

# **NRHS Space Needs Task Force**

## **Interim Report #2**

The NRHS Space Needs Task Force presents this Interim Report to reflect knowledge and perspective gained since the first Interim Report issued on March 5, 2015. Despite the date of its acceptance, the first Interim Report was a reflection of the Task Force's knowledge as of November, 2014. This Interim Report #2 incorporates information learned since that time and updates the community on the Task Force's direction.

### **Executive Summary**

Nashoba Regional High School exceeded its capacity for students several years ago. Although the school was designed to handle a greater population of students than currently enrolled, general-use classrooms have been reassigned to special purposes reducing the student capacity of the facility. There is an immediate need for one (1) additional science lab and six (6) general classrooms.

This does not address classroom needs for (1) future growth in school population and (2) curriculum changes requiring specialized spaces.

Separately from any overcrowding, population growth or curriculum change issues, NRHS teachers and administrators identified a list of building shortcomings that are inconveniences or distractions to teaching.

There remain areas of investigation from Interim Report #1. These are detailed below.

## **NRHS Space Needs Task Force Findings**

### **Loss of Building Capacity**

After the renovation of NRHS in 2002, the school was believed to be large enough to accommodate a student population of 1250. Despite having a population of only 1183 in the 2014-2015 school year, the school is seriously overcrowded with about one hundred (100) students using the auditorium as their homeroom due to lack of classrooms.

This is due to the removal of six general purpose classrooms (accommodating between 120 to 150 students) for specialized uses. Two classrooms were divided into smaller rooms for Art classes and classes needing small section sizes. Special Education classes that require kitchen and bathroom facilities were added by converting four general purpose classrooms.

### **Effects of Current Overcrowding Upon Students**

- Approximately one hundred students each period are scheduled for Study Halls in locations unsuitable for learning or study. Most students take their Study Hall in

the foyer of the auditorium, a large space with lighting suitable for a hallway but not for prolonged and intensive study. The large number of students placed in the foyer each period makes for many distractions and prohibits cooperative work between students.

- There are ten (10) teachers who do not have dedicated rooms and must travel to different rooms with a cart containing all of their teaching materials. The effect of this is to reduce the actual “face time” spent teaching each day. If a traveling teacher requires two extra minutes at the beginning of each class to distribute material and two minutes at the end of each class to collect the material, there is a loss of “face time” of four minutes per class. A class period is 44 minutes, so this loss of “face time” is equivalent of missing a class every eleven (11) days of the school year.
- Science Lab Demand Exceeds Availability: Four-credit science courses meet every school day. Five-credit science courses meet every day and have a second period (the Lab period) every fourth day. Six-credit courses meet every day and have a second period (the Lab period) every other day. Four-credit science courses do laboratory work in class, but the hands-on laboratory work is more extensive in the five-credit and six-credit courses.
  - o In the 2014-2015 school year:
    - Twenty-two (22) students were denied the opportunity to take the five-credit Accelerated-level (AC) Biology course because only one section of the course (with 24 students) could be accommodated.
    - Six (6) College Preparatory (CP) students were turned away from the five-credit CP Biology course
    - Seventeen (17) students were turned away from the five-credit CP Chemistry course
    - Anatomy and Physiology courses were five-credit courses and are now four-credit courses due to space and personnel issues.
    - All students who desired enrollment in five-credit courses and could not get into them were offered four-credit courses in the same subject.
  - o The number of sections of extra-credit Science Labs has decreased in the past few years. At the same time the range and breadth of science courses has increased. The two are related, for as the range of courses increases the rooms suitable for these courses remains the same and extra-credit Science Labs have been reduced to accommodate the new courses. The number of extra-credit Science Labs cannot be increased without additional dedicated space. The priority for this additional space is first Biology, then Chemistry, followed by Physics.
- Students are able to get their desired courses in other areas of the Core Curriculum (Math, English, Languages). These courses do not require specialized spaces.

