Monroe Townhip Schools

ROSS HABER AND ASSOCIATES

Monroe Township Board of Education

Enrollment Projection Report Update

February, 2016

Introduction

The purpose of this report is to provide the Monroe Township Board of Education with an updated enrollment projection study. Monroe Township has experienced a great deal of growth both in its overall population and school enrollment during the past six years. During this period of time there has been a great deal of new housing construction in the community. Using the most recent data provided by the Township it appears that, based upon new housing approvals and ongoing construction that this is going to continue during the next few years. As of the most recent report from the Township there are currently 2,164 non-age restricted residential units either under construction or with approval for construction which will have an impact on the schools.[1] It is projected that when all of these residential units are completed they could generate as many as 1,342 students to the schools. This projection is based upon student yields using the Rutgers Study[2] as a baseline with an adjustment to those yield factors based upon past experience with actual student yields in Monroe Township.

Executive Summary

1. The total enrollment in the District increased from 5,649 students in 2010-11 to 6,450 in 2015-16. This is an increase of 801 students or approximately 12.5%.

2. The total enrollment in the District, without considering any new construction, is projected to increase from the current 6,450 to 6,625 in 2020-21. This is a projected increase of 175 students or approximately 2.7%. With the new construction included this

[1] Township Planning Department--January, 2016-see attachment. Note that 618 units (JSM Marketplace) are currently pending a court decision, but they are approved and it is assumed that they will be built.
[2] "Who Lives in New Jersey," Rutgers University Department of Urban Studies, 2006

projected number increases to 7,846, which would be an increase of 1,396 students or approximately 17.8%.

3. The K-5 enrollment increased from 2,576 in 2010-11 to 2,630 in 2015-16. This was an increase of 54 students or approximately 2%.

4. The K-5 enrollment is projected to decrease (without the new construction) from the current 2,630 to 2,390 in 2020-21. This is a decline of 240 students or approximately 5.4%. With the new construction the total number of K-5 students will increase to 3,002. This is a projected increase of 372 students or approximately 12.4%.[3]

5. The middle school enrollment increased from 1,295 students in 2010-11 to 1,603 students in 2015-16. This is an increase of 308 students or approximately 19.1%.

6. The middle school enrollment is projected to increase (without new construction) from the current 1,603 in 2015-16 to 1,626 in 2020-21. This is a marginal increase of 23 students or approximately 1.4%. With the new construction the enrollment will increase to 2,048. This is an increase of 445 students or approximately 21.8%.

7. The high school enrollment increased from 1,655 in 2010-11 to 2,094 in 2015-16. This is an increase of 439 students or approximately 20%.

8. The high school enrollment (without new construction) is projected to increase from the current 2,094 to 2,489 in 2020-21. This is a projected increase of 395 students or approximately 15.9%. With the new construction the enrollment is projected to increase to 2,781. This is an increase of 687 students or approximately 24.7%.

[3] Note that the overwhelming majority of these K-5 students will impact Oak Tree and Applegarth Schools. It appears that only JSM Celebrations will not impact these two schools, but will impact Brookside and Barclay Brook.

Methodology

This study used the cohort survival method for baseline projections with some modification. Typically and in past practice the cohort method used livebirths attributable to a community to project kindergarten enrollment. The theory being that children born in the community will become kindergarten students five years later. This has proven over time to be, in our experience and opinion, to not produce accurate kindergarten projections, in fact in reviewing past studies we have found that in the majority of cases it under projects kindergarten enrollment which then tends to under project all enrollment. The reason for this not working is most evident in a Town like Monroe where there is a very high median age (due to the large number of age-restricted residences) thus indicating a much lower birth rate and the cost of homes which generally do not attract new home owners until they have children. Therefore, the use of a moving average to project kindergarten does produce more reliable and accurate projections for kindergarten. The State Education Department does accept moving averages for projecting kindergarten as an alternative to birth rate.

The cohort survival method follows students as they move from grade to grade and calculates the percentage of growth and/or decline as they move through the system. This is tracked for six years and an average rate of growth is calculated to produce a five-year growth/decline ratio. The final year of actual enrollment is then multiplied by the average growth/decline ratio (also referred to as the migration ratio) to project the next five years of enrollment. However this projection does not include any growth based upon projected construction (that is housing that is either under construction or that has been approved by the Township).

In order to project the impact of new housing construction a student yield ratio has to be developed (the number of students which can be attributed to new housing and different housing types). Rutgers University has developed for different regions in New Jersey guidelines for projections based upon housing value and type (i.e.-single family, townhouse, condo, apt). However these are

guidelines and need to be adjusted to the specifics of a community. Once those are done a model is developed to calculate a student yield. Once that yield is known the total number of students are distributed over the grade levels. It is important to note that it is not really possible to know exactly how many students will be projected to any particular grade there for based upon the percentage of grades for each school structure (i.e.-k-5, 6-8, 9-12) an even distribution is made. These distributions are weighted to show greater yield in the lower and middle grades as opposed to the upper grades, the assumption being that homes are purchased, in large measure, by families with younger school aged children.

The ratios and projections for this study are based upon the following assumptions:

1. The data provided by the Township is accurate and up to date (as of January, 2016).
2. That the majority of single family homes being built in Monroe Township have four or more bedrooms.
3. That the majority of Townhouses have two or three bedrooms.
4. That the apartments and condominiums have a distribution of one and two bedroom apartments.
5. That the construction will be completed in the next five to seven years.

Table 1 on the next page consolidates all of these factors into a single sheet. The following defines the columns:

Column 1: Name of the Development

Column 2: Date of approval (if available)

Column 3: Status

Column 4: Number units by type and number to be built

Column 5: Yield factors per unit type

Column 6: Student yields and grade distribution.

