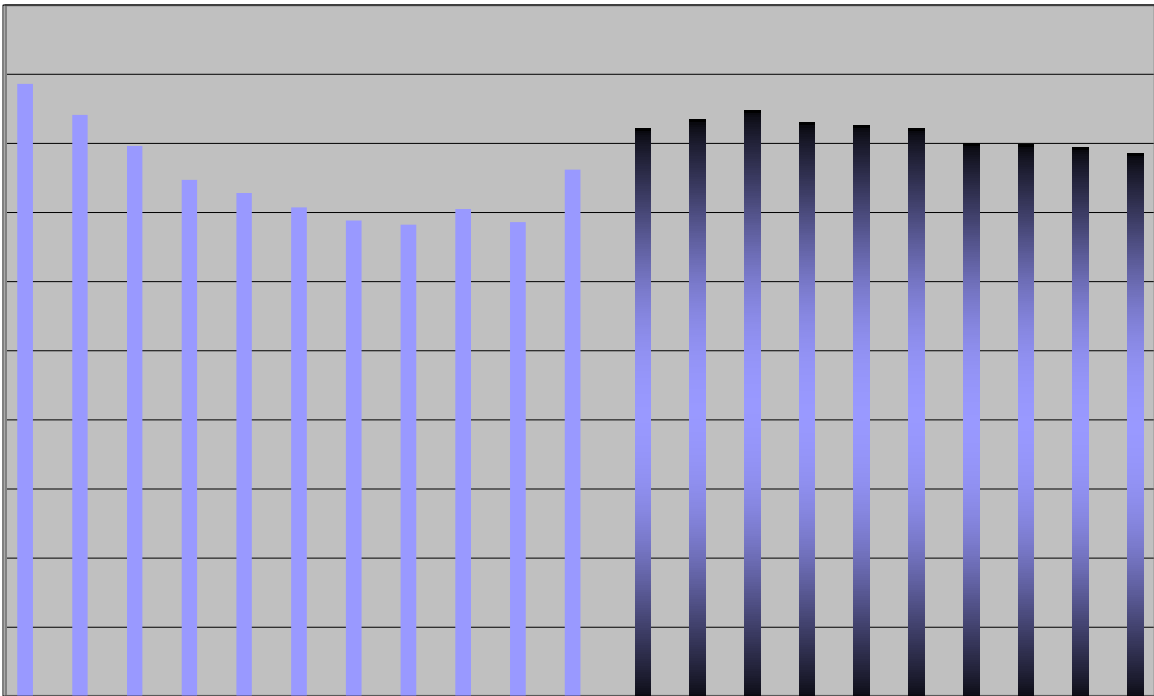


REGION 12 PUBLIC SCHOOLS ENROLLMENT PROJECTED TO 2031



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January 20, 2022

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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 52 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.

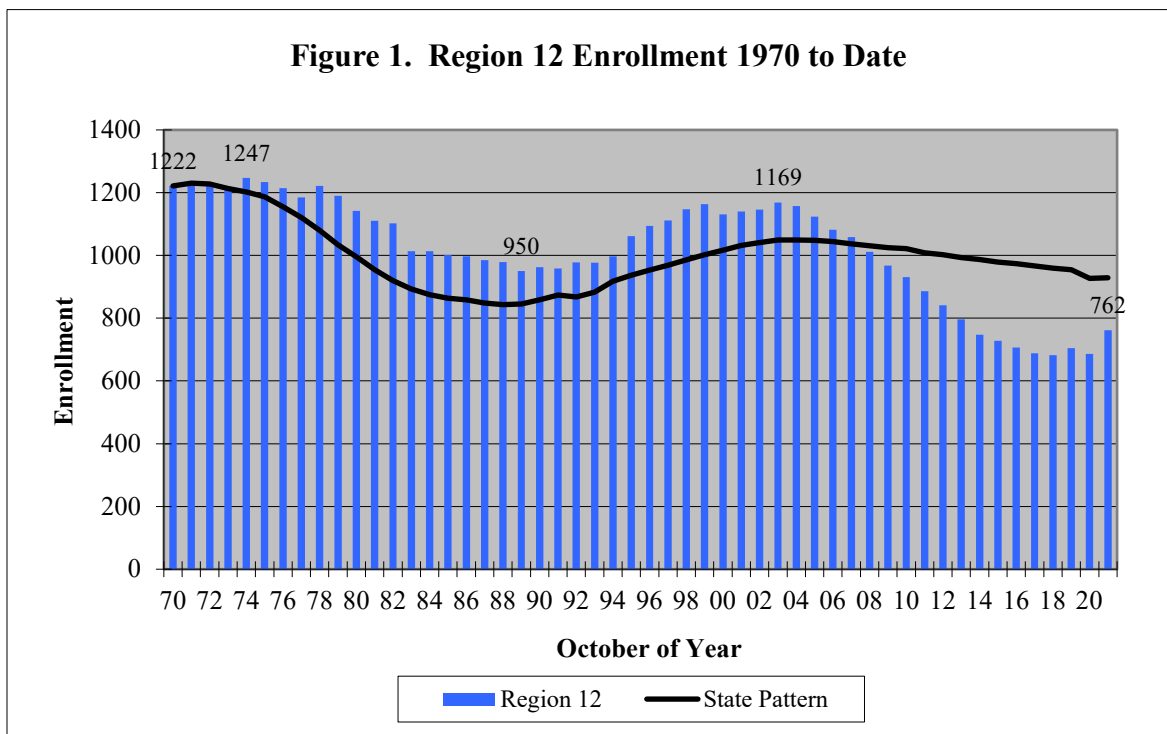
Enrollment projections are a valuable planning tool. For budgeting, the numbers can place requested expenditures into a per pupil context. This can inform the public about which expenditures represent continuing expenditures to support on-going programs and expenditures for school improvement and program 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 during 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, and more families deciding to home-school their children. 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. Enrollment may have exited its down cycle. The October, 2021 enrollment was 762 students compared to 686 last year. Even with the addition of the Agriscience Program, the 2021 figure is still 404 students (34.8 percent) below the 2003 peak.

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 2021. 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 929 students on October 1, 2021 instead of the 762 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, 2021. They show that only 71.9 percent of the region's school-age residents attended the Region 12 Public Schools in 2021. A large 22.2 percent of the school-age residents attended non-public schools in state. This figure includes one student attending a non-public special education facility at district expense. The number attending private schools out-of-state is not known. Five school-age residents attended a state technical high school or the agriculture science program in Region 14. There were 36 students (4.4 percent) reported as being home-schooled. There were 11 students of staff residing in other towns included in the 169 non-residents recorded. (On state records, these students are recorded as residents.) The projections in this report are based upon the 762 residents and non-residents who were enrolled in the Region 12 Public Schools on October 1, 2021 (see "Total Enrollment." below).

Table 1. 2021 Enrollment		
	Number	Percent
Residents		
A. Reg. 12 Public	593	71.9%
B. Tech/Ag Sci	5	0.6%
C. Magnet/Other	8	1.0%
D. Non-Public	183	22.2%
E. Home-Schooled	36	4.4%
Total (A+B+C+D+E)	825	
F. Non-Residents	169	
Total Enrollment (A+F)	762	

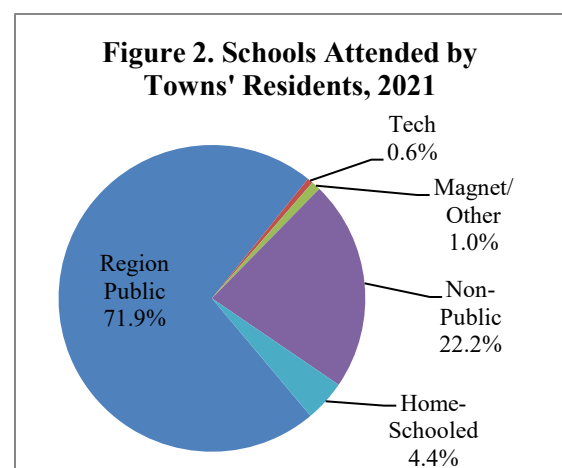
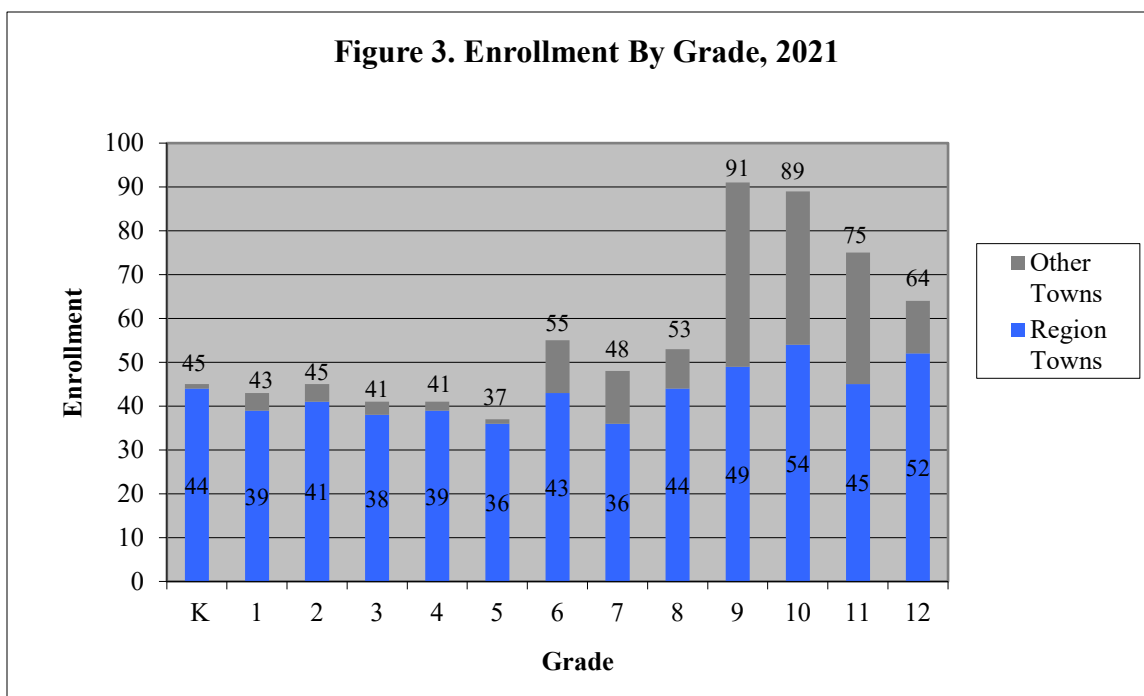


Figure 3 shows the October 2021 grade-by-grade enrollment by of students in the Region 12 Public Schools. Enrollment in pre-kindergarten programs is not shown. The high school students from other towns are tuitioned-in from Sherman; students enrolled in the Agriscience Program in grades 9-11 or private-pay. Grade 10 had the largest resident enrollment with 54 students. It was followed by grade 12 with 52 students enrolled. Grades 5 and 7 had the fewest resident students, 36. Without significant in-migration, this is the pattern for a future enrollment decline. If current conditions continue, this year's kindergarten class of 45 resident and non-resident students could have 70 students when it enters grade 6 at Shepaug Valley Middle School in 2027 and 96 students when it enters grade 9 at Shepaug Valley High School in 2030. Both figures are slightly above the current counts in those grades. 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-D). 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. I adjusted the 2020 and 2021 grade-to-grade growth rates for students withdrawn to become home-schooled. For each grade I calculated four different averages of the annual growth rates: a three-year average; a four-year average from 2017 to 2019 and 2021; 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 started by using in 2022 through 2024 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 adjusted averages. To estimate kindergarten enrollment, I used the four-year averages from 2017-2019 and 2021 of retentions, and yields from births five and six years ago from each town. I projected pre-kindergarten enrollment from births three- and four-years ago based on the growth observed in 2019 and 2021.

The adjusted growth observed in 2020 and 2021 was extraordinarily high. I assumed it would continue for only the next three years. Sales of existing single-family homes and condominiums in 2021 will be below the 2020 count. Thus, in the years 2025-2031 of the projection, I switched to the slightly lower growth rates based on ten-year medians.

The number of children withdrawing to become home-schooled jumped from 12 in 2019 to 34 in 2020 and 36 in 2021. I have assumed in this report that the impact of Covid-19 will be substantially behind us by October, 2022. Accordingly, I assumed that 60 percent of the students home-schooled in 2021 would return to the Region 12 Public Schools in 2022. That model would return the number home-schooled to close to pre-Covid-19 levels in 2023.

To extend a projection beyond four years, I need to project births. The State Department of Public Health recorded 35 births in 2020 - 7 in Bridgewater, 13 in Roxbury and 15 in Washington. These counts are provisional but unlikely to change. To estimate 2021 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 2019 and 2020. The resulting estimates were 10 births in Bridgewater, 13 in Roxbury and 15 in Washington for a total of 38. I based births in 2022 to 2026 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 2019. 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 2019-2021. That resulted in an average number of births of 9 in Bridgewater, 13 in Roxbury and 16 in Washington for a regional average of 37 births in the 2022 to 2026 period.

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 three-year growth rates. To project enrollment in grades 10-12 in the program I relied on five-years of enrollment history of these students in Region 12 and 14.

This report also includes projections by town of residence. As with the school-based projection, I used a five-year average of the adjusted grade-to-grade resident growth in towns in 2022 to 2024 and the ten-year median in 2025-2031. To project kindergarten I used the average growth from the birth cohort five-years prior because the breakdown used above was not available by town of residence. In 2022-24, I used the averages of the adjusted growth from 2017-2019, 2021 and in 2025-31 the ten-year median. I projected pre-kindergarten enrollment from the two-year (2019 and 2021) history of enrollment compared to the average of births three- and four-years ago.

Enrollment data from 2011 to 2021 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 2021 were provided by the Healthcare Quality, Statistics, Analysis and Reporting Unit of the State Department of Public Health.

