1%	123.0%	29.8%	144.3%
2021	2016	65	115	7	90	5	13	7.1%	138.5%	21.3%	155.4%
2022	2017	70	105	7	83	4	11	6.1%	118.6%	16.9%	138.6%
2023	2018	59	121	4	102	1	14	3.8%	172.9%	20.0%	191.5%
2024	2019	60	90	2	73	3	11	1.7%	121.7%	18.6%	156.7%
3-Year Average								3.8%	136.5%	18.6%	186.8%
Weighted 3-Year Average								3.1%	138.2%	18.8%	157.8%
5-Year Average								4.6%	134.3%	21.2%	187.6%
Covid 19/CGS 10-15c Adj								**5.3%**	133.2%	19.2%	156.1%
Median, Past 10 Years								**6.0%**	**124.6%**	**22.9%**	**156.8%**

The correlation between births and kindergarten enrollment five-year later was an extremely low 0.02 over the 2003 to 2023 period. In essence, we can't predict kindergarten enrollment from prior births. If this relationship were used to predict kindergarten enrollment, the estimate would have been off by an average of five children annually over the past ten years. The cohort survival method, even with my enhancements, cannot overcome the underlying unpredictability of kindergarten enrollment from earlier births.

The correlation between births and birth-to-kindergarten growth was a high -0.78 over the 2003 to 2023 period. This means that there is less growth between births five-years prior and kindergarten enrollment when births are relatively large. Births in the 2015-19 period, the look-back period to determine future kindergarten enrollment, averaged 63. The upcoming kindergarten classes will come primarily from births around 70 although there were 76 births in 2021. The industry-standard cohort-survival model relies on the notion that the growth between birth to kindergarten will remain similar, independent of the number of births. That simply is not the case in Woodbridge and opens up the possibility of slightly overestimating future kindergarten enrollment. It should be monitored.

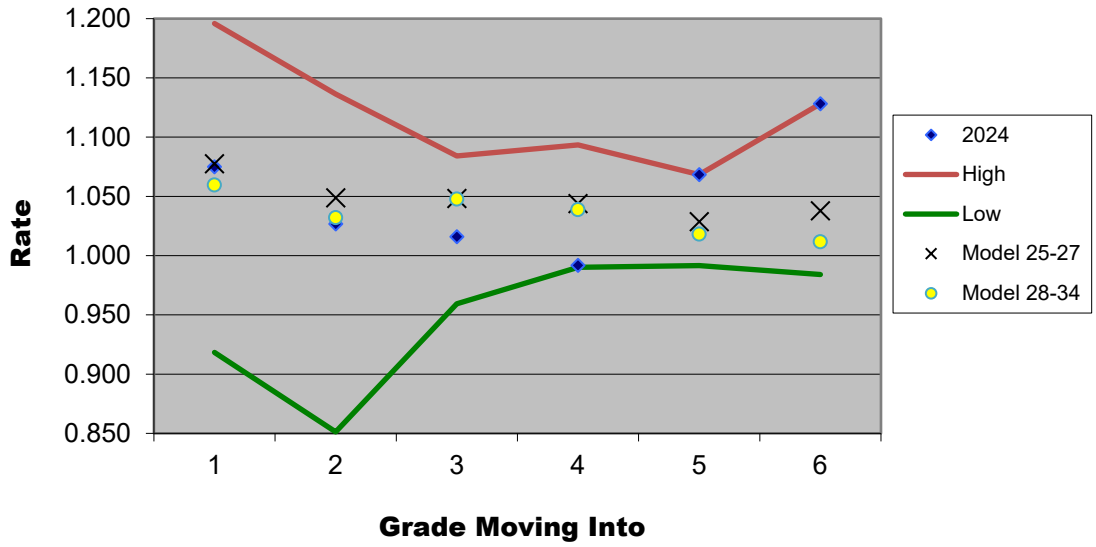
Section 10-15c of the Connecticut General Statutes was modified in the 2023 session of the legislature to have children be five years old upon entry to kindergarten starting in the fall of 2024. Districts would have the option of admitting children born between September 2, 2019 and December 31, 2019 based on a

parent's written request and an evaluation by a certified staff member and the school's principal. Last year I projected you would enroll 27 students from the September to December, 2019 birth cohort. The actual enrollment was 18 children. You went from an estimated 66.7 percent of children enrolling as four-year olds in 2023 to an estimated 45 percent in 2024. I have assumed the percentage will fall to 30.2 percent for the kindergarten class of 2025, 14.9 percent for the class of 2026 and go to zero by 2027. In 2028, I switch to a September to August calendar of births. This projection of kindergarten enrollment could prove to be significantly off if the assumptions adopted here differ from what procedures are officially adopted and how parents respond to them.

