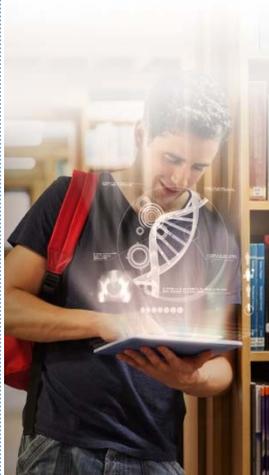




# Abington Public Schools New Co-Located PreK / Middle / High School

Schematic Design

## Community Forum Presentation



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**Abington Building Committee**

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Jannette Leary  
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# Spring 2012

The Town of Abington has  
**AN OPPORTUNITY**

to receive approximately

## **55-60% Grant from the MSBA**

to pay costs associated with a new school facility project.



Massachusetts School Building Authority

*Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities*

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## Why did the Massachusetts School Building Authority (MSBA) offer Abington a Grant opportunity?

- Overcrowding in existing Frolio Middle School and Elementary Schools.
- No Major School Project in OVER 50 YEARS.
- Age and Condition of existing building infrastructure at the Frolio Middle School and High School.
- Lack of Building Code Compliance at the Frolio Middle School and High School.
- Lack of Energy Conservation Code Compliance at the Frolio Middle School and High School.
- Lack of Structural Code Compliance at the Frolio Middle School and High School.
- Lack of Modern Technology at the Frolio Middle School and High School.
- Lack of Handicap Accessibility (Building and Site) at the Frolio Middle School and High School.
- Security issues at the Frolio Middle School and High School (proximity of Administration to Main Building Entrance).
- Undersized Classrooms and Educational Spaces.
- Undersized Media Centers and Support Areas.
- Undersized Art and Music spaces within Frolio Middle School.
- Undersized Library Media Center at the High School.
- Lack of Special Education Space.
- Lack of Student Exhibit space.
- Lack of small group work, study, and testing areas.
- Lack of adequate administration and support space.
- Lack of natural daylighting and inefficient artificial lighting.
- Lack of natural ventilation and outdated mechanical systems.
- Lack of Performance, Presentation, and Instructional Space.
- Poor and/or ineffective acoustics within the instructional classrooms and gathering spaces.
- Poorly organized High School building that deters interdisciplinary or collaborative learning.
- Frolio Middle School does not support modern middle school educational programming.
- Poorly located Library Media Center at the Frolio Middle School.
- Inadequate cooling within computer classrooms.
- Science classrooms do not meet the current national and state guidelines.
- Exterior masonry work (repainting and renovation) required at the Frolio Middle School.
- Etc., Etc., Etc.

**Where does this Grant money  
come from and has it been  
provided to other communities?**

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The money comes from  
**taxes paid by Abington residents**  
and taxpayers throughout the Commonwealth.

1¢ of the State's 6.25% Sales Tax

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# What are the initial requirements to receive a grant from the MSBA?

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Complete a comprehensive Feasibility Study in collaboration with the MSBA to determine the most fiscally responsible and educationally appropriate long-term solution.

## Spring 2012

- Annual Town Meeting and subsequent Ballot Vote -  
**The Town of Abington voted to appropriate \$450,000 to collaborate with the MSBA and complete the comprehensive Feasibility Study.**

**Over the past year,**  
Abington has been completing this comprehensive Feasibility Study  
with **very specific guidance from the MSBA.**



Massachusetts School Building Authority  
*Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities*

## **Over 4,600 collective hours**

of meetings, planning, and discussion by Abington and analysis, investigation, and reporting by the engineering, design, educational team and the MSBA!

