

**2017-18 SCHOOL ENROLLMENT PROJECTION STUDY
FOR
THE FALMOUTH SCHOOL DEPARTMENT**

Prepared by:

**Rebecca Wandell
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EXECUTIVE SUMMARY

Three models were used to project future enrollment in Falmouth. The first model, called the “best fit” model is a standard statistical model which projects enrollment based on historical trends. The “best fit” model is considered to be the most likely scenario to occur in Falmouth **IF** future enrollment follows historical patterns of enrollment. The second model, called the “55 new housing units” model is first based on the “best fit” model, then takes into account the impact on enrollment from 55 new housing units being built annually. The third model, called the “65 new housing units” model is first based on the “best fit” model, then takes into account the impact on enrollment from 65 new housing units being added annually.

- ▶ The term “best fit” refers to the strongest statistical correlation between historical trends. The reader should keep in mind the “best fit” model is not always the best fit for predicting future enrollment. This is often the case in situations where the “best fit” model does not adequately account for the impact of resident development, when residential development, economic or population changes are occurring in the area, or when recent changes in migration trends or resident births trends occur.
- ▶ When looking at the enrollment figures it is important for the reader to pay close attention to the type of enrollment being discussed, i.e., whether the data is referring to resident enrollment, resident attending enrollment, non-resident students attending district schools, resident students attending non-district schools, or total attending enrollment. Additionally, due to limitations on availability of certain types of enrollment data, these figures do not include 100% home schooled students, or students attending privately paid for schools.

To provide reasonable cushions for use in planning school facilities, the enrollment projections are presented in the report **Appendix** within ranges of plus and minus 10% for the K-8 grade groups, and plus and minus 5% for grades 9-12. In addition, more conservative ranges of plus and minus 3% across all grade levels are supplied. In completing the enrollment projections for Falmouth, the major findings of this study are as follows:

Resident Birth Trends:

Resident births during the ten-year period (2001-02 to 2010-11) influenced first grade enrollment over the last ten years (2008-09 to 2017-18), fluctuated year-to-year. The average number of births over the last five years of the period, (2006-07 to 2010-11), was 77 births, which was significantly lower than the previous five-year period (2001-02 to 2005-06), or 89 births. What this means is, on average, Falmouth had 12 fewer children born to residents. The decline in average resident births over the last five years of the period placed downward pressure on average entering first grade class sizes, while fluctuations in the level of resident births year-to-year caused fluctuations in first grade class sizes. Over the last ten-year period of available resident birth data, 2007-08 to 2016-17, births to residents of Falmouth averaged 81 births annually, ranging between 74 and 92 births. The most recent five-year period (2012-13 to 2016-17) averaged 85 births, while over the last three years (2014-15 to 2016-17) the average of births to residents declined slightly, to average 82 births.

Preschool Migration Trends:

In the first five years of the last decade, (2008-09 to 2012-13), Falmouth experienced an in-migration of preschool-aged children. The level of preschool migration increased over last five years (2013-14 to 2017-18), and over the last three years, (2015-16 to 2017-18).

Taken together, a decline in the average level of resident births despite the increase in average preschool in-migration resulted in entering first grade class sizes that, on average, have declined slightly over the last five years. In addition, fluctuations in the level of resident births and preschool migration levels caused year-to-year fluctuations in first grade class sizes.

Elementary Migration Trends:

Over the last three and five years a few grade levels experienced higher levels of in-migration when compared with the previous first five-year trends. What these changes in migration trends means is, the school population outlook would likely have been somewhat different just five years ago compared with what the outlook is today.

Economic Influences on Enrollment:

A decline in the unemployment rate indicates recovery from the recession has occurred, and an increase in the Civilian Labor Force has also increased the number of workers in the area. In addition, while the increase in the Civilian Labor Force may have had an impact on school enrollment over the last five years, any impact would already be accounted for in the last three to five-year historical enrollment trends used to make projections.

New Housing Development Impact on Enrollment:

Due to the Contract Zone (Homestead Farms) being developed, Falmouth may experience a higher level of growth compared to what has occurred on average over the last three years. When looking at the three and five-year averages of residential development compared with preschool and elementary migration, it appears there was a relationship between new housing units and additional preschool migration and that the 2017-18 “best fit” model would underestimate both preschool and elementary migration trends if these higher levels of development do come to fruition.

To take into account the additional resident births, preschool migration, and elementary migration from additional new homes in Falmouth two alternative models were created in addition to the “best fit” model. The second model called the 2017-18 “55 new housing units” model takes into account the impact from 55 new homes in Falmouth, and the third model, called the 2017-18 “65 new housing units” model takes into account the impact from 65 new homes in Falmouth. Details on how these two additional models were created can be found in **Section VI** of the report.

- **2017-18 Best Fit Projections for Falmouth Resident Students:**

The 2017-18 “best fit” model is based on average births occurring between 2014-15 and 2016-17, and on a continuation of preschool in-migration similar to the level occurring over the last four years, except for the 2018-19 first grade class which was based on the 2017-18 Kindergarten enrollment and the in-migration occurring between first grade and Kindergarten over the last four years. *(See Table II-1 and Figure II-2).*

First Grade Class Size:

- ▶ Under the 2017-18 “best fit” model, first grade enrollment is projected to experience yearly swings corresponding with swings in resident births, with enrollment ranging between 128 and 159 students, and averaging 143 students annually through 2027-28.

Grade Group Enrollment:

- ▶ Grades K-5 resident attending enrollment will remain similar to the current enrollment of 886 students to range between 875 and 880 students through 2020-21. Following 2020-21 attending enrollment is projected to slowly increase to range between 903 and 942 students through 2027-28. Only four Falmouth resident students are projected to attend non-district schools each year through 2027-28.
- ▶ Grades 6-8 resident attending enrollment will increase reaching 550 students by 2020-21. Following 2020-21, enrollment is projected to decline to reach 454 students in 2023-24 before increasing again to range between 491 and 559 students through 2027-28. Another 1 Falmouth resident student is projected to attend non-district schools each year through 2027-28.
- ▶ Grades 9-12 resident attending enrollment is projected to decline from the current enrollment of 682 students to range between 652 and 671 students through 2021-22. Following 2021-22, enrollment is projected to increase, reaching 711 students in 2023-24 and then is projected to decline, reaching 633 students in 2027-28. Another 10 to 11 Falmouth resident students are projected to attend non-district schools each year through 2027-28.

- **2017-18 55 New Housing Units Projections for Falmouth Resident Students:**

The 2017-18 “55 new housing units” model is based on 2017-18 “best fit” model then takes into account the impact on resident births, preschool migration and elementary migration from additional homes built in the community. **Details on how the projections were made can be found in Section VI of this report.**

First Grade Class Size:

- ▶ Under the 2017-18 “55 new housing units” model, first grade enrollment is projected to experience yearly swings corresponding with swings in resident births, with total enrollment ranging between 129 and 164 students, and averaging 150 students annually through 2027-28.

Grade Group Enrollment:

- ▶ Grades K-5 resident attending enrollment will remain similar to the current enrollment of 886 students to range between 879 and 902 students through 2019-20 before increasing to 930 students in 2021-22. Following 2021-22 attending enrollment is projected to slowly increase further to range between 960 and 987 students through 2027-28. Only four Falmouth resident students are projected to attend non-district schools each year through 2027-28.
- ▶ Grades 6-8 resident attending enrollment will increase reaching 553 students by 2020-21. Following 2020-21, enrollment is projected to decline, to reach 465 students in 2023-24 before increasing again to range between 507 and 585 students through 2027-28. Another 1 Falmouth resident student is projected to attend non-district schools each year through 2027-28.
- ▶ Grades 9-12 resident attending enrollment is projected to decline from the current enrollment of 682 students to range between 652 and 671 students through 2021-22. Following 2021-22, enrollment is projected to increase, reaching 714 students in 2023-24 and is then projected to reach 639 students in 2026-27 and 651 students 2027-28. Another 10 to 11 Falmouth resident students are projected to attend non-district schools each year through 2027-28.

- **2017-18 65 New Housing Units Projections for Falmouth Resident Students:**

The 2017-18 “65 new housing units” model is based on 2017-18 “best fit” model then takes into account the impact on resident births, preschool migration and elementary migration from additional homes built in the community. **Details on how the projections were made can be found in Section VI of this report.**

First Grade Class Size:

- ▶ Under the 2017-18 “65 new housing units” model, first grade enrollment is projected to experience yearly swings corresponding with swings in resident births, with total enrollment ranging between 131 and 171 students through 2027-28. In addition, Falmouth should experience an average first grade enrollment of 156 students over the next ten years.

Grade Group Enrollment:

- ▶ Grades K-5 resident attending enrollment will remain similar to the current enrollment of 886 students to range between 886 and 908 students through 2019-20 before increasing to 973 students in 2021-22. Following 2021-22 attending enrollment is projected to increase further, ranging between 1,007 and 1,048 students through 2027-28. Only four to five Falmouth resident students are projected to attend non-district schools each year through 2027-28.
- ▶ Grades 6-8 resident attending enrollment will increase reaching 554 students by 2020-21. Following 2020-21, enrollment is projected to decline to reach 480 students in 2023-24 before increasing again, reaching 615 students by 2027-28. Another 1 Falmouth resident student is projected to attend non-district schools each year through 2027-28.
- ▶ Grades 9-12 resident attending enrollment is projected to decline from the current enrollment of 682 students to range between 652 and 672 students through 2021-22. Following 2021-22, enrollment is projected to increase, reaching 716 students in 2023-24 and then should decline to reach 654 students in 2026-27, then increasing to 675 students by 2027-28. Another 10 to 11 Falmouth resident students are projected to attend non-district schools each year through 2027-28.

Recommendations:

Outside forces such as changes in the economy, housing prices and/or new housing starts, job losses or changes, or unexpected national, state or local events can have an impact on enrollment trends which could in turn alter the outlook of enrollment in Falmouth. Future enrollment should routinely be monitored for potential changes in trends, specifically looking to see if future enrollment deviates significantly from what is projected. In addition, the School Department should continue to routinely monitor births to residents, preschool migration trends, grade-to-grade migration trends, and local housing development trends.

Appendix Table 4 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 Best Fit Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	875	526	1,401	661	2,062	4	1	5	11	16	879	527	1,406	672	2,078
2019-20	881	541	1,422	655	2,077	4	1	5	10	15	885	542	1,427	665	2,092
2020-21	880	550	1,430	652	2,082	4	1	5	10	15	884	551	1,435	662	2,097
2021-22	904	507	1,411	671	2,082	4	1	5	11	16	908	508	1,416	682	2,098
2022-23	923	478	1,401	701	2,102	4	1	5	11	16	927	479	1,406	712	2,118
2023-24	942	454	1,396	711	2,107	4	1	5	11	16	946	455	1,401	722	2,123
2024-25	931	491	1,422	691	2,113	4	1	5	11	16	935	492	1,427	702	2,129
2025-26	909	534	1,443	652	2,095	4	1	5	10	15	913	535	1,448	662	2,110
2026-27	903	559	1,462	626	2,088	4	1	5	10	15	907	560	1,467	636	2,103
2027-28	906	544	1,450	633	2,083	4	1	5	10	15	910	545	1,455	643	2,098

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc.... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 4-1 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 55 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	879	527	1,406	661	2,067	4	1	5	11	16	883	528	1,411	672	2,083
2019-20	894	541	1,435	655	2,090	4	1	5	10	15	898	542	1,440	665	2,105
2020-21	902	553	1,455	652	2,107	4	1	5	10	15	906	554	1,460	662	2,122
2021-22	930	511	1,441	671	2,112	4	1	5	11	16	934	512	1,446	682	2,128
2022-23	962	482	1,444	702	2,146	4	1	5	11	16	966	483	1,449	713	2,162
2023-24	987	465	1,452	714	2,166	4	1	5	11	16	991	466	1,457	725	2,182
2024-25	979	507	1,486	694	2,180	4	1	5	11	16	983	508	1,491	705	2,196
2025-26	960	557	1,517	657	2,174	4	1	5	10	15	964	558	1,522	667	2,189
2026-27	960	585	1,545	639	2,184	4	1	5	10	15	964	586	1,550	649	2,199
2027-28	968	574	1,542	651	2,193	4	1	5	10	15	972	575	1,547	661	2,208

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 4-2 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 65 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	886	527	1,413	661	2,074	4	1	5	11	16	890	528	1,418	672	2,090
2019-20	908	542	1,450	655	2,105	4	1	5	10	15	912	543	1,455	665	2,120
2020-21	929	554	1,483	652	2,135	4	1	5	10	15	933	555	1,488	662	2,150
2021-22	973	514	1,487	672	2,159	4	1	5	11	16	977	515	1,492	683	2,175
2022-23	1,022	490	1,512	703	2,215	5	1	6	11	17	1,027	491	1,518	714	2,232
2023-24	1,048	480	1,528	716	2,244	5	1	6	11	17	1,053	481	1,534	727	2,261
2024-25	1,035	529	1,564	699	2,263	5	1	6	11	17	1,040	530	1,570	710	2,280
2025-26	1,013	587	1,600	666	2,266	5	1	6	11	17	1,018	588	1,606	677	2,283
2026-27	1,007	621	1,628	654	2,282	5	1	6	10	16	1,012	622	1,634	664	2,298
2027-28	1,010	615	1,625	675	2,300	5	1	6	11	17	1,015	616	1,631	686	2,317

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

I. INTRODUCTION

Change in school enrollment derives from two sources, changes in the number of births to residents, and the net migration of preschool and school-aged children into and out of a community. These projections reflect both sources of change.

The projections are based on an in-house cohort survival model which contains two steps.

- First, historical trends and relationships between entering class sizes (first grade enrollment) and resident births in the year that is six years before the enrollment year is analyzed. Correlation coefficients (using Pearson's r-squared) are calculated for the last three, four, five, six, seven, eight, nine and ten-year periods regarding the relationship between first grade enrollment and births. The correlation coefficients are examined to determine which period represents the statistical "best fit" for projecting future first grade enrollment based on resident birth data.
- Second, historical trends at each grade level are analyzed, specifically looking at the grade-to-grade survival ratios. These ratios represent the number of students in a grade in one year (i.e., 1st grade in 2016-17) in relation to the number of students in the next grade the following year (i.e., 2nd grade in 2017-18). Then correlation coefficients (using Pearson's r-squared) are calculated for the last three, four, five, six, seven, eight, nine and ten-year periods regarding the relationship between enrollment in a grade in one year and the next grade the following year to determine which period represents the statistical "best fit" at each of the grade levels. The grade-to-grade ratios that represent the "best fit" are then applied to the current enrollment in each grade and projected first grade classes to project enrollment for the next ten years.
- To provide reasonable cushions for use in the planning of school facilities, school enrollment projections are summarized by grade group and presented the projections within ranges of plus and minus 10% for grades K-8 and plus and minus 5% for grades 9-12, and plus and minus 3% for grades K-12. These ranges and details on the enrollment data and methodologies used for making the projections can be found in the report **Appendix**.

Sections II and IV of this report provide historical enrollment trends and three sets of enrollment projections each projecting enrollment through 2027-28 for each grade and by grade group. **Section III** discusses the historical grade-to-grade migration trends used to complete the projections.

Section VI of this report presents economic trends, population trends, and residential development factors that may influence enrollment projections.

Grade by grade historical and projected enrollment, and ranges for use in school facilities planning are presented in the report **Appendix** along with a detailed explanation of the data used and methodologies.

II. FIRST GRADE ENROLLMENT

A. Historical First Grade Enrollment

First grade enrollment over the last ten years (2008-09 to 2017-18) fluctuated year-to-year while declining, on average. During this ten-year period, first grade enrollment ranged between 123 and 152 students, with an average enrollment of 138 students. The average first grade enrollment over the last five years (2013-14 to 2017-18), was 136 students, a lower level of average enrollment compared with the average of the previous five-year period (2008-09 to 2012-13), or 140 students. Enrollment over the last three years (2015-16 to 2017-18) was lower than the five-year average, with first grade enrollment averaging 130 students. *(See Table II-1 and Figure II-2).*

B. Resident Births Influencing Historical Enrollment

Resident births during the ten-year period influencing first grade enrollment over the last ten years (2001-02 to 2010-11), declined, on average. The average number of births over the last five years of the period, (2006-07 to 2010-11), was 77 births, which was lower than the previous five-year period (2001-02 to 2005-06), or 89 births. What this means is, on average, Falmouth had 12 fewer children born to residents. **The decline in average resident births over the last five years of the period placed downward pressure on average entering first grade class sizes, while fluctuations in the level of resident births year-to-year caused fluctuations in first grade class sizes.** *(See Table II-1 and Figure II-1).*

C. Resident Births Influencing Future Enrollment

Over the last ten-year period of available resident birth data, 2007-08 to 2016-17, births to residents of Falmouth averaged 81 births annually, with births fluctuating year-to-year, to range between 74 and 92 births. The most recent five-year period (2012-13 to 2016-17) averaged 85 births, while over the last three years (2014-15 to 2016-17) the average of births to residents declined slightly, to average 82 births. *(See Table II-1 and Figure II-1).*

The “best fit” projections used the three-year average (2014-15 to 2016-17) of births to estimate future births, or the 2017-18 “best fit” model assumes resident births should average about 82 births annually. **Since Falmouth has experienced fluctuations in the number of resident births in the past, it is reasonable to assume these fluctuations will continue to occur in the future. However, it is impossible to predict which years will see higher birth levels verse lower birth levels. Therefore, due to the influence resident births has on future first grade enrollment, the Falmouth School Department will need to keep an eye on future resident births.**

D. Net Preschool Migration Trends

In the first five years of the last decade, (2008-09 to 2012-13), Falmouth experienced an in-migration of preschool-aged children, with an average migration ratio of 1.573. In the past five years, (2013-14 to 2017-18), Falmouth experienced a higher preschool in-migration, with an average migration ratio of 1.779. Additionally, over the last three years, (2015-16 to 2017-18), preschool in-migration continued to remain strong, with an average ratio of 1.700. **Over the last ten years, average preschool in-migration has increased, placing upward pressure on first grade class sizes over the last five years. (See Table II-1).**

NOTE: Taken together, a decline in the average level of resident births despite the increase in average preschool in-migration resulted in entering first grade class sizes that, on average, have declined slightly over the last five years. In addition, fluctuations in the level of resident births and preschool migration levels caused year-to-year fluctuations in first grade class sizes.

E. Projections of Entering First Grade Class Sizes

The 2017-18 “best fit” model is based on average births occurring between 2014-15 and 2016-17, and on a continuation of preschool in-migration similar to the level occurring over the last four years, except for the 2018-19 first grade class which was based on the 2017-18 Kindergarten enrollment and the in-migration occurring between first grade and Kindergarten over the last four years. (See Table II-1 and Figure II-2).

- ▶ Under the 2017-18 “best fit” model, first grade enrollment is projected to experience yearly swings corresponding with swings in resident births, with enrollment ranging between 128 and 159 students, and averaging 143 students annually through 2027-28.

The 2017-18 “55 new housing units” model is first based on 2017-18 “best fit” model then takes into account the impact on resident births, preschool migration and elementary migration from 55 new homes being added annually.

- ▶ Under the 2017-18 “55 new housing units” model, first grade enrollment is projected to experience yearly swings corresponding with swings in resident births, with total enrollment ranging between 129 and 164 students, and averaging 150 students annually through 2027-28.

The 2017-18 “65 new housing units” model is first based on 2017-18 “best fit” model then takes into account the impact on resident births, preschool migration and elementary migration from additional homes built in the community.

- ▶ Under the 2017-18 “65 new housing units” model, first grade enrollment is projected to experience yearly swings corresponding with swings in resident births, with total enrollment ranging between 131 and 171 students through 2027-28. In addition, Falmouth should experience an average first grade enrollment of 156 students over the next ten years.

Table II-1 - Relationship of Entering First Grade Class Size to Resident Births
Falmouth School Department

Birth Year (Oct. 15 - Oct. 14)	# of Resident Births			First Grade Year	Best Fit Model		55 New Housing Units Model		65 New Housing Units Model		
					First Grade Enrollment	Ratio 1 st /Births	First Grade Enrollment	Ratio 1 st /Births	First Grade Enrollment	Ratio 1 st /Births	
2001-02	85			2008-09	142	1.671					
2002-03	90			2009-10	152	1.689					
2003-04	92			2010-11	126	1.370					
2004-05	83			2011-12	135	1.627					
2005-06	96			2012-13	145	1.510					
2006-07	74			2013-14	145	1.959					
2007-08	79			2014-15	145	1.835					
2008-09	77			2015-16	144	1.870					
2009-10	76			2016-17	123	1.618					
2010-11	77			2017-18*	124	1.610	124	1.610	124	1.610	
2011-12	74			2018-19	128	1.730	129	1.743	131	1.770	
2012-13	87			2019-20	151	1.736	154	1.770	158	1.816	
2013-14	92			2020-21	159	1.728	164	1.783	171	1.859	
2014-15	85			2021-22	147	1.729	153	1.800	162	1.906	
2015-16	80			2022-23	139	1.738	146	1.825	157	1.963	
2016-17 pre	80			2023-24	139	1.738	148	1.850	161	2.013	
2017-18*	82	84	85	2024-25	142	1.732	146	1.738	147	1.750	
2018-19*	82	86	88	2025-26	142	1.732	149	1.733	153	1.779	
2019-20*	82	88	91	2026-27	142	1.732	153	1.739	158	1.795	
2020-21*	82	90	94	2027-28	142	1.732	156	1.733	163	1.811	
10-Yr Avg. (2001-02 to 2010-11)	83			10-Yr Avg. (2008-09 to 2017-18)	138	1.676					
5-Yr Avg. (2001-02 to 2005-06)	89			First 5-Yr Avg. (2008-09 to 2012-13)	140	1.573					
5-Yr Avg. Births (2006-07 to 2010-11)	77			Most Recent 5-Yr Avg. (2013-14 to 2017-18)	136	1.779					
Births 3-Yr Avg. (2008-09 to 2010-11)	77			Most Recent 3-Yr Avg. (2015-16 to 2017-18)	130	1.700					
Most Recent 10-Yr Avg. (2007-08 to 2016-17)	81			Projected 10-Yr Avg. (2018-19 to 2027-28)	143	1.732	150	1.771	156	1.846	
Most Recent 5-Yr Avg. (2012-13 to 2016-17)	85										
Most Recent 3-Yr Avg. (2014-15 to 2016-17)	82										

Births - Maine Center for Disease Control and Prevention, Data, Research and Vital Statistics. 2017 births are preliminary; *2017-18 to 2020-21 births estimated based on average births between 2014-15 and 2016-17. **Note:** Enrollment includes all resident students attending Falmouth schools and resident students attending school out-of-district, except 100% home schooled students and students attending privately paid for schools. **Source:** 2008-09 to 2016-17 -October 1st, resident enrollment from MDOE, 2017-18 date from the Falmouth School Department. All else calculated by Wandell Consulting.

