

THE BOE INSISTS THAT WE MUST EXPAND MILL HILL SCHOOL TO WHAT THEY CALL A "504" – THEY MAY BE WRONG FOR FOUR REASONS

1. THE BOE SEEMS TO BE SIGNIFICANTLY OVERSTATING FUTURE ENROLLMENTS.
2. THE BOE SEEMS TO BE SIGNIFICANTLY UNDERSTATING CURRENT K-5 SCHOOL CAPACITY.
3. THERE IS NO COMPELLING NEED FOR THE BOE TO CLOSE THE EARLY CHILDHOOD CENTER ("ECC") AT WARDE AND MOVE ITS 137 KIDS INTO OUR ELEMENTARY SCHOOLS.
4. THE ADDITIONAL \$1 MILLION THE BOE WANTS TO SPEND ON MILL HILL COULD COST US \$6-\$7 MILLION IF WE LOSE OUR STATE REIMBURSEMENT BECAUSE OF IT.

Anyone who is aware that our BOE recently requested a 5% increase in its budget for next year, despite declining enrollment and the State's precarious fiscal problems, will not be surprised to hear that its members are now advocating aggressively for a bigger expansion of Mill Hill School than the Board of Selectmen recently approved. We believe the BOE may be wrong for four reasons.

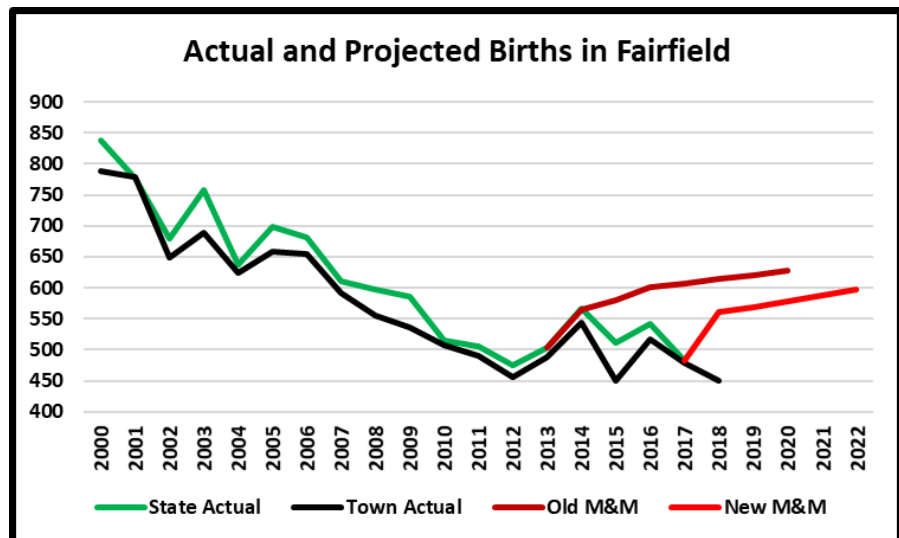
1. BOE ENROLLMENT PROJECTIONS ARE TOO HIGH BECAUSE BIRTHS ARE NOT RECOVERING

The K-5 enrollment projections the BOE is using are too high because births continue to decline rather than recovering as Milone & MacBroom ("M&M") assumed they would when it made the projections of future K-5 enrollments upon which the BOE is relying.

M&M makes its projections of future K-5 enrollment by estimating two variables: the number of births and the number of additional school-age kids who will move into Fairfield after they are born. After they estimate births, they guess how many more students will show up in Kindergarten than were born five years earlier, which they call the "Birth-to-K" ("BTK") ratio. Finally, they guess how many more students will show up in grades 1-5 than there were in Kindergarten over the previous five years, which they call the "Persistency" ratio (a.k.a., in-migration).

Annual births in Fairfield have been declining steadily. They averaged **687** in the **2000-2009** period and continued declining to an average of **498** in the **2010-2012** period. In its first projections for Fairfield in **2012**, M&M projected that births would recover to **628** by **2020**. When it updated and extended its projections four years later, M&M projected that births would

recover only to **578** by **2020**, with **560** in 2018 versus their earlier estimate of **614**. The actual birth number for 2018 will come in around **450**, which is **164** or **27%** below M&M's original estimate, and **110** or **20%** below its most recent estimate. (Differences in some years between State and Town numbers is out-of-state births to Fairfield residents.)



