

SECTION 9 ENROLLMENT PROJECTIONS

The following charts illustrate the student enrollment projections for the Rye Elementary School, Rye Middle School, and those students who will be attending Portsmouth High School from Rye. These charts are created using the Cohort Survival Method, utilizing the concept of the five (5) year weighted average, five (5) year straight average and three (3) year weighted average. Primarily these charts use progression ratios to predict the future student enrollment. These charts should be used to examine enrollment trends and not as exact student numbers.

By computing three (3) averages, instead of only one (1) average, a more accurate range can be done when analyzing future years' student enrollment. It should be noted that the accuracy of the enrollment trends, regardless of the method utilized, should be for the entire school population and not for a specific grade level.

The projection enrollments are created by using a complex formula, which gives statistical weight to prior years' student enrollment data in determining the future student enrollment. Data on resident live births are as recorded and reported by the State of New Hampshire. Actual enrollment data is calculated by using October 1st enrollments.

At the elementary school you will note that the projected student population for the 2015-2016 projects a decrease of sixteen (16) students school wide. Continuing in 2016-2017 and 2017-2018 there is a decrease of projected student enrollment with the aggregate student enrollment being between 250 to 270 students. It is interesting to note that there is a 6% increase in students between kindergarten and grade one. There is also a rather significant increase in the progression ratio between resident live births and the number of students' actually entering kindergarten. You will note that the progression ratio indicates an approximate increase of more than 30%. For 2014-2015, this same age group had a 48% increase in students. A possible explanation is that families of child bearing age are still moving into the Town with children of pre-elementary school age but at a slower rate than prior years, or due to the economy, parents are electing to send their child(ren) to public kindergarten rather than remain in a private setting.

At the middle school, the student population decreased by eight (8) students in 2014-2015 when compared to the prior year. It is estimated that there will be an increase in students at the middle school of eleven (11) students for 2015-2016. The student population is projected to decrease in 2016-2017 and future years with the potential number of students in four (4) years being in the 150 range.

Further, you will note that in the 2015-2016 budget, it is projected that six (6) Rye students would not be attending Portsmouth High School, but would be attending a private school. These six (6) students represent approximately 13% of the current eighth grade student population, less any New Castle students.

In 2015-2016, there is a projected decrease of six (6) students attending Portsmouth High School over the number of students budgeted in 2014-2015, but please remember that these figures are projections only. With the potential decrease of six (6) less students at Portsmouth High School for 2015-2016 the appropriation has still increased due to the projected rise in the tuition rate per student. The appropriation increase for high school tuition is still significant as the budgetary increase is anticipated to be \$108,067. A consideration why the 2015-2016 appropriation is greater is that the per student tuition cost estimated for 2015-2016 is \$995 greater than the actual amount budgeted.

Currently there are 204 students attending Portsmouth High School which is one (1) student greater than the number of students appropriated. This higher number of students and the higher than anticipated cost per pupil has created a budgetary deficit of \$48,318 if the budgetary and actual estimates of students attending Portsmouth High School were in complete agreement. When more students attend Portsmouth High School it is generally due to one (1) of the following reasons:

- 1) students attending Portsmouth High School who attended a private school the prior year;
- 2) students who moved into Rye;
- 3) the total number of high school age students, whether they attend private or public school in the aggregate is greater than the prior year;
- 4) more current eighth grade students are attended Portsmouth High School than anticipated.

Naturally, there is always the possibility that more students may move into or may move out of the Town, increasing or decreasing the number of students who will or will not attend Portsmouth High School.

