

Region 12 Public Schools Enrollment Projected to 2032

Peter M. Prowda, PhD
28 Old Mill Court
Simsbury, CT 06070
(860) 716-7971
peteprowda@yahoo.com

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Introduction

This report presents a ten-year projection of enrollment for the Region 12 Public Schools. It includes growth from your new Agriscience Program. It is based on residents and non-residents enrolled in the Region 12 schools on October 1 of the school year. The projection is divided into the three grade levels that represent how the Region 12 schools are organized: K-5, 6-8 and 9-12. The report includes 53 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 - population, women of child-bearing age, labor force, housing, grade 9 repeaters, migration, non-public enrollment, non-resident enrollment in the district and resident enrollment in other public schools - are presented. Finally, the accuracy of earlier projections is examined.

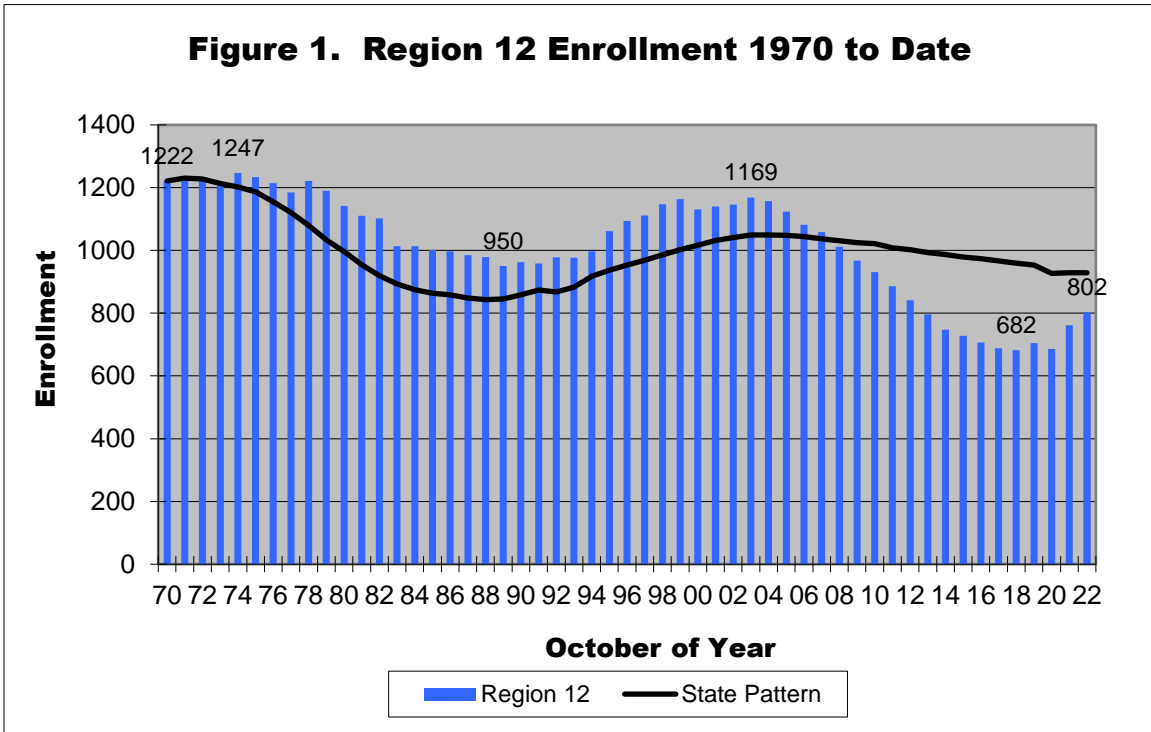
Enrollment projections are a valuable planning tool. For budgeting, the numbers can place requested expenditures into a per pupil context. This can inform the public about which expenditures represent continuing expenditures to support on-going programs and expenditures for school improvement and program expansion. In this period of limited resources, it might point out areas for possible cuts. Projections are an essential step in determining the staffing that will be needed in the future. This may facilitate the transfer of teachers from one grade to another or allow the hiring process to start earlier, which can increase the likelihood of attracting the best teachers in the marketplace. Projections are a critical and required step in planning for school facilities. The State of Connecticut requires eight-year school-based projections as a critical component of determining the size of the project for which reimbursement is eligible. The projections in this report are appropriate for that use.

This projection was run just after the Covid-19 pandemic, which has had an impact mostly on elementary enrollment. In projections I have run, I have observed a continued decline in non-public school enrollment, a decline in births in 2020, an increase in births in 2021, a slight decrease in magnet school enrollment, more families deciding to home-school their children and their return. Each town is a little different. The trick is to observe the data and make a judgement which patterns are transient and adjust the projection accordingly. A key assumption behind the method used in this report is that enrollment patterns in the near future will be reflected in the patterns of the recent past. I have assumed that the pandemic will be substantially behind us in the fall of 2022. I have made what I feel are the best possible adjustments to this unique situation.

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 Region 12 from 1970 to date and compares it to public school enrollment statewide. Enrollment in the Region 12 schools grew from 1,222 students in 1970 to an all-time peak of 1,247 in 1974. Between then and 1989, enrollment moved downward to 950 students. In those 15 years, enrollment declined by 324 students or 25.4 percent. Between 1989 and 2003 enrollment grew to 1,169 students. In those 14 years, enrollment rose by 219 students or 23.1 percent. With the addition of the agriscience program, enrollment has exited its down cycle. The 682 students enrolled in 2018 was 41.7 percent below the 2003 high. The October, 2022 enrollment of 762 students is 120 students above the 2018 low, a gain of 17.6 percent.

Region 12's enrollment pattern is fairly similar to that of the state's public schools. Between its 1971 peak and 1988, Connecticut public school enrollment declined by 31.5 percent. State enrollment hit a secondary peak in 2004. It grew 24.5 percent between the 1988 low and 2004. State enrollment declined

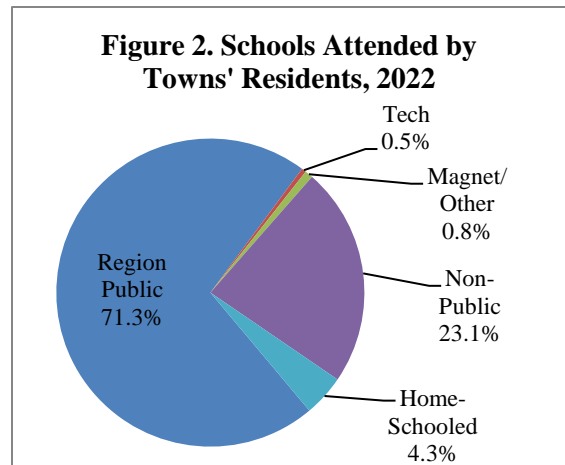


by 11.5 percent between 2004 and 2022. Region 12's downward cycle of the 1980s was less steep and shorter in duration than the state's cycle. Region 12's growth cycle in the 1990s was about the same magnitude and duration as the state's growth cycle. Region 12's decline cycle of the 2000s has been much steeper than the state's cycle to date. Had Region 12 followed the state pattern of enrollment since 1970, it would have had 928 students on October 1, 2022 instead of the 802 that were enrolled on that date.

Current Enrollment

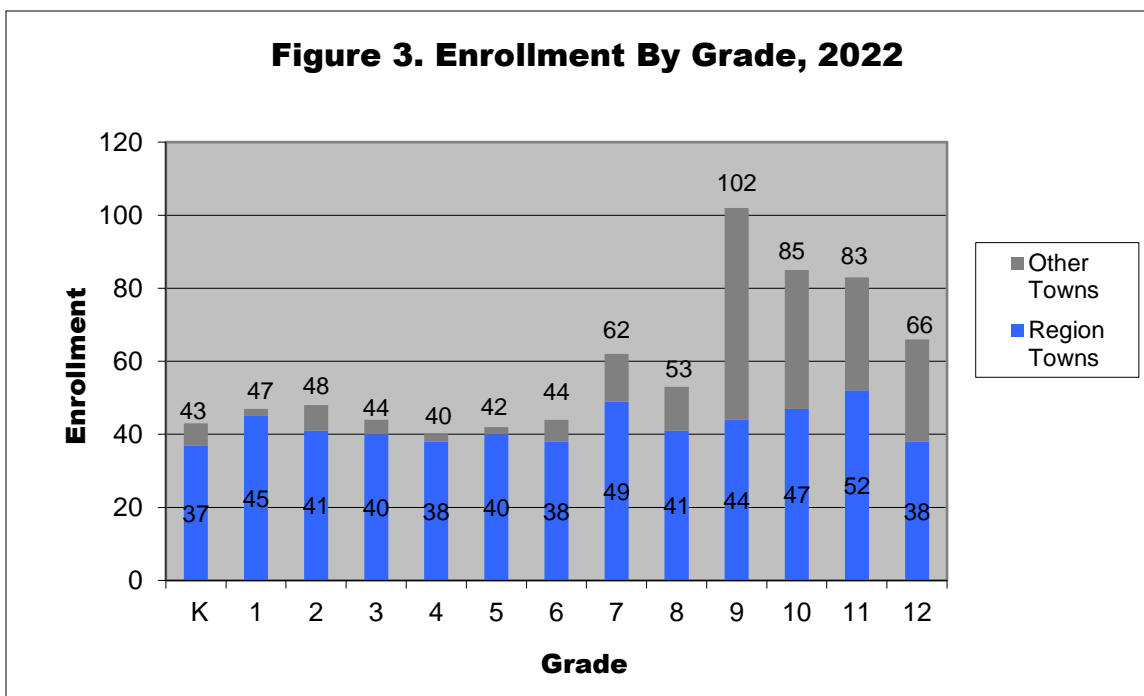
Table 1 and Figure 2 provide a picture of where Bridgewater, Roxbury and Washington residents attended school on October 1, 2022. They show that only 71.3 percent of the region's school-age residents attended the Region 12 Public Schools. A large 23.1 percent of the school-age residents attended non-public schools in state. This figure includes two students attending a non-public special education facility at district expense. The number attending private schools out-of-state is not known. Four school-age residents attended a state technical high school. There were 36 students (4.3 percent)

	Number	Percent
Residents		
A. Reg. 12 Public	590	71.3%
B. Tech	4	0.5%
C. Magnet/Other	7	0.8%
D. Non-Public	191	23.1%
E. Home-Schooled	36	4.3%
Total (A+B+C+D+E)	828	
F. Non-Residents	212	
Total Enrollment (A+F)	802	



reported as being home-schooled. There were 15 students of staff residing in other towns included in the 590 residents in Region 12. (On state records, these students are recorded as residents.) The projections in this report are based upon the 802 residents and non-residents who were enrolled in the Region 12 Public Schools on October 1, 2022 (see “Total Enrollment” on page 2).

Figure 3 shows the October 2022 grade-by-grade enrollment by of students in the Region 12 Public Schools. Enrollment in pre-kindergarten programs is not shown. The high school students from other towns are tuitioned-in from Sherman; students enrolled in the Agriscience Program or private-pay. Grade 11 had the largest resident enrollment with 52 students. It was followed by grade 7 with 49 students enrolled. Kindergarten had the fewest resident students, 37. If current conditions continue, this year's kindergarten class of 43 resident and non-resident students could have 55 students when it enters grade 6 at Shepaug Valley Middle School in 2028 and 98 students when it enters grade 9 at Shepaug Valley High School in 2031. The current year enrollment by grade is the starting point for this projection. How it moves forward is discussed below.



Projection Method

I generated the projections in this report using the cohort survival method. This is the standard method used by people running enrollment projections. For the grades above kindergarten, I computed grade-to-grade growth rates for ten years (see Appendices A-E). For example, if the number of fifth graders this year is 41 and the number of fourth graders last year was 40, then the growth rate is 1.025. Growth rates above 1.000 indicate that students moved in, transferred in or were retained. Growth rates below 1.000 mean that students moved out, transferred out, withdrew to become home-schooled, dropped out, or were not promoted from the prior grade. For each grade I calculated five different averages of the annual growth rates: a three-year average; a weighted three-year average; the average of 2018, 2019 and 2022; a five-year average; and a ten-year median. I choose the average that best fits the data. The average growth rate for a grade is applied to the prior year's enrollment from the prior grade. The projection builds grade by grade and year by year.

In this projection I used the five-year averages of the observed grade-to-grade combined resident and non-resident growth in each town. This means that I expect that the towns that have recruited non-residents in recent years or accepted region 12 residents from another town will continue to do so. Starting in grade 6, I calculated the averages for the region as a whole. I also estimated enrollment in grades 6-12 from the five-year averages. To estimate kindergarten enrollment, I used the five-year averages of retentions, and resident yields from births five and six years ago from each town plus the average number of non-residents enrolled in the past three years. I projected pre-kindergarten enrollment from births three- and four-years ago based on the growth observed in 2019, 2021 and 2022.

Unlike many other towns that I have observed, Bridgewater and Washington appeared to be net importers of students during 2020. Your year-to-year growth rates by grade jumped even more than normal. Sales of existing single-family homes and condominiums in 2022 will be below the 2021 count. I chose the five-year average because it reflects growth, but not an implausible amount.

I projected grade 9 enrollment for Region 12 residents, Sherman residents enrolled in regular program and Agriscience enrollment from Brookfield, Danbury, New Fairfield, New Milford, Newtown, and Sherman. I used the five-year average of grade 8 to 9 transition rates in Sherman. In each town sending students to the Agriscience program, I used the weighted three-year growth rates. This tended to better reflect the recent trend. To project enrollment in grades 10-12 in the program, I relied on three-years of enrollment history of these students almost all in Region 12.

To extend a projection beyond four years, I need to project births. The State Department of Public Health recorded 39 births in 2021 - 12 in Bridgewater, 12 in Roxbury and 15 in Washington. These counts are provisional but unlikely to change. To estimate 2022 births in each town, I started with the in-state births through September. I estimated October to December births by utilizing the ratio of October to December births versus January to September births observed over the past five years. I then added in the average out-of-state births recorded in 2020 and 2021. The resulting estimates were 11 births in Bridgewater, 11 in Roxbury and only 12 in Washington for a total of 34. I based births in 2023 to 2027 on the Connecticut State Data Center's 2017 projections of women of child-bearing ages in 2020, 2025 and 2030 and my estimate of similar communities (DRG C) fertility rates in 2020. I computed annual growth rates in births between 2020 and 2025 and 2025 to 2030 and applied them to the three-year moving average of births starting in 2020-2022. That resulted in an average number of births of 10 in Bridgewater, 12 in Roxbury and 13 in Washington for a regional average of 35 births in the 2023 to 2027 period.

This report also includes projections by town of residence. As with the school-based projection, I used a five-year average of the grade-to-grade resident growth in 2023 and 2024. In years 2025-32, I used the ten-year median. This is a conservative approach. To project kindergarten I used the five-year average growth from the birth cohort five-years prior because the breakdown used above was not available by town of residence. I projected pre-kindergarten enrollment from the three-year (2019, 2021 and 2022) history of enrollment compared to the average of births three- and four-years ago.

Enrollment data from 2012 to 2022 were taken from files provided by the Connecticut State Department of Education. Note that current district-level data on the Department's website may include special education students educated outside of the district. The Department also counts children of staff as residents. 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 the Board of Education to the public. Births from 1980 to 2022 were provided by the Healthcare Quality, Statistics, Analysis and Reporting Unit of the State Department of Public Health.