If births remain flat at **450** per year, even if we assume that M&M's guesses about BTK ratios over the next nine years are correct (an average of **1.239**),¹ then Kindergarten enrollment in **FY28** (the last year of M&M's latest projections) will be **549** instead of **729**. That's **25%** or **180 fewer kids**. And

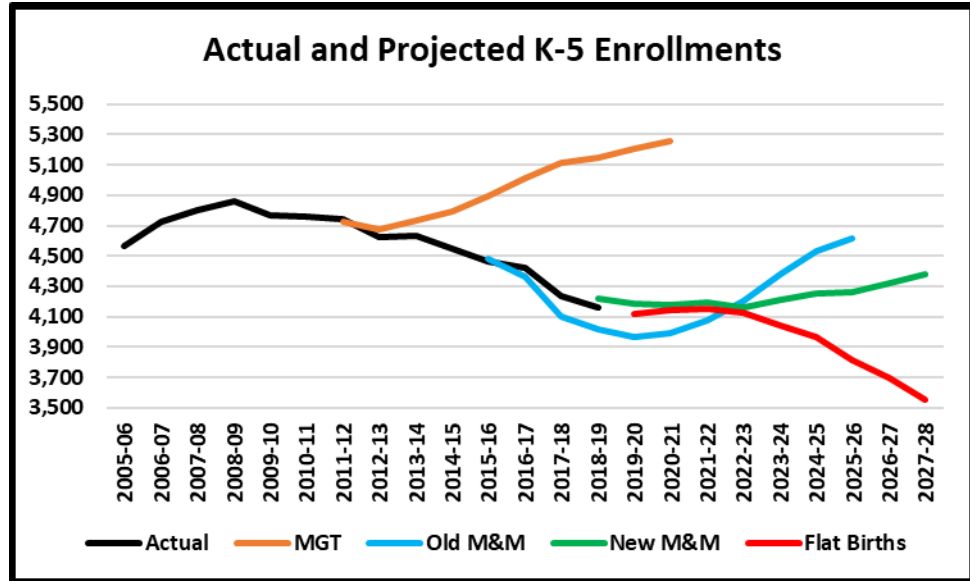
even if we then assume that M&M's guesses about Persistency ratios over the next nine years are correct (an average of 1.068),² total K-5 enrollment in FY28 will be **3,556** instead of **4,378**. That's **822 fewer kids**. Total K-5 enrollment of **3,556** in FY28 would also be **600 fewer kids** than we had this year (**4,156**), FY19.

With eleven elementary schools, the average number of students per school in FY19 was **378**, which means that M&M's potential error due to overly optimistic birth assumptions of **822** students is equivalent to 2.2 current average schools. Although Supt. Jones often describes M&M's projections as "**incredibly accurate**," their longer-term projections have in fact been way off, as is apparent in the graph, which also shows the projections of the consulting firm (MGT) that M&M replaced.

Note that the only adjustment we have made to M&M's projections is to assume that births will stay flat rather than decline or increase significantly. We could also challenge M&M's projected BTK and Persistency ratios on the grounds that they are both significantly higher than they have been in the recent past. For example, at **1.239**, M&M's assumed average BTK ratio for the next nine years is significantly higher than the actual average BTK ratio of **1.104** in the 10-year FY06-FY15 period. Likewise, at **1.068**, M&M's assumed average Persistency ratio for the next nine years is significantly higher than the actual average Persistency ratio of **1.038** in the 10-year FY07-FY16 period. Thus, even the flat-births enrollment number of 3,556 for FY28 may be high. The BOE never really challenged the birth, BTK and Persistency assumptions underlying M&M's optimistic enrollment projections.

2. CAPACITY IS UNDERSTATED BECAUSE WE CAN PUT AT LEAST 24 KIDS (NOT 21) IN EACH CLASSROOM, AND BECAUSE WE DON'T NEED A 23% CAPACITY CUSHION

The BOE continues to understate capacity in our eleven K-5 schools by asserting that they can only put **21** students in each classroom, and then insisting that they need a 10%-15% cushion on that number for



¹ A BTK ratio of 1.239 simply means that M&M guesses that there will be 23.9% more students in Kindergarten each year than were born in Fairfield five years earlier.

² A Persistency ratio of 1.068 simply means that M&M guesses that there will be 6.8% more students in grades 1-5 than the total of number of kids that were in Kindergarten for the previous five years.

planning purposes. This means that they want to put only **18-19** students in classrooms that will hold **24** students, which provides a 23% cushion ($18.5/24 = 77\%$). By “cushion” we mean the percent of available seats that we deliberately plan to be vacant to provide flexibility.