Figure II-1

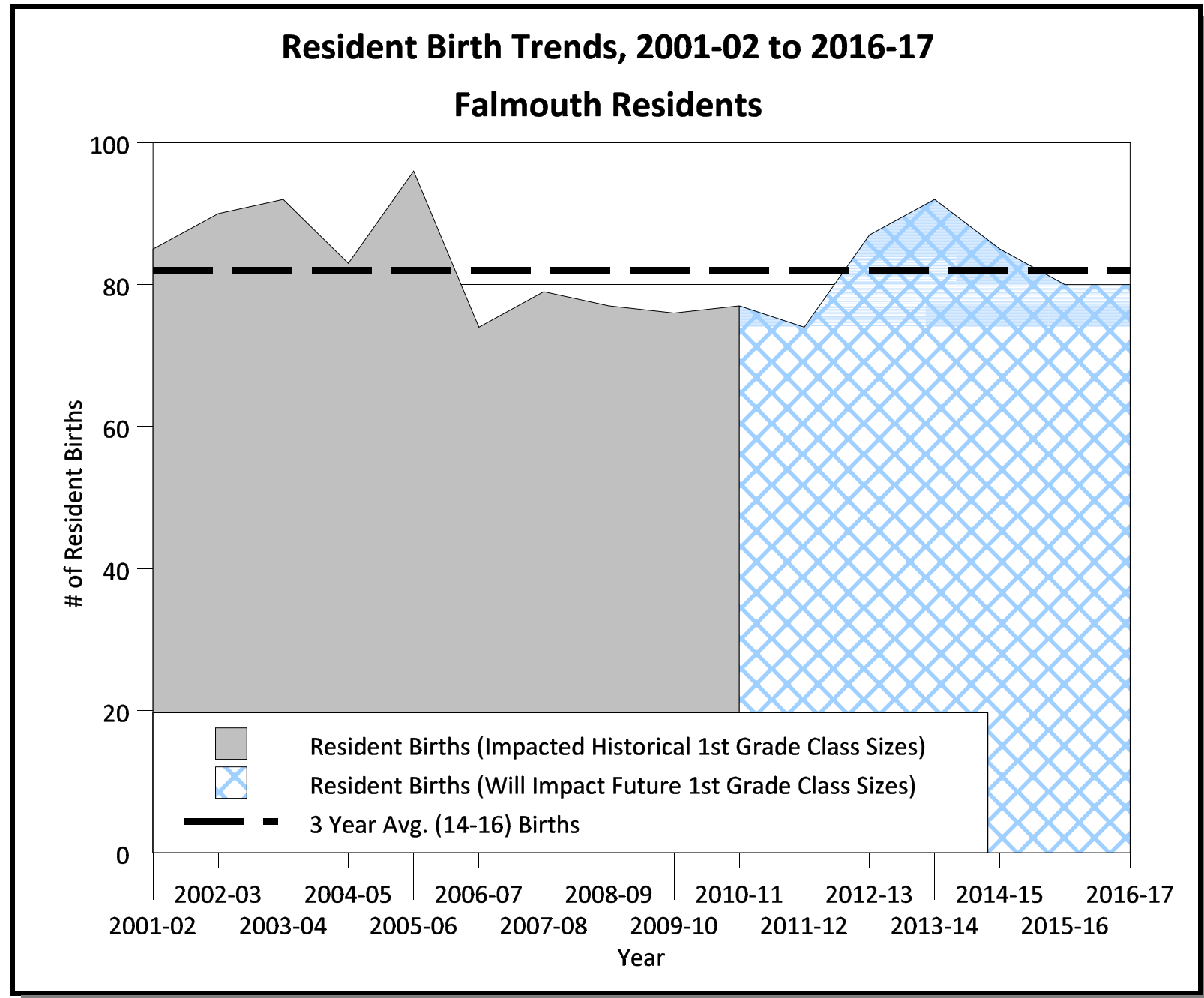
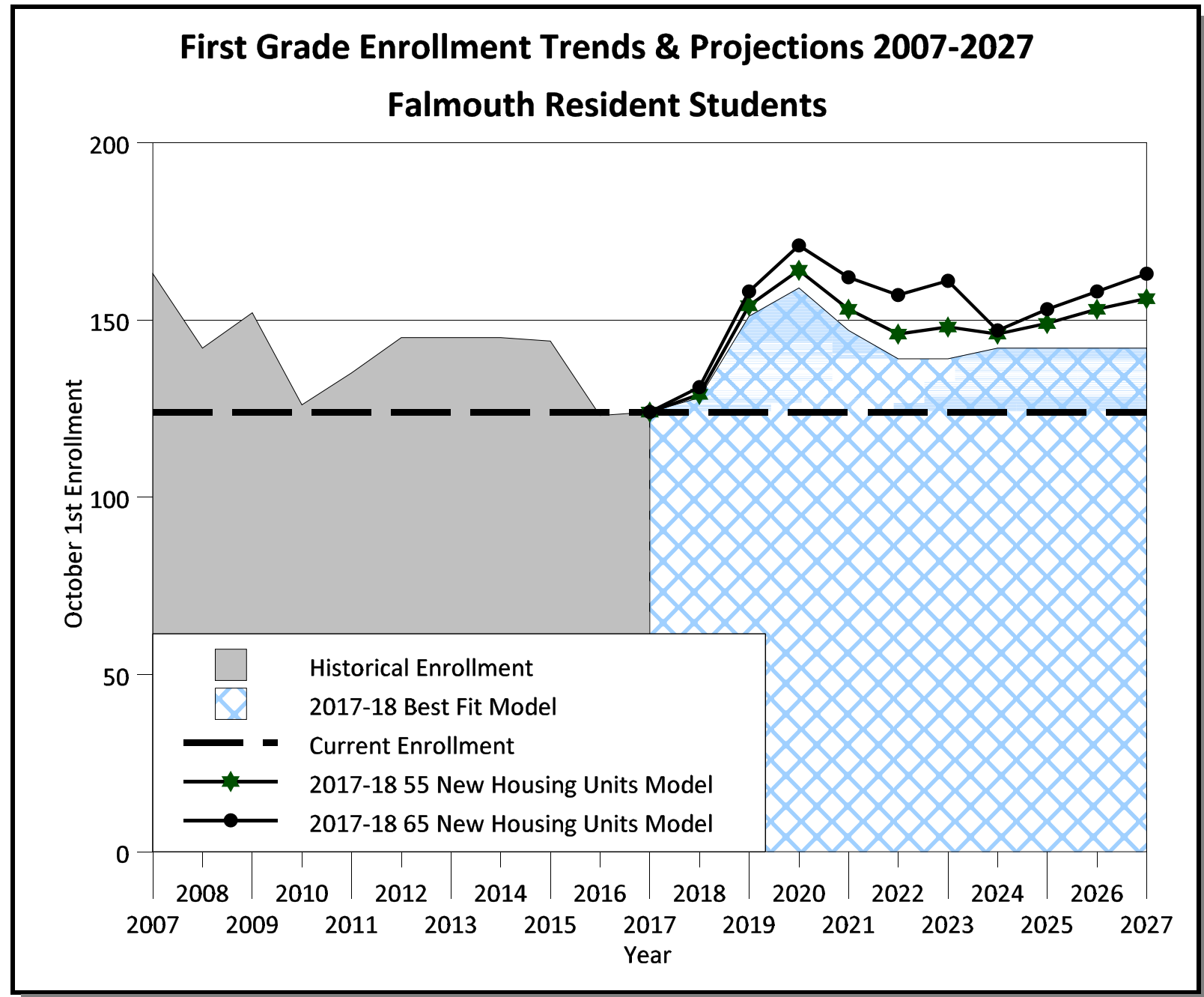


Figure II-2



III. GRADE-TO-GRADE MIGRATION TRENDS

After assessing preschool-migration trends and establishing first grade enrollment, the migration trends between grades are examined and grade-to-grade survival ratios are established. These ratios represent the number of students in a grade in one year (i.e., 1st grade in 2016-17) in relation to the number of students in the next grade the following year (i.e., 2nd grade in 2017-18). The historical average grade-to-grade survival ratios for the last three, four, five, six, seven, eight, nine and ten-year periods are analyzed to determine which period represents the statistical “best fit” at each of the grade levels. The grade-to-grade ratios that represent the “best fit” are then applied to the current enrollment in each grade and projected first grade classes to project enrollment for the next ten years. This section will show how the grade-to-grade migration trends have changed, on average, in Falmouth.

Appendix Table-3 shows average grade-to-grade survival ratios in Falmouth for grades K-8 along with how the ratios translate into a loss or addition of new students. For example, the 10-year K-1 average ratio was 1.123, this translates to an average annual student in-migration of 12.3% between Kindergarten and first grade over the last decade. When looking at these grade-to-grade ratios, student migration trends in Falmouth have changed across only a handful of grade levels.

When looking at the average trends over the last three years of the past decade, the biggest change occurred between grades K-1 and 1-2 over the last 3-year period (2015-16 to 2017-18), with some slight notable difference between grades 4-5 when looking at the five-year trends. At grades 1-2 an in-migration occurred compared to the out-migration occurring in the first 5-year period (2008-09 to 2011-12), while in grades K-1 less in-migration occurred in the last 3-year period. However, the average K-1 in-migration of 6.8% over the last three years indicates in-migration into first grade from Kindergarten is still strong. At grades 4-5 slightly more in-migration (4.8%) occurred over the last five years compared to the previous 5-year period (2.8%).

When looking at the grade-to-grade ratios at the high school level, no significant changes in migration trends stood out. Historical migration between grades 8-9, 9-10 and 10-11 has always been an average out-migration. At grades 8-9 the level of out-migration declined slightly over the last three years, while for grades 9-10 and 10-11 a less than 1% change occurred over the last three to five-year periods. When looking at grades 11-12, more recent trends indicate an in-migration occurred verse an out-migration of students, however the change was still minor, and likely not having much impact on future enrollment.

NOTE: **The best fit model is based on historical migration trends and takes into account the changes in trends discussed. However, if something unexpected occurs to impact overall average migration trends in Falmouth beyond what is estimated using the historical trends, the enrollment projections would need to be reassessed.**

**Appendix Table 3 - Falmouth Attending Resident Enrollment - Average Grade-To-Grade Survival Ratios
2017-18 Best Fit Model**

School Year	Grade											
	K-1		1-2		2-3		3-4		4-5		5-6	
	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-
10 Year Avg. (08-17)	1.123	12.3%	1.026	2.6%	1.056	5.6%	1.027	2.7%	1.038	3.8%	1.022	2.2%
1st 5-Year Avg. (08-12)	1.192	19.2%	0.989	-1.1%	1.056	5.6%	1.018	1.8%	1.028	2.8%	1.030	3.0%
Last 5-Year Avg. (13-17)	1.055	5.5%	1.062	6.2%	1.056	5.6%	1.037	3.7%	1.048	4.8%	1.013	1.3%
Last 4-Year Avg. (14-17)	1.073	7.3%	1.070	7.0%	1.054	5.4%	1.037	3.7%	1.054	5.4%	1.012	1.2%
Last 3-Year Avg. (15-17)	1.068	6.8%	1.050	5.0%	1.052	5.2%	1.030	3.0%	1.039	3.9%	1.012	1.2%

School Year	Grade											
	6-7		7-8		8-9		9-10		10-11		11-12	
	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-
10 Year Avg. (08-17)	1.018	1.8%	1.011	1.1%	0.987	-1.3%	0.988	-1.2%	0.992	-0.8%	1.004	0.4%
1st 5-Year Avg. (08-12)	1.012	1.2%	1.006	0.6%	0.978	-2.2%	0.984	-1.6%	0.995	-0.5%	0.993	-0.7%
Last 5-Year Avg. (13-17)	1.024	2.4%	1.015	1.5%	0.995	-0.5%	0.992	-0.8%	0.988	-1.2%	1.015	1.5%
Last 4-Year Avg. (14-17)	1.017	1.7%	1.016	1.6%	0.996	-0.4%	0.994	-0.6%	0.988	-1.2%	1.018	1.8%
Last 3-Year Avg. (15-17)	1.025	2.5%	1.005	0.5%	0.992	-0.8%	0.988	-1.2%	0.986	-1.4%	1.004	0.4%

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

IV. RESIDENT ENROLLMENT TRENDS

These figures include all resident students attending Falmouth schools, and all resident students attending school outside of the district with the exception of 100% home schooled students and any students attending private schools. (See *Appendix Tables 2, 2-1, 2-2, 4, 4-1, 4-2 and Figure IV-1 through Figure IV-4*).

A. Resident Enrollment Trends and Projections for Grades K-5

Historical Trends:

- ▶ Since 2007-08, resident attending enrollment in grades K-5 remained fairly stable, with enrollment ranging between 877 and 913 students through 2017-18.
- ▶ In addition, enrollment of Falmouth students attending out of district schools ranged between zero and 4 students through 2017-18.

2017-18 Best Fit Model:

- ▶ Under the 2017-18 “best fit” model, K-5 resident attending enrollment will remain similar to the current enrollment of 886 students to range between 875 and 880 students through 2020-21. Following 2020-21 attending enrollment is projected to slowly increase to range between 903 and 942 students through 2027-28.
- ▶ Only four Falmouth resident students are projected to attend non-district schools each year through 2027-28.

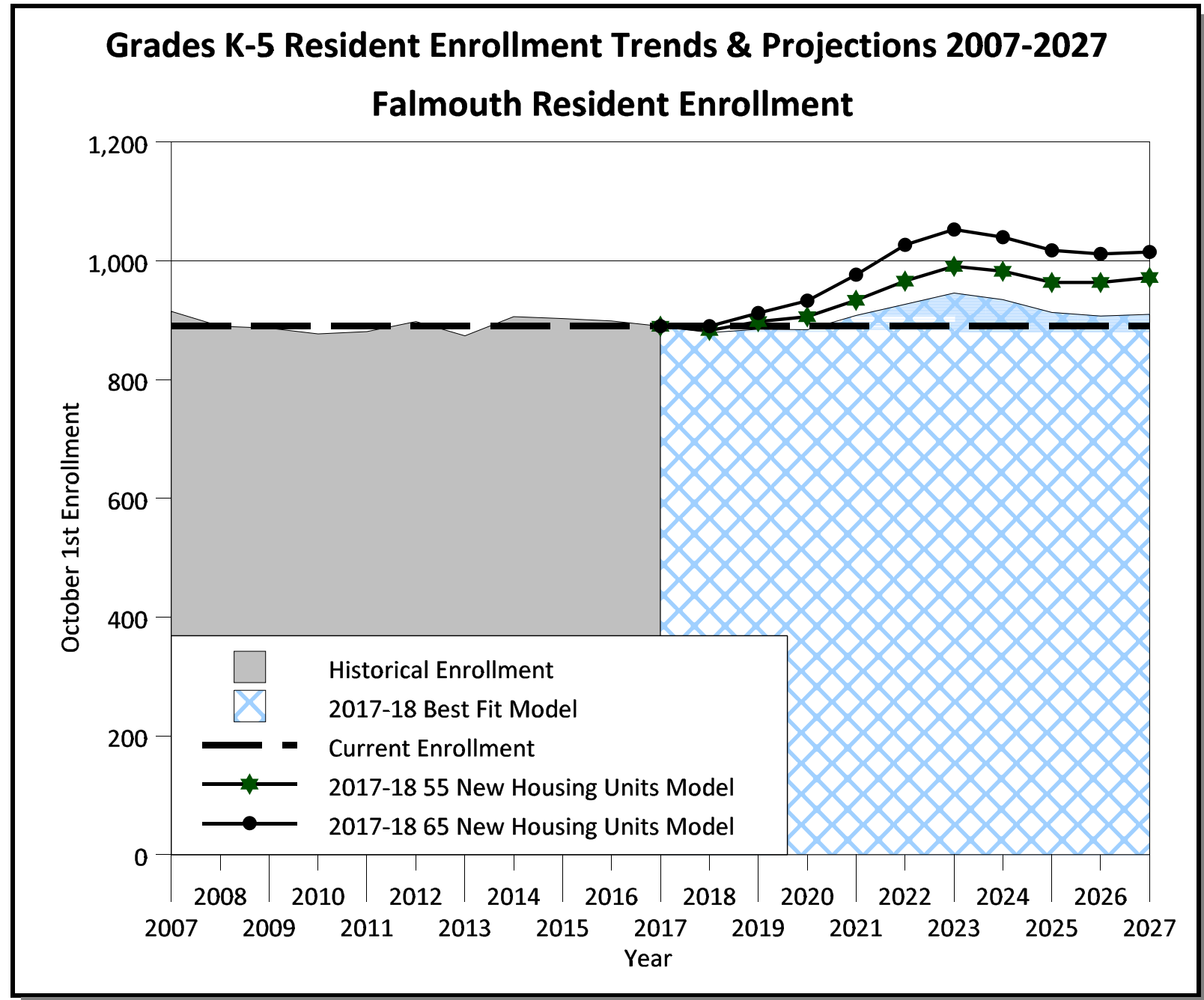
2017-18 55 New Housing Units Model:

- ▶ Under the 2017-18 “55 new housing units” model, K-5 resident attending enrollment will remain similar to the current enrollment of 886 students to range between 879 and 902 students through 2020-21 before increasing to 930 students in 2021-22. Following 2021-22 attending enrollment is projected to slowly increase further to range between 960 and 987 students through 2027-28.
- ▶ Only four Falmouth resident students are projected to attend non-district schools each year through 2027-28.

2017-18 65 New Housing Units Model:

- ▶ Under the 2017-18 “65 new housing units” model, K-5 resident attending enrollment will remain similar to the current enrollment of 886 students to range between 886 and 908 students through 2019-20 before increasing to 973 students in 2021-22. Following 2021-22 attending enrollment is projected to increase further to range between 1,007 and 1,048 students through 2027-28.
- ▶ Only four to five Falmouth resident students are projected to attend non-district schools each year through 2027-28.

Figure IV-1



B. Resident Enrollment Trends and Projections for Grades 6-8

Historical Trends:

- ▶ Since 2007-08, grades 6-8 enrollment declined from 569 students in 2007-08 to reach 524 students in 2011-12. Following 2011-12, enrollment leveled off to range between 486 and 521 students through 2017-18.
- ▶ Since 2007-08, enrollment of Falmouth students at non-district schools ranged between zero and 3 students through 2017-18.

2017-18 Best Fit Model:

- ▶ Under the 2017-18 “best fit” model, 6-8 resident attending enrollment will increase reaching 550 students by 2020-21. Following 2020-21, enrollment is projected to decline, reaching 454 students in 2023-24 before increasing again to range between 491 and 559 students through 2027-28.
- ▶ Another 1 Falmouth resident student is projected to attend non-district schools each year through 2027-28.

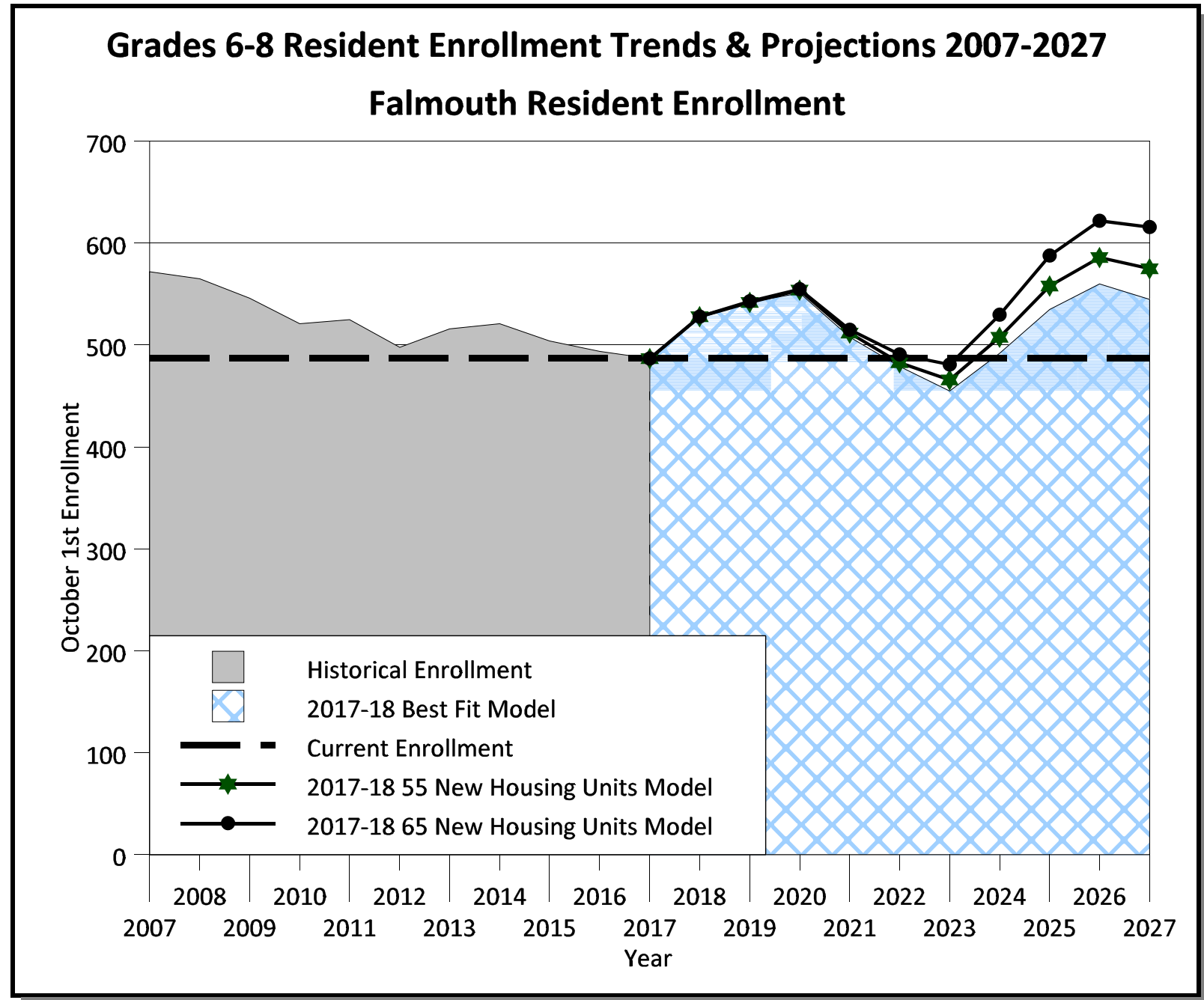
2017-18 55 New Housing Units Model:

- ▶ Under the 2017-18 “55 new housing units” model, 6-8 resident attending enrollment will increase reaching 553 students by 2020-21. Following 2020-21, enrollment is projected to decline, reaching 465 students in 2023-24 before increasing again to range between 507 and 585 students through 2027-28.
- ▶ Another 1 Falmouth resident student is projected to attend non-district schools each year through 2027-28.

2017-18 65 New Housing Units Model:

- ▶ Under the 2017-18 “65 new housing units” model, 6-8 resident attending enrollment will increase reaching 554 students by 2020-21. Following 2020-21, enrollment is projected to decline, reaching 480 students in 2023-24 before increasing again to reach 615 students by 2027-28.
- ▶ Another 1 Falmouth resident student is projected to attend non-district schools each year through 2027-28.

Figure IV-2



C. Resident Enrollment Trends and Projections for Grades 9-12

Historical Trends:

- ▶ Attending resident enrollment in grades 9-12 increases from 657 students in 2007-08 to reach 730 students in 2012-13. Following 2012-13, enrollment declined slightly, but remained fairly stable to range between 682 and 710 students through 2017-18.
- ▶ Since 2007-08, enrollment of Falmouth students attending non-district schools ranged between one and 14 students through 2017-18.

2017-18 Best Fit Model:

- ▶ Under the 2017-18 “best fit” model, 9-12 resident attending enrollment is projected to decline from the current enrollment of 682 students to range between 652 and 671 students through 2021-22. Following 2021-22, enrollment is projected to increase, reaching 711 students in 2023-24 and then is projected to decline, reaching 633 students in 2027-28.
- ▶ Another 10 to 11 Falmouth resident students are projected to attend non-district schools each year through 2027-28.

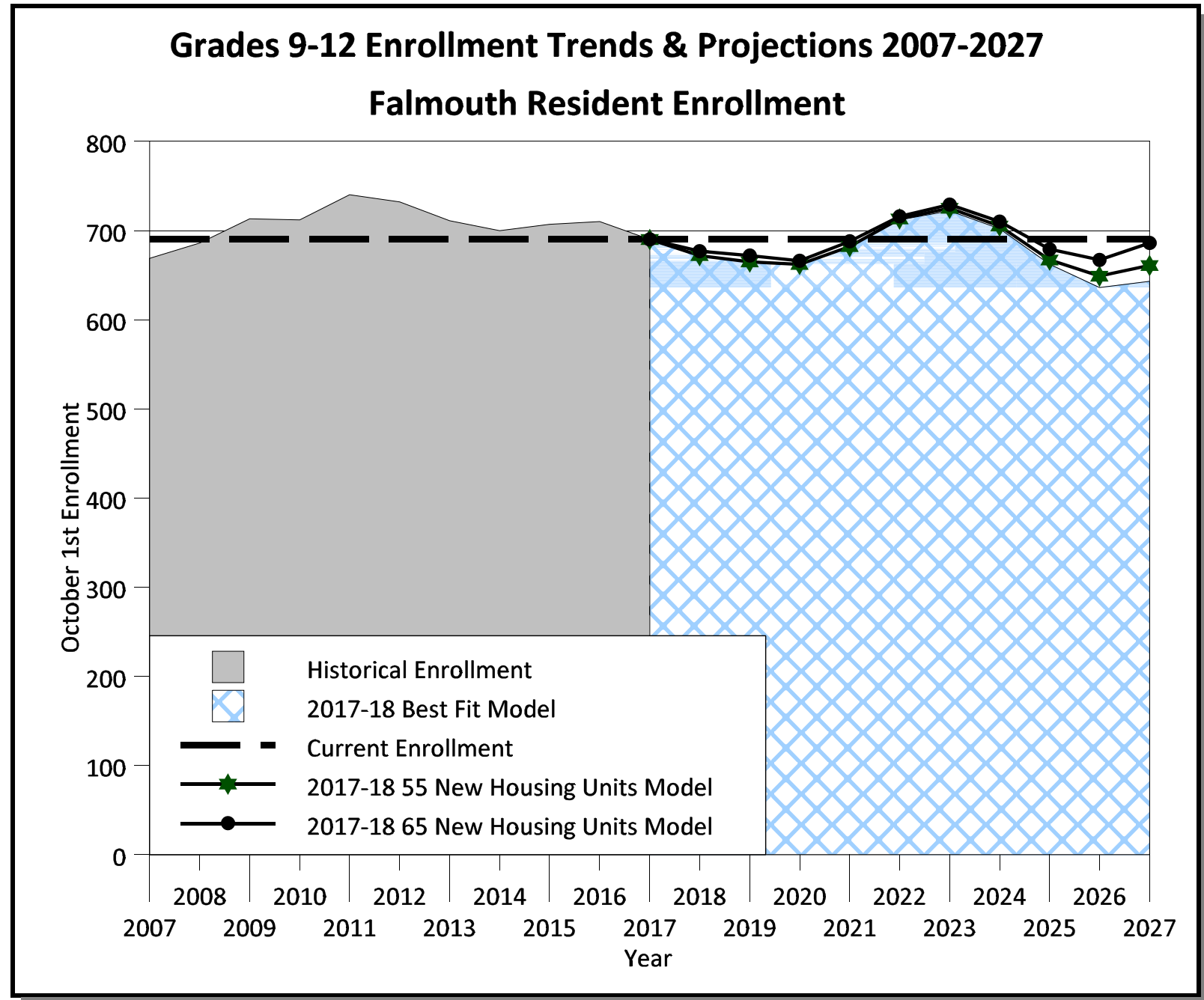
2017-18 55 New Housing Units Model:

- ▶ Under the 2017-18 “55 new housing units” model, 9-12 resident attending enrollment is projected to decline from the current enrollment of 682 students to range between 652 and 671 students through 2021-22. Following 2021-22, enrollment is projected to increase, reaching 714 students in 2023-24 and then is projected to decline, reaching 639 students in 2026-27 and 651 students 2027-28.
- ▶ Another 10 to 11 Falmouth resident students are projected to attend non-district schools each year through 2027-28.

2017-18 65 New Housing Units Model:

- ▶ Under the 2017-18 “65 new housing units” model, 9-12 resident attending enrollment is projected to decline from the current enrollment of 682 students to range between 652 and 672 students through 2021-22. Following 2021-22, enrollment is projected to increase, reaching 716 students in 2023-24 and then is projected to decline, reaching 654 students in 2026-27, then increasing to 675 students by 2027-28.
- ▶ Another 10 to 11 Falmouth resident students are projected to attend non-district schools each year through 2027-28.

