Monroe Public Schools

Enrollment Projections

ROSS HABER AND ASSOCIATES

September 1, 2018

Monroe Township Schools **Enrollment Update**

Background

The intent of this report is to provide the Monroe Township Board of Education with an enrollment projection update. In order to provide context for this study it is important to understand the background. When a school district proposes a referendum there are a number of steps which must be taken. One of the most important parts of this process, especially when a school district is planning a building program, is to provide the State Education Department with a five-year enrollment projection. The Long Range Facility Plan filing is a document provided by the State to calculate enrollment projections. This format bases projections only on a six-year history of enrollment, further it also calculates kindergarten projections based upon live births which take place five years prior to children entering kindergarten. There are several fundamental problems with this method. First of all (and this is essential in Monroe Township) this does not take into account projected enrollment which includes new students entering into the schools from new residential housing. Secondly, this method ignores the basic economics and community characteristics of Monroe in that the majority of new home owners come into the District with children. In fact, the median in Monroe is in approximately 55 which results in a low birth rate in the Township. The other factor is that to this point Monroe has had half-day kindergarten which means that if enrollment is projected from kindergarten upward it is not going to provide an accurate projection.

In order to overcome these deficits the State will allow for the addition of students estimated coming from new housing developments. However, the State only allows projections for a five year period. Prior to the submission for the last referendum myself, along with a representative from the District, attended a meeting in Trenton regarding this issue. The first report that I wrote spread the projections over a period greater than five years. With that not being acceptable to the State we asked if it would be acceptable if we "front loaded" the report by siting developments that the Township states have approvals and that have a high probability of being completed within the five years of the projection That was deemed acceptable and the report was adjusted.

In the late spring of 2018 I was asked to update the report provided to the District in 2017. This report is an update, which uses 2017-18 enrollment figures and housing information, provided by the Township as of July 31, 2018. Table 2 on page 3 shows the housing developments to be built. The total number of new, non-age restricted units (includes both single and multi-family units) with Planning Board approval and remain to be built is 2,288. According to the Township these units should be completed and occupied within the next five years. In addition, there are 497 units pending that do not have approval and for which there is not timetable for approval. While the student yields from these units will not be in the projection they will be footnoted in the report.

Enrollment Summary

1. From the 2012-13 school year to the 2017-18 school year the total student enrollment grew from 6,061 (including pre-K and self-contained special education students) to 6,779. This was an increase of 718 students or approximately 10.6%.

2. Total enrollment in the District, without considering new housing units, is projected to grow to 7,032. That would be an increase from 2017-18 of 253

students, or approximately 4.6%. ***However, when configured with the yields from the new housing developments the enrollment is estimated to be 8,485. That is a projected increase of 1,706 students or approximately 20.1%***.

3. The -K-5 grew from 2,685 students in 2012-13 to 2,715 students in 2017-18. That was an increase of 30 students or approximately 1.1%. The enrollment is projected (without considering new housing) decrease slightly by 2022-23 to 2,670, a marginal decrease of 45 students or approximately 1.7%. ***However, when configured with new housing the K-5 enrollment is projected to grow to 3,583 by 2022-23. This is an increase of 868 students or approximately 26.2%.***

4. The middle school enrollment grew from 1,380 students in 2012-13 to 1,643 in 263 in 2017-18. This is an increase of 263 students or approximately 16%. The enrollment in the middle school is projected to grow to 1,710 in 2022-23. That is an increase of 67 students or approximately 3.9%. ***However, when configured with the new housing the enrollment is projected to grow to 2,047. That would be an increase of 404 students or approximately 19.75%.***

5. The enrollment at the high school grew from 1,896 students in 2012-13 to 2,291 in 2017-18. This was an increase of 395 students or approximately 17.25%. The high school is projected to grow to 2,548 in 2022-23. That is an increase of 257 students or approximately 10.1%. ***However, when configured with new housing the enrollment is projected to grow to 2,747. This is an increase of 456 students or approximately 16.6%.***

