

MIDDLE SCHOOL TASK FORCE REPORT

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Introduction

The Pollard Middle School was built in 1958 and has been added to in 1969 and 1993-95. The 1995 renovation updated the facilities and systems and added five classrooms and a new media center. Initial plans for the 1993 renovation called for 20 classrooms, but that number was scaled back to 10 and then to 5 due to financial considerations.

The student capacity for the renovated structure was projected to be 982; however, a study by Kaestle Boos Associates, Inc. for the 1999 Needham Townwide Comprehensive Facilities Study found that the building had an existing space deficit of 8,168 sq. ft. for a population of 982 (See Attachment A). The space deficit puts the actual capacity of the building at 922. The current enrollment at Pollard is 1,051, and the 2001-02 projected enrollment is 1,083. Therefore, next year the building will exceed capacity by over 160 students. After next year, the enrollment is projected to fluctuate between a high of 1,073 in 2002-03 and a low of 998 in 2005-06 before beginning to rise again to the 1,050. (See Attachment B.)

To illustrate the space problem in a more concrete manner: the 8,168 sq. ft. deficit for a population of 982 represents a need for approximately 10 additional classrooms. (The Regulations Governing the School Building Assistance Act calls for middle school classrooms to be from 750-850 sq. ft.) The population next year will have approximately 100 more students than the 982, necessitating the need for at least an additional 5 classrooms, bringing the total classroom deficit to 15.

When the Comprehensive Facilities Study Committee issued its report in 1999, they calculated the Pollard's Building Capacity Utilization at 96%, noting that educational planners recommend 90% utilization. Today's Building Capacity Utilization is 107%.

In order to address the space problems at the Middle School, the Superintendent formed a task force in September to examine the overcrowding issue. Specifically, the task force was given short- and long-term charges:

CHARGE

The Middle School Task Force will work with, and consult with, the Middle School Principal and staff to develop a set of short-term and long-term recommendations to resolve programmatic and instructional concerns related to increased enrollment, both currently and as a result of future enrollment projections.

SHORT-TERM CHARGE: December 15, 2000

- 1) To describe the program/instructional implications of an anticipated increase of one hundred students;
- 2) To advise and assist the Principal in the development of a set of recommendations to resolve current and new term overcrowding in the building.

LONG-TERM CHARGE: September 1, 2001

- 1) To review the literature/research concerning the relationship of middle school size, enrollment, and program efficacy;
- 2) To consult, visit, and document programs' effectiveness in varying size middle schools in reasonable proximity to Needham;
- 3) To review and interpret various existing studies and documents developed on behalf of the Needham Public Schools;
- 4) To survey, conduct open forums, and gather qualitative data concerning the expectations and interests for middle school education among existing preschool, elementary, middle, and high school parents, and greater community by September 1, 2001;
- 5) To develop a set of recommendations and options for the School Committee to consider regarding program and facility needs for the next five to fifteen years.

The Process

The eleven members of the Middle School Task Force met throughout the fall to study the nature of the overcrowding problem, to generate and analyze various possible solutions, and to make a recommendation. In the process, they reviewed a number of documents and reports including:

Kaestle Boos Associates, Inc. Facilities Study
The Needham Townwide Comprehensive Facilities Study
Regulations Governing the School Building Assistance Act
The Future School Needs Committee Report
The 2000 Pollard Middle School Enrollment Report
A Classroom Utilization Report by Joe Barnes

In addition, the group consulted with a number of groups and individuals including:

Mark LaFleur, Director of MBMD
Representatives from other school systems with similar needs and problems
Karl Clauset and Patricia Carey, Chairs of the Townwide Comprehensive Facilities Study
Members of the 1993 Pollard School Building Committee
Faculty Members of the Pollard Middle School
Margie Saidel, Director of Food Services

The Problem

According to the 1999 study by Kaestle Boos Associates, the Pollard Middle School building has significantly insufficient space for the current student population. The 1993-95 renovation was calculated to provide space for 982 students; however, Kaestle Boos identified numerous

insufficiencies in the building and stated that an additional 8,168 sq.ft. of space was minimally needed to support a population of 982. Kaestle Boos further stated that an additional 5,050 sq. ft. was needed on top of the 8,168 to provide a quality educational program for a population of 982 students. To exacerbate the problem, the 2000-01 enrollment is 1,051; and the Future School Needs Committee projects an enrollment of 1,083 for next year. The population is then expected to remain somewhat stable for the next few years.

