



Mountain Lakes School District

*Tradition of Honest Excellence*

# Enrollment Projection and Facility Analysis Report

prepared by

**Ross Haber Associates**

**September, 2014**

**Mountain Lakes Board of Education**  
**Enrollment Projection and Facility Utilization Study**  
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**Introduction**

The Mountain Lakes Board of Education has engaged Ross Haber Associates to provide an enrollment projection and facility utilization study. The Mountain Lakes District consists of three buildings housing students in grades K-12 (Wildwood Elementary, Briarcliff Middle School and Mountain Lakes High School). In addition there is the Lake Drive Program for the Hearing Impaired which is within the District. The Lake Drive Program is a self-funded program and attracts hearing impaired students from all over the State of New Jersey. School Districts pay tuition plus transportation costs for this program. The Mountain Lakes Schools have a complex faculty and facility relationship with the Lake Drive Program. The Lake Drive program services student's in grades pre-k through 12. The Mountain Lakes Schools provide several rooms throughout the three public school buildings to accommodate students who "age out" of the Lake Drive Program.

This study focuses on the three Mountain Lakes Schools and does not include any project and/or facility analysis of the Lake Drive Program except as it relates to each of the three public schools.

The Mountain Lakes Public Schools do accept students, by tuition, from other communities. These students are accepted based upon the availability of space in any of the three schools. Parents who enroll children in the elementary and middle school enter with the understanding that entry into the next level is

contingent upon space. If a tuition student completes grade 5 or grade 8 in Mountain Lakes there is no guarantee of admission into either grade 6 or grade 9. One of the outcomes of this study is for the District to determine how much growth, if any, can be given to the tuition program.

### **Executive Summary**

The overall K-12 enrollment in the Mountain Lakes Schools has remained remarkably stable from the base year enrollment of this study (2008-09) to the current school year. The total enrollment in 2008-09 was 1,459.<sup>1</sup> This enrollment declined marginally to 1,426 in 2013-14. This is a decrease of 23 students in total or approximately 2.25%. The total enrollment in the District is projected to remain stable with the projection for 2018-19 being 1,413. This is a decline from the 2013-14 enrollment of 1,426 students or about 1.2%. The breakdown by grade level is as follows:

1. The K-5 enrollment declined from 491 in 2008-09 to 453 in 2013-14. This is a decline of 38 students or approximately 8%. The K-5 enrollment is projected to increase slightly from the current 453 to 467. This is an increase of 14 students or approximately 3%.
2. The middle school enrollment decline from 306 in 2008-09 to 290 in 2013-14. This is a decrease of 16 students or approximately 5.23%. The middle school enrollment is projected to decrease from the current 290 students to 250 in 2018-19. This is a decline of 40 students or approximately 13.8%.
3. The high school enrollment actually increased from 662 in 2008-09 to 683 in 2013-14. This is an increase of 21 students or approximately 3%. The high school enrollment is projected to continue to increase

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<sup>1</sup> Enrollment data from both the Mountain Lakes School District and the New Jersey Department of Education.

slightly from the current 683 to 696. This is an increase of 13 students or approximately 1.7%.

The enrollment history and projection indicate that the student population has remained stable during the past six years and is projected to continue as such.

## General Demographics

**Table 1: Comparative Demographics**

<b>Mountain Lakes</b>				
	2000	2012	Diff	Percent
Population	4,256	4,206	-50	-1.17%
Median Age	39.40	43.40	4.00	10.15%
Household	1,330	1,362	32	2.41%
Median Income	\$141,757	\$159,773	\$18,016	12.71%
Mean Income	\$196,682	\$259,771	\$63,089	32.08%
<b>Morris County</b>				
	2000	2012	Diff	Percent
Population	470,212	493,472	23,260	4.95%
Median Age	37.80	41.42	3.62	9.58%
Household	174,379	189,821	15,442	8.86%
Median Income	\$77,340	\$117,258	\$39,918	51.61%
Mean Income	\$99,849	\$151,802	\$51,953	52.03%
<b>State of New Jersey</b>				
	2000	2012	Diff	Percent
Population	8,414,350	8,791,894	377,544	4.49%
Median Age	36.70	39.40	2.70	7.36%
Household	3,064,645	3,214,360	149,715	4.89%
Median Income	\$55,146	\$71,637	\$16,491	29.90%
Mean Income	\$74,719	\$96,602	\$21,883	29.29%

