FULLER MIDDLE SCHOOL FEASIBILITY STUDY

Finance Subcommittee

October 10, 2018

Agenda

1. Introduction and Project Need
2. The Design: Site and Building
3. Benefits to the Students and Community
4. Schedule and Cost
5. Important Dates
6. Questions

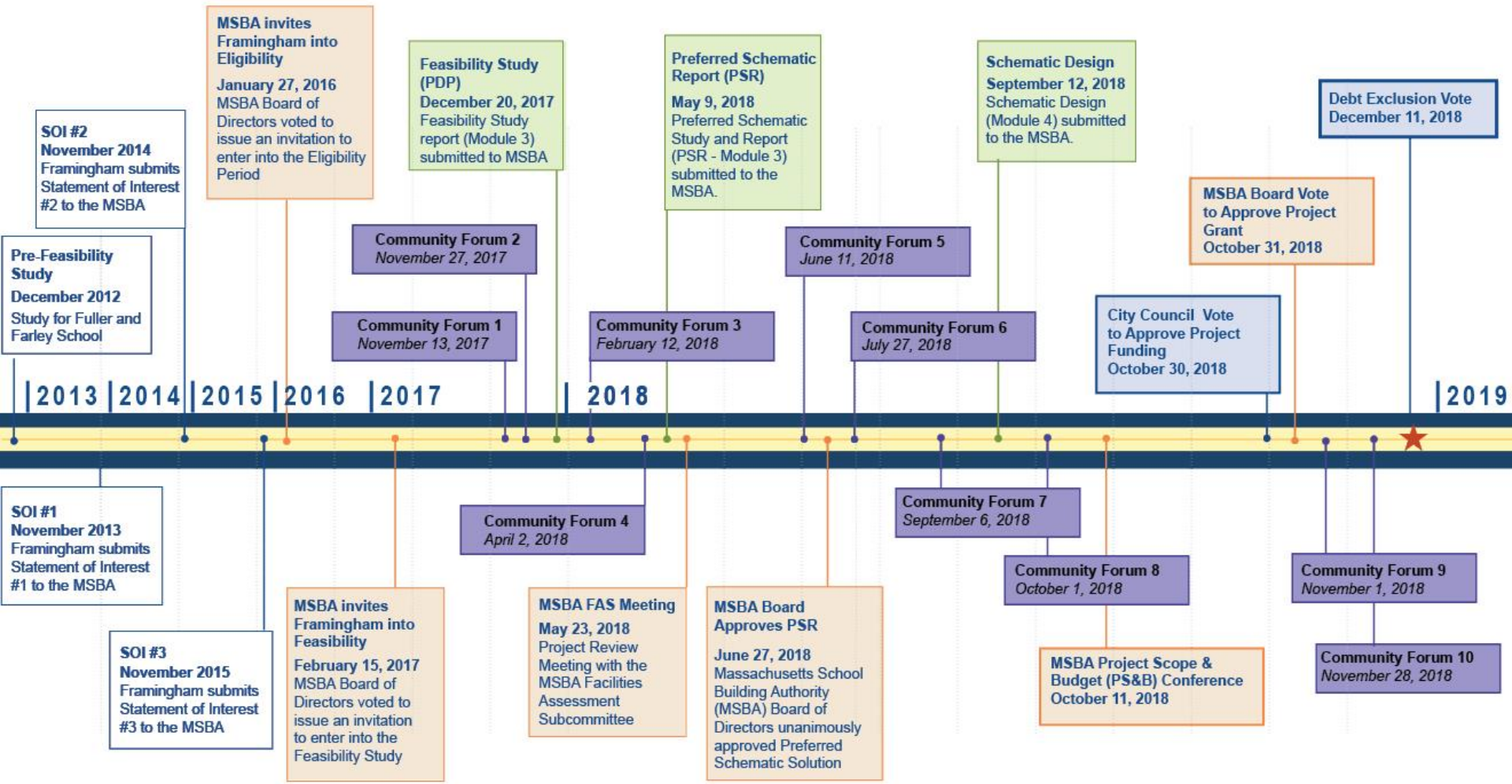
SCHOOL BUILDING COMMITTEE MEMBERS

Dr. Yvonne Spicer	Mayor
David Miles	Co-Chair, Resident with Finance Experience
Dr. Edward Gotgart	Co-Chair, Chief Operating Officer, FPS
Thatcher Kezer, III	Chief Operating Officer
Adam Freudberg	School Committee Chair
Dr. Robert Tremblay	Superintendent of Schools
Charlie Sisitsky	City Council Member
Richard Finlay	School Committee Member and Convenor
Noval Alexander	School Committee Member
Scott Wadland	School Committee Member
Mary Ellen Kelley	Chief Financial Officer
Jennifer Pratt	Chief Procurement Officer
Heather Connolly	Former School Committee Chair
Matt Torti	Director of Buildings and Grounds, FPS
Anne Ludes	Director of Secondary Education

