

# FULLER MIDDLE SCHOOL FEASIBILITY STUDY

School Committee Meeting  
March 12, 2018

# Agenda

1. Introductions
2. Process and Schedule
3. Existing School Conditions
4. Educational Programming
5. Pre-Concept Options
6. Next Steps
7. Questions

# Feasibility Study Scope, Process and Schedule

# Feasibility Study Scope

- **MSBA** is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.
- **MSBA** mandates a multi-step rigorous study and approval process
- **MSBA** requires formation of a School Building Committee to oversee the study and project on behalf of the community

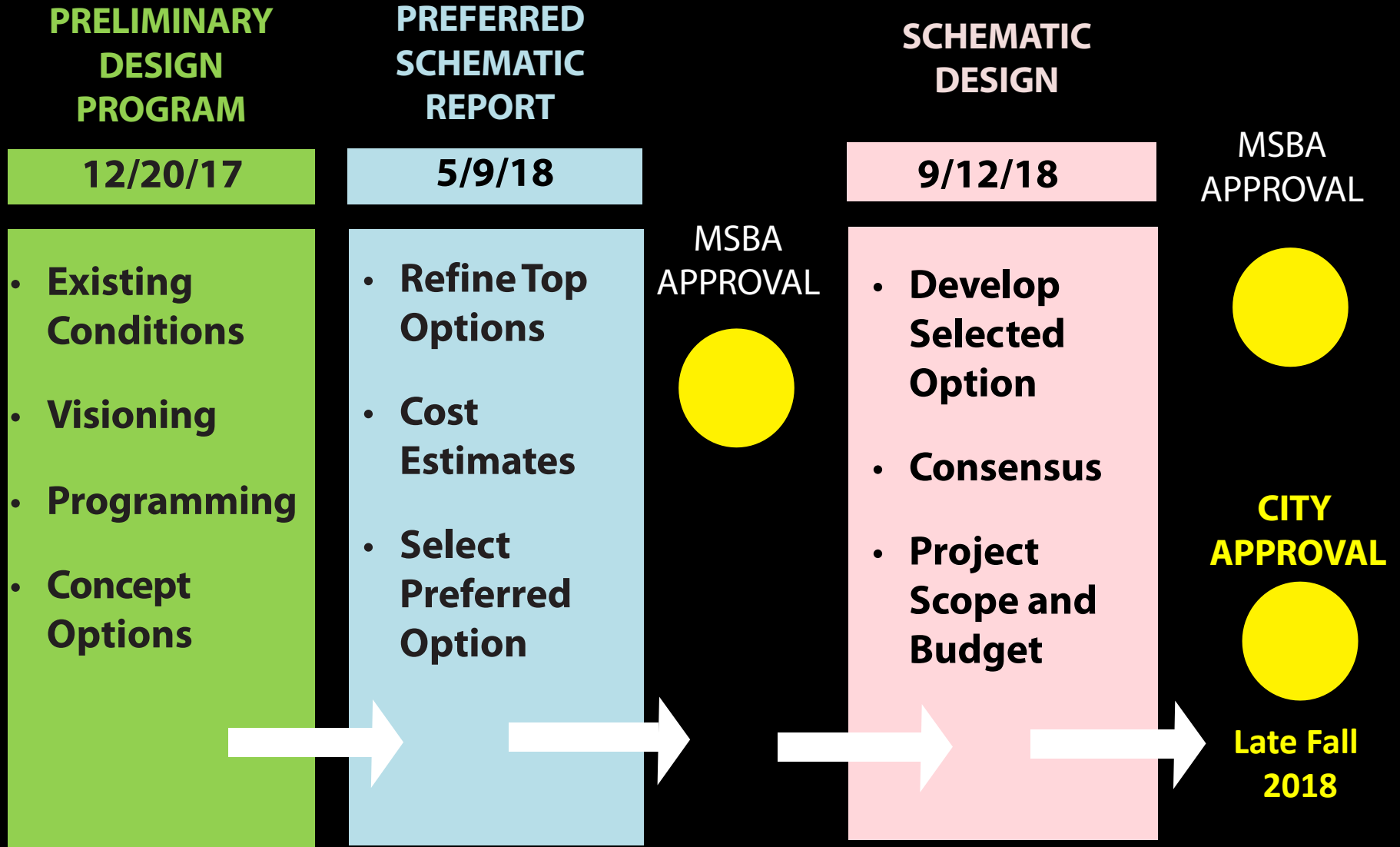
# Feasibility Study Scope

The MSBA has agreed to participate with Framingham in a feasibility study for a **630 Student Middle School for Grades 6-8.**

