



2011-12 Enrollment Projections

TO: Kathleen A. Murphy, Superintendent of Schools, Hampton, NH SAU#90
FROM: Donald G. Kennedy, Ed.D., Demographic Specialist
DATE: December 5, 2011
RE: Enrollment Projections

We are pleased to send you the enclosed revised documents displaying the past, present, and projected enrollments for the Hampton School District SAU#90. We have used 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. The last time NESDEC was asked to provide enrollment projections for Hampton was in 2008-09, thus it is interesting to learn what new trends have been established in the intervening school years. It is helpful to have projections annually in order to give the district a “heads up” in trends that may affect planning decisions, and the operating budget.

NESDEC’s enrollment projection totals with data from the fall of 2008 came within 6.5% of the actual Grade 1-8 enrollment total for fall, 2010 (1,026 projected v. 1,093 actual enrollment). In Grades K-5, the new trends were toward substantially larger enrollments, with 737 pupils projected from the 2008 data v. 818 enrolled; however, in Grades 6-8, 403 students were projected from the 2008 data v. 410 pupils registered as of October 1, 2011...a trend that remained steady.

The two factors at work which will have the greatest effect upon future enrollments are: a decline in the number of births to Hampton residents and, to a lesser degree, b. fluctuating in-migration (due to the real estate slowdown). In the decade from 1996-2005, Hampton averaged 156 births per year; more recently (and expected over the next 6-7 years) are about 119-141 births annually, averaging about 20 fewer than during the prior decade. Incidentally, New Hampshire experienced a 4.4% decline in births from 2007 to 2009 (in large part caused by the economic Recession), the next-to-smallest decline among the six New England states. New Hampshire’s 5.4%

rate of unemployment is the least among the six New England states, suggesting that real estate sales may begin to bounce back within the next few months (in contrast, Rhode Island's unemployment rate continues at 10.5%).

The ever-changing relationship between Hampton births and Kindergarten enrollments is displayed on the B-K graph. Hampton, over the most recent decade, has registered about 88 Kindergarteners for every 100 births (five years previous)...this fall there were 96 Kindergarteners for every 100 births five-years-previous, the third-highest ratio in over a decade. Grade 1 is expected to be about 4% larger than the previous year's Kindergarten class.

Like many nearby communities, Hampton continues to experience enrollment fluctuations of in/out-migration in Grades 1-12. Over the past ten years, there have been five years of 1-4% net in-migration (including +4% in 2009 and +1% in 2010 and 2011), two flat years, and three years of 1-3% net out-migration. **K-12 enrollments are forecast to be generally flat, although the pace will fluctuate, due to the occasional imbalance between the numbers in the graduating class and the numbers of incoming Kindergarteners.**

Will these patterns of decline really last for as long as ten years? Perhaps not. As soon as the economy and real estate situation improve in the region, additional in-migration may return to Hampton. Many communities in the region sold during 2008, 2009, 2010, and 2011-to-date, only about 60-80% as many homes as in 2005-2007. Building permits have fluctuated as well, generally slowing; see the "Additional Data" table below. See the description on Page 4 below regarding "reliability of projections".

As noted above, the number of births is an important variable in projecting future school enrollments, thus changing trends in births can be of special interest. U.S. births steadily increased from 2003 onward, reaching the highest peak in two decades, in 2007. However, U.S. births dropped 2% in 2008 (compared with 2007) and declined by an additional 2.6% in 2009 (compared with 2008). The Pew Research Center analyzed data from 25 states and found that the states hit hardest by the Recession (such as Michigan) had the greatest decline in births. Although additional factors may be involved, during times of substantial and prolonged economic difficulty, persons expecting to lose their employment and/or their homes, may postpone having children. The Pew Center estimates that 14% of Americans aged 18-34 postponed having a child because of the recent recession (2% with incomes above \$75,000 postponed having a child, with higher rates of postponement in lower income brackets).