SCHOOL BUILDING COMMITTEE MEMBERS

Jose Duarte	Principal, Fuller Middle School
Caitlin Stempleski	Teacher, Fuller School Middle
Patrick Johnson	Principal, Walsh Middle School
Michael Tusino	Building Commissioner
Richard Weader II	Member
Michael Grilli	Member
Dr. Jennifer Krusinger Martin	Member
Donald C. Taggart III	Member
David Panich	Member
Thomas Barbieri	Member
Dr. Dale Hamel	Member

SIX YEARS OF PLANNING



HOW WE GOT HERE

- The Fuller Middle School is an aged facility that requires significant upkeep, spending which will not result in long-term educational benefits.
- Framingham submitted its initial application to MSBA for a grant in November 2013.
- The MSBA receives approximately 120 grant applications for capital projects annually, of which approximately 10 are approved annually.
- Framingham residents voted to approve the Feasibility Study funding at its October 18, 2016 Special Town Meeting.

OPEN, TRANSPARENT AND PUBLIC PROCESS

For the past 18 months, public meetings have included:

- **27 School Building Committee Meetings**
- **8 Community Forums**
- **4 City Council Meetings**
- **4 School Committee Meetings**
- **2 Public Presentations at Library**
- **1 Public Hearing at ZBA**
- **1 Neighborhood Meeting**

Project Website:
www.fullerbuildingproject.com

EDUCATIONAL DEFICIENCIES

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

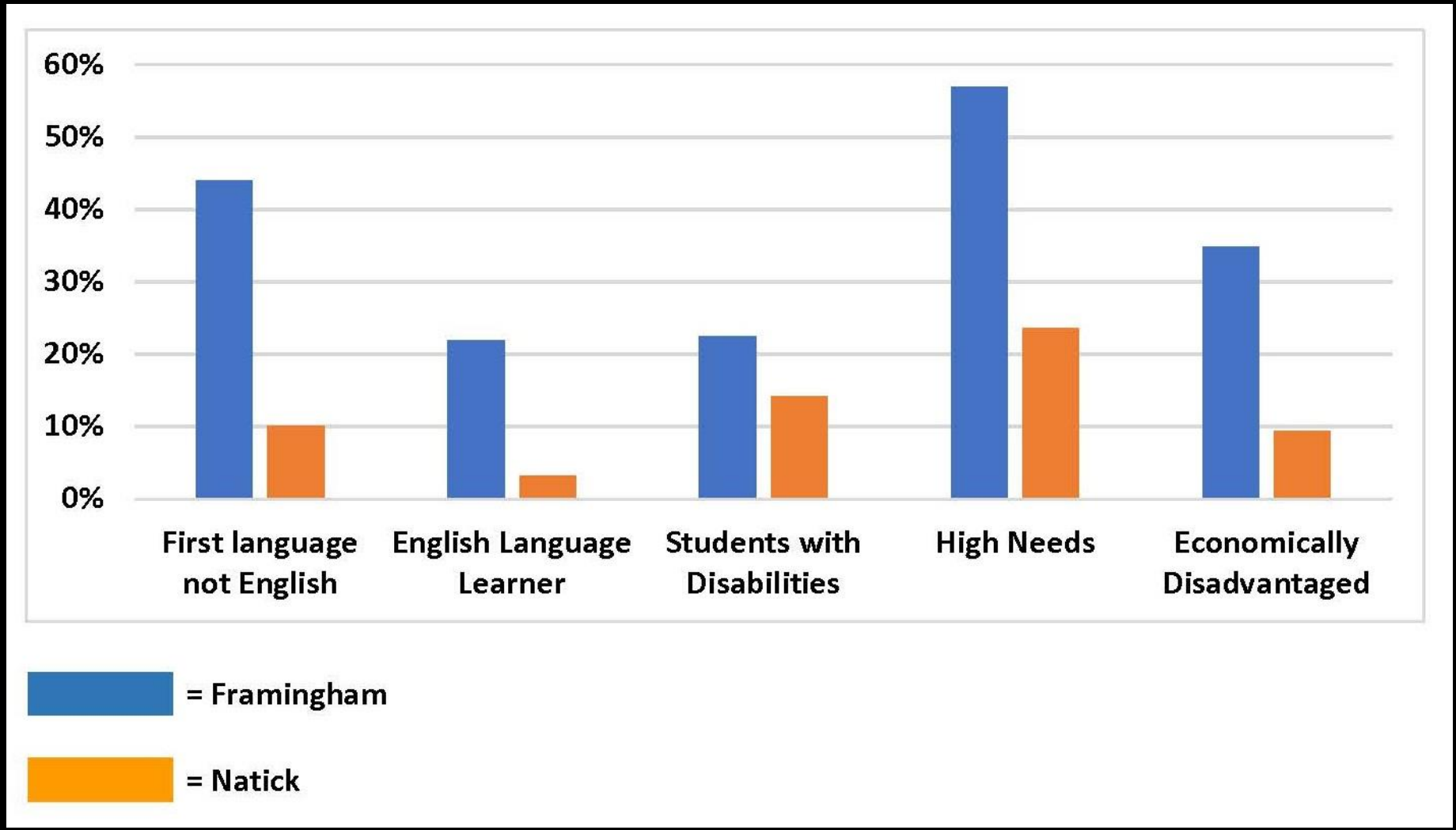
DESIGN ENROLLMENT

- The MSBA initially provided an enrollment cap of 580 students, based on their demographic projections.
- FPS successfully appealed, and persuaded the MSBA that an enrollment of 630 students in grades 6-8 is appropriate
- 630 students is a good and supportable number
- Now established, the MSBA does not allow further renegotiation of the enrollment figure
- Current design allows flexibility to support more than 630 students