I believe that a second impact of the law will be a reduction in children retained in kindergarten. Over the past five years your kindergarten retention rate averaged 4.6 percent. I reduced that by 20 percent in 2025, 40 percent in 2026 and 60 percent in 2027 to 2034.

Figure 7 gives a perspective of the grade-to-grade resident growth rates for students attending the Beecher Road School. An "x" indicates the average growth rate used in 2025 to 2027 of this projection. The yellow circle denotes the growth rates used in years 2028 to 2034. 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. Be aware that the gap in grades 1-3 is very wide. The growth rates used in the early years of projection were based on a four-year average of the observed grade-to-grade growth rates in 2019, 2022, 2023 and 2024. The 10-year median growth rates were used in years 2027 to 2034 of the projection.

Figure 7. Grade-to-Grade Growth Rates



Most model growth rates were in the middle to upper part of the ten-year range. All six of the elementary growth rates were well above 1.000 indicating that families with children are moving into Woodbridge. The 2024 rates in grades 5 and 6 were ten-year highs. Grade 4 was near a ten-year low. In only grades 1 and two were the 2024 growth rates close to the projection rates. The average of the growth rates across grades 1-6 used for the projection was a high 1.048 for projection years 2025-27 and 1.035 for years 2028 to 2034. The average in 2024 was a high 1.051. The median rate over the past 20 years was 1.035. This high in-migration of families with school-age children is a major driver of your expected enrollment growth.

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 several 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; resident enrollment in other public schools and family migration.

Figure 8 presents the US Census Bureau estimate of Woodbridge population growth between April, 2020 and 2023. In that period, the town's estimated population declined by 34 people. The population loss of 0.38 percent ranked it 155th in the state. In contrast, New Haven County grew by 0.95 percent, the state grew by 0.80 percent and similar communities grew by 1.07 percent. Woodbridge population grew 1.08 percent between 2010 and 2020. That compared to an 0.89 percent growth for the state, 0.27 percent for New Haven County and 1.72 percent for similar communities.

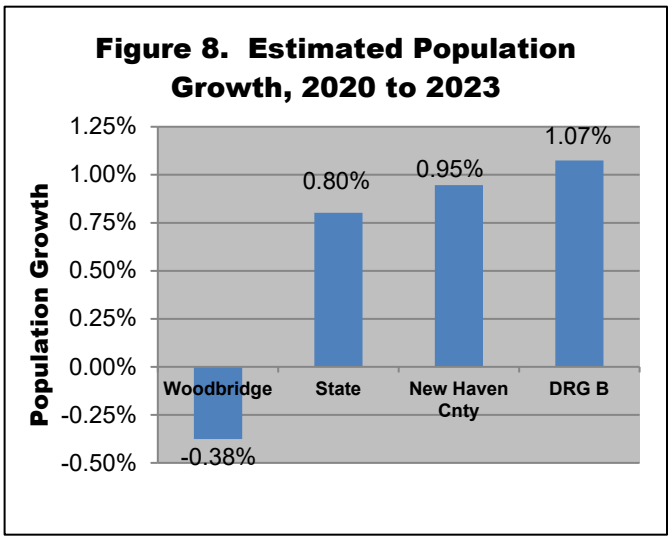


Figure 9 presents the Connecticut State Data Center's 2017 population projections for Woodbridge residents 0-14 years of age in the years 2020, 2025 and 2030. The Center projected that population ages 0-4 would grow from 391 in 2020 to 416 in 2025 and 441 in 2030. They projected the population ages 5-9 would be unchanged between 2020 and 2025 and then grow by 4.1 percent between 2025 and 2030. The number ages 10-14 would grow from 523 in 2020 to 583 in 2025 and then decline slightly. This projection underestimated the 2020 census count of 0-4 by 8 percent, ages 5-9 by 15.4 percent, and ages 10-14 by 21.8 percent.

