

#### **2020-21 Enrollment Projections**

TO: Dr. Patricia Cosentino, New Fairfield Public Schools, New Fairfield, CT

FROM: Donald G. Kennedy, Ed.D. and Karen L. LeDuc, Ph.D.

DATE: October 26, 2020
RE: Enrollment Projections

The global pandemic continues to affect our nation's public health; however, as we are in the earliest stages of the pandemic economy it may be difficult economic trends. For example, some towns in Vermont, Maine and western Massachusetts are experiencing record single-family home sales with rapidly rising median sale prices at the same time important industries affecting hospitality and tourism are operating at a small fraction of their recent pace. However, we do know that the effects of the 2008 recession upon school enrollments differed significantly from one District to another. Some Districts declined in enrollment for a year or two, then experienced new families moving in. Others took up to a decade to recover.

In an attempt to obtain more data (and a better understanding), NESDEC has added a "Second Semester refresher" enrollment projection at no cost to affiliates.

We are pleased to send you the enclosed documents displaying the past, present and projected enrollments for the New Fairfield School District. We have received the figures given to us by the District and we assume that the method of collecting the enrollment data has been consistent from year to year. NESDEC's enrollment projection totals from fall of 2019 data fell within -3 students of the actual Grade K-12 enrollment total for fall, 2020 (2,057 projected vs. 2,060 actual). In Grades K-2, 399 pupils were projected vs. 384 enrolled. In Grades 3-5, 466 students were projected vs. 471 enrolled. In Grades 6-8, 499 students were forecast vs. 497 enrolled. And in Grades 9-12, 693 pupils were projected vs. 708 enrolled. Of note, the largest variance was at Kindergarten, with 136 students projected vs. 119 enrolled, a variance of -17 students. For that grade level, we adjusted the ratio to include a 2-4 year average. NESDEC assumes the Kindergarten district-reported enrollment numbers are close to accurate based on current trends. The K variance may have been influenced in particular by families' reactions to COVID-19. In light of this, it may be beneficial for the district to take part in the second semester update of NESDEC enrollment projections (at no cost to the district), when more information is known.

As a note, it might be beneficial for the district to continue monitoring homeschooled students for potential return to the District, as in 2019 there were 12 students and in 2020 the number increased to 27 students.

The two factors now at work which will have the greatest effect upon future enrollments are: a. a lower number of births to New Fairfield residents and, b. an expected continuation of the in-migration of new families (which almost a decade ago recovered from the 2008 recession.) The students currently in Grades 1-10 were born during a period when New Fairfield was averaging 108 births per year. More recently, and expected over the next 6-7 years, New Fairfield now is averaging about 98 births per year, about -10 fewer births per year than previously. The strong relationship between New Fairfield births and Kindergarten enrollments is displayed on the B-K graph. Especially over the most recent 5-8 years, New Fairfield registered about 125-135 Kindergarteners for every 100 New Fairfield births (five years previous.)

"Hidden Trends" within the district: Like many nearby communities, New Fairfield continues to experience fluctuations in enrollment and in/migration in Grades 1-8. There are additional trends and counter-trends to consider. More so than other grade levels, <u>Grades 1-8 in most districts</u>, taken as a group, tend to be quite stable in numbers. Grades 9-12 are excluded from the calculation as in many communities there tends to be additional fluctuation for reasons having little to do with students moving in/out of the community – in the case of New Fairfield, Grade 9 tends to be 1% larger than the previous year's Grade 8. Regarding the Grade 1-8 enrollment stability, if last year the Grade 1-7 total was 1,000 children, if no one moved in or out, this fall's Grades 2-8 would equal about 1,000 – the same cohort of children. Because Grades 1-8 tend to be the most stable in total K-12 enrollment, these Grades 1-8 are potential places to discover "hidden trends" that otherwise might go unnoticed and provide a useful yardstick by which to measure a district's tendency toward in-/out-migration. In the case of New Fairfield, we know that the district had been experiencing an in-migration of school-age children (with increases in 7 out of 8 years, leading to a net increase averaging +12 students.) The presence of in-migration in Grades 1-8 would be evidence of the complexity of enrollments in these unsettled economic times. Analysis of these hidden trends sometimes can provide an additional benchmark by which to assess enrollment trends.