VISIONING HIGHLIGHTS

- Personalized and Collaborative Learning
- Transdisciplinary Instruction
- Visible Learning
- Adaptability
- Whole Child, Whole Community
- Community and Civic

FRAMINGHAM DEMOGRAPHICS – ILLUSTRATIVE COMPARISON

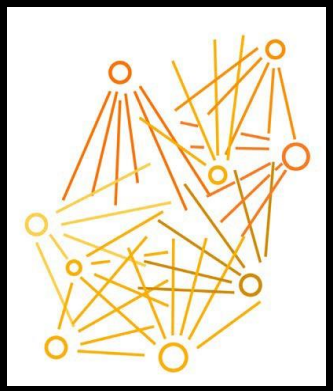


Source: Mass Dept of Elementary and Secondary Education

TRANSLATING THE EDUCATIONAL PROGRAM INTO SPACE PLANNING

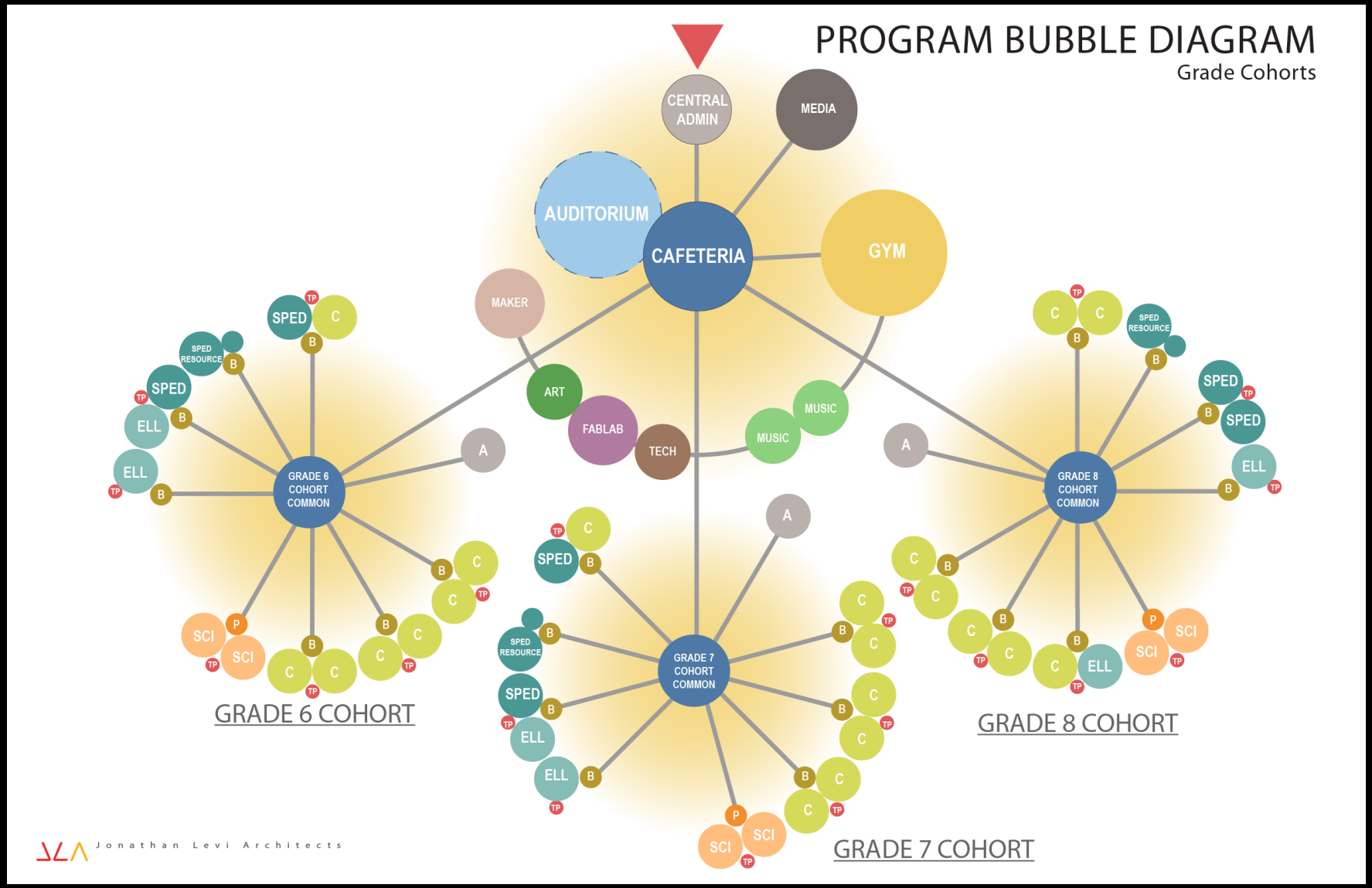
Fuller Middle School 21st Century Teaching and Learning