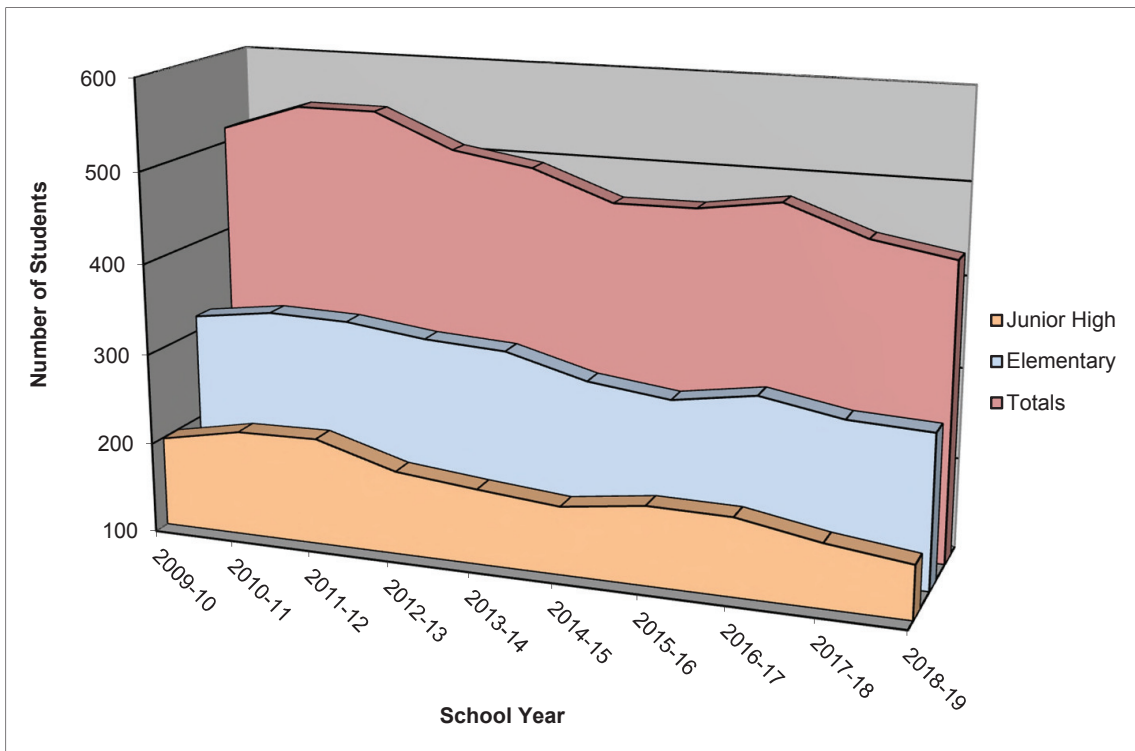
Again, the enrollment projections are used as a tool to project enrollment trends, and are not meant to be used as an exact forecast for the number of students. Further exploration and close monitoring of students population will need to be continually undertaken.



STUDENT ENROLLMENT AT THE RYE ELEMENTARY AND JUNIOR HIGH SCHOOLS

Data based on five (5) year weighted average and General Fall Reports.

<u>School Year</u>	<u>Junior High</u>	<u>Elementary</u>	<u>Totals</u>
2009-10	199	317	516
2010-11	216	329	545
2011-12	218	327	545
2012-13	192	316	508
2013-14	183	311	494
2014-15	175	287	462
2015-16	187	276	463
2016-17	186	290	476
2017-18	170	274	444
2018-19	159	270	429



**RYE SCHOOL DISTRICT
PROJECTED ENROLLMENT THREE YEAR WEIGHTED AVERAGE
COHORT SURVIVAL METHOD UTILIZING DATA AS OF OCTOBER 1, 2014**

YEAR	RESIDENT LIVE BIRTHS	YEAR/GRADE												TOTAL K-5	TOTAL 6-8	TOTAL 9-12	
		K	1	2	3	4	5	6	7	8	9	10	11				12
2006	23	46	53	57	67	55	49	67	67	84	46	51.5	50	39	327	218	186.5
2007	35	40	50	47	58	66	55	45	79	68	52	44	49.5	39	316	192	184.5
2008	24	37	45	50	53	59	67	52	52	79	44	53	43	48.5	311	183	188.5
2009	39	47	36	44	51	51	58	64	58	53	60.5	40	58.5	45	287	175	204
PROGRESSION RATIOS		<u>130.69% 104.26% 97.00% 105.55% 98.44% 99.66% 94.58% 113.94% 101.21% 70.18% 95.37% 103.78% 97.99%</u>															
2010	30	39	49	35	46	50	51	55	73	59	37	58	42	57	271	186	194
2011	37	48	41	48	37	46	50	48	63	74	41	35	60	41	269	184	177
2012	29	38	50	40	50	36	46	47	55	63	52	39	37	59	260	165	187
2013	28	37	40	49	42	49	36	43	54	55	44	49	41	36	252	152	171
2019-20		38	38	38	52	41	49	34	49	55	39	42	51	40		138	172
2020-21			40	40	40	51	41	47	39	50	38	37	44	50		135	170
2021-22				40	40	40	51	39	53	39	35	37	39	43		131	153
2022-23					40	40	40	48	44	54	28	33	38	38		146	137
2023-24						37	38	55	55	45	38	26	35	37		137	136
2024-25							43	43	43	55	31	36	27	34		141	129
2025-26								43	43	43	39	30	37	27			133
2026-27									30	30	30	37	31	37			135
2027-28										21	29	29	38	30			119

Note: Any student who is in a joint custody situation with a parent who resides in a town other than Rye has still been counted as one (1) student, rather than the tuition invoice of .5 .