Figure IV-3



Appendix Table 2 - Enrollment Trends & Projections - Falmouth Attending Resident Students - 2017-18 Best Fit Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	107	163	156	144	173	170	193	185	191	162	175	167	153	913	569	1,482	657	2,139
2008-09	116	142	146	162	147	177	174	199	190	178	157	172	165	890	563	1,453	672	2,125
2009-10	114	152	144	155	165	156	175	176	194	192	180	158	171	886	545	1,431	701	2,132
2010-11	119	126	154	157	156	165	164	179	178	192	182	176	150	877	521	1,398	700	2,098
2011-12	134	135	130	161	166	155	172	170	182	176	195	182	179	881	524	1,405	732	2,137
2012-13	148	145	134	136	159	176	162	165	170	176	172	197	185	898	497	1,395	730	2,125
2013-14	133	145	149	143	141	163	179	170	167	169	173	170	198	874	516	1,390	710	2,100
2014-15	133	145	164	158	151	155	165	178	178	168	171	172	180	906	521	1,427	691	2,118
2015-16	116	144	154	169	159	160	155	170	178	176	174	167	176	902	503	1,405	693	2,098
2016-17	117	123	152	164	178	161	162	156	176	179	174	175	169	895	494	1,389	697	2,086
2017-18	119	124	127	161	169	186	165	168	153	173	168	170	171	886	486	1,372	682	2,054
Projected																		
2018-19	141	128	130	134	166	176	188	169	169	152	171	167	171	875	526	1,401	661	2,062
2019-20	149	151	134	137	138	172	178	193	170	167	150	170	168	881	541	1,422	655	2,077
2020-21	138	159	158	141	141	143	174	182	194	168	165	149	170	880	550	1,430	652	2,082
2021-22	130	147	167	167	146	147	145	179	183	192	166	164	149	904	507	1,411	671	2,082
2022-23	130	139	155	176	172	151	149	149	180	181	190	165	165	923	478	1,401	701	2,102
2023-24	133	139	146	163	182	179	153	152	149	178	179	188	166	942	454	1,396	711	2,107
2024-25	133	142	146	153	168	189	181	157	153	148	176	178	189	931	491	1,422	691	2,113
2025-26	133	142	149	153	158	174	191	185	158	152	146	175	179	909	534	1,443	652	2,095
2026-27	133	142	149	157	158	164	177	196	186	156	150	145	175	903	559	1,462	626	2,088
2027-28	133	142	149	157	161	164	166	181	197	184	154	149	146	906	544	1,450	633	2,083

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. Three-year average of births (2014-15 to 2016-17) used to estimate births from 2017-18 to 2020-21. *2017 birth data is preliminary and provisional from the Maine Department of Health and Human Services, Office of Data, Research, and Vital Statistics. The first grade from 2019-20 to 2027-28 was projected using the 4-year ratio of first grade to births, and the 2018-19 first grade was based on the 2017-18 Kindergarten class size and the 4-year ratio of first grade to Kindergarten.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

Appendix Table 4 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 Best Fit Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	875	526	1,401	661	2,062	4	1	5	11	16	879	527	1,406	672	2,078
2019-20	881	541	1,422	655	2,077	4	1	5	10	15	885	542	1,427	665	2,092
2020-21	880	550	1,430	652	2,082	4	1	5	10	15	884	551	1,435	662	2,097
2021-22	904	507	1,411	671	2,082	4	1	5	11	16	908	508	1,416	682	2,098
2022-23	923	478	1,401	701	2,102	4	1	5	11	16	927	479	1,406	712	2,118
2023-24	942	454	1,396	711	2,107	4	1	5	11	16	946	455	1,401	722	2,123
2024-25	931	491	1,422	691	2,113	4	1	5	11	16	935	492	1,427	702	2,129
2025-26	909	534	1,443	652	2,095	4	1	5	10	15	913	535	1,448	662	2,110
2026-27	903	559	1,462	626	2,088	4	1	5	10	15	907	560	1,467	636	2,103
2027-28	906	544	1,450	633	2,083	4	1	5	10	15	910	545	1,455	643	2,098

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc.... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 2-1 - Enrollment Trends & Projections - Falmouth Attending Resident Students - 2017-18 55 New Housing Units Model																		
October 1st Enrollment																		
School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	107	163	156	144	173	170	193	185	191	162	175	167	153	913	569	1,482	657	2,139
2008-09	116	142	146	162	147	177	174	199	190	178	157	172	165	890	563	1,453	672	2,125
2009-10	114	152	144	155	165	156	175	176	194	192	180	158	171	886	545	1,431	701	2,132
2010-11	119	126	154	157	156	165	164	179	178	192	182	176	150	877	521	1,398	700	2,098
2011-12	134	135	130	161	166	155	172	170	182	176	195	182	179	881	524	1,405	732	2,137
2012-13	148	145	134	136	159	176	162	165	170	176	172	197	185	898	497	1,395	730	2,125
2013-14	133	145	149	143	141	163	179	170	167	169	173	170	198	874	516	1,390	710	2,100
2014-15	133	145	164	158	151	155	165	178	178	168	171	172	180	906	521	1,427	691	2,118
2015-16	116	144	154	169	159	160	155	170	178	176	174	167	176	902	503	1,405	693	2,098
2016-17	117	123	152	164	178	161	162	156	176	179	174	175	169	895	494	1,389	697	2,086
2017-18	119	124	127	161	169	186	165	168	153	173	168	170	171	886	486	1,372	682	2,054
Projected																		
2018-19	144	129	130	134	166	176	189	169	169	152	171	167	171	879	527	1,406	661	2,067
2019-20	154	154	136	138	139	173	178	193	170	167	150	170	168	894	541	1,435	655	2,090
2020-21	144	164	162	144	143	145	176	183	194	168	165	149	170	902	553	1,455	652	2,107
2021-22	137	153	172	171	149	148	147	180	184	192	166	164	149	930	511	1,441	671	2,112
2022-23	138	146	162	183	177	156	151	150	181	182	190	165	165	962	482	1,444	702	2,146
2023-24	136	148	155	172	190	186	159	155	151	179	180	189	166	987	465	1,452	714	2,166
2024-25	140	146	155	163	178	197	188	163	156	149	177	179	189	979	507	1,486	694	2,180
2025-26	143	149	153	163	168	184	200	193	164	154	148	176	179	960	557	1,517	657	2,174
2026-27	146	153	157	161	168	175	187	204	194	162	153	147	177	960	585	1,545	639	2,184
2027-28	146	156	160	165	166	175	177	191	206	192	160	152	147	968	574	1,542	651	2,193

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. The 55 New Housing Units Model was first based on the 2017-18 Best Fit Model then took into account the impact on births, preschool migration, and elementary migration from the addition of 55 new housing units in Falmouth. Details on how this model was created are found in Section VI of the written report.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 4-1 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 55 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	879	527	1,406	661	2,067	4	1	5	11	16	883	528	1,411	672	2,083
2019-20	894	541	1,435	655	2,090	4	1	5	10	15	898	542	1,440	665	2,105
2020-21	902	553	1,455	652	2,107	4	1	5	10	15	906	554	1,460	662	2,122
2021-22	930	511	1,441	671	2,112	4	1	5	11	16	934	512	1,446	682	2,128
2022-23	962	482	1,444	702	2,146	4	1	5	11	16	966	483	1,449	713	2,162
2023-24	987	465	1,452	714	2,166	4	1	5	11	16	991	466	1,457	725	2,182
2024-25	979	507	1,486	694	2,180	4	1	5	11	16	983	508	1,491	705	2,196
2025-26	960	557	1,517	657	2,174	4	1	5	10	15	964	558	1,522	667	2,189
2026-27	960	585	1,545	639	2,184	4	1	5	10	15	964	586	1,550	649	2,199
2027-28	968	574	1,542	651	2,193	4	1	5	10	15	972	575	1,547	661	2,208

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 2-2 - Enrollment Trends & Projections - Falmouth Attending Resident Students - 2017-18 65 New Housing Units Model																		
October 1st Enrollment																		
School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	107	163	156	144	173	170	193	185	191	162	175	167	153	913	569	1,482	657	2,139
2008-09	116	142	146	162	147	177	174	199	190	178	157	172	165	890	563	1,453	672	2,125
2009-10	114	152	144	155	165	156	175	176	194	192	180	158	171	886	545	1,431	701	2,132
2010-11	119	126	154	157	156	165	164	179	178	192	182	176	150	877	521	1,398	700	2,098
2011-12	134	135	130	161	166	155	172	170	182	176	195	182	179	881	524	1,405	732	2,137
2012-13	148	145	134	136	159	176	162	165	170	176	172	197	185	898	497	1,395	730	2,125
2013-14	133	145	149	143	141	163	179	170	167	169	173	170	198	874	516	1,390	710	2,100
2014-15	133	145	164	158	151	155	165	178	178	168	171	172	180	906	521	1,427	691	2,118
2015-16	116	144	154	169	159	160	155	170	178	176	174	167	176	902	503	1,405	693	2,098
2016-17	117	123	152	164	178	161	162	156	176	179	174	175	169	895	494	1,389	697	2,086
2017-18	119	124	127	161	169	186	165	168	153	173	168	170	171	886	486	1,372	682	2,054
Projected																		
2018-19	148	131	131	134	166	176	189	169	169	152	171	167	171	886	527	1,413	661	2,074
2019-20	160	158	139	138	139	174	179	193	170	167	150	170	168	908	542	1,450	655	2,105
2020-21	152	171	168	148	144	146	177	183	194	168	165	149	170	929	554	1,483	652	2,135
2021-22	147	162	181	178	154	151	149	181	184	193	166	164	149	973	514	1,487	672	2,159
2022-23	151	157	173	193	186	162	155	153	182	183	190	165	165	1,022	490	1,512	703	2,215
2023-24	138	161	168	184	201	196	167	159	154	181	180	189	166	1,048	480	1,528	716	2,244
2024-25	143	147	169	177	190	209	198	171	160	152	178	179	190	1,035	529	1,564	699	2,263
2025-26	148	153	155	178	182	197	212	203	172	158	151	177	180	1,013	587	1,600	666	2,266
2026-27	153	158	160	163	184	189	200	217	204	170	157	149	178	1,007	621	1,628	654	2,282
2027-28	153	163	166	169	168	191	192	205	218	202	168	155	150	1,010	615	1,625	675	2,300

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. The 65 New Housing Units Model was first based on the 2017-18 Best Fit Model then took into account the impact on births, preschool migration and elementary migration from the addition of 65 new housing units in Falmouth. Details on how this model was created are found in Section VI of the written report.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

Appendix Table 4-2 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 65 New Housing Units Model

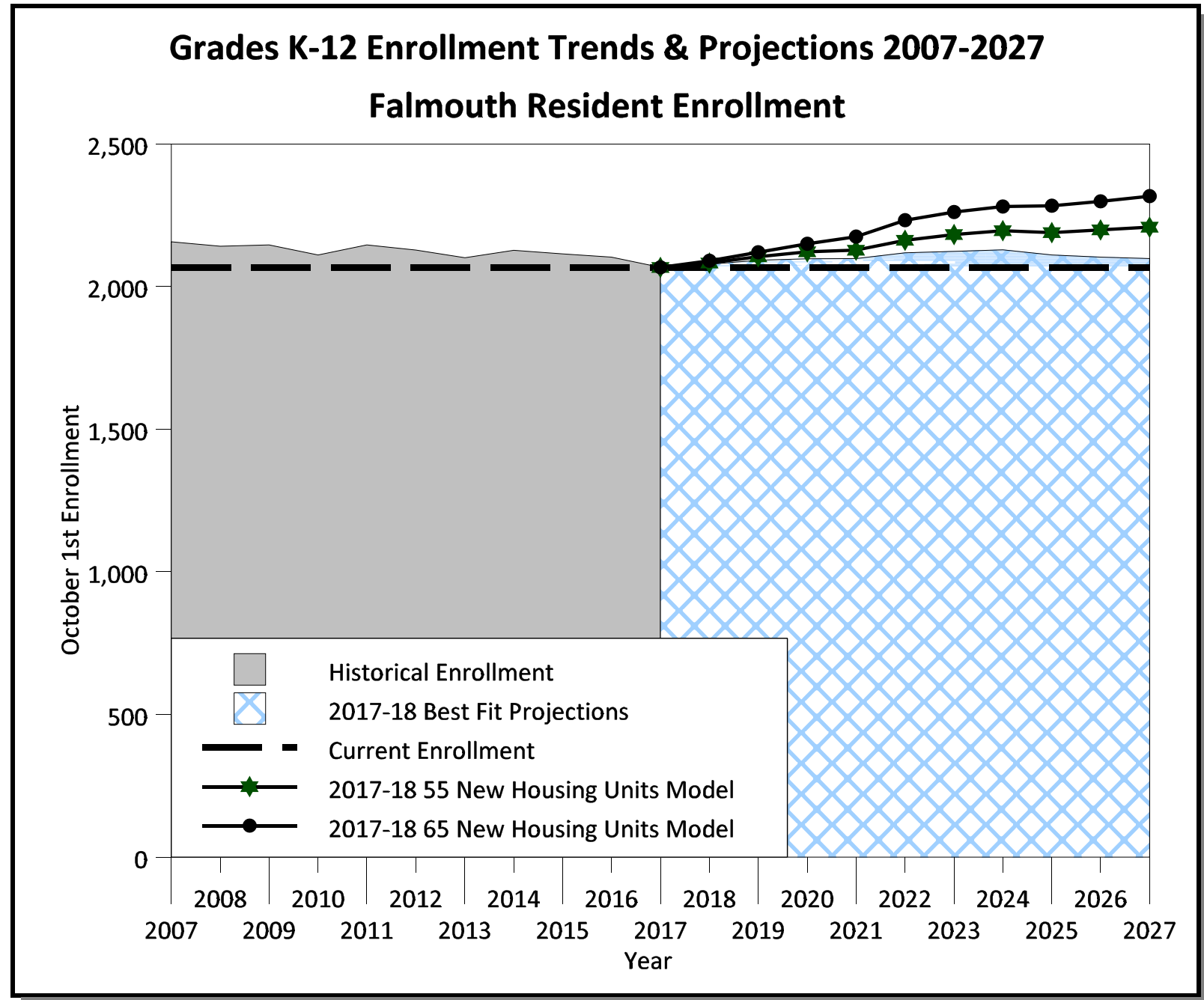
October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	886	527	1,413	661	2,074	4	1	5	11	16	890	528	1,418	672	2,090
2019-20	908	542	1,450	655	2,105	4	1	5	10	15	912	543	1,455	665	2,120
2020-21	929	554	1,483	652	2,135	4	1	5	10	15	933	555	1,488	662	2,150
2021-22	973	514	1,487	672	2,159	4	1	5	11	16	977	515	1,492	683	2,175
2022-23	1,022	490	1,512	703	2,215	5	1	6	11	17	1,027	491	1,518	714	2,232
2023-24	1,048	480	1,528	716	2,244	5	1	6	11	17	1,053	481	1,534	727	2,261
2024-25	1,035	529	1,564	699	2,263	5	1	6	11	17	1,040	530	1,570	710	2,280
2025-26	1,013	587	1,600	666	2,266	5	1	6	11	17	1,018	588	1,606	677	2,283
2026-27	1,007	621	1,628	654	2,282	5	1	6	10	16	1,012	622	1,634	664	2,298
2027-28	1,010	615	1,625	675	2,300	5	1	6	11	17	1,015	616	1,631	686	2,317

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Figure IV-4



V. TOTAL ATTENDING ENROLLMENT (RESIDENT AND NON-RESIDENT STUDENTS)

These projections include all resident and non-resident students attending Falmouth Schools. (Data can be found in *Appendix Tables 6, 6-1, 6-2, 7, 7-1, 7-2 and Figures V-1 through V-4.*)

A. Total Attending Enrollment in Grades K-5 (Falmouth Elementary School)

Historical Trends:

- ▶ Since 2007-08, total attending enrollment fluctuated year-to-year, with enrollment ranging between 881 and 929 students through 2017-18.

2017-18 Best Fit Projections:

- ▶ Under the 2017-18 “best fit” model, K-5 total attending enrollment will remain similar to the current enrollment of 905 students to range between 895 and 902 students through 2020-21. Following 2020-21, enrollment is projected to increase, to range between 926 and 966 students through 2027-28.

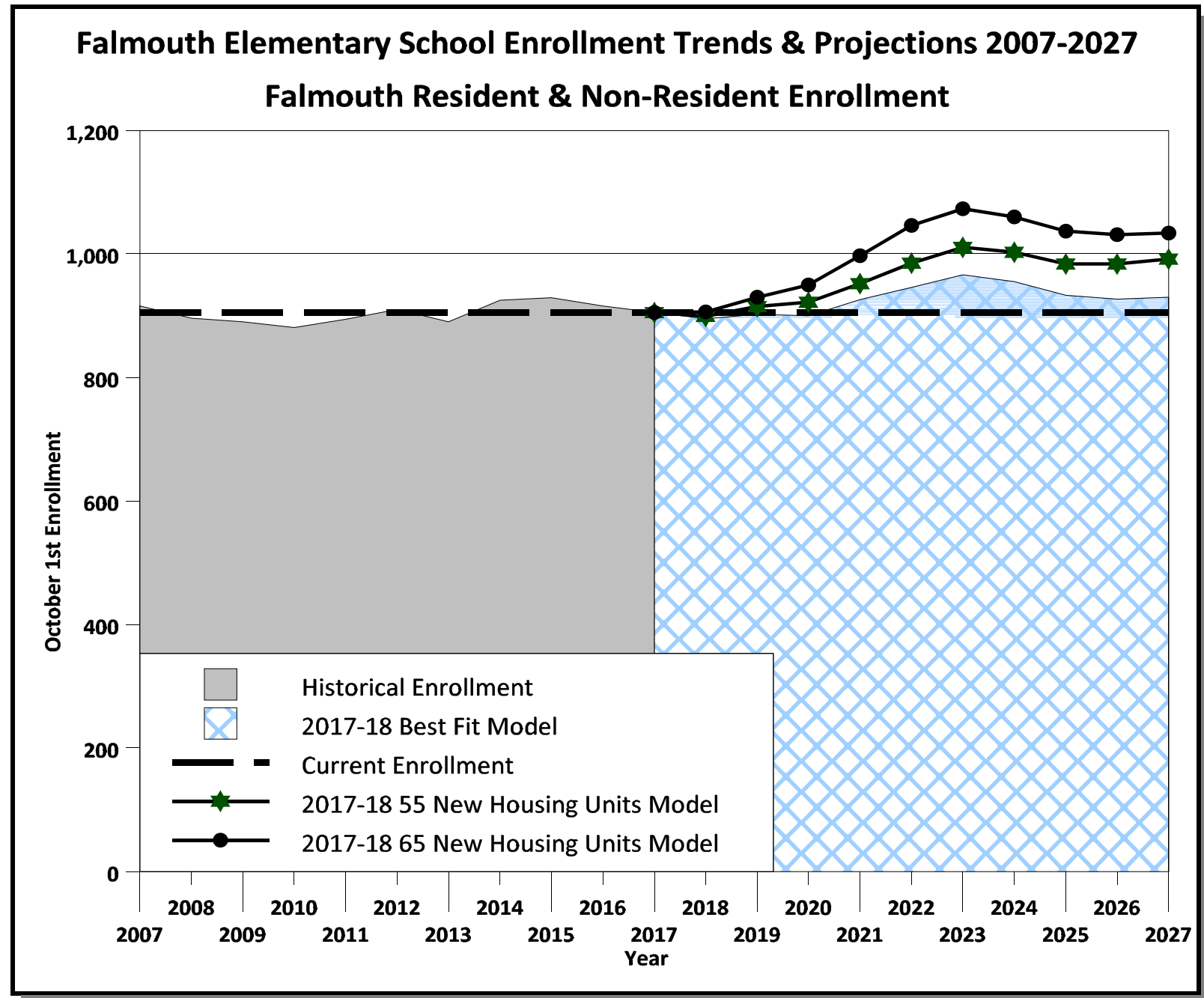
2017-18 55 New Housing Units Model:

- ▶ Under the 2017-18 “55 new housing units” model, K-5 total attending enrollment will increase reaching 952 students by 2021-22. Following 2021-22, total attending enrollment is projected to increase further, to range between 984 and 1,011 students through 2027-28.

2017-18 65 New Housing Units Model:

- ▶ Under the 2017-18 “65 new housing units” model, K-5 total attending enrollment will increase reaching 997 students by 2021-22. Following 2021-22, total attending enrollment is projected to increase further, to range between 1,031 and 1,073 students through 2027-28.

Figure V-1



B. Total Attending Enrollment in Grades 6-8 (Falmouth Middle School)

Historical Trends:

- ▶ Total attending enrollment (resident students and non-resident students) in at the Falmouth Middle School declined from 570 students in 2007-08 to reach 545 students in 2009-10. Following 2009-10 enrollment fluctuated year-to-year ranging between ranged between 498 and 526 students through 2016-17.

2017-18 Best Fit Model:

- ▶ Under the 2017-18 “best fit” model, total attending 6-8 enrollment will increase from the current enrollment of 498 students to reach 559 students in 2020-21 before declining to 462 students in 2023-24. Following 2023-24 enrollment is projected to increase again to range between 500 and 568 students through 2027-28.

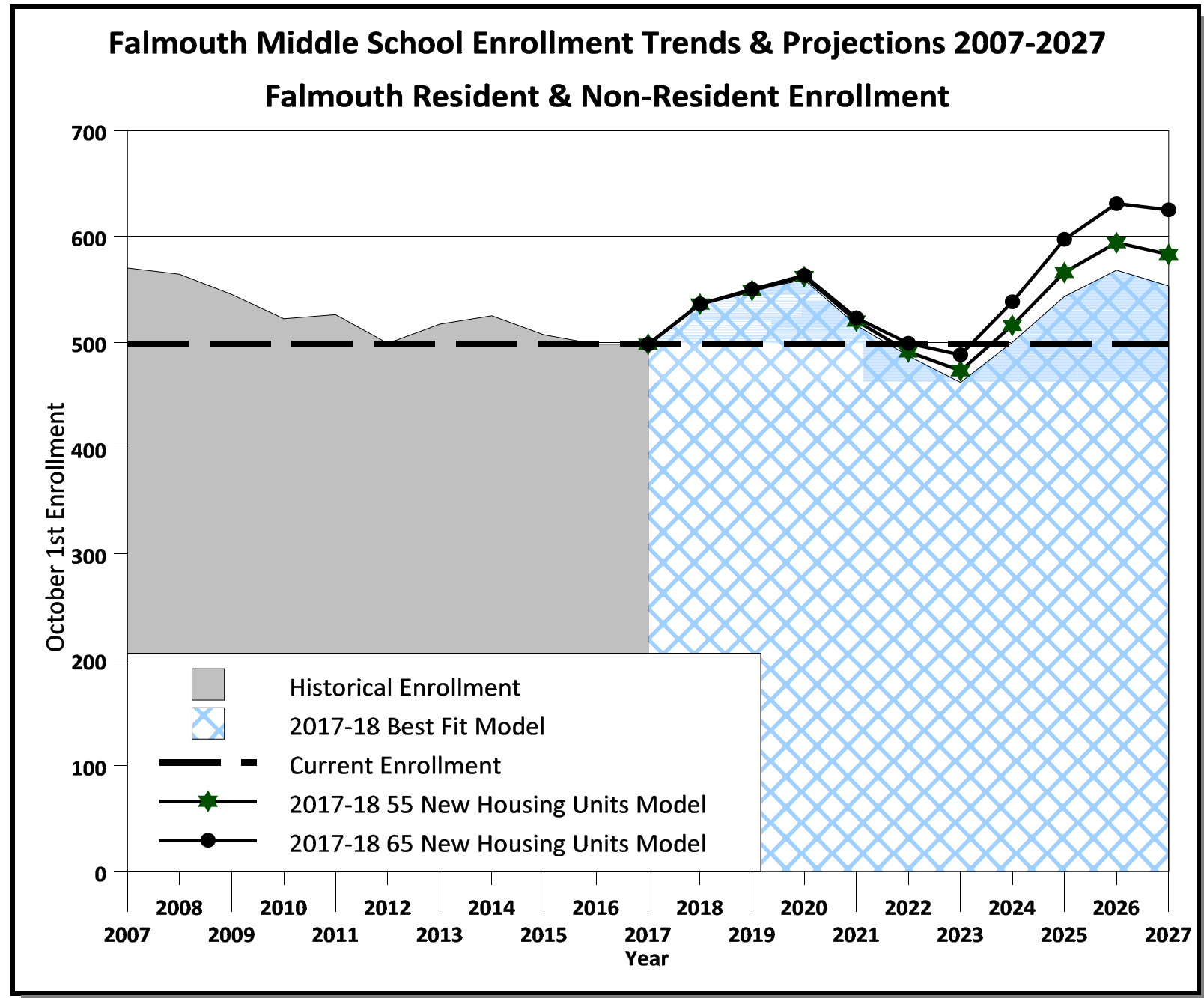
2017-18 55 New Housing Units Model:

- ▶ Under the 2017-18 “55 new housing units” model, total attending 6-8 enrollment will increase from the current enrollment of 498 students to reach 562 students in 2020-21 before declining to 473 students in 2023-24. Following 2023-24 enrollment is projected to increase again to reach a high enrollment of 594 students in 2026-27, and 583 students in 2027-28.

2017-18 65 New Housing Units Model:

- ▶ Under the 2017-18 “65 new housing units” model, total attending 6-8 enrollment will increase from the current enrollment of 498 students to reach 563 students in 2020-21 before declining to 488 students in 2023-24. Following 2023-24 enrollment is projected to increase again to reach a high enrollment of 631 students in 2026-27, and 625 students in 2027-28.

Figure V-2



C. Total Attending Enrollment in Grades 9-12 (Falmouth High School)

Historical Attending Enrollment Trends:

- ▶ Since 2007-08, grades 9-12 total attending enrollment (resident students and non-resident students) at the Falmouth High School increased from 663 students in 2007-08 to reach a high enrollment of 735 students in 2011-12. Following 2012-13, enrollment declined, but remained fairly stable to range between 695 and 711 students through 2017-18.

2017-18 Best Fit Model:

- ▶ Under the 2017-18 “best fit” model, total attending enrollment at the Falmouth High School will continue to decline from the current enrollment of 696 students to range between 666 and 687 students through 2021-22. Following 2021-22, enrollment is projected to increase to 724 students by 2023-24 before declining to reach 644 students by 2027-28.