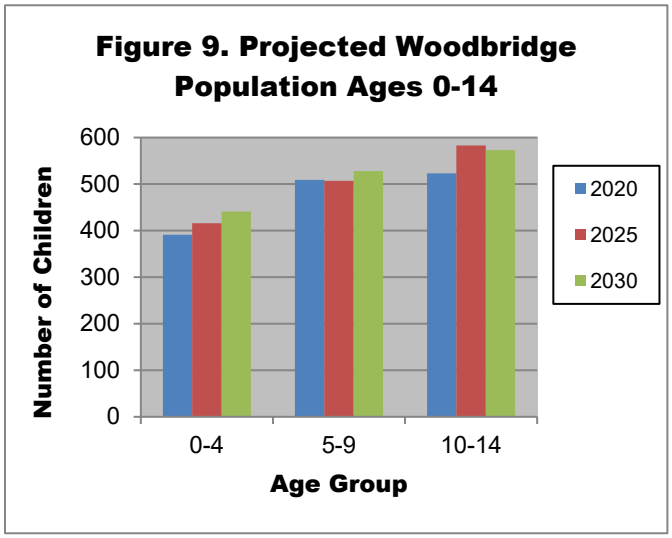


Figure 10 presents the Connecticut State Data Center 2017 projections of the number of women of child-bearing age for 2020, 2025 and 2030. In communities such as yours, women in the 30-34 age group have the highest rate of births. The Center projected the number of women in this group would grow from 162 in 2020 to 231 in 2025 and plunge to 130 in 2030. The second highest birth rate in communities like yours is women ages 25-29. The Center projected the number in that age range would plummet in upcoming years. Their projection underestimated the 2020 census count of women 15-44 by 14.7 percent.

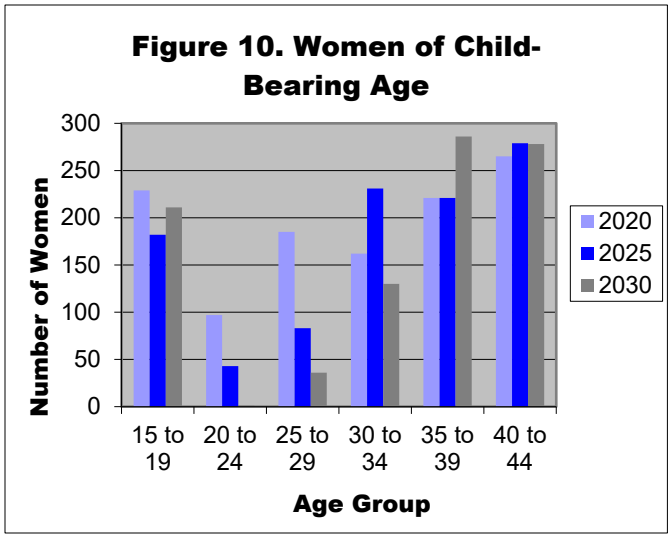


Figure 11 examines the number of people in the labor market over the past ten years from the US Department of Labor, Bureau of Labor Statistics. These are people 16 years of age or older who work or actively are seeking employment. The Woodbridge estimated labor force peaked in 2018, fell precipitously in 2020 and recovered in 2023. It grew an estimated 0.1 percent between 2013 and 2023. The state grew by 1.4 percent and New Haven County grew by 2.5 percent between 2013 and 2023. Woodbridge's 2023 unemployment rate of 2.8 percent was down 2.7 percentage points from the 2020 Covid-19 rate of 5.5 percent. It is much better than the state rate of 3.8 percent and the New Haven County rate of 3.9 percent.

