



## 2009-10 Enrollment Projections

TO: Barbara S. Powers, Superintendent of Schools, Falmouth, ME  
FROM: Donald G. Kennedy, Ed.D., Demographic Specialist  
DATE: November 30, 2009  
RE: Enrollment Projections

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We are pleased to send you the enclosed documents displaying the past, present, and projected enrollments for the Falmouth School District. 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.

NESDEC's enrollment projection totals from fall of 2008 came within 0.8% of the actual Grade K-12 enrollment total for fall, 2009 (2,116 projected v. 2,133 actual). Adjustments have been made for 2010 in the projection ratios.

The two factors at work which will have the greatest effect upon future Falmouth enrollments are: a decrease in the number of births to Falmouth residents and b. decreased in-migration (related to the real estate slowdown). In the decade from 1994-2003, Falmouth averaged 105 births per year; more recently (and expected over the next 6-7 years) are about 73-86 births annually (with the exception of 95 births in 2004 and 98 in 2006). The ever-changing relationship between Falmouth births and Kindergarten enrollments is displayed on the B-K graph. Falmouth for years has registered about 120 Kindergarteners for every 100 Falmouth births (five years previous), a continuing relationship. Grade 1 is expected to be about 34% larger than the previous year's Kindergarten class. Like many nearby communities Falmouth continues to experience enrollment fluctuations of in/out-migration in Grades 1-12. **K-12 enrollments are forecast to decrease by about 33 students annually over the next ten years.**

**Will these patterns really last for as long as ten years? Probably not.** As soon as the economy and real estate situation improve in the region, additional in-migration may return to Falmouth. Many communities in the region have sold in 2008 (and 2009 to date) only about 60-70% as many homes as in 2005-2007. Building permits have slowed as well; see the “Additional Data” table below. See the description on Page 4 below regarding “reliability of projections”.

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](mailto: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 2008-09, increased to 104 students in Grade 2 in 2009-10, 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](mailto: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.

# Falmouth, ME Historical Enrollment

School District: **Falmouth, ME**

11/30/09

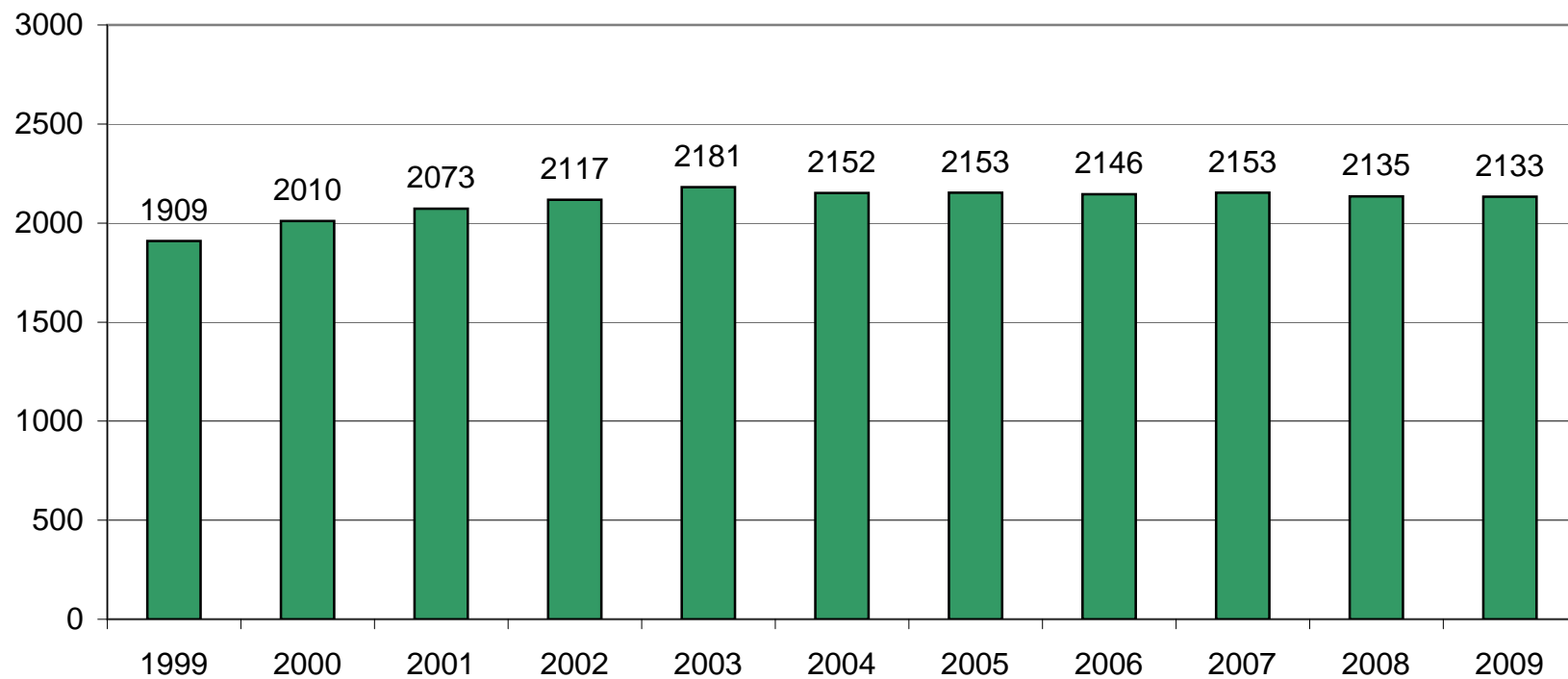
Historical Enrollment By Grade																			
Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
1994	102	1999-00	0	155	150	171	158	158	153	169	149	158	143	114	135	95	1	1909	1909
1995	106	2000-01	0	143	176	159	176	166	159	164	163	156	161	141	114	132	0	2010	2010
1996	109	2001-02	0	159	165	192	169	182	166	159	159	165	141	155	145	116	0	2073	2073
1997	122	2002-03	0	133	177	164	207	171	182	169	165	164	160	135	151	139	0	2117	2117
1998	101	2003-04	0	142	166	189	168	208	177	188	167	174	156	154	138	154	0	2181	2181
1999	109	2004-05	0	123	166	166	191	181	204	170	185	167	156	156	155	132	0	2152	2152
2000	114	2005-06	0	124	159	157	166	192	184	198	163	194	165	153	154	144	0	2153	2153
2001	111	2006-07	0	109	169	145	164	164	197	184	196	172	175	162	155	154	0	2146	2146
2002	92	2007-08	0	109	163	157	145	173	170	193	186	192	163	179	169	154	0	2153	2153
2003	83	2008-09	0	116	142	148	162	149	177	174	200	191	179	157	176	164	0	2135	2135
2004	95	2009-10	0	114	152	147	154	165	156	175	175	193	191	180	158	173	0	2133	2133