Table 1: Growth by Schools

School	2012-13	2017-18	Change	%Change	2022-23	Change	% Change	2022-23	Change	% Change
								With Housing		
High School	1896	2291	395	20.83%	2544	253	11.04%	2747	203	7.98%
Middle School	1380	1643	263	19.06%	1710	67	4.08%	2047	337	19.71%
BB/BR	922	738	-184	-19.96%	640	-98	-13.28%	1090	450	70.31%
ML/WD	919	974	55	5.98%	875	-99	-10.16%	901	26	2.97%
OT/AP	860	1100	240	27.91%	1150	50	4.55%	1592	442	38.43%
Total	5977	6746	769	12.87%	6919	173	2.56%	8377	1458	21.07%

Table 1 shows the growth by school both with and without the new housing developments. The first column is the 2012-13 enrollment. The second column is the enrollment as of October, 2017. The fifth column is the projected growth without the new housing and the last three columns show the growth with the new housing considered. This table does not include the pre-K or self-contained special needs students. The total enrollment projection for the District, with housing and with pre-K and special needs students is 8,485 students. This does not include housing that is pending, but not yet approved by the board. ***Those housing units could add an additional 288 students to the District.***

Table 2: New Approved Residential Housing Units[1]

Approved Non-Age Restricted Units (as of July 31, 2018)										
Development	Type	School	Location	Approved Units	Total 2016-18	To be Built	Total Students	K-5	6-8	9-12
Monroe Chase (Sarlo)	SF	OT/AP	Applegarth/Halsey Reed	130	44	0				
Courts of Monroe	SF									
Stratford @ Monroe	SF	OT/AP	Halsey Reed/Cranbury	768	73	254	199	139	40	0
Stratford Meadows	SF	OT/AP			18	24	20	14	4	21
Majestic Woods	SF	BR/BB		13	3	2	3	2	1	2
Elm Ridge	SF	BR/BB		8	5	3	3	2	1	0
Emily Court	SF	BR/BB		11	6	5	4	3	1	0
Heritage Chase	SF	BR/BB		7		0	0	0	0	0
Pushtel	SF	ML/WD		9	0	9	7	5	1	0
Rocky Brook Estates	SF	OT/AP	Disbrow Hill/Etra	41	38	3	2	2	0	1
RWD	SF	BR/BB		4		4	3	2	1	0
John Stasi/River Road	SF	BR/BB		5	3	2	2	1	0	0
Colts Run	SF	OT/AP	England Mount/Old Church	53	34	19	16	11	3	0
Monroe Manor (COAH)	MF	OT/AP	Butcher/Disbrow	85	48	37	22	15	4	2
Hidden Pond	SF	OT/AP	England Road	32	24	8	7	5	1	2
The Orchards (Sarlo)	MF	OT/AP	Prospect Plains/Cranbury	132	28	48	29	20	6	1
JSM	MF	BR/BB		749		749	434	304	87	3
Shared Properties (COAH)	MF	OT/AP	Rte 33 Westbound	233		233	135	95	27	44
The Gateway Verde	MF	OT/AP	Rte 33/Applegarth/Bentley	170	48	128	75	53	15	15
Monroe 33 Developers	MF	OT/AP	Route 33 South/Butcher	150		150	88	62	18	9
JSM Celebrations	MF	BR/BB	Mounts Mills/Spotswood	522		522	303	212	61	9
Private Homes Single D.U.	MF		All Over	136	48	88	54	38	11	31
Total Approved				3258		**2288**	**1406**	**984**	**281**	**141**

Table 2 shows the approved residential housing units as of July 31, 2018 as provided by the Monroe Township Planning Board. This table shows the name of the development, the number of units still to be built, the attendance zones in which the school will be built and the projected number of students from each development broken down by grade level. The students are distributed

[1] This data was provided by the Monroe Township Planning Board and is available upon request from the Township. There are three developments which are pending and not included: JSM Mounts Mills 100 units; JSM Route 33 North 171 units; Shared Properties (near East Windsor) 226 units. This is a total of 497 multi-family units.

as follows: K-5=70%; Grades 6-8=20%; and grades 9-12 = 10%. These yields are then combined with the cohort projection (projections based only on enrollment history) in order to yield an estimate of growth based upon history and approved construction.