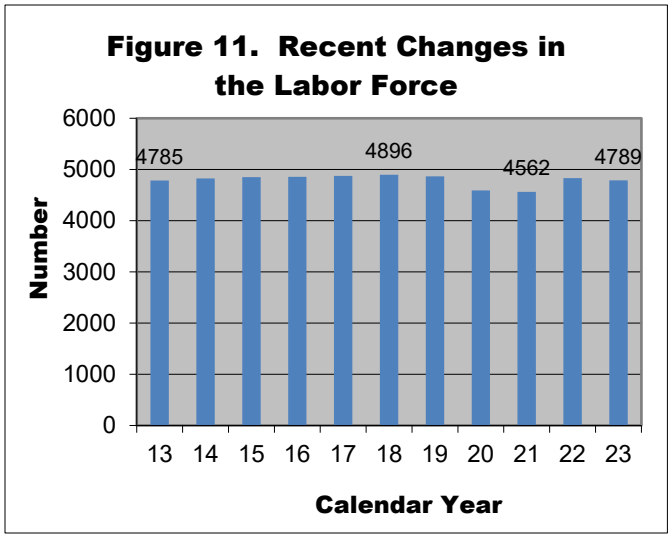


Figure 12 presents the net new housing units permitted from 2013 to 2023 from the State Department of Economic and Community Development. In the past ten years the number of net (of demolitions) new housing units permitted in Woodbridge ranged from a low of -3 in 2014 to a high of 20 in 2023. There were eight units permitted in 2022. Between 2019 and 2023, there was an average of 9.6 net new housing units authorized. The newly constructed Regency Townhomes for seniors should open up their former homes to younger families.

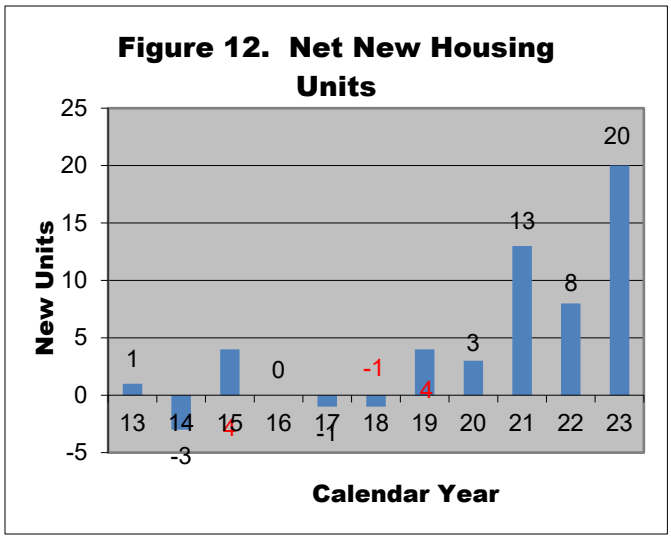


Figure 13 presents my estimate of the number of sales of existing homes. I derived it by taking the number of sales of single-family homes and condominiums from The Warren Group/Commercial Record and subtracting the number of new single-family housing units authorized the prior year. The estimated number of sales of existing homes ranged from a low of 82 in 2023 to a high of 131 in 2016. Based on sales through September, I project there will be 112 sales in 2024. Between 2020 and 2024 there was an average of 112 sales.

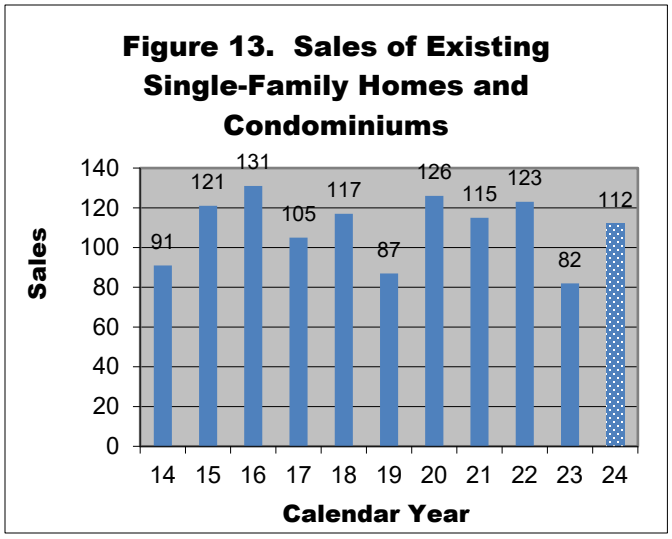


Figure 14 presents non-residents enrolled in Woodbridge Schools under the Open Choice program. In 2014 there were 12 New Haven residents enrolled at the Beecher Road School. That number grew to 18 in 2021 and has remained there. The projection assumes that the Beecher Road School will accept 1-6 children annually in kindergarten so that the total non-resident enrollment will remain at 18 students.