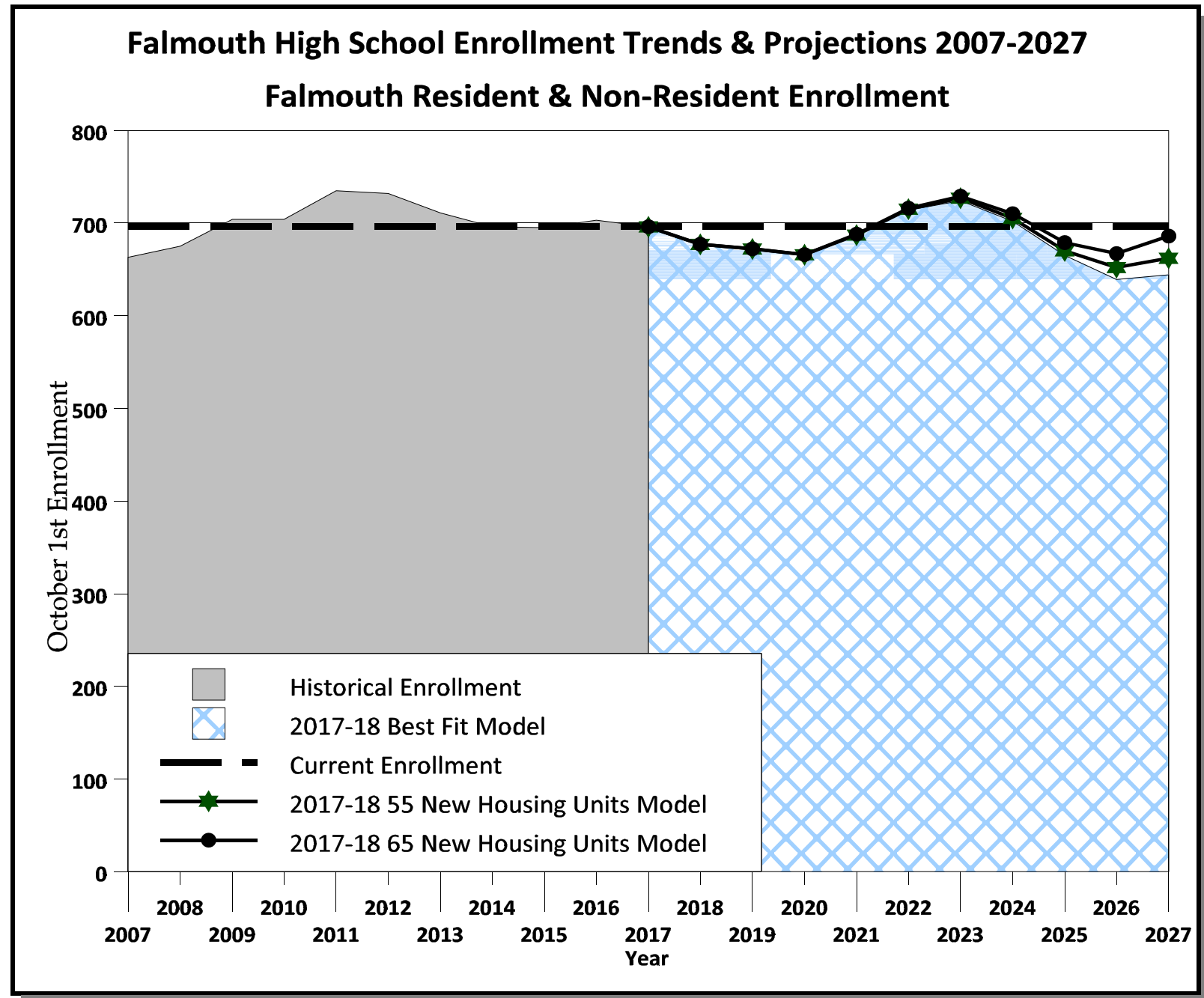
2017-18 55 New Housing Units Model:

- ▶ Under the 2017-18 “55 new housing units” model, total attending enrollment at the Falmouth High School will continue to decline from the current enrollment of 696 students to range between 666 and 687 students through 2021-22. Following 2021-22, enrollment is projected to increase to 727 students by 2023-24 before declining to reach 652 students by 2026-27, and 662 students in 2027-28.

2017-18 65 New Housing Units Model:

- ▶ Under the 2017-18 “65 new housing units” model, total attending enrollment at the Falmouth High School will continue to decline from the current enrollment of 696 students to range between 666 and 688 students through 2021-22. Following 2021-22, enrollment is projected to increase to 729 students by 2023-24 before declining to reach 667 students by 2026-27, and 686 students in 2027-28.

Figure V-3



Appendix Table 6 - Enrollment Trends & Projections - Attending Enrollment (Resident and Non-Resident) - 2017-18 Best Fit Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	108	164	156	145	173	170	193	186	191	163	177	169	154	916	570	1,486	663	2,149
2008-09	116	143	148	162	149	178	174	199	191	179	157	174	165	896	564	1,460	675	2,135
2009-10	115	152	147	155	165	156	175	176	194	192	181	158	173	890	545	1,435	704	2,139
2010-11	119	128	155	157	157	165	164	180	178	192	183	177	152	881	522	1,403	704	2,107
2011-12	140	135	132	164	166	157	173	170	183	176	195	184	180	894	526	1,420	735	2,155
2012-13	153	148	135	138	160	176	164	165	170	176	172	197	187	910	499	1,409	732	2,141
2013-14	137	148	152	144	144	165	179	171	167	170	173	170	198	890	517	1,407	711	2,118
2014-15	138	149	168	161	152	157	166	178	181	171	172	172	181	925	525	1,450	696	2,146
2015-16	119	150	161	173	163	163	158	171	178	176	175	168	176	929	507	1,436	695	2,131
2016-17	121	126	157	167	180	165	164	158	176	182	175	176	170	916	498	1,414	703	2,117
2017-18	123	127	129	166	172	188	168	172	158	174	173	173	176	905	498	1,403	696	2,099
Projected																		
2018-19	145	131	133	136	171	179	190	172	173	157	172	173	175	895	535	1,430	677	2,107
2019-20	153	155	137	140	140	177	181	195	173	171	155	171	175	902	549	1,451	672	2,123
2020-21	142	163	162	144	144	145	178	185	196	171	169	155	171	900	559	1,459	666	2,125
2021-22	134	151	171	171	149	150	147	183	186	194	169	168	156	926	516	1,442	687	2,129
2022-23	134	143	159	180	176	154	152	151	184	184	192	168	170	946	487	1,433	714	2,147
2023-24	137	143	150	167	186	183	156	155	151	182	182	190	170	966	462	1,428	724	2,152
2024-25	137	146	150	157	172	193	184	160	156	150	180	181	191	955	500	1,455	702	2,157
2025-26	137	146	153	157	162	178	194	188	161	155	148	179	183	933	543	1,476	665	2,141
2026-27	137	146	153	161	162	168	180	199	189	159	153	147	180	927	568	1,495	639	2,134
2027-28	137	146	153	161	165	168	169	184	200	187	157	152	148	930	553	1,483	644	2,127

Notes: Attending enrollment data contains all resident students and non-resident students attending district schools.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 7 - Enrollment Trends & Projections - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 Best Fit Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					NON Resident Students Attending District Schools					Total All Attending Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	3	1	4	6	10	916	570	1,486	663	2,149
2008-09	890	563	1,453	672	2,125	6	1	7	3	10	896	564	1,460	675	2,135
2009-10	886	545	1,431	701	2,132	4	0	4	3	7	890	545	1,435	704	2,139
2010-11	877	521	1,398	700	2,098	4	1	5	4	9	881	522	1,403	704	2,107
2011-12	881	524	1,405	732	2,137	13	2	15	3	18	894	526	1,420	735	2,155
2012-13	898	497	1,395	730	2,125	12	2	14	2	16	910	499	1,409	732	2,141
2013-14	874	516	1,390	710	2,100	16	1	17	1	18	890	517	1,407	711	2,118
2014-15	906	521	1,427	691	2,118	19	4	23	5	28	925	525	1,450	696	2,146
2015-16	902	503	1,405	693	2,098	27	4	31	2	33	929	507	1,436	695	2,131
2016-17	895	494	1,389	697	2,086	21	4	25	6	31	916	498	1,414	703	2,117
2017-18	886	486	1,372	682	2,054	19	12	31	14	45	905	498	1,403	696	2,099
Projected															
2018-19	875	526	1,401	661	2,062	20	9	29	16	45	895	535	1,430	677	2,107
2019-20	881	541	1,422	655	2,077	21	8	29	17	46	902	549	1,451	672	2,123
2020-21	880	550	1,430	652	2,082	20	9	29	14	43	900	559	1,459	666	2,125
2021-22	904	507	1,411	671	2,082	22	9	31	16	47	926	516	1,442	687	2,129
2022-23	923	478	1,401	701	2,102	23	9	32	13	45	946	487	1,433	714	2,147
2023-24	942	454	1,396	711	2,107	24	8	32	13	45	966	462	1,428	724	2,152
2024-25	931	491	1,422	691	2,113	24	9	33	11	44	955	500	1,455	702	2,157
2025-26	909	534	1,443	652	2,095	24	9	33	13	46	933	543	1,476	665	2,141
2026-27	903	559	1,462	626	2,088	24	9	33	13	46	927	568	1,495	639	2,134
2027-28	906	544	1,450	633	2,083	24	9	33	11	44	930	553	1,483	644	2,127

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 6-1 - Enrollment Trends & Projections - Attending Enrollment (Resident and Non-Resident) - 2017-18 55 New Housing Units Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	108	164	156	145	173	170	193	186	191	163	177	169	154	916	570	1,486	663	2,149
2008-09	116	143	148	162	149	178	174	199	191	179	157	174	165	896	564	1,460	675	2,135
2009-10	115	152	147	155	165	156	175	176	194	192	181	158	173	890	545	1,435	704	2,139
2010-11	119	128	155	157	157	165	164	180	178	192	183	177	152	881	522	1,403	704	2,107
2011-12	140	135	132	164	166	157	173	170	183	176	195	184	180	894	526	1,420	735	2,155
2012-13	153	148	135	138	160	176	164	165	170	176	172	197	187	910	499	1,409	732	2,141
2013-14	137	148	152	144	144	165	179	171	167	170	173	170	198	890	517	1,407	711	2,118
2014-15	138	149	168	161	152	157	166	178	181	171	172	172	181	925	525	1,450	696	2,146
2015-16	119	150	161	173	163	163	158	171	178	176	175	168	176	929	507	1,436	695	2,131
2016-17	121	126	157	167	180	165	164	158	176	182	175	176	170	916	498	1,414	703	2,117
2017-18	123	127	129	166	172	188	168	172	158	174	173	173	176	905	498	1,403	696	2,099
Projected																		
2018-19	148	132	133	136	171	179	191	172	173	157	172	173	175	899	536	1,435	677	2,112
2019-20	158	158	139	141	141	178	181	195	173	171	155	171	175	915	549	1,464	672	2,136
2020-21	148	168	166	147	146	147	180	186	196	171	169	155	171	922	562	1,484	666	2,150
2021-22	141	157	176	175	152	151	149	184	187	194	169	168	156	952	520	1,472	687	2,159
2022-23	142	150	166	187	181	159	154	152	185	185	192	168	170	985	491	1,476	715	2,191
2023-24	140	152	159	176	194	190	162	158	153	183	183	191	170	1,011	473	1,484	727	2,211
2024-25	144	150	159	167	182	201	191	166	159	151	181	182	191	1,003	516	1,519	705	2,224
2025-26	147	153	157	167	172	188	203	196	167	157	150	180	183	984	566	1,550	670	2,220
2026-27	150	157	161	165	172	179	190	207	197	165	156	149	182	984	594	1,578	652	2,230
2027-28	150	160	164	169	170	179	180	194	209	195	163	155	149	992	583	1,575	662	2,237

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 7-1 - Enrollment Trends & Projections - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 55 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					NON Resident Students Attending District Schools					Total All Attending Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	3	1	4	6	10	916	570	1,486	663	2,149
2008-09	890	563	1,453	672	2,125	6	1	7	3	10	896	564	1,460	675	2,135
2009-10	886	545	1,431	701	2,132	4	0	4	3	7	890	545	1,435	704	2,139
2010-11	877	521	1,398	700	2,098	4	1	5	4	9	881	522	1,403	704	2,107
2011-12	881	524	1,405	732	2,137	13	2	15	3	18	894	526	1,420	735	2,155
2012-13	898	497	1,395	730	2,125	12	2	14	2	16	910	499	1,409	732	2,141
2013-14	874	516	1,390	710	2,100	16	1	17	1	18	890	517	1,407	711	2,118
2014-15	906	521	1,427	691	2,118	19	4	23	5	28	925	525	1,450	696	2,146
2015-16	902	503	1,405	693	2,098	27	4	31	2	33	929	507	1,436	695	2,131
2016-17	895	494	1,389	697	2,086	21	4	25	6	31	916	498	1,414	703	2,117
2017-18	886	486	1,372	682	2,054	19	12	31	14	45	905	498	1,403	696	2,099
Projected															
2018-19	879	527	1,406	661	2,067	20	9	29	16	45	899	536	1,435	677	2,112
2019-20	894	541	1,435	655	2,090	21	8	29	17	46	915	549	1,464	672	2,136
2020-21	902	553	1,455	652	2,107	20	9	29	14	43	922	562	1,484	666	2,150
2021-22	930	511	1,441	671	2,112	22	9	31	16	47	952	520	1,472	687	2,159
2022-23	962	482	1,444	702	2,146	23	9	32	13	45	985	491	1,476	715	2,191
2023-24	987	465	1,452	714	2,166	24	8	32	13	45	1,011	473	1,484	727	2,211
2024-25	979	507	1,486	694	2,180	24	9	33	11	44	1,003	516	1,519	705	2,224
2025-26	960	557	1,517	657	2,174	24	9	33	13	46	984	566	1,550	670	2,220
2026-27	960	585	1,545	639	2,184	24	9	33	13	46	984	594	1,578	652	2,230
2027-28	968	574	1,542	651	2,193	24	9	33	11	44	992	583	1,575	662	2,237

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 6-2 - Enrollment Trends & Projections - Attending Enrollment (Resident and Non-Resident) - 2017-18 65 New Housing Units Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	108	164	156	145	173	170	193	186	191	163	177	169	154	916	570	1,486	663	2,149
2008-09	116	143	148	162	149	178	174	199	191	179	157	174	165	896	564	1,460	675	2,135
2009-10	115	152	147	155	165	156	175	176	194	192	181	158	173	890	545	1,435	704	2,139
2010-11	119	128	155	157	157	165	164	180	178	192	183	177	152	881	522	1,403	704	2,107
2011-12	140	135	132	164	166	157	173	170	183	176	195	184	180	894	526	1,420	735	2,155
2012-13	153	148	135	138	160	176	164	165	170	176	172	197	187	910	499	1,409	732	2,141
2013-14	137	148	152	144	144	165	179	171	167	170	173	170	198	890	517	1,407	711	2,118
2014-15	138	149	168	161	152	157	166	178	181	171	172	172	181	925	525	1,450	696	2,146
2015-16	119	150	161	173	163	163	158	171	178	176	175	168	176	929	507	1,436	695	2,131
2016-17	121	126	157	167	180	165	164	158	176	182	175	176	170	916	498	1,414	703	2,117
2017-18	123	127	129	166	172	188	168	172	158	174	173	173	176	905	498	1,403	696	2,099
Projected																		
2018-19	152	134	134	136	171	179	191	172	173	157	172	173	175	906	536	1,442	677	2,119
2019-20	165	162	142	141	141	179	182	195	173	171	155	171	175	930	550	1,480	672	2,152
2020-21	156	176	172	151	147	148	181	186	196	171	169	155	171	950	563	1,513	666	2,179
2021-22	151	166	187	182	157	154	151	185	187	195	169	168	156	997	523	1,520	688	2,208
2022-23	155	161	177	198	190	165	158	155	186	186	192	168	170	1,046	499	1,545	716	2,261
2023-24	142	165	172	188	206	200	170	162	156	185	183	191	170	1,073	488	1,561	729	2,290
2024-25	147	151	173	181	194	214	201	174	163	154	182	182	192	1,060	538	1,598	710	2,308
2025-26	152	157	159	182	186	201	216	206	175	161	153	181	184	1,037	597	1,634	679	2,313
2026-27	157	162	164	167	188	193	203	221	207	173	160	151	183	1,031	631	1,662	667	2,329
2027-28	157	167	170	173	172	195	195	208	222	205	171	158	152	1,034	625	1,659	686	2,345

Notes: Attending enrollment data contains all resident students and non-resident students (except home schooled students and private school students) attending district schools. The 65 Housing Units Added Model was first based on the 2017-18 Best Fit Model then took into account the impact from the addition of new housing units in Falmouth on both preschool and elementary in-migration. Details on how this model was created are found in the written report.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 7-2 - Enrollment Trends & Projections - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 65 New Housing Units Model

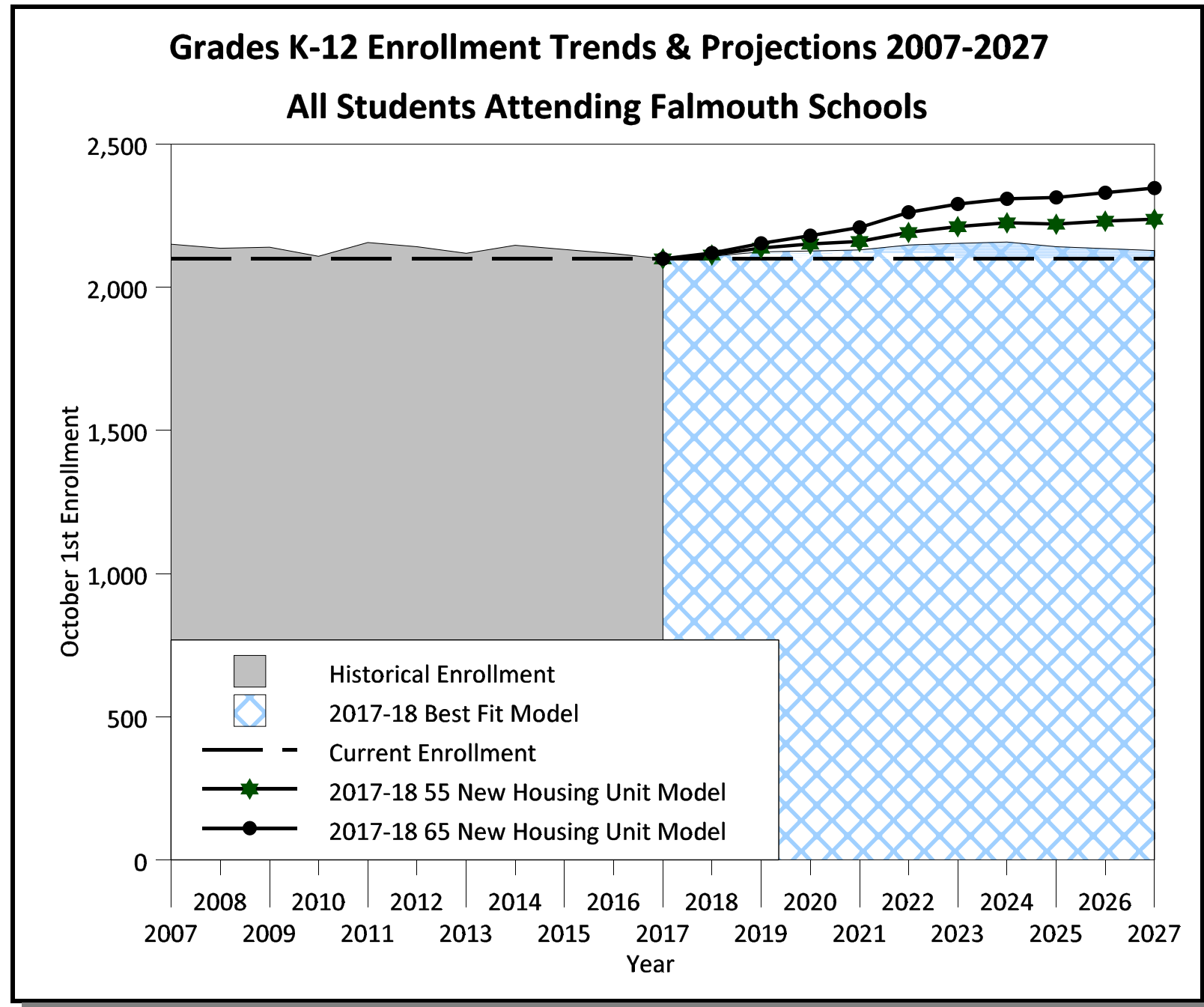
October 1st Enrollment															
School Year	Resident Students Attending District Schools					NON Resident Students Attending District Schools					Total All Attending Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	3	1	4	6	10	916	570	1,486	663	2,149
2008-09	890	563	1,453	672	2,125	6	1	7	3	10	896	564	1,460	675	2,135
2009-10	886	545	1,431	701	2,132	4	0	4	3	7	890	545	1,435	704	2,139
2010-11	877	521	1,398	700	2,098	4	1	5	4	9	881	522	1,403	704	2,107
2011-12	881	524	1,405	732	2,137	13	2	15	3	18	894	526	1,420	735	2,155
2012-13	898	497	1,395	730	2,125	12	2	14	2	16	910	499	1,409	732	2,141
2013-14	874	516	1,390	710	2,100	16	1	17	1	18	890	517	1,407	711	2,118
2014-15	906	521	1,427	691	2,118	19	4	23	5	28	925	525	1,450	696	2,146
2015-16	902	503	1,405	693	2,098	27	4	31	2	33	929	507	1,436	695	2,131
2016-17	895	494	1,389	697	2,086	21	4	25	6	31	916	498	1,414	703	2,117
2017-18	886	486	1,372	682	2,054	19	12	31	14	45	905	498	1,403	696	2,099
Projected															
2018-19	886	527	1,413	661	2,074	20	9	29	16	45	906	536	1,442	677	2,119
2019-20	908	542	1,450	655	2,105	22	8	30	17	47	930	550	1,480	672	2,152
2020-21	929	554	1,483	652	2,135	21	9	30	14	44	950	563	1,513	666	2,179
2021-22	973	514	1,487	672	2,159	24	9	33	16	49	997	523	1,520	688	2,208
2022-23	1,022	490	1,512	703	2,215	24	9	33	13	46	1,046	499	1,545	716	2,261
2023-24	1,048	480	1,528	716	2,244	25	8	33	13	46	1,073	488	1,561	729	2,290
2024-25	1,035	529	1,564	699	2,263	25	9	34	11	45	1,060	538	1,598	710	2,308
2025-26	1,013	587	1,600	666	2,266	24	10	34	13	47	1,037	597	1,634	679	2,313
2026-27	1,007	621	1,628	654	2,282	24	10	34	13	47	1,031	631	1,662	667	2,329
2027-28	1,010	615	1,625	675	2,300	24	10	34	11	45	1,034	625	1,659	686	2,345

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Figure V-4



VI. ASSESSMENT OF ECONOMIC CONDITIONS, POPULATION TRENDS, AND RESIDENTIAL DEVELOPMENT AND THEIR RELATION TO SCHOOL ENROLLMENT

Future school enrollment is impacted by past, current, and future trends in population, housing development, and economic conditions. With the growth of a population and development of new homes comes the potential for new students in the school system. Because school enrollment is impacted by residential development, development trends in the district are analyzed. This information is then used to test whether the “best fit” cohort survival enrollment projections adequately reflect the impact of potential residential development trends.

A. Economic Conditions

Table VI-1 presents trends in the Civilian Labor Force in Falmouth, the **Portland-South Portland Metropolitan Area (Metro)**, and the State of Maine. Between 2012 and 2016, the **Portland-South Portland Metro’s** Civilian Labor Force increased from 202,190 to 202,256, an increase of 66 workers for an increase of less than 0.1%, while the State of Maine's Civilian Labor Force declined by 1.7% over the same time period. The number of people unemployed declined in the Metro with the unemployment rate declining from 6.1% in 2012 to 3% in 2016, while in the State of Maine, the unemployment rate declined from 7.5% in 2012 to 3.9% in 2016. The decline in the unemployment rate across the State of Maine reflects recovery from recessionary impacts on employment.

Falmouth’s Civilian Labor Force experienced an increase of 4.6%, with a gain of 282 workers between 2012 and 2016. Falmouth experienced a greater percentage gain in the Civilian Labor Force compared to the experience in the Portland-South Portland Metro, and a gain instead of a loss experienced in the State of Maine as a whole (loss of 1.7%.) Falmouth also experienced a decline in the unemployment rate between 2012 and 2016, with the unemployment rate declining to 2.6% in 2016 from 4.5% in 2012.

The decline in unemployment rates indicates recovery from the recession has occurred, in addition the gain in the Civilian Labor Force has also increased the number of workers in the area. While the increase in the Civilian Labor Force likely has had an impact on school enrollment over the last five years, any impact would already be accounted for in the last three to five-year historical enrollment trends used to make projections. Therefore, no changes to the 2017-18 “best fit” model are necessary to account for changes in employment levels in Falmouth at this time. However, if significant change in the Civilian Labor Force occurs in the future, then the potential impact on school enrollment from economic condition changes might need to be reassessed.

Table VI-1 - Trends in Civilian Labor Force, 2012 - 2016
Labor Market Area Influencing Falmouth vs. State of Maine

	Falmouth				Portland-South Portland Metro				State of Maine			
	2012	2016	Change (2012-16)		2012	2016	Change (2012-16)		2012	2016	Change (2012-16)	
			#	%			#	%			#	%
Civilian Labor Force	6,095	6,377	282	4.6%	202,190	202,256	66	0.0%	702,636	690,624	(12,012)	-1.7%
Employment	5,823	6,213	390	6.7%	189,839	196,221	6,382	3.4%	650,117	664,010	13,893	2.1%
Unemployment	272	165	(107)	-39.3%	12,351	6,035	(6,316)	-51.1%	52,519	26,614	(25,905)	-49.3%
Unemployment Rate	4.5%	2.6%	-1.9%		6.1%	3.0%	-3.1%		7.5%	3.9%	-3.6%	

Source: Maine Department of Labor, Center for Workforce Research and Information

B. Population Trends

Table VI-2 presents the population trends for Falmouth in comparison to Cumberland County and the State using data from the U.S. Census. Unfortunately, the Census data is now six years old, and estimates of current population is limited. The U.S. Census Bureau's 2016 American Community Survey provides estimates of population, but the margin of error can be quite significant. However, the margin of error on Falmouth's total population estimate for 2016 was +/- 22 people, and the availability of projections by age and gender type used for this study was not fully available. Therefore, the estimated figures should be viewed with some caution.

In 2000, Falmouth's total population was 10,310 people, increasing by 875 people to 11,185 by the year 2010, gaining 8.5% in total population. Cumberland County also experienced growth in total population, with an increase 6%, while the population of the State of Maine as a whole increased by 4.2%. Census population estimates for 2016 indicate total population in Falmouth likely grew, reaching an estimated population of around 11,753 people since 2010.