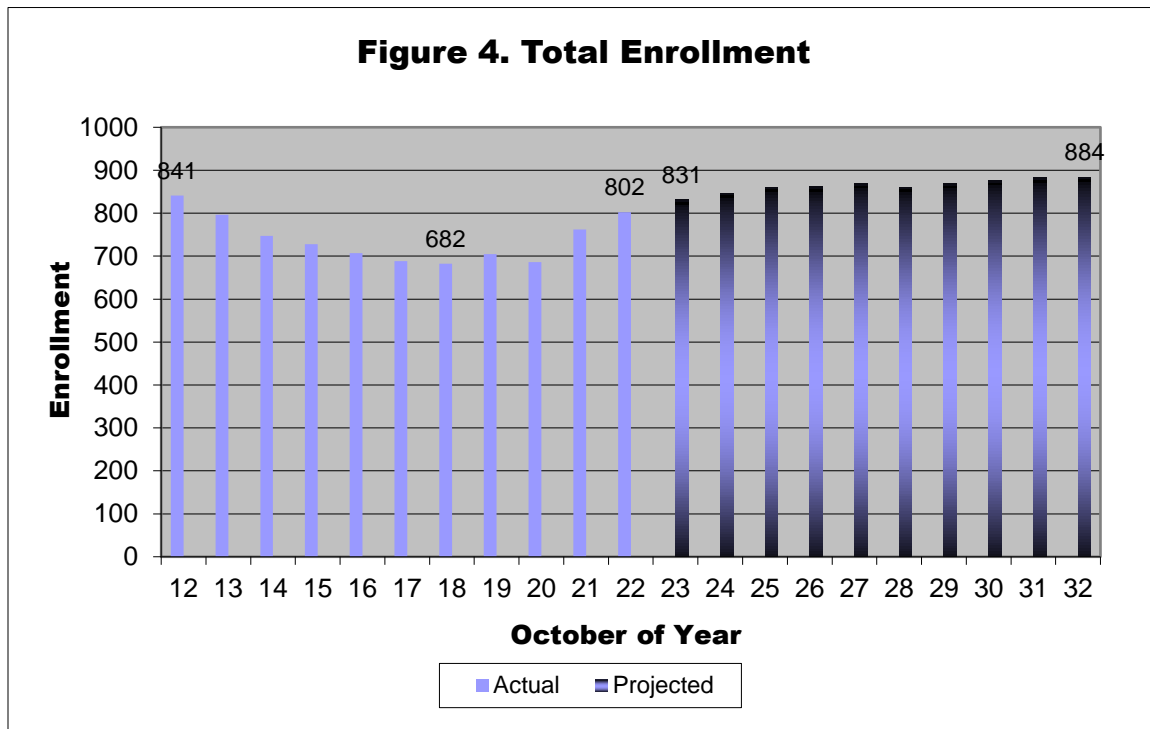
Total Enrollment

Table 2 and Figure 4 present the observed total enrollment in Region 12 from 2012 to 2022 and projected enrollment through 2032. Detailed grade-by-grade data may be found in Appendices D and E. Enrollment declined from 841 in 2012 to 682 students in 2018. The addition of the Agriscience program in 2019 pushed enrollment to 802 students in 2022. Between 2012 and 2022, Region 12 enrollment decreased by 39 students or 4.6 percent. Without the Agriscience Program, the loss would have been 17.1 percent. In that period, statewide public-school K-12 enrollment decreased by 7.4 percent.

Region 12's decline of 17.1 percent between 2012 and 2022, adjusted for the addition of 105 agriscience students, was in the middle of most similar districts in the region. The declines in Canton (-13.7 percent) and Region 14 (-16.2 percent) were smaller. The 18.9 percent decline in Region 10, 18.9 percent decline in Oxford, 22.8 percent decline in New Hartford with Region 7 and 34.2 percent decline in Sherman (including high school) were larger.

I anticipate a moderate enrollment growth in the upcoming ten years. The agriscience enrollment will give a very modest increase. Overall, I anticipate an enrollment increase of about 30 students (3.6 percent) in October, 2023. By 2032, enrollment could approach 885 students, a growth of over 80 students or a little more than 10 percent. I have projected that total enrollment statewide will be down 3.7 percent in that period. Your total enrollment could average about 865 students over the ten-year projection period. This compares to an average total enrollment of 730 students over the past ten years.

Year	Students	Percent Change
2012	841	
2013	796	-5.4%
2014	747	-6.2%
2015	728	-2.5%
2016	707	-2.9%
2017	688	-2.7%
2018	682	-0.9%
2019	705	3.4%
2020	686	-2.7%
2021	762	11.1%
2022	802	5.2%
2023	831	3.6%
2024	846	1.8%
2025	860	1.7%
2026	861	0.1%
2027	869	0.9%
2028	860	-1.0%
2029	869	1.0%
2030	876	0.8%
2031	882	0.7%
2032	884	0.2%



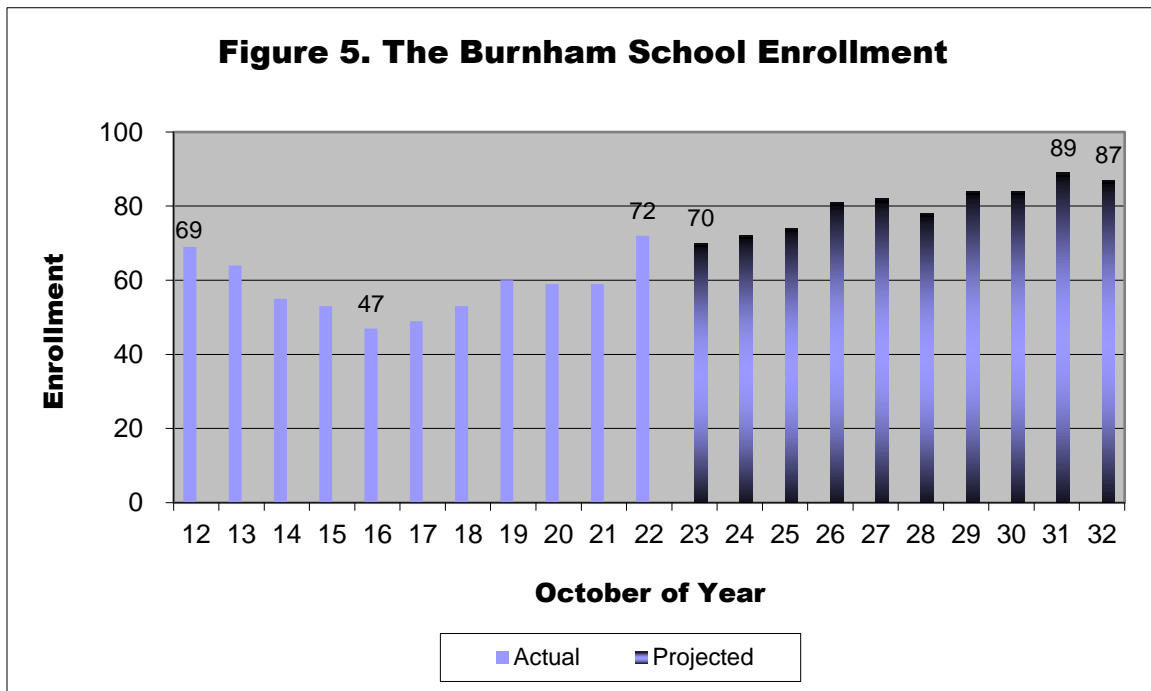
The Burnham School Enrollment

Table 3 and Figure 5 present actual resident and non-resident enrollment from 2012 to 2022 at The Burnham School and projected enrollment to 2032. Grade by grade results may be found in Appendix A. Enrollment in grades K-5 dropped from 69 in 2012 to 47 students in 2016 and then rebounded to 72 students in 2022. There were losses of greater than ten percent in 2014 and 2016. There were gains of greater than ten percent in 2019 and 2022. The 2022 count includes 12 students from towns outside of Bridgewater. In those ten years, enrollment grew by three students, a 4.3 percent increase. State public-school enrollment in grades K-5 fell 10.3 percent in that interval.

I project a period of enrollment growth for the school if in-migration continues; two children from outside the region enroll in kindergarten (the average over the past three years), and births increase. I project that next October's enrollment at The Burnham School could be about the same as this October. I anticipate an enrollment peak just short of 90 students in 2031. Enrollment in 2032 could be close to 85 students. That would be a 21 percent increase over the current count. I project that state public school enrollment in grades K-5 will fall 0.6 percent in that interval. Over the ten-year projection period, The Burnham School enrollment could average 80 students. That would be above the average of 57 students observed over the past ten years. The projection has no more than 20 students in any grade in any year.

Year	Students	Percent Change
2012	69	
2013	64	-7.2%
2014	55	-14.1%
2015	53	-3.6%
2016	47	-11.3%
2017	49	4.3%
2018	53	8.2%
2019	60	13.2%
2020	59	-1.7%
2021	59	0.0%
2022	72	22.0%
2023	70	-2.8%
2024	72	2.9%
2025	74	2.8%
2026	81	9.5%
2027	82	1.2%
2028	78	-4.9%
2029	84	7.7%
2030	84	0.0%
2031	89	6.0%
2032	87	-2.2%

These figures exclude pre-kindergarten children. Over the past ten years, there has not been a pre-kindergarten program at The Burnham School. My projection model assumes that there will not be one in the future. In 2022, there were eight Bridgewater pre-kindergarten students in the district's program at the Washington Primary School.



Booth Free School Enrollment

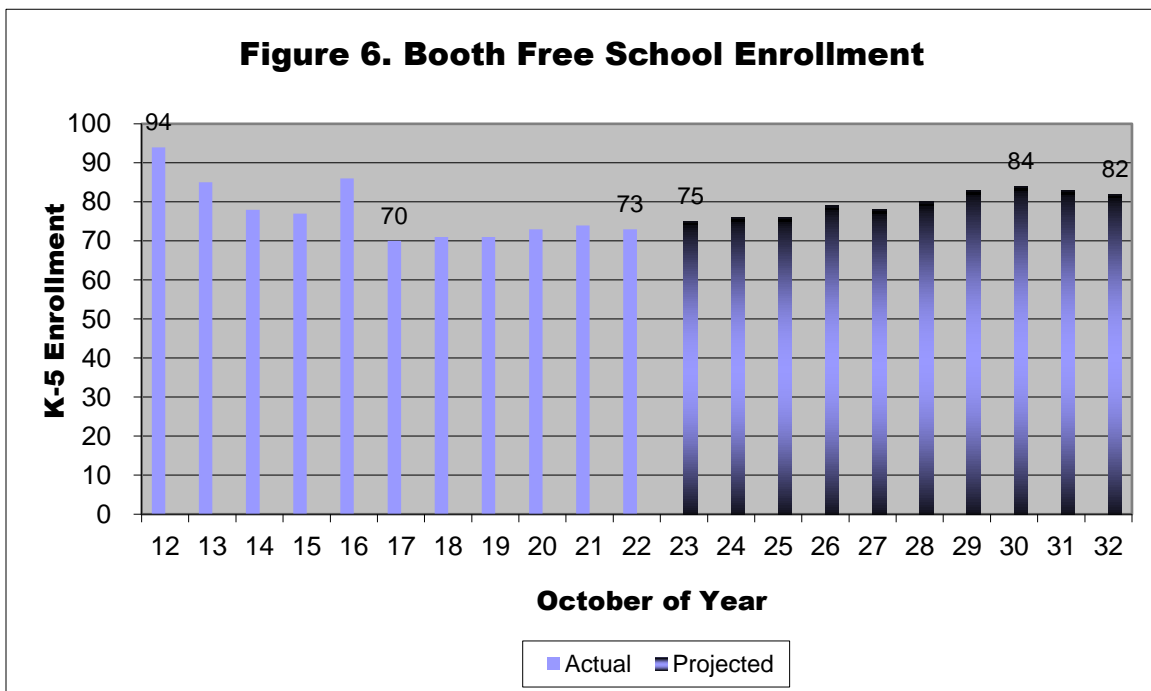
Table 4 and Figure 6 present actual resident and non-resident enrollment from 2012 to 2022 at the Booth Free School and projected enrollment to 2032. Grade by grade results may be found in Appendix B. Between 2012 and 2017, enrollment in grades K-5 decreased from 94 to 70 students. By 2022, it had inched up to 73 students. The 2022 count includes six students from another town. There were declines of greater than ten percent in 2017; 2016 saw an increase of greater than ten percent. Between 2012 and 2022, enrollment fell by 21 students, a 22.3 percent decrease. State public school enrollment in grades K-5 fell 10.3 percent in that interval.

I project a slight increase in enrollment over the next decade. I project that October 2023 enrollment will be about the same as October 2022. I project a peak enrollment of 84 students in 2030. I anticipate enrollment could end the projection near 80 students. The projected 2032 enrollment would be almost ten students or 12 percent above the 2022 figure. I project that state public school enrollment in grades K-5 will fall 0.6 percent in that interval. Over the ten-year projection period, the Booth Free School enrollment could average 80 students. That would be a little above the average of 76 students observed over the past ten years. The projection has no more than 15 students in any grade in any year.

Year	Students	Percent Change
2012	94	
2013	85	-9.6%
2014	78	-8.2%
2015	77	-1.3%
2016	86	11.7%
2017	70	-18.6%
2018	71	1.4%
2019	71	0.0%
2020	73	2.8%
2021	74	1.4%
2022	73	-1.4%
2023	75	2.7%
2024	76	1.3%
2025	76	0.0%
2026	79	3.9%
2027	78	-1.3%
2028	80	2.6%
2029	83	3.8%
2030	84	1.2%
2031	83	-1.2%
2032	82	-1.2%

Booth Free School started to recruit non-resident students in 2015. With Covid-19, the effort lost a bit of momentum. The effort is still built into the projection.

These figures exclude pre-kindergarten children. In 2022, there were 12 Roxbury children in the district's pre-kindergarten program at Washington Primary School.



Washington Primary School Enrollment

Table 5 and Figure 7 present actual resident and non-resident enrollment from 2012 to 2022 at the Washington Primary School and projected enrollment to 2032. Grade by grade results may be found in Appendix C. Between 2012 and 2019, K-5 enrollment declined from 138 to 93 students. In 2022 it rebounded to 119 students. Over the past ten years K-5 enrollment decreased by 19 students or 13.8 percent. State public school enrollment in grades K-5 fell 10.3 percent in that interval.

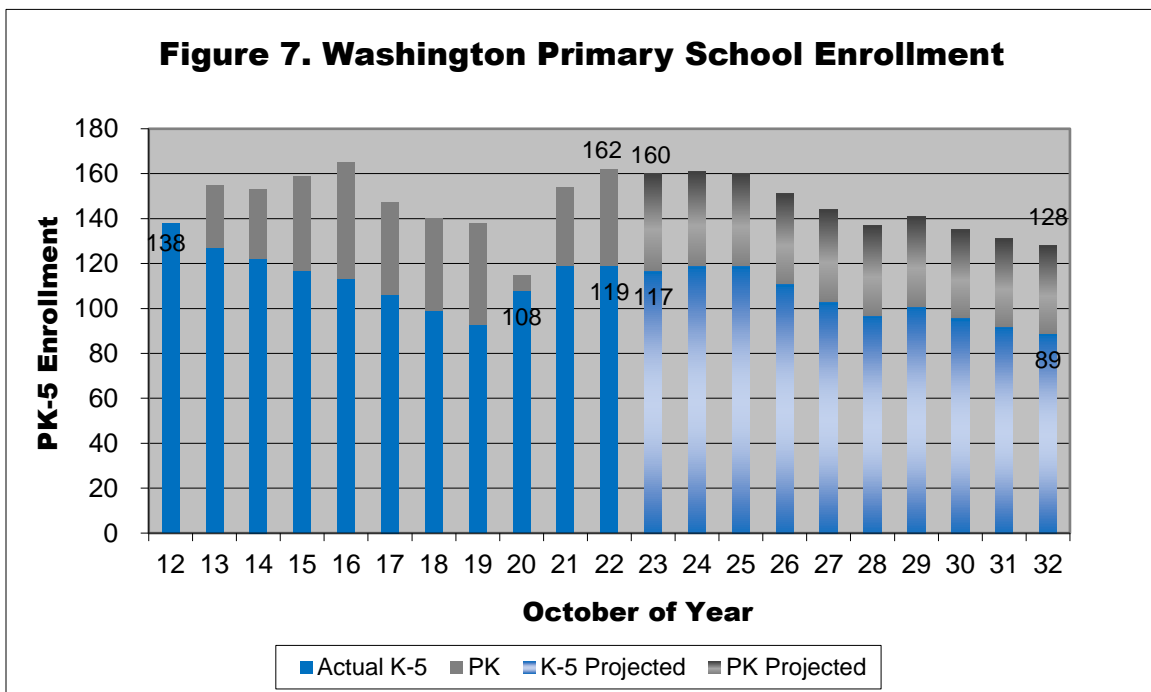
The district's pre-kindergarten program was moved from the Reach Early Childhood Center to the Washington Primary School in 2013. Its enrollment peaked at 52 children in October of 2016. Covid-19 caused it to collapse to seven children in 2020. The October, 2022 count was 43 children.