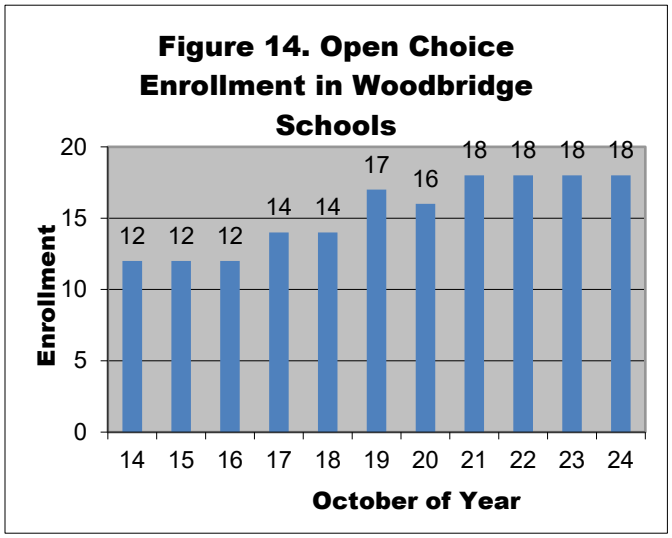


Figure 15 presents the non-public enrollment in grades PK-6 over the past ten years for students from the town of Woodbridge. The data are from the records of the Connecticut State Department of Education. Non-public enrollment declined from 64 students in 2013 to 43 students in 2020 and then rose to 58 in 2023. In the past ten years, enrollment in the non-public schools decreased by six students or nine percent. The 2023 enrollment represented 6.5 percent of all PK-6 students from Woodbridge. That is below the 7.0 percent level of 2013. I project the non-public enrollment in grades PK-6 from Woodbridge will be slightly lower in 2024.

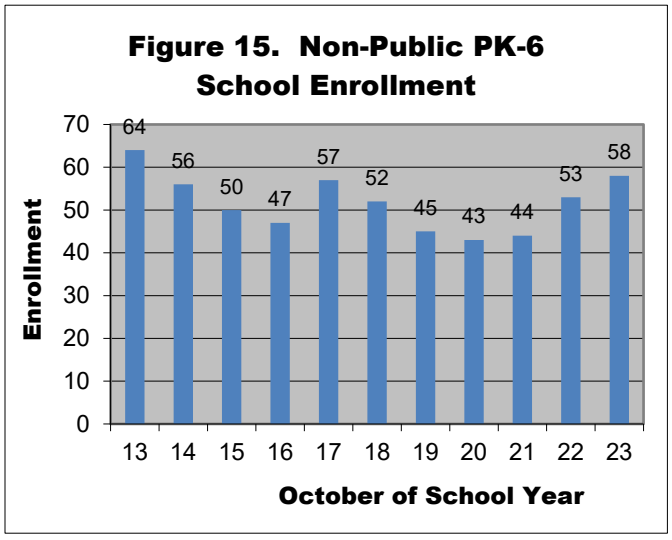


Figure 16 presents the enrollment of Woodbridge residents in grades PK-6 in other public schools in Connecticut from 2014 to 2024. The number educated out-of-district in other public schools grew from seven in 2014 to 21 in 2019. In 2024, the preliminary count was nine students. Most attended prekindergarten in a magnet school in New Haven