Study Scope includes:

- Existing Conditions Review
- Educational Program
- Design Alternatives
  - Renovation
  - Renovation / Addition
  - All New Construction
- Cost Estimates

# MSBA Feasibility Study Process and Schedule



# Completed Project Milestones

February 2013      Pre-Feasibility Study Completed

November 2015   Framingham Submits Proposal to MSBA

April 2016        Historic Enrollments Study Completed

June 2016        K-8 Educational Visioning Completed

October 2016     Framingham Town Meeting approves  
Feasibility Study Funding

December 2016   Framingham and MSBA Agree on  
Student Design Enrollment

February 2017    MSBA Invites Framingham to  
Feasibility Study

# Completed Project Milestones

June 2017                      Framingham Retains Owner's  
Project Manager

September 2017              Framingham Retains Architect

November 13, 2017      Community Forum No. 1

November 27, 2017      Community Forum No. 2

December 20, 2017      Preliminary Design Program  
Submitted to MSBA

February 6, 2018              Presentation to City Council

February 12, 2018          Community Forum No. 3



# Defining the Need

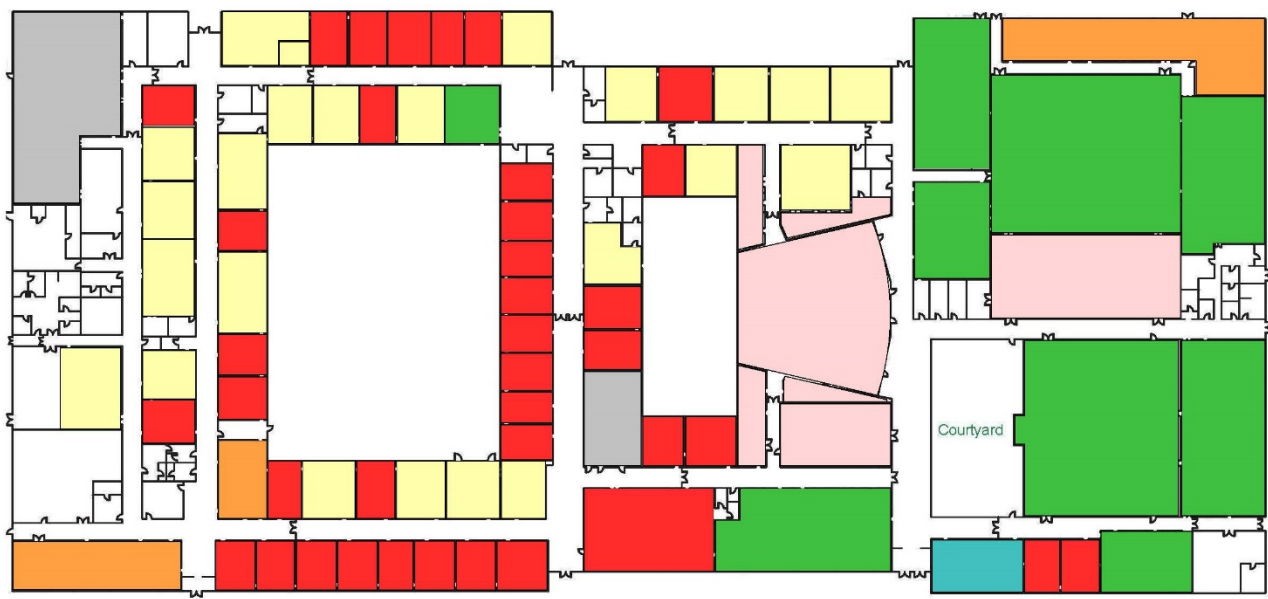
## The Need:

- Need a long-term solution to resolve deteriorating school building
- Provide educational spaces to meet MSBA standards
- Update the layout to meet 21st century Visioning Session goals

## The Goal

- Cost Effective, Sustainable and Educational Appropriate School with the least impact to the ongoing education of the students

# EDUCATIONAL DEFICIENCIES



- BETWEEN 90% - 110% MSBA GUIDELINE
- MORE THAN 110% MSBA GUIDELINE
- LESS THAN 90% MSBA GUIDELINE
- NOT IN MSBA PROGRAM
- OUTSIDE PROGRAMS

1

FULLER SCHOOL - MSBA SPACE NEEDS COMPLIANCE

1" = 60'-0"

# PHYSICAL BUILDING DEFICIENCIES

Energy Code

Envelope

Accessibility

Structural

Mechanical, Electrical and  
Plumbing Systems

Hazardous Materials



# Educational Programming

Fuller Middle School is in its fourth year of STEAM (Science, Technology, Engineering, Arts and Mathematics)

- Transdisciplinary Instruction – Connect multiple content areas by linking concepts and skills with a real-world context. Encourage and support Inquiry.
- Personalized and Collaborative Learning – Teach students to take charge of their own learning with “hands-on” projects that can correspond with their interests and needs.
- Whole Child, Whole Community – Actively support emotional and social foundations to improve academic success.

## DESIGN PRINCIPALS

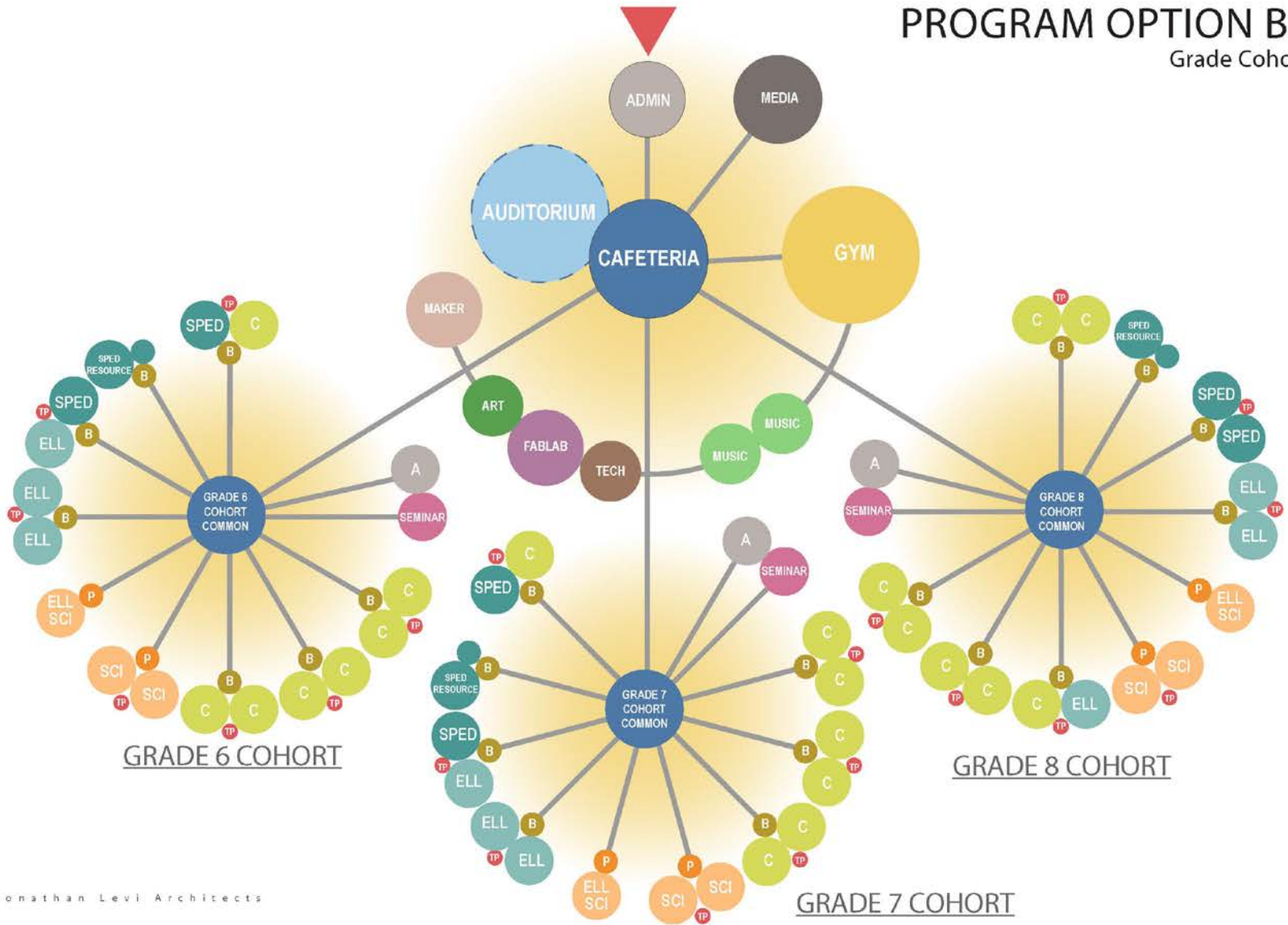
- Visible Learning – Inspire students to learn from each other through student collaboration, presentations, demonstrations, and ongoing works-in-progress.
- Community and Civic Hub – Continue existing use as central location for meetings, adult learning, school productions and recreational activities.
- Adaptability – This building will need to meet Framingham’s future needs, so must be versatile enough to accommodate different teaching methods, including traditional ones.