The under 18 years of age population of Falmouth was 2,811 in 2000, by 2010, the under 18 population increased by 3% to 2,894 children, with a gain of 83 children. However, the population of people under 18 years of age declined by 5% in Cumberland County, while the State of Maine declined by 8.9%. The under 18 population estimates for 2016 indicate the population declined, reaching an under 18 population of around 2,762 people since 2010, however this estimate comes with at least a 2% margin of error, and based on what we know about the 2017-18 enrollment and births, the Census estimate is likely too low by at least 2%. Therefore, the Census population estimates for the under 18 population should be viewed with caution.

The school-aged population of Falmouth (5 to 17 years of age) was 2,100 in 2000. By 2010, that figure increased by 13.4% to 2,381 students, for a gain of 281 school-aged children. Looking at Cumberland County, the population of people 5 to 17 years of age declined by 5.1%, while the State of Maine experienced a decline of 11.1%. Therefore, the gain in the school-aged population did not occur throughout the rest of Cumberland County or the State of Maine.

When we look at Falmouth's population fertile females (women who are 18 to 44 years of age), in 2000 there were 1,670 fertile females. By 2010 that figure declined by 18.7% to 1,357, a loss of 313 fertile females. Looking at Cumberland County, the population of fertile females declined by 7.6%, and the State of Maine declined by 10%. The decline in the fertile female population in Cumberland County and the State helps to explain the loss in the under 18 population. However, the gain in the under 18 population while a decline in fertile females occurred in Falmouth is a different trend, which can be the result of various factors such as more children born per fertile female in the community (indicating larger family sizes) or more children have mothers who are past the normally accepted fertile age (or older than 44 years of age.)

Looking at the population of women who are generally considered past their fertile age, or women 45 years of age or older, Falmouth experienced a significant increase in population. Between 2000 and 2010, the population of women who are 45 years of age or older increased from 2,363 women to reach 3,065 women in 2010, for a gain of 702 women, or 29.7% over the period. The population of women who are 45 years of age or older increased by 25% in

Cumberland County, while the State of Maine experienced an increase of 22.8% during the period. Therefore, the aging female population is a statewide trend.

The implication is while the fertile female population has declined, there also has been growth in the population of women who have matured past the generally accepted age of fertility, or women who are 45 years of age or older. The growth in the 45 years of age or older female population will most likely continue, unless something occurs to reverse or slow this trend, and combined with the decline in the fertile female population, the result would likely be fewer children will be born in Falmouth. However, since seven years have passed, changes in population have likely occurred, but the full extent of any change is unknown in terms of a statistically accurate population count. In addition, there is a possibility of the remaining fertile females having larger family sizes or more women in the 45+ age group are starting a family later.

**Table VI-2 - Population Trends 2000 and 2010, 2016 Estimated
Falmouth vs. Cumberland County and the State of Maine**

Area	2000	2010	2016 Estimated	2000-10	
				#	%
TOTAL POPULATION					
Falmouth	10,310	11,185	11,753	875	8.5%
Cumberland County	265,612	281,674	286,119	16,062	6.0%
State	1,274,923	1,328,361	1,329,328	53,438	4.2%
POPULATION UNDER 18					
Falmouth	2,811	2,894	2,762	83	3.0%
Cumberland County	61,962	58,894	56,938	(3,068)	(5.0)%
State of Maine	301,238	274,533	255,859	(26,705)	(8.9)%
SCHOOL-AGED POPULATION (5 to 17 Years of Age)					
Falmouth	2,100	2,381	n/a	281	13.4%
Cumberland County	46,519	44,139	n/a	(2,380)	(5.1)%
State of Maine	230,512	205,013	n/a	(25,499)	(11.1)%
FERTILE FEMALE POPULATION (Females 18 to 44 years of age)					
Falmouth	1,670	1,357	n/a	(313)	(18.7)%
Cumberland County	53,660	49,568	n/a	(4,092)	(7.6)%
State of Maine	240,816	216,748	n/a	(24,068)	(10.0)%
FEMALE POPULATION (Females 45+ years of age)					
Falmouth	2,363	3,065	n/a	702	29.7%
Cumberland County	53,435	66,770	n/a	13,335	25.0%
State of Maine	267,123	328,076	n/a	60,953	22.8%
Source: 2000 and 2010 Decennial U.S. Census. 2016 American Community Survey U.S. Census.					

Source: 2000 and 2010 Decennial U.S. Census. 2016 American Community Survey U.S. Census.

C. Residential Development Trends

Trends in housing development are influenced by national and regional economic trends and local land-use policies. Two sets of data are used to examine residential development trends, the U.S. decennial Census for year-round housing units and annual local new housing unit data.

1. U.S. Census Data

In 2010, total year-round housing units in Falmouth had increased to 4,543 units from 4,047 units in 2000, for an increase of 12.3% (496 units) since 2000, or on average, 50 new year-round units were added annually over the period. (*See Table VI-3*). The year-round housing unit increase experienced in Falmouth during this period was more than the increase in Cumberland County (10.9%) and the increase experienced throughout the State of Maine (9.6%). While this data indicates strong new housing unit development in Falmouth between 2000 and 2010, it does not take into account recent changes in development.

To account for more recent development, the most recent year-to-year residential development trends will be analyzed next.

Table VI-3 - Year-Round Housing Unit Trends - 2000 - 2010
Falmouth vs. Cumberland County and the State of Maine

Area	# of Year-Round Housing Units		Change (2000-2010)		Average # Added/ Year
	2000	2010	# of units	% Change	
Falmouth	4,047	4,543	496	12.3%	50
Cumberland County	111,750	123,977	12,227	10.9%	1,223
State of Maine	550,361	603,360	52,999	9.6%	5,300

Source: 2000 and 2010 U.S. Census.

2. Local Housing Data

Table VI-4 presents trends in annual new housing units built in Falmouth between 2007 and 2017. Local residential housing data is examined to estimate housing units in the future and to determine if residential development in Falmouth is impacting school enrollment trends. Data on annual new housing units added since 2007 is used to analyze residential development trends, and was obtained from the Town of Falmouth's Planning Department. Housing permits issued in Falmouth were broken down into the following categories:

- ▶ **Single-Family Dwelling Units**: new homes built in the community and are not considered to be age-restricted housing.
- ▶ **Duplex Units**: new housing units, not a replacement of an existing home, and are not age-restricted housing
- ▶ **Replacement**: these are replacement units, i.e., tear down of an old single-family home and replacement of that home
- ▶ **Accessory Dwelling Units (ADU)**: units that are no larger than 800 sq. ft. and are considered to be in-law type apartments on single family homes
- ▶ **Multi-Family Units**: these are age restricted housing for people 55 years of age and older
- ▶ **ESRD**: Overlay District for age restricted housing for people 55 years of age and older

Of these types of permits, only “single-family dwelling units” and “duplex units” were considered when looking at the potential impact of new housing unit development on school enrollment. The reasons for discounting other types of housing development vary. For example, any homes built with the purpose of being age-restricted would have little to no impact on enrollment because these units tend to house no school-aged children. The accessory dwelling units (ADU) added are typically in-law apartment type units. ADUs are no larger than 800 sq. ft in size, and are in addition to a single-family housing unit where the main living space was either pre-existing (and already housing any school-aged children) or if new, is counted in the single-family housing unit permit count.

In addition, while replacement homes do have potential to result in new school-aged children it would be on a case by case basis, for example the replacement might be due to a structure fire where the family already lived in the housing unit, or it could be a new homeowner who purchased the property with the intent to rebuild the home, or it could be a seasonal property conversion. Since the details are not readily available, due to the uncertainty behind the permit intent, these type of permits are routinely discounted when assessing the impact of new housing unit development on school enrollment.

Since 2007, permits for new single-family homes and duplex homes fluctuated between 25 and 62 units annually through 2017. Looking at new homes added over the last 10-years, on average, 42 new housing units have been added annually in Falmouth since 2008. Over the last five years (2013 to 2017), 45 new housing units were added annually while the previous five-year period (2008 to 2012) experienced average growth of 39 new homes per year. Looking at the last three years of data, (2015 to 2017), on average, 43 new homes were added annually, a slightly lower level compared to the most recent five-year average (45 housing units) and more on par with the ten-year average (42 housing units.)

Future new housing development is often difficult to predict and depends on demand, developer interest, availability of buildable lots and the economy. According to the Town Planner, there are a number of housing projects which have been approved and are both underway or not yet started, along with a number of projects currently under review. The main development of note is the Contract Zone - Homestead Farms. Although the development has been modified somewhat from the initial presentation, and at the time of this report the development would potentially bring 119 new housing units into Falmouth, with 31 affordable units being built closest to the turnpike, and another 74 market rate units and 14 duplex units available. In addition, the market rate homes are expected to be considered more affordable in comparison to other housing being built in Falmouth and the developer plans to build these new housing units over the next three years.

The town currently has growth permit limitations, allowing only 65 total permits to be issued annually for new single-family units and two-family/duplex units. What this means is while there are several unknowns about how many permits for these new homes will end up being issued in the future, we do know there will be a maximum of 65 permits issued for housing types which could potentially impact enrollment, unless of course the Town makes a change to the growth permit limit. However, a few questions do remain, for example, will all of the 65 growth permits issued for new housing units over the next two years consist of permits in this Contract Zone development, or will permits in the Contract Zone make up only a portion of the permits issued? Will the growth permit maximum be met consistently at 65 units, or will housing remain steady at around 43 to 45 units per year despite the new project because overall housing demand remains steady? Or will demand of new housing bump up the permits slightly but still not hitting the maximum allowed under the growth permit limitations, with new housing being added at a rate of around 55 new housing units per year?

To adequately account for any potential impact on school enrollment from new housing unit development in Falmouth, it became clear that looking at various alternative scenarios would be best. After discussion with Ethan Croce, the Community Development Director a decision was made to first look at the level of development accounted for by the 2017-18 “best fit” model (or 42 to 49 units to be discussed further in this Section), then look at what the impact of 55 new housing units added annually and then the impact of 65 new housing units added annually would be on school enrollment in Falmouth.

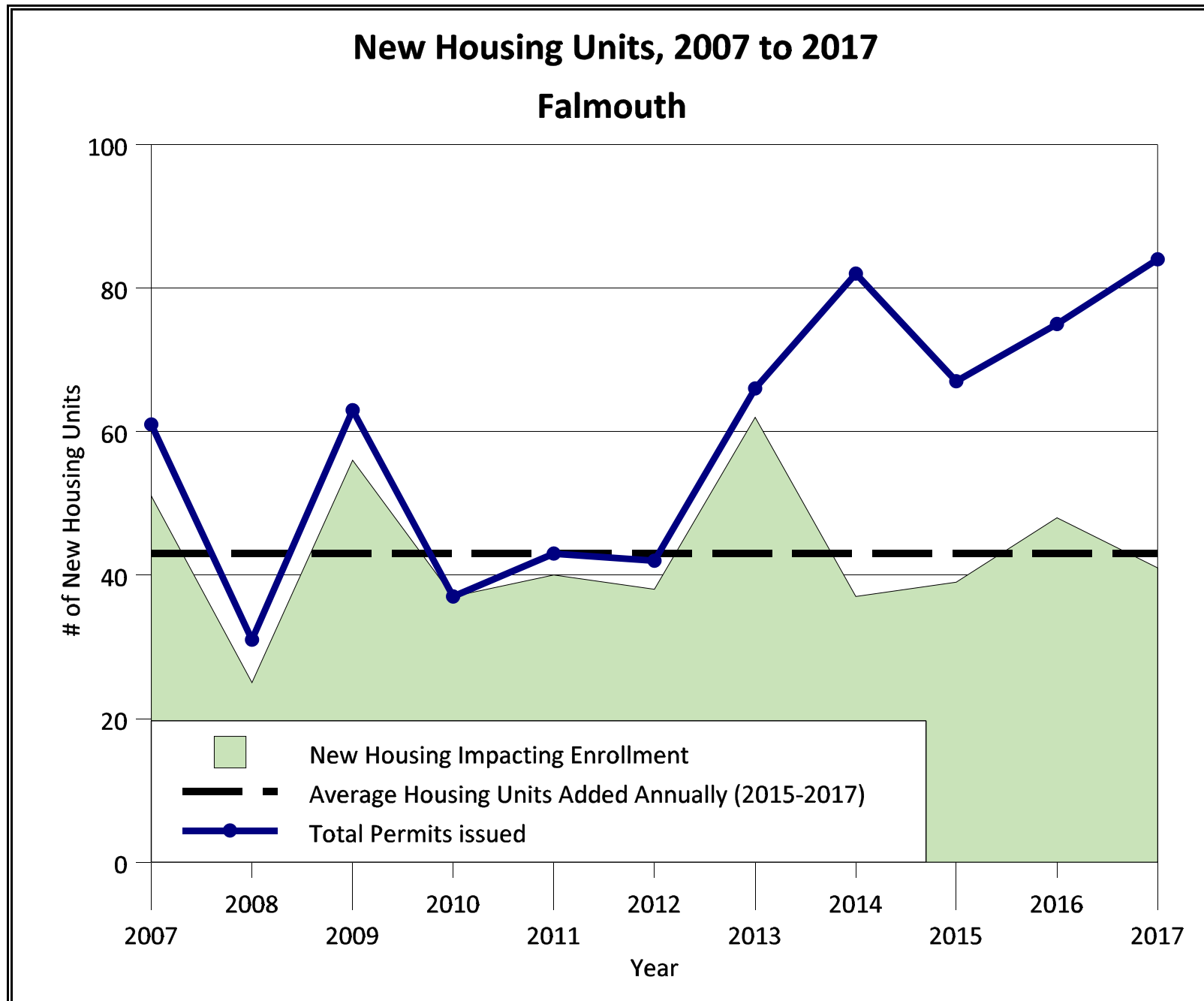
It is important to understand new housing development will fluctuate year-to-year and the alternative models would be based on average rates of development. The purpose of the comparison is to assess the potential impact housing would have on enrollment, and gain an understanding that future enrollment could potentially look very different when considering new housing development scenarios.

Table VI-4 - New Housing Units, 2007 to 2017
Town of Falmouth

Year	Single Family Dwellings (New)	Duplex/2 Family (New)	Replacement (Tear down/rebuild of existing)	Accessory Dwelling Units (no larger than 800 sq. ft)	Multi-Family (all age restricted 55+)	ESRD (Overlay District for age restricted 55+)	Total New Housing Development	Total New Homes Impacting Enrollment
2007	51	0	3	1	0	6	61	51
2008	25	0	3	0	0	3	31	25
2009	56	0	0	2	0	5	63	56
2010	37	0	0	0	0	0	37	37
2011	40	0	2	1	0	0	43	40
2012	38	0	3	1	0	0	42	38
2013	62	0	1	3	0	0	66	62
2014	37	0	3	0	36	6	82	37
2015	39	0	9	4	0	15	67	39
2016	45	3	7	9	0	11	75	48
2017	39	2	6	6	20	11	84	41
Last 10 Year Avg. (2008 to 2017)	42	1	3	3	6	5	59	42
First 5 Year Avg. (2008 to 2012)	39	0	2	1	0	2	43	39
Last 5 Year Avg. (2013 to 2017)	44	1	5	4	11	9	75	45
Last 3 Year Avg. (2015 to 2017)	40	1	6	5	14	11	75	43

Source: Town of Falmouth Planning Department

Figure VI-1



D. Relationship of Residential Development to School Enrollment

The “best fit” cohort survival does not directly incorporate the level of residential development and turnover in the existing housing stock when projecting school enrollment. Instead, the survival ratios used within cohort models reflect the historical impact of net migration (which is influenced by residential development and turnover) on school enrollment. What this means is, if future residential development levels, turnover levels, or their relationship to net migration is **significantly** different from levels experienced in the past ten years, then the “best fit” cohort survival model may overstate or understate future enrollment depends on the strongest statistical correlation of trends. For school planning purposes, understanding the degree to which residential development activity will impact school enrollment is important.

1. Net Preschool Migration

To show the relationship between residential development and preschool net migration, the ratios between net preschool migration reflected in the first grade enrollment and the number of new housing units built in Falmouth between the year of the first grade enrollment year and the six years prior was examined. (*See Table VI-5*).

On average, for each of the six-year periods examined, 262 new homes were built in Falmouth. The average net migration of preschool-aged children for each of the first grade enrollment years was an in-migration of 60 children, for a ratio of 0.227 children per unit, or a gain of about 23 children for every 100 units built.

However, when looking at the trends over the last three years between 2010-15 and 2012-17, on average, 261 new homes were built in Falmouth, a similar level compared with what occurred over the five-year period. The average in-migration of preschool-aged children for each of the first grade enrollment years was slightly lower than the five-year average, or an average in-migration of 54 children occurred, for a ratio of 0.206 children per unit, or a gain of about 21 children for every 100 units built.

When looking at the level of residential development compared to preschool migration trends, new residential development in Falmouth appears to have a fairly consistent influence on preschool migration. To determine the average impact on future preschool in-migration levels from projected residential development, the three-year experience in Falmouth, or ratio of 0.206 will be used.

**Table VI-5 - Births, First Grade Enrollment, Net Preschool Migration and New Housing Units Added
Falmouth**

Birth Year (Oct. 15-Oct. 14)	# of Births	1st Grade Class Year	1st Grade Enrollment	Net Migration	6-Year Period	New Housing Units Added	Ratio Migr/HU
2006-07	74	2013-14	145	71	2008-13	258	0.275
2007-08	79	2014-15	145	66	2009-14	270	0.244
2008-09	77	2015-16	144	67	2010-15	253	0.265
2009-10	76	2016-17	123	47	2011-16	264	0.178
2010-11	77	2017-18	124	47	2012-17	265	0.177
5 Year Avg. (07-11)	77	5 Year Avg. (13-17)	136	60	Avg. (08-17)	262	0.227
3 Year Avg. (09-11)	77	3 Year Avg. (15-17)	130	54	Avg. (10-17)	261	0.206

Sources: Births - Bureau of Health Statistics and Data Management, Maine Department of Health and Human Services, Bureau of Vital Records Administration. 1st Grade Enrollment - October 1st 2008 to 2016 from MDOE, 2017 from Falmouth School Department. Residential New Housing Units - Town of Falmouth, Planning Department

To account for the impact of recent residential development on preschool in-migration, the average ratio of preschool in-migration to new housing units over the last three years is compared to recent residential development. By doing this, the impact of projected future residential development can be tested against the preschool in-migration levels reflected in the 2017-18 “best fit” projections, or in-migration of about 60.4 students annually, a level of preschool in-migration consistent with the addition of about 49 homes added annually. (*See Table VI-6*).

- Development of 55 new homes annually would have the potential for generating the in-migration of 67.9 students annually in each first grade in Falmouth, or 7.5 students more than reflected in the 2017-18 “best fit” model.
- Development of 65 new homes annually would have the potential for generating the in-migration of 80.3 students annually in each first grade in Falmouth, or 19.9 students more than reflected in the 2017-18 “best fit” model.

Therefore, two additional models should be created based on new housing unit development, each taking into account additional preschool migration. Since the full impact on preschool migration will take several years to fully realize, the additional students will be added in slowly, with the full impact of higher levels of development fully realized in 2023-24. Since the large scale development may be a one time event, future new housing development is likely to return to more recent levels after 2023-24.

The second model is called the 2017-18 “55 new housing units” model, will be first based on the 2017-18 “best fit” model, then will take into account 7.5 additional students in first grade, or the following additional students will be added to each first grade class:

- ▶ In 2018-19, 1.3 additional students will be added to the first grade class,
- ▶ In 2019-20, 2.5 additional students will be added to the first grade class,
- ▶ In 2020-21, 3.8 additional students will be added to the first grade class,
- ▶ In 2021-22, 5.0 additional students will be added to the first grade class,
- ▶ In 2022-23, 6.3 additional students will be added to the first grade class,
- ▶ In 2023-24 7.5 additional students will be added to the first grade class.

The third model, called the 2017-18 “65 new housing units” model, will be first based on the 2017-18 “best fit” model, then will take into account 19.9 additional students in first grade, or the following additional students will be added to each first grade class:

- ▶ In 2018-19, 3.3 additional students will be added to the first grade class,
- ▶ In 2019-20, 6.6 additional students will be added to the first grade class,
- ▶ In 2020-21, 9.9 additional students will be added to the first grade class,
- ▶ In 2021-22, 13.3 additional students will be added to the first grade class,
- ▶ In 2022-23, 16.6 additional students will be added to the first grade class,
- ▶ In 2023-24 19.9 additional students will be added to the first grade class.

Table VI-6 - Comparison of the Potential Impact of Future New Home Development on Preschool In-Migration to Enrollment Projections for Falmouth			
	2017-18 Best Fit Model	55 Housing Units	65 Housing Units
Projected Annual New Homes Added	49	55	65
Projected Housing Added Over a Six-Year Period	294	330	390
Average Ratio of Preschool In-migration to New Homes (Average 2010 to 2017)	0.206	0.206	0.206
Potential Annual Preschool In-migration Resulting from Projected Development Levels	60.5	67.9	80.3
Average Annual Preschool In-migration Levels reflected in 2017-18 “best fit” model	60.4	60.4	60.4
<i>Difference from Potential Impact</i>	<i>0.1</i>	<i>7.5</i>	<i>19.9</i>
Accumulative Impact of Additional Preschool Students			
Year 1 - 2018-19	16.7%	1.3	3.3
Year 2 - 2019-20	33.3%	2.5	6.6
Year 3 - 2020-21	50.0%	3.8	10.0
Year 4 - 2021-22	66.7%	5.0	13.3
Year 5 - 2022-23	83.3%	6.3	16.6
Full Impact of Higher Development - 2023-24	100.0%	7.5	19.9
Source: Calculated by Wandell Consulting			

2. Net Elementary (Grades 1-6) Migration

To assess the relationship between residential development levels and migration of students at the elementary grades (first to sixth), the ratio of annual net migration of students at each of the grade levels and annual new housing units built in Falmouth during the year was analyzed. (See *Table VI-7*).

In the ten years between 2008 and 2017, Falmouth experienced an average net in-migration of elementary students while migration fluctuated year-to-year between an in-migration of zero students and an in-migration of 52 students. The average ratio of in-migration of elementary students (1-6) to new housing units was 0.598, or, on average, over the last ten years for every 10 housing units built in Falmouth an in-migration of about 6 elementary-aged students occurred.

Falmouth continued to experience an average in-migration of elementary students over the last five years (2013 to 2017), with elementary migration continuing to fluctuate year-to-year, for an average in-migration ratio of 0.714. Or, on average, over the last five years for every 10 housing units built in Falmouth an in-migration of about 7 elementary-aged students occurred.

Looking at development over the last three years (2015 to 2017), Falmouth continued to experience strong average in-migration of elementary students, with an in-migration ratio of 0.664. Or, on average, over the last three years for every 10 housing units built in Falmouth an in-migration of about 6 to 7 elementary-aged students occurred.

Clearly elementary migration in Falmouth has been impacted by new housing development, with an increase in elementary in-migration occurring over the last three to five years.

**Table VI-7 - Net Elementary (1-6) Migration and New Housing Units
Falmouth**

Enrollment Years	Net Migration (Grades 1-5 - 2-6)	Year	# of New Homes	Ratio Migr/HU
2007-08 to 2008-09	0	2008	25	0.000
2008-09 to 2009-10	21	2009	56	0.375
2009-10 to 2010-11	24	2010	37	0.649
2010-11 to 2011-12	26	2011	40	0.650
2011-12 to 2012-13	20	2012	38	0.526
2012-13 to 2013-14	25	2013	62	0.403
2013-14 to 2014-15	52	2014	37	1.405
2014-15 to 2015-16	24	2015	39	0.615
2015-16 to 2016-17	31	2016	48	0.646
2016-17 to 2017-18	30	2017	41	0.732
10 Year Avg. (08-17)	25	10 Year Avg. (08-17)	42	0.598
5 Year Avg. (13-17)	32	5 Year Avg. (13-17)	45	0.714
3 Year Avg. (15-17)	28	3 Year Avg. (15-17)	43	0.664

Sources: Net Migration - Calculated based on October 1st Resident Enrollment data from MDOE and the Falmouth School Department. Residential New Housing Units - 2008-2017 from the Falmouth Planning Department.

By applying the average ratio of elementary in-migration to new homes over the last three years to the estimated level of future residential development the impact of projected future residential development can be estimated and used as a test against the elementary in-migration levels reflected in the 2017-18 “best fit” projections, or in-migration of about 27.8 students annually. (*See Table VI-8*). The level of elementary in-migration projected by the 2017-18 “best fit” model is consistent with the addition of about 42 homes added annually.

- Development of 55 new homes annually would have the potential for generating the in-migration of 36.5 students annually in grades 1 through 6 in Falmouth, or 8.7 students more than reflected in the 2017-18 “best fit” model.
- Development of 65 new homes annually would have the potential for generating the in-migration of 43.2 students annually in grades 1 through 6 in Falmouth, or 15.4 students more than reflected in the 2017-18 “best fit” model.

Therefore, two additional models should be created based on new housing unit development which takes into account additional students in grades 1 through 6. Since the full impact on elementary migration will take several years to fully realize, the additional students will be added in slowly, with the full impact of higher levels of development fully realized in 2023-24.

The second model is called the 2017-18 “55 new housing units” model, will be first based on the 2017-18 “best fit” model, then will take into account 8.7 additional students in grades 1 to 6, or the following additional students will be added to each grade in grades 1 to 6:

- In 2018-19, 0.2 additional students will be added to each grade, in grades 1 to 6,
- In 2019-20, 0.5 additional students will be added to each grade, in grades 1 to 6,
- In 2020-21, 0.7 additional students will be added to each grade, in grades 1 to 6,
- In 2021-22, 1.0 additional students will be added to each grade, in grades 1 to 6,
- In 2022-23, 1.2 additional students will be added to each grade, in grades 1 to 6,
- In 2023-24, 1.5 additional students will be added to each grade, in grades 1 to 6.