Total Enrollment

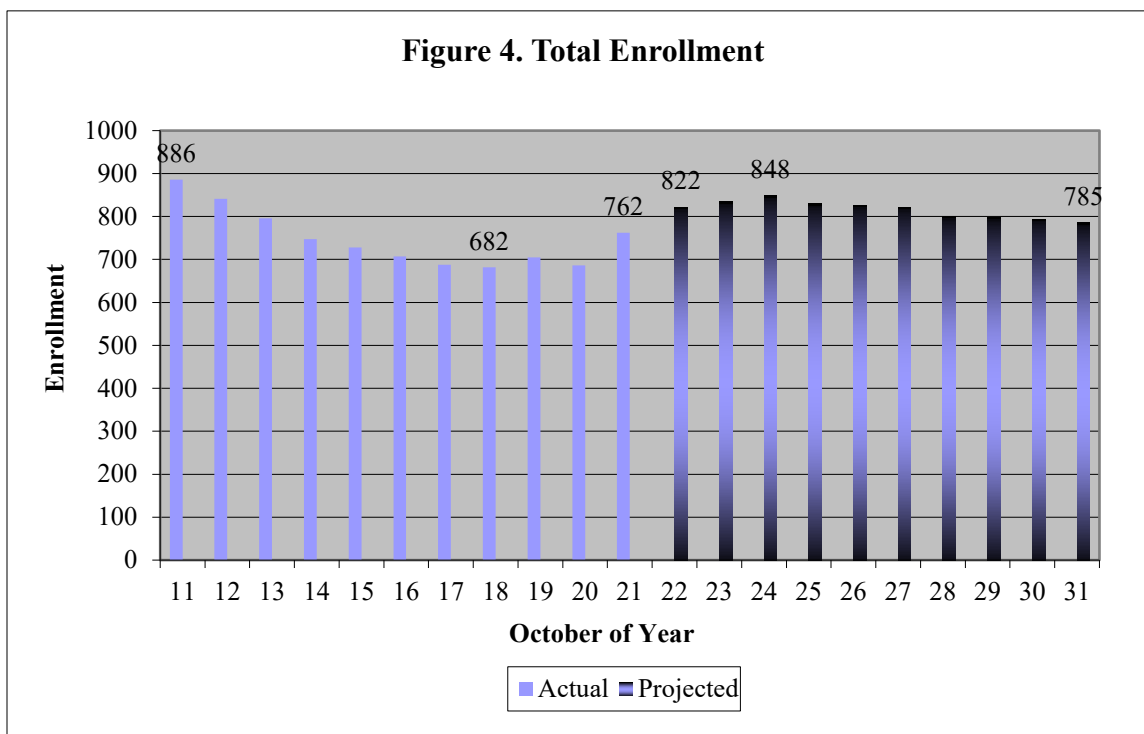
Table 2 and Figure 4 present the observed total enrollment in Region 12 from 2011 to 2021 and projected enrollment through 2031. Detailed grade-by-grade data may be found in Appendices D and E. Enrollment declined from 886 in 2011 to 682 students in 2018. The addition of the Agriscience program in 2019 pushed enrollment to 762 students in 2021. Between 2011 and 2021, Region 12 enrollment decreased by 124 students or 14.0 percent. Without the Agriscience Program, the loss would have been 22.3 percent. In that period, statewide public-school K-12 enrollment decreased by 8.0 percent.

Region 12's decline of 22.3 percent between 2011 and 2021, adjusted for the addition of 74 agriscience students in grades 9-11, was greater than most similar districts in the region. The 36.8 percent decline in New Hartford with Region 7 and the 34.1 percent decline in Sherman (including high school) were larger. The declines in Oxford (20.8 percent), Region 14 (20.4 percent), Region 10 (19.0 percent), and Canton (14.0 percent) were smaller.

The addition of the Shepaug Agriscience Program will temporarily obscure the decline. As it builds to grades 9-12 in 2022, enrollment should grow from 762 in 2021 to 848 students in 2024. Enrollment could then recede to 785 students in 2031. That would be about 25 students above the 2021 count, a gain of three percent. I have projected that total enrollment statewide will be down 7.9 percent in that period.

Your total enrollment could average almost 820 students over the ten-year projection period. This compares to an average total enrollment of 747 students over the past ten years.

Year	Students	Percent Change
2011	886	
2012	841	-5.1%
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	822	7.9%
2023	834	1.5%
2024	848	1.7%
2025	830	-2.1%
2026	826	-0.5%
2027	822	-0.5%
2028	800	-2.7%
2029	798	-0.2%
2030	794	-0.5%
2031	785	-1.1%



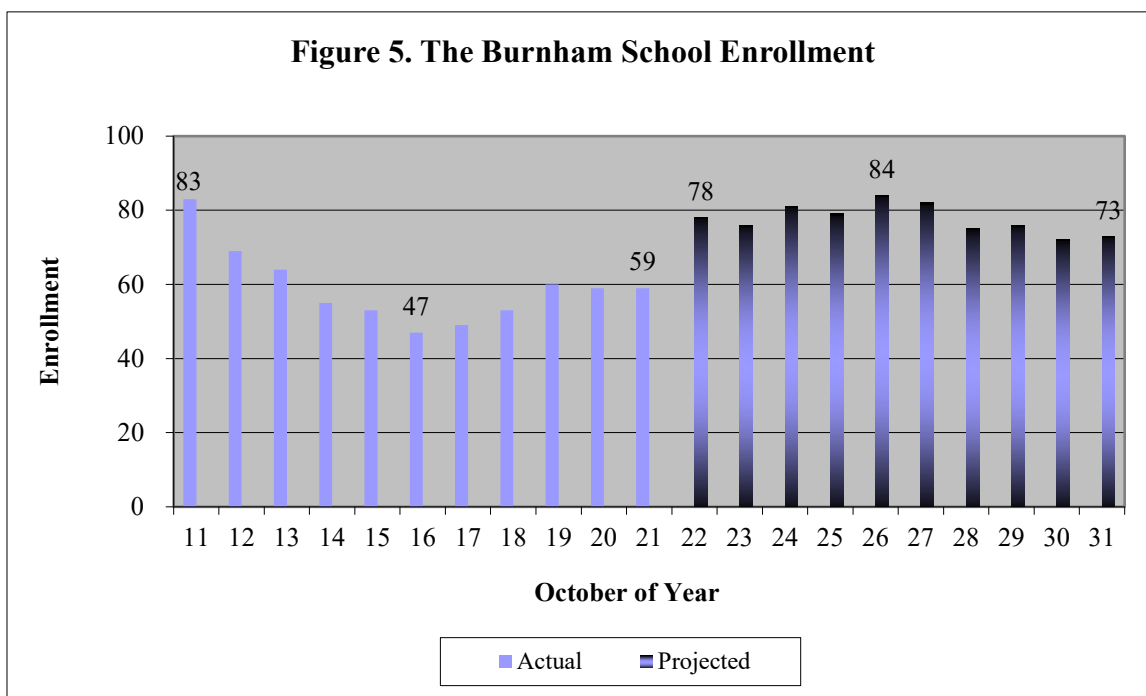
The Burnham School Enrollment

Table 3 and Figure 5 present actual resident and non-resident enrollment from 2011 to 2021 at The Burnham School and projected enrollment to 2031. Grade by grade results may be found in Appendix A. Enrollment in grades K-5 dropped from 83 in 2011 to 47 students in 2016 and then rebounded to 59 students in 2021. There were losses of greater than ten percent in 2012, 2014 and 2016. The 2021 count includes 13 students from towns outside of Bridgewater. In those ten years, enrollment fell by 24 students, a 28.9 percent decrease. State public-school enrollment in grades K-5 fell 11.4 percent in that interval.

I project a period of enrollment growth for the school if in-migration continues; three children from outside the region enroll in kindergarten (the average over the past three years), and births increase. I project that next year's enrollment at The Burnham School could be almost 20 students more than this year as a 5th grade of four students exits and a kindergarten projected to be 18 students enters. I anticipate an enrollment peak just short of 85 students in 2026. I then expect a slow drift downward to 73 students in 2031. That would be a 23 percent increase over the current count. I project that state public school enrollment in grades K-5 will fall 5.6 percent in that interval. Over the ten-year projection period, The Burnham School enrollment could average 78 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
2011	83	
2012	69	-16.9%
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	78	32.2%
2023	76	-2.6%
2024	81	6.6%
2025	79	-2.5%
2026	84	6.3%
2027	82	-2.4%
2028	75	-8.5%
2029	76	1.3%
2030	72	-5.3%
2031	73	1.4%

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 2021, there were eight Bridgewater pre-kindergarten students in the district's program at the Washington Primary School.



Booth Free School Enrollment

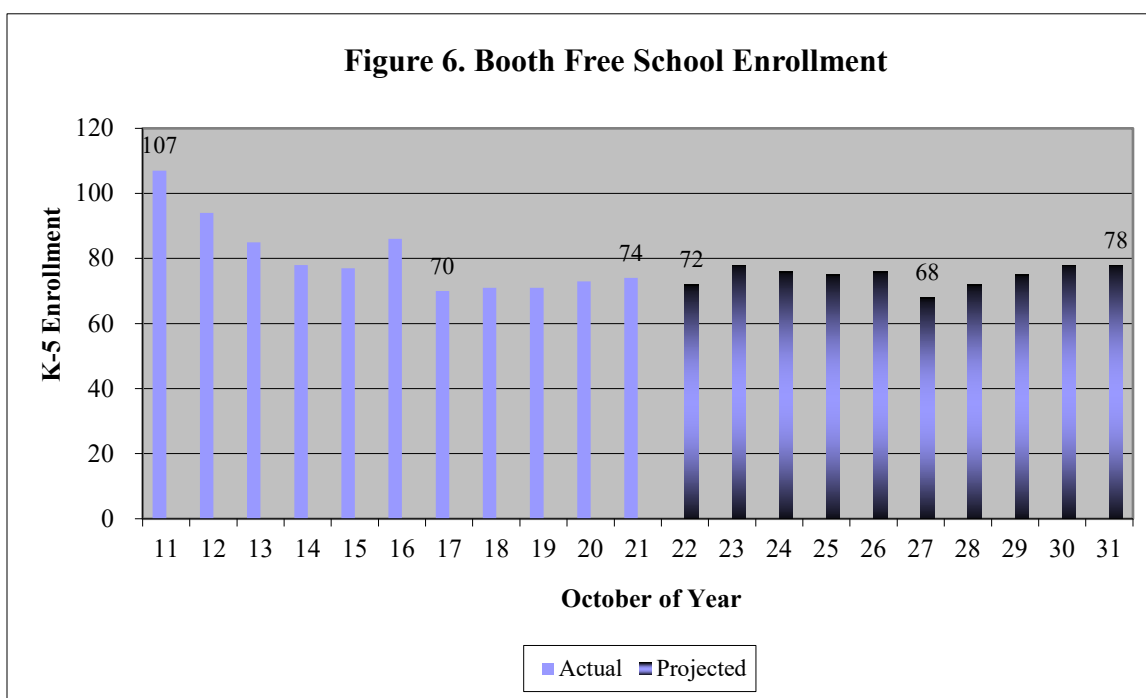
Table 4 and Figure 6 present actual resident and non-resident enrollment from 2011 to 2021 at the Booth Free School and projected enrollment to 2031. Grade by grade results may be found in Appendix B. Between 2011 and 2017, enrollment in grades K-5 decreased from 107 to 70 students. By 2021, it had inched up to 74 students. The 2021 count includes five students from another town. There were declines of greater than ten percent in 2012 and 2017; 2016 saw an increase of greater than ten percent. Between 2011 and 2021, enrollment fell by 33 students, a 30.8 percent decrease. State public school enrollment in grades K-5 fell 11.4 percent in that interval.

I project a very slight increase in enrollment over the next decade. I project that October 2022 enrollment will be about the same as October 2021. I project a peak enrollment of 78 students in 2023 and later at the end of the projection. I anticipate enrollment could end the projection near 80 students. The projected 2031 enrollment would be about five students or 5-6 percent above the 2021 figure. I project that state public school enrollment in grades K-5 will fall 5.6 percent in that interval. Over the ten-year projection period, the Booth Free School enrollment could average 75 students. That would be about the same as the average of 78 students observed over the past ten years.

Booth Free School appears to have started to more aggressively recruit non-resident students in 2015. With Covid-19, the effort lost a bit of momentum. The effort is now only partially built into the projection.

These figures exclude pre-kindergarten children. Over the past ten years, there has not been a pre-kindergarten program at Booth Free School. My projection model assumes that there will not be one in the future. In 2021, there were ten Roxbury pre-kindergarten children in the district's program at the Washington Primary School.

Year	Students	Percent Change
2011	107	
2012	94	-12.1%
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	72	-2.7%
2023	78	8.3%
2024	76	-2.6%
2025	75	-1.3%
2026	76	1.3%
2027	68	-10.5%
2028	72	5.9%
2029	75	4.2%
2030	78	4.0%
2031	78	0.0%



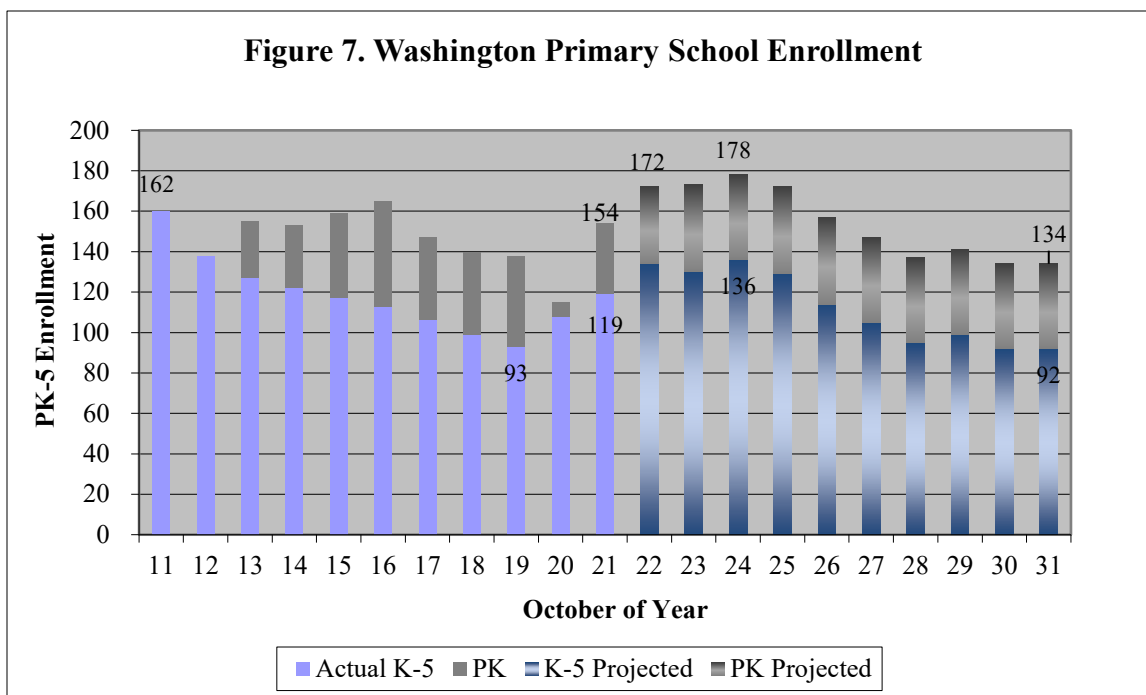
Washington Primary School Enrollment

Table 5 and Figure 7 present actual resident and non-resident enrollment from 2011 to 2021 at the Washington Primary School and projected enrollment to 2031. Grade by grade results may be found in Appendix C. Between 2011 and 2020, enrollment declined from 160 to 115 students. In 2021 it rebounded to 154 students. There were declines of greater than ten percent in 2012, 2017 and 2021. The huge increase in 2021 was the pre-kindergarten enrollment growing from 7 children in 2020 to 35 in 2021. The district's pre-kindergarten program was moved to the Washington Primary School in 2013. In the past ten years, the school's K-5 enrollment declined by 41 students or 25.6 percent. State public school enrollment in grades K-5 fell 11.4 percent in that interval.