Table compares several key demographic factors between Mountain Lakes, Morris County, and New Jersey. While the County and the State have shown overall growth in population the population of the community has declined marginally.<sup>2</sup> The median income and the average (mean income of the community has increased substantially during the past 12 years. There has also

<sup>2</sup> Data from United States Census Bureau, American Factfinder 2.

been a significant increase in the median age in the community. The higher the median age the lower the number of children in a given community.

As far as residential housing is concerned there has only been a marginal increase in the number of new houses built in Mountain Lakes. This is largely due to the size of the homes being built as compared to the homes being replaced and the general availability of property.

**Table 2: Permits Issued<sup>3</sup>**

Permits Issued		
	SF	Total
2008	5	5
2009	7	7
2010	17	17
2011	12	12
2012	14	14
2013	18	18
2014	11	11
Total	84	84

Table 2 shows the number of permits issued for new residential construction in Mountain Lakes since 2008. The total is 84 representing about 6% of the total housing in the community. This number includes new housing and housing that is considered new as a result of tearing down the existing structure and replacing it with a new structure.

According to the Mountain Lakes Planning Department there is no major new construction planned in that it is fairly well built out and that there are Highlands Act restrictions on some of the land. At any rate this does support the projection showing stability in the enrollment.

## **Methodology**

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<sup>3</sup> Data from Censtats-United States Census: Municipalities are required to report permits issued for new residential construction on a monthly basis to the Census Department.

This study used a modified cohort survival projection table. Cohort survival, which is used by the State Education Department as its standard for projections creates the projection by calculating the growth and decline of groups of students as they move from grade to grade. This is done for a period of six years in order to calculate an average growth ratio, for example, if there are 100 students in grade 1 and this group grows to 110 when they become second graders, then the growth ratio is 1.1. This is calculated and an average of five years of growth is applied to the current enrollment in that grade in order to project future enrollments.

Typically to calculate kindergarten growth a birth to kindergarten ratio is developed and applied to each kindergarten year. In Mountain Lakes this was not producing reliable results so instead of the birth to kindergarten ratio we used a moving average. This is the modification and is accepted by the State Education Department as part of its Long Range Facility Plan.