Table 3: District-Wide Enrollment Projection without New Housing Developments

Five-Year Projection KG Average No Housing																																
Year	**K**		**1**		**2**		**3**		**4**		**5**		**6**		**7**		**8**		**9**		**10**		**11**		**12**	**K-5**	**6-8**	**9-12**	**Total K-8**	**PK**	**UG**	**Total**
2012-13	346		440		410		466		530		493		445		481		454		518		475		454		449	2685	1380	1896	5961	83	17	6061
		1.188		1.032		1.046		1.069		1.004		0.990		0.998		1.015		1.110		0.981		0.960		0.965								
2013-14	302		411		454		429		498		532		488		444		488		504		508		456		438	2626	1420	1906	5952	95	2	6049
		1.348		1.066		1.079		1.051		1.040		1.045		1.027		1.016		1.133		1.016		1.018		1.059								
2014-15	307		407		438		490		451		518		556		501		451		553		512		517		483	2611	1508	2065	6184	109	0	6293
		1.401		1.160		1.180		1.071		1.106		1.058		1.045		1.020		1.124		1.009		0.980		1.002								
2015-16	317		430		472		517		525		499		548		581		511		507		558		502		518	2760	1640	2085	6485	55		6540
		1.325		1.088		1.070		1.031		1.055		1.028		0.998		1.034		1.114		1.018		1.023		1.028								
2016-17	336		420		468		505		533		554		513		547		601		569		516		571		516	2816	1661	2172	6649	60		6709
		1.295		1.048		1.058		1.026		1.034		1.042		1.000		1.011		1.078		0.989		0.986		1.000								
2017-18	276		435		440		495		518		551		577		513		553		648		563		509		571	2715	1643	2291	6649	120	10	6779
Av		*1.311*		*1.079*		*1.087*		*1.050*		*1.048*		*1.032*		*1.014*		*1.019*		*1.112*		*1.003*		*0.994*		*1.011*						*1.12*		
Year	K		1		2		3		4		5		6		7		8		9		10		11		12	K-5	6-8	9-12	Sub	PK		Total
2018-19	322		362		469		478		520		543		569		585		523		615		650		559		514	2693	1677	2338	6708	68		6776
2019-20	317		422	``	390		510		502		544		560		577		596		581		616		645		565	2685	1733	2409	6827	77		6904
2020-21	320		415		455		424		535		526		562		568		588		663		583		612		652	2675	1718	2510	6903	86		6989
2021-22	322		419		448		494		445		561		543		570		579		653		664		579		619	2690	1692	2516	6897	96		6993
2022-23	323		422		452		487		519		467		579		550		581		644		655		660		585	2670	1710	2544	6924	108		7032

Table 3 shows the District-wide enrollment history and projection without the new housing developments. The Kindergarten enrollment for 2017-18 was not considered in the projection in that it appears to be an anomaly. It is far lower than previous kindergarten enrollments.

Table 4: District-wide Enrollment Projection with New and Approved New Residential Housing Considered[2]