Educational Program - Visioning Program - Building Evaluation - Structural Evaluation - Heating & Ventilation Evaluation - Haz-Mat Inspection & Report - Phase 1 Environmental Assessment - Plumbing Evaluation - Electrical Evaluation - Technology Systems Evaluation - Site Evaluation - Traffic Analysis - Geotechnical Investigations - Site Utility Review - Permitting Review - Comparison Matrix - Costs Analysis - Options Narratives - District Space Allocation Analysis - Construction Impact Review - Space Summary Spreadsheets - Sustainable Design Review

## **Over 14 potential building options studied!**

**New Construction - Renovation / Addition - Renovation - Multiple Grade Configurations**

## **Over 25 potential school sites studied!**



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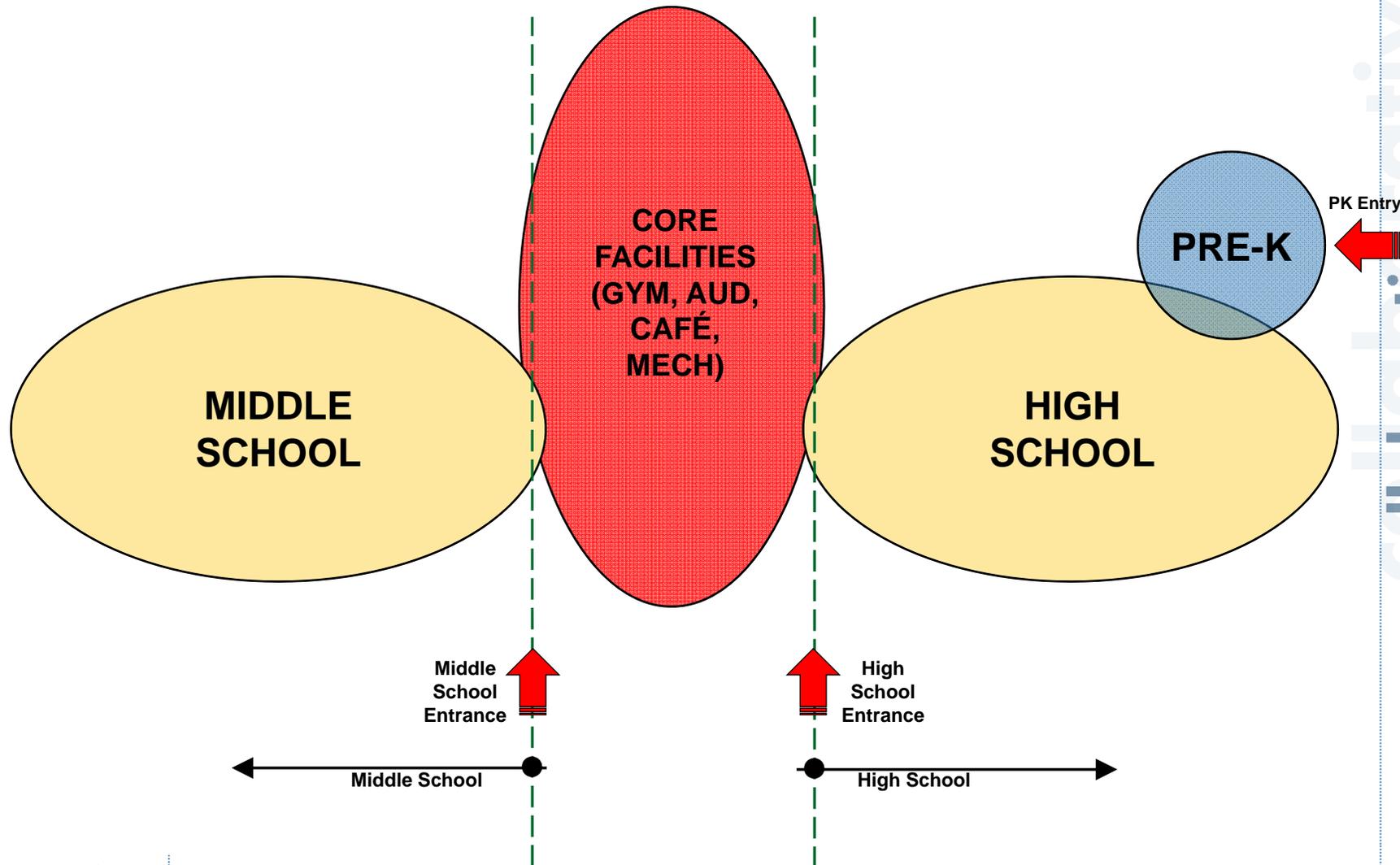
## Conclusion by Abington and MSBA:

### **A SINGLE PROJECT**

which includes a **NEW Middle School** and a **NEW High School** co-located on the existing High School site is the **most cost effective** means for **resolving Abington's school facility and educational needs** for the next **50 YEARS.**

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## What is a “Co-located” school?



PK Entry

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## What are the advantages of a co-located school for Abington?

- MSBA pays for **ONE** project on **ONE** construction site that resolves **ALL** of the District's overcrowding issues, and educational and facility deficiencies.
- A co-located 5-8 and 9-12 school with included Pre-Kindergarten offers the most district-wide benefits – resolves overcrowding.
- More academic and educational opportunities.
- New 21<sup>st</sup> Century educational spaces and facilities for Grades 5-8, 9-12, and Pre-K.
- More efficient use of building and staffing resources.
- Less cost associated with a single building.
- Relieves elementary school overcrowding by moving Grades 3 and 4 to Woodsdale and Kindergarten thru Grade 2 to Beaver Brook Elementary School.
- Closes two of the old, inefficient buildings - North School and Center Schools.
- District Administration moves to the current Frolio Middle School building.
- Maintains the Frolio Gymnasium and the associated locker facilities for Town use.

## Why was the High School site selected?



**High School Site =  
Best Site!**

- More available acreage
- All utilities available
- Already cleared and graded
- Already owned
- Central location

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## What are some of the key discoveries as a result of the Feasibility Study?

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Abington will be required to spend approximately

**\$22.1 million**

in repairs to Frolio Middle School and High School over the next few years to allow these buildings to function at a minimal level.

Repairs **DO NOT** include:

- Any new educational or community space
- Any new technology
- Reconfigured classrooms
- New finishes
- A 750 seat Auditorium
- Appropriately sized instructional classrooms
- Appropriately structured multi-purpose play fields
- Overcrowding in existing Frolio Middle School and Elementary Schools
- No Major School Project in OVER 50 YEARS
- Resolving the age and Condition of existing building infrastructure at the Frolio Middle School and High School
- Energy Conservation Code Compliance at the Frolio Middle School and High School
- Security issues at the High School (proximity of Administration to Main Building Entrance)
- Overcoming undersized Classrooms and Educational Spaces
- Overcoming undersized Media Centers and Support Areas
- Overcoming undersized Art and Music spaces within Frolio Middle School
- Overcoming undersized Library Media Center at the High School
- Any new Special Education Space
- Any new Student Exhibit Space
- Any new small group work, study, and testing areas
- Any new administration and support space
- Natural daylighting improvements
- Any new Performance, Presentation, and Instructional Space
- Updated acoustics within the instructional classrooms and gathering spaces
- Poorly organized High School building that deters interdisciplinary or collaborative learning
- Poorly located Library Media Center at the Frolio Middle School
- Exterior masonry work (repointing and renovation) at the Frolio Middle School

**\*\*\* Once renovation costs exceed 30% of the full assessed value of the building, 100% full code compliance is required. \*\*\***

## Why is new construction preferred over renovation / addition?

### Renovation / Addition

#### 42-48 months - Construction Duration

- Phased Occupied Construction
- More significant and frequent noise disruptions
- More significant and frequent visual distractions
- More significant and frequent service interruptions
- More significant and frequent air quality control issues
- More significant and frequent dust control issues
- More significant and frequent scheduling interruptions
- More significant and frequent building system service interruptions
- Greater potential for interactions between faculty and students with construction personnel
- More significant security measures required within the existing building due to construction activity
- More significant unknowns or unanticipated conditions during construction
- Safety concerns regarding removal of hazardous materials while school is occupied by students
- Less efficient building footprint and envelope
- Potential compromises in security implementation
- Goals of educational visioning and program compromised
- More costly construction
- Higher long-term operational costs
- Compromises in educational layout for the building
- Compromises in the organization for co-location of Middle School and High School.