Student Driven, Web Complimentary, Collaboration-Based

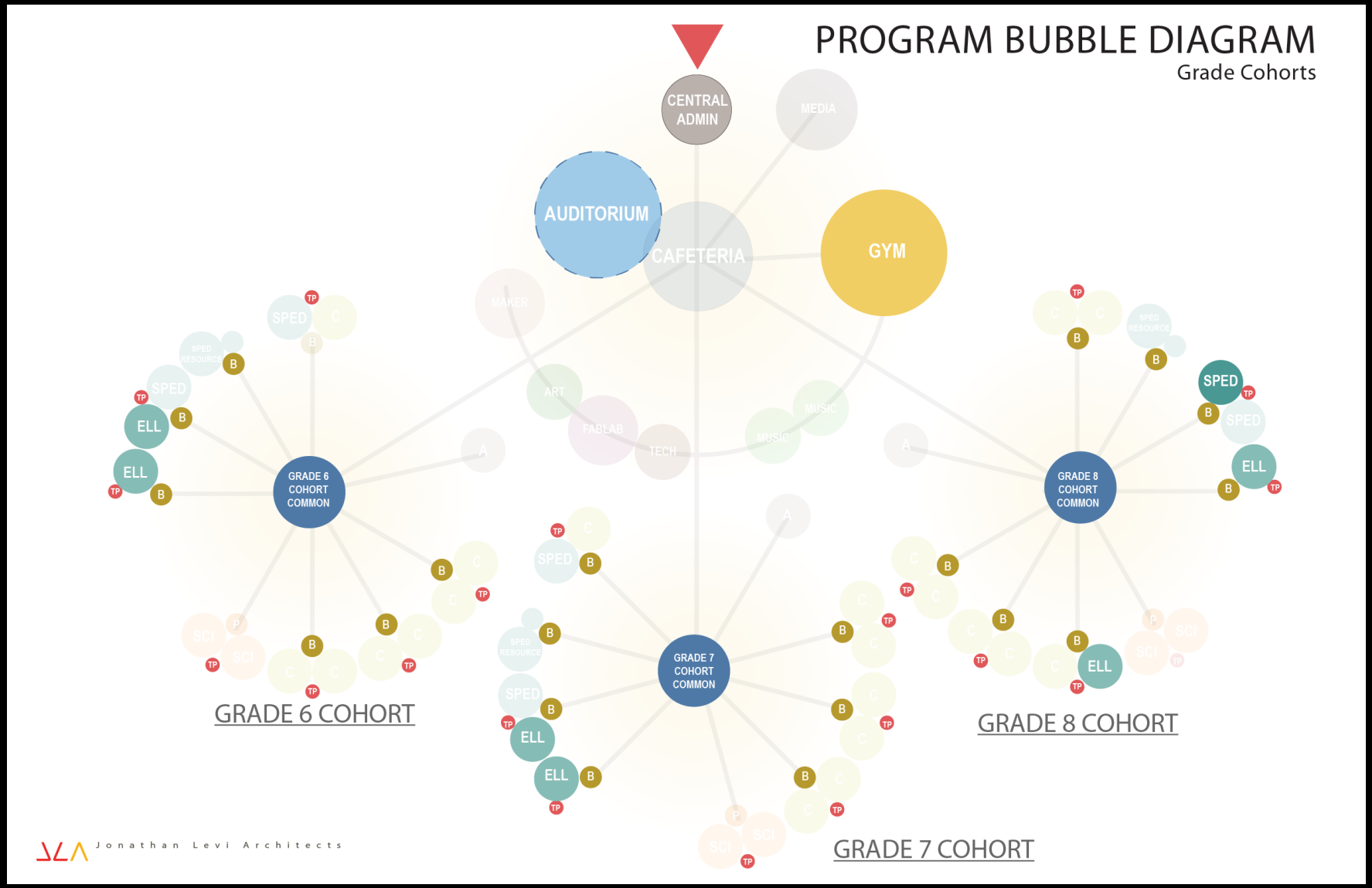


Space Principles	Space Initiatives
Small Scale Collaborative Teaching	Ubiquitous Learning
	Agile, Varied Scale Classroom
Collaborative Learning	Specialized Learning Spaces
	Team Teaching
Interdisciplinary Content Project Based Learning	STEAM Exploratory
	Maker Space
Visible Learning	Visible Teacher Office
Flexible Learning	Small Group Collaboration Spaces
Outdoor Learning	
Community Engagement	Community Collaboration Spaces

Building Space and Adjacency Diagram



Spaces to Support Framingham Demographics and STEAM



WHY AN AUDITORIUM AND INCREASED GYMNASIUM SPACE

The existing 1958 Fuller auditorium and gyms, to be demolished, serve an important function for the school and the South Framingham community.