I expect K-5 enrollment to remain steady for three years and then start to decline. By 2032, it could be below 90 students. That would be a net loss of 30 students or 25 percent. I project that state public school enrollment in grades K-5 will fall 0.6 percent in that interval.

Based on births three- and four-years prior, I project prekindergarten enrollment will vary from 39 to 43 children and average 40 children in that period.

I project PK-5 enrollment will decline by 34 students over the next ten years. That would be a decline of 21 percent. Over the ten-year projection period, I believe Washington Primary School enrollment could average 145 students compared to 149 students observed over the past ten years.

Year	K-5 Students	PK Students
2012	138	0
2013	127	28
2014	122	31
2015	117	42
2016	113	52
2017	106	41
2018	99	41
2019	93	45
2020	108	7
2021	119	35
2022	119	43
2023	117	43
2024	119	42
2025	119	41
2026	111	40
2027	103	41
2028	97	40
2029	101	40
2030	96	39
2031	92	39
2032	89	39

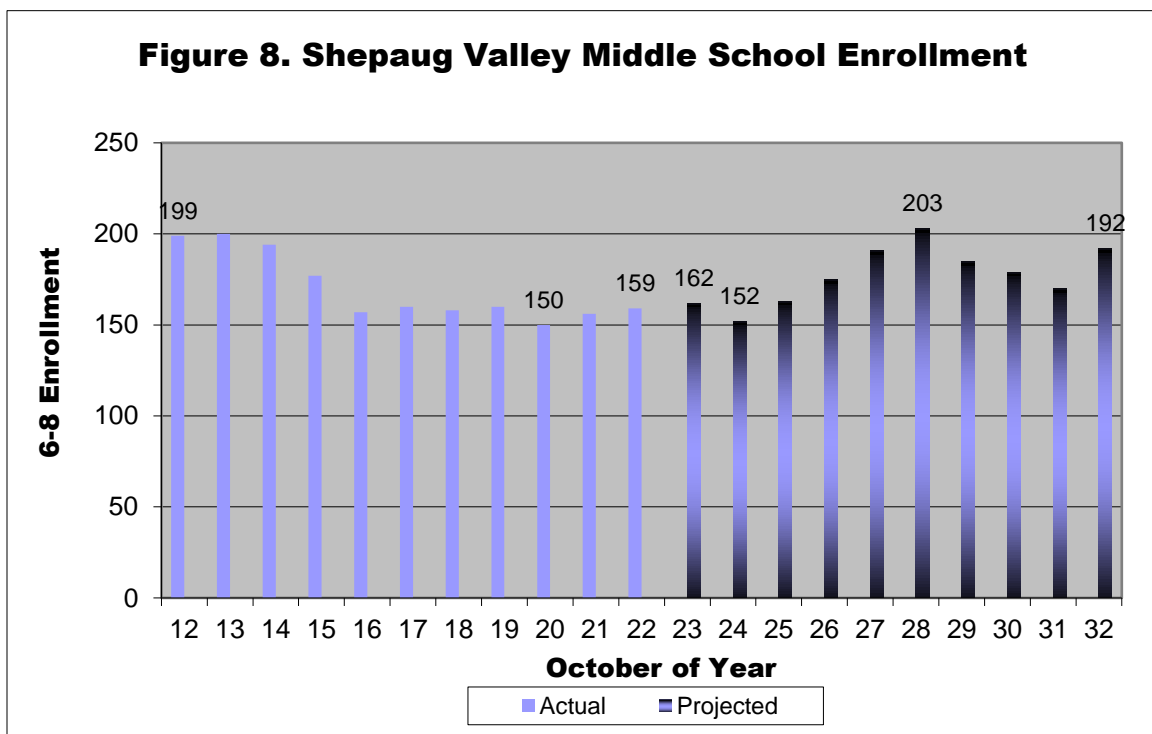


Shepaug Valley Middle School Enrollment

Table 6 and Figure 8 present actual enrollment from 2012 to 2022 in grades 6-8 at the Shepaug Valley School and projected enrollment to 2032. Grade by grade results may be found in Appendix E. The school's enrollment fell from 199 students in October, 2012 to 150 in 2020. In 2022 it rebounded to 159 students. There were declines of greater than five percent in 2015, 2016 and 2020. The 2022 enrollment included 31 students from outside the region. Between 2012 and 2022 enrollment decreased by 40 students or 20.1 percent. Without the influx of non-residents, the decline would have been 35.7 percent. Enrollment in grades 6-8 in the state's public schools decreased 9.0 percent in that interval.

The upcoming trend is little change through 2025, followed by a period of modest growth. I expect next year's enrollment will be about the same as this year. I expect a low of 152 students in 2024. I anticipate four years of growth greater than six percent between 2024 and 2027. I expect a peak enrollment of a little over 200 students in 2028. At the projection's end, the projected enrollment is about 190 students. That would be about 30 students above the current level, a growth of almost 21 percent. I project that enrollment in grades 6-8 statewide will decline by 5.8 percent in that period. Over the ten-year projection period, I expect that enrollment in grades 6-8 at the Shepaug Valley School could average about 175 students over the next ten years. This would be above the average of 167 students observed over the past ten years.

Year	Students	Percent Change
2012	199	
2013	200	0.5%
2014	194	-3.0%
2015	177	-8.8%
2016	157	-11.3%
2017	160	1.9%
2018	158	-1.3%
2019	160	1.3%
2020	150	-6.3%
2021	156	4.0%
2022	159	1.9%
2023	162	1.9%
2024	152	-6.2%
2025	163	7.2%
2026	175	7.4%
2027	191	9.1%
2028	203	6.3%
2029	185	-8.9%
2030	179	-3.2%
2031	170	-5.0%
2032	192	12.9%



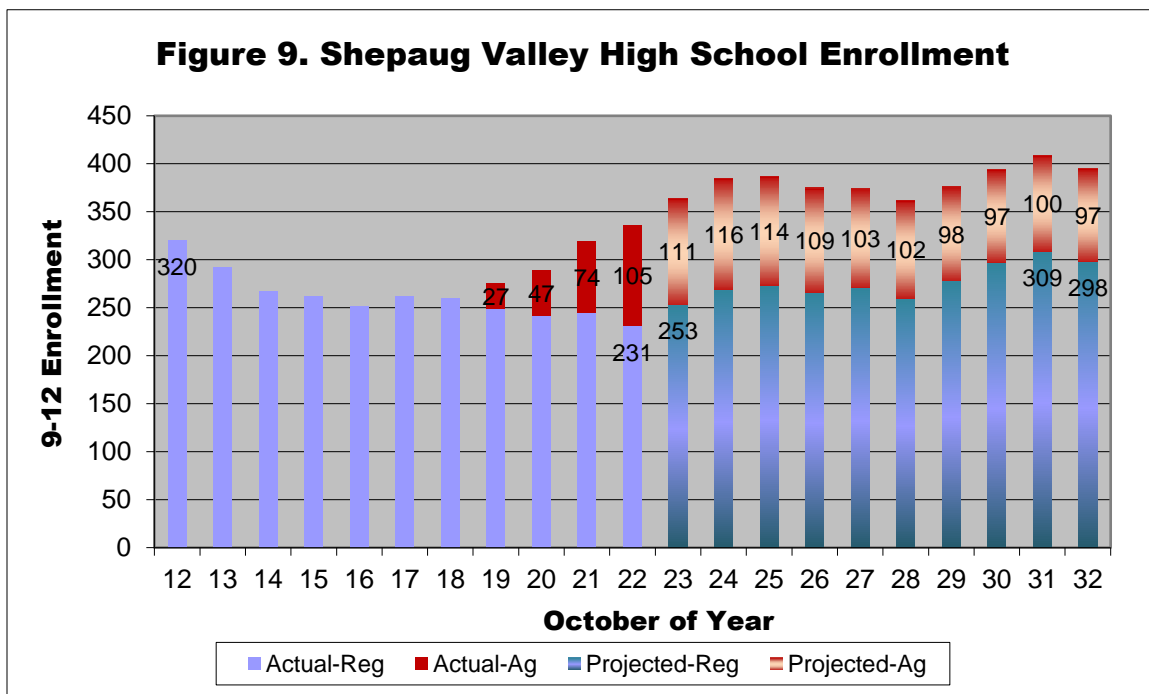
Shepaug Valley High School Enrollment

Table 7 and Figure 9 present actual enrollment from 2012 to 2022 at the Shepaug Valley High School and projected enrollment to 2032. It includes resident, tuition and Sherman students in the school's regular and special education programs and resident and non-resident students in the school's Agriscience Program. Total enrollment went from 320 students in October, 2012 to 252 students in 2016. Enrollment growth accelerated with the addition of grade 9 students in the Agriscience program in 2019. By 2022, the agriculture science program had grown to grades 9-12 and the school's enrollment had grown to 336 students. In the past ten years, the school's enrollment increased by 16 students or 5.0 percent. Without the addition of the Agriscience program, the school's enrollment would have declined by 89 students or 27.8 percent. Public high school enrollment statewide decreased 4.2 percent in that period.

I anticipate Shepaug Valley High School enrollment will grow in the upcoming years. I expect next year's enrollment will be about 30 students more than this year. Peak enrollment could approach 410 students in 2031. Enrollment at the projection's end could be 395 students. That would be an increase of almost 60 students or 17-18 percent. I project that high school enrollment statewide will decrease 7.2 percent between 2022 and 2032. Over the ten-year projection period, I expect enrollment at the high school will average a little over 380 students compared to 282 over the past ten years.

These figures include Sherman residents. I have projected that Sherman enrollment outside of the Agriscience Program will average about 33 students over the next ten years. This is based on about 30 percent of 8th graders in Sherman choosing Shepaug Valley.

Year	Total Enrl.	Ag-Sci Enrl.
2012	320	0
2013	292	0
2014	267	0
2015	262	0
2016	252	0
2017	262	0
2018	260	0
2019	276	27
2020	289	47
2021	319	74
2022	336	105
2023	364	111
2024	385	116
2025	387	114
2026	375	109
2027	374	103
2028	362	102
2029	376	98
2030	394	97
2031	409	100
2032	395	97



Enrollment in Region 12 by Town of Residence

Table 8 presents the actual enrollment in grades PK-12 in Region 12 broken down by town of residence for 2012 to 2022 and projected enrollment from 2023 to 2032. The table also provides each town's share of the enrollment observed from 2012 to 2022 and projected from 2023 to 2032.

The column labeled "Town Total" represents enrollment from Bridgewater, Roxbury and Washington only. It was arrived at by summing enrollments by town of residence. It is the basis for determining each town's percentage of enrollment in Region 12. The "Region Total" includes residents, high school students from Sherman, tuitioned-in students from other towns and non-residents in the Agriscience Program. "Town Pct." represents the percentage of Region 12 enrollment that comes from the region's three member towns. Because I used a more conservative approach in the resident projection, the "town percentage" should be interpreted with caution in 2025 and beyond.

October of Year	Grade PK-12 Enrollment					Town Percentage			
	Bridgewater	Roxbury	Washington	Town Total	Region Total	Town Pct.	Bridgewater	Roxbury	Washington
2012	192	262	362	816	841	97.0%	23.53%	32.11%	44.36%
2013	170	253	351	774	796	97.2%	21.96%	32.69%	45.35%
2014	148	241	329	718	747	96.1%	20.61%	33.57%	45.82%
2015	133	219	332	684	728	94.0%	19.44%	32.02%	48.54%
2016	125	227	308	660	707	93.4%	18.94%	34.39%	46.67%
2017	112	222	281	615	688	89.4%	18.21%	36.10%	45.69%
2018	117	204	279	600	682	88.0%	19.50%	34.00%	46.50%
2019	121	189	285	595	705	84.4%	20.34%	31.76%	47.90%
2020	115	189	256	560	686	81.6%	20.54%	33.75%	45.71%
2021	131	176	286	593	762	77.8%	22.09%	29.68%	48.23%
2022	140	170	280	590	802	73.6%	23.73%	28.81%	47.46%
Projected									
2023	143	171	286	600	831	72.2%	23.83%	28.50%	47.67%
2024	152	170	282	604	846	71.4%	25.17%	28.15%	46.68%
2025	152	168	272	592	860	68.8%	25.68%	28.38%	45.94%
2026	156	171	256	583	861	67.7%	26.76%	29.33%	43.91%
2027	162	167	249	578	869	66.5%	28.03%	28.89%	43.08%
2028	159	166	237	562	860	65.3%	28.29%	29.54%	42.17%
2029	169	159	236	564	869	64.9%	29.96%	28.19%	41.85%
2030	167	160	230	557	876	63.6%	29.98%	28.73%	41.29%
2031	163	159	225	547	882	62.0%	29.80%	29.07%	41.13%
2032	164	158	218	540	884	61.1%	30.37%	29.26%	40.37%

Between 2012 and 2022, PK-12 enrollment from Bridgewater fell 27.1 percent, enrollment from Roxbury fell 35.1 percent and enrollment from Washington fell 22.7 percent. Concurrently, Bridgewater's share of Region 12 resident enrollment went from 23.5 percent in 2012 to 23.7 percent in 2022. In that period, Roxbury's share declined from 32.1 percent to 28.8 percent and Washington's share changed from 44.4 percent to 47.5 percent. Over the ten years from 2012 to 2022, Bridgewater students were 20.5 percent of the combined enrollment, Roxbury students were 32.7 percent and Washington students were 46.8 percent.

In October 2023, I project that Bridgewater students will comprise 23.83 percent of the combined enrollment, Roxbury students will comprise 28.50 percent and Washington students will comprise 47.67 percent. My ten-year projection has Bridgewater's resident enrollment increasing by 17 percent, Roxbury's declining by seven percent and Washington's declining by 22 percent. Those enrollment patterns will increase Bridgewater's share, decrease Roxbury's share and reduce Washington's share.

Factors Affecting the Projection

The primary reasons for enrollment change lie in births, kindergarten yield from the birth cohort and grade-to-grade growth rates. Figure 10 presents the actual and provisional births from 1980 to 2021 and estimated births through 2027. Births to Bridgewater, Roxbury and Washington residents ranged from a high of 83 in 1986 to a low of 25 in 2018. Based on in-state births through September, I estimate there will be 34 births in 2022. From 2000 to 2009 there was an average of 53 births annually. In the five years from 2013 to 2017 (this fall's kindergarten through 4th graders) births averaged 38. Births in the 2017 through 2022 period will average close to 35. The projection in years 2027 to 2032 assumes an average of 36 births annually between 2023 and 2027.