Among the six New England states, hard-hit Connecticut dropped by 8.6% over the two-year period from 41,684 births in 2007 to 38,083 in 2009; similarly, Rhode Island experienced an 8.1% decline from 12,503 births in 2007 to 11,494 births in 2009; mothers in Vermont gave birth to 6,492 children in 2007

and 6,118 babies in 2009, a 5.8% decline; Maine dropped by 4.7% from 14,177 children in 2007 to 13,506 babies in 2009; New Hampshire experienced a 4.4% decrease from 14,397 births in 2007 compared with only 13,764 children born in 2009; lastly, Massachusetts declined by only 3.9% from 77,731 births in 2007 to 74,643 children born in 2009. Overall, in the 275+ enrollment projections prepared by NESDEC during 2009-10, about 2/3 of districts were continuing to shrink in enrollment; whereas about 1/3 of districts appeared to be experiencing flat enrollments or some growth (of 0.5% or more per year) in the K-12 student population. Because of the higher median ages among the New England population, births in the region generally have been declining over the past several years; thus the Recession has accelerated an on-going trend. Although these rates may change monthly, recent rates of unemployment have been about 10.5% in RI; 8.9% in CT; 7.5% in ME; 7.3% in MA; 5.8% in VT; and 5.4% in NH.

If your district has need for further assistance in the area of long range facilities planning, we would urge you to call so that we might discuss our planning services which include our Demographic and Long-Range Enrollment Projection Studies.

We have enclosed suggestions for interpreting the printout and a brief description of the modified cohort survival methodology used in preparing the projections. As always, we would be delighted to hear from you regarding ways in which we might make the enrollment forecasts more useful to you. Please don't hesitate to call or email us at ep@nesdec.org. Best wishes for the school year.

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 are normally quite responsive to these fluctuations.
2. Look down the K and 1 columns and note 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 in-migration has probably occurred; if it is smaller, then out-migration has probably 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/junior high, 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

The cohort survival technique is the most frequently used method of preparing enrollment forecasts. NESDEC uses that technique, 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. 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 2010-11, increased to 104 students in Grade 2 in 2011-12, 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 possibility for change in the underlying assumptions/trends.

Projections based upon **the children already 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**. The least 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 difficulties); b. the District size was below 500 students, thus subject to fluctuations; 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 be starting. **In light of this, 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 Adobe Acrobat reader to convert the desired information to a “snapshot,” which can be inserted into PowerPoint slides, Word documents, etc. Because the snapshot tool creates a graphic, the image is not editable.

Steps for Using The Snapshot Tool in Adobe Acrobat Reader 8.0:

1. Click on Tools Menu;
2. Choose “Select & Zoom;”
3. Choose “Snapshot Tool;”
4. Click and drag around the text, chart, and/or graphics that you would like to capture: your selection will be copied to the clipboard automatically;
5. Click in the document where you would like the information to appear;*
6. Give Paste command.

If you have an earlier version of Adobe Acrobat and these instructions don’t work for you, contact your tech support person, or NESDEC and we will try to assist you. Telephone (508)481-9444 or ep@nesdec.org. Ask for Peggy, Don, or Carol.

*You may paste your snapshot onto a PowerPoint slide, onto an Excel sheet, or even into a graphics program to save as a separate graphic file (in .jpg or other format), so that it is available for inserting into future documents.