**RYE SCHOOL DISTRICT
PROJECTED ENROLLMENT FIVE YEAR WEIGHTED AVERAGE
COHORT SURVIVAL METHOD UTILIZING DATA AS OF OCTOBER 1, 2014**

YEAR	RESIDENT LIVE BIRTHS	YEAR/GRADE	TOTAL														
			K	1	2	3	4	5	6	7	8	9	10	11	12	K-5	6-8
2004	30	2009-10	48	55	47	49	59	73	58	68	50	33	55	45	317	199	183
2005	43	2010-11	50	57	61	47	50	64	90	62	46	46	34	55	329	216	181
2006	23	2011-12	46	53	57	67	55	67	67	84	46	51.5	50	39	327	218	186.5
2007	35	2012-13	40	50	47	58	66	45	79	68	52	44	49.5	47.5	316	192	193
2008	24	2013-14	37	45	50	53	59	52	52	79	44	53	43	48.5	311	183	188.5
2009	39	2014-15	47	36	44	51	51	64	58	53	60.5	40	58.5	45	287	175	204
PROGRESSION RATIOS			<u>138.6% 106.22% 97.72% 105.73% 101.31% 100.14% 96.61% 113.75% 100.51% 69.57% 97.67% 103.44% 101.97%</u>														
2010	30	2015-16	42	50	35	47	52	51	56	73	58	37	59	41	276	187	197
2011	37	2016-17	51	44	49	37	47	52	49	64	73	41	36	61	280	186	180
2012	29	2017-18	40	54	43	52	38	47	50	56	64	51	40	37	274	170	190
2013	28	2018-19	39	43	53	46	52	38	46	57	56	45	50	41	270	159	173
		2019-20		41	42	56	46	52	36	52	57	39	44	51	270	145	176
		2020-21		40	40	44	57	46	51	41	52	40	38	45	270	144	176
		2021-22		43	45	43	45	57	45	58	42	36	39	40	270	144	161
		2022-23		43	43	44	43	45	55	51	58	29	35	40	270	164	145
		2023-24		43	43	43	43	43	43	63	51	40	28	37	270	157	146
		2024-25		42	42	49	42	42	42	49	63	36	39	29	270	154	141
		2025-26		47	47	47	47	47	47	49	44	44	35	41	270	149	149
		2026-27		48	48	48	48	48	48	48	34	34	43	36	270	155	155
		2027-28		33	33	33	33	33	33	33	33	34	44	37	270	148	148

Note: Any student who is in a joint custody situation with a parent who resides in a town other than Rye has still been counted as one (1) student, rather than the tuition invoice of .5 .

**RYE SCHOOL DISTRICT
PROJECTED ENROLLMENT FIVE YEAR STRAIGHT AVERAGE
COHORT SURVIVAL METHOD UTILIZING DATA AS OF OCTOBER 1, 2014**

YEAR	RESIDENT LIVE BIRTHS	YEAR/GRADE	K	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL TOTAL		
																K-5	6-8	9-12
2004	30	2009-10	48	55	47	49	59	59	73	58	68	50	33	55	46	317	199	184
2005	43	2010-11	50	57	61	47	50	64	64	90	62	46	46	34	55	329	216	181
2006	23	2011-12	46	53	57	67	55	49	67	67	84	46	51.5	50	39	327	218	186.5
2007	35	2012-13	40	50	47	58	66	55	45	79	68	52	44	49.5	47.5	316	192	193
2008	24	2013-14	37	45	50	53	59	67	52	52	79	44	53	43	48.5	311	183	188.5
2009	39	2014-15	47	36	44	51	51	58	64	58	53	60.5	40	58.5	45	287	175	204
PROGRESSION RATIOS			<u>141.05% 108.65% 99.47% 105.27% 103.10% 101.26% 99.01% 114.60% 100.73% 69.01% 98.49% 103.19% 102.47%</u>															
2010	30	2015-16	42	51	36	46	53	52	57	73	58	37	60	41	60	280	189	197
2011	37	2016-17	52	46	51	38	48	53	51	66	74	40	36	61	42	288	191	180
2012	29	2017-18	41	57	46	53	39	48	53	59	66	51	40	37	63	284	178	191
2013	28	2018-19	39	44	56	48	55	39	48	60	59	46	50	41	38	283	167	175
		2019-20	39	44	44	59	50	56	39	55	61	41	45	52	42	155	155	180
		2020-21		41	47	47	61	50	55	45	55	42	40	46	53	155	155	182
		2021-22		43	43	43	48	62	50	63	45	38	41	41	48	158	158	169
		2022-23					43	49	61	57	64	31	38	43	42	182	182	154
		2023-24						43	48	70	57	44	31	39	44	176	176	157
		2024-25						49	49	55	71	40	43	32	40	161	161	154
		2025-26						49	56	49	56	49	39	45	32	165	165	165
		2026-27						34	34	38	38	48	48	40	46	173	173	173
		2027-28						23	23	38	23	38	38	50	41	152	152	152

Note: Any student who is in a joint custody situation with a parent who resides in a town other than Rye has still been counted as one (1) student rather than the tuition invoice of .5.

New Hampshire Resident Births by County and Town/City, 2003-2013

The data provide in this document include live births to mothers who are New Hampshire residents. Please note: birth data for the year 2012 does not include all NH residents who were born out-of-state, and is therefore considered incomplete at this time.

<u>TOWN/CITY</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
GREENLAND	41	38	34	38	35	50	33	47	44	37	52
NEW CASTLE	7	3	4	6	1	3	5	6	2	4	3
NEWINGTON	2	6	8	9	5	3	3	4	2	7	7
RYE	32	30	43	23	35	24	39	30	37	29	28

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