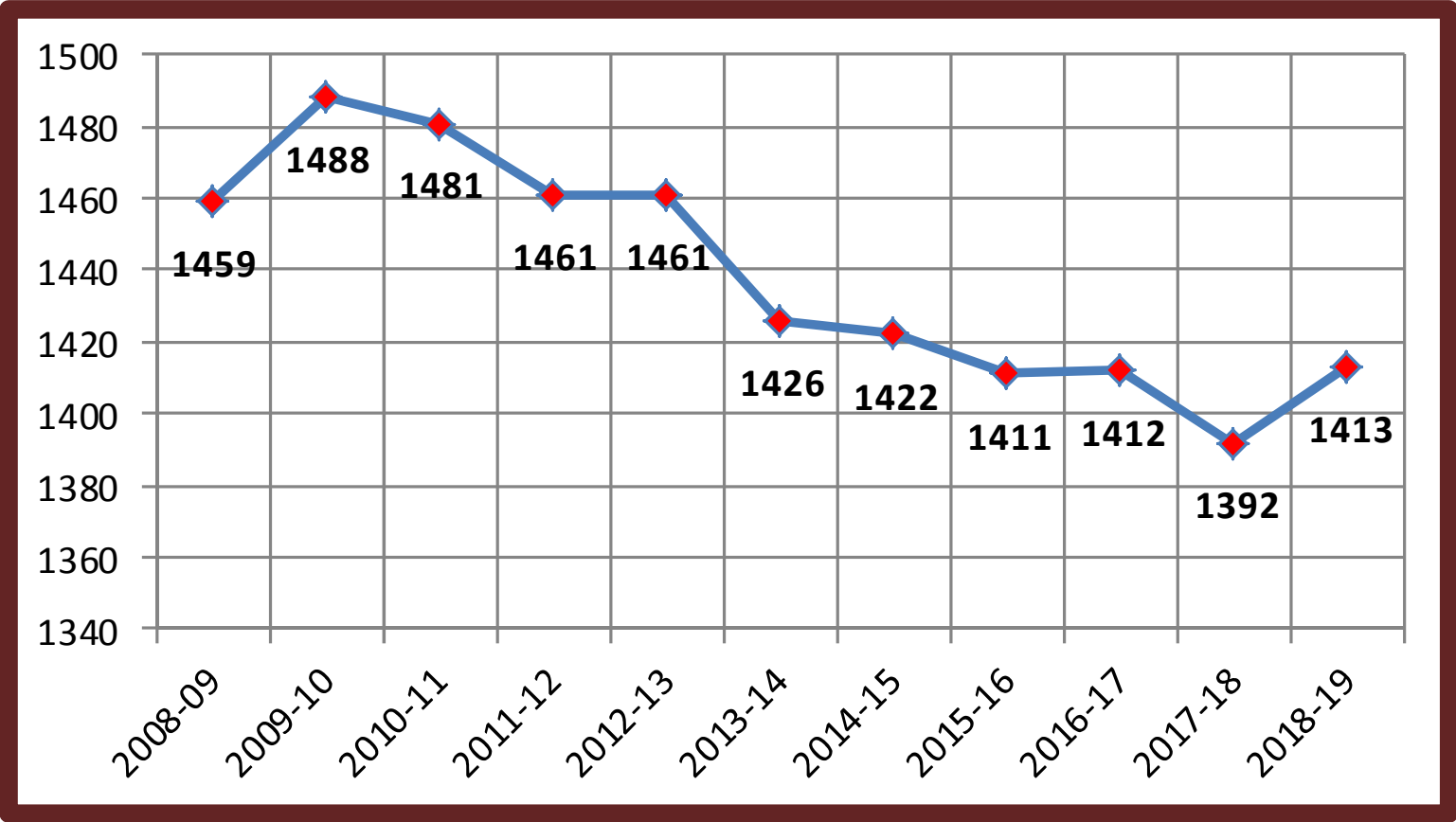
## **Enrollment Projection Tables and Charts**