The Regulations Governing the School Building Assistance Act makes a space allowance of 135 gross square feet per pupil. Therefore, an additional 13,635 sq. ft. is needed on top of the 8,168 insufficiency discussed above, bringing the minimum deficit total to 21,803 sq. ft. and the optimal deficit total to 26,853 sq. ft.

Additional space needed for 982 students	8,168
Additional space for 1083 students	<u>13,635</u>
Minimal additional space need for 2001-02 population	21,803
Additional space required for quality program	<u>5,050</u>
_____Optimal space requirement	26,853 sq. ft.

Although all of this space would not be used for classrooms, it does help to understand that the Regulations recommend 750-850 sq. ft. for a middle school classroom.

Impact of Overcrowding

It is important to understand the impact of this space shortage on staff and students:

- The need to use all areas of the building at all times of the day has already necessitated a new schedule which has reduced core teaching time. This change means that 7th and 8th grade classes have had the instructional time for core subjects reduced by approximately 10%.
- Space problems have had an impact on both class size and total number of students per teacher. To date, space priority has been given to core subject teachers; and the impact on these class sizes has been minimized. The average class size is 24 in grade 6 and approximately 22 in grades 7 and 8. However, the daily assignment for 7th and 8th grade teachers is between 108 and 117 students. These large caseloads place an unusual burden on teachers given the demands to differentiate instruction, accommodate an increasing special education population, teach writing across the curriculum, vary assessment techniques, and communicate effectively with the home. It is significant that the waiting period for a parent conference is minimally two months. In addition, the large numbers impact the very important personal bond between teacher and student demanded by middle school teaching. Next year, without the addition of another cluster at the 7th grade level, the average teacher load will be over 125 students.

Overcrowding has had a greater impact on the enrichment class sizes. In foreign language and experiential education, classes sometimes have as many as 29 students. Students have been unable to enroll in technology classes because of limited space, and physical education classes often have more than 70 students with two teachers in one gym.

- Teachers must share classrooms. There are 48 general use classrooms in the Pollard School building. There are currently 64 F.T.E.'s of general teaching staff, meaning that 16 teachers must share classrooms. Those teachers without their own classrooms must move from room to room throughout the day to teach their classes. Those teachers with their own classrooms must leave so that their rooms can be used when they do not have a class. It should also be noted that there is minimal workroom space for teachers when they must vacate their rooms.

Classrooms are currently occupied 85% of the time. (See Attachment C - Classroom Utilization Memo.) Of the 336 classroom periods available, the rooms are in use for 277 of the periods. Many of the unused periods are in the 10 science rooms. These classrooms are often prepared for labs at the beginning of the day, and it is impossible for other classes to use these rooms. In addition, three of the rooms (#280, #283, and #264) are undersized classrooms and are not suited for classes of more than 20 students.

- The facility requires more flexible spaces to support project-based learning, differentiated instruction, and other innovative teaching techniques. There are also no science rooms available to support lab-based learning at the sixth grade level.
- Office and meeting spaces are in short supply. Some professionals must share offices. In addition, spaces are lacking for small and large group meetings, teacher planning and work areas, and testing for special education. Time-out spaces for students are also needed.
- The cafeteria is completely inadequate for the population. In order to feed the number of students in the Middle School, lunch service begins at 10:30 a.m. and ends after 1:00 p.m. In addition, with only two serving areas, there are complaints that some students do not have time to go through the service line. The cafeteria is crowded and loud.
- There is not enough space for special education programs. Designated rooms are often small and do not lend themselves to small group instruction or individual help. In all instances, the rooms are shared by several teachers and paraprofessionals. This year two students who might have attended Pollard in a special program had to be placed outside the system because space to house the program did not exist.
- The auditorium will hold only one grade at a time, and it has inadequate lighting and poor acoustics.
- There is insufficient storage space. Former book rooms have been converted into instructional areas, and there is little space for project storage in the art rooms.
- Hallways and common areas are crowded and pose potential safety issues. Developmentally, it is important that middle school aged children have space to move about without running into their peers.
- Although not a problem in the building, parking is a significant issue. There are not enough spaces for staff members to park in the lots. Parents and the public must often park at

significant distances from the school to attend conferences or events, and drop-off and pick-up circulation patterns are dangerous.