Enrollment projections and real estate trends: Over the next three years, K-2 enrollments are forecast to <u>increase</u> by a total of +35 students; Grades 3-5 enrollments are expected to <u>decrease</u> by -63 students; Grades 6-8 to <u>increase</u> by +20 pupils; and the high school level to <u>decrease</u> by about -44 pupils...all within the next three years – as the classes move up the grades. Enrollment projections are more reliable in Years #1-4 in the future and less reliable in the 'out-years"- as many factors may change. That said, it is quite possible that real estate turnover will have increased further, bringing in additional new families – see the "projections" page. Although the Year #1-3 forecast likely will occur, the longer-term future is better viewed as a possible direction which may be affected by improved real estate conditions – rather than a specific set of numbers. That longer-term future also will be affected by the number of babies-yet-to-be-born...it is quite likely that the birth numbers will increase slightly as new families move in. All projections are more reliable for Years #1-5 in the future; and less reliable in the "out-years" – as some many factors can change. As soon as the pandemic economy shifts, additional in-migration may occur into New Fairfield. Building permits have begun to slow as well; see the "Additional Data" table below. As additional families move in, the forecasted declines may moderate. See the "reliability of projections" section for more details. The birth numbers used in the projections, through 2018, are from the CT Department of

Public Health – any "provisional" numbers reflect a total that is preliminary: the total may rise yet will not shrink. Any "estimated" years, are a rolling five-year average, which NESDEC has found to be the most accurate method of estimation. Local City/Town Clerks have up-to-date information on local births however do not have access to the number of New Fairfield residents born out-of-state (information which will eventually become known to the CT DPH Vital Statistics).

Forecasting Kindergarten and Grade 9: The two most difficult grades to forecast in all districts are Kindergarten and Grade 9. The latter is difficult to anticipate, as there are so many options for Grade 9 (in vocational or agricultural schools, private or parochial non-public schools, etc.). Kindergarten can be difficult to project based upon births alone, especially in a changing real estate market like New Fairfield at the present time, as many districts have large numbers of "net move-ins/move-outs" who are ages 1-4. Some districts take extra steps to track 3 and 4-year olds with a local census, or report to NESDEC the known number of 4-year-olds in local pre-schools/nursery schools which typically enroll Kindergarteners in the district. Knowing this information helps NESDEC to project Kindergarteners more reliably...as does data from the Kindergarten Screening in districts which also track 3 and 4-year old siblings (or neighbors) at that time. New Fairfield's substantial population of immigrants remains an important variable within the new class of Kindergarteners each year – and is well-worth tracking in order to update, periodically, the estimated number of newly-arrived children. The more data, in addition to births, which is sent to NESDEC regarding the incoming Kindergarten class, the greater is the chance that "enrollment surprises" will be minimized.

Trends in real estate sales: Everyday across America, 10,000 "Baby Boomers" celebrate their 65<sup>th</sup> birthday - a phenomenon which will continue for a decade. New England has a disproportionately large share of these senior citizens, many of whom had planned to "downsize" their living arrangements, yet postponed putting homes on the market due to the Great Recession. School enrollments are influenced strongly by the number of real estate sales, as these contribute new families moving into many districts. In over 80% of districts, the number of real estate sales is 4-5 times larger than the number of building permits for new residential construction – thus the number of real estate sales often is a more important factor than the number of building permits. The global economy continues to be somewhat unsettled, yet NESDEC has assumed that there will be continued economic stability on the national and regional levels.