Five-Year Projection KG Average Housing																																	
Year	**K**		**1**		**2**		**3**		**4**		**5**		**6**		**7**		**8**		**9**		**10**		**11**		**12**	**K-5**	**6-8**	**9-12**	**Total**	**PK**	**UG**	**Total**
																													K-8			
2012-13	346		440		410		466		530		493		445		481		454		518		475		454		449	2685	1380	1896	5961	83	17	6061
		1.188		1.032		1.046		1.069		1.004		0.990		0.998		1.015		1.110		0.981		0.960		0.965								
2013-14	302		411		454		429		498		532		488		444		488		504		508		456		438	2626	1420	1906	5952	95	2	6049
		1.348		1.066		1.079		1.051		1.040		1.045		1.027		1.016		1.133		1.016		1.018		1.059								
2014-15	307		407		438		490		451		518		556		501		451		553		512		517		483	2611	1508	2065	6184	109	0	6293
		1.401		1.160		1.180		1.071		1.106		1.058		1.045		1.020		1.124		1.009		0.980		1.002								
2015-16	317		430		472		517		525		499		548		581		511		507		558		502		518	2760	1640	2085	6485	55		6540
		1.325		1.088		1.070		1.031		1.055		1.028		0.998		1.034		1.114		1.018		1.023		1.028								
2016-17	336		420		468		505		533		554		513		547		601		569		516		571		516	2816	1661	2172	6649	60		6709
		1.295		1.048		1.058		1.026		1.034		1.042		1.000		1.011		1.078		0.989		0.986		1.000								
2017-18	276		435		440		495		518		551		577		513		553		648		563		509		571	2715	1643	2291	6649	120	10	6779
Av		*1.311*		*1.079*		*1.087*		*1.050*		*1.048*		*1.032*		*1.014*		*1.019*		*1.112*		*1.003*		*0.994*		*1.011*						*1.12*		
Year	K		1		2		3		4		5		6		7		8		9		10		11		12	K-5	6-8	9-12	Sub	PK		Total
2018-19	357		387		494		503		545		558		579		595		533		619		654		563		518	2843	1707	2354	6904	68		6972
2019-20	344		503		442		562		553		596		588		599		618		599		627		656		576	2999	1805	2460	7264	77		7341
2020-21	357		486		577		516		625		615		630		611		625		697		601		623		664	3175	1866	2585	7626	86		7712
2021-22	377		513		559		662		576		690		655		658		643		705		709		607		640	3377	1956	2661	7994	96		8090
2022-23	404		539		599		652		740		649		712		663		671		716		709		707		616	3583	2047	2747	8377	108		8485

Table 4 shows the enrollment projections which include the estimated students from the new housing developments. This does not include students from the 497 pending units. These units could potentially produce an additional 288 students which would bring the total projection to 8,773.

[2] This table calculates the number of students from new housing developments along with the normal increase/decrease of enrollment based upon enrollment history. This calculation is not made by simply adding the estimates from new housing to the cohort table. There is also no way to know when all of these developments will be completed, however, the Township has assured us that to the best of their knowledge this will happen within the next five years.