The new school will:

- Continue to provide a home for these functions
- Maintain parity with Framingham's other Middle Schools
- Provide a safe and flexible environment for teaching and learning

SQUARE FEET PER STUDENT DIFFERENTIATORS

1. Added auditorium space beyond MSBA standard including related circulation, toilets and services
2. Increased gym size beyond MSBA standard
3. Added stem educational program areas including collaboration zones, break-out areas and satellite administration suites
4. Added spaces for specialized ELL programs
5. Added space for Special Education due to Framingham student demographics
6. Minimum MSBA Space Sizes disproportionate in smaller Design populations

OPTIONS STUDIED

OPTIONS STUDIED

RATINGS:

+	Advantageous
-o-	Neutral
-	Disadvantageous
- -	Very Disadvantageous

	Option 0 Repair to Code Baseline	Option A Add / Reno	Option B Tree Branch New Constr.	Option C Folded Hands New Constr.	Option D Butterfly New Constr.	Comments
PROJECT EVALUATION CRITERIA						
1 Total Project Cost	- -	-	+	+	+	See costs below
2 Schedule	- -	-	+	+	+	Renovation options will require phasing and additional construction time. Swing space requires additional time
3 Construction Impact to Education	- -	-	+	-o-	+	Swing space will be disruptive and smaller than current Fuller use
4 Construction Impact to Campus and Neighbors	-o-	-	-	+	-	Swing space / trailers will be disruptive to neighbors. Options A, B and D close to Flagg Drive so potentially disruptive
5 Educational Program Accommodation	- -	-o-	+	+	+	Options vary on ability to provide 3 appropriate cohort locations and identity
6 Flexibility-Fixed Classroom Count per Cohort	-o-	-	-	+	-	Option C allows each cohort to increase or decrease the number of SPED and general classrooms because they are not aggregated in a defined wing or floor.
7 STEM Enhancement-Visible learning	- -	-	-o-	+	-o-	Open atrium has greatest visibility within and between cohorts. All options to facilitate project based learning.
8 Flexibility-Building Systems	- -	-	+	+	+	New construction would be designed for flexible use and improved MEP accessibility
9 Open Space /Building Massing / Footprint	- -	-	-o-	+	-o-	3 story Option C has smallest footprint, resulting in largest open area.
10 Security	- -	-o-	+	+	+	All options A-D would be substantially more secure than existing
11 Community Use	-o-	-	+	+	+	All alternatives allow community use. New Construction options allow increased access to playfields.
12 Academic Campus	-	-	-o-	+	-o-	Locating Fuller closer to Farley and McCarthy improves ability to create identifiable campus. Option C most successful.
13 Outdoor Theater	-o-	-o-	-o-	+	-o-	South-facing sloped outdoor space inherent in Option C design
14 Natural Light and Views	- -	-o-	+	+	+	one-story "Pancake" massing creates interior rooms with limited access to windows
15 LEED / Sustainability	-	-o-	-o-	+	-o-	Option C has best solar orientation
16 Risk	- -	- -	+	+	+	Options requiring renovation and/or swing space have more inherent risk due to unforeseen conditions
17 Long Term Maintenance and Repair Costs	-	-o-	+	+	+	3 story Option C has smallest roof area.
18 Operating Costs	-	-o-	+	+	+	Solar orientation and ext skin quantity impact energy loads
19 Design Scope Flexibility	- -	- -	+	+	-	Options B and C would most readily allow a modification to the Auditorium and/or Gym size in upcoming Schematic Design phase
Total GSF	196,000	167,000	154,000	154,000	154,000	


COMMUNITY ACCESS
GYM&AUDITORIUM
NEW PARKING 154 SPACES
NEW FULLER MIDDLE SCHOOL
NEW PARKING 96 SPACES
FARLEY/MASS BAY
FOOTPRINT OF EXISTING 1958
BUILDING TO BE REMOVED
SOUTH FRAMINGHAM GREEN
MCCARTHY ELEMENTARY SCHOOL
N
SITE PLAN