In New England, how rapidly will additional homes be placed on the market? A mid-2014 study using data from the Federal Housing Finance Agency, Bureau of Economic Analysis and the U.S. Census Bureau directly links home prices to the "real Gross Domestic Product" (GDP) in each of the nine regions in the country. New information on the pandemic will become useful as it becomes known. Thus, although real estate sales and rentals are very strong in some New England towns and cities, there are many senior citizens may still refrain from placing their homes on the market – as house prices still may be rising – this factor might affect many residents of New Fairfield. New England births, however, are likely to remain at low levels, due to the advanced median age of the New England population.

A note about the Pre-Kindergarten Year (PK): Recent research on the critical value of quality educational programs for 3-and-4-year-old children is summarized in *The Most Important Year, Pre-Kindergarten and the Future of Our Children* by Suzanne Bouffard, a Developmental Psychologist,

Penguin Random House (2017). A child's brain develops faster during these essential early childhood years than at any other time during the life span. Further, children who attend quality Pre-Kindergarten programs develop better language, literacy, problem-solving and math skills, and are more likely to display stronger self-control – qualities that will prepare them for a lifetime of successful learning. Across the U.S., more districts are increasing the number of children in public Pre-Kindergarten – and some are considering "universal Pre-K" for all 4-year olds.

#### Continuing Declines Expected in New England's PK-12 Enrollments

From 2016 to 2028, the US Department of Education anticipates changes in PK-12 enrollment of +5.4% in the South; +2.1% in the West, -2.1% in the Midwest; and -3.7% in the Northeast.

State	Fall 2015	Fall 2027 Projected	PK-12 Decline	% Change, 2015- 2028
CT	535,118	471,100	-65,018	-12.0%
ME	180,512	170,700	-10,913	-6.0%
MA	964,026	941,600	-22,426	-2.3%
NH	182,425	163,700	-18,725	-10.3%
RI	142,014	136,100	-5,914	-4.1%
VT	87,866	79,700	-8,166	-9.3%

**Source:** USDE, National Center for Education Statistics, *Projections of Education Statistics to 2027*, Statistics to 2028, Table 3, Pages 35-36; Published May 28, 2020.



### **Analyzing Your Enrollment**

#### **Historical Public Enrollments**

- 1. After the "YEAR" column can be found the "BIRTHS" column. The number of births to residents for each of eleven years is displayed. Note any trends, e.g., have births been decreasing? increasing? leveling off? Kindergarten and Grade 1 enrollments normally are quite responsive to these fluctuations.
- 2. Look **down** the K and 1 columns, noting the direction of the trend. This affords a comparison of these classes over a ten-year period. Add the K and Grade 1 enrollments of the first school year recorded and compare them with the sum of the current K and Grade 1 enrollments.
- 3. Take the first K class and follow it diagonally to trace its movement to Grade 1, 2, etc. up to its current 10th grade status. This comparison (which can be accomplished for other classes also) gives some measure of the effects of migration in your school district. If a sixth grade class today is larger than it was as a K class six years ago, then net in-migration probably has occurred; if it is smaller, then net out-migration probably has occurred.
- 4. Compare each K class with the previous year's graduating class. Note which is larger and by what amount one surpasses the other. Larger graduating classes generally reflect declining enrollments; larger K classes generally indicate increasing enrollments.
- 5. In the "Grade Combinations" section, note the trends of elementary, middle school and high school enrollments. A significant and consistent trend in these summaries usually results in the corresponding trend for projected enrollments. If enrollments are leveling off in the elementary grades after a period of decline, then the secondary enrollments might be expected to continue to decline for several years until the leveling off experience has had time to take hold at the secondary grades.

#### **Enrollment Projections**

1. Note the trends exhibited in the total K-12 (or 1-12) projection for the next five years as well as the projections for various grade

combinations. The trends on this page should generally exhibit a continuation of the trends mentioned above for historical enrollments, although the **rate** of change may be quite different.

- 2. Look at the births in the most recent years and note whether the trend is up, down, or level.
- 3. Make similar comparisons as appropriate on this page as were suggested for the "Historical Public Enrollments" page.

