WAYLAND • PUBLIC • SCHOOLS

WAYLAND, MASSACHUSETTS

To: Finance Subcommittee

From: Susan Bottan, School Business Administrator

Date: October 26, 2015

RE: 2015-2016 October 1 Enrollment Report

On October 1 of each year, Wayland Public Schools records and reports the total number of students enrolled by grade level to the Massachusetts Department of Elementary and Secondary Education as required. This information is used by the Commonwealth to calculate the district's foundation enrollment and Chapter 70 funding. In addition, October 1 enrollment are used by the district to project the next year's enrollment and identify trends in enrollment for subsequent years. The enrollments projections for the next year form the foundation upon which the district's budget is developed and the enrollment trends are used to inform the district's multi-year budget forecast.

The purpose of this report is to provide to the School Committee a summary of 2015-2016 October 1 enrollment by grade, school and elementary class size compared to the prior year's actual enrollment. October 1 enrollment will also be compared with projections made last year for the current year. Lastly, this report will summarize projections for 2016-2017 school year and forecast trends for 2018 through 2020.

Actual Enrollment 2015-2016

Total enrollment in the Wayland Public Schools on October 1, 2015 was 2,659 students, 6 fewer students than were enrolled on October 1, 2014. This represents a (.2 %) decrease in enrollment as compared with last year's enrollment. FY16 enrollments by grade and school are illustrated in the table below:

ENROLLMENTS BY GRADE October 1, 2015

			october 1	, 2015		
	CLAYPIT	HAPPY		MIDDLE	HIGH	
GRADE	HILL	HOLLOW	LOKER	SCHOOL	SCHOOL	TOTAL
* Pre-K						95
K	74	57	40			171
1	79	64	41			184
2	83	57	38			178
3	98	73	50			221
4	96	71	47			214
5	91	69	47			207
6				193		193
7				233		233
8				218		218
9					206	206
10					215	215
11					193	193
12					226	226
TOTAL K-12	521	391	263	644	840	2,659
Oct. 1, 2014	524	408	207	672	854	2,665
DIFFERENCE	-3	-17	56	-28	-14	-6

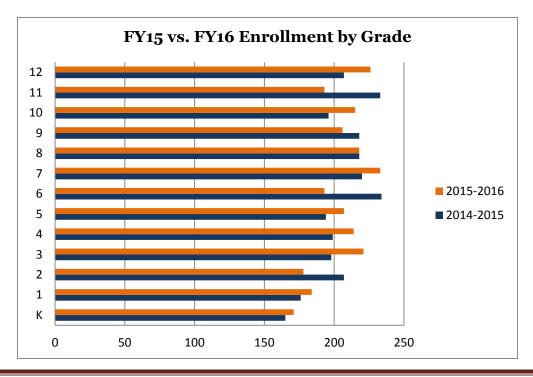
^{*} Pre-kindergarten numbers at TCW are for information only and are not included in totals.

In comparison to FY15, the elementary level increased by 36 students whereas the middle and high schools decreased by (28) and (14), respectively. The table below illustrates the comparative enrollment between October 1, 2014 and October 1, 2015 for grades K-12:

COMPARATIVE ENROLLMENTS GRADES K-12 2014-2015 vs. 2015-2016

2014-2015 vs. 2015-2016											
GRADE	2014-2015	2015-2016	CHANGE								
K	165	171	6								
1	176	184	8								
2	207	178	-29								
3	198	221	23								
4	199	214	15								
5	194	207	13								
6	234	193	-41								
7	220	233	13								
8	218	218	0								
9	218	206	-12								
10	196	215	19								
11	233	193	-40								
12	207	226	19								
TOTAL K-12	2,665	2,659	-6								
K-5	1,139	1,175	36								
6-8	672	644	-28								
9-12	854	840	-14								

The graph below illustrates October 1 enrollment by grade level for FY15 as compared to FY16. Grade 7 followed by grade 12 and grade 3 are the highest enrolled, whereas kindergarten, grade 1 and grade 2 are the lowest enrolled of all grade levels K-12 in the district this year:



Of the 2,659 students enrolled in the Wayland Public Schools on October 1, 2015, 137 were Boston students participating in our METCO program. The number of Boston students enrolled in Wayland has remained consistent over the past several years:

ENROLLMENTS BY GRADE - METCO Students October 1, 2015

	CLAYPIT	HAPPY	<u> </u>	MIDDLE	HIGH	
GRADE	HILL	HOLLOW	LOKER	SCHOOL	SCHOOL	TOTAL
K	1	1	0			2
1	0	4	4			8
2	5	4	5			14
3	5	5	6			16
4	0	5	6			11
5	0	6	5			11
6				11		11
7				13		13
8				15		15
9					6	6
10					11	11
11					10	10
12					9	9
METCO K-12	11	25	26	39	36	137

In addition to the number of Boston residents enrolled in the district, 66 children of staff members who live outside of Wayland attend the Wayland Public Schools. Of the total students enrolled, 37 students attend school at the elementary level, 17 attend the middle school and 12 attend the high school.

The budget and staffing levels for the 2015-16 school year were built on a projected enrollment of 2,642. Actual enrollment totaled 17 more students than projected in grades K-12. The elementary level reported 45 students more than projected. The middle and high schools reported (11) and (17) students fewer than the number of students projected. The table on the next page illustrates projected versus actual enrollments by school and grade level:

PROJECTED vs. ACTUAL ENROLLMENTS, K-12 October 1, 2015

	PROJECTED	ENROLLED		
GRADE	Oct. 1, 2015	Oct. 1, 2015	DIFFERENCE	
K	146	171	25	
1	174	184	10	
2	184	178	-6	
3	217	221	4	
4	207	214	7	
5	202	207	5	
6	195	193	-2	
7	236	233	-3	
8	224	218	-6	
9	216	206	-10	
10	214	215	1	
11	198	193	-5	
12	229	226	-3	
TOTAL K-12	2,642	2,659	17	
K-5	1,130	1,175	45	
6-8	655	644	-11	
9-12	857	840	-17	

The Wayland Public Schools completed its last phase to a K-5 elementary configuration this year. At the Loker School, the district's lines were drawn in such a way to support two classrooms per level for a total of twelve sections, Kindergarten to grade 5, three classrooms per level at the Happy Hollow School, for a total of 18 sections, and four classrooms per level at the Claypit Hill School, for a total of 24 sections. The average classroom sizes at each elementary school, with the exception of grade 3 at all three elementary schools and grade 1 at Happy Hollow and Loker Schools, fall within the class size targets established by the Wayland School Committee. On the next page, class size is illustrated by school, by grade and by section for each elementary school:

ELEMENTARY CLASS SIZES

FY 2016 Actual Elementary School Class Size

			NUMBER	AVERAGE	TARGET
Claypit Hill		TOTAL	CLASSROOMS	CLASS SIZE	UPPER LIMIT
Kindergarten		74	4	19	20
Grade 1		79	4	20	20
Grade 2		83	4	21	23
Grade 3		98	4	25	23*
Grade 4		96	4	24	25
Grade 5		<u>91</u>	<u>4</u>	<u>23</u>	25
	Total	521	24	22	23
Happy Hollow					
Kindergarten		57	3	19	20
Grade 1		64	3	21	20*
Grade 2		57	3	19	23
Grade 3		73	3	24	23*
Grade 4		71	3	24	25
Grade 5		<u>69</u>	<u>3</u>	<u>23</u>	25
	Total	391	18	22	23
<u>Loker</u>					
Kindergarten		40	2	20	20
Grade 1		41	2	21	20*
Grade 2		38	2	19	23
Grade 3		50	2	25	23*
Grade 4		47	2	24	25
Grade 5		<u>47</u>	<u>2</u>	24	25
	Total	263	12	22	23
Total Elementary		1,175	54	22	

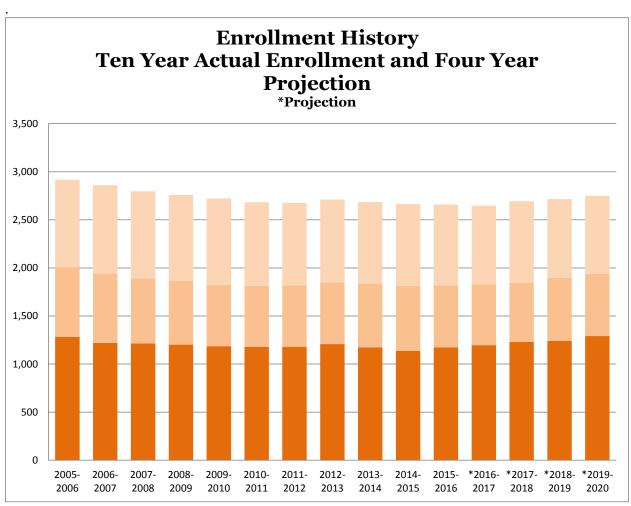
^{*} Average class size exceeds target upper limit.

