

Report of School Building Committee for Wellesley Middle School 2010 Annual Town Meeting Update

In the Fall of 2009, a School Building Committee (“SBC”) was formed to evaluate capacity at the Wellesley Middle School (“WMS”) in light of current enrollment projections. In brief, the SBC has reviewed and is continuing to review internal space conversion, utilization of existing spaces and addition of new spaces to WMS. At this time, the SBC is awaiting additional information (discussed below) to determine the final conclusion on space needs. However, the preliminary assessment is that some, but not all spaces can be obtained internally and that construction of additional space (*modular construction*) likely will be necessary by FY12 to address the increased capacity needs on a timely basis with the least disruption and compromise to the students and faculty; the question is the number of modular spaces. We anticipate that we will have all requisite information for Annual Town Meeting and will provide an update at that time.

The motion under Article 20 requests that Town Meeting authorize the use of funds for the design and permitting of the modular construction. Town Meeting is not being asked for an appropriation at this time. The source of funds will be a combination of transfer of existing monies from the School Department to the Permanent Building Committee and funding through the *State Fiscal Stabilization Fund* which was sourced from the *American Recovery and Reinvestment Act of 2009*. A request for funding of the actual construction of the modular spaces will be made at a Special Town Meeting in the Fall of 2010.

The specific objectives of the WMS School Building Committee are as follows:

1. To review the current WMS facility in terms of capacity, spaces and utilization
2. To define the projected space needs going forward based on enrollment projections
3. To evaluate options to address additional space needs
4. To recommend a course of action which maintains the educational program as determined by the School Committee while minimizing the cost to the Town.

The following is a summary report of our findings to date and recommendation.

The SBC has reviewed the current space, current utilization, scheduling, capacity requirements, the need for additional teaching spaces and the various options to accommodate the increase in the student population. Additional work is ongoing and an update will be provided at Annual Town Meeting.

CAPACITY, SPACES AND UTILIZATION

Assessment of Capacity Requirements

The review of the capacity has three major components: Projected enrollment, special needs and accommodations, and class size/program structure.

a. Projected Enrollment

WMS was renovated in 2005-2007 to make critical infrastructure improvements and to increase capacity to 1100 students. At the time, the WMS Renovation Project was designed and approved (2003), enrollment was 907 and expected to peak at 1,050 students in FY11. As part of the renovation, interior spaces were converted to classroom spaces to support enrollment of up to 1,100 students.

Since 2003, actual enrollment has increased at a rate greater than projected. This has been due to an increasing rate of *in-migration* (influx of students moving into the district). Enrollment projections prepared in each of the succeeding years were adjusted to reflect current data, resulting in:

1. increasing the projected peak enrollment number; and
2. extending the date of the projected peak first from FY10 to FY12 and now to FY14.

The most current projections prepared using data as of October 1, 2009, predict a peak enrollment of 1,224 students at WMS in FY14.

	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
	<i>Actual</i>	<i>Proj.</i>									
6th	388	384	429	402	414	418	385	367	372	328	329
7th	360	380	377	420	394	406	410	377	360	365	321
8th	382	356	377	373	416	390	402	406	373	356	361
Total	1,130	1,120	1,183	1,195	1,224	1,214	1,197	1,150	1,105	1,049	1,011

To accommodate the enrollment in excess of 1,100 students in FY10 (+30), four interior spaces were converted into teaching spaces and other spaces were more fully utilized (*e.g.*, auditorium used for orchestra classes).

b. Special Needs and Accommodations

The composition of students with special needs requiring accommodations mandated by the State and Federal Government also plays a role in the assessment of capacity needs. Since 2003, WMS has incorporated three additional Special Education programs in-house and a program dedicated for students learning to speak English (ELL). Combined, these programs have required the use of an additional six classrooms and spaces for related therapies. These programs did not exist at WMS prior to 2003 and were unanticipated at that time.

c. Class Size and Program Design

The class size guideline for WMS is 22 students per class as set by the School Committee based on comparable data and educational standards. Today, class size at WMS *on average* is very close to the guideline. However, due to scheduling challenges and students dropping classes and/or moving after the original schedule is established, class size ranges from 17-24 in core courses (English, Math, Social Studies and Science) and 20% of core courses are above the 22 student guideline by one or two students across all three grades.

Specifically, the current 6th grade consists of 18 sections with an average of 21.6 students and a range of 21-23 students; 7th grade has 16 sections with an average class size of 22.5 and a range of 20-23; and 8th comprises 18 sections, an average class size of 21.2 and a range of 16-24 students. There are 12 spaces dedicated to Special Education/ELL programs including intensive Special Education program spaces, learning centers and one ELL space.