The BOE’s class-size guidelines state that we can put **23** students in grades **K-2** classrooms and **25** in grades **3-5** classrooms (an average of **24**), and they go on to state that although “*a class not exceeding 25 shall be desirable,*” we can go up to **30** students before it is necessary to create another “section” or add a teaching assistant.³ So, using a still conservative maximum number of **24** students in each classroom, and assuming we need only a 5% cushion (instead of a 10%-15% cushion), **our true K-5 capacity is ~23% higher than they claim** ($22.8/18.5 = 1.23$). For example, what they call a “**504**” school (24 classrooms x 21 students), in which they want to put only **441** students (87.5% of 504), is really at least a “**547**” school (24 classrooms x 24 students x 95%), **so K-5 capacity is ~24% greater (547/441 = 1.24) than the BOE is assuming in its analysis to justify further increasing the size of Mill Hill School.**

Everyone agrees that we should compute capacity by multiplying the **number of classrooms** by the **number of students per classroom**. We have eleven elementary schools with a total of 286 full-size classrooms, but some of those classrooms cannot be used for grade-level instruction because they are dedicated to other purposes, like art, music and special education (“SPED”).

CAPACITY AND ENROLLMENTS IN K-5 SCHOOLS									
Pupils/Room	Classrooms			Instructional Rooms		Total Seats#		K-5 Enrollment	
	Total	AMS*	Pre-K	BOE	Actual#	BOE	Actual	Current (5/1/19)	FY28 per M&M
						21	24		
Burr	28	5	1	22	23	462	552	386	369
Dwight	21	4	0	17	17	357	408	294	351
Holland	28	4	0	24	24	504	576	361	404
Jennings	23	6	0	17	17	357	408	294	304
McKinley	30	6	0	24	24	504	576	432	418
Mill Hill	20	7	0	21	21	441	504	344	382
N. Stratfield	28	4	0	24	24	504	576	378	392
Osborn	30	8	0	22	22	462	528	419	399
Riverfield	27	3	0	24	24	504	576	413	462
Sherman	24	2	0	22	22	462	528	442	482
Stratfield	27	3	2	22	24	462	576	384	415
Total	286	52	3	239	242	5019	5808	4147	4378

Source: M&M at 4/3/18. *Art, Music, SPED, etc. #Actual Instructional Rooms = BOE total plus 3 currently used for Pre-K program plus 8 to be added at Mill Hill. BOE seats do not include the 40 that are in CLC rooms rather than instructional rooms.

So, according to the BOE,⁴ we have **231** classrooms available for instruction. Multiply 231 classrooms by **21** students, which is the maximum the BOE says each classroom will hold, and you get **4,851** seats. Add the eight new classrooms to be built at Mill Hill and you have **239** classrooms and **5,019** seats (239×21).

However, actual capacity is higher than the BOE claims because there are three classrooms at Burr and Stratfield currently used for Pre-K students as part of a wholly discretionary program to alleviate the Racial Imbalance Problem (RIP) at McKinley by encouraging minority students to opt out of McKinley and enroll at other elementary schools. Since the RIP will soon be solved by redistricting, there will be no need to continue the Pre-K programs at Burr and Stratfield, so we can add those classrooms to

³ See page 132 of the BOE Budget Book. http://cdn.fairfieldschools.org/boe/budget/2019-20/BOE_Budget_2019-2020_02-20-2019.pdf

⁴ http://cdn.fairfieldschools.org/district-information/enrollment/MM_BOF_Presentation_04032018.pdf

capacity. More important, as noted earlier, we can actually put at least **24** students in each classroom based on the BOE’s class-size guidelines. After adding back three classrooms and increasing students per classroom from 21 to 24, the number of seats expands 16% to **5,808**.