AERIAL VIEW

FIRST FLOOR PLAN

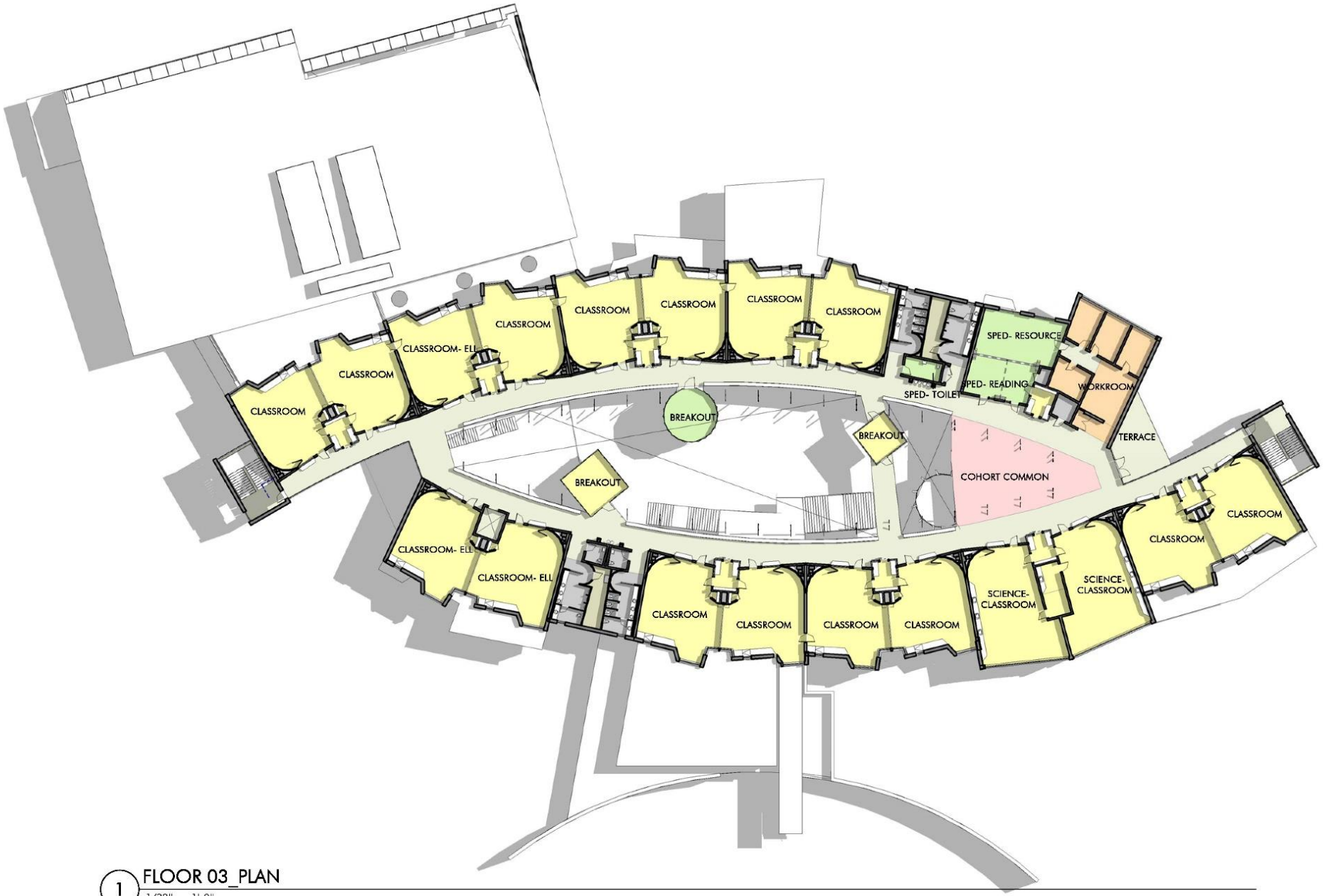
1 FLOOR 01_PLAN

1/32" = 1'-0"