### New Construction

#### 30-36 months - Construction Duration

- Minimize noise disruptions
- Minimize visual distractions
- Minimize service interruptions
- Minimize air quality control issues
- Minimize dust control issues
- Minimize scheduling interruptions
- Minimize building system service interruptions
- Minimize interactions between faculty and students with construction personnel
- Minimize security measures required within the existing building due to construction activity
- Less unknowns or unanticipated conditions during construction
- Most efficient building footprint and envelope
- Best adjacencies of programmatic areas
- Better able to meet the goals of educational visioning and program
- Less costly
- Able to provide separate dining space for Middle School and High School
- More economical long-term operational costs
- Better educational layout for the building
- Better organization for middle school teaming
- Better organization for co-location of Middle School and High School
- Better organization for sharing of key resources between Middle and High schools.

VS.

Renovation / Addition is approx. **\$8M MORE** than New Construction.

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## Why are the Renovation costs so significant?

### Renovation work triggers:

- 100% Accessibility requirements within an existing building with multiple floor elevations.
- Seismic / Structural Modifications
- Energy Code Compliance
- Demolition to remove / upgrade plumbing, electrical, mechanical, and fire protection systems.
- Asbestos and hazardous material abatement
- Extended construction time period associated with Phased Occupied Construction

## Opportunity for Consolidation of facilities and grade configurations.

<b>Current Buildings</b>		<b>Proposed Solution</b>	
Center School	PreK - K	Beaver Brook Elementary School	K - 2
Beaver Brook Elementary School	1-4	Woodsdale Elementary School	3-4
Woodsdale Elementary School	5-6	New co-located Middle / High School with Pre-Kindergarten	5-8, 9-12 w Pre-K
Frolio Middle School	7-8	Frolio Middle School (District Administration)	Admin.
Abington High School	9-12		
North School	Admin.		

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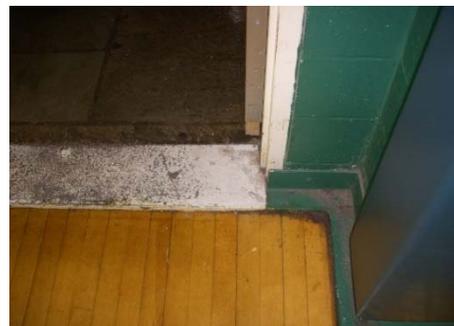
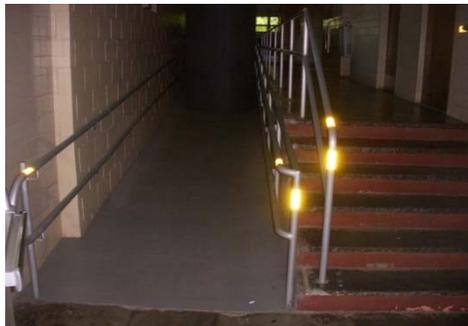
## Frolio Middle School has many deficiencies:



- Classrooms are undersized and expansion is not practical.
- 675 SF classrooms existing vs. minimum acceptable of 850 SF classrooms.
- Security and safety are inadequate.
- Lacks many necessary educational program areas such as:
  - Technology application labs
  - Small group instruction rooms
  - Student presentation space
  - Special education support
  - Teacher planning, collaboration, and work areas
  - Large group instruction seminar space
- 2-acre site lacks parking and sufficient areas for safe student arrival and departure.
- Inferior educational environment
  - Poor ventilation
  - Inadequate lighting
  - Inadequate educational technology
  - Basement level instructional space
  - Inadequate dining areas