# Preliminary Design Options

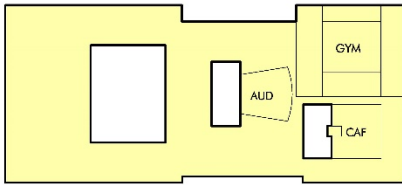


# PROGRAM OPTION B.2

Grade Cohorts

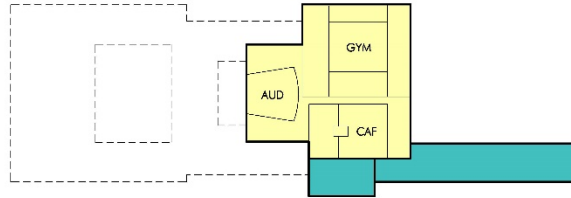


# Alternatives



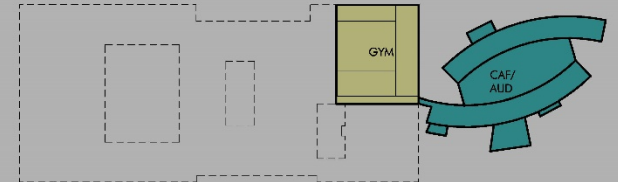
## OPTION 0.0 - EXISTING

0.0 'Repair Existing': Minimum required repairs and code upgrades to the existing structure



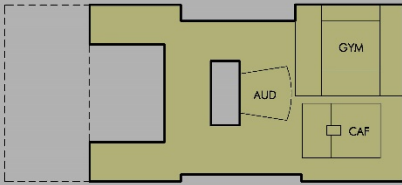
## OPTION A - ADD/RENO

A 'Addition/Renovation': Retention and Upgrade of existing auditorium, gymnasium/locker and cafeteria areas. Conversion of existing cafeteria to multi-use dining and learning. Addition of new attached two story classroom and administration wing at front and east of existing cafeteria. Swing space required.



## OPTION C.1 - FOLDED HANDS ADD/RENO

C.1 'Folded Hands Addition/Renovation': Retention and renovation of existing gymnasium/locker room only. Remaining scope to be attached new three story split level entry construction with stepped convertible commons/auditorium/cafeteria and balcony-accessed classrooms. Occupied phased construction required.