The third model is called the 2017-18 “65 new housing units” model, will be first based on the 2017-18 “best fit” model, then will take into account 15.3 additional students in grades 1 to 6, or the following additional students will be added to each grade in grades 1 to 6:

- In 2018-19, 0.4 additional students will be added to each grade, in grades 1 to 6,
- In 2019-20, 0.9 additional students will be added to each grade, in grades 1 to 6,
- In 2020-21, 1.3 additional students will be added to each grade, in grades 1 to 6,
- In 2021-22, 1.7 additional students will be added to each grade, in grades 1 to 6,
- In 2022-23, 2.1 additional students will be added to each grade, in grades 1 to 6,
- In 2023-24, 2.6 additional students will be added to each grade, in grades 1 to 6.

Table VI-8 - Comparison of the Potential Impact of Future New Homes on Elementary In-Migration (Grades First through Sixth) to the "Best Fit" Enrollment Projections for Falmouth

	2017-18 Best Fit Model	55 Housing Units	65 Housing Units
New Homes Added Annually	42	55	65
Average Ratio of In-migration to New Homes Added	0.664	0.664	0.664
Potential Annual In-grade In-migration Resulting from Projected Residential Development	27.9	36.5	43.2
Average Annual In-migration Levels for Grades 1-6 reflected in the 2017-18 "best fit" model	27.8	27.8	27.8
Difference - Potential Impact	0.1	8.7	15.4
<i>Difference per grade in grades 1 to 6</i>	0.0	1.5	2.6
<i>Accumulative Impact of Additional Elementary Students</i>			
Year 1 - 2018-19	16.7%	0.2	0.4
Year 2 - 2019-20	33.3%	0.5	0.9
Year 3 - 2020-21	50.0%	0.7	1.3
Year 4 - 2021-22	66.7%	1.0	1.7
Year 5 - 2022-23	83.3%	1.2	2.1
Full Impact of Higher Development - 2023-24	100.0%	1.5	2.6
Source: Calculated by Wandell Consulting			

E. Summary and Recommendations Regarding Economic Conditions, Population Trends, and Residential Development

Based on the large scale Contract Zone - Homestead development, Falmouth most likely will experience a higher level of growth similar compared to what happened over the last three to five years, with residential development of between 55 and 65 new homes added annually. When looking at residential development compared with preschool and elementary migration, the 2017-18 “best fit” model did not adequately account for the impact of new homes on school enrollment if this higher level of development occurs. Therefore, two additional models were created to account for the additional preschool and elementary in-migration from potential new home development.

The 2017-18 “best fit” model is a standard statistical model which projects enrollment based on historical trends and is considered to be the most likely scenario to occur in Falmouth if future enrollment follows the historical pattern of enrollment, and accounts for the addition of 42 to 49 new housing units per year.

The 2017-18 “55 new housing units” model is based on the 2017-18 best fit model then takes into account additional resident births, preschool migration and elementary migration and would be the model likely scenario to occur in Falmouth if the Town has average development of around 55 new homes added annually, and the level of preschool and elementary in-migration to new homes continues as it has over the last three-year and five-year periods.

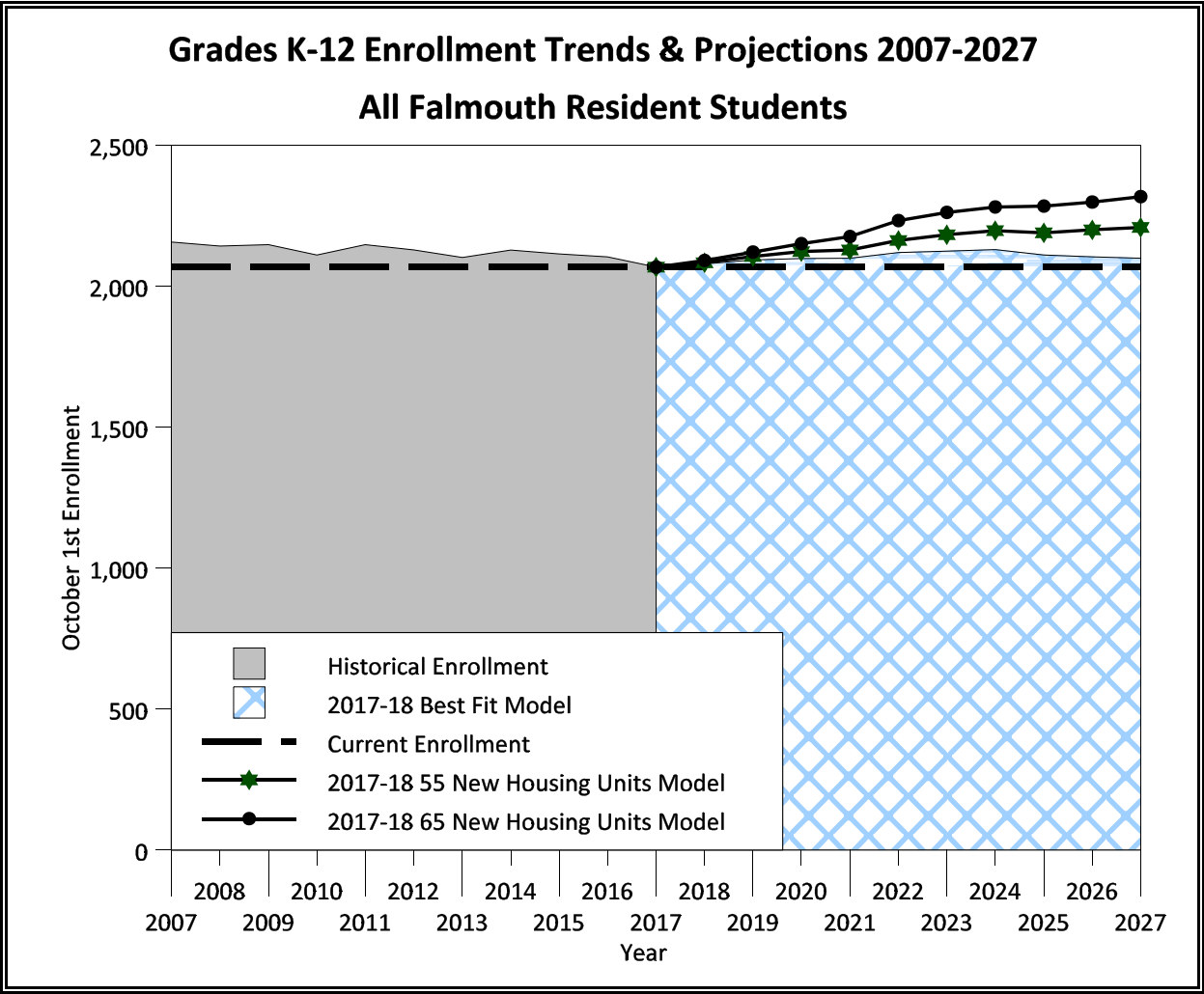
The 2017-18 “65 new housing units” model is based on the 2017-18 best fit model then takes into account additional resident births, preschool migration and elementary in-migration and would be the model likely scenario to occur in Falmouth if the Town has average development of around 65 new homes added annually, and the level of preschool and elementary in-migration to new homes continues as it has over the last three-year and five-year periods.

It is important to note that if recessions or economic booms occur in the future, or if significant residential development and/or population changes occur, these enrollment projections would need to be reassessed.

VII. SUMMARY OF ENROLLMENT PROJECTIONS FOR SCHOOL PLANNING PURPOSES

To provide reasonable cushions for use in planning school facilities, the enrollment projections by grade group and presented the projections within ranges of plus and minus 10% for the K-8 grade groups, and plus and minus 5% for grades 9-12. In addition, more conservative ranges of 3% across all grade levels are supplied. These ranges should provide the school department with some idea of what future enrollment would look like under different scenarios. The report **Appendix** contains grade by grade historical and projected enrollment.

Figure VII-1



**Appendix Table 5 - All Falmouth Resident Students - 2017-18 Best Fit Model
Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment**

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	890			487			690			2,067		
2018-19	791	879	967	474	527	580	638	672	706	1,903	2,078	2,253
2019-20	797	885	974	488	542	596	632	665	698	1,917	2,092	2,268
2020-21	796	884	972	496	551	606	629	662	695	1,921	2,097	2,273
2021-22	817	908	999	457	508	559	648	682	716	1,922	2,098	2,274
2022-23	834	927	1,020	431	479	527	676	712	748	1,941	2,118	2,295
2023-24	851	946	1,041	410	455	501	686	722	758	1,947	2,123	2,300
2024-25	842	935	1,029	443	492	541	667	702	737	1,952	2,129	2,307
2025-26	822	913	1,004	482	535	589	629	662	695	1,933	2,110	2,288
2026-27	816	907	998	504	560	616	604	636	668	1,924	2,103	2,282
2027-28	819	910	1,001	491	545	600	611	643	675	1,921	2,098	2,276

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	890			487			690			2,067		
2018-19	853	879	905	511	527	543	652	672	692	2,016	2,078	2,140
2019-20	858	885	912	526	542	558	645	665	685	2,029	2,092	2,155
2020-21	857	884	911	534	551	568	642	662	682	2,033	2,097	2,161
2021-22	881	908	935	493	508	523	662	682	702	2,036	2,098	2,160
2022-23	899	927	955	465	479	493	691	712	733	2,055	2,118	2,181
2023-24	918	946	974	441	455	469	700	722	744	2,059	2,123	2,187
2024-25	907	935	963	477	492	507	681	702	723	2,065	2,129	2,193
2025-26	886	913	940	519	535	551	642	662	682	2,047	2,110	2,173
2026-27	880	907	934	543	560	577	617	636	655	2,040	2,103	2,166
2027-28	883	910	937	529	545	561	624	643	662	2,036	2,098	2,160

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 8 - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 Best Fit Model

Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	905			498			696			2,099		
2018-19	806	895	985	482	535	589	643	677	711	1,931	2,107	2,285
2019-20	812	902	992	494	549	604	638	672	706	1,944	2,123	2,302
2020-21	810	900	990	503	559	615	633	666	699	1,946	2,125	2,304
2021-22	833	926	1,019	464	516	568	653	687	721	1,950	2,129	2,308
2022-23	851	946	1,041	438	487	536	678	714	750	1,967	2,147	2,327
2023-24	869	966	1,063	416	462	508	688	724	760	1,973	2,152	2,331
2024-25	860	955	1,051	450	500	550	667	702	737	1,977	2,157	2,338
2025-26	840	933	1,026	489	543	597	632	665	698	1,961	2,141	2,321
2026-27	834	927	1,020	511	568	625	607	639	671	1,952	2,134	2,316
2027-28	837	930	1,023	498	553	608	612	644	676	1,947	2,127	2,307

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	905			498			696			2,099		
2018-19	868	895	922	519	535	551	657	677	697	2,044	2,107	2,170
2019-20	875	902	929	533	549	565	652	672	692	2,060	2,123	2,186
2020-21	873	900	927	542	559	576	646	666	686	2,061	2,125	2,189
2021-22	898	926	954	501	516	531	666	687	708	2,065	2,129	2,193
2022-23	918	946	974	472	487	502	693	714	735	2,083	2,147	2,211
2023-24	937	966	995	448	462	476	702	724	746	2,087	2,152	2,217
2024-25	926	955	984	485	500	515	681	702	723	2,092	2,157	2,222
2025-26	905	933	961	527	543	559	645	665	685	2,077	2,141	2,205
2026-27	899	927	955	551	568	585	620	639	658	2,070	2,134	2,198
2027-28	902	930	958	536	553	570	625	644	663	2,063	2,127	2,191

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 5-1 - All Falmouth Resident Students - 2017-18 55 New Housing Units Model

Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	890			487			690			2,067		
2018-19	795	883	971	475	528	581	638	672	706	1,908	2,083	2,258
2019-20	808	898	988	488	542	596	632	665	698	1,928	2,105	2,282
2020-21	815	906	997	499	554	609	629	662	695	1,943	2,122	2,301
2021-22	841	934	1,027	461	512	563	648	682	716	1,950	2,128	2,306
2022-23	869	966	1,063	435	483	531	677	713	749	1,981	2,162	2,343
2023-24	892	991	1,090	419	466	513	689	725	761	2,000	2,182	2,364
2024-25	885	983	1,081	457	508	559	670	705	740	2,012	2,196	2,380
2025-26	868	964	1,060	502	558	614	634	667	700	2,004	2,189	2,374
2026-27	868	964	1,060	527	586	645	617	649	681	2,012	2,199	2,386
2027-28	875	972	1,069	518	575	633	628	661	694	2,021	2,208	2,396

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	890			487			690			2,067		
2018-19	857	883	909	512	528	544	652	672	692	2,021	2,083	2,145
2019-20	871	898	925	526	542	558	645	665	685	2,042	2,105	2,168
2020-21	879	906	933	537	554	571	642	662	682	2,058	2,122	2,186
2021-22	906	934	962	497	512	527	662	682	702	2,065	2,128	2,191
2022-23	937	966	995	469	483	497	692	713	734	2,098	2,162	2,226
2023-24	961	991	1,021	452	466	480	703	725	747	2,116	2,182	2,248
2024-25	954	983	1,012	493	508	523	684	705	726	2,131	2,196	2,261
2025-26	935	964	993	541	558	575	647	667	687	2,123	2,189	2,255
2026-27	935	964	993	568	586	604	630	649	668	2,133	2,199	2,265
2027-28	943	972	1,001	558	575	592	641	661	681	2,142	2,208	2,274

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 8-1 - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 55 New Housing Units Model
Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	905			498			696			2,099		
2018-19	809	899	989	482	536	590	643	677	711	1,934	2,112	2,290
2019-20	824	915	1,007	494	549	604	638	672	706	1,956	2,136	2,317
2020-21	830	922	1,014	506	562	618	633	666	699	1,969	2,150	2,331
2021-22	857	952	1,047	468	520	572	653	687	721	1,978	2,159	2,340
2022-23	887	985	1,084	442	491	540	679	715	751	2,008	2,191	2,375
2023-24	910	1,011	1,112	426	473	520	691	727	763	2,027	2,211	2,395
2024-25	903	1,003	1,103	464	516	568	670	705	740	2,037	2,224	2,411
2025-26	886	984	1,082	509	566	623	637	670	704	2,032	2,220	2,409
2026-27	886	984	1,082	535	594	653	619	652	685	2,040	2,230	2,420
2027-28	893	992	1,091	525	583	641	629	662	695	2,047	2,237	2,427

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	905			498			696			2,099		
2018-19	872	899	926	520	536	552	657	677	697	2,049	2,112	2,175
2019-20	888	915	942	533	549	565	652	672	692	2,073	2,136	2,199
2020-21	894	922	950	545	562	579	646	666	686	2,085	2,150	2,215
2021-22	923	952	981	504	520	536	666	687	708	2,093	2,159	2,225
2022-23	955	985	1,015	476	491	506	694	715	736	2,125	2,191	2,257
2023-24	981	1,011	1,041	459	473	487	705	727	749	2,145	2,211	2,277
2024-25	973	1,003	1,033	501	516	531	684	705	726	2,158	2,224	2,290
2025-26	954	984	1,014	549	566	583	650	670	690	2,153	2,220	2,287
2026-27	954	984	1,014	576	594	612	632	652	672	2,162	2,230	2,298
2027-28	962	992	1,022	566	583	600	642	662	682	2,170	2,237	2,304

Notes: Enrollment data contains all resident students and non-resident students attending district schools.
2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

Appendix Table 5-2 - All Falmouth Resident Students - 2017-18 65 New Housing Units Model

Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	890			487			690			2,067		
2018-19	801	890	979	475	528	581	638	672	706	1,914	2,090	2,266
2019-20	821	912	1,003	489	543	597	632	665	698	1,942	2,120	2,298
2020-21	840	933	1,026	500	555	611	629	662	695	1,969	2,150	2,332
2021-22	879	977	1,075	464	515	567	649	683	717	1,992	2,175	2,359
2022-23	924	1,027	1,130	442	491	540	678	714	750	2,044	2,232	2,420
2023-24	948	1,053	1,158	433	481	529	691	727	763	2,072	2,261	2,450
2024-25	936	1,040	1,144	477	530	583	675	710	746	2,088	2,280	2,473
2025-26	916	1,018	1,120	529	588	647	643	677	711	2,088	2,283	2,478
2026-27	911	1,012	1,113	560	622	684	631	664	697	2,102	2,298	2,494
2027-28	914	1,015	1,117	554	616	678	652	686	720	2,120	2,317	2,515

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	890			487			690			2,067		
2018-19	863	890	917	512	528	544	652	672	692	2,027	2,090	2,153
2019-20	885	912	939	527	543	559	645	665	685	2,057	2,120	2,183
2020-21	905	933	961	538	555	572	642	662	682	2,085	2,150	2,215
2021-22	948	977	1,006	500	515	530	663	683	703	2,111	2,175	2,239
2022-23	996	1,027	1,058	476	491	506	693	714	735	2,165	2,232	2,299
2023-24	1,021	1,053	1,085	467	481	495	705	727	749	2,193	2,261	2,329
2024-25	1,009	1,040	1,071	514	530	546	689	710	731	2,212	2,280	2,348
2025-26	987	1,018	1,049	570	588	606	657	677	697	2,214	2,283	2,352
2026-27	982	1,012	1,042	603	622	641	644	664	684	2,229	2,298	2,367
2027-28	985	1,015	1,045	598	616	634	665	686	707	2,248	2,317	2,386

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 8-2 - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 65 New Housing Units Model
Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*		905			498			696			2,099	
2018-19	815	906	997	482	536	590	643	677	711	1,940	2,119	2,298
2019-20	837	930	1,023	495	550	605	638	672	706	1,970	2,152	2,334
2020-21	855	950	1,045	507	563	619	633	666	699	1,995	2,179	2,363
2021-22	897	997	1,097	471	523	575	654	688	722	2,022	2,208	2,394
2022-23	941	1,046	1,151	449	499	549	680	716	752	2,070	2,261	2,452
2023-24	966	1,073	1,180	439	488	537	693	729	765	2,098	2,290	2,482
2024-25	954	1,060	1,166	484	538	592	675	710	746	2,113	2,308	2,504
2025-26	933	1,037	1,141	537	597	657	645	679	713	2,115	2,313	2,511
2026-27	928	1,031	1,134	568	631	694	634	667	700	2,130	2,329	2,528
2027-28	931	1,034	1,137	563	625	688	652	686	720	2,146	2,345	2,545

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*		905			498			696			2,099	
2018-19	879	906	933	520	536	552	657	677	697	2,056	2,119	2,182
2019-20	902	930	958	534	550	567	652	672	692	2,088	2,152	2,217
2020-21	922	950	979	546	563	580	646	666	686	2,114	2,179	2,245
2021-22	967	997	1,027	507	523	539	667	688	709	2,141	2,208	2,275
2022-23	1,015	1,046	1,077	484	499	514	695	716	737	2,194	2,261	2,328
2023-24	1,041	1,073	1,105	473	488	503	707	729	751	2,221	2,290	2,359
2024-25	1,028	1,060	1,092	522	538	554	689	710	731	2,239	2,308	2,377
2025-26	1,006	1,037	1,068	579	597	615	659	679	699	2,244	2,313	2,382
2026-27	1,000	1,031	1,062	612	631	650	647	667	687	2,259	2,329	2,399
2027-28	1,003	1,034	1,065	606	625	644	665	686	707	2,274	2,345	2,416

Notes: Enrollment data contains all resident students and non-resident students attending district schools
2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

APPENDIX A

GRADE BY GRADE HISTORICAL & PROJECTED ENROLLMENT

Appendix Table 1 - Entering Class to Births Ratio Worksheet

Attending Resident Enrollment - Falmouth Resident Students - 2017-18 Best Fit Model

Oct 15-Oct 14 Births	Number Births	KG Year	KG Class Size	1st Grade Year	1st Class Size	Ratio 1st/Birth	Ratio 1st/K	Proj. 1st Grade	Net Preschool Migration			
2001-02	85	10/07	107	10/08	142	1.671	1.327		57			
2002-03	90	10/08	116	10/09	152	1.689	1.310		62			
2003-04	92	10/09	114	10/10	126	1.370	1.105		34			
2004-05	83	10/10	119	10/11	135	1.627	1.134		52			
2005-06	96	10/11	134	10/12	145	1.510	1.082		49			
2006-07	74	10/12	148	10/13	145	1.959	0.980		71			
2007-08	79	10/13	133	10/14	145	1.835	1.090		66			
2008-09	77	10/14	133	10/15	144	1.870	1.083		67			
2009-10	76	10/15	116	10/16	123	1.618	1.060		47			
2010-11	77	10/16	117	10/17	124	1.610	1.060		47			
2011-12	74	10/17	119	10/18		1.726	1.073	128	54			
2012-13	87	10/18		10/19		1.733		151	64			
2013-14	92	10/19		10/20		1.733		159	67			
2014-15	85	10/20		10/21		1.733		147	62			
2015-16	80	10/21		10/22		1.733		139	59			
2016-17*	80	10/22		10/23		1.733		139	59			
2017-18 est	82	10/23		10/24		1.733		142	60			
2018-19 est	82	10/24		10/25		1.733		142	60			
2019-20 est	82	10/25		10/26		1.733		142	60			
2020-21 est	82	10/26		10/27		1.733		142	60			
10yr Total (02-11)		829	10yr Total (07-16)		1,237	10yr Total (08-17)		1,381	1.666	1.116	Last 10yr	55.2
10yr Avg (02-11)		83	10yr Avg (07-16)		124	10yr Avg (08-17)		138	1.676	1.116	Last 5yr	59.6
5yr Avg (13-17)		85									Last 3yr	53.7
5yr Max (13-17)		92									Proj.	60.4
5yr Min (13-17)		80										
3 yr Avg (15-17)		82										
First Grade to Births Correlation Coefficients		First Grade to Kindergarten Correlation Coefficients										
10 YEAR	0.213	10 YEAR	0.449									
9 YEAR	0.203	9 YEAR	0.582									
8 YEAR	0.041	8 YEAR	0.882									
7 YEAR	0.308	7 YEAR	0.859									
6 YEAR	0.330	6 YEAR	0.886									
5 YEAR	0.052	5 YEAR	0.895									
4 YEAR	0.720	4 YEAR	0.999									
3 YEAR	0.536	3 YEAR	1.000									
						Ratios		1st/Birth	1st/K			
						Avg last 10		1.676	1.123			
						Avg last 9		1.676	1.100			
						Avg last 8		1.675	1.074			
						Avg last 7		1.718	1.070			
						Avg last 6		1.734	1.059			
						Avg last 5		1.778	1.055			
						Avg last 4		1.733	1.073			
						Avg last 3		1.699	1.068			
						av 1st 5		1.573	1.192			
						10yr Weighted		1.699	1.082			
						5yr Weighted		1.717	1.063			

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. Three-year average of births (2014-15 to 2016-17) used to estimate births from 2017-18 to 2020-21. *2017 birth data is preliminary and provisional from the Maine Department of Health and Human Services, Office of Data, Research, and Vital Statistics. The first grade from 2019-20 to 2027-28 was projected using the 4-year ratio of first grade to births, and the 2018-19 first grade was based on the 2017-18 Kindergarten class size and the 4-year ratio of first grade to Kindergarten.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 2 - Enrollment Trends & Projections - Falmouth Attending Resident Students - 2017-18 Best Fit Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	107	163	156	144	173	170	193	185	191	162	175	167	153	913	569	1,482	657	2,139
2008-09	116	142	146	162	147	177	174	199	190	178	157	172	165	890	563	1,453	672	2,125
2009-10	114	152	144	155	165	156	175	176	194	192	180	158	171	886	545	1,431	701	2,132
2010-11	119	126	154	157	156	165	164	179	178	192	182	176	150	877	521	1,398	700	2,098
2011-12	134	135	130	161	166	155	172	170	182	176	195	182	179	881	524	1,405	732	2,137
2012-13	148	145	134	136	159	176	162	165	170	176	172	197	185	898	497	1,395	730	2,125
2013-14	133	145	149	143	141	163	179	170	167	169	173	170	198	874	516	1,390	710	2,100
2014-15	133	145	164	158	151	155	165	178	178	168	171	172	180	906	521	1,427	691	2,118
2015-16	116	144	154	169	159	160	155	170	178	176	174	167	176	902	503	1,405	693	2,098
2016-17	117	123	152	164	178	161	162	156	176	179	174	175	169	895	494	1,389	697	2,086
2017-18	119	124	127	161	169	186	165	168	153	173	168	170	171	886	486	1,372	682	2,054
Projected																		
2018-19	141	128	130	134	166	176	188	169	169	152	171	167	171	875	526	1,401	661	2,062
2019-20	149	151	134	137	138	172	178	193	170	167	150	170	168	881	541	1,422	655	2,077
2020-21	138	159	158	141	141	143	174	182	194	168	165	149	170	880	550	1,430	652	2,082
2021-22	130	147	167	167	146	147	145	179	183	192	166	164	149	904	507	1,411	671	2,082
2022-23	130	139	155	176	172	151	149	149	180	181	190	165	165	923	478	1,401	701	2,102
2023-24	133	139	146	163	182	179	153	152	149	178	179	188	166	942	454	1,396	711	2,107
2024-25	133	142	146	153	168	189	181	157	153	148	176	178	189	931	491	1,422	691	2,113
2025-26	133	142	149	153	158	174	191	185	158	152	146	175	179	909	534	1,443	652	2,095
2026-27	133	142	149	157	158	164	177	196	186	156	150	145	175	903	559	1,462	626	2,088
2027-28	133	142	149	157	161	164	166	181	197	184	154	149	146	906	544	1,450	633	2,083

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. Three-year average of births (2014-15 to 2016-17) used to estimate births from 2017-18 to 2020-21. *2017 birth data is preliminary and provisional from the Maine Department of Health and Human Services, Office of Data, Research, and Vital Statistics. The first grade from 2019-20 to 2027-28 was projected using the 4-year ratio of first grade to births, and the 2018-19 first grade was based on the 2017-18 Kindergarten class size and the 4-year ratio of first grade to Kindergarten.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

**Appendix Table 3 - Falmouth Attending Resident Enrollment - Average Grade-To-Grade Survival Ratios
2017-18 Best Fit Model**