WMS is structured to support student transition from a small, neighborhood elementary school where students are taught primarily by a single classroom teacher to a large middle school and then to an even larger high school:

Sixth grade students and teachers are organized into "*houses*" which are groupings of four homerooms. Students in 6th grade learn and travel with the same group of 22 students (the homeroom) for core academic subjects. Courses are taught by four different teachers (one for each major subject area) who work in a team and teach

each of the homerooms within the house. The classrooms within a house (other than science labs) are physically close to each other. Sixth grade students have classes with others outside the homeroom only for electives.

Seventh grade students are organized into "*clusters*." There are approximately 88 students in a cluster who all have the same four teachers for the major academic subjects. They no longer travel in a set group of 22 but may share classes with any of the 88 students in the cluster. The classrooms generally are physically close to each other with the exception of the science labs. Students have classes with anyone in the grade for electives and their foreign language.

Eighth grade uses an open enrollment structure like high school. Students are scheduled into core courses and electives with any other 8th grade students (380 students in FY10).

These models of school structure have demonstrated success at providing a smooth transition and effective delivery of middle school curriculum. They also allow for relationship building among teachers and staff, and spatial distinctions (different locations in the building) among the grade levels. However, the structure requires distinct classroom configurations in order to accommodate the house and cluster models.

Current Spaces

WMS currently has the following spaces:

Space Type	Number of Spaces
Standard Classrooms	49
Science Labs	12
Sped/ELL	12
Lecture Halls	2
Fitness (gyms, fitness center and dance)	4
Auditorium	1
Library	1
IT/Workshop	2
Photo Lab	1
Other Specialized Spaces (art, consumer science, music)	9
Total	93

Space Utilization Analysis

As currently programmed, the spaces at WMS have reached maximum capacity. We are continuing to explore increasing *utilization* of existing capacity.

An analysis of the space utilization rate at WMS revealed the following: For core courses, utilization is 71.4% overall. That is, for the core academic subjects, classrooms are in use 71.4% of the school day. The utilization rates for Special Education spaces and electives are more variable depending upon the specific space.

The findings are consistent with expectations: Each teacher at WMS has a specific and dedicated room assignment which is used to conduct all daily activities. Pursuant to the Contract, each teacher at WMS teaches five out of seven periods each day. During the two non-teaching periods, students

are attending electives such as art, music and language. During these periods, the teachers spend one period for preparation for classes (as defined by the Contract) and the other for communal planning and meetings with parents and students.

School Administration has reviewed educational programming and has considered a number of options including increasing class size guidelines, modifying the house, cluster, open enrollment scaffolding, and staggering the school start time by grade or specific class subject. It is their strong position that such changes would materially alter the integrity of the educational system and the delivery of programs. School Committee supports maintaining the current program. SBC understands that these decisions are strictly within the purview of the School Administration and the School Committee.

The WPS Administration has engaged Mr. Frank Locker of *Frank Locker Educational Planning* to review a number of alternatives for maximizing capacity including better utilization of current spaces, adding teaching resources, reviewing the practice of scheduling teachers into dedicated classrooms, and scheduling optimization without compromising the delivery of the educational program. It is important to note that options for increased space utilization must:

- effectively enable the delivery of the educational program;
- maintain the ability to adhere to the current program design (House and Cluster system); and
- minimize disruption and displacement of staff and students.

PROJECTED SPACE NEEDS

Based upon the enrollment projections (with current utilization) and in keeping with current class size guidelines and Program Design, the following spaces are needed through FY14:

Year	Enrollment	Regular	Science	Electives	SpEd	Total Spaces
FY10A	1,130					
FY11	1,120	+2 Gr 7 -2 Gr 8				+0/+0
FY12	1,183	+2 Gr 6 +1 Gr 8	+1	+1	+2	+5/+2
FY13	1,195	+2 Gr 7		+1	+1	3/+1
FY14	1,224	+2 Gr 8	+1		+1	+3/+1
Total		+7	+2	+2	+4	+11/+4

As shown, there is a need for an additional seven teaching spaces for FY12 (September 1, 2011), an additional four by FY13 (September 1, 2012), and potentially an additional four by FY14 (September 1, 2013).

OPTIONS ASSESSMENT

The SBC has conducted an assessment of the options to meet the space needs of WMS. The assessment has included a review of non-construction and construction options.