**Table 3: District Enrollment History and Projection**

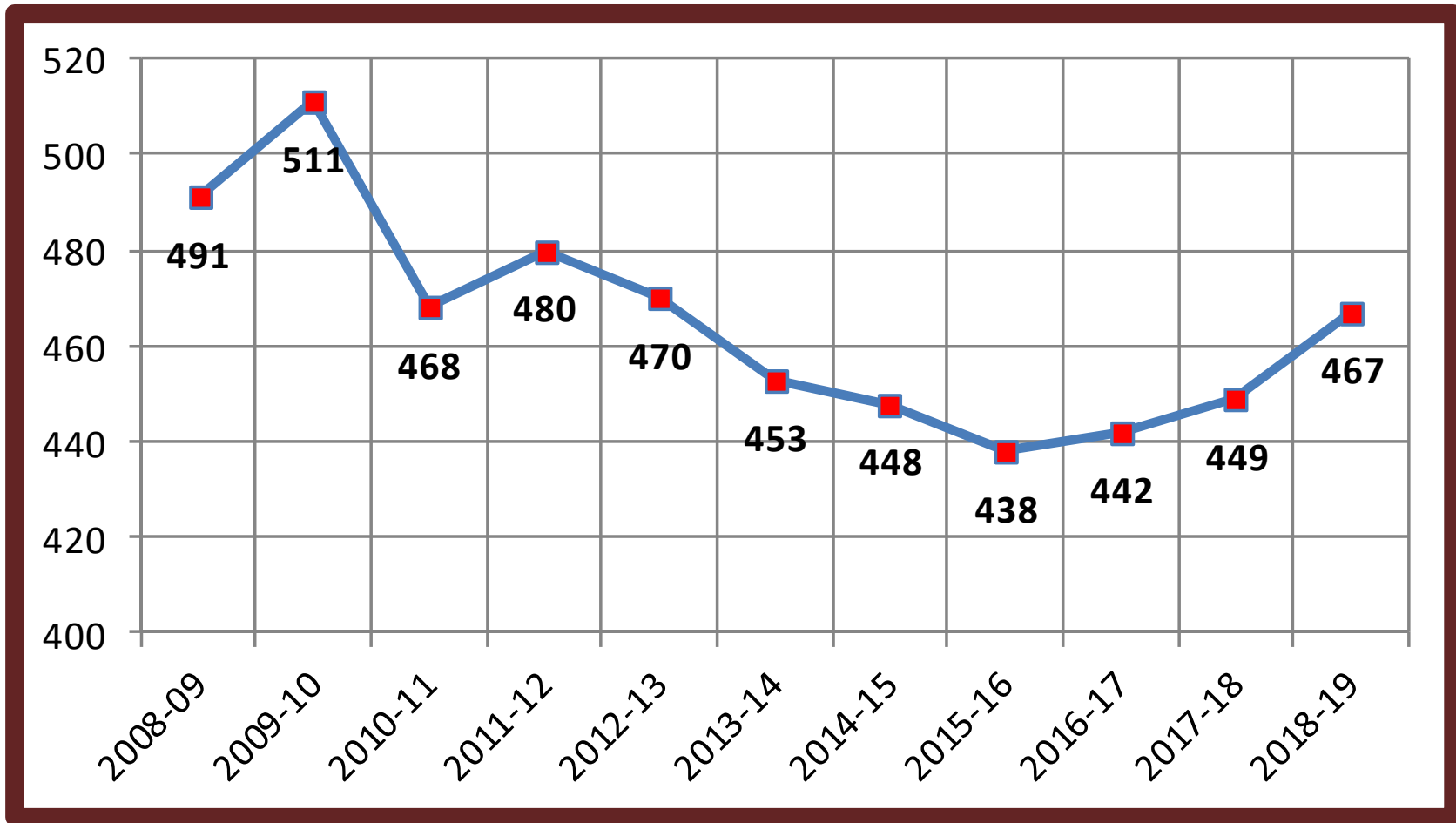
Mountain Lakes Enrollment Projection																		
Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	K-5	6-8	9-12	Total
08-09	44	59	80	87	77	106	82	109	99	98	183	158	168	153	491	306	662	1459
09-10	31	60	87	84	90	81	109	86	113	100	169	184	155	170	511	299	678	1488
10-11	22	54	71	87	83	90	83	112	97	116	168	176	185	159	468	325	688	1481
11-12	34	45	71	83	89	91	101	84	115	94	169	164	171	184	480	293	688	1461
12-13	31	56	66	75	85	92	96	98	87	123	162	180	165	176	470	308	683	1461
13-14	28	56	59	71	74	93	100	96	105	89	180	162	175	166	453	290	683	1426
Year		K	1	2	3	4	5	6	7	8	9	10	11	12	K-5	6-8	9-12	Total
14-15	25	<b>63</b>	<b>73</b>	<b>63</b>	<b>72</b>	<b>78</b>	<b>99</b>	<b>101</b>	<b>102</b>	<b>107</b>	<b>143</b>	<b>184</b>	<b>160</b>	<b>177</b>	<b>448</b>	<b>310</b>	<b>664</b>	<b>1422</b>
15-16	29	55	82	78	64	76	83	100	107	104	172	146	182	162	438	311	662	1411
16-17	23	55	72	88	79	67	81	84	106	109	167	175	145	184	442	299	671	1412
17-18	27	57	72	77	89	83	71	82	89	108	175	170	173	146	449	279	664	1392
18-19	26	57	74	77	78	93	88	72	87	91	174	179	168	175	467	250	696	1413