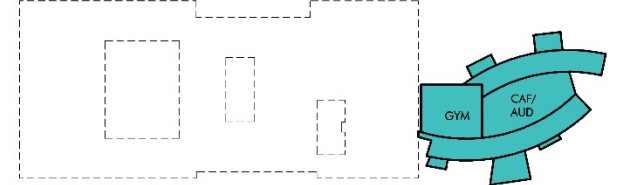
## OPTION 0.1 - ADD/RENOVATION

0.1 'Addition/Renovation': Partial demolition of surplus floor areas and complete gut renovation and reconstruction of remaining areas to meet code and to address, as best as possible, the educational program. The later includes conversion of the existing cafeteria into a multi-use dining and learning space. Swing space required.



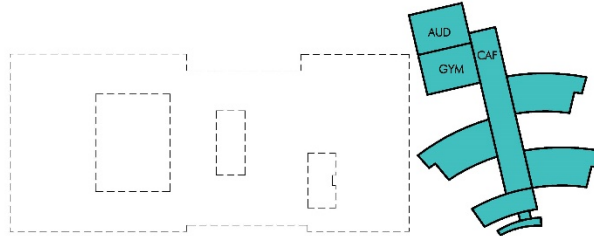
## OPTION B.1 - TREE BRANCHES ADD/RENO

B.1 'Tree Branches Addition/Renovation': Retention and renovation of existing auditorium and gymnasium/locker room. Remaining scope to be attached new two story construction with central learning commons/cafeteria spine and branching academic wings and courtyards. Swing space required.



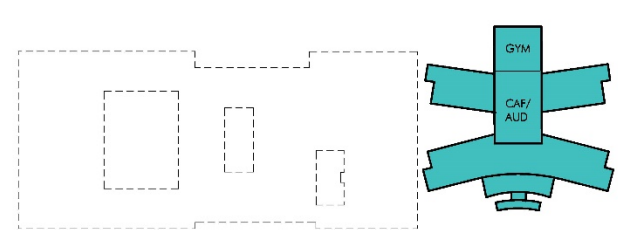
## OPTION C.2 - FOLDED HANDS

C.2 'Folded Hands New Construction': New three story split level entry construction with stepped convertible commons/auditorium/cafeteria and balcony-accessed classrooms. New construction located in existing parking. No swing space or occupied construction required.



## OPTION B.2 - TREE BRANCHES

B.2 'Tree Branches New Construction': New two story construction with central learning commons/cafeteria spine, new replacement sloped-floor auditorium and branching academic wings and courtyards. New construction located in existing parking. No swing space required.



## OPTION D - BUTTERFLY

D 'Butterfly': New two story construction with classroom wings radiating off stepped convertible commons/auditorium/cafeteria/gymnasium. New construction located in existing parking. No swing space or occupied construction required.