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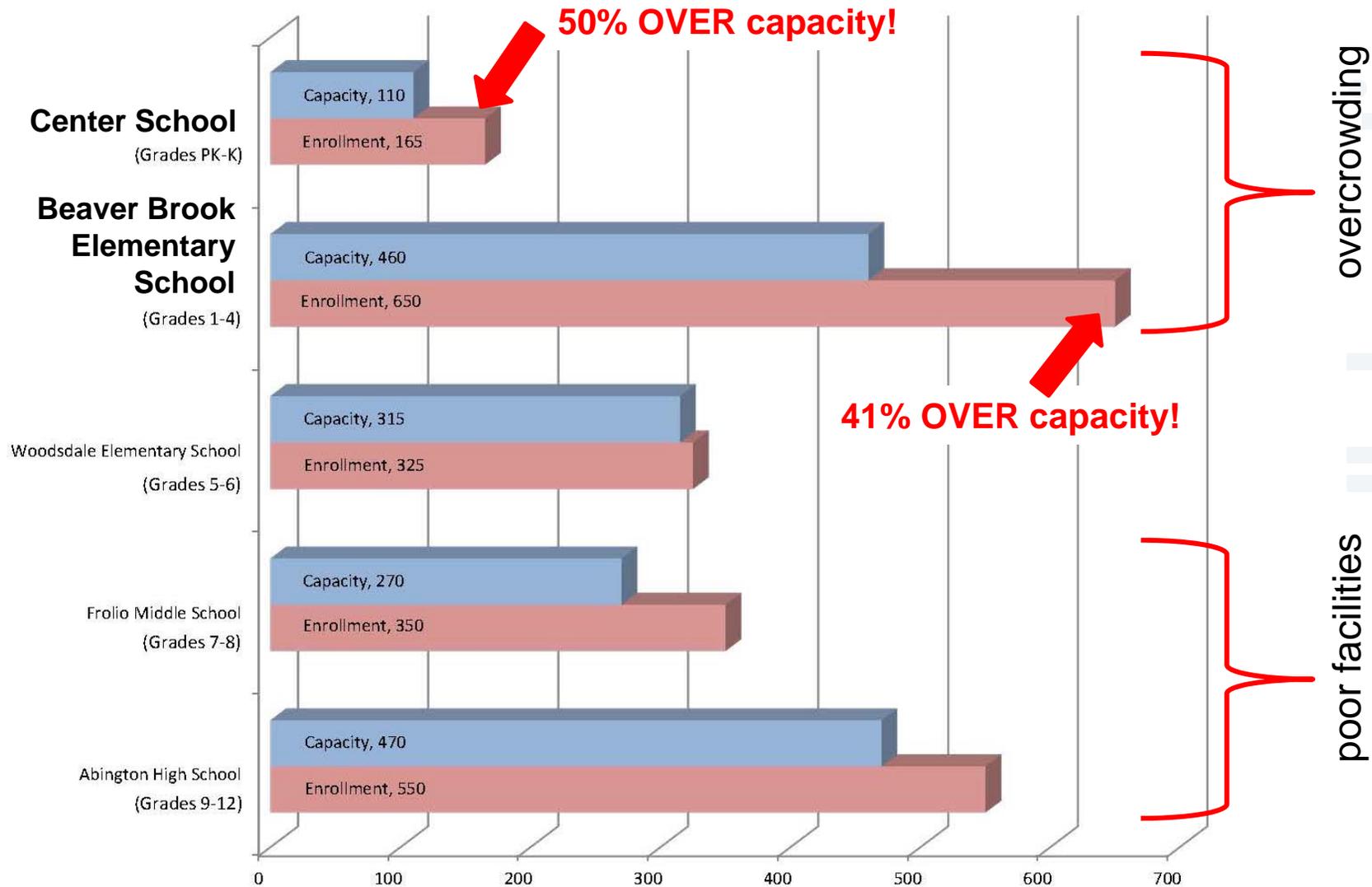
## Abington High School has many deficiencies:



- Classrooms are undersized and expansion is not practical.
- 710 SF classrooms existing vs. minimum acceptable of 825 SF classrooms.
- Security and safety are inadequate.
- Lacks many necessary educational program areas such as:
  - Technology application labs
  - Group performance and presentation space
  - Modern music and art labs
  - Appropriate video production and broadcasting facilities
  - Modern science and engineering labs
  - Testing, tutorial, and small group instruction rooms
  - Interdisciplinary instruction opportunities
  - Appropriate health and fitness space
  - Teacher collaboration and work areas
  - Student exhibit space
- Inferior educational environment
  - Poor lighting
  - Poor ventilation
  - Poor acoustics
  - Lack of modern technology

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## Overcrowding and poor facilities:



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## Educational Benefits of a New Facility: The Classroom



In the 1930's and 1950's, students were organized in rows and directed to observe as the teacher provided instruction at the front of the classroom. Abington's schools were designed to support this approach.

# Abington Public Schools New Co-located PreK / Middle / High School

Schematic Design



TODAY, students are organized in groups and teams and are encouraged to collaborate on projects as they learn through experience and communication with others.

They are provided access to multiple technology resources in order to cover more material at a faster pace than ever before.....utilizing laptops, wireless data access, interactive white boards, etc.

### Today's Classroom:

Larger  
Better acoustics  
Better ventilation

Better lighting (natural and artificial)  
More technology

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# Abington Public Schools New Co-located PreK / Middle / High School

Schematic Design



Abington High School and Frolio Middle School teachers and students have worked hard to adapt within the 1930's and 1950's facilities, but these classrooms lack many of the advantages of a modern classroom.

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# Abington Public Schools New Co-located PreK / Middle / High School Schematic Design



Rockland Middle School



East Bridgewater Co-located Middle / High School



Hanover High School



Marshfield High School

## Abington tour of local projects....



East Bridgewater Co-located Middle / High School



Marshfield High School



Hingham Middle School



Marshfield High School

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# Abington Public Schools New Co-located PreK / Middle / High School

Schematic Design



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# Abington Public Schools New Co-located PreK / Middle / High School

## Schematic Design



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# Abington Public Schools New Co-located PreK / Middle / High School

## Schematic Design

### Each school (Middle School/High School) will have:

- Separate educational wings
- Separate on site bus routes
- Separate primary entrances into the building
- Separate on site parking areas
- Different start / end time as it occurs now.
- Separate cafeteria seating areas adjacent to respective educational wing
- Separate gymnasium and locker room facilities
- Separate Nurse, administration and guidance

### Pre-Kindergarten will have:

- Separate entrance and administration
- Designated parking area
- Separate outdoor play area
- Separate educational wing of the building
- Dedicated Van staging area and entrance into Pre-K wing of the building



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**Estimated Total Project Cost:**

**\$96** million

**Approximate cost to the Town of Abington:**

**\$43-46** million

**Approximate cost to the “average” taxpayer:**

**\$2.13** per \$1,000 of assessed value

OR

**\$600** per year (\$281,145 assessment)

(\$150 per quarterly tax bill – starting in year 2017 or 2018)

- This amount will then DECREASE every year thereafter -

- Other existing town debt exclusions will be paid off by 2017 (Town Office/Library/Sewer) -