#### PROJECTION METHODOLOGY

Cohort component (survival) technique is a frequently used method of preparing enrollment forecasts. NESDEC uses this method, but modifies it in order to move away from forecasts which are wholly computer or formula driven. Such modification permits the incorporation of important, current town-specific information into the generation of the enrollment forecasts (such as the volume of real estate sales, building permits, in/out-migration, etc.). Basically, percentages are calculated from the historical enrollment data to determine a reliable percentage of increase or decrease in enrollment between any two grades. For example, if 100 students enrolled in Grade 1 in 2018-19, increased to 104 students in Grade 2 in 2019-20, the percentage of survival would have been 104% or a ratio of 1.04. Such ratios are calculated between each pair of grades or years in school over several recent years.

After study and analysis of the historical ratios, and based upon a reasonable set of assumptions regarding births, migration rates, retention rates, etc., ratios most indicative of future growth patterns are determined for each pair of grades. The ratios thus selected are applied to the present enrollment statistics for a pre-determined number of years. The ratios used are the key factors in the reliability of the projections, given the validity of the data at the starting point. The strength of the ratios lies in the fact that each ratio encompasses **collectively** the variables that account for increases or decreases in the size of a grade enrollment as it moves on to the next grade. Each ratio represents the cumulative effect of the following factors:

- 1. Real estate turnover and new residential construction;
- 2. Migration, in or out, of the schools;
- 3. Drop-outs, transfers, etc.;
- 4. Births to residents;
- 5. Retention in the same grade.

#### **RELIABILITY OF ENROLLMENT PROJECTIONS**

Projections can serve as useful guides to school administrators for educational planning. In this regard, the projections are generally most reliable when they are closest in time to the current year. Projections six to ten years out may serve as a guide to future enrollments and are useful for facility planning purposes. However, they should be viewed as subject to change given the likelihood of changes in the underlying assumptions/trends.

Projections that are based upon the children who already are in the district (the current K-12 population only) will be the most reliable; the second level of reliability will be for those children already born into the community but not yet old enough to be in school. A less reliable category is the group for which an estimate must be made to predict the number of births, thereby adding an additional variable. See these three multi-colored groupings on the "Projected Enrollment" slide/page.

How often do the actual enrollments closely match the NESDEC projections? The research literature reports the closest that enrollment forecasters are likely to come to actual enrollments is about 1% variance per year-from-the-known-data. That is, a 1% variance from projection-to-actual "one-year-out" into the future (2% variance "two-years-out" ... 10% variance "ten-years-out"). NESDEC reaches this "highest possible" standard in about 90% of cases. When our NESDEC variance is greater, the reasons often are one of the following: a. imbedded/intervening "hidden" variables (examples: a parochial school closed or other students returned from non-public schools, a charter school opened, the Kindergarten program changed entrance age or to extended/full-day, the high school toughened its course credit/graduation requirements, the District set new attendance boundaries for elementary schools, or the District had well-publicized budget/referendum academic accreditation difficulties); b. the District size was below 500 students, thus subject to fluctuations in total numbers; or c. the District has not done enrollment projections on an annual basis.

Annual updates allow for early identification of recent changes in historical trends. When the actual enrollment in a grade is significantly different (high or low) from the projected number, it is important (yet difficult) to determine whether this is a one-year aberration or whether a new trend may have begun. In light of this possibility, NESDEC urges all school districts to have updated enrollment forecasts developed by NESDEC each October. This service is available at no cost to affiliated school districts.



## **Using This Information Electronically**

If you would like to extract the information contained in this report for your own documents or presentations, you can use screenshots, which can be inserted into PowerPoint slides, Word documents, etc. Because screenshots create graphics, the image is not editable. Please feel free to contact us if you need assistance in this matter, by phone (508-481-9444) or by email (ep@nesdec.org).