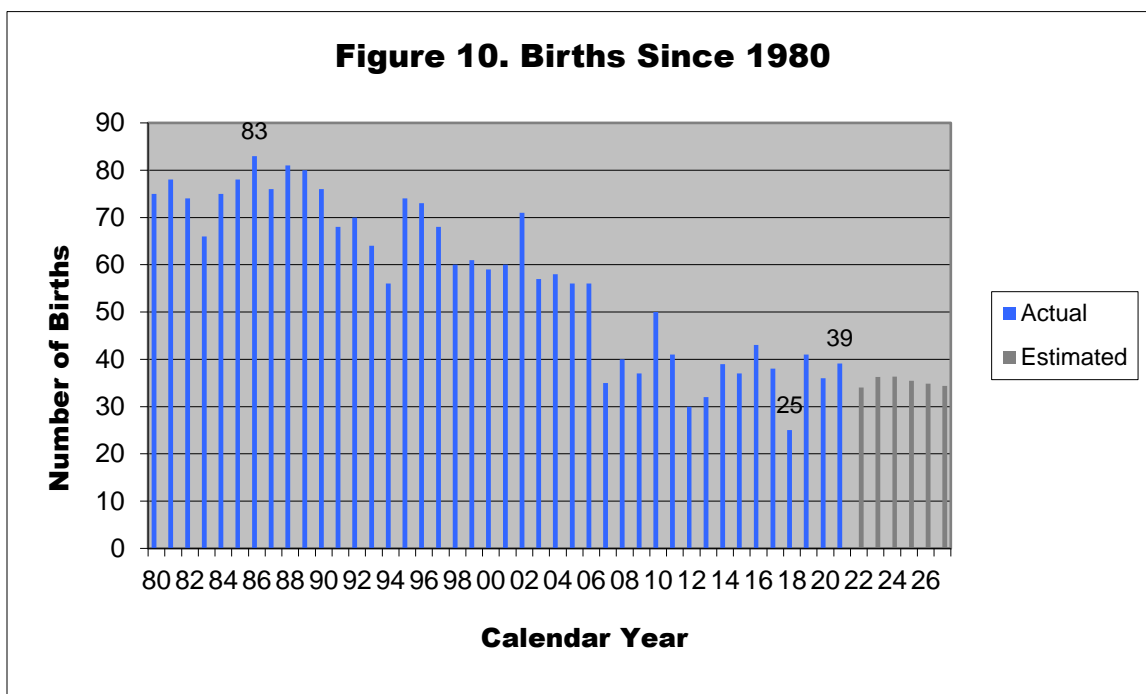
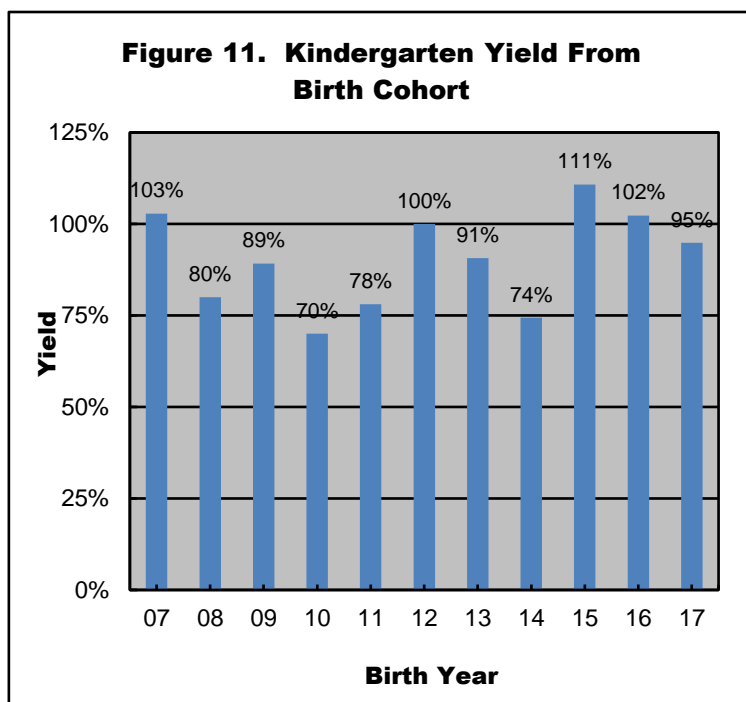


Figure 11 depicts the kindergarten yield five- and six-years later from the birth cohorts of 2007 to 2017 for residents of the three towns attending kindergarten in Region 12 schools. All these birth cohorts were affected by the introduction of full-day kindergarten in 2012. There were 43 births in 2016 in the three towns and 38 resident children enrolled in Region 12 kindergartens at age five in 2021 and an additional six who first enrolled in kindergarten at age six in 2022. That is a yield of 102 percent. The yield from the birth cohort ranged from a low of 70 percent in 2010 to a high of 111 percent in 2015. The estimated yield for births from 2017 is 95 percent. Note that 2017 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 2023. Yields below 100 percent generally mean that parents choose another school system or move out of town after giving birth while a resident of the three towns. In 2022, there were nine children enrolled in non-public kindergartens. Yields above 100 percent mean families move into the towns after giving birth elsewhere.

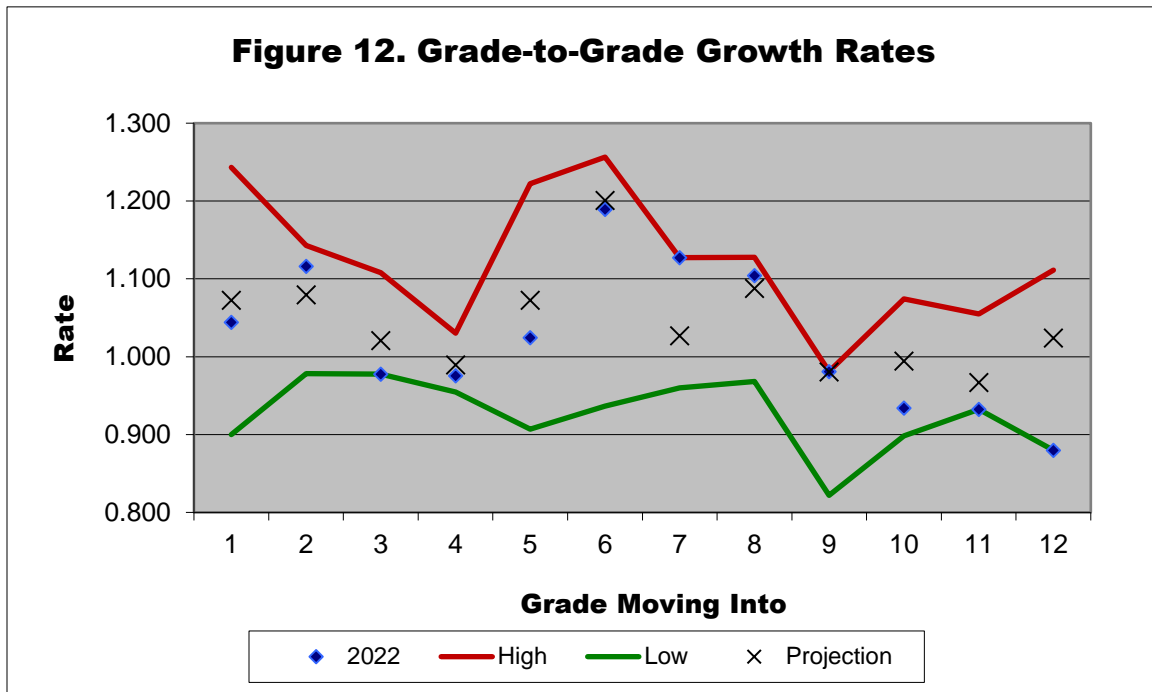
Table 9 gives a history of enrollment in kindergarten since 2012 and relates the components of kindergarten enrollment back to the appropriate birth cohort. Retention is tied to the prior year's kindergarten enrollment. The projection was built up from a similar analysis in each town. This table is presented to give an overall perspective. To estimate kindergarten enrollment in all three towns, I used the five-year average of retentions, and yields from births five and six years ago. I then added the average number of non-residents enrolled in kindergarten over the past three years. Combined, this averaged 81 percent of births five years ago, 13.3 percent of births six years ago, 0.5 percent of current kindergarten students retained, and four non-residents.

Year	Birth Year	Births		Re-tained from Prior Year	---- Non-Retained ---- Born 5-Years Prior 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
			K		Resident	Resident					
2012	2007	35	36	0	33	0	3	0.0%	94.3%	5.4%	102.9%
2013	2008	40	33	0	30	0	3	0.0%	75.0%	8.6%	80.0%
2014	2009	37	35	1	31	2	2	3.0%	83.8%	5.0%	89.2%
2015	2010	50	35	0	31	2	2	0.0%	62.0%	5.4%	70.0%
2016	2011	41	30	0	26	0	4	0.0%	63.4%	8.0%	78.0%
2017	2012	30	38	0	24	8	6	0.0%	80.0%	14.6%	100.0%
2018	2013	32	35	1	25	3	6	2.6%	78.1%	20.0%	90.6%
2019	2014	39	37	0	27	6	4	0.0%	69.2%	12.5%	74.4%
2020	2015	37	38	0	32	4	2	0.0%	94.6%	5.1%	110.8%
2021	2016	43	45	0	38	1	6	0.0%	88.4%	16.2%	102.3%
2022	2017	38	43	0	31	6	6	0.0%	81.6%	14.0%	94.8%
3-Year Average								0.0%	85.6%	11.8%	102.7%
5-Year Average								0.5%	81.0%	13.3%	94.6%
2018, 2019, 2022								0.8%	76.1%	15.2%	86.6%
10-Year Median								0.0%	80.0%	8.6%	90.6%

The correlation between births and kindergarten enrollment five-year later across the three towns was a moderate to high 0.82 over the 2000 to 2022 period. Remember that the kindergarten enrollment was built up from births in each of the towns separately, not as a whole as illustrated here. If this relationship were used to predict kindergarten enrollment, the estimate would have been off an average of five children annually over the past ten years. The cohort survival method, with my breakout into five-year olds, six-year-old delayed entrants and children retained, can reasonably well predict kindergarten enrollment from earlier births.

The "Connecticut Early Childhood Report on Changing the Kindergarten Date," mandated by Public Act 14-39, recommended that the start date for kindergarten be moved back to October 1st phased in one-month increments over the course of three years. It further recommended the elimination of the section of C.G.S Sec. 10-184 which allows parents the option of not enrolling their age-eligible child. There is no indication that this common-sense change will be implemented. If implemented, the changes would very slightly decrease the size of your kindergarten class for three years and increase your pre-kindergarten enrollment. This change is not built into this projection, but will be built into future projections once the implementation date is set.

Figure 12 gives a perspective of the grade-to-grade growth rates for students attending the Region 12 schools. 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. For example, enrollment in grade 2 in 2022 was 1.12 times larger than the 2021 enrollment in grade 1. The projection used a growth rate of 1.080. Over the past ten years the rate ranged from 0.978 to 1.143. In general, the narrower the gap between the two lines is, the greater the accuracy of the projection. This table, which is based on growth for the district as a whole, is for illustrative purposes only as the elementary projections were built separately for each town.



The projection growth rates are, for the most part, in the middle to upper end of the ten-year range. Grade 11 appears to be the lone exception. Seven of the eight elementary growth rates were above 1.000 indicating an in-migration into Region 12 schools. The grade 9 rate is reflective of residents and tuition students other than Sherman continuing. The rates in 2022 set ten-year highs in grades 7 and 9. Ten-year lows occurred in 2022 in grades 3, 11 and 12. The projection growth rates were well below the 2022 rates in grade 7 and well above in grades 5, 10 and 12. All others were fairly close. The average growth rate across grades 2-12 used for the projection was 1.040. The rate in 2022 was 1.022. The median rate over the past 20 years was 0.998. The median rate does not reflect the recent increase in non-resident enrollment. Covid-19 evidently added to an influx of students into Region 12 that appears to have started in 2019. This recent growth is now built into the projection.

Context of the Projection

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

To assist in this endeavor, this report examines 11 factors that could affect enrollment: town population; projected population ages 0-19; women of child-bearing age; the labor force; new home construction; sales of existing homes; grade 9 repeaters; non-public enrollment; resident enrollment in other public schools; non-resident enrollment and migration of families with school-age children.

Figure 13 presents the US Census Bureau's count of Bridgewater, Roxbury and Washington population growth between April 2010 and 2020. In that period, the population in the three towns grew by one person. The population gain of 0.01 percent would have ranked 70th in the state. In contrast, Litchfield County fell by 4.9 percent, the state grew by 0.89 percent and communities with similar economic and need characteristics (DRG C) fell by 1.9 percent. The Bureau estimates that between July 2020 and 2021, the towns grew by 0.15 percent. That was ranked 72nd in the state. The state also grew by that amount, Litchfield County grew by 0.07 percent and similar communities across the state grew by 0.31 percent.

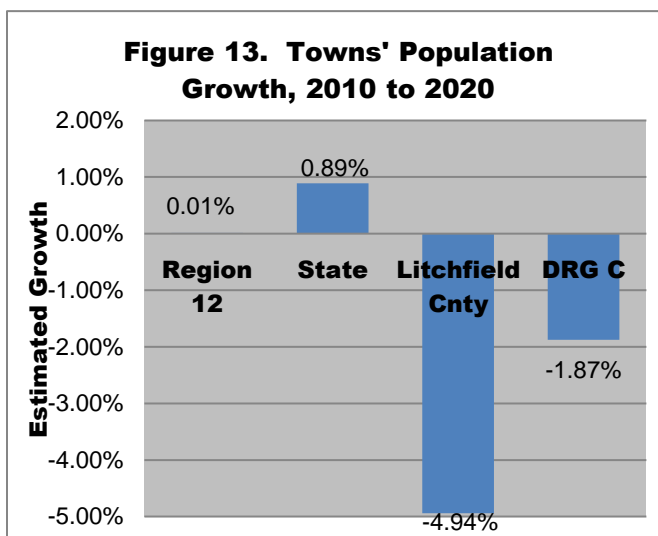


Figure 14 presents the Connecticut State Data Center's 2017 population projections for the Region's residents 0-19 years of age in the years 2020, 2025 and 2030. The Center projected that the 0-4 age population would decline 5.3 percent between 2020 and 2030. The Center projected the population ages 5-9 would decline 7.6 percent between 2020 and 2030. They also projected that the number of children ages 10-14 would decline 6.4 percent between 2020 and 2030. The number of youth ages 15-19 was projected to decline 20 percent between 2020 and 2030. This independent projection shows a deeper decline in population than the changes in enrollment projected in this report.

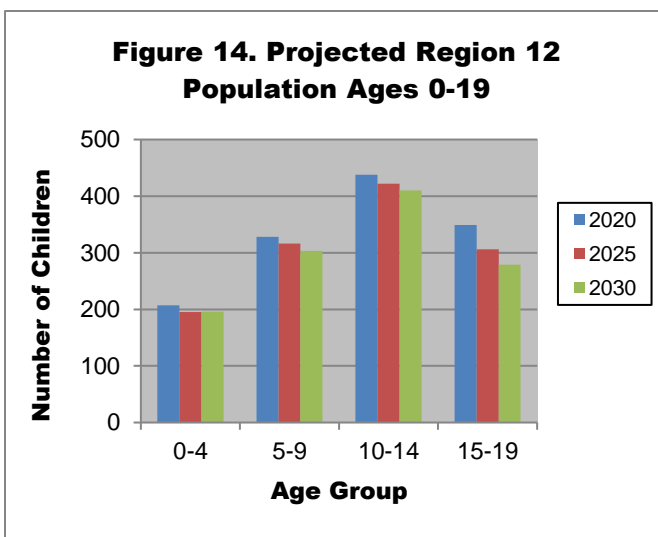


Figure 15 presents the Connecticut State Data Center's 2017 projections of the number of women of child-bearing age from the three towns in 2020, 2025 and 2030. The Center projected a 7.2 percent decline in women ages 15-44 between 2020 and 2025 and a 7.9 percent decline between 2025 and 2030. However, in the key 30-34 age group for communities like yours, the Center projected a 31 percent increase between 2020 and 2025. In the second highest birth rate in similar communities, women ages 25-29, the Center projected the number in that age range would decline 59 percent between 2020 and 2025.