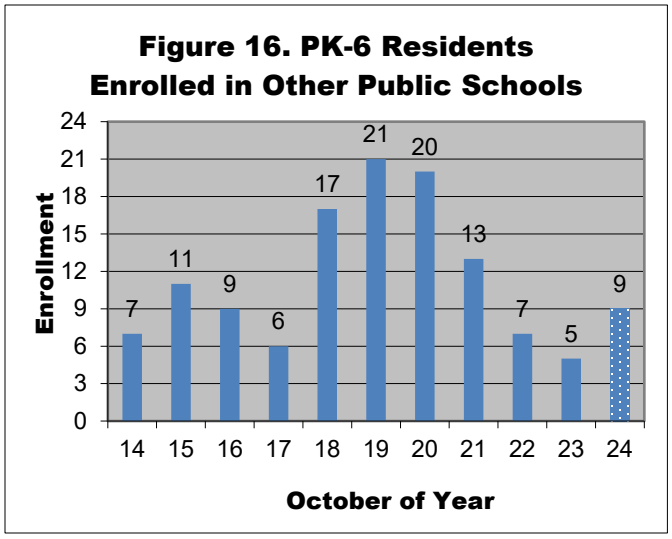
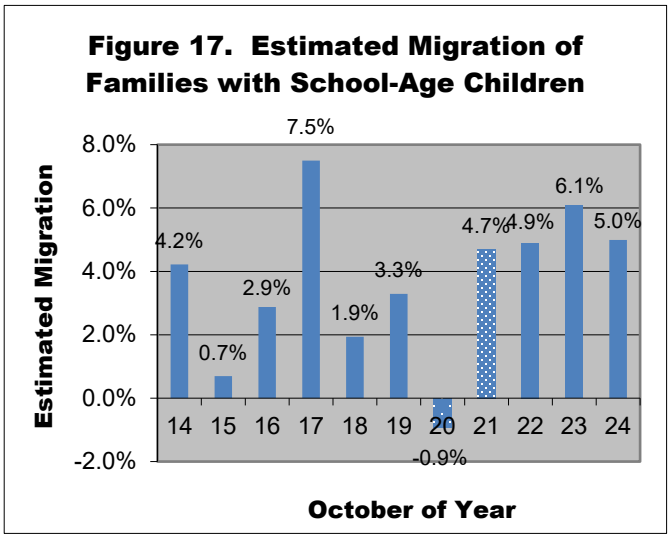


Figure 17 presents my estimated migration of families with school-age children. The calculation excludes non-residents enrolled in Woodbridge and includes Woodbridge residents enrolled in other public schools, students enrolled in non-public schools and in 2020 and 2021, students home-schooled. Estimated family migration ranged from a low of -0.9 percent in 2020 to a high of +7.5 percent in 2017. The preliminary rate in 2024 was 5.0 percent. The data in Appendix B are different and were based on resident and non-resident enrollment in Woodbridge only. The average family migration in the past five years was +3.9 percent. The median rate over the past 10 years was +4.0 percent.

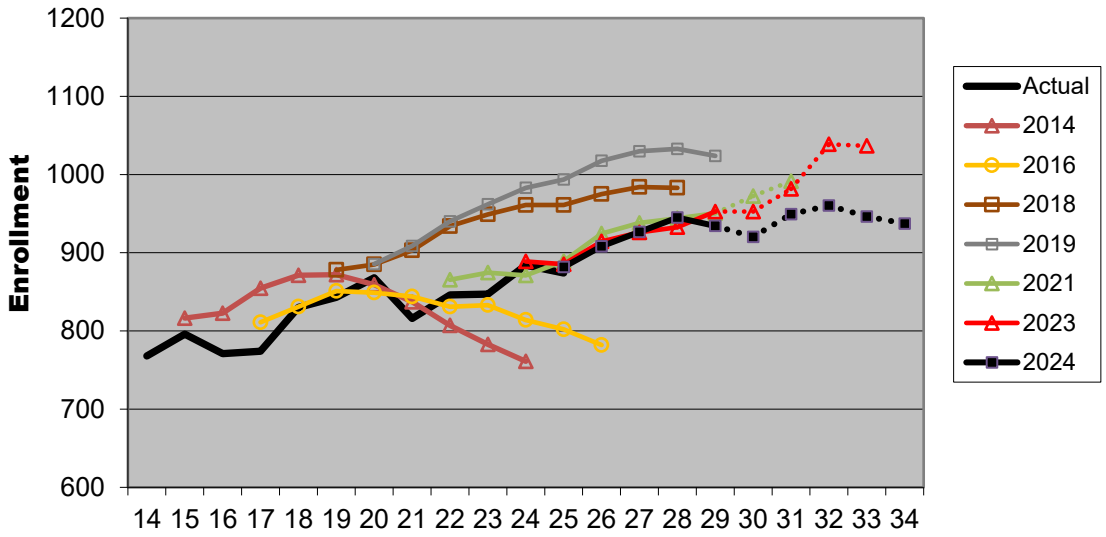


Prior Projections of Enrollment

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 18 presents the even-numbered and recent years enrollment projections that I have run for Woodbridge since 2014.