Non-construction Options

Several non-construction options were reviewed for feasibility, cost and program impact. The findings revealed that the non-construction options were not feasible for the following reasons:

- Convert elementary school into a 6th grade only school
 - This option has been successfully pursued in the Needham Public Schools with the opening of the Hi-Rock School. However, our analysis shows that the decline in WPS elementary enrollment which would enable this option will not occur until FY15/FY16 which does not mitigate the capacity issue at WMS.
 - Expenses required to create science labs in an elementary facility carry significant cost.
- Convert some or all elementary schools into K-6 schools
 - There is insufficient capacity at the elementary schools to accommodate the additional grade.
 - This would result in significant change to educational program design (House system).
- Conduct some WMS classes at the adjacent Sprague School and redistrict Sprague students to other elementary schools
 - This poses multiple issues including scheduling, class transition time conflicts, supervision, teacher space needs and a significant impact on Sprague School community.
- Move 6th grade or 8th grade to an alternative site
 - There are no appropriate sites available.
- Move 8th grade to high school
 - There is not space currently available.
 - Capacity at the new High School will not accommodate the projected 8th grade enrollment.
- Move the WPS Central Administration to an elementary school
 - Space needs equivalent to eight classrooms.
 - Decline in elementary enrollment does not provide eight classrooms until after FY14.

It should be noted that the School Committee is currently performing a comprehensive review of the elementary schools (including an inventory of classrooms and status of structures and systems) in relation to the current enrollment projections and multiple enrollment scenarios. We appreciate the urgent need to move forward on the middle school space needs and after review of the non-construction options, the SBC has concluded that none provides a timely, appropriate and adequate solution to the current capacity issue.

Construction Options

HMFH Architects, Inc. (“HMFH”) has been retained to conduct a preliminary feasibility study to identify construction options to address the addition of spaces. Each of these options has been reviewed for overall cost impact, program impact and ability to provide the additional space when needed.

a. Internal renovations

WMS has already undergone internal renovations and space conversion to increase capacity in the current facility. There are not any further options which are prudent from a cost perspective.

b. Relocation of WPS Central Administration from the first floor to off-site, rented space

The relocation of the WPS Central Administration during the 2005-2007 renovation provided for the much needed transition space. However, the cost of re-renovating the space into

classrooms, in addition to the annual cost of rental space (8,000 square feet for a period of six years) does not make this a prudent option.

c. Construction of additional permanent space contiguous with the existing facility

The construction of an addition to the current facility was assessed. The potential sites are the front courtyard and the back parking lot adjacent to the gymnasium. The addition options ranged from 12,000 – 18,000 square feet and would likely exceed \$5 million in project costs. There would be significant impact on the WMS community during a construction period.

d. Construction of modular space adjacent to the existing facility

The construction of modular spaces in the parking lot adjacent to Donizetti Street was assessed. *Modular construction* is a form of facility construction in which a building is built in three-dimensional sections (or modules) in a factory environment off-site and then assembled into the final structure. Most major systems such as mechanical, electrical, plumbing and finishes are completed off-site. Site work proceeds while the structure is constructed off-site. Actual on-site construction time is approximately 8 to 12 weeks. *Modular construction* was used to provide increased capacity at Schofield and Fiske Schools.

It was determined that the site assessed would be sufficient for the construction of up to nine classroom spaces (up to 9850 square feet).

RECOMMENDATION

We anticipate that increased room utilization has the potential to maximize the capacity of the current WMS facility; however, it is likely that some modularity will be required to address increased enrollment. We will update Town Meeting on the modular spaces needed at WMS to deliver the educational program to the projected enrollment beginning in FY12 through FY18, when enrollment declines to existing levels.

After reviewing the options noted above, the SBC has determined that the additional space via modular construction is the most cost-effective alternative and will also address the increased capacity needs on a timely basis, with the least disruption and compromise to the students and faculty. Our current assessment is for a total of nine spaces (9850 square feet) to be constructed in the WMS parking lot adjacent to Donizetti Street and the gymnasium. If the analysis reveals that we can proceed with fewer spaces, we will adjust this recommendation accordingly.

Submitted by School Building Committee, Wellesley Middle School

- Terri Tsagaris, Chair (Board of Selectmen)
- Hans Larsen (Executive Director of Town)
- Chris Ketchen (Deputy Director of Town)
- Bella Wong (Superintendent, Wellesley Public Schools)
- Josh Frank (Principal, Wellesley Middle School)
- KC Kato (School Committee)
- John Moran (Director, Facilities Maintenance)
- Rob Shupe (Permanent Building Committee)
- Jack Haley (Advisory Committee)
- Geoff Witheford (citizen with construction background)