School Year	Grade											
	K-1		1-2		2-3		3-4		4-5		5-6	
	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-
10 Year Avg. (08-17)	1.123	12.3%	1.026	2.6%	1.056	5.6%	1.027	2.7%	1.038	3.8%	1.022	2.2%
1st 5-Year Avg. (08-12)	1.192	19.2%	0.989	-1.1%	1.056	5.6%	1.018	1.8%	1.028	2.8%	1.030	3.0%
Last 5-Year Avg. (13-17)	1.055	5.5%	1.062	6.2%	1.056	5.6%	1.037	3.7%	1.048	4.8%	1.013	1.3%
Last 4-Year Avg. (14-17)	1.073	7.3%	1.070	7.0%	1.054	5.4%	1.037	3.7%	1.054	5.4%	1.012	1.2%
Last 3-Year Avg. (15-17)	1.068	6.8%	1.050	5.0%	1.052	5.2%	1.030	3.0%	1.039	3.9%	1.012	1.2%

School Year	Grade											
	6-7		7-8		8-9		9-10		10-11		11-12	
	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-	Ratio	% +/-
10 Year Avg. (08-17)	1.018	1.8%	1.011	1.1%	0.987	-1.3%	0.988	-1.2%	0.992	-0.8%	1.004	0.4%
1st 5-Year Avg. (08-12)	1.012	1.2%	1.006	0.6%	0.978	-2.2%	0.984	-1.6%	0.995	-0.5%	0.993	-0.7%
Last 5-Year Avg. (13-17)	1.024	2.4%	1.015	1.5%	0.995	-0.5%	0.992	-0.8%	0.988	-1.2%	1.015	1.5%
Last 4-Year Avg. (14-17)	1.017	1.7%	1.016	1.6%	0.996	-0.4%	0.994	-0.6%	0.988	-1.2%	1.018	1.8%
Last 3-Year Avg. (15-17)	1.025	2.5%	1.005	0.5%	0.992	-0.8%	0.988	-1.2%	0.986	-1.4%	1.004	0.4%

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 4 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 Best Fit Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	875	526	1,401	661	2,062	4	1	5	11	16	879	527	1,406	672	2,078
2019-20	881	541	1,422	655	2,077	4	1	5	10	15	885	542	1,427	665	2,092
2020-21	880	550	1,430	652	2,082	4	1	5	10	15	884	551	1,435	662	2,097
2021-22	904	507	1,411	671	2,082	4	1	5	11	16	908	508	1,416	682	2,098
2022-23	923	478	1,401	701	2,102	4	1	5	11	16	927	479	1,406	712	2,118
2023-24	942	454	1,396	711	2,107	4	1	5	11	16	946	455	1,401	722	2,123
2024-25	931	491	1,422	691	2,113	4	1	5	11	16	935	492	1,427	702	2,129
2025-26	909	534	1,443	652	2,095	4	1	5	10	15	913	535	1,448	662	2,110
2026-27	903	559	1,462	626	2,088	4	1	5	10	15	907	560	1,467	636	2,103
2027-28	906	544	1,450	633	2,083	4	1	5	10	15	910	545	1,455	643	2,098

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc.... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

**Appendix Table 5 - All Falmouth Resident Students - 2017-18 Best Fit Model
Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment**

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	890			487			690			2,067		
2018-19	791	879	967	474	527	580	638	672	706	1,903	2,078	2,253
2019-20	797	885	974	488	542	596	632	665	698	1,917	2,092	2,268
2020-21	796	884	972	496	551	606	629	662	695	1,921	2,097	2,273
2021-22	817	908	999	457	508	559	648	682	716	1,922	2,098	2,274
2022-23	834	927	1,020	431	479	527	676	712	748	1,941	2,118	2,295
2023-24	851	946	1,041	410	455	501	686	722	758	1,947	2,123	2,300
2024-25	842	935	1,029	443	492	541	667	702	737	1,952	2,129	2,307
2025-26	822	913	1,004	482	535	589	629	662	695	1,933	2,110	2,288
2026-27	816	907	998	504	560	616	604	636	668	1,924	2,103	2,282
2027-28	819	910	1,001	491	545	600	611	643	675	1,921	2,098	2,276

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	890			487			690			2,067		
2018-19	853	879	905	511	527	543	652	672	692	2,016	2,078	2,140
2019-20	858	885	912	526	542	558	645	665	685	2,029	2,092	2,155
2020-21	857	884	911	534	551	568	642	662	682	2,033	2,097	2,161
2021-22	881	908	935	493	508	523	662	682	702	2,036	2,098	2,160
2022-23	899	927	955	465	479	493	691	712	733	2,055	2,118	2,181
2023-24	918	946	974	441	455	469	700	722	744	2,059	2,123	2,187
2024-25	907	935	963	477	492	507	681	702	723	2,065	2,129	2,193
2025-26	886	913	940	519	535	551	642	662	682	2,047	2,110	2,173
2026-27	880	907	934	543	560	577	617	636	655	2,040	2,103	2,166
2027-28	883	910	937	529	545	561	624	643	662	2,036	2,098	2,160

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 6 - Enrollment Trends & Projections - Attending Enrollment (Resident and Non-Resident) - 2017-18 Best Fit Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	108	164	156	145	173	170	193	186	191	163	177	169	154	916	570	1,486	663	2,149
2008-09	116	143	148	162	149	178	174	199	191	179	157	174	165	896	564	1,460	675	2,135
2009-10	115	152	147	155	165	156	175	176	194	192	181	158	173	890	545	1,435	704	2,139
2010-11	119	128	155	157	157	165	164	180	178	192	183	177	152	881	522	1,403	704	2,107
2011-12	140	135	132	164	166	157	173	170	183	176	195	184	180	894	526	1,420	735	2,155
2012-13	153	148	135	138	160	176	164	165	170	176	172	197	187	910	499	1,409	732	2,141
2013-14	137	148	152	144	144	165	179	171	167	170	173	170	198	890	517	1,407	711	2,118
2014-15	138	149	168	161	152	157	166	178	181	171	172	172	181	925	525	1,450	696	2,146
2015-16	119	150	161	173	163	163	158	171	178	176	175	168	176	929	507	1,436	695	2,131
2016-17	121	126	157	167	180	165	164	158	176	182	175	176	170	916	498	1,414	703	2,117
2017-18	123	127	129	166	172	188	168	172	158	174	173	173	176	905	498	1,403	696	2,099
Projected																		
2018-19	145	131	133	136	171	179	190	172	173	157	172	173	175	895	535	1,430	677	2,107
2019-20	153	155	137	140	140	177	181	195	173	171	155	171	175	902	549	1,451	672	2,123
2020-21	142	163	162	144	144	145	178	185	196	171	169	155	171	900	559	1,459	666	2,125
2021-22	134	151	171	171	149	150	147	183	186	194	169	168	156	926	516	1,442	687	2,129
2022-23	134	143	159	180	176	154	152	151	184	184	192	168	170	946	487	1,433	714	2,147
2023-24	137	143	150	167	186	183	156	155	151	182	182	190	170	966	462	1,428	724	2,152
2024-25	137	146	150	157	172	193	184	160	156	150	180	181	191	955	500	1,455	702	2,157
2025-26	137	146	153	157	162	178	194	188	161	155	148	179	183	933	543	1,476	665	2,141
2026-27	137	146	153	161	162	168	180	199	189	159	153	147	180	927	568	1,495	639	2,134
2027-28	137	146	153	161	165	168	169	184	200	187	157	152	148	930	553	1,483	644	2,127

Notes: Attending enrollment data contains all resident students and non-resident students attending district schools.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 7 - Enrollment Trends & Projections - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 Best Fit Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					NON Resident Students Attending District Schools					Total All Attending Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	3	1	4	6	10	916	570	1,486	663	2,149
2008-09	890	563	1,453	672	2,125	6	1	7	3	10	896	564	1,460	675	2,135
2009-10	886	545	1,431	701	2,132	4	0	4	3	7	890	545	1,435	704	2,139
2010-11	877	521	1,398	700	2,098	4	1	5	4	9	881	522	1,403	704	2,107
2011-12	881	524	1,405	732	2,137	13	2	15	3	18	894	526	1,420	735	2,155
2012-13	898	497	1,395	730	2,125	12	2	14	2	16	910	499	1,409	732	2,141
2013-14	874	516	1,390	710	2,100	16	1	17	1	18	890	517	1,407	711	2,118
2014-15	906	521	1,427	691	2,118	19	4	23	5	28	925	525	1,450	696	2,146
2015-16	902	503	1,405	693	2,098	27	4	31	2	33	929	507	1,436	695	2,131
2016-17	895	494	1,389	697	2,086	21	4	25	6	31	916	498	1,414	703	2,117
2017-18	886	486	1,372	682	2,054	19	12	31	14	45	905	498	1,403	696	2,099
Projected															
2018-19	875	526	1,401	661	2,062	20	9	29	16	45	895	535	1,430	677	2,107
2019-20	881	541	1,422	655	2,077	21	8	29	17	46	902	549	1,451	672	2,123
2020-21	880	550	1,430	652	2,082	20	9	29	14	43	900	559	1,459	666	2,125
2021-22	904	507	1,411	671	2,082	22	9	31	16	47	926	516	1,442	687	2,129
2022-23	923	478	1,401	701	2,102	23	9	32	13	45	946	487	1,433	714	2,147
2023-24	942	454	1,396	711	2,107	24	8	32	13	45	966	462	1,428	724	2,152
2024-25	931	491	1,422	691	2,113	24	9	33	11	44	955	500	1,455	702	2,157
2025-26	909	534	1,443	652	2,095	24	9	33	13	46	933	543	1,476	665	2,141
2026-27	903	559	1,462	626	2,088	24	9	33	13	46	927	568	1,495	639	2,134
2027-28	906	544	1,450	633	2,083	24	9	33	11	44	930	553	1,483	644	2,127

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 8 - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 Best Fit Model

Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	905			498			696			2,099		
2018-19	806	895	985	482	535	589	643	677	711	1,931	2,107	2,285
2019-20	812	902	992	494	549	604	638	672	706	1,944	2,123	2,302
2020-21	810	900	990	503	559	615	633	666	699	1,946	2,125	2,304
2021-22	833	926	1,019	464	516	568	653	687	721	1,950	2,129	2,308
2022-23	851	946	1,041	438	487	536	678	714	750	1,967	2,147	2,327
2023-24	869	966	1,063	416	462	508	688	724	760	1,973	2,152	2,331
2024-25	860	955	1,051	450	500	550	667	702	737	1,977	2,157	2,338
2025-26	840	933	1,026	489	543	597	632	665	698	1,961	2,141	2,321
2026-27	834	927	1,020	511	568	625	607	639	671	1,952	2,134	2,316
2027-28	837	930	1,023	498	553	608	612	644	676	1,947	2,127	2,307

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	905			498			696			2,099		
2018-19	868	895	922	519	535	551	657	677	697	2,044	2,107	2,170
2019-20	875	902	929	533	549	565	652	672	692	2,060	2,123	2,186
2020-21	873	900	927	542	559	576	646	666	686	2,061	2,125	2,189
2021-22	898	926	954	501	516	531	666	687	708	2,065	2,129	2,193
2022-23	918	946	974	472	487	502	693	714	735	2,083	2,147	2,211
2023-24	937	966	995	448	462	476	702	724	746	2,087	2,152	2,217
2024-25	926	955	984	485	500	515	681	702	723	2,092	2,157	2,222
2025-26	905	933	961	527	543	559	645	665	685	2,077	2,141	2,205
2026-27	899	927	955	551	568	585	620	639	658	2,070	2,134	2,198
2027-28	902	930	958	536	553	570	625	644	663	2,063	2,127	2,191

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 Best Fit Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 1-1 - Entering Class to Births Ratio Worksheet									
Attending Resident Enrollment - Falmouth Resident Students - 2017-18 55 New Housing Units Model									
Oct 15-Oct 14 Births	Number Births	KG Year	KG Class Size	1st Grade Year	1st Class Size	Ratio 1st/Birth	Ratio 1st/K	Proj. 1st Grade	Net Preschool Migration
2001-02	85	10/07	107	10/08	142	1.671	1.327		57
2002-03	90	10/08	116	10/09	152	1.689	1.310		62
2003-04	92	10/09	114	10/10	126	1.370	1.105		34
2004-05	83	10/10	119	10/11	135	1.627	1.134		52
2005-06	96	10/11	134	10/12	145	1.510	1.082		49
2006-07	74	10/12	148	10/13	145	1.959	0.980		71
2007-08	79	10/13	133	10/14	145	1.835	1.090		66
2008-09	77	10/14	133	10/15	144	1.870	1.083		67
2009-10	76	10/15	116	10/16	123	1.618	1.060		47
2010-11	77	10/16	117	10/17	124	1.610	1.060		47
2011-12	74	10/17	119	10/18		1.746	1.086	129	55
2012-13	87	10/18		10/19		1.768		154	67
2013-14	92	10/19		10/20		1.782		164	72
2014-15	85	10/20		10/21		1.804		153	68
2015-16	80	10/21		10/22		1.827		146	66
2016-17*	80	10/22		10/23		1.846		148	68
2017-18 est	84	10/23		10/24		1.733		146	62
2018-19 est	86	10/24		10/25		1.733		149	63
2019-20 est	88	10/25		10/26		1.733		153	65
2020-21 est	90	10/26		10/27		1.733		156	66
10yr Total (02-11)	829	10yr Total (07-16)	1,237	10yr Total (08-17)	1,381	1.666	1.116	Last 10yr	55.2
10yr Avg (02-11)	83	10yr Avg (07-16)	124	10yr Avg (08-17)	138	1.676	1.116	Last 5yr	59.6
5yr Avg (13-17)	85							Last 3yr	53.7
5yr Max (13-17)	92							Proj.	65.1
5yr Min (13-17)	80								
3 yr Avg (15-17)	82								
First Grade to Births Correlation Coefficients		First Grade to Kindergarten Correlation Coefficients							
10 YEAR	0.213	10 YEAR	0.449						
9 YEAR	0.203	9 YEAR	0.582						
8 YEAR	0.041	8 YEAR	0.882						
7 YEAR	0.308	7 YEAR	0.859						
6 YEAR	0.330	6 YEAR	0.886						
5 YEAR	0.052	5 YEAR	0.895						
4 YEAR	0.720	4 YEAR	0.999						
3 YEAR	0.536	3 YEAR	1.000						
				Ratios		1st/Birth	1st/K		
				Avg last 10		1.676	1.123		
				Avg last 9		1.676	1.100		
				Avg last 8		1.675	1.074		
				Avg last 7		1.718	1.070		
				Avg last 6		1.734	1.059		
				Avg last 5		1.778	1.055		
				Avg last 4		1.733	1.073		
				Avg last 3		1.699	1.068		
				av 1st 5		1.573	1.192		
				10yr Weighted		1.699	1.082		
				5yr Weighted		1.717	1.063		
Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. The 55 New Housing Units Model was first based on the 2017-18 Best Fit Model then took into account the impact on births, preschool migration, and elementary migration from the addition of 55 new housing units in Falmouth. Details on how this model was created are found in Section VI of the written report									

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. The 55 New Housing Units Model was first based on the 2017-18 Best Fit Model then took into account the impact on births, preschool migration, and elementary migration from the addition of 55 new housing units in Falmouth. Details on how this model was created are found in Section VI of the written report

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 2-1 - Enrollment Trends & Projections - Falmouth Attending Resident Students - 2017-18 55 New Housing Units Model																		
October 1st Enrollment																		
School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	107	163	156	144	173	170	193	185	191	162	175	167	153	913	569	1,482	657	2,139
2008-09	116	142	146	162	147	177	174	199	190	178	157	172	165	890	563	1,453	672	2,125
2009-10	114	152	144	155	165	156	175	176	194	192	180	158	171	886	545	1,431	701	2,132
2010-11	119	126	154	157	156	165	164	179	178	192	182	176	150	877	521	1,398	700	2,098
2011-12	134	135	130	161	166	155	172	170	182	176	195	182	179	881	524	1,405	732	2,137
2012-13	148	145	134	136	159	176	162	165	170	176	172	197	185	898	497	1,395	730	2,125
2013-14	133	145	149	143	141	163	179	170	167	169	173	170	198	874	516	1,390	710	2,100
2014-15	133	145	164	158	151	155	165	178	178	168	171	172	180	906	521	1,427	691	2,118
2015-16	116	144	154	169	159	160	155	170	178	176	174	167	176	902	503	1,405	693	2,098
2016-17	117	123	152	164	178	161	162	156	176	179	174	175	169	895	494	1,389	697	2,086
2017-18	119	124	127	161	169	186	165	168	153	173	168	170	171	886	486	1,372	682	2,054
Projected																		
2018-19	144	129	130	134	166	176	189	169	169	152	171	167	171	879	527	1,406	661	2,067
2019-20	154	154	136	138	139	173	178	193	170	167	150	170	168	894	541	1,435	655	2,090
2020-21	144	164	162	144	143	145	176	183	194	168	165	149	170	902	553	1,455	652	2,107
2021-22	137	153	172	171	149	148	147	180	184	192	166	164	149	930	511	1,441	671	2,112
2022-23	138	146	162	183	177	156	151	150	181	182	190	165	165	962	482	1,444	702	2,146
2023-24	136	148	155	172	190	186	159	155	151	179	180	189	166	987	465	1,452	714	2,166
2024-25	140	146	155	163	178	197	188	163	156	149	177	179	189	979	507	1,486	694	2,180
2025-26	143	149	153	163	168	184	200	193	164	154	148	176	179	960	557	1,517	657	2,174
2026-27	146	153	157	161	168	175	187	204	194	162	153	147	177	960	585	1,545	639	2,184
2027-28	146	156	160	165	166	175	177	191	206	192	160	152	147	968	574	1,542	651	2,193

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. The 55 New Housing Units Model was first based on the 2017-18 Best Fit Model then took into account the impact on births, preschool migration, and elementary migration from the addition of 55 new housing units in Falmouth. Details on how this model was created are found in Section VI of the written report.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 4-1 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 55 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	879	527	1,406	661	2,067	4	1	5	11	16	883	528	1,411	672	2,083
2019-20	894	541	1,435	655	2,090	4	1	5	10	15	898	542	1,440	665	2,105
2020-21	902	553	1,455	652	2,107	4	1	5	10	15	906	554	1,460	662	2,122
2021-22	930	511	1,441	671	2,112	4	1	5	11	16	934	512	1,446	682	2,128
2022-23	962	482	1,444	702	2,146	4	1	5	11	16	966	483	1,449	713	2,162
2023-24	987	465	1,452	714	2,166	4	1	5	11	16	991	466	1,457	725	2,182
2024-25	979	507	1,486	694	2,180	4	1	5	11	16	983	508	1,491	705	2,196
2025-26	960	557	1,517	657	2,174	4	1	5	10	15	964	558	1,522	667	2,189
2026-27	960	585	1,545	639	2,184	4	1	5	10	15	964	586	1,550	649	2,199
2027-28	968	574	1,542	651	2,193	4	1	5	10	15	972	575	1,547	661	2,208

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 5-1 - All Falmouth Resident Students - 2017-18 55 New Housing Units Model

Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	890			487			690			2,067		
2018-19	795	883	971	475	528	581	638	672	706	1,908	2,083	2,258
2019-20	808	898	988	488	542	596	632	665	698	1,928	2,105	2,282
2020-21	815	906	997	499	554	609	629	662	695	1,943	2,122	2,301
2021-22	841	934	1,027	461	512	563	648	682	716	1,950	2,128	2,306
2022-23	869	966	1,063	435	483	531	677	713	749	1,981	2,162	2,343
2023-24	892	991	1,090	419	466	513	689	725	761	2,000	2,182	2,364
2024-25	885	983	1,081	457	508	559	670	705	740	2,012	2,196	2,380
2025-26	868	964	1,060	502	558	614	634	667	700	2,004	2,189	2,374
2026-27	868	964	1,060	527	586	645	617	649	681	2,012	2,199	2,386
2027-28	875	972	1,069	518	575	633	628	661	694	2,021	2,208	2,396

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	890			487			690			2,067		
2018-19	857	883	909	512	528	544	652	672	692	2,021	2,083	2,145
2019-20	871	898	925	526	542	558	645	665	685	2,042	2,105	2,168
2020-21	879	906	933	537	554	571	642	662	682	2,058	2,122	2,186
2021-22	906	934	962	497	512	527	662	682	702	2,065	2,128	2,191
2022-23	937	966	995	469	483	497	692	713	734	2,098	2,162	2,226
2023-24	961	991	1,021	452	466	480	703	725	747	2,116	2,182	2,248
2024-25	954	983	1,012	493	508	523	684	705	726	2,131	2,196	2,261
2025-26	935	964	993	541	558	575	647	667	687	2,123	2,189	2,255
2026-27	935	964	993	568	586	604	630	649	668	2,133	2,199	2,265
2027-28	943	972	1,001	558	575	592	641	661	681	2,142	2,208	2,274

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 6-1 - Enrollment Trends & Projections - Attending Enrollment (Resident and Non-Resident) - 2017-18 55 New Housing Units Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	108	164	156	145	173	170	193	186	191	163	177	169	154	916	570	1,486	663	2,149
2008-09	116	143	148	162	149	178	174	199	191	179	157	174	165	896	564	1,460	675	2,135
2009-10	115	152	147	155	165	156	175	176	194	192	181	158	173	890	545	1,435	704	2,139
2010-11	119	128	155	157	157	165	164	180	178	192	183	177	152	881	522	1,403	704	2,107
2011-12	140	135	132	164	166	157	173	170	183	176	195	184	180	894	526	1,420	735	2,155
2012-13	153	148	135	138	160	176	164	165	170	176	172	197	187	910	499	1,409	732	2,141
2013-14	137	148	152	144	144	165	179	171	167	170	173	170	198	890	517	1,407	711	2,118
2014-15	138	149	168	161	152	157	166	178	181	171	172	172	181	925	525	1,450	696	2,146
2015-16	119	150	161	173	163	163	158	171	178	176	175	168	176	929	507	1,436	695	2,131
2016-17	121	126	157	167	180	165	164	158	176	182	175	176	170	916	498	1,414	703	2,117
2017-18	123	127	129	166	172	188	168	172	158	174	173	173	176	905	498	1,403	696	2,099
Projected																		
2018-19	148	132	133	136	171	179	191	172	173	157	172	173	175	899	536	1,435	677	2,112
2019-20	158	158	139	141	141	178	181	195	173	171	155	171	175	915	549	1,464	672	2,136
2020-21	148	168	166	147	146	147	180	186	196	171	169	155	171	922	562	1,484	666	2,150
2021-22	141	157	176	175	152	151	149	184	187	194	169	168	156	952	520	1,472	687	2,159
2022-23	142	150	166	187	181	159	154	152	185	185	192	168	170	985	491	1,476	715	2,191
2023-24	140	152	159	176	194	190	162	158	153	183	183	191	170	1,011	473	1,484	727	2,211
2024-25	144	150	159	167	182	201	191	166	159	151	181	182	191	1,003	516	1,519	705	2,224
2025-26	147	153	157	167	172	188	203	196	167	157	150	180	183	984	566	1,550	670	2,220
2026-27	150	157	161	165	172	179	190	207	197	165	156	149	182	984	594	1,578	652	2,230
2027-28	150	160	164	169	170	179	180	194	209	195	163	155	149	992	583	1,575	662	2,237

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 7-1 - Enrollment Trends & Projections - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 55 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					NON Resident Students Attending District Schools					Total All Attending Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	3	1	4	6	10	916	570	1,486	663	2,149
2008-09	890	563	1,453	672	2,125	6	1	7	3	10	896	564	1,460	675	2,135
2009-10	886	545	1,431	701	2,132	4	0	4	3	7	890	545	1,435	704	2,139
2010-11	877	521	1,398	700	2,098	4	1	5	4	9	881	522	1,403	704	2,107
2011-12	881	524	1,405	732	2,137	13	2	15	3	18	894	526	1,420	735	2,155
2012-13	898	497	1,395	730	2,125	12	2	14	2	16	910	499	1,409	732	2,141
2013-14	874	516	1,390	710	2,100	16	1	17	1	18	890	517	1,407	711	2,118
2014-15	906	521	1,427	691	2,118	19	4	23	5	28	925	525	1,450	696	2,146
2015-16	902	503	1,405	693	2,098	27	4	31	2	33	929	507	1,436	695	2,131
2016-17	895	494	1,389	697	2,086	21	4	25	6	31	916	498	1,414	703	2,117
2017-18	886	486	1,372	682	2,054	19	12	31	14	45	905	498	1,403	696	2,099
Projected															
2018-19	879	527	1,406	661	2,067	20	9	29	16	45	899	536	1,435	677	2,112
2019-20	894	541	1,435	655	2,090	21	8	29	17	46	915	549	1,464	672	2,136
2020-21	902	553	1,455	652	2,107	20	9	29	14	43	922	562	1,484	666	2,150
2021-22	930	511	1,441	671	2,112	22	9	31	16	47	952	520	1,472	687	2,159
2022-23	962	482	1,444	702	2,146	23	9	32	13	45	985	491	1,476	715	2,191
2023-24	987	465	1,452	714	2,166	24	8	32	13	45	1,011	473	1,484	727	2,211
2024-25	979	507	1,486	694	2,180	24	9	33	11	44	1,003	516	1,519	705	2,224
2025-26	960	557	1,517	657	2,174	24	9	33	13	46	984	566	1,550	670	2,220
2026-27	960	585	1,545	639	2,184	24	9	33	13	46	984	594	1,578	652	2,230
2027-28	968	574	1,542	651	2,193	24	9	33	11	44	992	583	1,575	662	2,237

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 8-1 - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 55 New Housing Units Model
Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	905			498			696			2,099		
2018-19	809	899	989	482	536	590	643	677	711	1,934	2,112	2,290
2019-20	824	915	1,007	494	549	604	638	672	706	1,956	2,136	2,317
2020-21	830	922	1,014	506	562	618	633	666	699	1,969	2,150	2,331
2021-22	857	952	1,047	468	520	572	653	687	721	1,978	2,159	2,340
2022-23	887	985	1,084	442	491	540	679	715	751	2,008	2,191	2,375
2023-24	910	1,011	1,112	426	473	520	691	727	763	2,027	2,211	2,395
2024-25	903	1,003	1,103	464	516	568	670	705	740	2,037	2,224	2,411
2025-26	886	984	1,082	509	566	623	637	670	704	2,032	2,220	2,409
2026-27	886	984	1,082	535	594	653	619	652	685	2,040	2,230	2,420
2027-28	893	992	1,091	525	583	641	629	662	695	2,047	2,237	2,427