With the expected return of a majority of home-schooled students, I anticipate an increase of 18 students in October 2022. I anticipate a peak enrollment of almost 180 students in 2024. If births do not recover, enrollment could be about 135 students in 2031. That would be 20 students less than October, 2021, a loss of 13 percent. I project that state public school enrollment in grades K-5 will fall 5.6 percent in that interval. Over the ten-year projection period, I believe Washington Primary School enrollment could average 155 students compared to 146 students observed over the past ten years.

Year	Students	Percent Change
2011	160	
2012	138	-13.8%
2013	155	12.3%
2014	153	-1.3%
2015	159	3.9%
2016	165	3.8%
2017	147	-10.9%
2018	140	-4.8%
2019	138	-1.4%
2020	115	-16.7%
2021	154	33.9%
2022	172	11.7%
2023	173	0.6%
2024	178	2.9%
2025	172	-3.4%
2026	157	-8.7%
2027	147	-6.4%
2028	137	-6.8%
2029	141	2.9%
2030	134	-5.0%
2031	134	0.0%

These figures include pre-kindergarten children starting in 2013 when the program was moved from the Reach Early Childhood Center. Over the past ten years, district-wide prekindergarten enrollment ranged from five children in 2020 to 52 children in 2016. There were 35 students enrolled in 2020. My projection now bases pre-kindergarten enrollment of births three- and four-years prior. In October, 2022, I expect an enrollment of 38 children. I anticipate enrollment will average 42 children between 2022 and 2031.

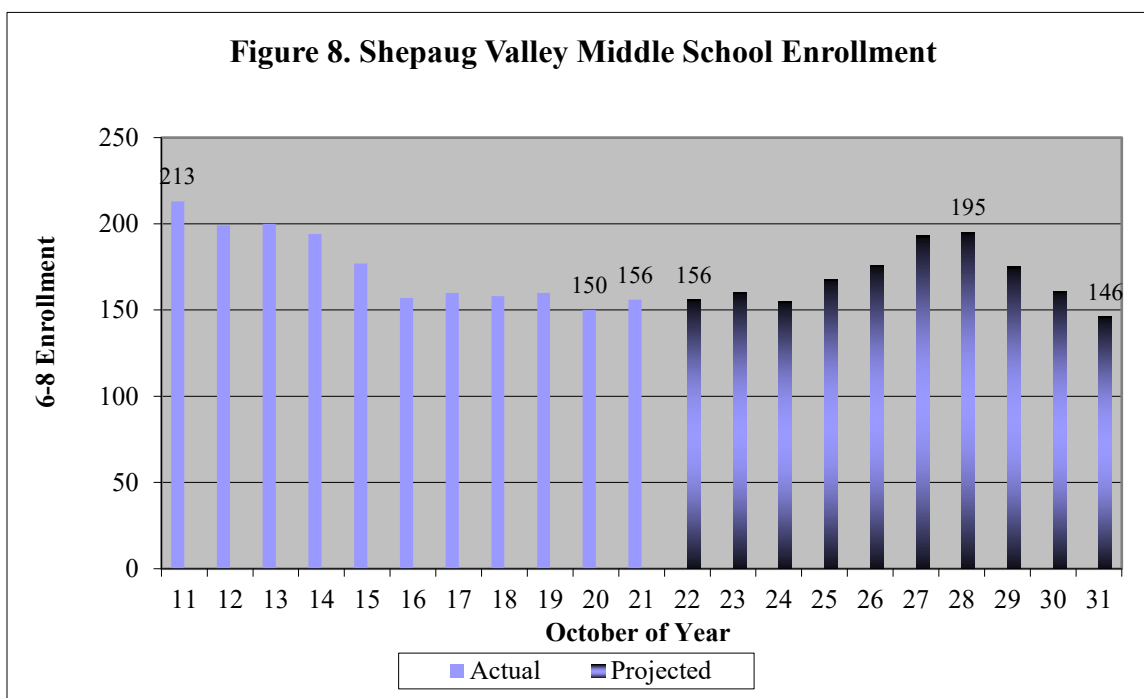


Shepaug Valley Middle School Enrollment

Table 6 and Figure 8 present actual enrollment from 2011 to 2021 in grades 6-8 at the Shepaug Valley School and projected enrollment to 2031. Grade by grade results may be found in Appendix E. The school's enrollment fell from 213 students in 2011 to 150 in 2020. In 2021 it rebounded to 156 students. There were declines of greater than five percent in 2011, 2012, 2015, 2016 and 2020. The 2021 enrollment included 33 students from outside the region. Between 2011 and 2021 enrollment decreased by 57 students or 28.6 percent. Without the influx of non-residents, the decline would have been 42.3 percent. Enrollment in grades 6-8 in the state's public schools decreased 8.7 percent in that interval.

The upcoming trend is little change through 2024, 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 155 students in 2024. I anticipate a growth of almost ten percent between 2024 and 2025 and between 2026 and 2027. At the projection's end, I project an enrollment of about 145 students. That would be 10 students below the current level, a decline of six to seven percent. I project that enrollment in grades 6-8 statewide will decline by 10.9 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 168 students over the next ten years. This would be very slightly below the average of 171 students observed over the past ten years.

Year	Students	Percent Change
2011	213	-6.2%
2012	199	-6.6%
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	156	0.0%
2023	160	2.6%
2024	155	-3.1%
2025	168	8.4%
2026	176	4.8%
2027	193	9.7%
2028	195	1.0%
2029	175	-10.3%
2030	161	-8.0%
2031	146	-9.3%



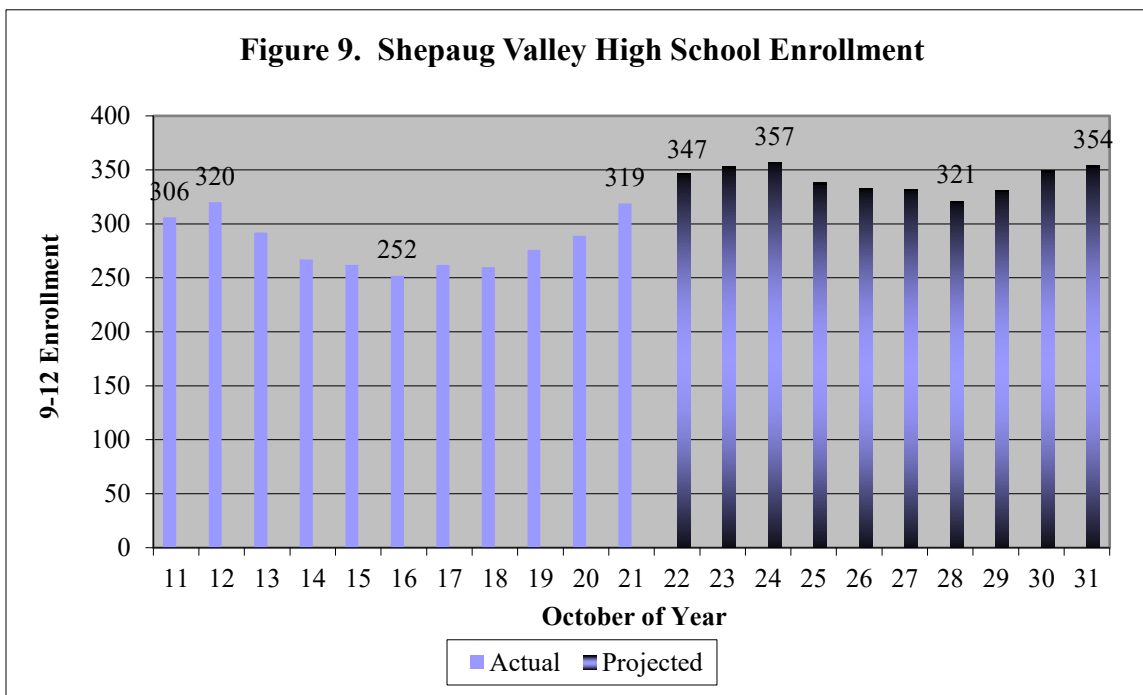
Shepaug Valley High School Enrollment

Table 7 and Figure 9 present actual enrollment from 2011 to 2021 at the Shepaug Valley High School and projected enrollment to 2031. 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. Enrollment went from 306 students in 2011 to 320 students in 2012 and then fell to 252 students in 2016. Enrollment picked up starting with the addition of grade 9 students in the Agriscience program. By 2021, the school's enrollment was 319 students. In the past ten years, the school's enrollment increased by 13 students or 4.2 percent. Without the addition of the Agriscience program, the school's enrollment would have declined by 104 students or 34.0 percent. Public high school enrollment statewide decreased 4.1 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 as the Agriscience program expands to include grade 12. Peak enrollment could approach 360 students in 2024. After a dip to about 320 students in 2028, enrollment at the projection's end could be about 355 students. This would be an increase of 35 students or 11 percent. I project that high school enrollment statewide will decrease 9.9 percent between 2021 and 2031. Over the ten-year projection period, I expect enrollment at the high school will average a little over 340 students compared to 280 over the past ten years.

These figures include Sherman residents. I have projected that Sherman enrollment outside of the Agriscience Program will average about 21 students over the next ten years. This is based on about 18 percent of 8th graders in Sherman choosing Shepaug Valley.

Year	Enrl.	Pct. Change
2011	306	
2012	320	4.6%
2013	292	-8.8%
2014	267	-8.6%
2015	262	-1.9%
2016	252	-3.8%
2017	262	4.0%
2018	260	-0.8%
2019	276	6.2%
2020	289	4.7%
2021	319	10.4%
2022	347	8.8%
2023	353	1.7%
2024	357	1.1%
2025	338	-5.3%
2026	333	-1.5%
2027	332	-0.3%
2028	321	-3.3%
2029	331	3.1%
2030	349	5.4%
2031	354	1.4%



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 2011 to 2021 and projected enrollment from 2021 to 2031. The table also provides each town's share of the enrollment observed from 2011 to 2021 and projected from 2021 to 2031.

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.

Table 8. Enrollment in Region 12 by Town of Residence									
	Grade PK-12 Enrollment					Town Percentage			
October of Year	Bridge-water	Roxbury	Wash-ington	Town Total	Region Total	Town Pct.	Bridge-water	Roxbury	Wash-ington
2011-12	201	274	392	867	886	97.9%	23.18%	31.60%	45.22%
2012-13	192	262	362	816	841	97.0%	23.53%	32.11%	44.36%
2013-14	170	253	351	774	796	97.2%	21.96%	32.69%	45.35%
2014-15	148	241	329	718	747	96.1%	20.61%	33.57%	45.82%
2015-16	133	219	332	684	728	94.0%	19.44%	32.02%	48.54%
2016-17	125	227	308	660	707	93.4%	18.94%	34.39%	46.67%
2017-18	112	222	281	615	688	89.4%	18.21%	36.10%	45.69%
2018-19	117	204	279	600	682	88.0%	19.50%	34.00%	46.50%
2019-20	121	189	285	595	705	84.4%	20.34%	31.76%	47.90%
2020-21	115	189	256	560	686	81.6%	20.54%	33.75%	45.71%
2021-22	131	176	286	593	762	77.8%	22.09%	29.68%	48.23%
Projected									
2022-23	144	181	298	623	822	75.8%	23.11%	29.05%	47.84%
2023-24	145	185	303	633	834	75.9%	22.91%	29.23%	47.86%
2024-25	152	182	298	632	848	74.5%	24.05%	28.80%	47.15%
2025-26	151	178	289	618	830	74.5%	24.43%	28.80%	46.77%
2026-27	155	180	277	612	826	74.1%	25.33%	29.41%	45.26%
2027-28	161	177	274	612	822	74.5%	26.31%	28.92%	44.77%
2028-29	155	176	269	600	800	75.0%	25.83%	29.33%	44.84%
2029-30	164	170	270	604	798	75.7%	27.15%	28.15%	44.70%
2030-31	160	173	264	597	794	75.2%	26.80%	28.98%	44.22%

Between 2011 and 2021 PK-12 enrollment from Bridgewater fell 34.8 percent, enrollment from Roxbury fell 35.8 percent and enrollment from Washington fell 27.0 percent. Concurrently, Bridgewater's share of Region 12 resident enrollment went from 23.2 percent in 2011 to 22.1 percent in 2021. In that period, Roxbury's share declined from 31.6 percent to 29.7 percent and Washington's share changed from 45.2 percent to 48.23 percent. Over the ten years from 2011 to 2021, Bridgewater students were 20.6 percent of the combined enrollment, Roxbury students were 33.0 percent and Washington students were 46.4 percent.

In October 2022, I project that Bridgewater students will comprise 23.11 percent of the combined enrollment, Roxbury students will comprise 29.05 percent and Washington students will comprise 47.84 percent. My ten-year projection has Bridgewater's enrollment increasing by 21 percent, Roxbury's declining by almost three percent and Washington's declining by almost ten percent. Those enrollment patterns will increase Bridgewater's share, decrease Roxbury's share and very slightly reduce Washington's share. Over the projection period, I project that Bridgewater students could average 25.3 percent of the combined enrollment, Roxbury students could average 29.0 percent and Washington students could average 45.8 percent.

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 2020 and estimated births through 2026. 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 38 births in 2021. From 2000 to 2009 there was an average of 53 births annually. In the five years from 2012 to 2016 (this fall's kindergarten through 4th graders) births averaged 36. Births in the 2016 through 2021 period will average close to 35. The projection in years 2026 to 2031 assumes an average of 37 births annually between 2021 and 2026.