## **New Fairfield, CT Historical Enrollment**

School District: New Fairfield, CT 10/8/2020

	Historical Enrollment By Grade																		
Birth Year	Births	School Year	PK	К	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2005	126	2010-11	79	139	198	185	197	213	200	231	246	257	250	269	239	223	0	2847	2926
2006	128	2011-12	73	172	146	197	191	194	209	203	234	248	287	234	255	231	0	2801	2874
2007	125	2012-13	67	154	163	151	204	196	201	216	206	232	256	280	232	248	0	2739	2806
2008	125	2013-14	66	162	151	170	157	201	203	204	216	206	247	246	261	241	0	2665	2731
2009	85	2014-15	85	139	158	162	174	154	199	209	204	216	213	240	240	268	0	2576	2661
2010	117	2015-16	67	153	130	151	165	173	152	193	198	199	230	213	228	245	0	2430	2497
2011	102	2016-17	77	136	153	138	152	164	172	152	190	201	188	226	211	235	0	2318	2395
2012	100	2017-18	74	150	139	153	137	153	170	180	154	190	190	186	225	206	0	2233	2307
2013	85	2018-19	77	112	157	139	156	141	161	174	184	158	183	189	194	223	0	2171	2248
2014	95	2019-20	89	143	115	152	144	161	139	174	175	189	152	179	185	187	0	2095	2184
2015	95	2020-21	71	119	149	116	153	149	169	144	179	174	181	151	182	194	0	2060	2131

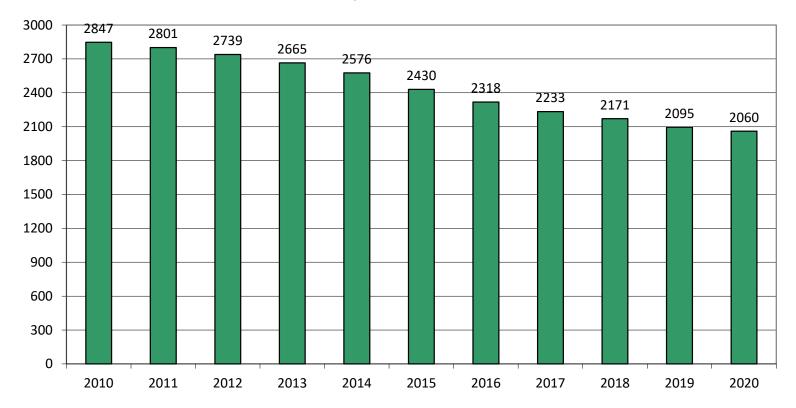
		Historical	Enrollm	nent in G	Grade Co	mbinatio	ns		
Year	PK-2	K-5	3-5	K-8	PK-5	6-8	K-2	7-12	9-12
2010-11	601	1132	610	1866	1211	734	522	1484	981
2011-12	588	1109	594	1794	1182	685	515	1489	1007
2012-13	535	1069	601	1723	1136	654	468	1454	1016
2013-14	549	1044	561	1670	1110	626	483	1417	995
2014-15	544	986	527	1615	1071	629	459	1381	961
2015-16	501	924	490	1514	991	590	434	1313	916
2016-17	504	915	488	1458	992	543	427	1251	860
2017-18	516	902	460	1426	976	524	442	1151	807
2018-19	485	866	458	1382	943	516	408	1131	789
2019-20	499	854	444	1392	943	538	410	1067	703
2020-21	455	855	471	1352	926	497	384	1061	708

Histori	cal Percei	ntage Ch	anges
Year	K-12	Diff.	%
2010-11	2847	0	0.0%
2011-12	2801	-46	-1.6%
2012-13	2739	-62	-2.2%
2013-14	2665	-74	-2.7%
2014-15	2576	-89	-3.3%
2015-16	2430	-146	-5.7%
2016-17	2318	-112	-4.6%
2017-18	2233	-85	-3.7%
2018-19	2171	-62	-2.8%
2019-20	2095	-76	-3.5%
2020-21	2060	-35	-1.7%
Change		-787	-27.6%