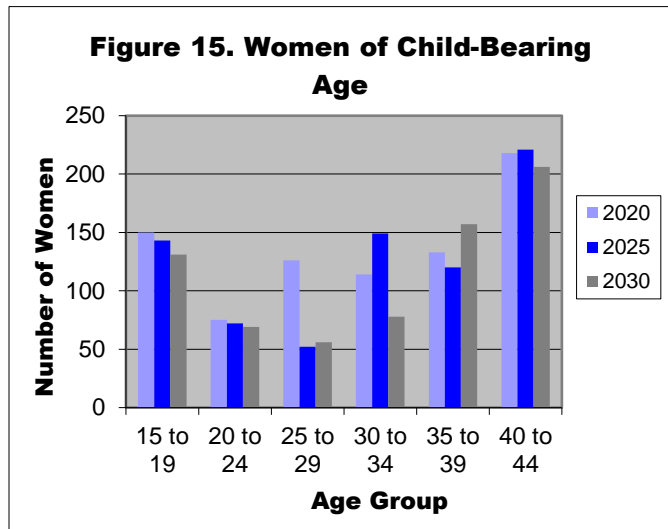


Figure 16 examines the number of people in the labor force from the US Department of Labor, Bureau of Labor Statistics. These are people 16 years of age or older who were working or actively were seeking employment. They estimated that the combined labor force in the three towns declined 1.7 percent between 2011 and 2021. The loss was less than the state (-3.1 percent) and Litchfield County (-5.9 percent). The 2021 unemployment rate of 4.3 percent across the three towns was down 0.8 percentage points from the 2020 level. It is better than the state rate of 6.3 percent and the Litchfield County rate of 5.5 percent.

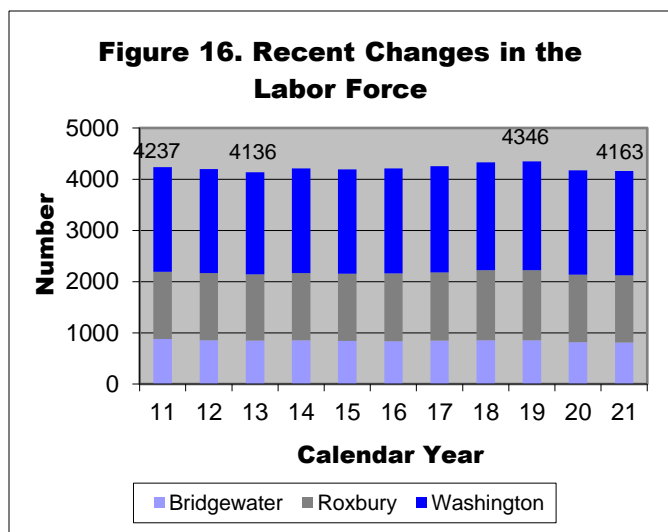


Figure 17 presents the net new housing permits issued from 2011 to 2021 as reported to the State Department of Economic and Community Development. In the past ten years the number of net (of demolitions) new housing permits issued in Bridgewater, Roxbury and Washington ranged from a low of zero in 2012 to a high of 14 in 2020. There was a net of eight permits issued across the three towns in 2021. Between 2018 and 2021, there was an average of nine net new housing permits issued.

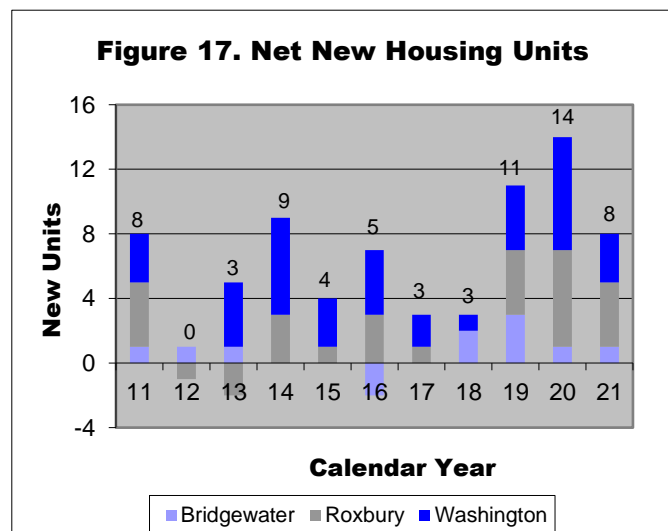


Figure 18 presents my estimate of the number of sales of existing single-family homes and condominiums. I derived it by taking the number of sales of single-family homes and condominiums from The Warren Group/Commercial Record and subtracting the prior year's number of new single-family housing units authorized. The estimated number of sales of existing homes ranged from a low of 82 in 2012 to a high of 196 in 2020. Based on sales through October, I project there will be only 89 sales of existing homes in 2022. Between 2018 and 2022 there was an average of 123 sales annually.

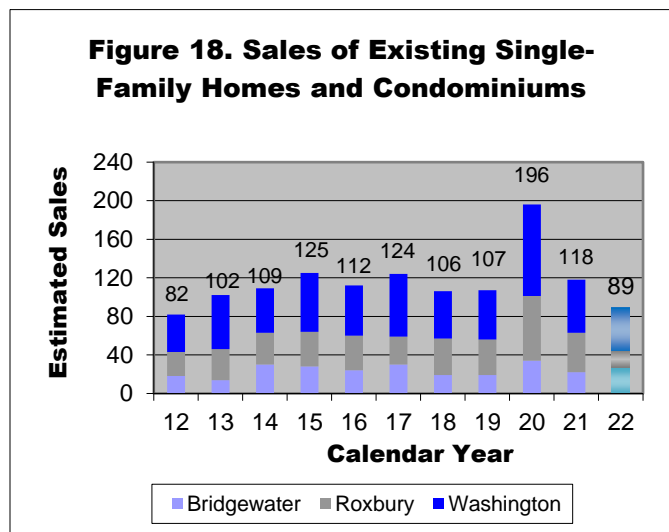
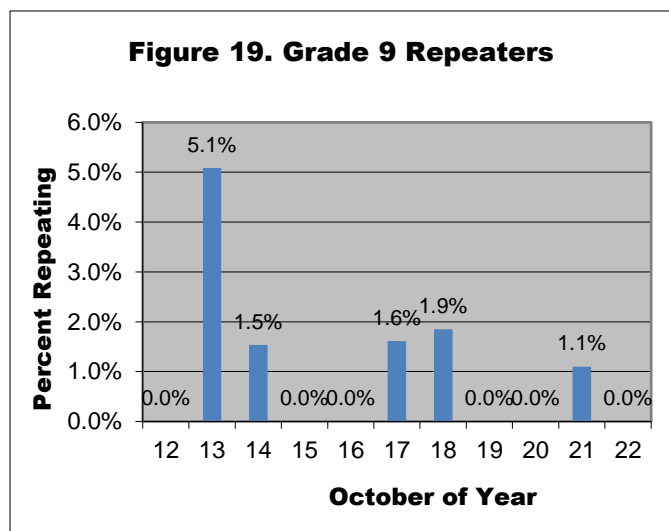


Figure 19 shows the percentage of students in grade 9 who did not earn enough credits to be promoted to grade 10. The percentage repeating ranged from zero in five previous years to 5.1 percent in 2013. The rate was zero in 2022. In the past five years, a total of two students were retained in the grade, a rate of 0.5 percent.



Dropouts can also affect the high school enrollment. This is not an issue in Region 12. You recorded a total of four over the past five school years. That was an annual rate of 0.28 percent.

Figure 20 presents the non-public enrollment in Connecticut over the past ten years for students from the three towns. Non-public enrollment ranged from a high of 241 students in both 2013 and 2014 to a low of 183 students enrolled in 2021. The 2022 count was 191 students. The 2022 enrollment represented a very high 24.1 percent of the combined public (in-district and out) and non-public enrollment. The rate in 2012 was 21.8 percent. I project a non-public enrollment of about 185 students in 2023 from Bridgewater, Roxbury and Washington.

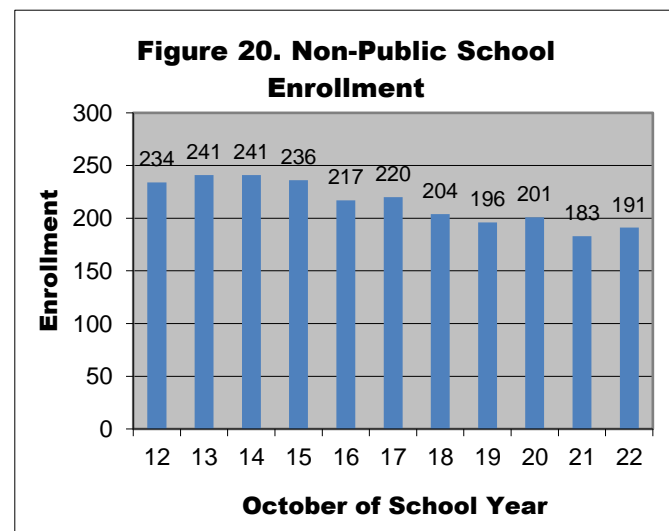


Figure 21 presents Bridgewater, Roxbury and Washington enrollment in other public schools. This would include state technical high schools, the agriculture science and technology program at Nonnewaug High and area magnets. The number of residents attending a public school other than the Region 12 Public Schools ranged from 11 in 2022 to 24 in 2012. In 2022, four residents attended a state technical high school, one attended a charter school and six attended another public school. These data were provided by the Connecticut State Department of Education. Prior to 2022, these counts included residents attending the Agri-Science program at Nonnewaug High School.

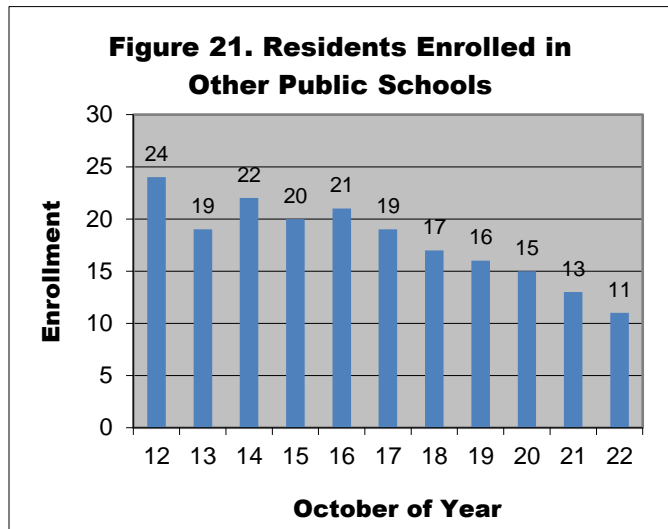


Figure 22 presents non-resident enrollment in Region 12 schools. The number of non-residents went from 25 in 2012 and with the opening of your Agriscience Program has increased to 227 in 2022. The October, 2022 count included 33 from Sherman in the regular education program, 74 tuition-students from other area towns, 105 students from the six towns sending students to your Agriscience program and 15 students of staff members. The projection assumes 29.8 percent of Sherman's grade 8 students will enroll in Region 12. That would yield 24-44 students in regular programs from Sherman annually.

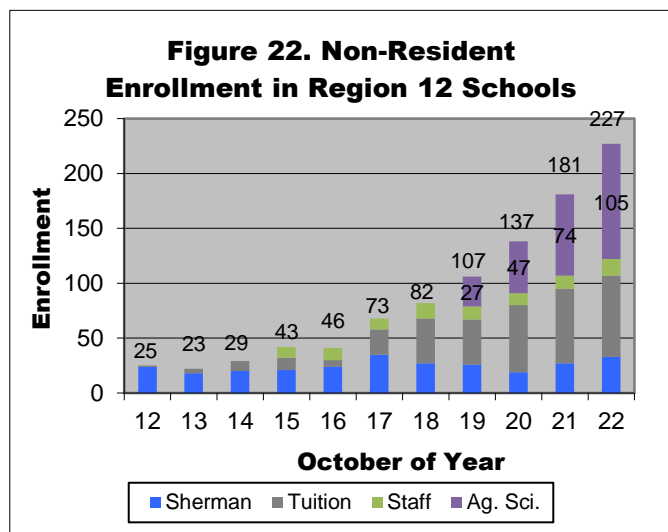
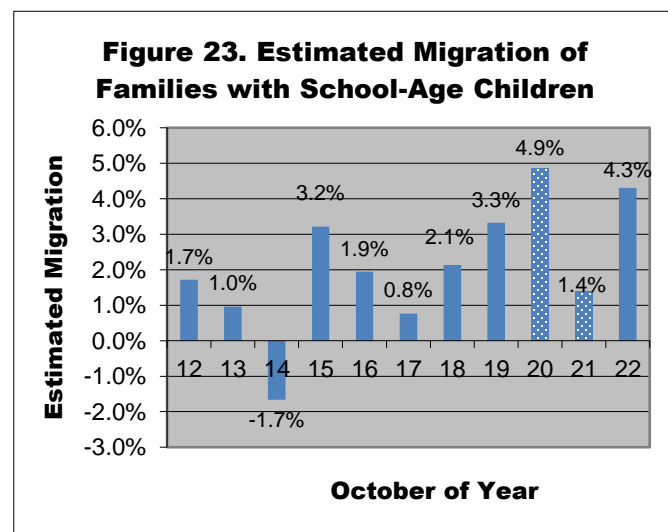


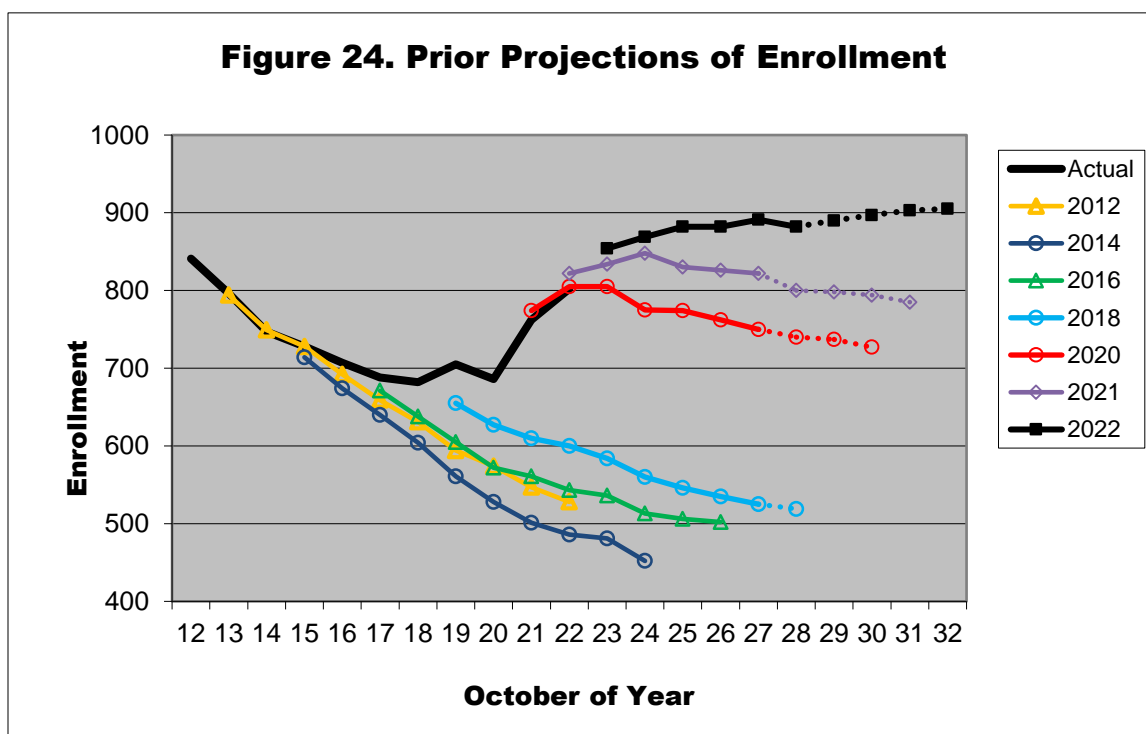
Figure 23 presents the estimated migration of families with school-age children. Is based it on observed resident enrollment in the Region 12 public schools, residents attending other public schools and residents enrolled in non-public schools. Estimated family migration was positive in 10 of the past 11 years. The migration rate ranged from a high of +4.9 percent in 2020 to a low of -1.7 percent in 2014. The high 2020 rate may be due to families with a second home in Region 12 relocating from their primary home in a denser community. The average migration over the 2018 to 2022 period of this projection was a high 7.14 percent. The median rate over the past 10 years was +0.93 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. One way to know if that assumption is valid is to examine how past projections have fared. Figure 24 presents the enrollment projections that I have run for Region 12 since 2012. To make the chart easier to read, I eliminated the projections of 2013, 2015, 2017 and 2019. The 2022 projection is the fourth to include non-resident enrollment in your Agriscience Program. The 10 enrollment projections that I did between 2012 and 2021 had one-year error rates that averaged 1.7 percent. The six projections done between 2012 and 2017 had an average five-year error rate of 12.4 percent, which is 2.4 percent annualized.