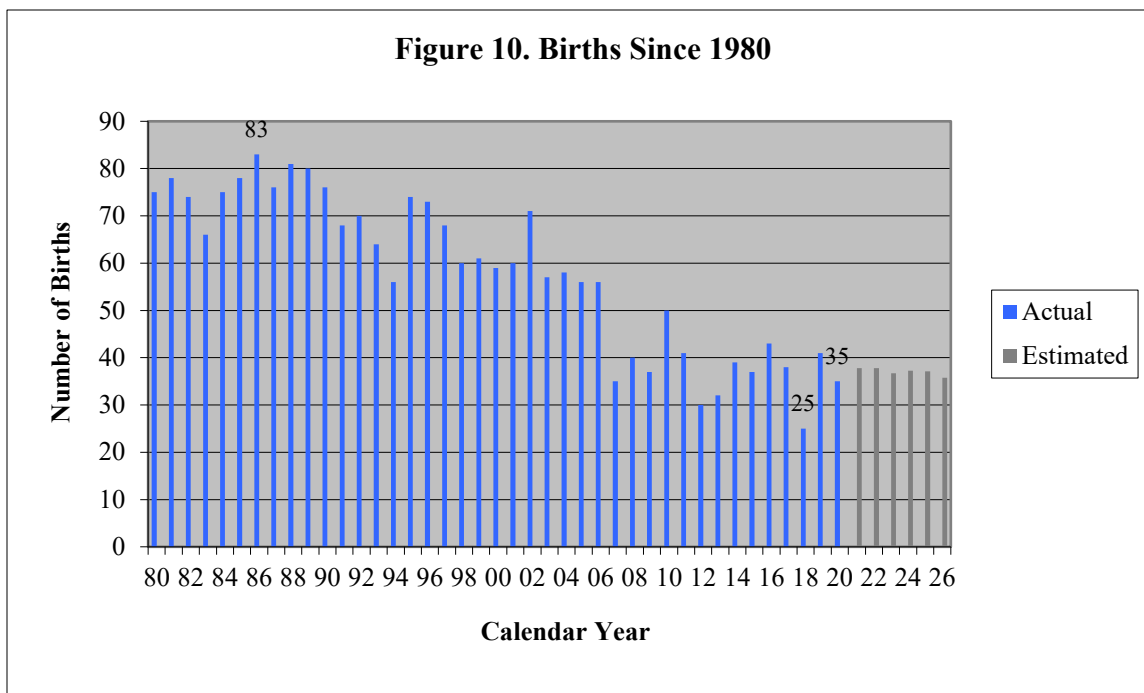
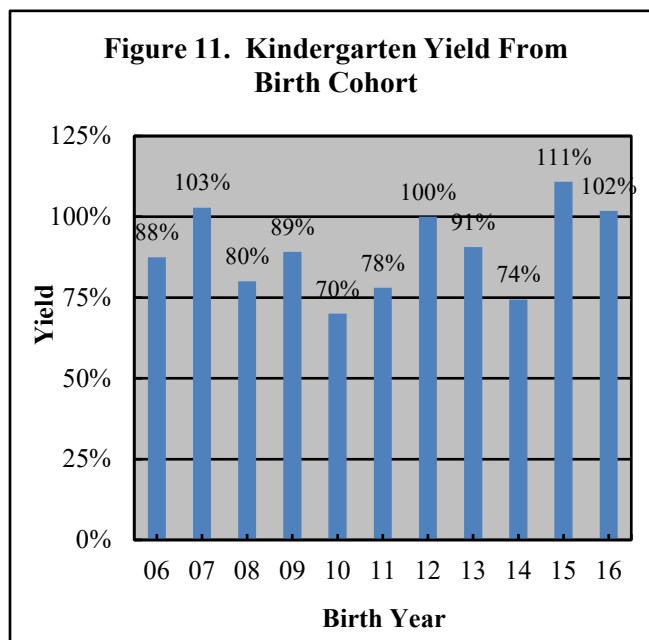


Figure 11 depicts the kindergarten yield five- and six-years later from the birth cohorts of 2006 to 2016 for residents of the three towns attending kindergarten in Region 12 schools. All these birth cohorts were affected by the introduction of full-day kindergarten in 2011. There were 37 births in 2015 in the three towns and 32 resident children enrolled in Region 12 kindergartens at age five in 2020 and an additional six who first enrolled in kindergarten at age six in 2021. The district reported three students home-schooled in kindergarten in 2020. That is a yield of 111 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 2016 is 102 percent. Note that 2016 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 2022. 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 2021, there were 10 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 2011 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 in 2022 to 2024, I used the five-year average of retentions, and yields from births five and six years ago. In 2025-2031, I used the slightly lower ten-year medians of the components. The yields in 2020 and 2021 include children home-schooled. I then added the average number of non-residents enrolled in kindergarten over the past five years. Combined, this averaged 80.7 percent of births five years ago, 13.4 percent of births six years ago, 0.6 percent of current kindergarten students retained, and four non-residents. These figures are well above those used in last year's projection.

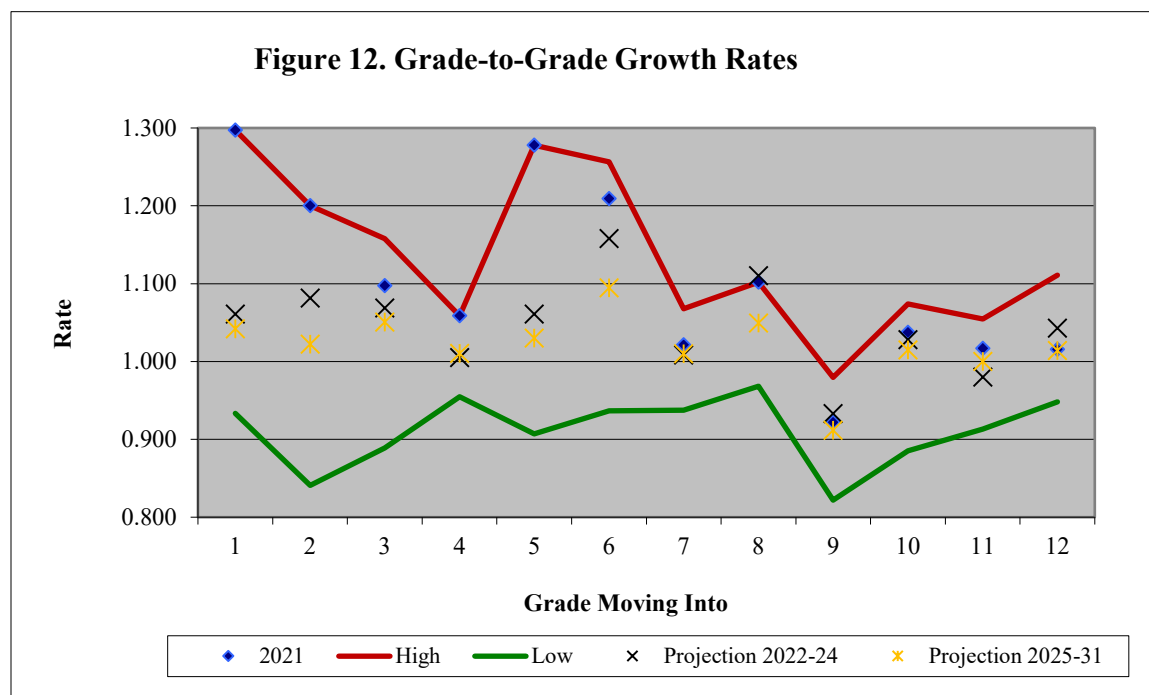
Table 9. Analysis of Kindergarten Enrollment											
Year	Birth Year			Retained from Prior Year	----- Non-Retained -----		Born 6 Years Prior	Percent Retained	Yield from Births 5-Years Prior	Yield from Births 6-Years Prior	Total Yield from Birth Cohort
		Births	K		Born 5-Years Prior Resident	Non-Resident					
2011	2006	56	51	1	46	0	4	2.2%	82.1%	7.1%	87.5%
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%	101.8%
3-Year Average								0.0%	81.5%	11.1%	95.6%
5-Year Average								0.6%	80.7%	13.4%	95.5%
2017-2019, 2021								0.7%	79.2%	15.7%	91.7%
10-Year Median								0.0%	80.0%	8.0%	89.2%
Rates used in 2020 Projection								0.7%	72.3%	13.1%	86.2%

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 2021 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 seven children annually over the past ten years. The cohort survival method, even with my breakout into five-year olds, six-year-old delayed entrants and children retained, cannot overcome the underlying unpredictability of kindergarten enrollment from earlier births.

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. Funds for the implementation have not been allocated by the General Assembly. Unless the state's fiscal situation changes for the better or a court intervenes, I do not believe this common-sense change will be

implemented. Once implemented, the changes will 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 in 2022 to 2024; the orange star is the growth used in 2025 to 2031. 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 2021 was 1.20 times larger than the 2020 enrollment in grade 1. The projection used a growth rate of 1.082 in 2022 to 2024 and a rate of 1.022 in 2025 to 2031. Over the past ten years the rate ranged from 0.841 to 1.200. In general, the narrower the gap between the two lines is, the greater the accuracy of the projection. The rates in 2020 and 2021 were adjusted for students withdrawing to be home-schooled. 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. All eight elementary growth rates in both the 2022-24 and 2025-31 projections were above 1.00 indicating an in-migration into Region 12 schools. The grade 9 rate is reflective of about 18 percent of the three towns' residents choosing a non-public or other school for high school, some students returning for high school and a very low repeater rate. The rates in 2021 set ten-year highs in grades 1, 2, 4, 5 and 8. The projection growth rates were well below the 2021 rates in grades 1-6. All others were fairly close. The average growth rate across grades 2-12 used for the projection in 2022 to 2024 was 1.043. The average growth rate across grades 2-12 used for the projection in 2025 to 2031 was 1.019. The rate in 2021 was a high 1.061. The median rate over the past 20 years was 0.998. 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 student migration.

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 declined by one person. The population loss 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's intercensal estimates, which are based, in part, on relative housing growth within Litchfield County, had estimated a population loss of 4.8 percent.

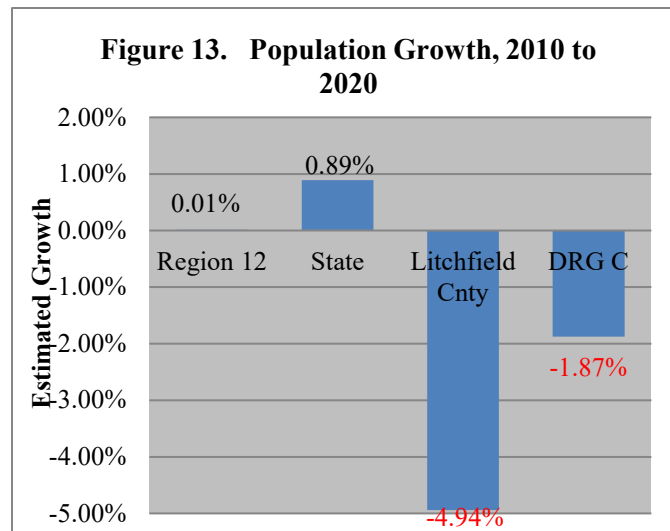


Figure 14 presents the Connecticut State Data Center's 2017 population projections for the Region's residents 0-19 years of age in the years 2020, 2025 and 2030. The Center projected that the 0-4 age population would decline 5.3 percent between 2020 and 2030. The Center projected the population ages 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.

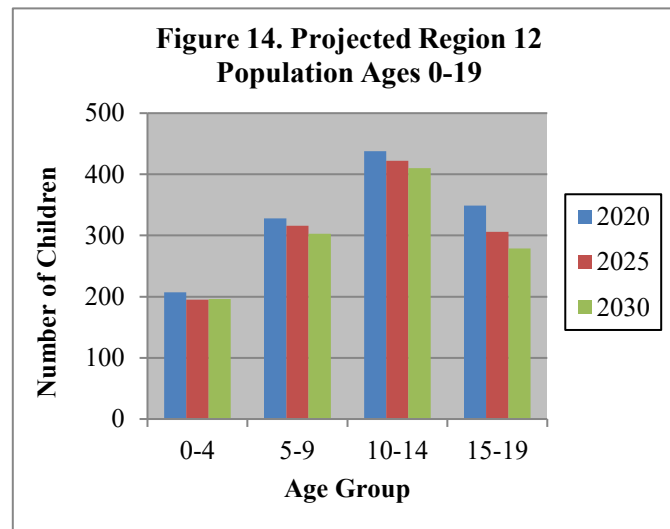


Figure 15 presents the Connecticut State Data Center's 2017 projections of the number of women of child-bearing age from the three towns in 2015, 2020 and 2025. The Center projected a 7.2 percent decline in women ages 15-44 between 2020 and 2025. However, in the key 30-34 age group for communities like 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.

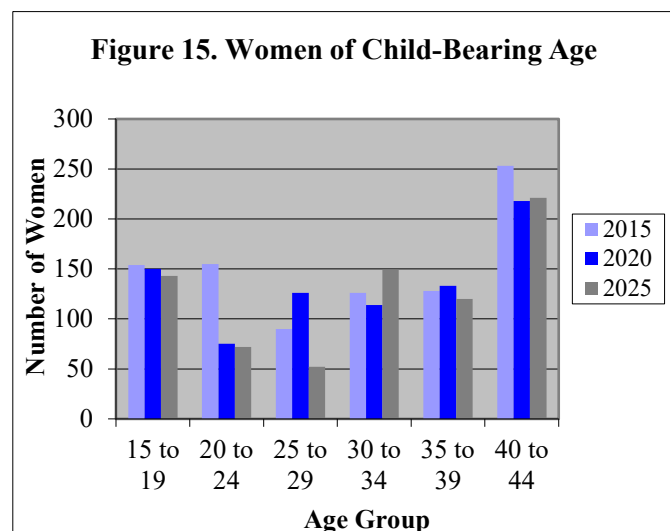


Figure 16 examines the number of people in the labor force from the US Department of Labor, Bureau of Labor Statistics. These are people 16 years of age or older who were working or actively were seeking employment. They estimated that the combined labor force in the three towns declined 2.7 percent between 2010 and 2020. The loss was bigger than the state (-2.0 percent) but much less than Litchfield County (-5.7 percent). The 2020 unemployment rate of 5.1 percent across the three towns was up 2.8 percentage points from the 2019 level. It is better than the state rate of 7.9 percent and the Litchfield County rate of 6.9 percent.