# Pre-Concept Alternatives Evaluation Matrix

## FULLER MIDDLE SCHOOL Pre-Concept Options Evaluation Matrix

### RATINGS:

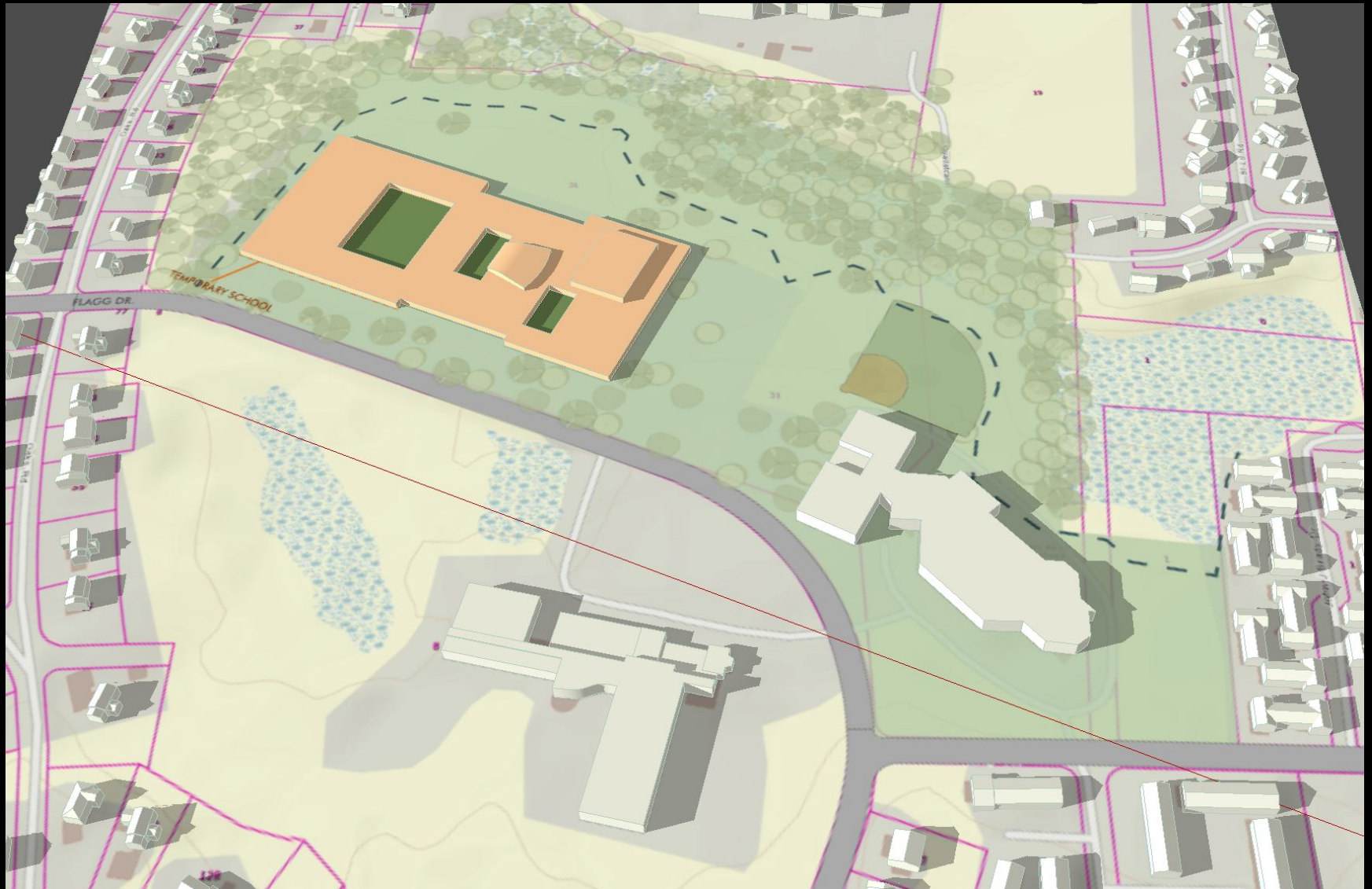
+	Advantageous
-O-	Neutral
-	Disadvantageous
--	Very Disadvantageous