#### NESDEC

## **New Fairfield, CT Historical Enrollment**

K-12, 2010-2020





### **New Fairfield, CT Projected Enrollment**

School District: New Fairfield, CT 10/8/2020

							E	nroll	ment	Proje	ctions	By G	rade*							
Birth Year	Births		School Year	PK	К	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2015	95		2020-21	71	119	149	116	153	149	169	144	179	174	181	151	182	194	0	2060	2131
2016	93		2021-22	72	127	124	148	118	158	153	177	147	182	167	179	153	182	0	2015	2087
2017	98		2022-23	73	134	132	123	151	122	163	160	180	149	175	165	181	153	0	1988	2061
2018	109	(prov.)	2023-24	74	149	139	131	126	156	126	171	163	183	143	173	167	181	0	2008	2082
2019	94	(prov.)	2024-25	75	128	155	138	134	130	161	132	174	166	176	141	175	167	0	1977	2052
2020	98	(est.)	2025-26	76	133	133	154	141	138	134	169	134	177	160	174	143	175	0	1965	2041
2021	98	(est.)	2026-27	77	134	138	132	157	146	142	140	172	136	170	158	176	143	0	1944	2021
2022	99	(est.)	2027-28	78	136	139	137	135	162	150	149	143	175	131	168	160	176	0	1961	2039
2023	100	(est.)	2028-29	79	136	141	138	140	139	167	157	152	145	168	130	170	160	0	1943	2022
2024	98	(est.)	2029-30	80	134	141	140	141	144	143	175	160	154	139	166	132	170	0	1939	2019
2025	99	(est.)	2030-31	81	135	139	140	143	146	148	150	178	163	148	137	168	132	0	1927	2008

Note: Ungraded students (UNGR) often are high school students whose anticipated years of graduation are unknown, or students with special needs - UNGR not included in Grade Combinations for 7-12, 9-12, etc.

Based on an estimate of births

Based on children already born

Based on students already enrolled

	Pr	ojected	Enrollme	nt in Gr	ade Co	mbinati	ons*		
Year	PK-2	K-5	3-5	K-8	PK-5	6-8	K-2	7-12	9-12
2020-21	455	855	471	1352	926	497	384	1061	708
2021-22	471	828	429	1334	900	506	399	1010	681
2022-23	462	825	436	1314	898	489	389	1003	674
2023-24	493	827	408	1344	901	517	419	1010	664
2024-25	496	846	425	1318	921	472	421	999	659
2025-26	496	833	413	1313	909	480	420	963	652
2026-27	481	849	445	1297	926	448	404	955	647
2027-28	490	859	447	1326	937	467	412	953	635
2028-29	494	861	446	1315	940	454	415	925	628
2029-30	495	843	428	1332	923	489	415	921	607
2030-31	495	851	437	1342	932	491	414	926	585

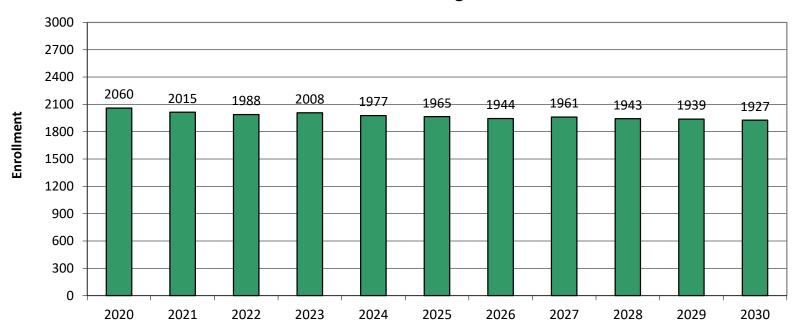
Projec	ted Perce	entage Chan	ges
Year	K-12	Diff.	%
2020-21	2060	0	0.0%
2021-22	2015	-45	-2.2%
2022-23	1988	-27	-1.3%
2023-24	2008	20	1.0%
2024-25	1977	-31	-1.5%
2025-26	1965	-12	-0.6%
2026-27	1944	-21	-1.1%
2027-28	1961	17	0.9%
2028-29	1943	-18	-0.9%
2029-30	1939	-4	-0.2%
2030-31	1927	-12	-0.6%
Change		-133	-6.5%

<sup>\*</sup>Projections should be updated annually to reflect changes in in/out-migration of families, real estate sales, residential construction, births, and similar factors.