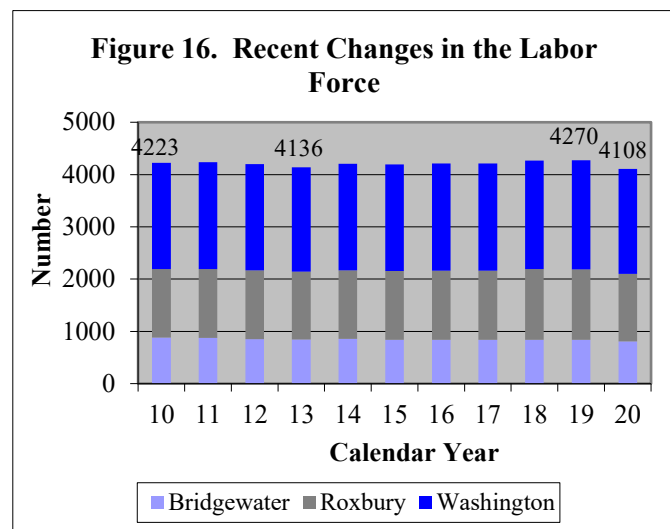


Figure 17 presents the net new housing permits issued from 2010 to 2020 as reported to the State Department of Economic and Community Development. In the past ten years the number of net (of demolitions) new housing permits issued in Bridgewater, Roxbury and Washington ranged from a low of zero in 2012 to a high of 14 in 2020. Between 2017 and 2020, there was an average of eight net new housing permits issued.

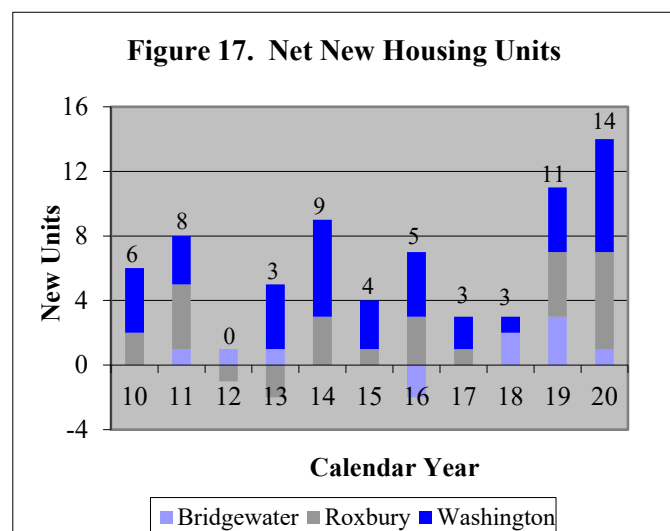


Figure 18 presents my estimate of the number of sales of existing single-family homes and condominiums. I derived it by taking the number of sales of single-family homes and condominiums from The Warren Group/Commercial Record and subtracting the prior year's number of new single-family housing units authorized. The estimated number of sales of existing homes ranged from a low of 67 in 2011 to a high of 196 in 2020. Between 2017 and 2020, there was an average of 133 sales annually. Based on sales through October, I expect there could be only 126 sales of existing homes in 2021.

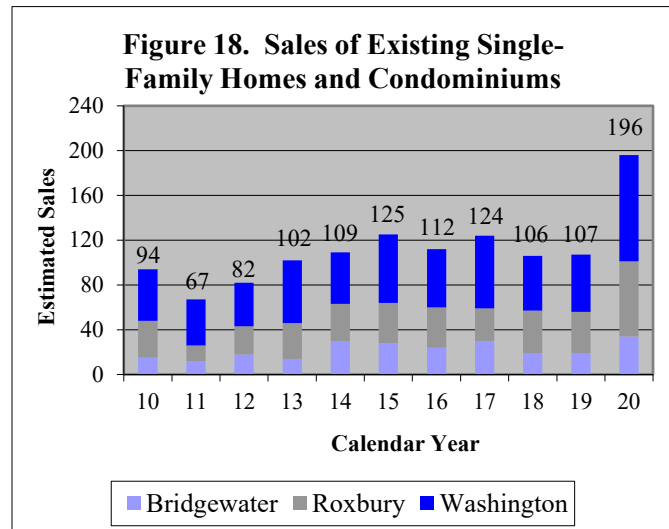
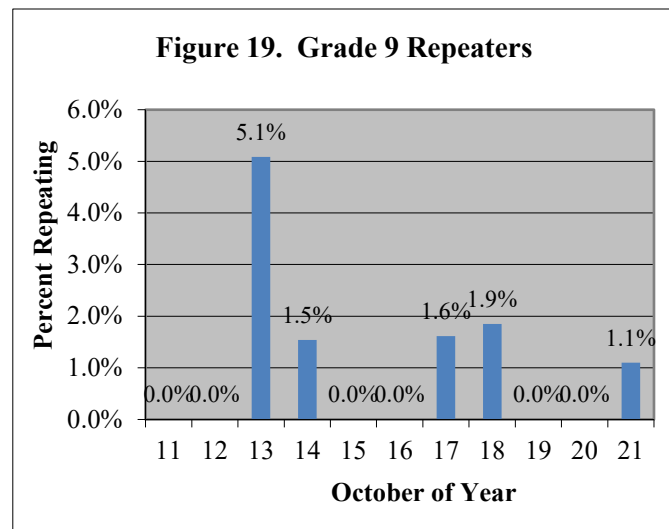


Figure 19 shows the percentage of students in grade 9 who did not earn enough credits to be promoted to grade 10. The percentage repeating ranged from zero in six previous years to 5.1 percent in 2013. The rate was 1.1 in 2021. In the five-year look-back period of the projection, a total of three students were retained in the grade, a rate of 0.8 percent.



Dropouts can also affect the high school enrollment. This is not an issue in Region 12. You recorded a total of three over the past five school years.

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 2021 enrollment represented a very high 23.2 percent of the combined public (in-district and out) and non-public enrollment. The rate in 2011 was 18.5 percent. I project a non-public enrollment of about 175 students in 2022 from Bridgewater, Roxbury and Washington.

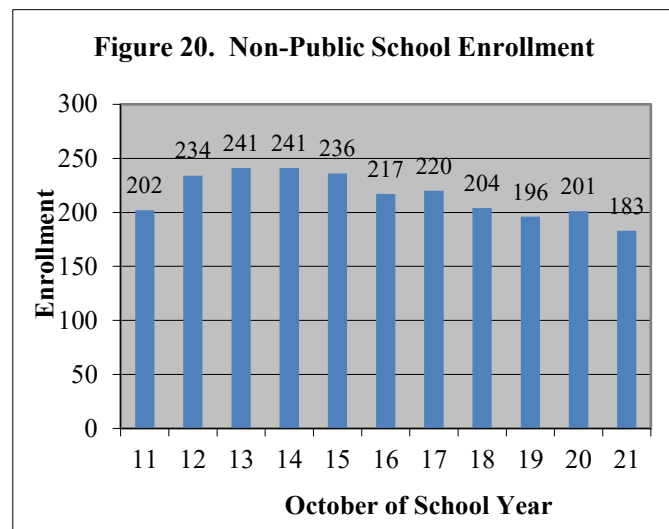


Figure 21 presents Bridgewater, Roxbury and Washington enrollment in other public schools. This would include state technical high schools, the agriculture science and technology program at Nonnewaug High and area magnets. The number of residents attending a public school other than the Region 12 Public Schools ranged from 13 in 2021 to 24 in 2012. In 2021, six residents attended a state technical high school, one remained in the agriculture science program at Nonnewaug, and six attended a magnet school or another public school. These data were provided by the Connecticut State Department of Education.

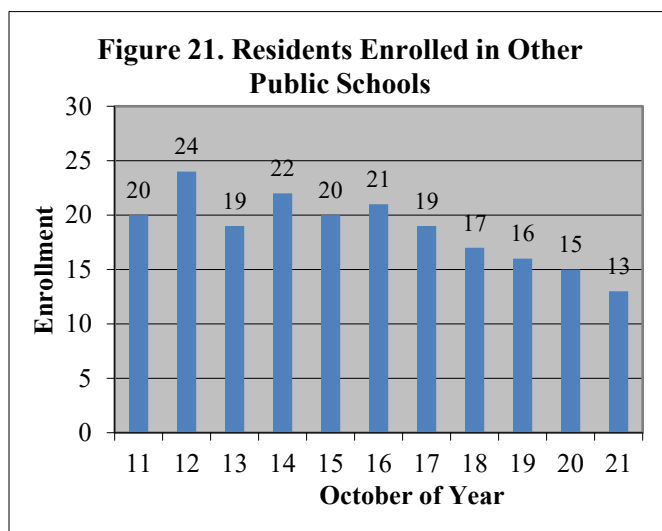


Figure 22 presents non-resident enrollment in Region 12 schools. The number of non-residents went from 19 in 2011 and with the opening of your Agriscience Program has increased to 169 in 2021. The 2021 count included 27 from Sherman in the regular education program, 67 tuition-students from other area towns, 74 students from the six towns sending students to your Agriscience program and 12 students of staff members. The projection assumes 17.5 percent of Sherman's grade 8 students will enroll in Region 12. That would yield a total enrollment in regular programs from 15 to 27 students from Sherman annually.

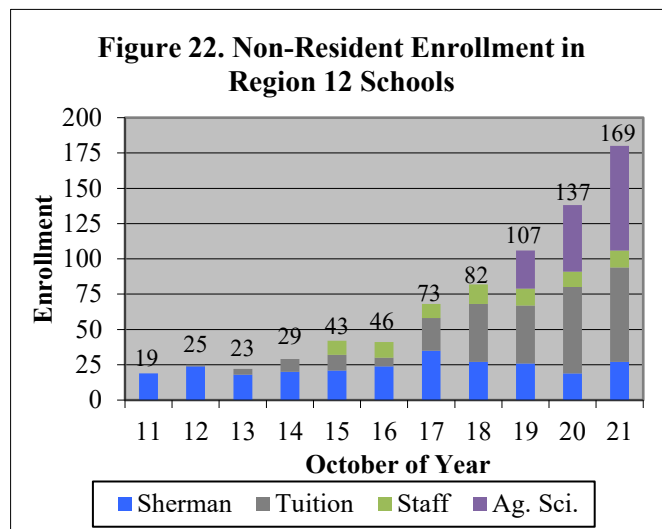
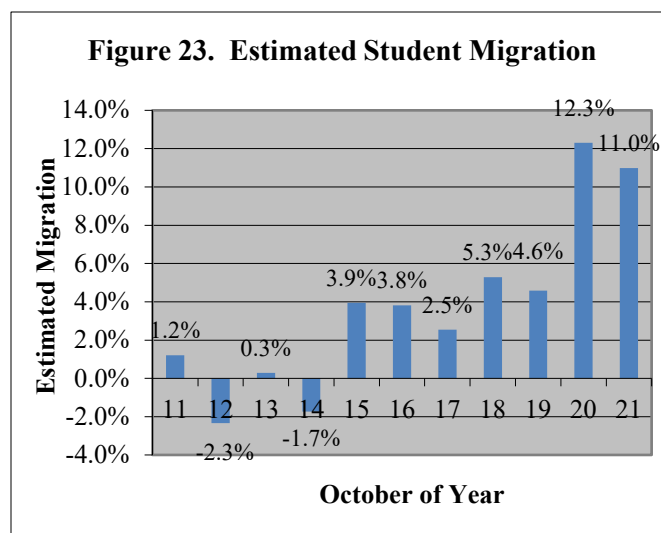


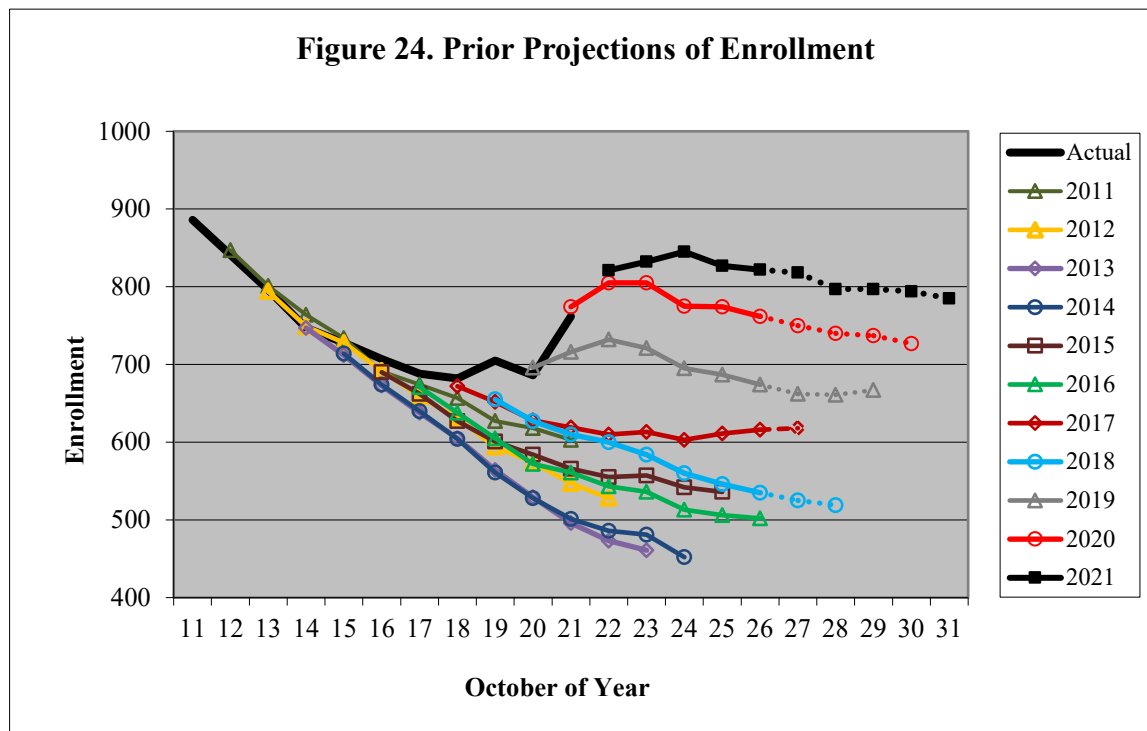
Figure 23 presents the estimated student migration for the 2011 to 2021 period. It is based on observed enrollment in the Region 12 public schools adjusted for Region 12 residents attending other public schools. In 2020 and 2021 it was adjusted for students home-schooled. Estimated migration was positive in the past seven years. The migration rate ranged from a high of +12.3 percent in 2020 to a low of -2.3 percent in 2012. The high 2021 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 2017 to 2021 period of this projection was an extremely high 7.14 percent. The median five-year rate over the past 25 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 2011. The 2021 projection is the third to include non-resident enrollment in your Agriscience Program. Last year's projection was 12 students (1.6 percent) high. The nine enrollment projections that I did between 2011 and 2019 had one-year error rates that averaged 1.6 percent. The six projections done between 2011 and 2016 had an average five-year error rate of 10.3 percent, which is 2.0 percent annualized.