- Business Course Demand Exceeds Availability: One hundred (100) students were turned away from “Introduction to Business” due to a lack of space and teachers. These courses do not require specialized spaces.
- Elective Course Demand Exceeds Availability: Between one-hundred-and-fifty (150) to two hundred (200) students were turned away from “Food” and “Digital Photo” courses due to lack of space and teachers. These courses require specialized spaces.

### **Effect of Future Student Population Growth on Space Needs**

The only available estimate of the number of students in the high school assumes the population of the three towns does not change in the future. This is an unrealistic assumption.

### **Effect of Curriculum Changes on Space Needs**

Growth and /or expansion of new courses is not defined by any forward-looking plan. It is a year-to-year decision. It is impossible to determine the future space needs without knowing the classes that will be offered, even with a stable population. In recent years the growth of courses has occurred outside of the Core Curriculum (of Science, Math, English, and Languages).

Changes in the curriculum reduce the student capacity of the high school due to the need for specialized spaces. This happens independently of changes in population, although student population growth magnifies the effect.

Growth in new areas of the curriculum is both horizontal and vertical. Not only are additional sections of existing classes added, the range of courses is broadening.

- Courses such as Computer Science, Theater Arts, Music, and Wellness require specialized spaces.
- There is no permanent broadcasting studio for student use. This has restricted course offerings in the Journalism program.
- Additional space is needed to initiate Alternative Education programs, which are directed at students who struggle in a traditional course setting. These students generally do not have disciplinary issues and are not SPED students.
- Addition space is needed to initiate Early Education programs, which provide students with courses in Child Care and pre-school education.

### **Other Building Problems Not Associated with Overcrowding or Curriculum Changes**

Teachers and administrators have identified a large number of shortcomings in the school.

Science Labs

- Many labs lack safety equipment such as UV goggle sanitizers, fire blanket storage, and locked chemical storage. Experimental offerings could be increased if these deficiencies were addressed
- Only one lab contains a chemical fume hood. Experimental offerings could be increased if this deficiency were addressed
- All labs have window exhaust fans, installed after building construction, that leak cold air in the winter
- Central heating is uneven in the science labs. Teachers sometimes send students to get their coats for class, resulting in loss of teaching time
- Fixed layout of lab tables and location of cabinetry impede collaboration among students.

### Art, Music, Theater

- Art classrooms not ventilated, preventing use of oil paints and other volatile substances
- Art classrooms too small for all students to use easels
- Some art classrooms lack enough sinks or any sinks at all
- Only one supply closet for three classrooms
- Inadequate space to display student work
- Only one ceramic kiln available for seven ceramics classes, resulting in delays in students ability to complete assignments
- No “pugmill” to efficiently recycle used clay, resulting in waste of supplies and time
- One art classroom has only artificial light
- Auditorium
  - o Theater Arts classes share auditorium space with Drama Club and RAD (Rape, Agression, Defense) classes. Inappropriate to schedule theater arts classes at same time as RAD. Both classes oversubscribed and require specialize space
  - o Auditorium space not dividable, so cannot be used by smaller groups
  - o No direct route to auditorium from main entrance or academic classrooms
  - o Auditorium not set up to provide direct feed of televised events
  - o Auditorium common storage space used by Theater Arts classes, Drama Club, Spring Musical, and RAD classes
- No instructional space dedicated to Music
- Band room limited to fifty student capacity by fire code regulations

### **Action Items from Interim Report #1 Not Addressed**

These items from Interim Report #1 (of 3/5/15) remain to be addressed:

- C. Evaluate the effect on student outcomes of lack of meeting space for teacher-collaboration, administrative tasks and professional tasks.
- D. Develop detailed list of heating and/or ventilation issues.

E. Review 10-year plan for NRHS maintenance and capital improvements.

F. Determine how to develop reliable projection of future NRHS enrollment.

**New Action Items for Interim Report #2**

To be determined...

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