Historical Enrollment in Grade Combinations									
Year	PK-4	K-2	3-4	K-8	5-8	6-8	7-8	7-12	9-12
1999-00	792	476	316	1421	629	476	307	794	487
2000-01	820	478	342	1462	642	483	319	867	548
2001-02	867	516	351	1516	649	483	324	881	557
2002-03	852	474	378	1532	680	498	329	914	585
2003-04	873	497	376	1579	706	529	341	943	602
2004-05	827	455	372	1553	726	522	352	951	599
2005-06	798	440	358	1537	739	555	357	973	616
2006-07	751	423	328	1500	749	552	368	1014	646
2007-08	747	429	318	1488	741	571	378	1043	665
2008-09	717	406	311	1459	742	565	391	1067	676
2009-10	732	413	319	1431	699	543	368	1070	702

Historical Percentage Changes			
Year	K-12	Diff.	%
1999-00	1909	0	0.0%
2000-01	2010	101	5.3%
2001-02	2073	63	3.1%
2002-03	2117	44	2.1%
2003-04	2181	64	3.0%
2004-05	2152	-29	-1.3%
2005-06	2153	1	0.0%
2006-07	2146	-7	-0.3%
2007-08	2153	7	0.3%
2008-09	2135	-18	-0.8%
2009-10	2133	-2	-0.1%
<b>K-12 Change</b>		<b>224</b>	<b>11.7%</b>