 Voted to be Removed from Consideration by School Building Committee

	Option 0.0 Repair to Code Baseline	Option 0.1 Renovation	Option A Add / Reno With Auditorium	Option B.1 Tree Branch Add / Reno	Option B.2 Tree Branch New Constr. With Auditorium	Option C.1 Folded Hands Add / Reno	Option C.2 Folded Hands New Constr. No Auditorium	Option D Butterfly New Constr. No Auditorium	Comments
<b>Project Criterion</b>									
Total Project Cost	--	--	-	-	+O-	-	+	+	See costs below
Schedule	--	--	-	-	+	+	+	+	Renovation options will require phasing and additional construction time. Swing space requires additional time
Swing Space or Occupied Construction	--	--	-	-	+	+	+	+	New school outside existing footprint requires no swing space
Construction Impact to Education	--	--	-	-	+	-O-	+	+	Swing space will be disruptive and smaller than current Fuller use
Construction Impact to Campus and Neighbors	-O-	-O-	-O-	-O-	-O-	-O-	-O-	-O-	Swing space / trailers will be disruptive to neighbors. New Construction on east will require temporary parking
Educational Program Accommodation	--	-	-O-	+	+	+	+	+	Options vary on ability to provide 3 appropriate cohort locations and identity
Flexibility	--	-	-	+	+	+	+	+	New construction would be designed for flexible use and improved MEP accessibility
Open Space /Building Massing / Footprint	--	-	-	-O-	+	-O-	+	+	Options built on east parking would open very large and flexible open area on existing Fuller footprint
Academic Campus Coordination	-	-	-	+	+	+	+	+	Locating Fuller closer to Farley and McCarthy improves ability to create identifiable campus
Natural Light and Views	--	--	-O-	-O-	+	+	+	+	"Pancake" massing creates interior rooms with limited access to windows
Risk	--	--	-	-	+	-O-	+	+	Options requiring renovation and/or swing space have more inherent risk due to unforeseen conditions
Community Use	-O-	+	+	+	+	+	+	+	All alternatives allow community use. New Construction options allow increased access to playfields.
Total GSF	195,000	163,000	160,000	164,000	155,000	149,000	145,000	145,000	
Swing Space Cost (\$Million)	\$6	\$6	\$6	\$6	\$0	\$0	\$0	\$0	Option 0 and 0.1 would require swing space at Farley. Options A and B.1 could have swing space in Fuller. Other options require no swing space.
Order of Magnitude Project Cost (\$Million)	\$125	\$123	\$114	\$116	\$95	\$107	\$89	\$89	This existing building is particularly expensive to renovate due to its construction assembly and degree of deterioration
MSBA Share	\$0	\$53	\$49	\$50	\$40	\$45	\$41	\$41	
Framingham Share	\$131	\$76	\$71	\$72	\$55	\$62	\$48	\$48	

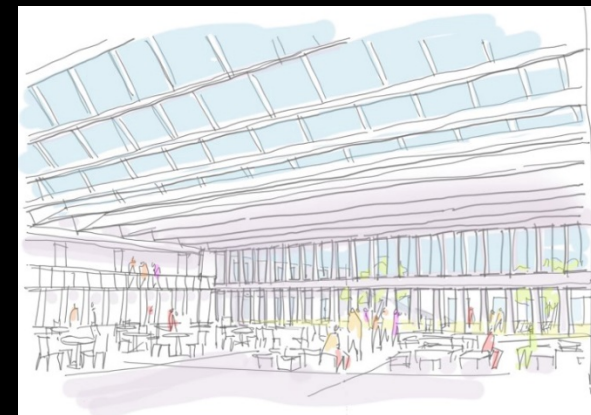
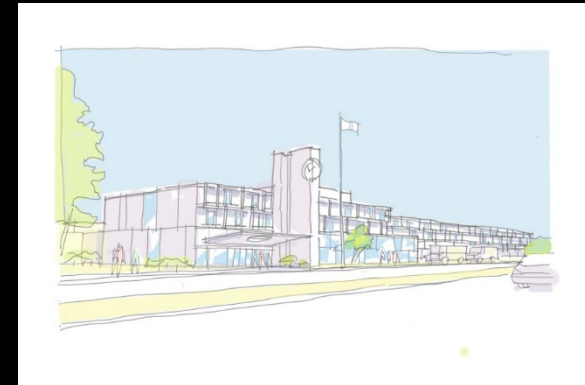
# Pre-Concept Alternatives

## Option 0.0 – Renovation Existing Fuller renovated to full code compliance



# Pre-Concept Alternatives

Option A - Renovation / Addition Renovation of Existing Gym and Auditorium.  
Remainder of Building Demolished and Replaced with New Construction