Evaluation Criteria

In order to evaluate the various options, the Task Force established the following criteria which we believed to be important:

- * **Educational impact** - Would the decision enhance or detract from the education of the students?
- * **Cost implications** - Do the benefits of an option justify the associated costs?
- * **Effect on the Middle School philosophy** - Would the decision allow the continuation of the middle school philosophy (e.g., clusters, common planning and conference time for teachers, exploration for students)?
- * **Impact on parents and family** - Would the option inconvenience or place undue hardship on families?
- * **Impact on staff** - Similarly, would the decision place undue hardship on staff?
- * **Health and safety** - Would an option's implementation have significant health and safety risks?
- * **Legal issues** - Are there regulatory or legal concerns associated with an option?
- * **Contractual issues** - Are there contractual issues which might arise as a result of a decision?
- * **Morale** - Would the option negatively impact the morale of students, teachers, or other staff?
- * **Impact on other levels and programs** - Would a decision have implications for other levels or programs in the System?
- * **Equity of opportunity for students** - Would all students receive equal educational opportunities if an option were implemented?
- * **Practicality of implementation** - Is the option feasible given all other considerations?

Options

The Task Force initially identified ten possible options for responding to the overcrowding at the Middle School on a short-term basis:

- **Maintain status quo**
- **Moving a portion of the school population to another site**
- **Double sessions**
- **Staggered schedule**
- **Permanent modular classrooms**
- **Trailers/Portable classrooms**
- **Conversion of common space (e.g., media, cafeteria, auditorium) to classrooms**
- **Year-round schooling**
- **Program and schedule changes**
- **Creation of a "community classroom"**

After initial analysis, the Task Force rejected eight of these options:

- **Maintain status quo.** Because of the issues described in the **Introduction** and **Problem** sections above, the Task Force believes some action is imperative. The current situation is made tolerable only by the extraordinary efforts of the staff. It is also the opinion of the Task Force that continuing with the status quo will begin to have a significant impact on the education of middle school students. It is too soon to judge the impact of larger class sizes, decreased instructional time, and inadequate space for appropriate instructional methods; but these issues will surely begin to erode the quality of the program. In addition, lack of action would eventually affect the morale of the staff and could lead to health and safety concerns.
- **Moving a portion of the school population to another site.** The Task Force explored the possibilities for splitting the school and utilizing other sites for a cluster or grade level. Among the possibilities considered were:
 - Moving a cluster to the High School
 - Keeping some 6th grade classes at the elementary level
 - Utilizing community spaces (churches, schools, etc.)

Although the Middle School students have been moved to other settings in the past, these actions were necessitated by a crisis situation. These moves had a significant impact on education, teachers, parents, and the receiving schools. The other facilities do not have all of the resources needed by teachers and students and require that extraordinary efforts go into maintaining a quality educational program. Such an action would isolate teachers from their colleagues, cost additional dollars, reduce opportunities for students, and place significant burdens on other levels of the System.

- **Double sessions.** In addition to the numerous problems and impacts of double sessions, Chapter 71, Section 1 of the Massachusetts General Laws specifies the circumstances under which double sessions may be considered; and the Middle School does not meet these standards.
- **Staggered schedule.** A staggered schedule requires that students begin and end their school day at different times. Such a plan would reduce crowding at certain times during the day, but there would still be a significant portion of each day when all of the students were present. It was felt that the small positive aspects of a staggered schedule were more than offset by difficulties in transportation, the impact on families of having children on different schedules, the loss of after-school activities, problems with scheduling, and the impact on enrichment courses.
- **Conversion of common space (e.g., media, cafeteria, auditorium) to classrooms.** There are no spaces which could easily or inexpensively be converted to classroom space. The Media Center and cafeteria are fully utilized and central to the Middle School operations. The auditorium is already used for some performing classes, but the room set-up does not lend itself to easy modification; nor is it a space conducive to quality instruction. Other storage and maintenance areas were also examined, but they were inappropriate environments for education.

- **Year-round schooling.** In many areas of the country, space considerations are forcing systems to move to keep school open all year with a portion of the population always on vacation. This option does reduce crowding, and it has also shown some educational value. Because most programs have a model like six weeks of school followed by two weeks of vacation, students do not have the long summer break which enhances retention of learning and reduces transition time. Despite the assets, this plan was rejected primarily because of its impact on families, who could have children on different vacation schedules. In addition, there are other problems associated with collective bargaining agreements, lack of air conditioning in the building, coordination with other levels in the system, scheduling, and implementation.
- **Permanent modular classrooms.** These prefabricated structures are similar to ones that have been at the Middle School prior to the 1995 renovation and are currently at the Hillside Elementary School. They offer the advantage of providing good instruction space and being relatively easy to construct. Total cost estimations for the 8 classrooms and cafeteria module varied from \$1 million to \$1.5 million depending upon specifications, installation, and planning expenses. Because of the expense and associated need to secure funding, the planning required, and the construction time, this option was rejected as a short-term solution; but it will be reconsidered as a long-term option.
- **Creation of a “community classroom.”** Community-based learning is an interesting idea, but it is impractical. It would be impossible to design a meaningful education program which would involve a significant number of students on a consistent basis outside of the school building. In addition, there are numerous associated problems such as planning, cost, transportation, handicapped students, weather, and practicality.