Hampton, NH SAU # 90 Historical Enrollment

School District: Hampton, NH SAU#90

12/1/2011

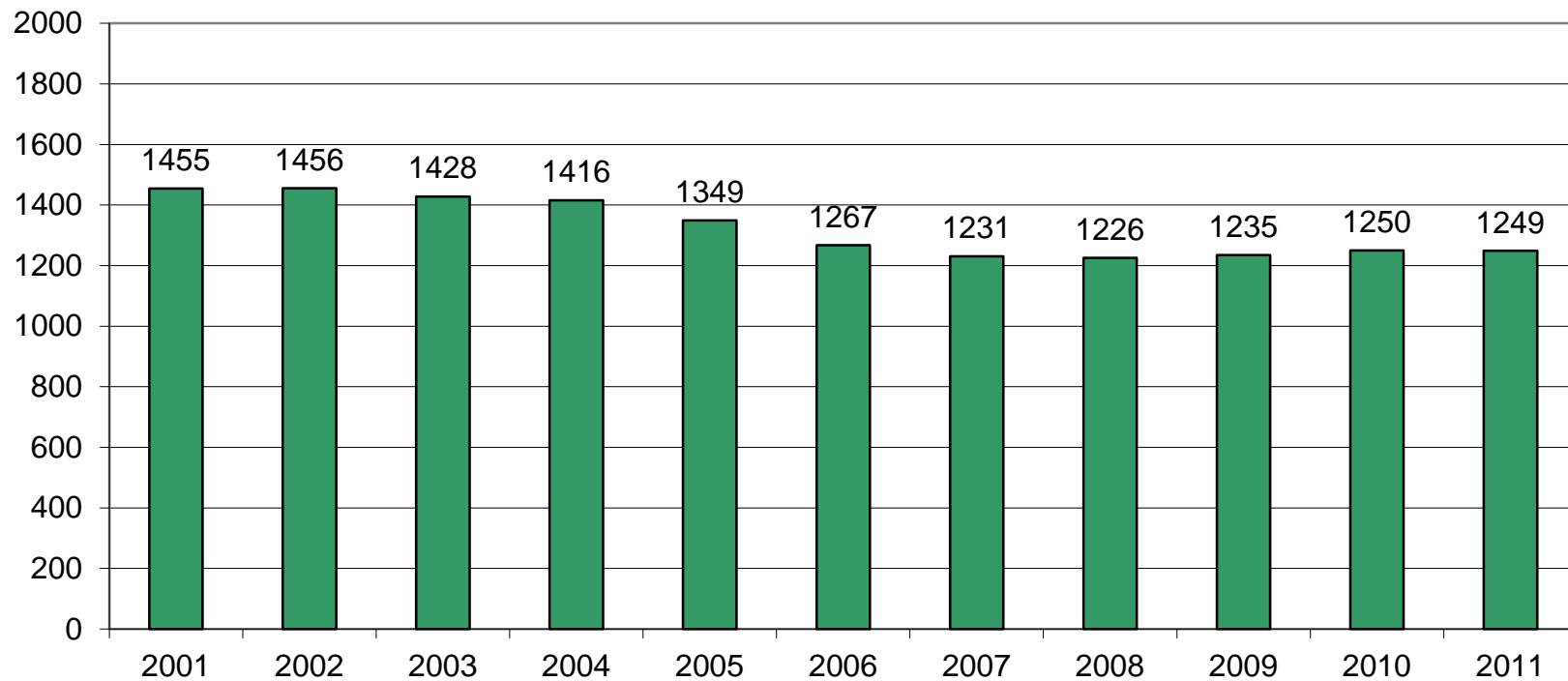
Historical Enrollment By Grade																			
Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-8	PK-8
1996	153	2001-02	17	144	139	162	153	169	167	190	171	143	0	0	0	0	0	1438	1455
1997	161	2002-03	16	124	159	137	157	158	171	173	206	155	0	0	0	0	0	1440	1456
1998	188	2003-04	16	127	141	137	143	162	160	194	175	173	0	0	0	0	0	1412	1428
1999	181	2004-05	17	125	152	142	160	148	160	169	174	169	0	0	0	0	0	1399	1416
2000	161	2005-06	17	124	137	147	144	149	146	153	163	169	0	0	0	0	0	1332	1349
2001	157	2006-07	17	109	132	128	143	139	143	146	153	157	0	0	0	0	0	1250	1267
2002	136	2007-08	18	96	122	126	126	142	142	152	149	158	0	0	0	0	0	1213	1231
2003	142	2008-09	15	145	106	127	126	127	144	141	152	143	0	0	0	0	0	1211	1226
2004	130	2009-10	14	126	141	118	131	131	133	141	143	157	0	0	0	0	0	1221	1235
2005	147	2010-11	16	150	139	142	118	125	142	132	137	149	0	0	0	0	0	1234	1250
2006	141	2011-12	21	135	146	141	150	120	126	140	132	138	0	0	0	0	0	1228	1249