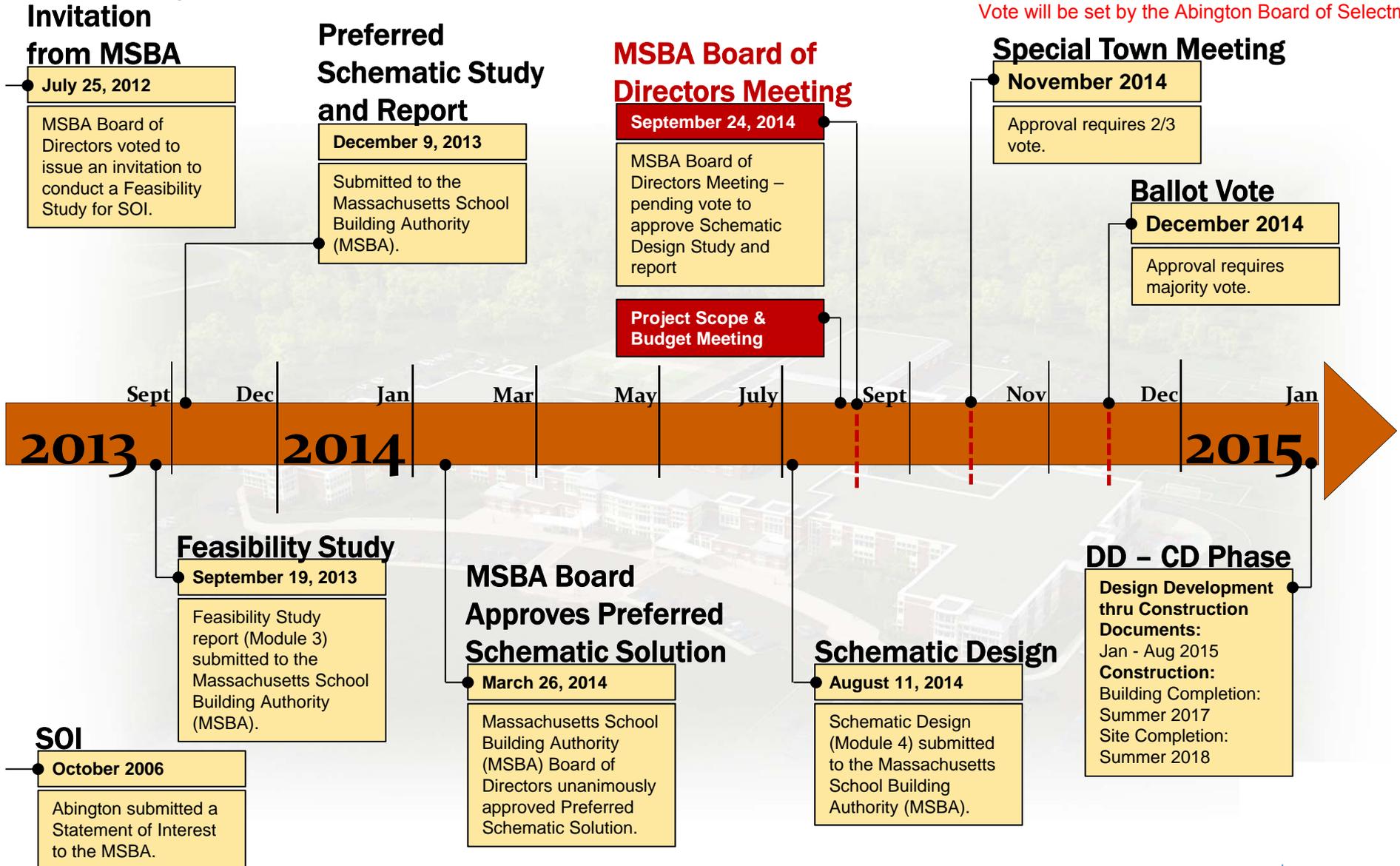
- Approximately 2/3 of homeowners will pay LESS than the above estimate, while 1/3 of the homeowners will pay MORE -

\*\* Detailed cost estimates and specific tax information will be available before the 2014 Special Town Meeting \*\*

# Abington Public Schools New Co-located PreK / Middle / High School

Schematic Design

NOTE: Exact dates for Special Town Meeting and Ballot Vote will be set by the Abington Board of Selectmen



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## Project Timeline

May 22, 2014

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# Questions/Comments?

For more info, please go to:

[www.ASBC.us](http://www.ASBC.us)

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Richard Testa at 781-857-2135