Table 1: Housing Developments and Yield Factors

1	2	3	4				5			6			
Development*	**Date**	**Prelim or**	**Non Age Resticted**				**Yield Factors**			**Student Yields**			
	Approved	**Final App**	**SF**	**Cond/Apt**	**Townhse**	**To be Built**	**SF**	**Cond/Apt**	**Tnhse**	**Total**	**K-5**	**6-8**	**9-12**
							Students	**Students**	**Students**	**Students**			
SFDU:Single Family							0.63	0.29	0.46				
Ave K @ 12th St			5			5	3						
Ave K @ 12th St			1			1	1						
Ave K @ 12th St			1			1	1						
Colts Run (England Estates)	2011	Final App	53			34	21						
Elm Ridge	2005	Final App	7			5	3						
Emily Court Estates	2014	Final App	11			11	7						
Giancola	2004	Final App	4			4	3						
Heritage Chase Extension	2000	Final App	7			7	4						
Hidden Pond	2010	Final App	32			28	18						
Majestic Woods	2005	Final App	10			1	1						
Monarch Woods	2005	Final App	9			0							
Primrose Acres	2002	Final App	21			0							
Pushtel	2014	Prelim App	9			9	6						
Rocky Brook	2007	Final App	41			38	24						
RWD (Buckalew Ave)	2014	Final App	4			4	3						
John Statis (River Rd)	2008	Final App	5			2	1						
Sunrise Acres	2005	Final App	36			0							
Monroe Manor	1988	Final App	690			34	21						
Stratford	1994	Final App	768			396	249						
JSM (Marketplace)	Pending	(Pending**)	618			618	389						
JSM (Celebrations)	2015	Prelim App		376	80	456	109	210					
Shared Properties	2014	Prelim App		47	186	233	14	107					
Gateway (Verde)	2014				170	170			78				
K. Hovnanian (Orchards)	2010	Final App	132			30	19						
Monroe Chase (Courts)	2011	Final App	104		19	71	13	15					
Total Units/Students						2158	909	332	78	1322	608	423	291
Does not include Age Restricted										**Grade**	**101**	**141**	**73**
**Pending Court Decision													

Table 2 on the next page provides the five year enrollment projection. The table is the cohort projection with the total number of students projected from the new housing units added at the bottom. In previous reports we have also provided projections for each of the elementary schools. However, this is not possible this year due to the change of school attendance zones which were implemented in September, 2015. It might be possible to spot trends in the 2016-17 school year, but to do projections we need at least two years of enrollment history.

However, it should be noted that based upon the location of the new developments JSM Celebrations could add as many as 92 k-5 students to the Barclay Brook and Brookside area. The remaining developments could add as many as 520 k-5 students to the Oak Tree and Applegarth Schools.

Table 2: District-wide Enrollment Projection

Year	Births		K		1		2		3		4		5		6		7		8		9		10		11		12	K-5	6-8	9-12	Sub	UG	PK	Total
2010-11	253	1.21	306		433		501		450		428		458		436		448		411		448		434		400		373	2576	1295	1655	5526	122	1	5649
				1.25		1.02		1.01		1.06		1.02		1.04		1.02		1.01		1.15		1.01		1.00		0.98								
2011-12	310	1.13	351		382		443		508		476		435		475		446		452		472		452		434		393	2595	1373	1751	5719	88	24	5831
				1.25		1.08		1.05		1.04		1.02		1.02		1.01		1.02		1.15		1.01		1.00		1.03								
2012-13	293	1.15	338		440		411		465		527		487		445		481		454		518		475		454		449	2668	1380	1896	5944	83	17	6044
				1.22		1.03		1.04		1.07		1.01		1.00		1.00		1.01		1.11		0.98		0.96		0.96								
2013-14	269	1.12	302		411		454		429		498		532		488		444		488		504		508		456		438	2626	1420	1906	5952	95	2	6049
				1.35		1.07		1.08		1.05		1.04		1.05		1.03		1.02		1.13		1.02		1.02		1.06								
2014-15	268	1.15	307		407		438		490		451		518		556		501		451		553		512		517		483	2611	1508	2065	6184	109	0	6293
				1.32		1.13		1.12		1.05		1.06		1.04		1.03		0.99		1.12		1.01		1.00		1.00								
2015-16	294	0.96	283		406		458		490		514		479		537		570		496		503		561		511		519	2630	1603	2094	6327	108	15	6450
Av		1.15		1.28		1.06		1.06		1.05		1.03		1.03		1.02		1.01		1.13		1.01		1.00		1.01								
Year	Births		K		1		2		3		4		5		6		7		8		9		10		11		12	K-5	6-8	9-12	Sub	UG		Total
2016-17	234		297		362		432		486		516		530		493		546		575		561		506		559		516	2623	1614	2141	6378	108	15	6501
2017-18	234		296		380	``	385		459		512		532		545		501		551		651		564		504		564	2563	1597	2282	6442	108	15	6565
2018-19	232		292		378		404		408		483		527		547		554		506		623		654		562		508	2493	1607	2347	6447	108	15	6570
2019-20	231		295		373		402		429		430		498		543		556		559		572		627		651		567	2427	1658	2416	6502	108	15	6625
2020-21	229		294		377		397		427		452		443		512		552		562		632		575		624		657	2390	1625	2489	6504	108	15	6627
New Hsing			***102***		***102***		***102***		***102***		***102***		***102***		***141***		***141***		***141***		***73***		***73***		***73***		***73***	***612***	***423***	***292***	***1327***	***UNK***	***15***	***1342***
																											3002	***2048***	***2781***	***7831***		***15***	***7846***