Historical Enrollment in Grade Combinations									
Year	PK-2	K-2	K-5	K-8	3-5	6-8	7-8	7-12	9-12
2001-02	462	445	934	1438	489	504	314	0	0
2002-03	436	420	906	1440	486	534	361	0	0
2003-04	421	405	870	1412	465	542	348	0	0
2004-05	436	419	887	1399	468	512	343	0	0
2005-06	425	408	847	1332	439	485	332	0	0
2006-07	386	369	794	1250	425	456	310	0	0
2007-08	362	344	754	1213	410	459	307	0	0
2008-09	393	378	775	1211	397	436	295	0	0
2009-10	399	385	780	1221	395	441	300	0	0
2010-11	447	431	816	1234	385	418	286	0	0
2011-12	443	422	818	1228	396	410	270	0	0

Historical Percentage Changes			
Year	K-8	Diff.	%
2001-02	1438	0	0.0%
2002-03	1440	2	0.1%
2003-04	1412	-28	-1.9%
2004-05	1399	-13	-0.9%
2005-06	1332	-67	-4.8%
2006-07	1250	-82	-6.2%
2007-08	1213	-37	-3.0%
2008-09	1211	-2	-0.2%
2009-10	1221	10	0.8%
2010-11	1234	13	1.1%
2011-12	1228	-6	-0.5%
K-8 Change		-210	-14.6%

Hampton, NH SAU # 90 Historical Enrollment

PK-8, 2001-2011



Hampton, NH SAU # 90 Projected Enrollment

School District: Hampton, NH SAU#90

12/1/2011

Enrollment Projections By Grade*																				
Birth Year	Births		School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-8	PK-8
2006	141		2011-12	21	135	146	141	150	120	126	140	132	138	0	0	0	0	0	1228	1249
2007	116		2012-13	21	114	140	153	145	151	125	124	139	136	0	0	0	0	0	1227	1248
2008	119		2013-14	21	117	118	146	157	146	157	123	123	143	0	0	0	0	0	1230	1251
2009	125		2014-15	21	123	121	123	150	158	152	155	122	126	0	0	0	0	0	1230	1251
2010	130	(est.)	2015-16	21	127	128	126	127	151	164	150	154	125	0	0	0	0	0	1252	1273
2011	126	(est.)	2016-17	21	124	132	134	130	127	157	162	149	158	0	0	0	0	0	1273	1294
2012	123	(est.)	2017-18	21	121	129	138	138	130	132	155	161	153	0	0	0	0	0	1257	1278
2013	125	(est.)	2018-19	21	122	126	135	142	138	135	130	154	165	0	0	0	0	0	1247	1268
2014	126	(est.)	2019-20	21	123	127	132	139	143	143	133	129	158	0	0	0	0	0	1227	1248
2015	126	(est.)	2020-21	21	124	128	133	136	140	148	141	132	133	0	0	0	0	0	1215	1236
2016	125	(est.)	2021-22	21	123	129	134	137	136	145	146	140	136	0	0	0	0	0	1226	1247

*Projections should be updated on an annual basis. Based on an estimate of births