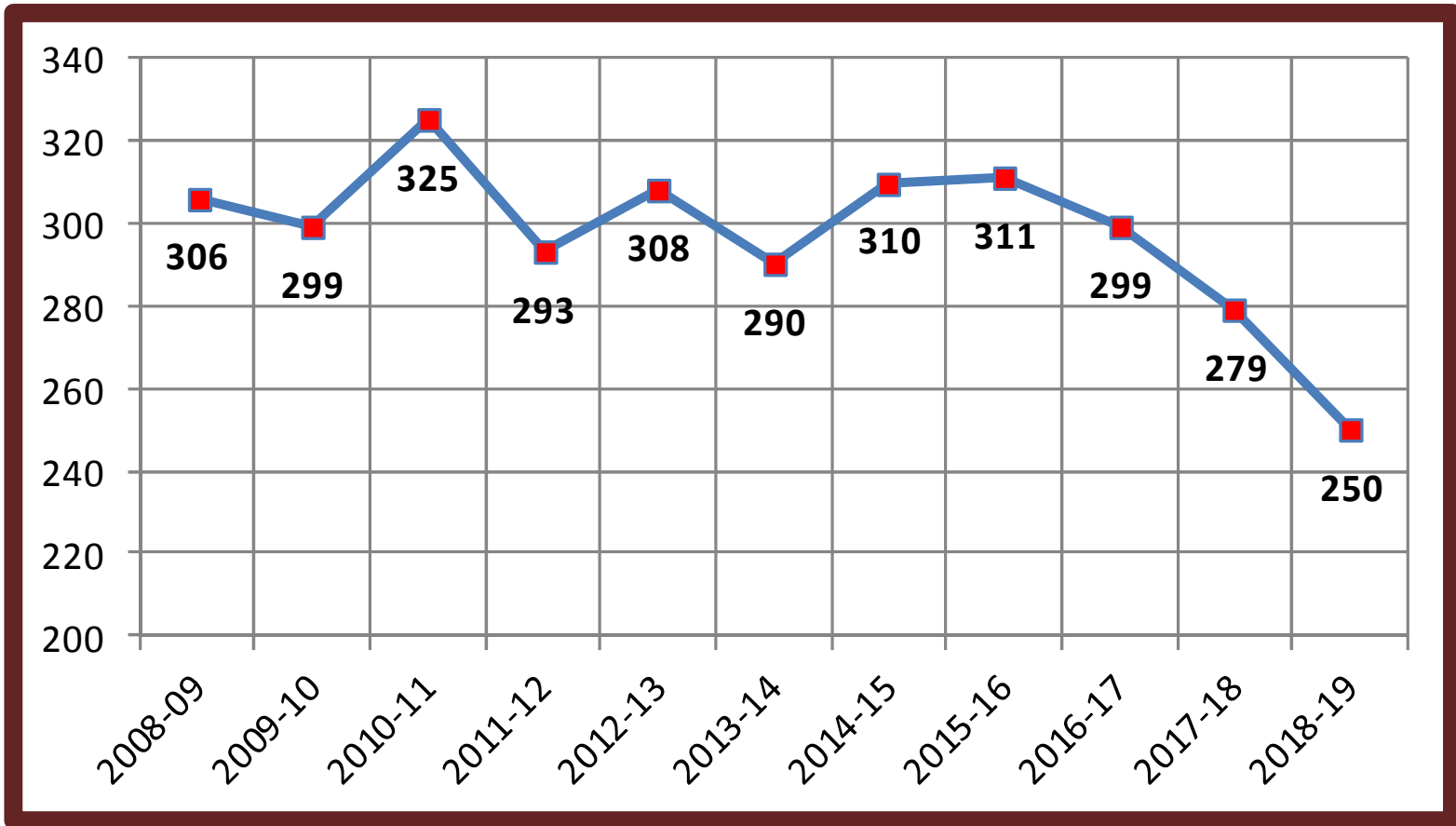
**Chart 1: District Enrollment History and Projection**