SECOND FLOOR PLAN

1 FLOOR 02_PLAN
1/32" — 1'-0"

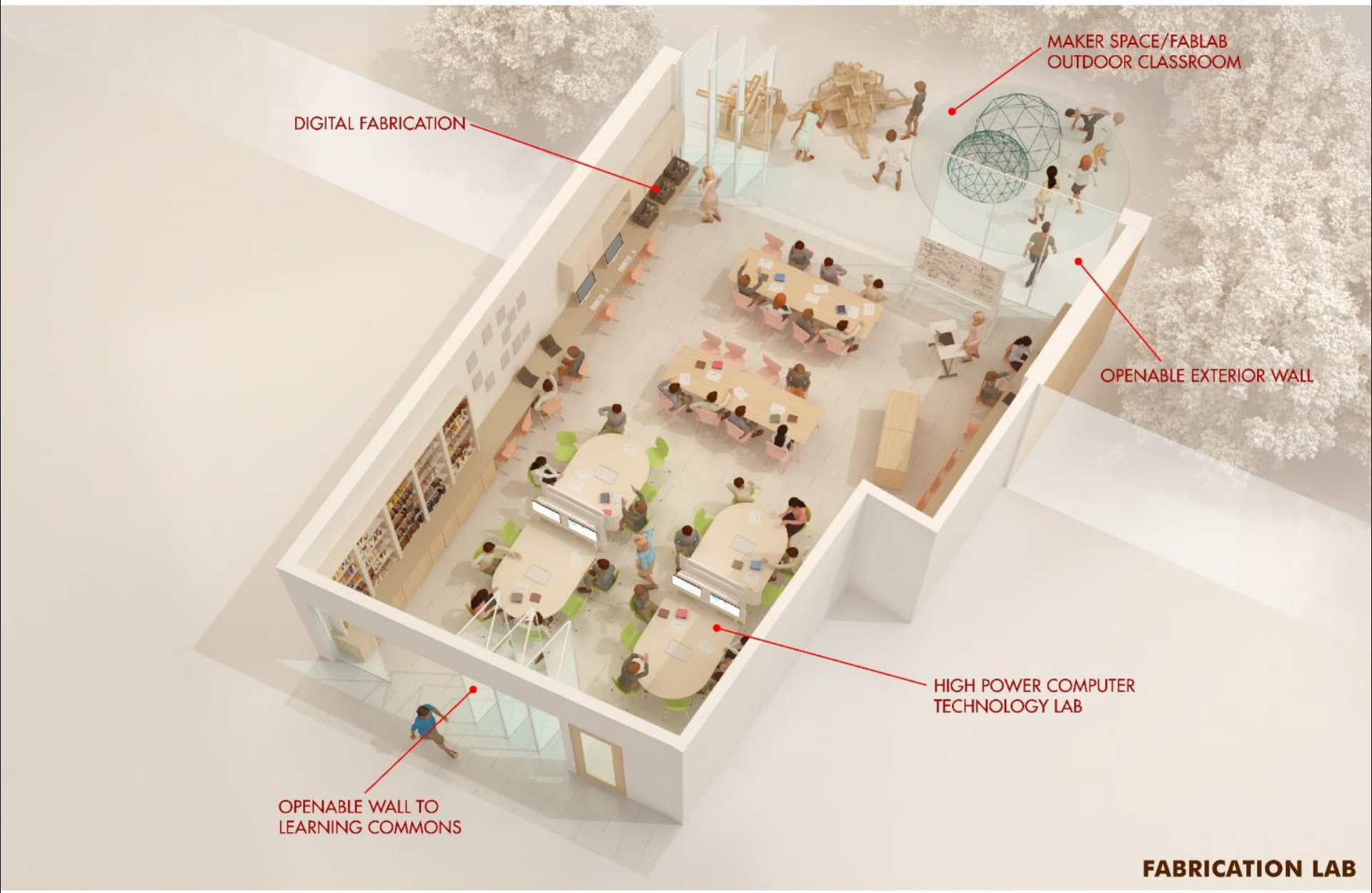
THIRD FLOOR PLAN



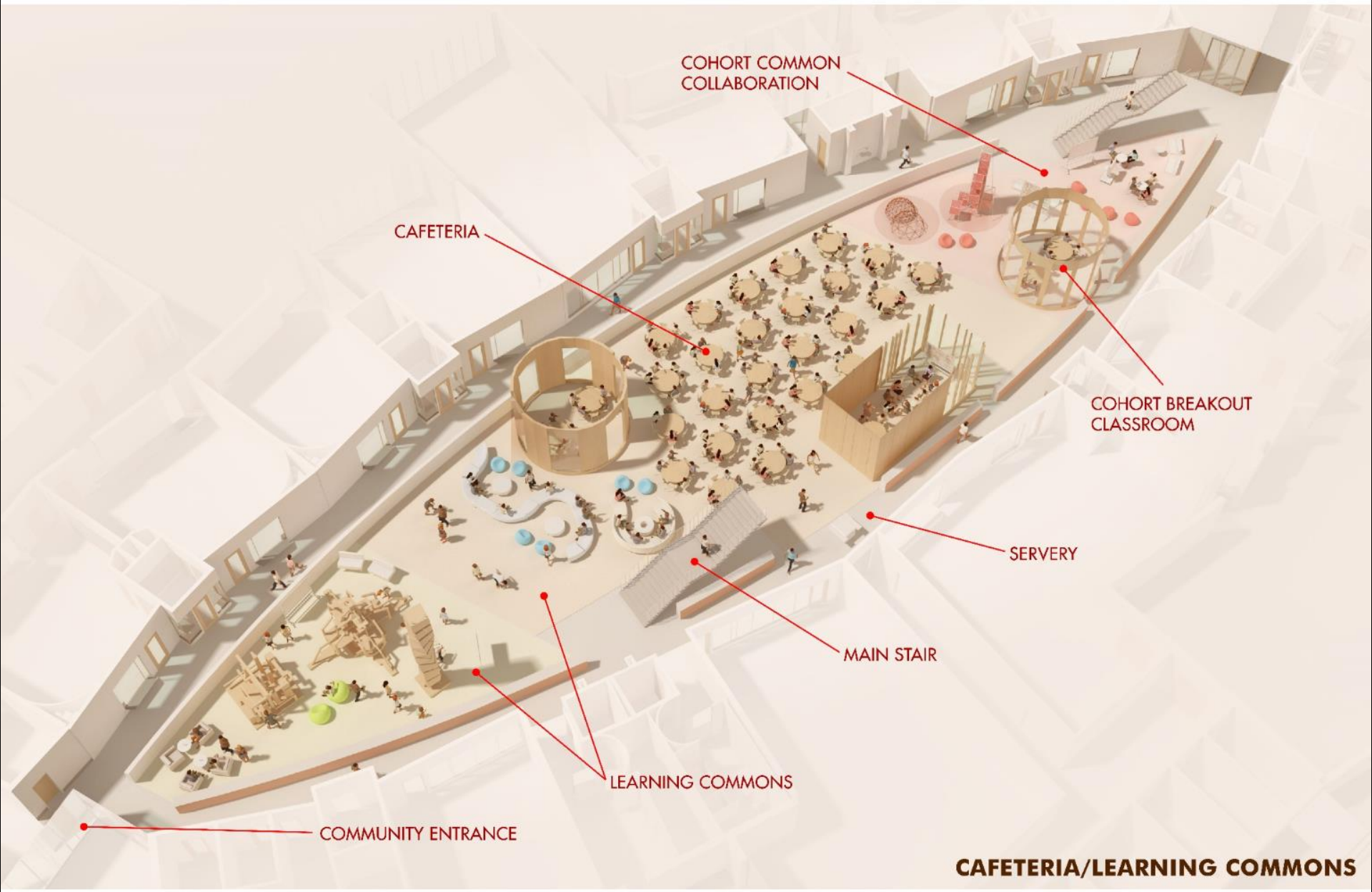
1 FLOOR 03_PLAN
1/32" — 1'-0"