# Falmouth, ME Historical Enrollment

**PK-12, 1999-2009**



# Falmouth, ME Projected Enrollment

School District: **Falmouth, ME**

11/30/09

Enrollment Projections By Grade*																				
Year	Births		School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2004	95		2009-10	0	114	152	147	154	165	156	175	175	193	191	180	158	173	0	2133	2133
2005	79		2010-11	0	95	153	146	151	158	171	156	178	176	183	190	182	155	0	2094	2094
2006	98		2011-12	0	118	127	146	150	155	164	171	158	179	167	182	192	179	0	2088	2088
2007	73		2012-13	0	88	158	122	150	154	161	164	174	159	170	167	184	189	0	2040	2040
2008	86	(est.)	2013-14	0	103	118	151	125	154	159	161	166	175	151	170	169	181	0	1983	1983
2009	86	(est.)	2014-15	0	103	138	113	155	128	159	159	163	167	166	151	172	166	0	1940	1940
2010	84	(est.)	2015-16	0	101	138	132	116	159	133	159	161	164	159	166	153	169	0	1910	1910
2011	85	(est.)	2016-17	0	102	135	132	135	119	165	133	161	162	156	159	168	150	0	1877	1877
2012	83	(est.)	2017-18	0	99	137	129	135	138	123	165	135	162	154	156	161	165	0	1859	1859
2013	85	(est.)	2018-19	0	102	133	131	132	138	143	123	167	136	154	154	158	158	0	1829	1829
2014	85	(est.)	2019-20	0	102	137	127	134	135	143	143	125	168	129	154	156	155	0	1808	1808

\*Projections should be updated on an annual basis.

Based on an estimate of births

Based on children already born

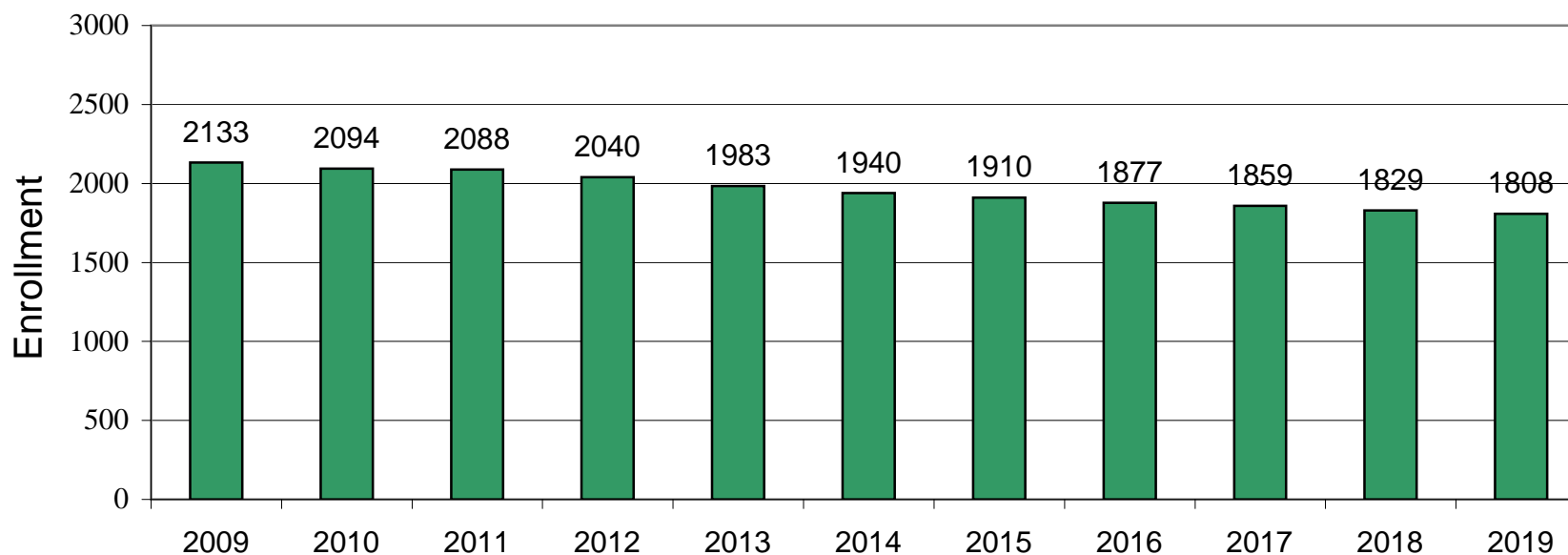
Based on students already enrolled

Projected Enrollment in Grade Combinations*									
Year	PK-4	K-2	3-4	K-8	5-8	6-8	7-8	7-12	9-12
2009-10	732	413	319	1431	699	543	368	1070	702
2010-11	703	394	309	1384	681	510	354	1064	710
2011-12	696	391	305	1368	672	508	337	1057	720
2012-13	672	368	304	1330	658	497	333	1043	710
2013-14	651	372	279	1312	661	502	341	1012	671
2014-15	637	354	283	1285	648	489	330	985	655
2015-16	646	371	275	1263	617	484	325	972	647
2016-17	623	369	254	1244	621	456	323	956	633
2017-18	638	365	273	1223	585	462	297	933	636
2018-19	636	366	270	1205	569	426	303	927	624
2019-20	635	366	269	1214	579	436	293	887	594