 Based on children already born

 Based on students already enrolled

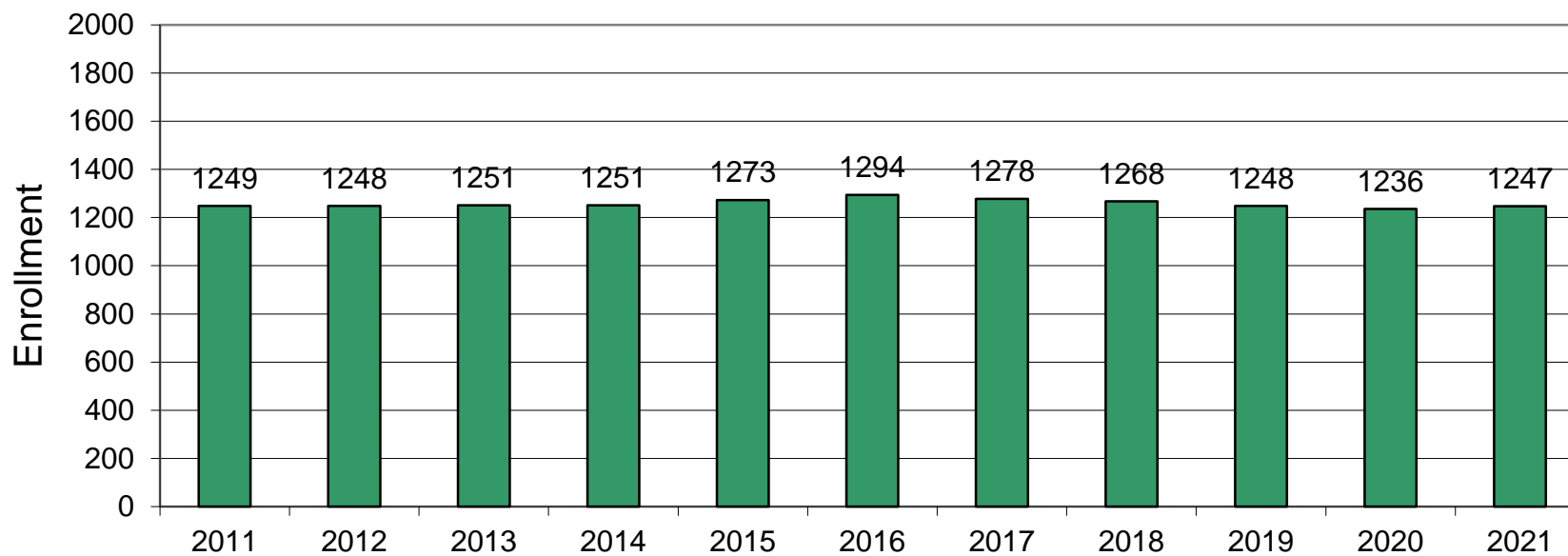
Projected Enrollment in Grade Combinations*									
Year	PK-2	K-2	K-5	K-8	3-5	6-8	7-8	7-12	9-12
2011-12	443	422	818	1228	396	410	270	0	0
2012-13	428	407	828	1227	421	399	275	0	0
2013-14	402	381	841	1230	460	389	266	0	0
2014-15	388	367	827	1230	460	403	248	0	0
2015-16	402	381	823	1252	442	429	279	0	0
2016-17	411	390	804	1273	414	469	307	0	0
2017-18	409	388	788	1257	400	469	314	0	0
2018-19	404	383	798	1247	415	449	319	0	0
2019-20	403	382	807	1227	425	420	287	0	0
2020-21	406	385	809	1215	424	406	265	0	0
2021-22	407	386	804	1226	418	422	276	0	0

Projected Percentage Changes			
Years	K-8	Diff.	%
2011-12	1228	0	0.0%
2012-13	1227	-1	-0.1%
2013-14	1230	3	0.2%
2014-15	1230	0	0.0%
2015-16	1252	22	1.8%
2016-17	1273	21	1.7%
2017-18	1257	-16	-1.3%
2018-19	1247	-10	-0.8%
2019-20	1227	-20	-1.6%
2020-21	1215	-12	-1.0%
2021-22	1226	11	0.9%
K-8 Change		-2	-0.2%

See "Reliability of Enrollment Projections" section of accompanying letter.
Projections are more reliable for Years 1-5 in the future than for Years 6 and beyond.