Chart 1: Comparison of Projections with without New Housing Units

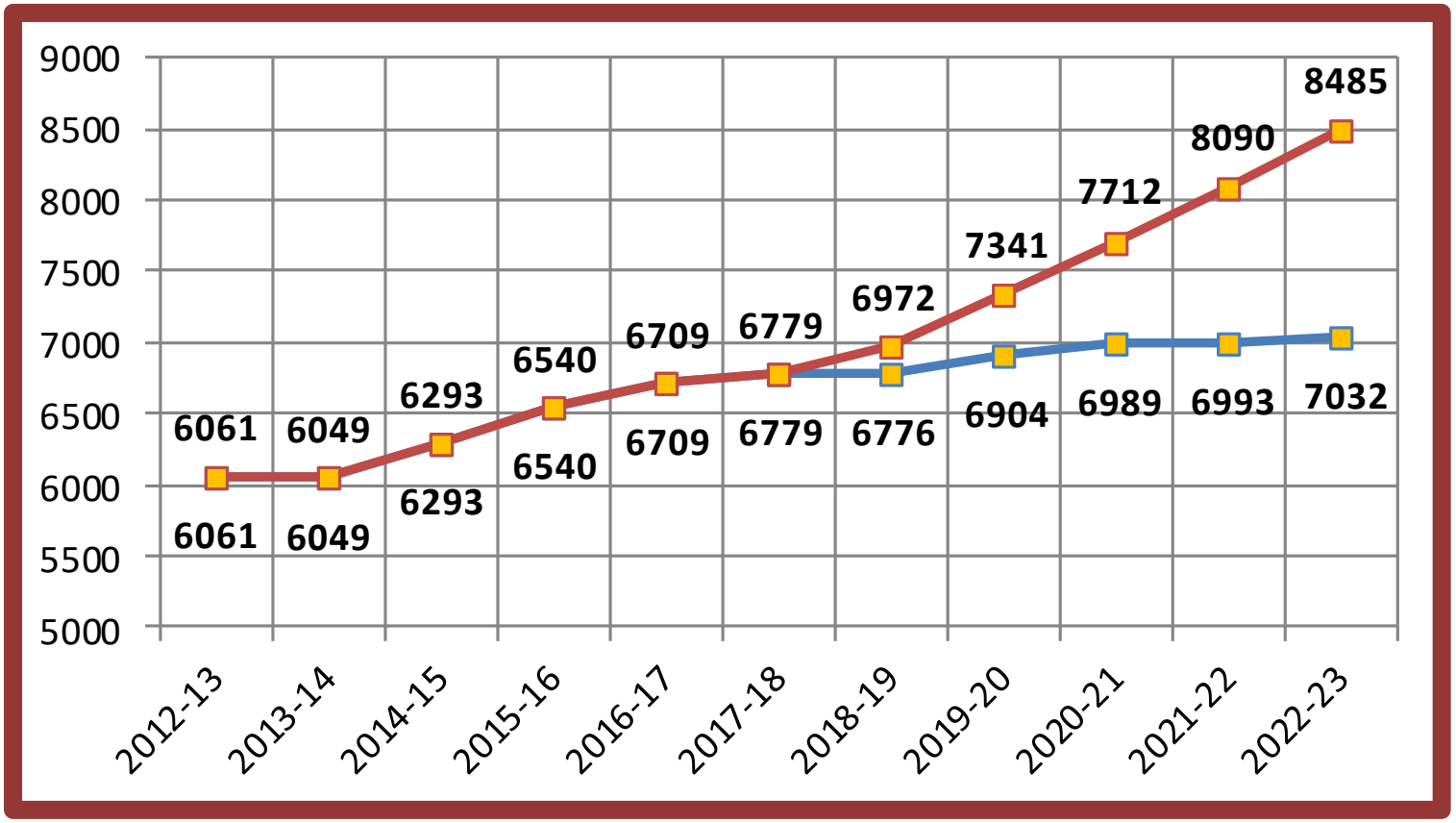


Chart 1 shows the growth with and without the new housing units. The red line represents the growth with the new housing units. The blue line is growth based solely upon enrollment history.

Table 5: Barclay Brook-Brookside Projection

Barclay Brook and Brookside												
	K	1	2	3	4	5	Total	UG	Total BB	UG	Tot Brk	TOT
2012-13	110	153	128	159	179	193	922		391		531	922
2013-14	95	129	156	135	165	179	859		380		479	859
2014-15	102	129	141	158	137	163	830	36	372	10	458	876
2015-15	81	123	119	124	152	129	728		323	29	405	757
2016-17	87	109	133	124	132	168	753	24	329		424	777
2017-18	67	108	117	136	129	133	690	26	292	22	398	738
	K	1	2	3	4	5	Total	UG	Total BB	UG	Tot Brk	TOT
2018-19	95	85	111	119	136	132	677	36	290	10	387	723
2019-20	88	118	86	114	121	140	667	36	292	10	375	718
2020-21	87	111	123	88	114	122	645	36	321	10	324	691
2021-22	89	111	115	126	87	116	644	36	315	10	329	681
2022-23	88	108	114	117	125	88	640	36	310	10	330	678

Table 5 shows the combined enrollment history and projection for the Barclay Brook/Brookside Schools. It is projected that approximately 1,287 new housing units are approved for construction in the Barclay Brook/Brookside attendance areas. Combined with the cohort survival projection (projection based solely on enrollment history) it is estimated that an additional 450 students may be added to the projected enrollment of 678 (including pre-school and self-contained special education) bringing the enrollment up to 1,128 students which is 206 students higher than attended those schools in 2012-13.

Table 6: Mill Lake-Woodland Projection

Mill Lake and Woodland												
	K	1	2	3	4	5	Total	PK	Tot ML	SE	Tot Wd	TOT
							K-5					
2012-13	125	132	140	155	185	182	919		552		367	919
2013-14	92	147	132	145	167	186	869		516		353	869
2014-15	115	141	177	185	194	216	1028	37	618	5	410	1070
2015-16	94	133	159	209	191	201	987		595	8	392	995
2016-17	119	130	143	171	217	198	978	14	563		415	992
2017-18	88	151	135	157	174	228	933	1	531	40	402	974
Av												
	K	1	2	3	4	5	Total	PK	Tot ML	SE	Tot Wd	TOT
2018-19	109	113	157	156	167	182	884	37	535	5	349	926
2019-20	107	139	115	177	160	173	871	37	538	5	333	913
2020-21	111	138	144	131	187	170	881	37	524	5	357	923
2021-22	110	139	143	164	137	196	889	37	556	5	333	931
2022-23	111	138	147	163	173	143	875	37	559	5	316	917