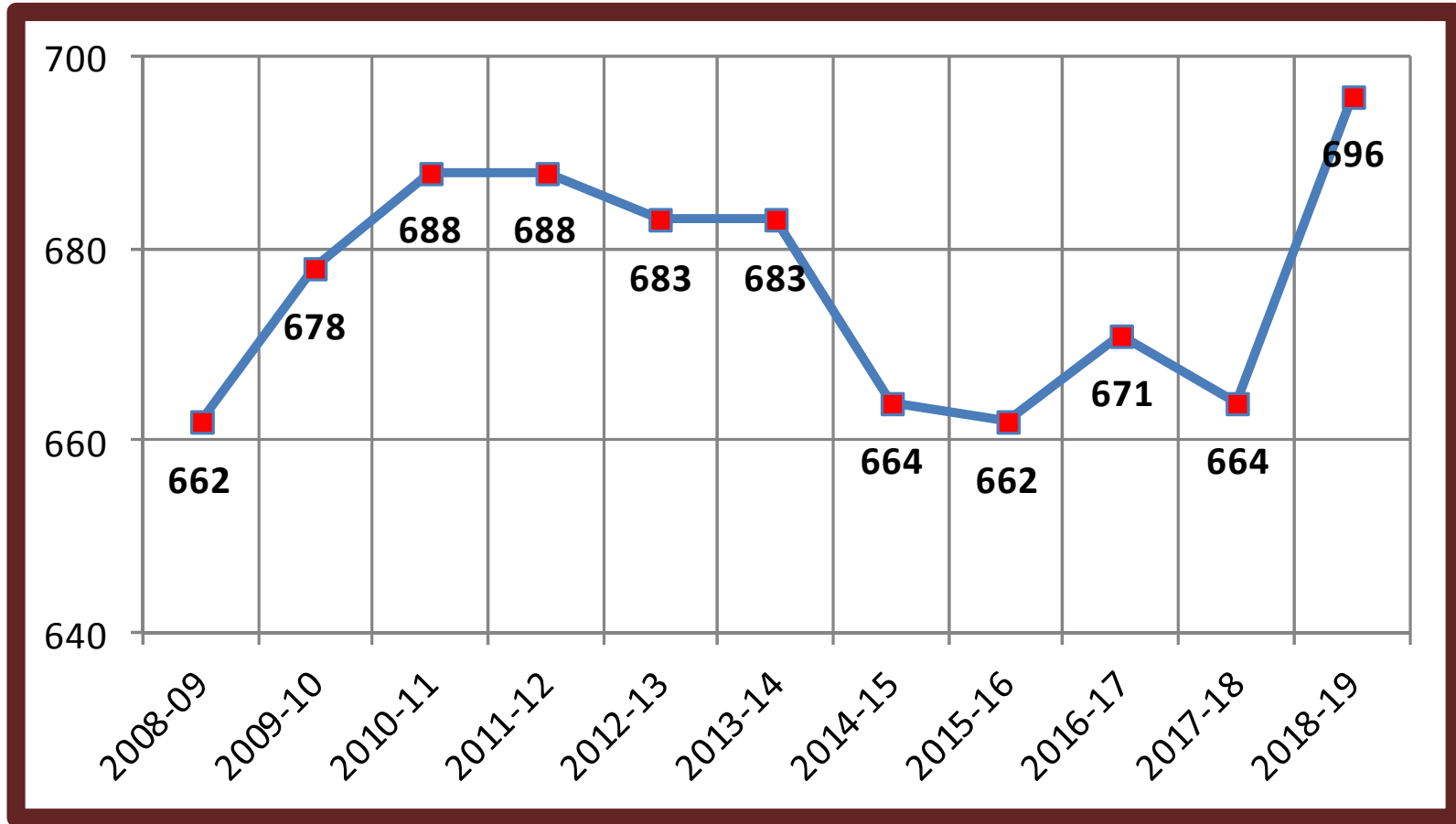
**Chart 2: Elementary School History and Projection**



**Chart 3: Middle School History and Projection**



**Chart 4: High School History and Projection**



# Utilization Analysis

The following tables show the utilization of classroom space in each building. Prior to visiting each school the floor plans were reviewed. Each school was visited and the floor plans were reviewed with each principal.