Projected Percentage Changes			
Years	K-12	Diff.	%
2009-10	2133	0	0.0%
2010-11	2094	-39	-1.8%
2011-12	2088	-6	-0.3%
2012-13	2040	-48	-2.3%
2013-14	1983	-57	-2.8%
2014-15	1940	-43	-2.2%
2015-16	1910	-30	-1.5%
2016-17	1877	-33	-1.7%
2017-18	1859	-18	-1.0%
2018-19	1829	-30	-1.6%
2019-20	1808	-21	-1.1%
<b>K-12 Change</b>		<b>-325</b>	<b>-15.2%</b>

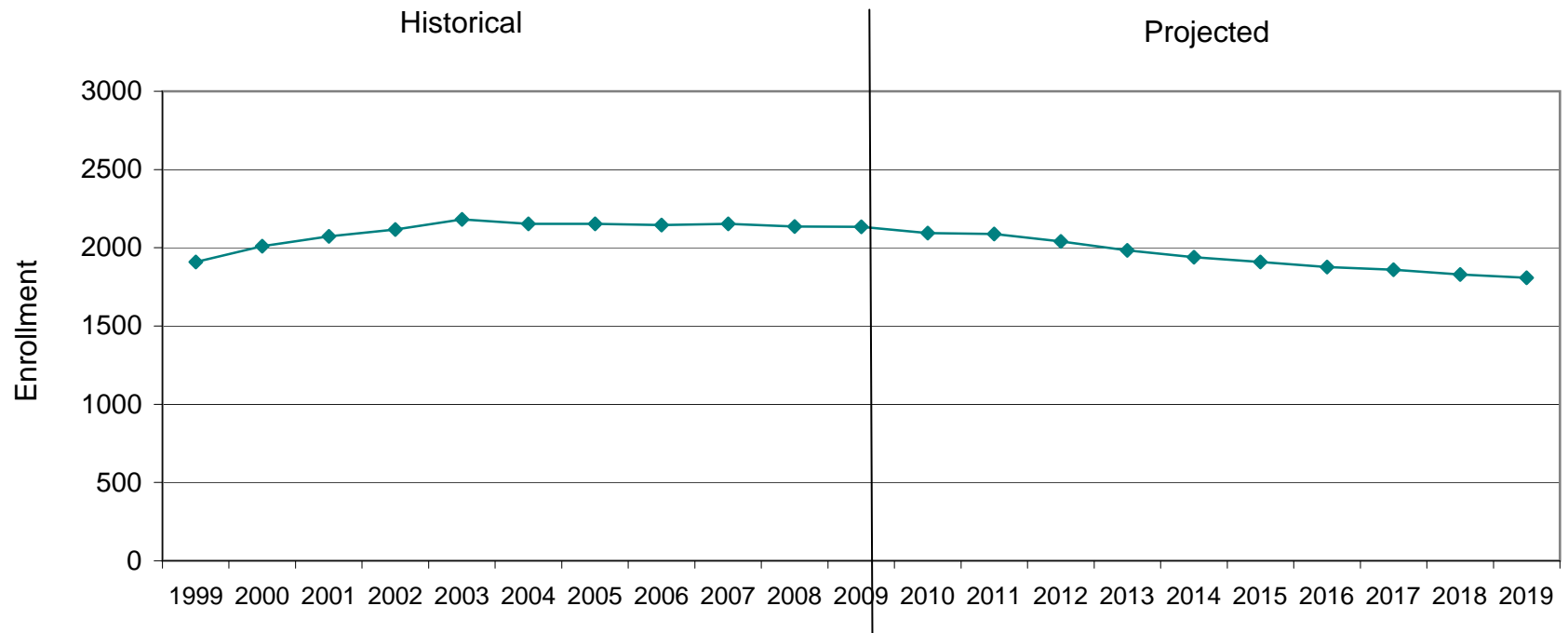
# Falmouth, ME Projected Enrollment

PK-12 TO 2019 Based On Data Through School Year 2009-10

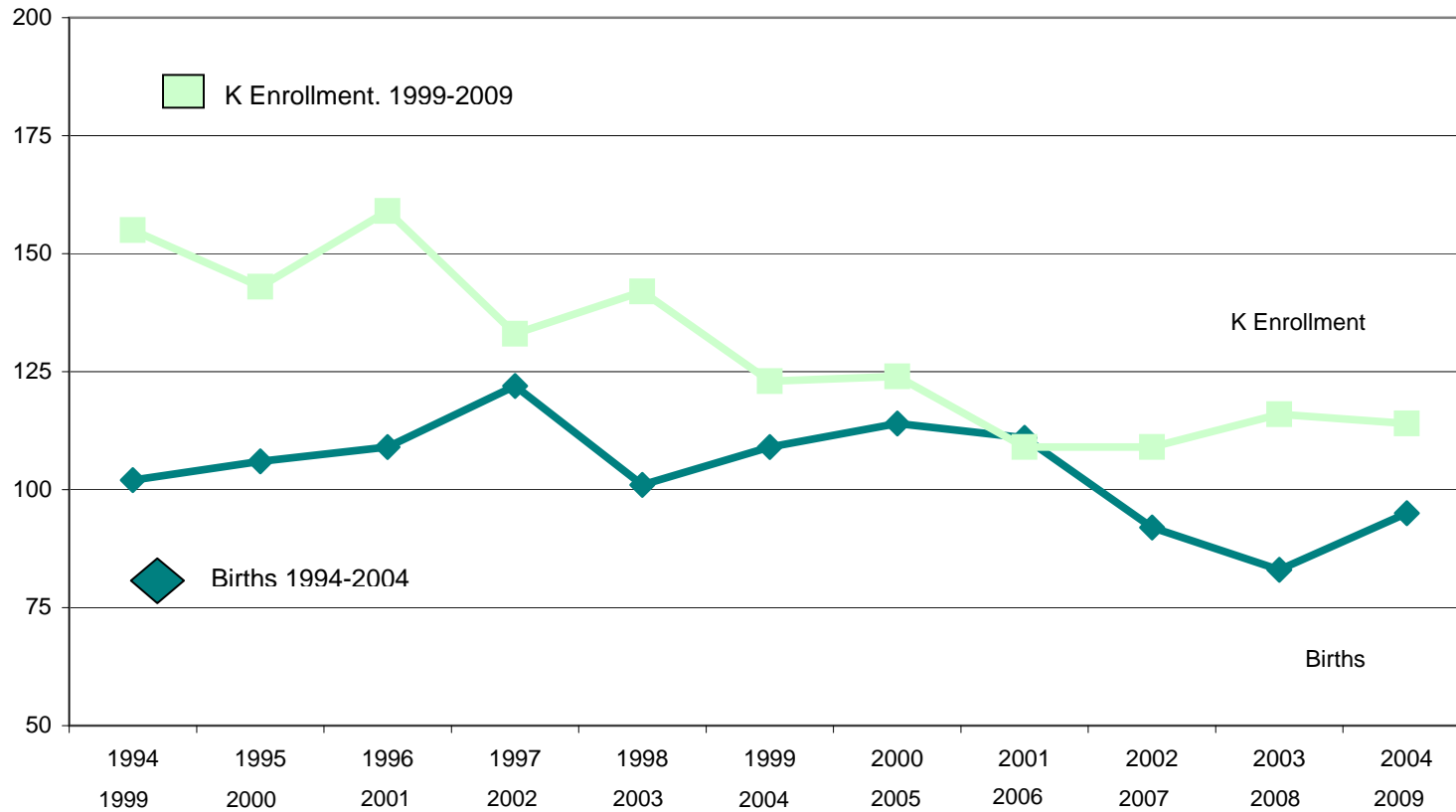


# Falmouth, ME Historical & Projected Enrollment

### PK-12, 1999 TO 2019



# Falmouth, ME Birth-to-Kindergarten Relationship



# Falmouth, ME Additional Data

Building Permits Issued		
Year	Single-Family	Multi-Units
1999	0	0
2005	52	0
2006	66	0
2007	62	0
2008	28	0
2009	31 to date	0

Enrollment History		
Year	Voc-Tech 9-12 Total	Non-Public K-12 Total
1999-00	0	0
2005-06	0	193
2006-07	0	0
2007-08	0	192
2008-09	0	175
2009-10	0	117

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
	15	0	4	5	5	6	5	8	12	13	18	17	9	117

K-12 Home-Schooled Students	
2009	16

K-12 Residents Enrolled in Charter or Magnet Schools	
2009	0

K-12 SpEd Outplaced Students	
2009	6

K-12 Choiced-In, Tuitioned-In, & Other Non-Residents	
2009	7

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