Last year's projection is running 2.5 percent high. In that analysis, I projected that K-5 enrollment would be 284 students in 2022. The actual enrollment of 264 was 20 students less than projected. The projection was high by 7.6 percent. I projected that enrollment in grades 6-8 would be 156 students in 2022. The actual enrollment of 159 was three students more than projected. The projection was low by 1.9 percent. I projected that high school enrollment would be 347 students in 2022. The actual enrollment of 336 was 11 students less than projected. The projection was high by 3.3 percent. I projected a pre-kindergarten enrollment of 35 students. The 2022 count of 43 students was eight more than projected.



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 2012. Some policy changes such as 9th grade admissions decisions for the agriculture science program 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 total enrollment could increase from 802 students in October, 2022 to about 885 students in 2032, a net gain of 10.8 percent. I project that enrollment at The Burnham School could grow from 72 students in 2022 to 87 students in 2032, a gain of nearly 21 percent. I project that enrollment at the Booth Free School could grow from 73 students in 2022 to 82 students in 2032, a gain of over 12 percent. The Washington School's enrollment could decline from 162 students in October, 2022 to about 130 in 2032. That would be 21 percent below the October 1, 2022 count. I believe that enrollment in grades 6-8 at the Shepaug Valley Middle School could grow from 159 in 2022 to a little over 200 in 2028 before easing to about 190 students in 2032. That would represent a 10-year gain of 21 percent. Shepaug Valley High School enrollment could grow 17-18 percent, increasing from 336 in 2022 to 395 students in 2032.

In October 2023, I project that Bridgewater students will comprise 23.8 percent of the combined resident enrollment, Roxbury students will comprise 28.51 percent and Washington students will comprise 47.7 percent. Different rates of growth in the three towns should increase Bridgewater's share and reduce Washington's share. Over the ten-year projection period, I project that Bridgewater students will average 26.8 percent of the combined enrollment, Roxbury students will average 32.7 percent and Washington students will average 44.0 percent.

Normally, a projection is just a moving forward of recent trends. With estimated migration returning to normal, I decided it was safe to return to the five-year average of the grade-to-grade growth rates for the projection. In some schools and grades this resulted in growth that I was uncomfortable using for the long term. Relatively stable births will likely have little impact on enrollment growth in the upcoming ten years. In the five years from 2013 to 2017 (this fall's kindergarten through 4th graders) births averaged 38. Births in the 2018 through 2023 period will average close to 35. My projection for the years 2027-2032 assumes an average of 36 births in 2023 to 2027. Across the three towns there was an average 5.4 percent decline over the last five years between births and eventual kindergarten enrollment in Region 12. Many parents still opt for area non-public schools. The average grade-to grade growth rates across grades 2-12 used was a high 1.040. The median over the last 20 years was 0.998.

Obviously Covid-19 has introduced a good deal of uncertainty into this projection. I have assumed that its impact on enrollment is behind us. I further assumed that the two-home families who moved into Region 12 will remain. If they return to their primary homes, the projection will end up high. We now have an increase in interest rates that is likely to change who and when people move into the region. There is a lot more going on now than in my typical projections.

These projections assume that there will be continued recruitment in the elementary schools of students from outside the three towns; no change in the acceptance rate of 8th graders from the six participating towns into the Agriscience Program; enrollment of Sherman residents at Shepaug Valley High; continued strong enrollment in non-public schools and relatively few residents enrolled other public schools. The projections further assume an estimated migration of families with school-age children of a little more than three percent, construction of eight new housing units annually and annual sales of 123 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 Bridgewater, Roxbury and Washington and then make adjustments as necessary.

Appendix A. The Burnham School Enrollment Projected by Grade to 2032										
October 1 of Year	Birth Year	Births¹	K²	1	2	3	4	5	PreK	Total
2012	2007	8	9	13	12	12	10	13	0	69
2013	2008	8	7	9	14	10	13	11	0	64
2014	2009	9	5	8	9	15	9	9	0	55
2015	2010	9	7	6	8	10	14	8	0	53
2016	2010	4	3	8	5	7	10	14	0	47
2017	2012	8	17	3	8	8	6	7	0	49
2018	2013	3	9	15	3	10	9	7	0	53
2019	2014	11	12	8	17	3	10	10	0	60
2020	2015	3	7	11	8	15	4	14	0	59
2021	2016	10	12	8	10	11	14	4	0	59
2022	2017	12	16	11	10	10	12	13	0	72
Projected										
2023	2018	6	9	15	12	11	10	13	0	70
2024	2019	10	13	8	16	13	11	11	0	72
2025	2020	7	10	12	9	17	14	12	0	74
2026	2021	12	15	9	13	10	18	16	0	81
2027	2022	11	14	14	10	14	10	20	0	82
2028	2023	10	13	13	15	11	15	11	0	78
2029	2024	11	14	12	14	16	11	17	0	84
2030	2025	11	14	13	13	15	17	12	0	84
2031	2026	10	13	13	14	14	16	19	0	89
2032	2027	10	13	12	14	15	15	18	0	87
Projection Growth Rates³			0.938	1.044	1.171	1.022	1.111			
Annual Growth Rates									Migration⁴	
2013			0.875	1.000	1.077	0.833	1.083	1.100	2.13%	
2014			0.444	1.143	1.000	1.071	0.900	0.692	-8.70%	
2015			0.667	1.200	1.000	1.111	0.933	0.889	-14.63%	
2016			0.750	1.143	0.833	0.875	1.000	1.000	0.00%	
2017			1.250	1.000	1.000	1.600	0.857	0.700	-17.86%	
2018			2.000	0.882	1.000	1.250	1.125	1.167	29.41%	
2019			0.727	0.889	1.133	1.000	1.000	1.111	6.67%	
2020			1.333	0.917	1.000	0.882	1.333	1.400	18.52%	
2021			1.100	1.143	0.909	1.375	0.933	1.000	6.45%	
2022			1.250	0.917	1.250	1.000	1.091	0.929	8.57%	
3-Year Ave.			1.400	0.968	1.037	1.029	1.034	1.107		
5-Year Ave.			1.436	0.930	1.067	1.065	1.043	1.116		
2018, 19, 22			1.423	0.946	1.000	1.095	1.000	1.107		
10-Yr Median			0.988	1.000	1.000	1.036	1.000	1.000		

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional. Births in 2022 were estimated from in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on 107.7% of births 5-years prior, 5.7% of births 6-years prior, 1.8% retentions and 1.7 non-residents.

³ Grades 1-5 based on 5-year averages of annual growth rates by grade.

⁴ Estimated by comparing enrollment in grades 2-5 one year with enrollment in grades 1-4 the prior year with an adjustment for non-residents in.

Appendix B. Booth Free School Enrollment Projected by Grade to 2032											
October 1 of Year	Birth Year	Births¹	K²	1	2	3	4	5	PreK	Total	
2012	2007	10	11	20	10	15	20	18	0	94	
2013	2008	10	7	10	20	12	14	22	0	85	
2014	2009	11	11	9	10	20	13	15	0	78	
2015	2010	14	12	12	9	10	19	15	0	77	
2016	2011	16	16	12	14	12	12	20	0	86	
2017	2012	7	5	14	11	16	12	12	0	70	
2018	2013	10	14	7	15	9	14	12	0	71	
2019	2014	8	9	13	8	16	11	14	0	71	
2020	2015	11	13	13	12	6	17	12	0	73	
2021	2016	17	15	10	14	11	6	18	0	74	
2022	2017	8	12	14	12	14	11	10	0	73	
Projected											
2023	2018	10	11	12	15	11	14	12	0	75	
2024	2019	10	12	11	13	14	11	15	0	76	
2025	2020	13	14	12	12	12	14	12	0	76	
2026	2021	12	14	14	13	11	12	15	0	79	
2027	2022	11	13	14	15	12	11	13	0	78	
2028	2023	12	14	13	15	14	12	12	0	80	
2029	2024	12	14	14	14	14	14	13	0	83	
2030	2025	12	13	14	15	13	14	15	0	84	
2031	2026	12	13	13	15	14	13	15	0	83	
2032	2027	12	13	13	14	14	14	14	0	82	
Projection Growth Rates³				1.018	1.070	0.933	1.017	1.100			
Annual Growth Rates								Migration⁴			
2013			0.700	0.909	1.000	1.200	0.933	1.100	4.62%		
2014			1.000	1.286	1.000	1.000	1.083	1.071	3.57%		
2015			0.643	1.091	1.000	1.000	0.950	1.154	0.00%		
2016			1.000	1.000	1.167	1.333	1.200	1.053	12.00%		
2017			0.571	0.875	0.917	1.143	1.000	1.000	-4.17%		
2018			1.400	1.400	1.071	0.818	0.875	1.000	-2.17%		
2019			0.875	0.929	1.143	1.067	1.222	1.000	12.50%		
2020			1.182	1.444	0.923	0.750	1.063	1.091	2.33%		
2021			0.824	0.769	1.077	0.917	1.000	1.059	2.13%		
2022			1.250	0.933	1.200	1.000	1.000	1.667	24.32%		
3-Year Ave.			1.111	1.000	1.056	0.912	1.030	1.176			
5-Year Ave.			1.167	1.018	1.070	0.933	1.017	1.100			
2018, 19, 22			1.346	1.061	1.000	0.975	1.000	0.889			
10-Yr Median			0.938	0.967	1.036	1.000	1.000	1.065			

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional. Births in 2022 were estimated from in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on 96.4% of births 5-years prior, 9.3% of births 6-years prior, zero retentions and 1.0 non-residents.

³ Grades 1-5 based on 5-year averages of annual growth rates by grade.

⁴ Estimated by comparing enrollment in grades 2-5 one year with enrollment in grades 1-4 the prior year with an adjustment for non-residents in.

Appendix C. Washington Primary School Enrollment Projected by Grade to 2032

October 1 of Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PreK ³	Total
2012	2007	17	16	22	15	21	34	30	0	138
2013	2008	22	19	19	22	15	22	30	28	155
2014	2009	17	19	20	20	24	16	23	31	153
2015	2010	27	16	18	20	22	24	17	42	159
2016	2011	21	11	16	19	21	21	25	52	165
2017	2012	15	16	11	17	20	22	20	41	147
2018	2013	19	12	15	14	17	19	22	41	140
2019	2014	19	16	13	16	14	15	19	45	138
2020	2015	23	18	22	17	20	13	18	7	115
2021	2016	16	18	25	21	19	21	15	35	154
2022	2017	18	15	22	26	20	17	19	43	162
Projected										
2023	2017	9	10	18	24	28	19	18	43	160
2024	2018	21	16	12	20	25	26	20	42	161
2025	2019	16	15	19	13	21	24	27	41	160
2026	2020	15	13	18	21	14	20	25	40	151
2027	2021	12	11	16	20	22	13	21	41	144
2028	2022	14	12	13	17	21	21	13	40	137
2029	2023	14	12	15	14	18	20	22	40	141
2030	2024	13	12	15	16	15	17	21	39	135
2031	2025	13	12	15	16	17	14	18	39	131
2032	2026	13	11	15	16	17	16	14	39	128
Projection Growth Rates⁴				1.213	1.093	1.059	0.944	1.033	0.515	
Annual Growth Rates										Migration⁵
2013			0.864	1.188	1.000	1.000	1.048	0.882	0.310	-3.26%
2014			1.059	1.053	1.053	1.091	1.067	1.045	0.319	6.41%
2015			0.556	0.947	1.000	1.100	1.000	1.063	0.563	1.25%
2016			0.524	1.000	1.056	1.050	0.955	1.042	0.806	2.44%
2017			0.933	1.000	1.063	1.053	1.048	0.952	0.543	0.00%
2018			0.632	0.938	1.273	1.000	0.950	1.000	0.467	4.48%
2019			0.842	1.083	1.067	1.000	0.882	1.000	0.525	-3.23%
2020			0.783	1.375	1.308	1.250	0.929	1.200	0.103	18.52%
2021			1.125	1.389	0.955	1.118	1.050	1.154	0.500	7.46%
2032			0.833	1.222	1.040	0.952	0.895	0.905	0.519	-2.38%
3-Year Ave.			0.895	1.327	1.067	1.093	0.962	1.061		
5-Year Ave.			0.832	1.213	1.093	1.059	0.944	1.033		
2018, 19, 22			0.768	0.920	1.058	1.020	0.981	1.033		
10-Yr Median			0.838	1.068	1.054	1.051	0.977	1.021		

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional. Births in 2022 were estimated from in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on 96.4% of births 5-years prior, 9.3% of births 6-years prior, zero retentions and 1.0 non-residents.

³ Pre-kindergarten based on births 3- and 3-years prior + non-residents.

⁴ Grades 1-5 based on 5-year averages of annual growth rates by grade.

⁵ Estimated by comparing enrollment in grades 2-5 one year with enrollment in grades 1-4 the prior year with an adjustment for non-residents in.