**Table 4: Elementary School Utilization Table**

Table 4 shows the general education utilization for each grade level over the course of the projection. The table, based upon a maximum class size of 25 shows the average class size per grade level and the total number of sections being used. Table 5 below shows the total utilization of the rooms in the building.

Wildwood	2014-15	Rooms	Actual	Average Class Size	Wildwood	2015-16	Rooms	Actual	Average Class Size	Wildwood	2016-17	Rooms	Actual	Average Class Size
KG	63	2.52	4	16	KG	55	2.20	4	14	KG	55	2.20	2	14
1	73	2.92	4	18	1	82	3.28	4	21	1	72	2.88	4	18
2	63	2.52	4	16	2	78	3.12	4	20	2	88	3.52	4	22
3	72	2.88	4	18	3	64	2.56	3	21	3	79	3.16	4	20
4	78	3.12	4	20	4	76	3.04	4	19	4	67	2.68	3	22
5	99	3.96	5	20	5	83	3.32	4	21	5	81	3.24	4	20
Total	448		25	18	Total	438		23	19	Total	442		21	19
Wildwood	2017-18	Rooms	Actual	Average Class Size	Wildwood	2018-19	Rooms	Actual	Average Class Size					
KG	57	2.28	4	14	KG	57	2.28	4	14					
1	72	2.88	4	18	1	74	2.96	4	19					
2	77	3.08	4	19	2	77	3.08	4	19					
3	89	3.56	4	22	3	78	3.12	4	20					
4	83	3.32	4	21	4	93	3.72	5	19					
5	71	2.84	4	18	5	88	3.52	4	22					
Total	449		24	19	Total	467		25	19					

**Table 4: Elementary School Space Utilization**

Rooms		Full Sized Room Utilization								
Full sized	Small	Gen	Comp	Art	Music	Res Rm	Tech	Lake	Total	Open
31	9	Ed						Drive		
2014-15		25	1	1	1	1.5	0.5	1	31	0
2015-16		23	1	1	1	1.5	0.5	1	29	2
2016-17		23	1	1	1	1.5	0.5	1	29	2
2017-18		24	1	1	1	1.5	0.5	1	30	1
2018-19		25	1	1	1	1.5	0.5	1	31	0

There are 31 full sized classrooms in Wildwood. Of these 25 are being used (2014) for general education classes. The next group of columns indicate how many full sized rooms are being used to accommodate other instructional programs. There are also 9 small classrooms used for resource rooms, physical therapy, and basic skills. Based upon current utilization there are no open full sized rooms in Wildwood. The other rows show the utilization through the projection period.

Some space may be opened if one of the resource rooms can be located into one of the smaller classrooms. The District has excellent class sizes on the elementary school level. Based upon these class sizes, and depending upon how large the District will allow the class sizes to grow will determine how many, if any, additional tuition students it may accept.

**Table 5: Middle School Utilization**

2014	6	7	8	Total	2017	6	7	8	Total
Max Class Size	25	25	25		Max Class Size	25	25	25	
Students	101	102	107	310	Students	82	89	108	279
Core	4.04	4.08	4.28	12.4	Core	3.28	3.56	4.32	11.16
Actual	4	4	5	13	Actual	4	4	5	13
Av Class Size	25	26	21	24	Av Class Size	21	22	22	21
Total Rms				16	Total Rms				16
Diff				3	Diff				3
2015	6	7	8	Total	2018	6	7	8	Total
Max Class Size	25	25	25		Max Class Size	25	25	25	
Students	100	107	104	311	Students	72	87	91	250
Core	4	4.28	4.16	12.44	Core	2.88	3.48	3.64	10
Actual	4	5	5	14	Actual	3	4	4	11
Av Class Size	25	21	21	22	Av Class Size	24	22	23	23
Total Rms				16	Total Rms				16
Diff				2	Diff				5
2016	6	7	8	Total					
Max Class Size	25	25	25						
Students	84	106	109	299					
Core	3.36	4.24	4.36	11.96					
Actual	4	5	5	14					
Av Class Size	21	21	22	21					
Total Rms				16					
Diff				2					