Last year's projection is running 1.6 percent high. In that analysis, I projected that K-5 enrollment would be 262 students in 2021. The actual enrollment of 252 was 10 students less than projected. The projection was high by 4.0 percent. I projected that enrollment in grades 6-8 would be 152 students in 2021. The actual enrollment of 156 was four students more than projected. The projection was low by 2.6 percent. I projected that high school enrollment would be 316 students in 2021. The actual enrollment of 319 was three students more than projected. The projection was low by one percent. I projected a pre-kindergarten enrollment of 44 students. The 2021 count of 35 students was nine less 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 2011. 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 will increase from 762 students in October, 2021 to a peak of 848 students in 2024 followed by a decline to 785 students by 2031, a net gain of three percent. I project that enrollment at The Burnham School could grow from 59 students in 2021 to 84 students in 2026 and end the projection at 73 students. I project that enrollment at the Booth Free School will be essentially flat, varying from a low of 68 in 2027 to a high of 78 on three different occasions. The Washington School's enrollment could peak at close to 180 students in 2024. By 2031, however, I anticipate an enrollment close to 135 students. That would be 12-13 percent below the October 1, 2021 count. I believe that enrollment in grades 6-8 at the Shepaug Valley Middle School could grow from 156 in 2021 to 195 in 2028 before declining to 146 students in 2031. That would represent a 10-year net loss of 6.4 percent. Shepaug Valley High School enrollment could grow 11 percent, increasing from 319 in 2021 to 354 students in 2031.

In October 2022, I project that Bridgewater students will comprise 23.1 percent of the combined resident enrollment, Roxbury students will comprise 29.1 percent and Washington students will comprise 47.8 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 25.3 percent of the combined enrollment, Roxbury students will average 29.0 percent and Washington students will average 45.8 percent.

Normally, a projection is just a moving forward of recent trends. In Region 12's case, however, estimated migration was so extraordinarily high in 2020 and 2021, I chose to use the ten-year median of the growth rates to project in 2025 to 2031. Births will likely have little impact in the upcoming ten years. In the five years from 2012 to 2016 (this fall's kindergarten through 4th graders) births averaged 36. Births in the 2017 through 2021 period will average close to 35. My projection for the years 2026-2031 assumes an average of 37 births in 2022 to 2026. Across the three towns there was an average 4.5 percent adjusted decline over the last five years between birth and eventual kindergarten enrollment in Region 12. Many parents still opt for area non-public schools. Across the past ten years, the decline was close to ten percent. The average grade-to-grade growth rates across grades 2-12 used in 2022-25 was a high 1.041. The average rate used in 2025-31 was 1.019. 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 the epidemic would be substantially behind us by October of 2022. I expect that the number of students withdrawing to become home-schooled would return to normal levels in October, 2022. 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. Those are a lot more assumptions than my typical projection.

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 a student migration of about two percent, construction of seven new housing units annually and 129 sales of existing homes.

It is important to remember that the cohort survival method relies on observed data from the recent past. Its key assumption is that those conditions will persist. It does not try to predict when the economic conditions might change. We cannot know today how long these conditions will continue. This projection should be used as a starting point for local planning. Examine the factors and assumptions underlying the method. You know your community best. Apply your knowledge of the specific conditions in Bridgewater, Roxbury and Washington and then make adjustments as necessary.

Appendix A. The Burnham School Enrollment Projected by Grade to 2031										
School Year	Birth Year	Births¹	K	1	2	3	4	5	PreK	Total
2011-12	2006	9	9	11	16	10	11	26	0	83
2012-13	2007	8	9	13	12	12	10	13	0	69
2013-14	2008	8	7	9	14	10	13	11	0	64
2014-15	2009	9	5	8	9	15	9	9	0	55
2015-16	2010	9	7	6	8	10	14	8	0	53
2016-17	2010	4	3	8	5	7	10	14	0	47
2017-18	2012	8	17	3	8	8	6	7	0	49
2018-19	2013	3	9	15	3	10	9	7	0	53
2019-20	2014	11	12	8	17	3	10	10	0	60
2020-21	2015	3	7	11	8	15	4	14	0	59
2021-22	2016	10	12	8	10	11	14	4	0	59
Projected										
2022-23	2017	12	18	12	8	13	11	16	0	78
2023-24	2018	6	12	17	13	9	13	12	0	76
2024-25	2019	10	14	11	18	15	9	14	0	81
2025-26	2020	7	10	15	11	19	15	9	0	79
2026-27	2021	10	12	11	15	11	19	16	0	84
2027-28	2022	9	11	13	11	16	11	20	0	82
2028-29	2023	9	11	12	13	11	16	12	0	75
2029-30	2024	9	11	12	12	13	11	17	0	76
2030-31	2025	9	11	12	12	12	13	12	0	72
2031-32	2026	8	11	12	12	12	12	14	0	73
Projection Growth Rates²				0.938	1.044	1.171	1.022	1.111		
				1.071	1.000	1.036	1.000	1.050		
Annual Growth Rates									Migration³	
2012			1.125	1.444	1.091	0.750	1.000	1.182		-2.08%
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 ⁴			1.333	0.917	1.000	0.941	1.250	1.400		21.43%
2021 ⁴			1.200	1.143	1.000	1.375	1.000	1.000		9.09%
3-Year Ave.			1.000	0.964	1.059	1.071	1.033	1.208		
5-Year Ave.			1.143	0.938	1.044	1.171	1.022	1.111		
2017-19, 2021			1.563	0.944	1.027	1.333	0.975	0.966		
10-Yr Median			1.000	1.071	1.000	1.036	1.000	1.050		

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional.

Births in 2021 were estimated from in-state births through September.

Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2019 from like (DRG C) towns.

² Grades 1-5 based on 5-year adjusted averages in 2022-24 and 10-year medians in 2025-31. Kindergarten based on same averages of Births five and 6-years prior and retentions.

³ Estimated by comparing enrollment in grades 2-5 one year with enrollment in grades 1-4 the prior year.

⁴ Growth rates adjusted for students withdrawn to become home-schooled.

Appendix B. The Booth Free School Enrollment Projected by Grade to 2031										
School Year	Birth Year	Births¹	K	1	2	3	4	5	PreK	Total
2011-12	2006	22	21	11	16	19	17	23	0	107
2012-13	2007	10	11	20	10	15	20	18	0	94
2013-14	2008	10	7	10	20	12	14	22	0	85
2014-15	2009	11	11	9	10	20	13	15	0	78
2015-16	2010	14	12	12	9	10	19	15	0	77
2016-17	2011	16	16	12	14	12	12	20	0	86
2017-18	2012	7	5	14	11	16	12	12	0	70
2018-19	2013	10	14	7	15	9	14	12	0	71
2019-20	2014	8	9	13	8	16	11	14	0	71
2020-21	2015	11	13	13	12	6	17	12	0	73
2021-22	2016	17	15	10	14	11	6	18	0	74
Projected										
2022-23	2017	8	9	17	11	16	13	6	0	72
2023-24	2018	10	10	9	18	12	16	13	0	78
2024-25	2019	10	10	10	9	19	12	16	0	76
2025-26	2020	13	13	10	10	9	20	13	0	75
2026-27	2021	13	13	13	10	10	9	21	0	76
2027-28	2022	12	12	13	13	10	10	10	0	68
2028-29	2023	13	13	12	13	13	10	11	0	72
2029-30	2024	13	13	13	12	13	13	11	0	75
2030-31	2025	13	13	13	13	12	13	14	0	78
2031-32	2026	13	13	13	13	13	12	14	0	78
Projection Growth Rates²				1.034	1.033	1.049	0.984	1.000		
				0.976	1.000	1.000	1.026	1.059		
Annual Growth Rates									Migration³	
2012			1.100	0.952	0.909	0.938	1.053	1.059		0.00%
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 ⁴			1.182	1.444	0.923	0.750	1.063	1.091		16.28%
2021 ⁴			0.706	0.769	1.077	0.917	1.000	1.059		-1.92%
3-Year Ave.			1.000	1.054	1.057	1.083	1.029	1.070		
5-Year Ave.			1.019	1.034	1.033	1.049	0.984	1.000		
2017-19, 2021			1.024	0.917	1.043	1.000	1.000	1.018		
10-Yr Median			0.938	0.976	1.000	1.000	1.026	1.059		

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional. Births in 2021 were estimated from in-state births through September.

Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2019 from like (DRG C) towns.

² Grades 1-5 based on 5-year adjusted averages in 2022-24 and 10-year medians in 2025-31. Kindergarten based on same averages of Births five and 6-years prior and retentions.

³ Estimated by comparing enrollment in grades 2-5 one year with enrollment in grades 1-4 the prior year.

⁴ Growth rates adjusted for students withdrawn to become home-schooled.

Appendix C. Washington Primary School Enrollment Projected by Grade to 2031										
School Year	Birth Year	Births ¹	K	1	2	3	4	5	PreK	Total
2011-12	2006	25	21	22	22	35	29	31	0	160
2012-13	2007	17	16	22	15	21	34	30	0	138
2013-14	2008	22	19	19	22	15	22	30	28	155
2014-15	2009	17	19	20	20	24	16	23	31	153
2015-16	2010	27	16	18	20	22	24	17	42	159
2016-17	2010	21	11	16	19	21	21	25	52	165
2017-18	2012	15	16	11	17	20	22	20	41	147
2018-19	2013	19	12	15	14	17	19	22	41	140
2019-20	2014	19	16	13	16	14	15	19	45	138
2020-21	2015	23	18	22	17	20	13	18	7	115
2021-22	2016	16	18	25	21	19	21	15	35	154
Projected										
2022-23	2017	18	18	21	29	23	20	23	38	172
2023-24	2018	9	10	21	24	31	23	21	43	173
2024-25	2019	21	20	11	24	26	31	24	42	178
2025-26	2020	15	13	21	12	25	26	32	43	172
2026-27	2021	15	13	14	22	13	25	27	43	157
2027-28	2022	17	14	14	15	23	13	26	42	147
2028-29	2023	15	13	15	15	16	23	13	42	137
2029-30	2024	15	13	14	16	16	16	24	42	141
2030-31	2025	16	13	14	15	17	16	17	42	134
2031-32	2026	15	13	14	15	16	17	17	42	134
Projection Growth Rates²				1.143	1.128	1.081	0.989	1.047	0.524	
Annual Growth Rates				1.050	1.054	1.050	1.000	1.038	0.524	
										Migration³
2012			0.941	1.048	0.682	0.955	0.971	1.034		-7.41%
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 ⁴			<i>0.913</i>	<i>1.353</i>	<i>1.538</i>	<i>1.313</i>	<i>1.000</i>	<i>1.200</i>	0.086	22.22%
2021 ⁴			<i>1.125</i>	<i>1.238</i>	<i>0.913</i>	<i>1.050</i>	<i>1.048</i>	<i>1.214</i>	0.524	6.94%
3-Year Ave.			<i>0.948</i>	<i>1.240</i>	<i>1.118</i>	<i>1.120</i>	<i>0.981</i>	<i>1.125</i>		
5-Year Ave.			<i>0.891</i>	1.143	1.128	1.081	0.989	1.047		
2017-19, 2021			0.899	1.123	1.063	1.045	0.987	1.013		
10-Yr Median			0.888	1.050	1.054	1.050	1.000	0.888		

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional. Births in 2021 were estimated from in-state births through September.

Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2019 from like (DRG C) towns.

² Grades 1-5 based on 5-year adjusted averages in 2022-24 and 10-year medians in 2025-31. Kindergarten based on same averages of Births five and 6-years prior and retentions.

³ Estimated by comparing enrollment in grades 2-5 one year with enrollment in grades 1-4 the prior year.

⁴ Growth rates adjusted for students withdrawn to become home-schooled.

Appendix D. Region 12 Enrollment Projected by Grade to 2031: Grades PK-5										
School Year	Birth Year	Births ¹	K	1	2	3	4	5	PK	Total PK-5
2011-12	2006	56	51	44	54	64	57	80	17	367
2012-13	2007	35	36	55	37	48	64	61	21	322
2013-14	2008	40	33	38	56	37	49	63	28	304
2014-15	2009	37	35	37	39	59	38	47	31	286
2015-16	2010	50	35	36	37	42	57	40	42	289
2016-17	2011	41	30	36	38	40	43	59	52	298
2017-18	2012	30	38	28	36	44	40	39	41	266
2018-19	2013	32	35	37	32	36	42	41	41	264
2019-20	2014	38	37	34	41	33	36	43	45	269
2020-21	2015	37	38	46	37	41	34	44	7	247
2021-22	2016	43	45	43	45	41	41	37	35	287
Projected										
2022-23	2017	38	45	50	48	52	44	45	35	319
2023-24	2018	25	32	47	55	52	52	46	37	321
2024-25	2019	41	44	32	51	60	52	54	43	336
2025-26	2020	35	36	46	33	53	61	54	41	324
2026-27	2021	38	38	38	47	34	53	64	43	317
2027-28	2022	38	37	40	39	49	34	56	42	297
2028-29	2023	37	37	39	41	40	49	36	42	284
2029-30	2024	37	37	39	40	42	40	52	42	292
2030-31	2025	37	37	39	40	41	42	43	42	284
2031-32	2026	36	37	39	40	41	41	45	42	285
Projection Growth Rates ²										
Annual Growth Rates										
			1.029	1.078	0.841	0.889	1.000	1.070	0.273	-2.34%
2012			0.825	1.056	1.018	1.000	1.021	0.984	0.322	0.28%
2013			0.946	1.121	1.026	1.054	1.027	0.959	0.341	-1.74%
2014			0.700	1.029	1.000	1.077	0.966	1.053	0.592	3.95%
2015			0.732	1.029	1.056	1.081	1.024	1.035	0.839	3.81%
2016			1.267	0.933	1.000	1.158	1.000	0.907	0.586	2.54%
2017			1.094	0.974	1.143	1.000	0.955	1.025	0.547	5.28%
2018			0.974	0.971	1.108	1.031	1.000	1.024	0.563	4.58%
2019			1.108	1.297	1.200	1.098	1.059	1.278	0.086	12.30%
2020 ⁴			1.047	1.098	1.000	1.048	1.022	1.111	0.556	10.99%
2021 ⁴										
3-Year Ave.			1.042	1.124	1.092	1.061	1.026	1.132	0.412	
5-Year Ave.			1.089	1.061	1.082	1.069	1.005	1.061	0.525	
2017-19, 2021			1.084	0.938	1.062	1.020	0.988	0.969	0.563	
10-Yr Median			1.001	1.042	1.022	1.051	1.010	1.030	0.551	

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional. Births in 2021 were estimated from in-state births through September.

Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and my estimate of fertility rates in 2019 from like (DRG C) towns.

² Grades 1-5 based on 5-year adjusted averages in 2022-24 and 10-year medians in 2025-31 by town. Kindergarten based on same averages of births five and 6-years prior and retentions.

³ Estimated by comparing enrollment in grades 3-8 one year with enrollment in grades 2.7 the prior year.

⁴ Growth rates adjusted for students withdrawn to become home-schooled.

Appendix E. Region 12 Enrollment Projected by Grade to 2031: Grades 6-12

School Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2011-12	64	61	88	76	77	84	69	213	306	886
2012-13	78	60	61	82	73	80	85	199	320	841
2013-14	63	75	62	59	76	77	80	200	292	796
2014-15	59	62	73	65	53	76	73	194	267	747
2015-16	50	63	64	66	67	51	78	177	262	728
2016-17	45	51	61	71	67	64	50	157	252	707
2017-18	58	46	56	62	72	67	61	160	262	688
2018-19	49	60	49	54	64	72	70	158	260	682
2019-20	47	49	64	78	58	60	80	160	276	705
2020-21	50	47	53	91	78	59	61	150	289	686
2021-22	55	48	53	91	89	75	64	156	319	762
Projected										
2022-23	45	57	54	84	95	88	80	156	347	822
2023-24	52	45	63	82	86	93	92	160	353	834
2024-25	53	52	50	92	84	84	97	155	357	848
2025-26	59	54	55	76	93	84	85	168	338	830
2026-27	59	60	57	78	77	93	85	176	333	826
2027-28	70	60	63	82	79	77	94	193	332	822
2028-29	61	71	63	81	83	79	78	195	321	800
2029-30	39	62	74	86	82	83	80	175	331	798
2030-31	57	39	65	96	87	82	84	161	349	794
2031-32	47	58	41	87	97	87	83	146	354	785
Projection Growth Rates¹										
2022-2024	1.158	1.008	1.110	0.933	1.028	0.980	1.043			
2025-2031	1.094	1.010	1.049	0.912	1.015	1.000	1.014			
Annual Growth Rates²								Migration²		
2012	0.975	0.938	1.000	0.830	0.961	1.039	1.012			-2.34%
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			-1.74%
2015	1.064	1.068	1.032	0.822	1.031	0.962	1.026			3.95%
2016	1.125	1.020	0.968	0.875	1.015	0.955	0.980			3.81%
2017	0.983	1.022	1.098	0.902	1.014	1.000	0.953			2.54%
2018	1.256	1.034	1.065	0.893	1.032	1.000	1.045			5.28%
2019	1.146	1.000	1.067	0.980	1.074	0.938	1.111			4.58%
2020	1.209	1.021	1.102	0.922	1.038	1.017	1.016			12.30%
2021	1.261	0.962	1.229	1.000	1.000	0.952	1.083			10.99%
3-Year Ave.	1.208	0.993	1.127	0.958	1.031	0.966	1.071			
5-Year Ave.	1.158	1.008	1.110	0.933	1.028	0.980	1.043			
2017-19, 2021	1.142	1.005	1.088	0.936	1.018	0.975	1.050			
10-Yr Median	1.094	1.010	1.049	0.912	1.015	1.000	1.014			

¹ Projection growth rates based on 2017-2019 and 2021 averages in 2022-2024 and ten-year medians in 2025-2031.

² Grade 9 rates adjusted for residents only. Projected Sherman and Agriscience non-resident enrollment added to resident projection. Annual growth rates in 2020 and 2021 adjusted for students withdrawing to become home-schooled.

² 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, and, in 2021, students home-schooled.

Appendix F. Bridgewater Resident Enrollment Projected by Grade to 2031: Grades PK-5										
School Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5
2011-12	2006	9	8	11	14	9	10	25	4	81
2012-13	2007	8	9	11	12	11	9	12	2	66
2013-14	2008	8	5	9	11	10	12	10	3	60
2014-15	2009	9	4	6	9	12	9	9	4	53
2015-16	2010	9	7	5	6	9	11	8	4	50
2016-17	2010	4	3	9	4	6	10	11	9	52
2017-18	2012	8	10	2	8	3	5	7	4	39
2018-19	2013	3	6	11	2	10	5	6	8	48
2019-20	2014	11	9	6	11	2	10	7	4	49
2020-21	2015	3	4	9	6	12	2	12	3	48
2021-22	2016	10	12	5	8	9	11	3	8	56
Projected										
2022-23	2017	12	14	12	5	11	9	13	6	70
2023-24	2018	6	7	14	12	7	11	11	6	68
2024-25	2019	10	12	7	14	14	7	12	6	72
2025-26	2020	7	7	14	7	14	14	8	7	71
2026-27	2021	10	10	8	14	7	14	16	7	76
2027-28	2022	9	9	12	8	14	7	16	7	73
2028-29	2023	9	8	10	12	8	14	8	7	67
2029-30	2024	9	9	9	10	12	8	16	6	70
2030-31	2025	9	9	10	9	10	12	9	6	65
2031-32	2026	8	8	10	10	9	10	14	6	67
Projection Growth Rates										
2022-2024			1.200	1.031	0.973	1.194	1.029	1.091	0.752	
2025-2031			0.972	1.150	1.000	1.000	1.000	1.156	0.752	
Annual Growth Rates										Estimated Migration⁴
2012			1.125	1.375	1.091	0.786	1.000	1.200	0.235	-3.6%
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 ⁵			1.333	1.000	1.000	1.182	1.000	1.200	0.273	14.0%
2021 ⁵			1.300	1.250	1.000	1.500	1.000	1.333	0.889	11.8%
3-Year Ave.			1.083	1.053	1.000	1.263	1.000	1.278		
5-Year Ave.			1.200	1.031	0.973	1.194	1.029	1.091		
2017-19, 2021			1.156	1.043	0.968	1.200	1.031	1.043		
10-Yr Median			0.972	1.150	1.000	1.000	1.000	1.156		

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional. Births in 2021 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2019 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.

⁵ Adjusted for students withdrawn to become home-schooled.

Appendix G. Bridgewater Resident Enrollment Projected by Grade to 2031: Grades 6-12										
School Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2011-12	11	15	24	17	15	22	16	50	70	201
2012-13	24	10	15	20	19	15	23	49	77	192
2013-14	12	24	10	14	18	19	13	46	64	170
2014-15	7	11	20	8	13	18	18	38	57	148
2015-16	9	7	12	14	9	14	18	28	55	133
2016-17	7	10	8	12	14	9	13	25	48	125
2017-18	12	7	11	7	12	14	10	30	43	112
2018-19	8	11	8	10	8	10	14	27	42	117
2019-20	8	11	12	10	11	7	13	31	41	121
2020-21	7	9	12	9	11	10	9	28	39	115
2021-22	14	7	8	12	9	12	13	29	46	131
Projected										
2022-23	5	16	8	8	13	10	14	29	45	144
2023-24	15	5	17	8	8	12	12	37	40	145
2024-25	13	16	5	16	8	8	14	34	46	152
2025-26	13	13	17	4	17	8	8	43	37	151
2026-27	8	13	14	15	4	17	8	35	44	155
2027-28	17	8	14	12	16	4	17	39	49	161
2028-29	17	17	9	12	13	16	4	43	45	155
2029-30	8	17	19	8	13	13	16	44	50	164
2030-31	17	8	19	17	8	13	13	44	51	160
2031-32	9	17	9	17	18	8	13	35	56	158
Projection Growth Rates ¹										
2022-2024	1.186	1.070	1.063	0.961	1.061	0.946	1.180			
2025-2031	1.045	1.000	1.091	0.892	1.050	1.000	1.023			
Annual Growth Rates								Migration ²		
2012	0.960	0.909	1.000	0.833	1.118	1.000	1.045			-3.6%
2013	1.000	1.000	1.000	0.933	0.900	1.000	0.867			0.0%
2014	0.700	0.917	0.833	0.800	0.929	1.000	0.947			-13.9%
2015	1.000	1.000	1.091	0.700	1.125	1.077	1.000			-1.8%
2016	0.875	1.111	1.143	1.000	1.000	1.000	0.929			4.0%
2017	1.091	1.000	1.100	0.875	1.000	1.000	1.111			-6.3%
2018	1.143	0.917	1.143	0.909	1.143	0.833	1.000			14.3%
2019	1.333	1.375	1.091	1.250	1.100	0.875	1.300			19.0%
2020 ³	1.143	1.125	1.091	0.833	1.100	0.909	1.286			14.0%
2021 ³	1.250	1.000	0.889	1.000	1.000	1.091	1.300			11.8%
3-Year Ave.	1.240	1.167	1.032	1.000	1.067	0.967	1.296			
5-Year Ave.	1.186	1.070	1.063	0.961	1.061	0.946	1.180			
2017-19, 2021	1.194	1.057	1.054	1.000	1.051	0.956	1.163			
10-Yr Median	1.045	1.000	1.091	0.892	1.050	1.000	1.023			

¹ Projection Growth Rates based on 5-year average of annual growth rates in 2022-24 and 10-year median in 2025-31.

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

³ Annual Growth Rates in 2020 and 2021 adjusted for students withdrawn to be home-schooled.

Appendix H. Roxbury Resident Enrollment Projected by Grade to 2031: Grades PK-5										
School Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5
2011-12	2006	22	22	11	18	21	18	25	5	120
2012-13	2007	10	12	22	9	16	21	19	8	107
2013-14	2008	10	9	11	22	11	15	23	11	102
2014-15	2009	11	11	8	10	21	12	15	12	89
2015-16	2010	14	9	10	9	10	20	14	13	85
2016-17	2010	16	16	8	12	11	12	21	16	96
2017-18	2012	7	6	14	10	12	11	12	15	80
2018-19	2013	10	14	6	15	7	12	12	6	72
2019-20	2014	9	7	13	7	16	8	11	14	76
2020-21	2015	11	13	11	14	7	18	11	3	77
2021-22	2016	17	14	10	11	12	7	20	10	84
Projected										
2022-23	2017	8	8	14	12	12	15	8	11	80
2023-24	2018	10	10	8	16	13	15	16	12	90
2024-25	2019	10	10	10	9	16	14	16	14	89
2025-26	2020	13	12	9	11	9	16	15	13	85
2026-27	2021	13	12	11	10	11	9	17	13	83
2027-28	2022	12	12	11	12	10	11	10	14	80
2028-29	2023	13	12	11	12	12	10	12	13	82
2029-30	2024	13	12	11	12	12	12	11	13	83
2030-31	2025	13	12	11	12	12	12	13	13	85
2031-32	2026	13	12	11	12	12	12	13	13	85
Projection Growth Rates										
2022-2024			1.019	1.018	1.093	0.983	1.057	1.082	1.056	
2025-2031			0.950	0.920	1.077	1.000	1.000	1.073	1.056	
Annual Growth Rates									Estimated Migration⁴	
2012			1.200	1.000	0.818	0.889	1.000	1.056	0.762	0.9%
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 ⁵			<i>1.182</i>	<i>1.714</i>	<i>1.000</i>	<i>1.000</i>	<i>1.125</i>	<i>1.375</i>	0.240	22.2%
2021 ⁵			<i>0.882</i>	<i>0.923</i>	<i>1.083</i>	<i>1.071</i>	<i>1.000</i>	<i>1.111</i>	1.111	0.0%
3-Year Ave.			<i>0.946</i>	<i>1.088</i>	<i>1.063</i>	<i>1.056</i>	<i>1.100</i>	<i>1.105</i>		
5-Year Ave.			1.019	1.018	1.093	0.983	1.057	1.082		
2017-19, 2021			<i>0.953</i>	<i>0.918</i>	<i>1.125</i>	<i>0.980</i>	<i>1.027</i>	<i>1.038</i>		
10-Yr Median			0.950	0.920	1.077	1.000	1.000	1.073		

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional. Births in 2021 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2019 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.

⁵ Adjusted for students withdrawn to become home-schooled.

Appendix I. Roxbury Resident Enrollment Projected by Grade to 2031: Grades 6-12										
School Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2011-12	18	16	29	27	23	24	17	63	91	274
2012-13	26	17	18	23	26	22	23	61	94	262
2013-14	20	25	20	13	21	28	24	65	86	253
2014-15	23	20	26	22	14	21	26	69	83	241
2015-16	15	22	20	23	21	13	20	57	77	219
2016-17	15	15	22	21	22	22	14	52	79	227
2017-18	20	15	15	25	23	23	21	50	92	222
2018-19	12	21	15	13	26	21	24	48	84	204
2019-20	10	11	23	13	15	22	19	44	69	189
2020-21	13	10	15	23	15	15	21	38	74	189
2021-22	9	13	9	13	20	13	15	31	61	176
Projected										
2022-23	19	9	15	10	14	20	14	43	58	181
2023-24	8	20	10	15	10	13	19	38	57	185
2024-25	16	8	21	10	16	9	13	45	48	182
2025-26	16	16	8	18	10	16	9	40	53	178
2026-27	15	16	16	7	18	10	15	47	50	180
2027-28	17	15	16	14	7	18	10	48	49	177
2028-29	10	17	15	14	14	7	17	42	52	176
2029-30	12	10	17	13	14	14	7	39	48	170
2030-31	11	12	10	15	13	14	13	33	55	173
2031-32	13	11	12	9	15	13	13	36	50	171
Projection Growth Rates ¹										
2022-2024	0.970	1.028	1.068	0.978	1.041	0.932	0.971			
2025-2031	1.000	1.000	1.020	0.876	1.001	0.978	0.956			
Annual Growth Rates								Migration ²		
2012	1.040	0.944	1.125	0.793	0.963	0.957	0.958			0.9%
2013	1.053	0.962	1.176	0.722	0.913	1.077	1.091			5.6%
2014	1.000	1.000	1.040	1.100	1.077	1.000	0.929			0.9%
2015	1.000	0.957	1.000	0.885	0.955	0.929	0.952			0.0%
2016	1.071	1.000	1.000	1.050	0.957	1.048	1.077			6.7%
2017	0.952	1.000	1.000	1.136	1.095	1.045	0.955			-1.2%
2018	1.000	1.050	1.000	0.867	1.040	0.913	1.043			-1.3%
2019	0.833	0.917	1.095	0.867	1.154	0.846	0.905			0.0%
2020 ³	1.273	1.200	1.364	1.043	1.133	1.000	0.955			22.2%
2021 ³	0.818	1.000	0.917	0.867	0.875	0.882	1.000			0.0%
3-Year Ave.	0.971	1.028	1.114	0.943	1.019	0.897	0.948			
5-Year Ave.	0.970	1.028	1.068	0.978	1.041	0.932	0.971			
2017-19, 2021	0.911	1.000	1.016	0.955	1.024	0.920	0.975			
10-Yr Median	1.000	1.000	1.020	0.876	1.001	0.978	0.956			

¹ Projection Growth Rates based on 5-year average of annual growth rates in 2022-24 and 10-year median in 2025-31.