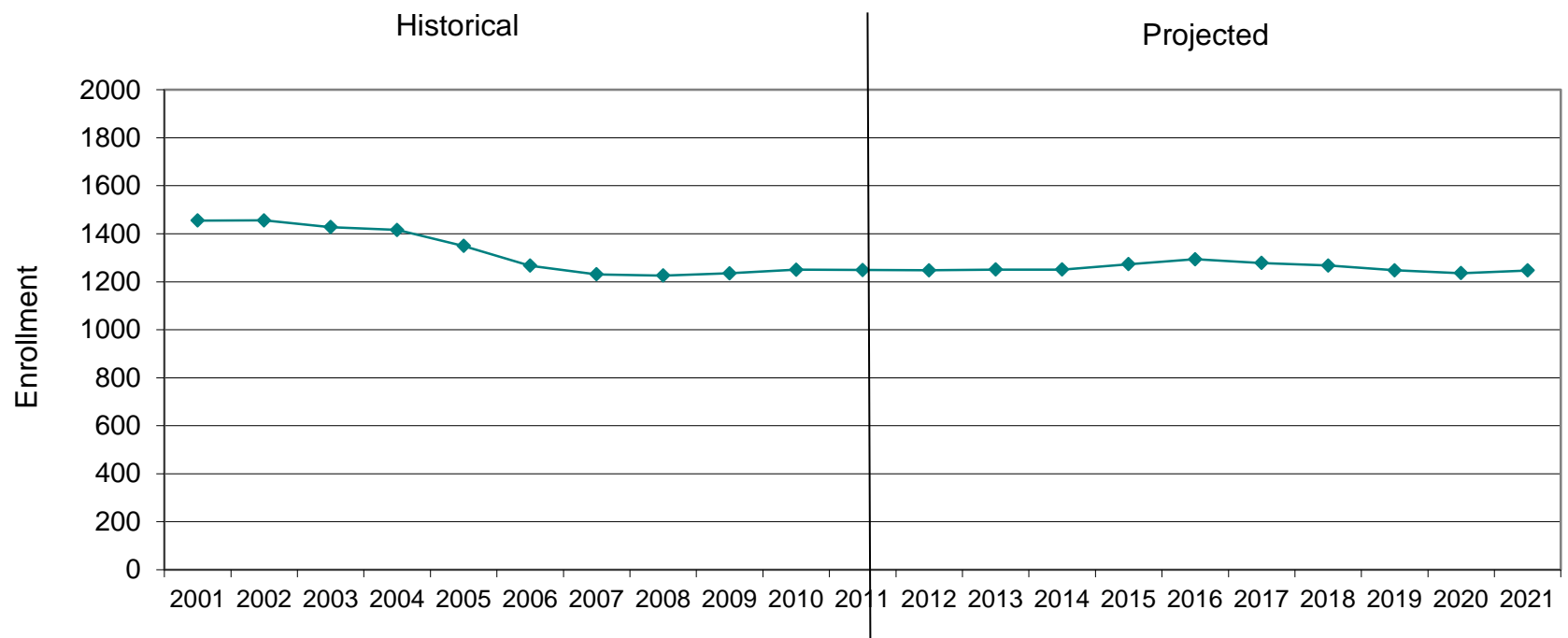
Hampton, NH SAU # 90 Projected Enrollment