### **New Fairfield, CT Projected Enrollment**

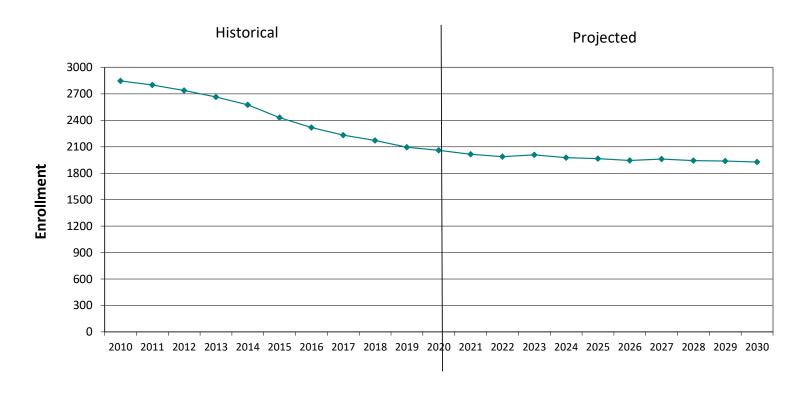
K-12 To 2030 Based On Data Through School Year 2020-21





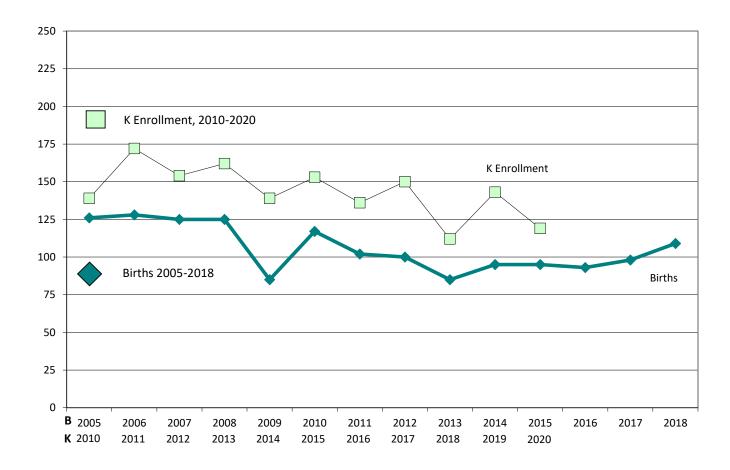
### New Fairfield, CT Historical & Projected Enrollment

K-12, 2010-2030





### New Fairfield, CT Birth-to-Kindergarten Relationship





# **New Fairfield, CT Additional Data**

	Building Permits Issued										
Year	Single-Family	Multi-Units									
2005	25	18									
2016	10	0									
2017	6	0									
2018	8	0									
2019	6	0									
2020	4 to date	0 to date									

Source: HUD and Building Department

	Enrollment	: History								
	Career-Tech Non-Public									
Year	9-12 Total	K-12 Total								
2005-06	36	138								
2016-17	24	n/a								
2017-18	29	n/a								
2018-19	38	n/a								
2019-20	39	n/a								
2020-21	48	n/a								

	Residents in Non-Public Independent and Parochial Schools (General Education)													
Enrollments	К	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
as of Oct. 1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

K-12 Home-	Schooled Students
2020	39

K-12 Residents in Charter or Magnet						
Schools, or "Choiced-out"						
2020 15						

K-12 Special Education Outplaced Students		
2020	7	

K-12 Tuitioned-In, Choiced-In, & Other Non- Residents			
2020	0		

The above data were used to assist in the preparation of the enrollment projections. If additional demographic work is needed, please contact our office.