Although there is already a “cushion” in all of these capacity numbers because, if necessary, we could repurpose non-instructional classrooms into instructional classrooms, it is customary to assume that some allowance should be made for the fact that (per former BOE consultant, MGT) “*students do not come in even groups for each grade*” . . . and thus “*it is unrealistic to expect each classroom to be filled with the maximum number of students.*” MGT goes on to say that, “. . . to arrive at a practical capacity calculation, a 95 percent scheduling/grouping factor is used to arrive at the functional capacity.”⁵

Although MGT says a **5% cushion** (i.e., a 95% grouping factor) is adequate, the BOE, having already significantly understated the number of students we can put in each classroom (21 instead of 24), thereby creating a **12.5% cushion**, then insists that we must have **another 12.5% cushion** on top of that by operating at only **85%-90%** of their understated capacity, which means they want only **18-19** students on average in classrooms that can actually accommodate **24** students. This “**double cushion**” reduces total BOE seats to **4,392**, which is **76%** of actual capacity (4,392/5,808). Not surprisingly, based on this substantial understatement of capacity, the BOE then insists that we need more space because current capacity utilization is **94%** and it will rise to **100%** in FY28 based on M&M’s optimistic enrollment projection. However, using a **5% cushion** (per MGT’s recommendation), actual current capacity utilization is only **75%** and actual FY28 capacity utilization (still assuming that M&M’s optimistic enrollment projections are correct) will rise slightly to **79%**. **And if births are flat for the next four years and enrollments in FY28 are only 3,556, our actual capacity utilization will drop to 64% (3,556/5,518).**

CAPACITY UTILIZATION IN K-5 SCHOOLS										
	Total Seats		Functional Seats		K-5 Enrollment		Capacity Utilization			
	BOE	Actual	87.5%	95%	Current (5/1/19)	FY28 per M&M	Per 87.5% BOE		Per 95% Actual	
			BOE	Actual			Current	M&MFY28	Current	M&MFY28
Burr	462	552	404	524	386	369	95%	91%	74%	70%
Dwight	357	408	312	388	294	351	94%	112%	76%	91%
Holland	504	576	441	547	361	404	82%	92%	66%	74%
Jennings	357	408	312	388	294	304	94%	97%	76%	78%
McKinley	504	576	441	547	432	418	98%	95%	79%	76%
Mill Hill	441	504	386	479	344	382	89%	99%	72%	80%
N. Stratfield	504	576	441	547	378	392	86%	89%	69%	72%
Osborn	462	528	404	502	419	399	104%	99%	84%	80%
Riverfield	504	576	441	547	413	462	94%	105%	75%	84%
Sherman	462	528	404	502	442	482	109%	119%	88%	96%
Stratfield	462	576	404	547	384	415	95%	103%	70%	76%
	5019	5808	4392	5518	4147	4378	94%	100%	75%	79%
BUT IF BIRTHS ARE FLAT AND FY28 ENROLLMENT IS ONLY 3,556:									64%	

In conclusion, the BOE is significantly understating K-5 school capacity. Back in 2010, MGT openly disagreed with the BOE on the same issue, which may explain why they are the “*former*” consultant. In its enrollments and capacity study dated December 14, 2010, MGT used the same official BOE guidelines we have used (i.e., **23-25** students per classroom), and recommended that model to calculate the

⁵ <http://archive.fairfieldschools.org/downloads/enrollment/4469%20-%20Fairfield%20Public%20Schools%20-%20Enrollment%20Projections%20-%20Elementary%20Capacity%20Study.pdf>

capacity of elementary schools rather than the BOE's model based on 21 per classroom. MGT's exact words were as follows: "**While both models use a similar approach, the use of an "average" class size in the FPS model for a loading factor, results in a lower capacity based on current enrollments as opposed to a capacity based on maximum class sizes.**"⁶

3. THERE IS NO COMPELLING NEED TO MOVE 137 PRE-K STUDENTS OUT OF THE ECC AT WARDE

Perhaps because the BOE wants more classrooms at Mill Hill at a time when it is difficult to make a reasonable case that we need more K-5 capacity, the BOE has decided to close the Early Childhood Center ("ECC") at Warde High School, which for many years (since 2003) has served the needs of Special Education Pre-K students. The number of ECC students has increased substantially in recent years, from 75 in FY10 to 165 in FY19, and there are 172 students pre-enrolled for FY20.

Even though the ECC at Warde has apparently been working to everyone's complete satisfaction for years, the BOE is proposing to close it and move those students into our K-5 schools over the next three years. It is noteworthy that the two schools into which the BOE is proposing to move ECC students, Holland Hill and North Stratfield, are already projected to be at 92% and 89% of capacity in FY28, without any ECC students, using M&M's projections and the BOE's understated capacity numbers. So, based on its own standards, it is not clear why the BOE believes 200 ECC students can be added there.

As part of their advocacy for this change, the BOE noted in its presentation to the Board of Selectmen⁷ that Warde High School is "***Over Capacity**" with 1,479 students and room for only 1,400, implying that the high school needs more space. However, later in the same presentation, Warde enrollment is projected to decline by 243 students over the next nine years, which means the ECC space will not be needed for high-school students. Indeed, over time, there may be room to expand the ECC at Warde.