This year, an additional full day Kindergarten classroom opened at Claypit Hill. Of the nine Kindergarten classrooms, six are full day programs; three at Claypit Hill, two at Happy Hollow, and one at Loker Schools. Each elementary school has one traditional day kindergarten classroom. The district's kindergarten enrollment of 171 is six more students than last year's total Kindergarten enrollment of 165. Last year's grade 8 cohort of 218 students was replaced by an incoming grade 6 class of 193. The Wayland High School's graduating class of 207 was replaced by an incoming freshman class of 206 this year.

The graphic on the next page shows Wayland's October 1 enrollment history from 2006 through a projected enrollment to 2020:

ENROLLMENT HISTORY and PROJECTIONS

YEAR	K-5	6-8	9-12	TOTAL	CHANGE	% CHANGE
2005-2006	1,283	721	912	2,916	-8	-0.27%
2006-2007	1,221	720	919	2,860	-56	-1.92%
2007-2008	1,213	680	903	2,796	-64	-2.24%
2008-2009	1,203	665	891	2,759	-37	-1.32%
2009-2010	1,186	639	896	2,721	-38	-1.38%
2010-2011	1,179	634	869	2,682	-39	-1.43%
2011-2012	1,180	639	856	2,675	-7	-0.26%
2012-2013	1,208	640	862	2,710	35	1.31%
2013-2014	1,174	663	847	2,684	-26	-0.96%
2014-2015	1,139	672	854	2,665	-19	-0.71%
2015-2016	1,175	644	840	2,659	-6	-0.22%
*2016-2017	1,197	631	820	2,648	-11	-0.41%
*2017-2018	1,231	612	851	2,694	46	1.72%
*2018-2019	1,240	655	820	2,715	21	0.81%
*2019-2020	1,291	646	814	2,751	36	1.36%



Projected Enrollment 2017-2020

A three-year cohort survival ratio (CSR) is used to develop internal projections for the Wayland Public Schools. This method has been employed for many years by the administration to make enrollment projections. The CSR takes into account housing growth, migration, retention, withdrawals, transfers and births over the three previous school years and produces highly reliable projections for enrollments in Grades 1-12. However, it is less accurate in predicting kindergarten enrollments which may be affected by postponed kindergarten enrollment, attendance at private full-day kindergarten programs, adoption, and housing development and turnover. Our own full day, tuition-based, kindergarten program also has an impact.

There are several sources of data one can use as the basis for predicting kindergarten enrollment: census data from the Town Clerk, birth data from five years before kindergarten enrollment, and self-reported data from parents and local preschools.

Wayland has traditionally used the second source, the three-year average of the birth-to-kindergarten ratio, i.e., the number of kindergarteners to the number of children born to Wayland residents five years earlier as reported to the Commonwealth's Department of Public Health Registry of Vital Records and Statistics. In 2011, there were 112 births reported for Wayland residents, an increase of 13% from the recorded births in 2010. The birth-to-kindergarten cohort survival ratio average for three years yields a projection of 187 kindergarteners for the 2016-2017 school year, which is 16 more students from the current enrollment of 171. The 9 kindergarten sections will have a projected average class sizes of 20 to 22, which is over the School Committee's established guideline for Kindergarten class size of 20 students. The cohort survival ratio takes into consideration the impact of METCO and staff students since their numbers are included in the Oct. 1 enrollment.

Additionally, the district's Special Education Department collects information from local preschools and parents of age-eligible children for kindergarten enrollment. This method relies on census data from these sources and adjusts for postponements (at both ends), METCO and staff students, and possible retentions. This estimate is used to validate the cohort survival method.