Table 5 shows the utilization at the middle school. The utilization is based upon 25 students per class in each of the five core courses. The table the projected number of students per grade, the actual number of classrooms used by core courses by grade and the average class size. The school has 16 total general education classrooms and for the current year 13 are needed thus leaving 3 open. However, those three classrooms are being used by the Lake Drive Program, leaving no additional full sized classrooms.

There are 6 smaller rooms being used for resource room, basic skills, and other programs (these rooms cannot accommodate full sized general education classes).

**Table 6: High School Utilization**

2014	9	10	11	12	Total		2017	9	10	11	12	Total	
Max Class Size	25	25	25	25			Max Class Size	25	25	25	25		
Students	143	184	160	177	664		Students	175	170	173	146	664	
Core	5.72	7.36	6.4	7.08	26.56		Core	7	6.8	6.92	5.84	26.56	
Actual	6	8	7	8	29		Actual	7	7	7	6	27	
Av Class Size	24	23	23	22	23		Av Class Size	25	24	25	24	25	
Total Rms					31	(w/TCU)	Total Rms					31	(w/TCU)
Diff					2		Diff					4	
2015	9	10	11	12	Total		2018	9	10	11	12	Total	
Max Class Size	25	25	25	25			Max Class Size	25	25	25	25		
Students	172	146	182	162	662		Students	174	179	168	175	696	
Core	6.88	5.84	7.28	6.48	26.48		Core	6.96	7.16	6.72	7	27.84	
Actual	7	6	8	7	28		Actual	7	8	7	7	29	
Av Class Size	25	24	23	23	24		Av Class Size	25	22	24	25	24	
Total Rms					31	(w/TCU)	Total Rms					31	(w/TCU)
Diff					3		Diff					2	
2016	9	10	11	12	Total								
Max Class Size	25	25	25	25									
Students	167	175	145	184	671								
Core	6.68	7	5.8	7.36	26.84								
Actual	7	7	6	8	28								
Av Class Size	24	25	24	23	24								
Total Rms					31	(w/TCU)							
Diff					3								

The high school utilization was calculated by using a class limit of 25 students in each of the five core courses by grade. With a total of 31 total rooms the projected number of rooms is shown as the difference. As of this writing there were three rooms assigned to Lake Drive, but at least one is not assigned to a full sized general education room.

The issues at the high school are that four of the rooms in the room count are TCU's (portables). In addition there are four classrooms being used in the back of the auditorium. Each of these resemble small lecture halls. The lighting is relatively poor and the layout makes for interaction between students very difficult. The situation, at this point, is not optimal but is adequate. The only problem is that with the Lake Drive Program there are no additional classrooms available. However, the projections do not show that there will be any major fluctuations in class size during the next five years.

### **Conclusion**

The enrollment projection for the District shows that the District has had a stable enrollment during the past six years. This stability, District-wide should remain through the 2018-19 school year. With a minimum of new housing and little land upon which to expand these projections should prove to be reliable.

Table 7 which follows was received from the Boonton Township Schools. Please note that this projection was done two years ago and only projects out to the 2016-17 school year. However the trend in the enrollment at the high school level appears to be declining. The impact of this decline could have the effect of opening up spaced at the high school to accommodate more tuition students.

**Table 7: Boonton Township High School Projection**

Year	9	10	11	12	Total
2012-13	63	55	68	70	256
2013-14	58	64	55	69	246
2014-15	65	59	64	55	244
2015-16	62	66	59	65	252
2016-17	48	63	66	60	237