Even if, as the BOE proposes, some 200 ECC students are placed in our K-5 schools, capacity utilization in the K-5 system will remain quite low, particularly if M&M's enrollment projections continue to prove optimistic. Another 200 students would raise our actual capacity utilization in FY28 (still assuming M&M's optimistic projections are correct) to only 83% from 79%.

4. THE STATE WILL NO LONGER REIMBURSE DISTRICTS FOR SCHOOL CONSTRUCTION COSTS IF THERE IS ADEQUATE CAPACITY ELSEWHERE IN THE DISTRICT

Historically, the Town has been reimbursed by the State for 20%-25% of the money it has spent on building and renovating its schools. However, as of 2017, the State has increased its scrutiny of the need for school construction **by requiring more careful evaluation of district-wide enrollment projections and capacity**, which means that even beyond the real concern that "rich" towns like Fairfield may not get any State education or school-construction aid in the future, State reimbursement could be at risk if Fairfield is deemed to be building more capacity than it can demonstrate a need for.

The bottom line is that that if the State concludes that expanding Mill Hill School by another three classrooms is not justified because there is more than adequate existing capacity in other District schools, the cost to the taxpayers of Fairfield could be far more than the incremental **\$1 million** in

⁶<http://archive.fairfieldschools.org/downloads/enrollment/4469%20%20Fairfield%20Public%20Schools%20%20Enrollment%20Projections%20%20Elementary%20Capacity%20Study.pdf> Page 53.

⁷ https://www.fairfieldct.org/filestorage/79/125/14376/76342/81050/FPS_Enrollment_Projections_-_BOS_Backup_-_05-22-2019.pdf

construction costs. It could actually cost the taxpayers **another ~\$5.5 million** (25% of \$22+ million) in lost State reimbursement, **which would increase the cost to the Town by ~40% from \$16.5+ million (75% of \$22+ million) to \$23+ million.**

Adding three more new classrooms to Mill Hill (raising total instructional classrooms in the school to 24 from 21) would add 55 more functional seats to BOE capacity and 68 more functional seats to Actual capacity, which means that Mill Hill School's capacity utilization in FY28 would drop from 99% to 87% based on the BOE's understated capacity, and from 80% to 70% based on real capacity. District-wide capacity utilization if three more classrooms are added (and still assuming M&M's optimistic enrollment projections are correct), would drop from 100% to 98% based on the BOE's understated capacity and from 79% to 78% based on actual capacity.

Since we are not experts on the State school construction reimbursement process, we are simply copying below the comments on this subject from what we believe to be a highly reputable source, the Connecticut School Finance Project. We will do some additional work on this subject in the near future.

Excerpts from: "Comparing Connecticut's School Construction Program – An examination of the costs, processes and state funding associated with school construction in Connecticut and its peer states."⁸

The State Department of Administrative Services has made several additional changes to the process of qualifying for school-construction aid, within its existing statutory authority, "including reviewing enrollment projections earlier in the planning phase and ensuring the proposed project will be utilized to at least 85 percent capacity, and that the proposed school is not in competition with nearby schools that offer similar educational programs. While 85 percent capacity utilization is the minimum requirement, DAS reports that in most cases, schools are being renovated to at least 90 percent capacity, and 100 percent capacity for new construction, while allowing flexibility for student migration. In addition, staff from the DAS visit each proposed site and review whether renovations could be utilized rather than new construction. Other planning factors the DAS considers before adding projects to the priority list are: the number of square feet per student; the grade configuration of the school; the number of students per instructional area; the quantity, size, and types of spaces; the recommended site size; and whether the district has adequate funds budgeted for facility maintenance.

The DAS now requires for each project on the School Building Projects Priority List:

- An enrollment projection and the capacity of the school;
- Substantiation of the total project costs;
- The readiness of an eligible project to begin construction;
- Efforts made by local or regional boards of education to redistrict, reconfigure, merge, or close schools in the district prior to submitting a grant application;
- Enrollment and capacity information for all schools in the district for the five years prior to the application;
- An enrollment projection for all schools in the district for the eight years following the submission of the application; and
- The state's priorities for the reduction of racial and economic isolation in the district.

June 3, 2019

⁸ <http://ctschoolfinance.org/assets/uploads/files/Comparing-CTs-School-Construction-Program.pdf>