Enrollment projections are used to develop the coming year's budget. Staffing levels at all grade levels are predicated upon the number and demographics of students reasonably expected to be enrolled at the start of the school year. Elementary enrollment numbers by school and by grade are used in conjunction with the School Committee's Class Size Policy guidelines to determine the number of classroom sections needed at each grade level, which in turn drives the number of specialists (e.g. art, general music and physical education teachers) required at each school.

PROJECTED ENROLLMENT (3-Yr Cohort Survival Ratios, except for K)

2016-2017

	CLAYPIT	HAPPY		MIDDLE	HIGH	
GRADE	HILL	HOLLOW	LOKER	SCHOOL	SCHOOL	TOTAL
K	81	63	43			187
1*	79	61	43			183
2	82	67	43			191
3	86	59	40			185
4	104	77	53			234
5	97	72	48			217
6				206		206
7				192		192
8				234		234
9					212	212
10					203	203
11					214	214
12					190	190
TOTAL K-12	530	399	268	631	820	2,648
Oct. 1, 2015	521	391	263	644	840	2,659
DIFFERENCE	9	8	5	-13	-20	-11
% DIFFERENCE	1.64%	2.03%	2.08%	-1.97%	-2.37%	-0.40%

Using only the cohort survival method for all grades, next year's total enrollment in the Wayland Public Schools is projected to total 2,648 students, (11) fewer students than the current school year. The High School enrollment is projected to decrease by (20), the Middle School to decrease by (13), and the elementary (Grades K-5) to increase by 22 students. The tables on the following pages illustrate projected and comparative enrollment by grade and by school:

COMPARATIVE ENROLLMENTS GRADES K-12 2014-2016 Actual Enrollment vs. 2017 Projections

				CHANGE
GRADE	2014-2015	2015-2016	2016-2017 Projections	2016 v. 2017
* Pre-K	97	97	97	0
K	165	171	187	16
1	176	184	183	-1
2	207	178	191	13
3	198	221	185	-36
4	199	214	234	20
5	194	207	217	10
6	234	193	206	13
7	220	233	192	-41
8	218	218	234	16
9	218	206	212	6
10	196	215	203	-12
11	233	193	214	21
12	207	226	190	-36
OTAL K-12	2,665	2,659	2,648	-11
K-5	1,139	1,175	1,197	22
6-8	672	644	631	-13
9-12	854	840	820	-20

Based on the enrollment projections, elementary class sizes are expected to be below the class size target limit, with the exception of grade 4 and Kindergarten in all three elementary school and Grade 1 at the Loker School. Grade 4 in all three elementary schools is projected to average at a class size of 26 students as compared to the target limit of 25 students. Kindergarten will be at target or as high as 22 students on average per classroom.

It is important to note that in addition to the CSR projections for Kindergarten, our district has obtained census data from the Town Clerk's Office that reveal and 20 additional Kindergarteners residing in Wayland beyond those students we have identified as being enrolled in community preschool programs or who are siblings of students currently enrolled in the Wayland Public Schools. Based on projected class sizes reaching or exceeding target enrollment and the additional census data, the district may need to consider opening its tenth Kindergarten classroom to meet the growing enrollment demand in FY17. By March of 2016, following the kindergarten registration period for 2017, information will be available to more accurately calculate the need for an additional kindergarten classroom. On the following page, projected class sizes for the elementary schools are noted.

PROJECTED 2016-2017ELEMENTARY CLASS SIZES

Using 3-Year Cohort Survival Ratios except for K

ACTUAL

Claumit IIIII	PROJECTED	NUMBER	AVERAGE	TARGET	CLASSROOMS
Claypit Hill	TOTAL	CLASSROOMS	CLASS SIZE	UPPER LIMIT	PRIOR YEAR
Kindergarten	81	4	20	20	4
Grade 1	79	4	20	20	4
Grade 2	82	4	21	23	4
Grade 3	86	4	22	23	4
Grade 4	104	4	26	25*	4
Grade 5	<u>97</u>	<u>4</u>	<u>24</u>	25	<u>5</u>
Total	530	24	22	22	25
Happy Hollow					
Kindergarten	63	3	21	20*	3
Grade 1	61	3	20	20	3
Grade 2	67	3	22	23	3
Grade 3	59 3		20	23	3
Grade 4	77	3	26	25*	3
Grade 5	<u>72</u>	<u>3</u>	<u>24</u>	25	<u>4</u>
Total	399	18	22	23	19
<u>Loker</u>					
Kindergarten	43	2	22	20*	2
Grade 1	43	2	21	20*	2
Grade 2	43	2	21	23	2
Grade 3	40	2	20	23	2
Grade 4	53	2	26	25*	2
Grade 5	<u>48</u>	<u>2</u>	24	25	<u>0</u>
Total	268	12	22	24	10
Total Elementary	1,197	54	22		54

^{*} Average class size exceeds target upper limit.