Appendix D. Region 12 Enrollment Projected by Grade to 2032: Grades PK-5										
October 1 of Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5
2012	2007	35	36	55	37	48	64	61	17	322
2013	2008	40	33	38	56	37	49	63	21	304
2014	2009	37	35	37	39	59	38	47	28	286
2015	2010	50	35	36	37	42	57	40	31	289
2016	2011	41	30	36	38	40	43	59	42	298
2017	2012	30	38	28	36	44	40	39	52	266
2018	2013	32	35	37	32	36	42	41	41	264
2019	2014	38	37	34	41	33	36	43	41	269
2020	2015	37	38	46	37	41	34	44	45	247
2021	2016	43	45	43	45	41	41	37	7	287
2022	2017	38	43	47	48	44	40	42	35	307
Projected										
2023	2018	25	30	45	51	50	43	43	35	305
2024	2019	41	41	31	49	52	48	46	37	309
2025	2020	36	39	43	34	50	52	51	43	310
2026	2021	39	42	41	47	35	50	56	41	311
2027	2022	34	38	44	45	48	34	54	43	304
2028	2023	36	39	39	47	46	48	36	42	295
2029	2024	36	40	41	42	48	45	52	42	308
2030	2025	35	39	42	44	43	48	48	42	303
2031	2026	35	38	41	45	45	43	52	42	303
2032	2027	34	37	40	44	46	45	46	42	297
Projection Growth Rates⁴										
Annual Growth Rates									Estimated Migration⁵	
2013			0.825	1.056	1.018	1.000	1.021	0.984	0.310	-0.28%
2014			0.946	1.121	1.026	1.054	1.027	0.959	0.319	-2.04%
2015			0.700	1.029	1.000	1.077	0.966	1.053	0.563	1.00%
2016			0.732	1.029	1.056	1.081	1.024	1.035	0.806	3.58%
2017			1.033	0.900	1.000	1.026	1.000	0.907	0.543	-3.02%
2018			1.094	0.974	1.143	1.000	0.955	1.025	0.467	2.44%
2019			0.974	0.971	1.108	1.031	1.000	1.024	0.525	5.88%
2020			1.027	1.243	1.088	1.000	1.030	1.222	0.103	4.35%
2021			1.047	1.132	0.978	1.108	1.000	1.088	0.500	5.22%
2022			1.132	1.044	1.116	0.978	0.976	1.024	0.519	4.18%
3-Year Ave.			1.068	1.133	1.057	1.024	1.000	1.108		
5-Year Ave.			1.053	1.073	1.080	1.021	0.990	1.073		
2017-19, 2022			1.065	0.967	1.027	1.018	0.992	1.008		
10-Yr Median			1.000	1.037	1.041	1.029	1.000	1.025		

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional.

Births in 2022 were estimated from in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on births 5-years prior, births 6-years prior, retentions and non-residents by town.

³ Pre-kindergarten based on births 3- and 3-years prior + non-residents.

⁴ Grades 1-5 based on 5-year averages of annual growth rates by grade and town.

⁵ Estimated by comparing enrollment in grades 2-5 one year with enrollment in grades 1-4 the prior year with an adjustment for non-residents in.

Appendix E. Region 12 Enrollment Projected by Grade to 2032: Grades 6-12

October 1 of Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2012	78	60	61	82	73	80	85	199	320	841
2013	63	75	62	59	76	77	80	200	292	796
2014	59	62	73	65	53	76	73	194	267	747
2015	50	63	64	66	67	51	78	177	262	728
2016	45	51	61	71	67	64	50	157	252	707
2017	58	46	56	62	72	67	61	160	262	688
2018	49	60	49	54	64	72	70	158	260	682
2019	47	49	64	78	58	60	80	160	276	705
2020	50	47	53	91	78	59	61	150	289	686
2021	55	48	53	91	89	75	64	156	319	762
2022	44	62	53	102	85	83	66	159	336	802
Projected										
2023	50	45	67	96	101	82	85	162	364	831
2024	52	51	49	108	95	98	84	152	385	846
2025	55	53	55	88	107	92	100	163	387	860
2026	61	56	58	90	88	103	94	175	375	861
2027	67	63	61	94	90	85	105	191	374	869
2028	65	69	69	94	94	87	87	203	362	860
2029	43	67	75	102	94	91	89	185	376	869
2030	62	44	73	109	101	91	93	179	394	876
2031	58	64	48	110	108	98	93	170	409	882
2032	62	60	70	82	109	104	100	192	395	884
Projection Growth Rates¹										
	1.201	1.027	1.088	0.981	0.995	0.967	1.024			
Annual Growth Rates²										
										Migration²
2013	1.033	0.962	1.033	0.951	0.927	1.055	1.000			-0.28%
2014	0.937	0.984	0.973	0.952	0.898	1.000	0.948			-2.04%
2015	1.064	1.068	1.032	0.822	1.031	0.962	1.026			1.00%
2016	1.125	1.020	0.968	0.875	1.015	0.955	0.980			3.58%
2017	0.983	1.022	1.098	0.902	1.014	1.000	0.953			-3.02%
2018	1.256	1.034	1.065	0.893	1.032	1.000	1.045			2.44%
2019	1.146	1.000	1.067	0.980	1.074	0.938	1.111			5.88%
2020	1.163	1.000	1.082	0.922	1.000	1.017	1.017			4.35%
2021	1.250	0.960	1.128	0.981	0.978	0.962	1.085			5.22%
2022	1.189	1.127	1.104	0.981	0.934	0.933	0.880			4.18%
3-Year Ave.	1.202	1.033	1.104	0.959	0.969	0.964	0.985			
5-Year Ave.	1.201	1.027	1.088	0.887	0.995	0.967	1.024			
2017, 19, 22	1.073	0.970	1.013	0.894	1.060	1.009	1.098			
10-Yr Median	1.136	1.010	1.066	0.936	1.007	0.981	1.008			

¹ Projection growth rates in grades 6-8 and 10-12 based on 5-year averages. Growth in grade 9 based on average of resident growth in 2019, 21 and 22.

² Grade 9 rates adjusted for residents only. Projected Sherman and Agriscience non-resident enrollment added to resident projection.

³ Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year with an adjustment for non-residents in and residents out to public schools.

Appendix F. Bridgewater Resident Enrollment Projected by Grade to 2032: Grades PK-5

October 1 of Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5
2012	2007	8	9	11	12	11	9	12	2	66
2013	2008	8	5	9	11	10	12	10	3	60
2014	2009	9	4	6	9	12	9	9	4	53
2015	2010	9	7	5	6	9	11	8	4	50
2016	2010	4	3	9	4	6	10	11	9	52
2017	2012	8	10	2	8	3	5	7	4	39
2018	2013	3	6	11	2	10	5	6	8	48
2019	2014	11	9	6	11	2	10	7	4	49
2020	2015	3	4	9	6	12	2	12	3	48
2021	2016	10	12	5	8	9	11	3	8	56
2022	2017	12	16	11	7	8	11	12	8	73
Projected										
2023	2018	6	7	16	11	8	9	13	7	71
2024	2019	10	12	7	16	13	9	11	8	76
2025	2020	7	7	13	7	16	13	10	10	76
2026	2021	12	12	7	13	7	16	14	9	78
2027	2022	11	11	13	7	13	7	18	9	78
2028	2023	10	10	12	13	7	13	8	9	72
2029	2024	11	11	11	12	13	7	14	9	77
2030	2025	11	11	12	11	12	13	8	8	75
2031	2026	10	10	12	12	11	12	14	8	79
2032	2027	10	10	11	12	12	11	13	8	77
Projection Growth Rates			1.205	1.024	1.030	1.171	1.083	1.212	0.835	
2025-32			1.009	1.050	1.000	1.000	1.000	1.101		
Annual Growth Rates									Estimated Migration⁴	
2013			0.625	1.000	1.000	0.833	1.091	1.111	0.333	0.0%
2014			0.444	1.200	1.000	1.091	0.900	0.750	0.615	-13.9%
2015			0.778	1.250	1.000	1.000	0.917	0.889	0.667	-1.8%
2016			0.750	1.286	0.800	1.000	1.111	1.000	1.636	4.0%
2017			1.250	0.667	0.889	0.750	0.833	0.700	0.571	-6.3%
2018			2.000	1.100	1.000	1.250	1.667	1.200	1.143	14.3%
2019			0.818	1.000	1.000	1.000	1.000	1.400	0.615	19.0%
2020			1.333	1.000	1.000	1.091	1.000	1.200	0.273	10.2%
2021			1.200	1.250	0.889	1.500	0.917	1.500	0.889	8.3%
2022			1.333	0.917	1.400	1.000	1.222	1.091	1.000	9.6%
3-Year Ave.			1.280	1.000	1.050	1.160	1.043	1.174		
5-Year Ave.			1.205	1.024	1.030	1.171	1.083	1.212		
2018, 19, 22			1.192	1.074	0.900	1.111	1.000	1.091		
10-Yr Median			1.009	1.050	1.000	1.000	1.000	1.101		

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional. Births in 2022 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on birth to kindergarten growth in past five years.

³ PK based on average births 3- and 4-years prior.

⁴ Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year.

**Appendix G. Bridgewater Resident Enrollment Projected by Grade to 2032:
Grades 6-12**

October 1 of Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2012	24	10	15	20	19	15	23	49	77	192
2013	12	24	10	14	18	19	13	46	64	170
2014	7	11	20	8	13	18	18	38	57	148
2015	9	7	12	14	9	14	18	28	55	133
2016	7	10	8	12	14	9	13	25	48	125
2017	12	7	11	7	12	14	10	30	43	112
2018	8	11	8	10	8	10	14	27	42	117
2019	8	11	12	10	11	7	13	31	41	121
2020	7	9	12	9	11	10	9	28	39	115
2021	14	7	8	12	9	12	13	29	46	131
2022	3	15	8	8	11	11	11	26	41	140
Projected										
2023	14	3	16	8	8	11	12	33	39	143
2024	15	15	3	15	8	8	12	33	43	152
2025	11	15	16	3	15	8	8	42	34	152
2026	10	11	16	15	3	15	8	37	41	156
2027	14	10	12	15	15	3	15	36	48	162
2028	18	14	11	11	15	15	3	43	44	159
2029	8	18	15	10	11	15	15	41	51	169
2030	14	8	20	14	10	11	15	42	50	167
2031	8	14	9	18	14	10	11	31	53	163
2032	14	8	15	8	18	14	10	37	50	164
Projection Growth Rates¹										
2023-2024	1.143	1.082	1.067	0.961	1.042	0.980	1.132			
2025-2032	1.000	1.000	1.091	0.921	1.000	1.000	1.000			
Annual Growth Rates										
										Migration²
2013	1.000	1.000	1.000	0.933	0.900	1.000	0.867			-3.6%
2014	0.700	0.917	0.833	0.800	0.929	1.000	0.947			0.0%
2015	1.000	1.000	1.091	0.700	1.125	1.077	1.000			-13.9%
2016	0.875	1.111	1.143	1.000	1.000	1.000	0.929			-1.8%
2017	1.091	1.000	1.100	0.875	1.000	1.000	1.111			4.0%
2018	1.143	0.917	1.143	0.909	1.143	0.833	1.000			-6.3%
2019	1.333	1.375	1.091	1.250	1.100	0.875	1.300			14.3%
2020	1.000	1.125	1.091	0.750	1.100	0.909	1.286			19.0%
2021	1.167	1.000	0.889	1.000	1.000	1.091	1.300			14.0%
2022	1.000	1.071	1.143	1.000	0.917	1.222	0.917			11.8%
3-Year Ave.	1.091	1.069	1.037	0.906	1.000	1.065	1.138			
5-Year Ave.	1.143	1.082	1.067	0.961	1.042	0.980	1.132			
2018, 19, 22	1.188	1.029	1.038	1.037	1.107	0.839	1.114			
10-Yr Median	1.000	1.000	1.091	0.921	1.000	1.000	1.000			

¹ Projection Growth Rates based on 5-year average of annual growth rates in 2023-24 and 10-year median in 2025-32.

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

Appendix H. Roxbury Resident Enrollment Projected by Grade to 2032: Grades PK-5

School Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5
2012	2007	10	12	22	9	16	21	19	8	107
2013	2008	10	9	11	22	11	15	23	11	102
2014	2009	11	11	8	10	21	12	15	12	89
2015	2010	14	9	10	9	10	20	14	13	85
2016	2010	16	16	8	12	11	12	21	16	96
2017	2012	7	6	14	10	12	11	12	15	80
2018	2013	10	14	6	15	7	12	12	6	72
2019	2014	9	7	13	7	16	8	11	14	76
2020	2015	11	13	11	14	7	18	11	3	77
2021	2016	17	14	10	11	12	7	20	10	84
2022	2017	8	9	13	10	12	12	9	12	77
Projected										
2023	2018	10	10	9	14	9	13	14	13	82
2024	2019	10	10	10	10	13	10	15	14	82
2025	2020	13	12	9	11	10	13	11	13	79
2026	2021	12	11	11	10	11	10	14	13	80
2027	2022	11	10	10	12	10	11	11	13	77
2028	2023	12	12	9	11	12	10	12	13	79
2029	2024	12	11	11	10	11	12	11	13	79
2030	2025	12	11	10	12	10	11	13	13	80
2031	2026	12	11	10	11	12	10	12	13	79
2032	2027	12	11	10	11	11	12	11	13	79
Projection Growth Rates 2023-24			1.036	0.981	1.056	0.947	1.056	1.125	1.104	
2025-32			0.950	0.913	1.074	1.000	1.000	1.093	1.104	
Annual Growth Rates									Estimated Migration⁴	
2013			0.900	0.917	1.000	1.222	0.938	1.095	0.880	5.6%
2014			1.000	0.889	0.909	0.955	1.091	1.000	0.800	0.9%
2015			0.643	0.909	1.125	1.000	0.952	1.167	1.130	0.0%
2016			1.000	0.889	1.200	1.222	1.200	1.050	1.882	6.7%
2017			0.857	0.875	1.250	1.000	1.000	1.000	1.579	-1.2%
2018			1.400	1.000	1.071	0.700	1.000	1.091	0.600	-1.3%
2019			0.778	0.929	1.167	1.067	1.143	0.917	1.000	0.0%
2020			1.182	1.571	1.077	1.000	1.125	1.375	0.240	17.5%
2021			0.824	0.769	1.000	0.857	1.000	1.111	1.111	-4.1%
2022			1.125	0.929	1.000	1.091	1.000	1.286	1.200	8.3%
3-Year Ave.			1.000	1.000	1.029	0.969	1.057	1.212		
5-Year Ave.			1.036	0.981	1.056	0.947	1.056	1.125		
2018, 19, 22			1.111	1.000	1.067	0.919	1.032	0.938		
10-Yr Median			0.950	0.913	1.074	1.000	1.000	1.093		

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional. Births in 2022 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on birth to kindergarten growth in past five years.

³ PK based on average births 3- and 4-years prior.

⁴ Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year.