Recommendations

In order to alleviate the overcrowding problems at Pollard, the Middle School Task Force makes the following short-term recommendations:

- **Add a fourth cluster at the 7th grade level.** The additional cluster will reduce the average teacher load from approximately 125 students per teacher to 94. Because of issues cited earlier, the reduction of caseload is necessary to maximize teacher effectiveness. The additional 7th grade cluster will be maintained in 2002-03 as the large 6th grade class moves on to 7th grade. For the 2002-03, an additional 8th grade cluster will be needed as well.
- **Modify the existing schedule.** By removing the integrated electives from the cluster configuration and schedule, it is possible to increase the core subject instructional time, to utilize a block scheduling option, to maintain common planning time, and to achieve a schedule which might be used over time. Classes will increase from 45 to 55 minutes every other day, adding 60 hours of instructional time per year. Electives can also be maintained; however, enrichment teachers will no longer be a part of a cluster team, and one elective period will be lost, reducing some of the options for students.
- **Rent 8 portable classrooms.** In order to add a fourth 7th grade cluster, 3 additional classrooms will be needed for 2001-02 school year. In 2002-03, 4 more classrooms will be

needed to add a 4th cluster to the 8th grade. By renting all of the portables for 2001-02 year, we can begin to reduce the number of teachers who do not have a classroom. Each modular unit is 24' x 66' which accommodates 2 classrooms; therefore, the plan calls for 4 modular classroom units.

Rental of 5 modulares - 8 classrooms and 1 cafeteria (discussed below) - is approximately \$1,100 per month for each unit (based on a 3-year rental contract). Therefore, the cost for 5 units will be \$5,500 per month or \$66,000 per year. Exact one-time installation costs depend upon placement and specific requirements (steps, ramps, skirting, site grading, etc.), but initial estimates call for less than \$50,000. Most contracting companies provide site and building design services as part of their contract.

Although the Pollard building has the ability to use gas heat in these structures, we are required to use electricity for rentals. Guidelines estimate the cost of electric energy at \$0.67 per square foot. Thus the annual energy costs would be approximately \$5,306.40 (7920 sq ft. x \$.067 = \$5,306.40).

- **Rent a portable cafeteria space.** Next year, without additional cafeteria space, it will be necessary to have 6 lunch periods. Lunches would begin as early as 10:15 a.m. and would end at 1:15 p.m. The additional space will make it possible to reduce the number of shifts. Discussions are still underway about the desirability of using the additional cafeteria space for students or converting the teachers' dining area into a student cafeteria and using the additional space for teachers.

There are a number of implications, both positive and negative, associated with these recommendations.

Positive Aspects

- This plan will be relatively inexpensive because the classrooms are rented, and one-time preparation costs are not extraordinary.
- The units can be installed in a relatively short period of time, making it possible to begin addressing the overcrowding issues next year when enrollment will reach its peak. There is generally a minimum of six months required from the time bids are solicited until installation is completed.
- Because the units are air conditioned, it will be unnecessary to air condition additional rooms for a special education student in the Pollard building, saving dollars which are currently being requested through the capital budget.
- The classrooms are generally considered to provide quality educational space with good lighting, ventilation, and heat.
- The schedule change will reduce the number of students per teacher and enhance teaching.

Negative Aspects

- The units will be temporary, and a long-term solution will still be necessary. The rental costs will solve the immediate problem, but they will not contribute to a more permanent solution.

- While the modularity will provide relief to classroom and cafeteria overcrowding, they do nothing to address problems in the hallways, the lack of office or teacher work space, or the inadequate special education rooms. It will also be necessary for many of the teachers to continue sharing classroom space.
- Enrichment teachers will no longer be able to be part of the cluster, eliminating their valuable perspectives on students and preventing them from being part of the team.

Future Work for the Task Force

The Task Force will continue its work through the spring to examine longer term solutions to the space problems at Pollard. Among the options being considered are:

- Maintaining status quo
- Adding permanent modular classrooms
- Making renovations to the Pollard building
- Constructing a second middle school

The Task Force welcomes the input and suggestions of the community and School Committee, and we are available to answer specific questions or to gather additional information.