PK-8 TO 2021 Based On Data Through School Year 2011-12

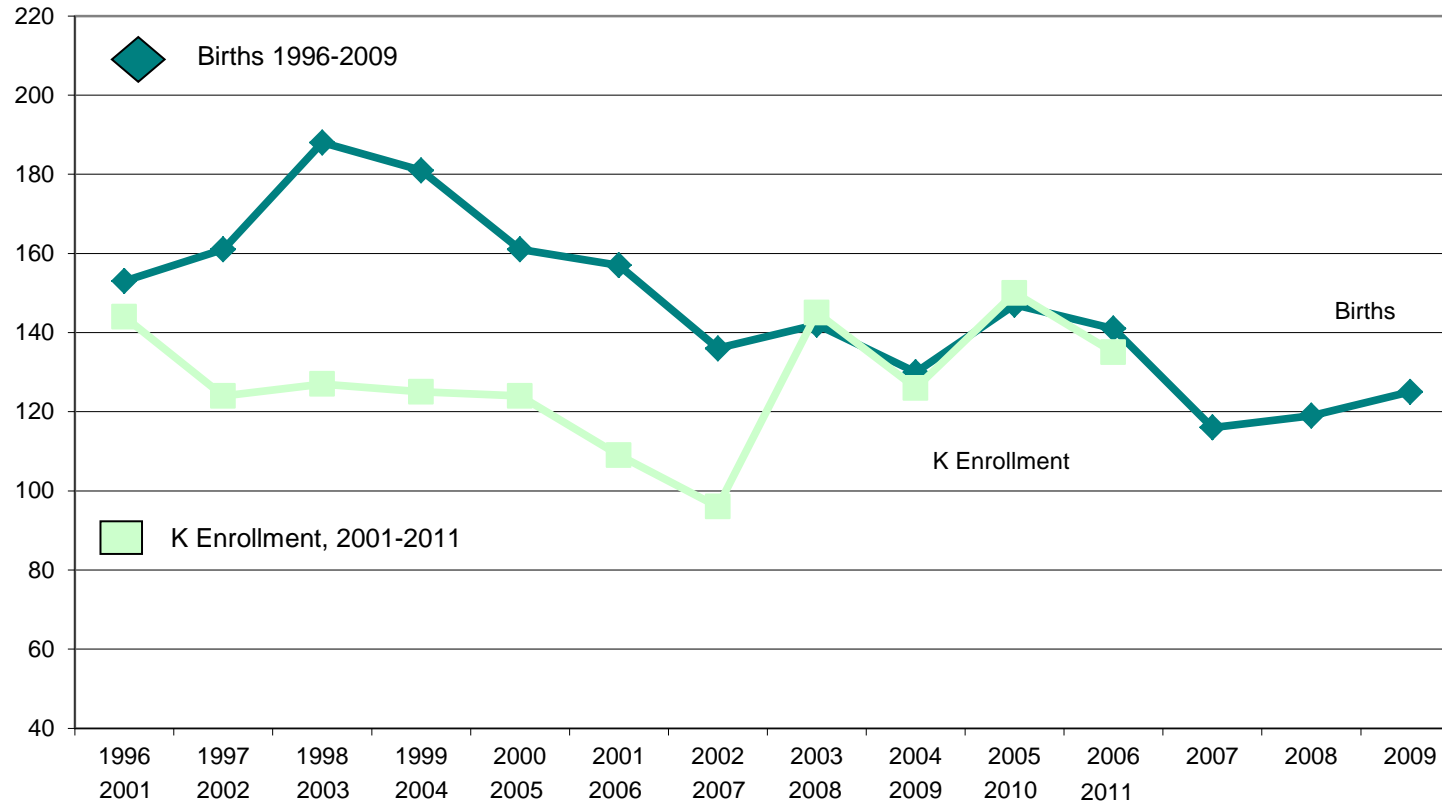


Hampton, NH SAU # 90 Historical & Projected Enrollment

PK-8, 2001-2021



Hampton, NH SAU # 90 Birth-to-Kindergarten Relationship



Hampton, NH SAU # 90 Additional Data

Building Permits Issued		
Year	Single-Family	Multi-Units
2000	62	0
2007	26	15
2008	28	30
2009	18	7
2010	12	6
2011	16 to 10/31	9

Source: HUD and Building Department

Enrollment History		
Year	Voc-Tech 9-12 Total	Non-Public K-12 Total
2000-01	0	n/a
2007-08	0	n/a
2008-09	0	n/a
2009-10	0	n/a
2010-11	0	n/a
2011-12	0	35

Residents in Non-Public Independent and Parochial Schools (Regular Education)														
Enrollments as of Oct. 1	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	2	2	6	1	5	4	3	10	2	0	0	0	0	35

K-12 Home-Schooled Students	
2011	25

K-12 Residents Enrolled in Charter or Magnet Schools	
2011	3

K-12 SpEd Outplaced Students	
2011	3

K-12 Choiced-In, Tuitioned-In, & Other Non-Residents	
2011	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.