Table 6 shows the enrollment projection for Mill-Lake/Woodland Schools. There is not much new development within the current attendance zones of these schools. The total yield from any new developments in this zone is small. The total enrollment for these two schools is projected to 917 (875 without pre-K or self-contained special education). The actual overall enrollment in these two schools is projected to be back where it was in 2012-13.

Table 7: Oak Tree-Applegarth Projection

Oak Tree & Applegarth												
	K	1	2	3	4	5	Total	PK	Total OT	Total AP	UG	Total
2012-13	111	155	142	152	166	118	844	16	560	284		860
2013-14	128	150	189	164	178	175	984	4	631	353		988
2014-15	126	176	172	199	173	187	1033	9	673	360		1042
2015-15	107	150	183	157	171	187	955	8	597	358		963
2016-17	118	170	177	204	179	184	1032	6	669	363	0	1038
2017-18	121	176	188	202	215	190	1092		687	405	8	1100
	K	1	2	3	4	5	Total	PK	Total OT	Total		Total
							K-5					
2018-19	116	165	201	203	217	229	1131	6	685	446	8	1145
2019-20	121	164	191	219	221	232	1148	6	695	453	8	1162
2020-21	121	168	188	207	234	234	1152	6	684	468	8	1166
2021-22	123	170	191	204	223	249	1160	6	688	472	8	1174
2022-23	124	168	192	208	220	238	1150	6	692	458	8	1164

Oak Tree and Applegarth is projected to grow from the current 1,100 students to 1,164 in 2022-23. These schools have grown considerably since 2012-13 primarily due to a great deal of new construction in that area. This is projected to continue and when housing is considered the Oak Tree-Applegarth Schools are projected to grow to 1,592 by the 2022-23 school year.

Table 10a: Middle School Projection w/o Housing

6	7	8	Total
445	481	454	1380
488	444	488	1420
556	501	451	1508
548	581	511	1640
513	547	601	1661
577	513	553	1643
6	7	8	Total
569	585	523	1677
560	577	596	1733
562	568	588	1718
543	570	579	1692
579	550	581	1710

Table 10b: Middle School Projection w/housing

6	7	8	Total
445	481	454	1380
488	444	488	1420
556	501	451	1508
548	581	511	1640
513	547	601	1661
577	513	553	1643
6	7	8	Total
579	595	533	1707
588	599	618	1805
630	611	625	1866
655	658	643	1956
712	663	671	2047

Table 10a and 10b show the projections for the middle school with and without new housing.

Table 11a: High Schools w/o Housing

9	10	11	12	Total
518	475	454	449	1896
504	508	456	438	1906
553	512	517	483	2065
507	558	502	518	2085
569	516	571	516	2172
648	563	509	571	2291
9	10	11	12	
615	650	559	514	2338
581	616	645	565	2409
663	583	612	652	2510
653	664	579	619	2516
644	655	660	585	2544

Table11b: High School w/housing

9	10	11	12	Total
518	475	454	449	1896
504	508	456	438	1906
553	512	517	483	2065
507	558	502	518	2085
569	516	571	516	2172
648	563	509	571	2291
9	10	11	12	
619	654	563	518	2354
599	627	656	576	2460
697	601	623	664	2585
705	709	607	640	2661
716	709	707	616	2747

Tables 11a and 11b show the projections for the high school with and without the new housing developments.

Conclusion

Based upon the data provided by the Township it would appear that there is going to be a continued increase in new residential housing. As a result the schools need to be certain that there is adequate space available to accommodate these new students. The District grew between 2012-13 to 2017-18 by almost 11%. It is projected to grow by approximately 20% during the next five years. The high school and middle school, which are already at or above capacity, will continue to grow substantially. The elementary schools, specifically Barclay Brook-Brookside and Oak Tree-Applegarth will see significant student growth.