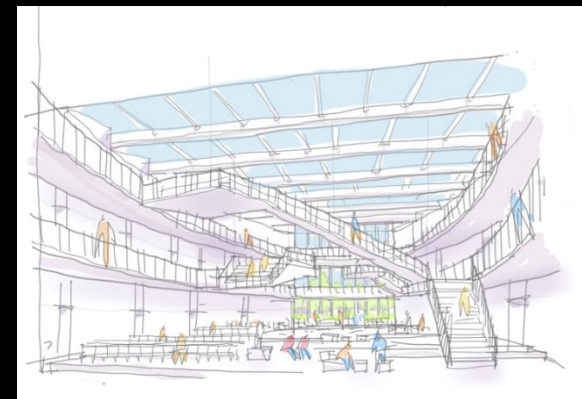
# Pre-Concept Alternatives

## Option B.2 - New Construction With new Auditorium



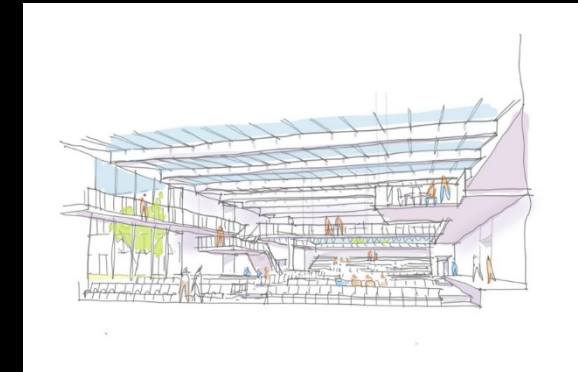
# Pre-Concept Alternatives

## Option C.2 – New Construction Building Demolished and Replaced with New Construction



# Pre-Concept Alternatives

## Option D – All New Construction





# Preliminary Cost Analysis

# State Reimbursement

- **MSBA** will reimburse all Eligible Costs, at a Base Rate of **57.05%** plus incentive points for an approved project if accepted by the voters of Framingham
- Example of Ineligible Costs include:
  - Site Costs over 8%
  - Building Costs over \$333/SF
  - Asbestos Flooring abatement
  - FF&E/Technology costs over \$2,400 per student
  - Legal Fees, Moving Expenses, construction contingencies over 1% for new construction or 2% for renovation
  - Temporary Swing space
  - Auditoriums in Middle Schools

# State Reimbursement Incentives

The MSBA provides incentives to reimburse up to an estimated additional **4.48% to 6.25%** of eligible costs. The incentives fall under the following categories:

- Energy Efficiency (2%)
- Renovation (1.77%)
- Maintenance Programs (1.48%)
- CM at Risk project delivery (1%)

# Preliminary Cost Analysis

	<u>Option 0.0</u> Repair to Code Baseline	<u>Option A</u> Add / Reno  With Auditorium	<u>Option B.2</u> Tree Branch New Constr.  With Auditorium	<u>Option C.2</u> Folded Hands New Constr.  No Auditorium	<u>Option D</u> Butterfly New Constr.  No Auditorium
Swing Space Cost (\$Million)	\$6	\$6	\$0	\$0	\$0
Order of Magnitude Project Cost (\$Million)	\$125	\$114	\$95	\$89	\$89
MSBA Share	\$0	\$49	\$40	\$41	\$41
Framingham Share	\$131	\$71	\$55	\$48	\$48

# NEXT STEPS

School Building Committee to continue to refine the Design Options and Costs. The SBC meetings are every two weeks. Meetings and agendas are posted on the FPS website.

- School Committee Meeting – March 7, 2018
- April 2, 2018 – Community Forum #4
- April 17, 2018 – Follow-up City Council Meeting
- [April 25, 2018 – Follow-up School Committee Meeting](#)
- May 9, 2018 – Submit Preferred Schematic Report (PSR) to MSBA
- September 12, 2018 - Submit Schematic Report (SD) to MSBA
- October 31, 2018 - MSBA board meeting to approve project
- Late Fall 2018 – City appropriation voting

# Community Resources

Project Website:

[www.fullerbuildingproject.com](http://www.fullerbuildingproject.com)

# Questions and Comments