My 2023 projection was 15 students (1.7 percent) above this year's enrollment of 874. The eight enrollment projections that I did between 2014 and 2023 had one-year error rates that averaged 2.8 percent. The six projections done between 2014 and 2019 had an average five-year error rate of 4.3 percent, which is 0.85 percent annualized.

Figure 18. Prior Projections of Enrollment



Over the past forty years, 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. The method usually does not attempt to predict the future. Its key assumption is that the near future will be like the recent past. For example, projections done in the late 2000s did not anticipate the recession of 2014 and projections done about 2015 could not have anticipated Covid-19 or the change in the kindergarten start age. Some policy changes such as full-day kindergarten or the expansion of Open Choice can be built into a new projection. It is incumbent upon the receiver of a projection to identify planned changes so that they can be built into a projection.

Summary

I project that Beecher Road School enrollment could peak at about 960 students in 2032 and end the projection near 940 students. I project the ten-year net gain could be about 65 students or 7.2 percent. I expect that there will be about 880 students enrolled next year. The school's enrollment could average 930 students over the ten-year projection period compared to 835 over the past ten years. The eight-year peak enrollment for a school construction grant is 960 students in 2032.

This report is projecting moderate continued growth over the next ten years. 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 2015 to 2019 (this fall's kindergarten through 4th graders) births averaged 63. Calendar-year births in the 2020 through 2024 period will average close to 70. These births have already happened and should support some growth in enrollment. My model assumes an average of 69 births between September and August in the 2025 to 2029 period.

The change in C.G.S. 10-15c to require children to be five years old upon kindergarten entry has introduced an immense amount of uncertainty into this projection. Based on the birth to kindergarten growth in 2021 to 2023, I expected 27 kindergarten students to enroll as 4-year-olds this fall. The actual first-time enrollment of children born September to December was 18 children. So, this fall's kindergarten class is artificially small. In 2023, I estimated that 66.7 percent of children born between September and December entered kindergarten as four-year-olds. My estimate for the kindergarten class of 2024 (the first year of the legislated change in kindergarten start age) was 45.0 percent of births in 2019. My model now assumes that percentage will decrease to 30.2 percent in 2025, 14.9 percent in 2026 and go to zero in 2027. It is relatively rare in Woodbridge for parents of children born in June through August to withhold their child from kindergarten until they turn six. Only six did so in the last three years. This "academic redshirting" could increase in the future, but is not yet built into my model. Over the past five years you have retained an average of 4.6 children per year in kindergarten. With future kindergarten classes being older, I anticipate this will decrease. It is clear that the change in CGS 10-15c has upset the already difficult prediction of future kindergarten enrollment. It will take several years for all the moving parts to shake out and leave us with a set of data from which we can project.

I worry about two statistical anomalies impacting the projection of kindergarten enrollment from prior births in Woodbridge. The first is a ,02 correlation between births and kindergarten enrollment five years later observed between 2003 and 2023. In short, there is practically no relationship between births and kindergarten enrollment five years later. The cohort survival method assumes there is an underlying relationship between the two. The second anomaly is that as births increase there has been less growth between births and subsequent kindergarten enrollment. The correlation is a high -.78. A basic assumption of the cohort-survival model is that the number of births does not impact birth to kindergarten growth. That clearly is not the case in Woodbridge. These make what is normally a difficult projection even worse.

A second factor in the projection is the average grade-to-grade growth rate over grades 1-6. I used the average of the annual resident growth rates in 2019, 2022, 2023 and 2024 to project growth in 2025 to 2027 and the very slightly lower 10-year median to project enrollment in 2028 to 2034. The average growth rates over grades 1-6 used to project enrollment were 1.048 in 2025 to 2027 and 1.035 in 2028 to 2034. For perspective, the twenty-year median growth rate of was 1.035.

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 full-day; retention policies will not change; little expansion of area magnet schools and enrollment of 18 New Haven students through the Open Choice program. The

projection assumes a slight decrease in non-public school enrollment; 10 new housing units will be constructed annually; there will be an average of 112 sales of existing homes; a little growth in the labor force; and a 4.0 percent in-migration of families with school-age children.

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 Woodbridge and then make adjustments as necessary.