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	905			498			696			2,099		
2018-19	872	899	926	520	536	552	657	677	697	2,049	2,112	2,175
2019-20	888	915	942	533	549	565	652	672	692	2,073	2,136	2,199
2020-21	894	922	950	545	562	579	646	666	686	2,085	2,150	2,215
2021-22	923	952	981	504	520	536	666	687	708	2,093	2,159	2,225
2022-23	955	985	1,015	476	491	506	694	715	736	2,125	2,191	2,257
2023-24	981	1,011	1,041	459	473	487	705	727	749	2,145	2,211	2,277
2024-25	973	1,003	1,033	501	516	531	684	705	726	2,158	2,224	2,290
2025-26	954	984	1,014	549	566	583	650	670	690	2,153	2,220	2,287
2026-27	954	984	1,014	576	594	612	632	652	672	2,162	2,230	2,298
2027-28	962	992	1,022	566	583	600	642	662	682	2,170	2,237	2,304

Notes: Enrollment data contains all resident students and non-resident students attending district schools.
2017-18 55 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

Appendix Table 1-2 - Entering Class to Births Ratio Worksheet																																													
Attending Resident Enrollment - Falmouth Resident Students - 2017-18 65 New Housing Units Model																																													
Oct 15-Oct 14 Births	Number Births	KG Year	KG Class Size	1st Grade Year	1st Class Size	Ratio 1st/Birth	Ratio 1st/K	Proj. 1st Grade	Net Preschool Migration																																				
2001-02	85	10/07	107	10/08	142	1.671	1.327		57																																				
2002-03	90	10/08	116	10/09	152	1.689	1.310		62																																				
2003-04	92	10/09	114	10/10	126	1.370	1.105		34																																				
2004-05	83	10/10	119	10/11	135	1.627	1.134		52																																				
2005-06	96	10/11	134	10/12	145	1.510	1.082		49																																				
2006-07	74	10/12	148	10/13	145	1.959	0.980		71																																				
2007-08	79	10/13	133	10/14	145	1.835	1.090		66																																				
2008-09	77	10/14	133	10/15	144	1.870	1.083		67																																				
2009-10	76	10/15	116	10/16	123	1.618	1.060		47																																				
2010-11	77	10/16	117	10/17	124	1.610	1.060		47																																				
2011-12	74	10/17	119	10/18		1.776	1.104	131	57																																				
2012-13	87	10/18		10/19		1.819		158	71																																				
2013-14	92	10/19		10/20		1.855		171	79																																				
2014-15	85	10/20		10/21		1.910		162	77																																				
2015-16	80	10/21		10/22		1.967		157	77																																				
2016-17*	80	10/22		10/23		2.015		161	81																																				
2017-18 est	85	10/23		10/24		1.733		147	62																																				
2018-19 est	88	10/24		10/25		1.733		153	65																																				
2019-20 est	91	10/25		10/26		1.733		158	67																																				
2020-21 est	94	10/26		10/27		1.733		163	69																																				
10yr Total (02-11)	829	10yr Total (07-16)	1,237	10yr Total (08-17)	1,381	1.666	1.116	Last 10yr	55.2																																				
10yr Avg (02-11)	83	10yr Avg (07-16)	124	10yr Avg (08-17)	138	1.676	1.116	Last 5yr	59.6																																				
5yr Avg (13-17)	85							Last 3yr	53.7																																				
5yr Max (13-17)	92							Proj.	70.6																																				
5yr Min (13-17)	80																																												
3 yr Avg (15-17)	82																																												
First Grade to Births Correlation Coefficients		First Grade to Kindergarten Correlation Coefficients																																											
10 YEAR	0.213	10 YEAR	0.449																																										
9 YEAR	0.203	9 YEAR	0.582																																										
8 YEAR	0.041	8 YEAR	0.882																																										
7 YEAR	0.308	7 YEAR	0.859																																										
6 YEAR	0.330	6 YEAR	0.886																																										
5 YEAR	0.052	5 YEAR	0.895																																										
4 YEAR	0.720	4 YEAR	0.999																																										
3 YEAR	0.536	3 YEAR	1.000																																										
<div><div></div><div><table><tr><th>Ratios</th><th>1st/Birth</th><th>1st/K</th></tr><tr><td>Avg last 10</td><td>1.676</td><td>1.123</td></tr><tr><td>Avg last 9</td><td>1.676</td><td>1.100</td></tr><tr><td>Avg last 8</td><td>1.675</td><td>1.074</td></tr><tr><td>Avg last 7</td><td>1.718</td><td>1.070</td></tr><tr><td>Avg last 6</td><td>1.734</td><td>1.059</td></tr><tr><td>Avg last 5</td><td>1.778</td><td>1.055</td></tr><tr><td>Avg last 4</td><td>1.733</td><td>1.073</td></tr><tr><td>Avg last 3</td><td>1.699</td><td>1.068</td></tr><tr><td>av 1st 5</td><td>1.573</td><td>1.192</td></tr><tr><td>10yr Weighted</td><td>1.699</td><td>1.082</td></tr><tr><td>5yr Weighted</td><td>1.717</td><td>1.063</td></tr></table></div></div>										Ratios	1st/Birth	1st/K	Avg last 10	1.676	1.123	Avg last 9	1.676	1.100	Avg last 8	1.675	1.074	Avg last 7	1.718	1.070	Avg last 6	1.734	1.059	Avg last 5	1.778	1.055	Avg last 4	1.733	1.073	Avg last 3	1.699	1.068	av 1st 5	1.573	1.192	10yr Weighted	1.699	1.082	5yr Weighted	1.717	1.063
Ratios	1st/Birth	1st/K																																											
Avg last 10	1.676	1.123																																											
Avg last 9	1.676	1.100																																											
Avg last 8	1.675	1.074																																											
Avg last 7	1.718	1.070																																											
Avg last 6	1.734	1.059																																											
Avg last 5	1.778	1.055																																											
Avg last 4	1.733	1.073																																											
Avg last 3	1.699	1.068																																											
av 1st 5	1.573	1.192																																											
10yr Weighted	1.699	1.082																																											
5yr Weighted	1.717	1.063																																											
Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. The 65 New Housing Units Model was first based on the 2017-18 Best Fit Model then took into account the impact on births, preschool migration and elementary migration from the addition of 65 new housing units in Falmouth. Details on how this model was created are found in Section VI of the written report.																																													

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 2-2 - Enrollment Trends & Projections - Falmouth Attending Resident Students - 2017-18 65 New Housing Units Model																		
October 1st Enrollment																		
School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	107	163	156	144	173	170	193	185	191	162	175	167	153	913	569	1,482	657	2,139
2008-09	116	142	146	162	147	177	174	199	190	178	157	172	165	890	563	1,453	672	2,125
2009-10	114	152	144	155	165	156	175	176	194	192	180	158	171	886	545	1,431	701	2,132
2010-11	119	126	154	157	156	165	164	179	178	192	182	176	150	877	521	1,398	700	2,098
2011-12	134	135	130	161	166	155	172	170	182	176	195	182	179	881	524	1,405	732	2,137
2012-13	148	145	134	136	159	176	162	165	170	176	172	197	185	898	497	1,395	730	2,125
2013-14	133	145	149	143	141	163	179	170	167	169	173	170	198	874	516	1,390	710	2,100
2014-15	133	145	164	158	151	155	165	178	178	168	171	172	180	906	521	1,427	691	2,118
2015-16	116	144	154	169	159	160	155	170	178	176	174	167	176	902	503	1,405	693	2,098
2016-17	117	123	152	164	178	161	162	156	176	179	174	175	169	895	494	1,389	697	2,086
2017-18	119	124	127	161	169	186	165	168	153	173	168	170	171	886	486	1,372	682	2,054
Projected																		
2018-19	148	131	131	134	166	176	189	169	169	152	171	167	171	886	527	1,413	661	2,074
2019-20	160	158	139	138	139	174	179	193	170	167	150	170	168	908	542	1,450	655	2,105
2020-21	152	171	168	148	144	146	177	183	194	168	165	149	170	929	554	1,483	652	2,135
2021-22	147	162	181	178	154	151	149	181	184	193	166	164	149	973	514	1,487	672	2,159
2022-23	151	157	173	193	186	162	155	153	182	183	190	165	165	1,022	490	1,512	703	2,215
2023-24	138	161	168	184	201	196	167	159	154	181	180	189	166	1,048	480	1,528	716	2,244
2024-25	143	147	169	177	190	209	198	171	160	152	178	179	190	1,035	529	1,564	699	2,263
2025-26	148	153	155	178	182	197	212	203	172	158	151	177	180	1,013	587	1,600	666	2,266
2026-27	153	158	160	163	184	189	200	217	204	170	157	149	178	1,007	621	1,628	654	2,282
2027-28	153	163	166	169	168	191	192	205	218	202	168	155	150	1,010	615	1,625	675	2,300

Notes: Attending enrollment data contains all resident students (except home schooled students and non-resident students) attending district schools. The 65 New Housing Units Model was first based on the 2017-18 Best Fit Model then took into account the impact on births, preschool migration and elementary migration from the addition of 65 new housing units in Falmouth. Details on how this model was created are found in Section VI of the written report.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

Appendix Table 4-2 - Enrollment Trends & Projections - Falmouth Resident Enrollment - 2017-18 65 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					Resident Students at NON-District Schools					Total All Falmouth Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	2	3	5	12	17	915	572	1,487	669	2,156
2008-09	890	563	1,453	672	2,125	0	2	2	14	16	890	565	1,455	686	2,141
2009-10	886	545	1,431	701	2,132	1	1	2	12	14	887	546	1,433	713	2,146
2010-11	877	521	1,398	700	2,098	0	0	0	12	12	877	521	1,398	712	2,110
2011-12	881	524	1,405	732	2,137	0	1	1	8	9	881	525	1,406	740	2,146
2012-13	898	497	1,395	730	2,125	0	1	1	2	3	898	498	1,396	732	2,128
2013-14	874	516	1,390	710	2,100	0	0	0	1	1	874	516	1,390	711	2,101
2014-15	906	521	1,427	691	2,118	0	0	0	9	9	906	521	1,427	700	2,127
2015-16	902	503	1,405	693	2,098	1	1	2	14	16	903	504	1,407	707	2,114
2016-17	895	494	1,389	697	2,086	4	0	4	13	17	899	494	1,393	710	2,103
2017-18	886	486	1,372	682	2,054	4	1	5	8	13	890	487	1,377	690	2,067
Projected															
2018-19	886	527	1,413	661	2,074	4	1	5	11	16	890	528	1,418	672	2,090
2019-20	908	542	1,450	655	2,105	4	1	5	10	15	912	543	1,455	665	2,120
2020-21	929	554	1,483	652	2,135	4	1	5	10	15	933	555	1,488	662	2,150
2021-22	973	514	1,487	672	2,159	4	1	5	11	16	977	515	1,492	683	2,175
2022-23	1,022	490	1,512	703	2,215	5	1	6	11	17	1,027	491	1,518	714	2,232
2023-24	1,048	480	1,528	716	2,244	5	1	6	11	17	1,053	481	1,534	727	2,261
2024-25	1,035	529	1,564	699	2,263	5	1	6	11	17	1,040	530	1,570	710	2,280
2025-26	1,013	587	1,600	666	2,266	5	1	6	11	17	1,018	588	1,606	677	2,283
2026-27	1,007	621	1,628	654	2,282	5	1	6	10	16	1,012	622	1,634	664	2,298
2027-28	1,010	615	1,625	675	2,300	5	1	6	11	17	1,015	616	1,631	686	2,317

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 5-2 - All Falmouth Resident Students - 2017-18 65 New Housing Units Model

Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*	890			487			690			2,067		
2018-19	801	890	979	475	528	581	638	672	706	1,914	2,090	2,266
2019-20	821	912	1,003	489	543	597	632	665	698	1,942	2,120	2,298
2020-21	840	933	1,026	500	555	611	629	662	695	1,969	2,150	2,332
2021-22	879	977	1,075	464	515	567	649	683	717	1,992	2,175	2,359
2022-23	924	1,027	1,130	442	491	540	678	714	750	2,044	2,232	2,420
2023-24	948	1,053	1,158	433	481	529	691	727	763	2,072	2,261	2,450
2024-25	936	1,040	1,144	477	530	583	675	710	746	2,088	2,280	2,473
2025-26	916	1,018	1,120	529	588	647	643	677	711	2,088	2,283	2,478
2026-27	911	1,012	1,113	560	622	684	631	664	697	2,102	2,298	2,494
2027-28	914	1,015	1,117	554	616	678	652	686	720	2,120	2,317	2,515

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*	890			487			690			2,067		
2018-19	863	890	917	512	528	544	652	672	692	2,027	2,090	2,153
2019-20	885	912	939	527	543	559	645	665	685	2,057	2,120	2,183
2020-21	905	933	961	538	555	572	642	662	682	2,085	2,150	2,215
2021-22	948	977	1,006	500	515	530	663	683	703	2,111	2,175	2,239
2022-23	996	1,027	1,058	476	491	506	693	714	735	2,165	2,232	2,299
2023-24	1,021	1,053	1,085	467	481	495	705	727	749	2,193	2,261	2,329
2024-25	1,009	1,040	1,071	514	530	546	689	710	731	2,212	2,280	2,348
2025-26	987	1,018	1,049	570	588	606	657	677	697	2,214	2,283	2,352
2026-27	982	1,012	1,042	603	622	641	644	664	684	2,229	2,298	2,367
2027-28	985	1,015	1,045	598	616	634	665	686	707	2,248	2,317	2,386

Notes: Enrollment data contains all resident students EXCEPT homeschooled students and students attending privately paid schools such as the Greater Portland Christian School, North Yarmouth Academy, and Waynflete etc... it does however contain any resident students attending a Charter School or non-district publicly funded school.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 6-2 - Enrollment Trends & Projections - Attending Enrollment (Resident and Non-Resident) - 2017-18 65 New Housing Units Model

October 1st Enrollment

School Year	K	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical																		
2007-08	108	164	156	145	173	170	193	186	191	163	177	169	154	916	570	1,486	663	2,149
2008-09	116	143	148	162	149	178	174	199	191	179	157	174	165	896	564	1,460	675	2,135
2009-10	115	152	147	155	165	156	175	176	194	192	181	158	173	890	545	1,435	704	2,139
2010-11	119	128	155	157	157	165	164	180	178	192	183	177	152	881	522	1,403	704	2,107
2011-12	140	135	132	164	166	157	173	170	183	176	195	184	180	894	526	1,420	735	2,155
2012-13	153	148	135	138	160	176	164	165	170	176	172	197	187	910	499	1,409	732	2,141
2013-14	137	148	152	144	144	165	179	171	167	170	173	170	198	890	517	1,407	711	2,118
2014-15	138	149	168	161	152	157	166	178	181	171	172	172	181	925	525	1,450	696	2,146
2015-16	119	150	161	173	163	163	158	171	178	176	175	168	176	929	507	1,436	695	2,131
2016-17	121	126	157	167	180	165	164	158	176	182	175	176	170	916	498	1,414	703	2,117
2017-18	123	127	129	166	172	188	168	172	158	174	173	173	176	905	498	1,403	696	2,099
Projected																		
2018-19	152	134	134	136	171	179	191	172	173	157	172	173	175	906	536	1,442	677	2,119
2019-20	165	162	142	141	141	179	182	195	173	171	155	171	175	930	550	1,480	672	2,152
2020-21	156	176	172	151	147	148	181	186	196	171	169	155	171	950	563	1,513	666	2,179
2021-22	151	166	187	182	157	154	151	185	187	195	169	168	156	997	523	1,520	688	2,208
2022-23	155	161	177	198	190	165	158	155	186	186	192	168	170	1,046	499	1,545	716	2,261
2023-24	142	165	172	188	206	200	170	162	156	185	183	191	170	1,073	488	1,561	729	2,290
2024-25	147	151	173	181	194	214	201	174	163	154	182	182	192	1,060	538	1,598	710	2,308
2025-26	152	157	159	182	186	201	216	206	175	161	153	181	184	1,037	597	1,634	679	2,313
2026-27	157	162	164	167	188	193	203	221	207	173	160	151	183	1,031	631	1,662	667	2,329
2027-28	157	167	170	173	172	195	195	208	222	205	171	158	152	1,034	625	1,659	686	2,345

Notes: Attending enrollment data contains all resident students and non-resident students (except home schooled students and private school students) attending district schools. The 65 Housing Units Added Model was first based on the 2017-18 Best Fit Model then took into account the impact from the addition of new housing units in Falmouth on both preschool and elementary in-migration. Details on how this model was created are found in the written report.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 7-2 - Enrollment Trends & Projections - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 65 New Housing Units Model

October 1st Enrollment															
School Year	Resident Students Attending District Schools					NON Resident Students Attending District Schools					Total All Attending Students				
	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12	Total K-5	Total 6-8	Total K-8	Total 9-12	Total K-12
Historical															
2007-08	913	569	1,482	657	2,139	3	1	4	6	10	916	570	1,486	663	2,149
2008-09	890	563	1,453	672	2,125	6	1	7	3	10	896	564	1,460	675	2,135
2009-10	886	545	1,431	701	2,132	4	0	4	3	7	890	545	1,435	704	2,139
2010-11	877	521	1,398	700	2,098	4	1	5	4	9	881	522	1,403	704	2,107
2011-12	881	524	1,405	732	2,137	13	2	15	3	18	894	526	1,420	735	2,155
2012-13	898	497	1,395	730	2,125	12	2	14	2	16	910	499	1,409	732	2,141
2013-14	874	516	1,390	710	2,100	16	1	17	1	18	890	517	1,407	711	2,118
2014-15	906	521	1,427	691	2,118	19	4	23	5	28	925	525	1,450	696	2,146
2015-16	902	503	1,405	693	2,098	27	4	31	2	33	929	507	1,436	695	2,131
2016-17	895	494	1,389	697	2,086	21	4	25	6	31	916	498	1,414	703	2,117
2017-18	886	486	1,372	682	2,054	19	12	31	14	45	905	498	1,403	696	2,099
Projected															
2018-19	886	527	1,413	661	2,074	20	9	29	16	45	906	536	1,442	677	2,119
2019-20	908	542	1,450	655	2,105	22	8	30	17	47	930	550	1,480	672	2,152
2020-21	929	554	1,483	652	2,135	21	9	30	14	44	950	563	1,513	666	2,179
2021-22	973	514	1,487	672	2,159	24	9	33	16	49	997	523	1,520	688	2,208
2022-23	1,022	490	1,512	703	2,215	24	9	33	13	46	1,046	499	1,545	716	2,261
2023-24	1,048	480	1,528	716	2,244	25	8	33	13	46	1,073	488	1,561	729	2,290
2024-25	1,035	529	1,564	699	2,263	25	9	34	11	45	1,060	538	1,598	710	2,308
2025-26	1,013	587	1,600	666	2,266	24	10	34	13	47	1,037	597	1,634	679	2,313
2026-27	1,007	621	1,628	654	2,282	24	10	34	13	47	1,031	631	1,662	667	2,329
2027-28	1,010	615	1,625	675	2,300	24	10	34	11	45	1,034	625	1,659	686	2,345

Notes: Enrollment data contains all resident students and non-resident students attending district schools.

2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018

Data produced by Wandell Consulting

Appendix Table 8-2 - Falmouth Attending Enrollment (Resident & Non-Resident) - 2017-18 65 New Housing Units Model
Enrollment Projection Ranges (+/-5% and +/-10%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-10%	Proj.	+10%	-10%	Proj.	+10%	-5%	Proj.	+5%	-Range	Proj.	+Range
2017-18*		905			498			696			2,099	
2018-19	815	906	997	482	536	590	643	677	711	1,940	2,119	2,298
2019-20	837	930	1,023	495	550	605	638	672	706	1,970	2,152	2,334
2020-21	855	950	1,045	507	563	619	633	666	699	1,995	2,179	2,363
2021-22	897	997	1,097	471	523	575	654	688	722	2,022	2,208	2,394
2022-23	941	1,046	1,151	449	499	549	680	716	752	2,070	2,261	2,452
2023-24	966	1,073	1,180	439	488	537	693	729	765	2,098	2,290	2,482
2024-25	954	1,060	1,166	484	538	592	675	710	746	2,113	2,308	2,504
2025-26	933	1,037	1,141	537	597	657	645	679	713	2,115	2,313	2,511
2026-27	928	1,031	1,134	568	631	694	634	667	700	2,130	2,329	2,528
2027-28	931	1,034	1,137	563	625	688	652	686	720	2,146	2,345	2,545

Enrollment Projection Ranges (+/-3%) - October 1st Enrollment

School Year	Grades K-5			Grades 6-8			Grades 9-12			Total All Grades K-12		
	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	+3%	-3%	Proj.	3%
2017-18*		905			498			696			2,099	
2018-19	879	906	933	520	536	552	657	677	697	2,056	2,119	2,182
2019-20	902	930	958	534	550	567	652	672	692	2,088	2,152	2,217
2020-21	922	950	979	546	563	580	646	666	686	2,114	2,179	2,245
2021-22	967	997	1,027	507	523	539	667	688	709	2,141	2,208	2,275
2022-23	1,015	1,046	1,077	484	499	514	695	716	737	2,194	2,261	2,328
2023-24	1,041	1,073	1,105	473	488	503	707	729	751	2,221	2,290	2,359
2024-25	1,028	1,060	1,092	522	538	554	689	710	731	2,239	2,308	2,377
2025-26	1,006	1,037	1,068	579	597	615	659	679	699	2,244	2,313	2,382
2026-27	1,000	1,031	1,062	612	631	650	647	667	687	2,259	2,329	2,399
2027-28	1,003	1,034	1,065	606	625	644	665	686	707	2,274	2,345	2,416

Notes: Enrollment data contains all resident students and non-resident students attending district schools
2017-18 65 New Housing Units Model Enrollment Projections for Falmouth, Completed January 2018
Data produced by Wandell Consulting

APPENDIX B

INFORMATION ON ENROLLMENT DATA & METHODOLOGIES USED FOR PROJECTION STUDIES

Enrollment Data and Methodologies Used for Projection Studies

Enrollment Data Used for the Projection Study:

- The enrollment data used for these projections is based on the October 1st resident enrollment count by school year. Historical enrollment data is obtained directly from the Maine Department of Education. If a study is completed in October to December of a school year the data may need to be obtained directly from the school district. Sometimes data supplied by the school district is different from what MDOE will show because of reporting differences, inconsistencies or errors adjusted over time. Although it does not happen often, it is important to understand it can happen and is often the source of differences in enrollment count between studies.
- It is also important to understand the resident enrollment and attending enrollment figures will not necessarily correlate with EPS funding counts of students. Specifics on what is included in the different types of enrollment counts, please visit the MDOE data center:
<http://www.maine.gov/education/datalist.htm>

Types of Enrollment Data:

1. **Total Resident Enrollment:** the count of all students living in the district's town(s) regardless of where they attend school. Excluded from this data are students attending privately paid for private schools and home schooled students. It does include students at publicly paid for schools such as Charter Schools, or other school districts within Maine.
2. **Attending Resident Enrollment:** the count of resident students attending a district's school(s).
3. **Enrollment of Resident Students Attending Out of District Schools:** the count of resident students attending other district schools either as tuition students, choice tuition students, superintendent agreements, or other such similar situations.
4. **Non-Resident Attending Enrollment:** is the count of students from other districts attending the resident district's schools.
5. **Private School Enrollment:** is the count of students attending private schools. Enrollment of students attending private schools is often excluded from the study because private schools do not always submit their enrollment counts, or MDOE did not always include the data in the resident enrollment count. For example, the enrollment for one year will show 10 students attending private school X, the following year there are zero students attending private school X, then in the next school year private school X suddenly has an enrollment of 15 students. These variations in enrollment count only serve to distort the migration trends used to make the projections.

However, private school student enrollment will remain if the district in question pays for students to attend the private school. An example of this is Saco students attending Thornton Academy. In these cases the private school enrollment count is consistently reported and there are no issues with consistency of historical data.

6. **Home Schooled Students:** is the count of students educated at home. Historical enrollment data of home schooled students is inconsistent. Some districts do a good job of tracking home schooled students by grade, others only have grade group data, some have the information for several schools years while others may only have information readily available on the most recent couple of school years. MDOE also has historical home schooled enrollment, but the counts are not as readily available. Therefore, home schooled enrollment is generally not projected unless a district can provide consistent data.

PAST Projections verse CURRENT Projections: When comparing past enrollment studies to future studies, it is important to understand the differences in enrollment data. With the older enrollment studies a detailed breakdown of enrollment was often not readily available. In other cases the data supplied by a district for the past study was adjusted by the district and/or MDOE following the completion of the projections. When comparing past studies to current studies, be sure to compare data that shows the same type of enrollment count. In some districts there is very little difference between resident attending enrollment and total resident enrollment, while in other districts there is a significant difference in the enrollment count.

Methodology Notes:

- **Resident Births:**

When making projections, the calendar year birth figures are not used to determine the number of resident births in a year. To project future entering first grade class sizes the "birth year" is based on when a student is eligible to enroll, or from October 15th of one year to October 14th of the next. Because the data supplied by the office of Data, Research, and Vital Statistics, Division of Public Health Systems, Maine Centers for Disease Control and Prevention at the Maine Department of Health and Human Services for October is based on October 1st to the 31st, the October births are split in half so that one half is put into one year and the other half is put into the following year's birth figures. This allows the cohort survival model to more accurately project entering first grade class sizes.

Birth data from calendar year 2017 is preliminary and provisional, but historically this data has been very accurate.

- **First Grade Class Sizes:**

The size of the first grade class is influenced by two factors: the number of births to residents of a community during the year that is six years prior to the enrollment year; and, net migration of preschool aged children (number of preschool aged children moving into the community minus the number of preschool aged children moving out of the community) during the first grade enrollment year and the year that was six years prior. The level of preschool migration can be measured by the ratio of enrollment for the entering first grade class to the number of births to residents in the year that was six years prior.

- **Net Migration Ratios:**

In making grade-to-grade projections, the historical average grade-to-grade survival ratios over the last three to ten years are analyzed. The average that displays the “strongest” statistical relationship to existing class sizes are used to project future enrollment.

When net migration ratios are discussed throughout the study, a ratio higher than 1.000 indicates a net in-migration of children occurred, and a ratio less than 1.000 indicates a net out-migration of children occurred.