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

³ Annual Growth Rates in 2020 and 2021 adjusted for students withdrawn to be home-schooled.

Appendix J. Washington Resident Enrollment Projected by Grade to 2031: Grades PK-5										
School Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5
2011-12	2006	25	21	22	22	34	29	30	8	166
2012-13	2007	17	15	22	16	21	34	30	11	149
2013-14	2008	22	19	18	23	16	22	30	13	141
2014-15	2009	17	18	22	20	26	17	23	13	139
2015-16	2010	27	17	18	22	22	25	18	22	144
2016-17	2010	21	11	17	19	23	21	26	25	142
2017-18	2012	15	14	11	18	20	24	19	19	125
2018-19	2013	19	12	15	13	17	19	23	21	120
2019-20	2014	19	16	13	16	13	14	20	24	116
2020-21	2015	23	17	22	15	19	12	18	1	104
2021-22	2016	16	18	24	22	17	21	13	15	130
Projected										
2022-23	2017	18	16	21	27	23	18	23	19	147
2023-24	2018	9	8	19	24	29	24	20	23	147
2024-25	2019	21	18	9	21	25	29	25	19	146
2025-26	2020	15	13	19	10	22	25	30	20	139
2026-27	2021	15	13	14	20	10	22	26	20	125
2027-28	2022	17	14	14	15	21	10	23	19	116
2028-29	2023	15	13	15	15	16	21	10	20	110
2029-30	2024	15	13	14	16	16	16	22	19	116
2030-31	2025	16	13	14	15	17	16	17	19	111
2031-32	2026	15	13	14	15	16	17	17	19	111
Projection Growth Rates										
2022-2024			1.200	1.031	0.973	1.194	1.029	1.091	1.261	
2025-2031			0.972	1.150	1.000	1.000	1.000	1.156	1.261	
Annual Growth Rates									Estimated Migration⁴	
2012			0.882	1.048	0.727	0.955	1.000	1.034	0.564	-3.3%
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	1.200	0.8%
2019			0.842	1.083	1.067	1.000	0.824	1.053	1.412	4.3%
2020 ⁵			<i>0.870</i>	<i>1.353</i>	<i>1.385</i>	<i>1.250</i>	<i>1.000</i>	<i>1.286</i>	0.059	7.1%
2021 ⁵			<i>1.125</i>	<i>1.250</i>	<i>0.957</i>	<i>1.056</i>	<i>1.100</i>	<i>1.154</i>	1.111	6.0%
3-Year Ave.			<i>0.948</i>	<i>1.245</i>	<i>1.098</i>	<i>1.106</i>	<i>0.980</i>	<i>1.152</i>		
5-Year Ave.			0.993	1.257	1.118	1.111	1.021	1.181		
2017-19, 2021			<i>0.884</i>	<i>1.123</i>	<i>1.045</i>	<i>1.015</i>	<i>0.988</i>	<i>1.000</i>		
10-Yr Median			0.867	1.077	1.057	1.049	1.000	1.043		

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional. Births in 2021 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2019 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.

⁵ Adjusted for students withdrawn to become home-schooled.

Appendix K. Washington Resident Enrollment Projected by Grade to 2031: Grades 6-12										
School Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2011-12	35	30	35	27	35	32	32	100	126	392
2012-13	28	33	28	30	22	39	33	89	124	362
2013-14	30	26	32	29	29	25	39	88	122	351
2014-15	28	29	27	28	25	29	24	84	106	329
2015-16	22	30	30	23	29	22	32	82	106	332
2016-17	20	22	28	21	26	27	22	70	96	308
2017-18	22	19	23	23	21	24	24	64	92	281
2018-19	22	21	21	21	24	24	26	64	95	279
2019-20	27	23	23	21	22	25	28	73	96	285
2020-21	19	25	22	23	20	21	22	66	86	256
2021-22	20	16	27	24	25	20	24	63	93	286
Projected										
2022-23	15	20	19	26	25	25	21	54	97	298
2023-24	25	14	21	18	27	25	26	60	96	303
2024-25	22	24	15	20	18	27	26	61	91	298
2025-26	26	21	25	13	20	18	27	72	78	289
2026-27	32	25	22	22	13	20	18	79	73	277
2027-28	27	30	26	20	22	13	20	83	75	274
2028-29	24	26	31	23	20	22	13	81	78	269
2029-30	11	23	27	28	23	20	22	61	93	270
2030-31	23	10	24	24	29	23	20	57	96	264
2031-32	18	22	10	21	24	29	23	50	97	258
Projection Growth Rates ¹										
2022-2024	1.085	0.947	1.055	0.957	1.027	1.009	1.085			
2025-2031	1.056	0.952	1.036	0.894	1.018	1.000	1.056			
Annual Growth Rates								Migration ²		
2012	0.960	0.909	1.000	0.833	1.118	1.000	1.045			-3.3%
2013	1.000	1.000	1.000	0.933	0.900	1.000	0.867			-3.7%
2014	0.700	0.917	0.833	0.800	0.929	1.000	0.947			2.0%
2015	1.000	1.000	1.091	0.700	1.125	1.077	1.000			2.8%
2016	0.875	1.111	1.143	1.000	1.000	1.000	0.929			0.7%
2017	1.091	1.000	1.100	0.875	1.000	1.000	1.111			-3.1%
2018	1.143	0.917	1.143	0.909	1.143	0.833	1.000			0.8%
2019	1.333	1.375	1.091	1.250	1.100	0.875	1.300			4.3%
2020 ³	1.143	1.125	1.091	0.833	1.100	0.909	1.286			7.1%
2021 ³	1.250	1.000	0.889	1.000	1.000	1.091	1.300			6.0%
3-Year Ave.	1.164	0.944	1.043	1.030	1.030	1.000	1.056			
5-Year Ave.	1.085	0.947	1.055	0.957	1.027	1.009	1.025			
2017-19, 2021	1.070	0.954	1.080	0.947	1.045	1.022	1.062			
10-Yr Median	1.056	0.952	1.036	0.894	1.018	1.000	1.016			

¹ Projection Growth Rates based on 5-year average of annual growth rates in 2022-24 and 10-year median in 2025-31.

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

³ Annual Growth Rates in 2020 and 2021 adjusted for students withdrawn to be home-schooled.

Appendix L. Region 12 Resident Enrollment Projected by Grade to 2031: Grades PK-5										
School Year	Birth Year	Births ¹	K ²	1	2	3	4	5	PK ³	Total PK-5
2011-12	2006	56	51	44	54	64	57	80	17	367
2012-13	2007	35	36	55	37	48	64	61	21	322
2013-14	2008	40	33	38	56	37	49	63	27	303
2014-15	2009	37	33	36	39	59	38	47	29	281
2015-16	2010	50	33	33	37	41	56	40	39	279
2016-17	2010	41	30	34	35	40	43	58	50	290
2017-18	2012	30	30	27	36	35	40	38	38	244
2018-19	2013	32	32	32	30	34	36	41	35	240
2019-20	2014	39	32	32	34	31	32	38	42	241
2020-21	2015	37	34	42	35	38	32	41	7	229
2021-22	2016	43	44	39	41	38	39	36	33	270
Projected										
2022-23	2017	45	38	47	44	46	42	44	36	297
2023-24	2018	32	25	41	52	49	50	47	41	305
2024-25	2019	29	40	26	44	55	50	53	39	307
2025-26	2020	38	32	42	28	45	55	53	40	295
2026-27	2021	38	35	33	44	28	45	59	40	284
2027-28	2022	37	35	37	35	45	28	49	40	269
2028-29	2023	37	33	36	39	36	45	30	40	259
2029-30	2024	37	34	34	38	40	36	49	38	269
2030-31	2025	37	34	35	36	39	40	39	38	261
2031-32	2026	37	33	35	37	37	39	44	38	263
Projection Growth Rates										
2022-2024			0.978	1.099	1.082	1.057	1.005	1.076	1.090	
2025-2031			0.911	1.056	1.059	1.033	1.026	1.036	1.090	
Annual Growth Rates									Estimated Migration⁴	
2012			1.029	1.078	0.841	0.889	1.000	1.070	0.525	-2.1%
2013			0.825	1.056	1.018	1.000	1.021	0.984	0.730	0.0%
2014			0.892	1.091	1.026	1.054	1.027	0.959	0.580	-2.0%
2015			0.660	1.000	1.028	1.051	0.949	1.053	0.951	1.0%
2016			0.732	1.030	1.061	1.081	1.049	1.036	1.667	3.2%
2017			1.000	0.900	1.059	1.000	1.000	0.884	1.188	-3.0%
2018			1.000	1.067	1.111	0.944	1.029	1.025	0.778	2.5%
2019			0.821	1.000	1.063	1.033	0.941	1.056	1.313	5.5%
2020 ⁵			1.000	1.313	1.094	1.118	1.032	1.281	0.241	9.5%
2021 ⁵			1.070	1.147	0.976	1.086	1.026	1.125	0.868	-2.8%
3-Year Ave.			0.966	1.168	1.083	1.115	1.000	1.176		
5-Year Ave.			0.978	1.099	1.082	1.057	1.005	1.076		
2017-19, 2021			0.958	1.032	1.044	1.015	1.000	1.013		
10-Yr Median			0.911	1.056	1.059	1.033	1.026	1.036		

¹ Births 2006 to 2020 are from the State Department of Public Health. The 2019 and 2020 figures are provisional. Births in 2021 are Dr. Prowda's estimate from an analysis of in-state births through September. Births in 2022-26 based on Connecticut State Data Center's 2017 projections of women of child-bearing ages and Dr. Prowda's estimate of fertility rates in 2019 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.

⁵ Adjusted for students withdrawn to become home-schooled.

Appendix M. Region 12 Resident Enrollment Projected by Grade to 2031: Grades 6-12										
School Year	6	7	8	9	10	11	12	6-8 Total	9-12 Total	PK-12 Total
2011-12	64	61	88	71	73	78	65	213	287	867
2012-13	78	60	61	73	67	76	79	199	295	816
2013-14	62	75	62	56	68	72	76	199	272	774
2014-15	58	60	73	58	52	68	68	191	246	718
2015-16	46	59	62	60	59	49	70	167	238	684
2016-17	42	47	58	54	62	58	49	147	223	660
2017-18	54	41	49	55	56	61	55	144	227	615
2018-19	42	53	44	44	58	55	64	139	221	600
2019-20	45	45	58	44	48	54	60	148	206	595
2020-21	39	44	49	55	46	46	52	132	199	560
2021-22	43	36	44	49	54	45	52	123	200	593
Projected										
2022-23	39	45	42	44	52	55	49	126	200	623
2023-24	48	39	48	41	45	50	57	135	193	633
2024-25	51	48	41	46	42	44	53	140	185	632
2025-26	55	50	50	35	47	42	44	155	168	618
2026-27	55	54	52	44	35	47	41	161	167	612
2027-28	61	53	56	46	45	35	47	170	173	612
2028-29	51	60	55	49	47	45	34	166	175	600
2029-30	31	50	63	49	50	47	45	144	191	604
2030-31	51	30	53	56	50	50	46	134	202	597
2031-32	40	50	31	47	57	50	49	121	203	587
Projection Growth Rates ¹										
2022-2024	1.041	1.009	1.069	0.954	1.059	0.964	1.032			
2025-2031	1.016	0.978	1.033	0.918	1.017	0.982	1.013			
Annual Growth Rates								Migration ²		
2012	0.975	0.938	1.000	0.830	0.944	1.041	1.013			-2.1%
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 ³	1.026	0.978	1.089	0.948	1.045	0.958	0.963			9.5%
2021 ³	1.049	0.923	1.000	1.000	0.982	0.978	1.130			-2.8%
3-Year Ave.	1.074	1.031	1.077	0.974	1.069	0.949	1.056			
5-Year Ave.	1.041	1.009	1.069	0.954	1.059	0.964	1.032			
2017-19, 2021	1.034	0.989	1.054	0.960	1.038	0.968	1.050			
10-Yr Median	1.016	0.978	1.033	0.918	1.017	0.982	1.013			

¹ Projection Growth Rates based on 5-year average of annual growth rates in 2022-24 and 10-year median in 2025-31.

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

³ Annual Growth Rates in 2020 and 2021 adjusted for students withdrawn to be home-schooled.

Appendix N. Non-Resident Enrollment in the Shepaug Agriscience Program Projected to 2031							
October Of Year	Sending Grade 8¹	9	10	11	12	9-12	Pct. Prior Year Grade 8
2010	2147						
2011	2022	9	14	9	11	43	0.42%
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	1954	26	27	22	18	93	1.28%
2023	1951	26	24	25	19	94	1.33%
2024	1925	27	24	22	21	94	1.38%
2025	1897	25	25	22	19	91	1.30%
2026	1876	24	23	23	19	89	1.27%
2027	1886	24	22	21	20	87	1.28%
2028	1867	22	22	20	18	82	1.17%
2029	1971	24	20	20	17	81	1.29%
2030	1911	25	22	19	17	83	1.27%
2031	1940	24	23	20	16	83	1.26%
Projection Growth Rates²		0.014	0.928	0.929	0.851		

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 2019-21 rates observed in Region 12. The growth rates in grades 10-12 were based on five-year averages for these towns for students in Region 12 and 14.

NOTE: The shaded area represents enrollment in Region 12.