Appendix A. Beecher Road School Enrollment by Grade Projected to 2034											
October of Year	**Birth Year[1]**	**Births**	**K[2]**	**1**	**2**	**3**	**4**	**5**	**6**	**PreK**	**Total**
2014	2009	46	111	109	108	103	97	128	120	20	796
2015	2010	53	102	106	109	109	102	97	126	20	771
2016	2011	61	97	116	109	118	107	107	97	23	774
2017	2012	58	100	109	125	119	127	110	110	30	830
2018	2013	55	108	114	114	121	124	133	109	20	843
2019	2014	57	101	122	118	119	125	129	134	20	868
2020	2015	61	99	92	104	124	123	124	131	19	816
2021	2016	65	115	118	103	110	133	124	125	18	846
2022	2017	70	105	116	117	111	120	134	126	18	847
2023	2018	59	121	115	131	124	118	120	135	20	884
2024	2019	60	90	130	118	133	123	126	135	19	874
Projected											
2025	2020	67	106	97	136	124	139	127	131	22	882
2026	2021	76	123	114	102	143	129	143	132	22	908
2027	2022	71	119	132	119	107	149	133	148	20	927
2028	2023-24	80	133	128	138	125	112	153	138	18	945
2029	2024-25	53	88	143	134	145	130	115	159	20	934
2030	2025-26	69	111	95	150	140	151	134	119	20	920
2031	2026-27	69	113	120	99	157	146	155	139	20	949
2032	2027-28	69	113	122	126	104	164	150	161	20	960
2033	2028-29	69	111	122	128	132	108	169	156	20	946
2034	2029-30	69	111	120	128	134	138	111	175	20	937

[1] 2009 to 2023 births were from the State Department of Public Health. Births in 2023 are provisional. Births in 2024 were based on in-state births through September. Births in 2025-26 to 2029-30 were set to the average of 2019 to 2024 because I was not happy with the accuracy of the 2017 Connecticut State Data Center projections of women of child-bearing ages in Woodbridge in 2020.Starting in October, 2028, births were based on a September to August calendar.

[2] Based on observed birth to kindergarten growth between January and August and September to December in 2025 to 2027 and on September to August births in 2028 to 2034, a 60 percent reduction in children retained passed in between 2025 and 2027 and 1-6 children from New Haven in kindergarten such that total Open Choice enrollment remains at 18 students.

Appendix B. Resident Growth from Grade to Grade across Years									
October of Year	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**Average**	**Estimated Migration[1]**
2015	1.868	0.954	1.009	1.009	0.990	1.000	0.984	0.991	-0.37%
2016	1.574	1.131	1.029	1.075	0.991	1.050	1.000	1.046	2.87%
2017	1.707	1.125	1.063	1.093	1.078	1.028	1.028	1.069	6.10%
2018	1.945	1.141	1.046	0.966	1.043	1.048	0.991	1.039	1.86%
2019	1.719	1.131	1.035	1.044	1.035	1.041	1.008	1.049	3.14%
2020*	1.590	0.918	0.851	1.051	1.025	0.992	1.016	0.976	-1.14%
2021*	1.692	1.196	1.133	1.039	1.073	1.008	1.025	1.079	4.94%
2022	1.443	1.000	1.000	1.078	1.093	1.008	1.016	1.033	3.40%
2023	2.034	1.109	1.136	1.060	1.064	1.000	1.008	1.063	5.02%
2024	1.450	1.075	1.027	1.016	0.992	1.068	1.128	1.051	4.44%
3-Year Ave.	1.642	1.061	1.054	1.052	1.050	1.025	1.051	1.049	
Weighted 3-Year	1.643	1.074	1.059	1.041	1.033	1.035	1.069	1.052	
2019, 22, 23, 24	1.650	**1.078**	**1.049**	**1.048**	**1.044**	**1.029**	**1.038**	1.048	
5-Year	1.642	1.060	1.030	1.049	1.050	1.015	1.039	1.040	
10-Year Median	1.700	1.117	**1.032**	**1.048**	**1.039**	**1.018**	**1.012**	1.044	
Projection Growth Rates: 2025-2027		1.078	1.049	1.048	1.044	1.029	1.038		
2028-2034		1.060	1.032	1.048	1.039	1.018	1.012		

[1] Includes non-residents enrolled in Woodbridge and excludes Woodbridge residents enrolled in other public schools, non-public schools and home-schooled.