Appendix I. Roxbury Resident Enrollment Projected by Grade to 2032: Grades 6-12

October 1 of Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2012	26	17	18	23	26	22	23	61	94	262
2013	20	25	20	13	21	28	24	65	86	253
2014	23	20	26	22	14	21	26	69	83	241
2015	15	22	20	23	21	13	20	57	77	219
2016	15	15	22	21	22	22	14	52	79	227
2017	20	15	15	25	23	23	21	50	92	222
2018	12	21	15	13	26	21	24	48	84	204
2019	10	11	23	13	15	22	19	44	69	189
2020	13	10	15	23	15	15	21	38	74	189
2021	9	13	9	13	20	13	15	31	61	176
2022	20	12	13	8	12	16	12	45	48	170
Projected										
2023	9	21	13	12	8	11	15	43	46	171
2024	14	9	23	12	12	7	11	46	42	170
2025	15	14	9	20	12	12	7	38	51	168
2026	11	15	14	8	20	12	11	40	51	171
2027	14	11	15	12	8	19	11	40	50	167
2028	11	14	11	13	12	8	18	36	51	166
2029	12	11	14	10	13	12	8	37	43	159
2030	11	12	11	12	10	13	11	34	46	160
2031	13	11	12	10	12	10	12	36	44	159
2032	12	13	11	11	10	12	10	36	43	158
Projection Growth Rates¹										
2023-24	0.970	1.047	1.071	0.909	1.011	0.879	0.968			
2025-32	1.000	1.000	1.000	0.887	0.998	0.964	0.955			
Annual Growth Rates										
										Migration²
2013	1.053	0.962	1.176	0.722	0.913	1.077	1.091			0.9%
2014	1.000	1.000	1.040	1.100	1.077	1.000	0.929			5.6%
2015	1.000	0.957	1.000	0.885	0.955	0.929	0.952			0.9%
2016	1.071	1.000	1.000	1.050	0.957	1.048	1.077			0.0%
2017	0.952	1.000	1.000	1.136	1.095	1.045	0.955			6.7%
2018	1.000	1.050	1.000	0.867	1.040	0.913	1.043			-1.2%
2019	0.833	0.917	1.095	0.867	1.154	0.846	0.905			-1.3%
2020	1.182	1.000	1.364	1.000	1.154	1.000	0.955			0.0%
2021	0.818	1.000	0.900	0.867	0.870	0.867	1.000			22.2%
2022	1.000	1.333	1.000	0.889	0.923	0.800	0.923			0.0%
3-Year Ave.	0.971	1.028	1.114	0.943	1.019	0.897	0.948			
5-Year Ave.	0.970	1.047	1.071	0.909	1.011	0.879	0.968			
2018, 19, 22	0.955	0.932	1.041	0.921	1.080	0.969	1.000			
10-Yr Median	1.000	1.000	1.000	0.887	0.998	0.964	0.955			

¹ Projection Growth Rates based on 5-year average in 2023 and 2024 and 10-year median of annual growth rates by grade in 2025-32.

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

**Appendix J. Washington Resident Enrollment Projected by Grade to 2032:
Grades PK-5**

October 1 of Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5	
2012	2007	17	15	22	16	21	34	30	11	149	
2013	2008	22	19	18	23	16	22	30	13	141	
2014	2009	17	18	22	20	26	17	23	13	139	
2015	2010	27	17	18	22	22	25	18	22	144	
2016	2010	21	11	17	19	23	21	26	25	142	
2017	2012	15	14	11	18	20	24	19	19	125	
2018	2013	19	12	15	13	17	19	23	21	120	
2019	2014	19	16	13	16	13	14	20	24	116	
2020	2015	23	17	22	15	19	12	18	1	104	
2021	2016	16	18	24	22	17	21	13	15	130	
2022	2017	18	12	21	24	20	15	19	20	131	
Projected											
2023	2018	9	7	15	22	25	19	16	23	127	
2024	2019	21	17	9	16	23	24	20	19	128	
2025	2020	16	13	19	10	17	22	25	17	123	
2026	2021	15	12	15	20	10	16	23	16	112	
2027	2022	12	9	13	16	21	10	17	17	103	
2028	2023	14	11	10	14	17	20	10	16	98	
2029	2024	14	11	12	11	15	16	21	16	102	
2030	2025	13	10	12	13	12	14	17	16	94	
2031	2026	13	10	11	13	14	11	15	16	90	
2032	2027	13	10	11	12	14	13	11	16	87	
Projection Growth Rates			2023-24	0.789	1.234	1.059	1.024	0.942	1.033	1.225	
			2025-32	0.791	1.121	1.057	1.049	0.958	1.043	1.225	
Annual Growth Rates										Estimated Migration⁴	
2013			0.864	1.200	1.045	1.000	1.048	0.882	0.591	-3.7%	
2014			1.059	1.158	1.111	1.130	1.063	1.045	0.542	2.0%	
2015			0.630	1.000	1.000	1.100	0.962	1.059	1.222	2.8%	
2016			0.524	1.000	1.056	1.045	0.955	1.040	1.471	0.7%	
2017			0.933	1.000	1.059	1.053	1.043	0.905	1.000	-3.1%	
2018			0.632	1.071	1.182	0.944	0.950	0.958	1.000	0.8%	
2019			0.842	1.083	1.067	1.000	0.824	1.053	1.231	4.3%	
2020			0.739	1.375	1.154	1.188	0.923	1.286	0.059	1.8%	
2021			1.125	1.412	1.000	1.133	1.105	1.083	1.111	5.6%	
2022			0.667	1.167	1.000	0.909	0.882	0.905	1.333	1.8%	
3-Year Ave.			0.825	1.314	1.034	1.057	0.980	1.064			
5-Year Ave.			0.789	1.234	1.059	1.024	0.942	1.033			
2018, 19, 22			0.714	0.979	1.060	1.020	0.962	1.032			
10-Yr Median			0.791	1.121	1.057	1.049	0.958	1.043			

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional. Births in 2022 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on birth to kindergarten growth in past five years in 2023-24 and on en-year median in 2025-32.

³ PK based on average of 2019, 2021 and 2022 births 3- and 4-years prior.

⁴ Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year.

Appendix K. Washington Resident Enrollment Projected by Grade to 2032: Grades 6-12										
October 1 of Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2012	28	33	28	30	22	39	33	89	124	362
2013	30	26	32	29	29	25	39	88	122	351
2014	28	29	27	28	25	29	24	84	106	329
2015	22	30	30	23	29	22	32	82	106	332
2016	20	22	28	21	26	27	22	70	96	308
2017	22	19	23	23	21	24	24	64	92	281
2018	22	21	21	21	24	24	26	64	95	279
2019	27	23	23	21	22	25	28	73	96	285
2020	19	25	22	23	20	21	22	66	86	256
2021	20	16	27	24	25	20	24	63	93	286
2022	15	22	20	28	24	25	15	57	92	280
Projected										
2023	21	15	24	20	29	25	25	60	99	286
2024	18	20	16	24	21	30	25	54	100	282
2025	21	17	21	15	24	21	30	59	90	272
2026	26	20	18	20	15	24	21	64	80	256
2027	24	25	21	17	20	15	24	70	76	249
2028	18	23	26	20	17	20	15	67	72	237
2029	11	17	24	25	20	17	20	52	82	236
2030	22	11	18	23	25	20	17	51	85	230
2031	18	21	11	17	23	25	20	50	85	225
2032	16	17	22	11	17	23	25	55	76	218
Projection Growth Rates¹										
2023-24	1.033	1.108	0.973	1.087	1.009	1.027	1.027			
2025-32	1.043	1.056	0.961	1.042	0.957	1.018	1.000			
Annual Growth Rates										
									Migration²	
2013	1.000	0.929	0.970	1.036	0.967	1.136	1.000			-3.3%
2014	0.933	0.967	1.038	0.875	0.862	1.000	0.960			-3.7%
2015	0.957	1.071	1.034	0.852	1.036	0.880	1.103			2.0%
2016	1.111	1.000	0.933	0.700	1.130	0.931	1.000			2.8%
2017	0.846	0.950	1.045	0.821	1.000	0.923	0.889			0.7%
2018	1.158	0.955	1.105	0.913	1.043	1.143	1.083			-3.1%
2019	1.174	1.045	1.095	1.000	1.048	1.042	1.167			0.8%
2020	0.950	0.926	0.957	1.000	0.952	0.955	0.880			4.3%
2021	1.111	0.842	1.080	1.091	1.087	1.000	1.143			7.1%
2022	1.154	1.100	1.250	1.037	1.000	1.000	0.750			6.0%
3-Year Ave.	1.059	0.955	1.078	1.042	1.015	0.985	0.924			
5-Year Ave.	1.108	0.973	1.087	1.009	1.027	1.027	1.009			
2018, 19, 22	1.088	0.970	1.000	0.958	1.029	1.057	1.175			
10-Yr Median	1.056	0.961	1.042	0.957	1.018	1.000	1.000			

¹ Projection Growth Rates based on 5-year average of annual growth rates by grade in 2023-2 and 10-year median in 2025-32.

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

Appendix L. Region 12 Resident Enrollment Projected by Grade to 2032: Grades PK-5										
October 1 of Year	Birth Year	Births¹	K²	1	2	3	4	5	PK³	Total PK-5
2012	2007	35	36	55	37	48	64	61	21	322
2013	2008	40	33	38	56	37	49	63	27	303
2014	2009	37	33	36	39	59	38	47	29	281
2015	2010	50	33	33	37	41	56	40	39	279
2016	2010	41	30	34	35	40	43	58	50	290
2017	2012	30	30	27	36	35	40	38	38	244
2018	2013	32	32	32	30	34	36	41	35	240
2019	2014	39	32	32	34	31	32	38	42	241
2020	2015	37	34	42	35	38	32	41	7	229
2021	2016	43	44	39	41	38	39	36	33	270
2022	2017	38	37	45	41	40	38	40	40	281
Projected										
2023	2018	39	24	40	47	42	41	43	43	280
2024	2019	29	39	26	42	49	43	46	41	286
2025	2020	38	32	41	28	43	48	46	40	278
2026	2021	41	35	33	43	28	42	51	38	270
2027	2022	38	30	36	35	44	28	46	39	258
2028	2023	33	33	31	38	36	43	30	38	249
2029	2024	37	33	34	33	39	35	46	38	258
2030	2025	36	32	34	36	34	38	38	37	249
2031	2026	35	31	33	36	37	33	41	37	248
2032	2027	35	31	32	35	37	36	35	37	243
Projection Growth Rates			0.947	1.105	1.052	1.028	1.006	1.095	1.028	
			0.905	1.043	1.055	1.042	1.024	1.031	1.028	
Annual Growth Rates									Estimated Migration⁴	
2013			0.825	1.056	1.018	1.000	1.021	0.984	0.621	0.0%
2014			0.892	1.091	1.026	1.054	1.027	0.959	0.637	-2.0%
2015			0.660	1.000	1.028	1.051	0.949	1.053	1.099	1.0%
2016			0.732	1.030	1.061	1.081	1.049	1.036	1.613	3.2%
2017			1.000	0.900	1.059	1.000	1.000	0.884	1.070	-3.0%
2018			1.000	1.067	1.111	0.944	1.029	1.025	0.921	2.5%
2019			0.821	1.000	1.063	1.033	0.941	1.056	1.050	5.5%
2020			0.919	1.313	1.094	1.118	1.032	1.281	0.173	8.0%
2021			1.023	1.147	0.976	1.086	1.026	1.125	0.857	3.1%
2022			0.974	1.023	1.051	0.976	1.000	1.026	1.176	5.6%
3-Year Ave.			0.975	1.145	1.035	1.055	1.019	1.136		
5-Year Ave.			0.947	1.105	1.052	1.028	1.006	1.095		
2018, 19, 22			0.927	1.009	1.030	1.000	0.991	1.017		
10-Yr Median			0.905	1.043	1.055	1.042	1.024	1.031		

¹ Births 2007 to 2021 are from the State Department of Public Health. The 2021 figure is provisional. Births in 2022 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2023-27 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2020 from like (DRG C) towns.

² Kindergarten based on birth to kindergarten growth in past five years within each town.

³ PK based on average births 3- and 4-years prior within each town

⁴ Estimated by comparing the enrollment in grades 3-8 one year with the enrollment in grades 2-7 the prior year.

Appendix M. Region 12 Resident Enrollment Projected by Grade to 2032: Grades 6-12										
October 1 of Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2012	78	60	61	73	67	76	79	199	295	816
2013	62	75	62	56	68	72	76	199	272	774
2014	58	60	73	58	52	68	68	191	246	718
2015	46	59	62	60	59	49	70	167	238	684
2016	42	47	58	54	62	58	49	147	223	660
2017	54	41	49	55	56	61	55	144	227	615
2018	42	53	44	44	58	55	64	139	221	600
2019	45	45	58	44	48	54	60	148	206	595
2020	39	44	49	55	46	46	52	132	199	560
2021	43	36	44	49	54	45	52	123	200	593
2022	38	49	41	44	47	52	38	128	181	590
Projected										
2023	44	39	53	40	45	47	52	136	184	600
2024	47	44	42	51	41	45	48	133	185	604
2025	47	46	46	38	51	41	45	139	175	592
2026	47	46	48	43	38	51	40	141	172	583
2027	52	46	48	44	43	37	50	146	174	578
2028	47	51	48	44	44	43	36	146	167	562
2029	31	46	53	45	44	44	43	130	176	564
2030	47	31	49	49	45	44	43	127	181	557
2031	39	46	32	45	49	45	43	117	182	547
2032	42	38	48	30	45	49	45	128	169	540
Projection Growth Rates¹										
2023-24	1.067	1.018	1.078	0.967	1.024	0.962	1.019			
2025-32	1.038	0.980	1.038	0.942	1.025	0.980	1.000			
Annual Growth Rates								Migration²		
2013	1.016	0.962	1.033	0.918	0.932	1.075	1.000			0.0%
2014	0.921	0.968	0.973	0.935	0.929	1.000	0.944			-2.0%
2015	0.979	1.017	1.033	0.822	1.017	0.942	1.029			1.0%
2016	1.050	1.022	0.983	0.871	1.033	0.983	1.000			3.2%
2017	0.931	0.976	1.043	0.948	1.037	0.984	0.948			-3.0%
2018	1.105	0.981	1.073	0.898	1.055	0.982	1.049			2.5%
2019	1.098	1.071	1.094	1.000	1.091	0.931	1.091			5.5%
2020	1.026	0.978	1.089	0.948	1.045	0.958	0.963			8.0%
2021	1.049	0.923	1.000	1.000	0.982	0.978	1.130			3.1%
2022	1.056	1.140	1.139	1.000	0.959	0.963	0.844			5.6%
3-Year Ave.	1.043	1.016	1.072	0.980	0.993	0.966	0.979			
5-Year Ave.	1.067	1.018	1.078	0.967	1.024	0.962	1.019			
2018, 19, 22	1.051	0.972	1.022	0.964	1.062	0.982	1.097			
10-Yr Median	1.038	0.980	1.038	0.942	1.025	0.980	1.000			

¹ Projection Growth Rates based on 5-year average of annual growth rates in 2022-24 and 10-year median in 2025-32.

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

Appendix N. Non-Resident Enrollment in the Shepaug Agriscience Program Projected to 2032							
October of Year	Sending Grade 8¹	9	10	11	12	9-12	Pct. Prior Year Grade 8
2011	2022						
2012	2099	9	9	13	8	39	0.45%
2013	2024	12	9	9	12	42	0.57%
2014	2002	16	10	9	9	44	0.79%
2015	2021	18	16	9	8	51	0.90%
2016	2088	17	17	17	9	60	0.84%
2017	2005	22	16	13	15	66	1.05%
2018	1970	17	16	16	12	61	0.85%
2019	1990	27	18	15	14	27	1.37%
2020	2035	25	22	16	14	47	1.26%
2021	1969	29	24	21	12	74	1.43%
2022	1934	36	30	20	19	105	1.83%
2023	1957	33	34	27	17	111	1.71%
2024	1953	32	31	30	23	116	1.64%
2025	1928	30	30	28	26	114	1.54%
2026	1899	30	28	27	24	109	1.56%
2027	1882	27	28	25	23	103	1.42%
2028	1892	30	25	25	22	102	1.59%
2029	1872	26	28	22	22	98	1.37%
2030	1988	29	24	25	19	97	1.55%
2031	1916	30	27	21	22	100	1.51%
2032	1850	27	28	24	18	97	1.41%
Projection Growth Rates²		0.015	0.938	0.891	0.865		

¹ The sending districts are Brookfield, Danbury, New Fairfield, New Milford, Newtown and Sherman.

² Projection growth rate in grade 9 was based on the weighted 3-year average from grade 8 the prior year. The growth rates in grades 10-12 were based on three-year averages for these towns for students in Region 12 and 14.

NOTE: The shaded area represents enrollment in Region 12.