The forecast for FY 2018 to FY 2020 on the next page indicates elementary school growth for the district, in part driven by the increased birth rates reported and tracked by the Town Clerk's Office.

WAYLAND PUBLIC SCHOOLS ENROLLMENT TRACKING from FY 2003 - 2016 and ENROLLMENT PROJECTIONS for FY17, FY18, FY19 and FY20

	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY17	FY17	FY17	FY17	FY18	FY19	FY20
Oct. 1	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	5 Yr	4 Yr	3 Yr	2 Yr	1 Yr			
															CSR	CSR	CSR	CSR	CSR	Using	3 Year	CSR
Births	132	124	124	108	123	112	91	105	99	112	124	120	121	121								
T/	107	202	170	107	102	174	170	1.00	1.00	170	100	1.61	1.65	171	101	100	107	105	102	200	202	204
K Consider 1		203	170	187	193	174	178	160	168	179	190	161	165	171	181	188	187	185	193	209	202	204
Grade 1	191	219	221	188	194	206	192	205	169	179	190	190	176	184	191	203	183	210	200	199	223	215
Grade 2	244	200	218	232	186	202	203	204	221	176	185	194	207	178	186	197	191	200	181	190	208	232
Grade 3	231	253	207	220	235	193	204	208	204	220	192	191	198	221	183	195	185	193	188	199	198	216
Grade 4	249	225	257	202	213	230	199	211	209	212	228	202	199	214	231	202	234	204	238	196	211	210
Grade 5	238	247	231	254	200	208	227	198	208	214	223	236	194	207	217	233	217	228	221	237	198	214
Grade 6	246	233	240	234	253	208	210	225	197	209	219	223	234	193	215	224	206	221	213	216	236	198
Grade 7	254	247	241	243	225	248	207	208	225	196	218	218	220	233	210		192	217	208	205	214	234
Grade 8	248	257	242	244	242	224	248	206	212	234	203	222	218	218	199	220	234	217	194	192	205	215
Grade 9	226	240	237	231	230	232	222	232	202	212	233	202	218	206	230	199	212	196	221	228	187	200
Frade 10	198	227	241	234	224	221	229	218	226	199	206	234	196	215	209	229	203	228	209	210	225	185
Frade 11	213	204	218	233	228	222	223	229	214	227	205	208	233	193	200	207	214	204	196	203	209	224
Frade 12	192	210	201	214	237	228	217	217	227	218	218	203	207	226	224	201	190	201	220	211	200	206
Total		2,965	2,924	2,916	2,860	2,796	· ·		2,682	2,675	2,710	2,684	2,665	2,659	2,676	2,718	2,648	,	2,682	2,694		2,751
Delta	5	38	-41	-8	-56	-64	-37	-38	-39	-7	35	-26	-19	-6	11	53	-17	39	-36	12	21	36
Growth	0.2%	1.3%	-1.4%	-0.3%	-1.9%	-2.3%	-1.3%	-1.4%	-1.5%	-0.3%	1.3%	-1.0%	-0.7%	-0.2%	0.4%	1.9%	-0.6%	1.4%	-1.3%	0.5%	0.8%	1.3%
Totals																						
K-5	1,350	1,347	1,304	1,283	1,221	1,213	1,203	1,186	1,179	1,180	1,208	1,174	1,139	1,175	1,189	1,218	· ·	1,219		1,231	1,240	1,291
6-8	748	737	723	721	720	680	665	639	634	639	640	663	672	644	624	664	631	656	615	612	655	646
9-12	829	881	897	912	919	903	891	896	869	856	862	847	854	840	863	836	820	829	846	851	820	814