TYPICAL CLASSROOM SUITE FROM CORRIDOR

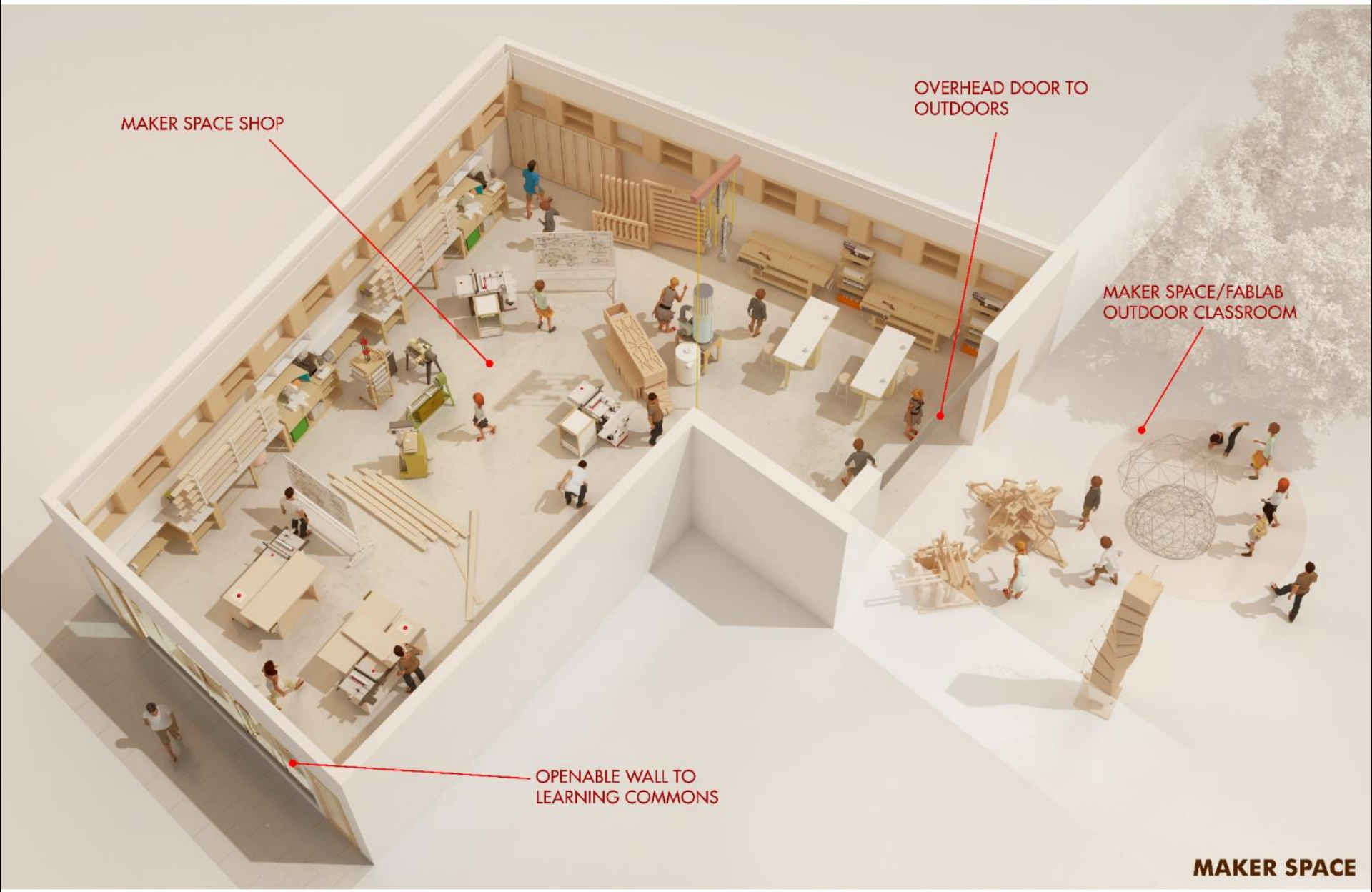
TYPICAL CLASSROOM SUITE FROM EXTERIOR



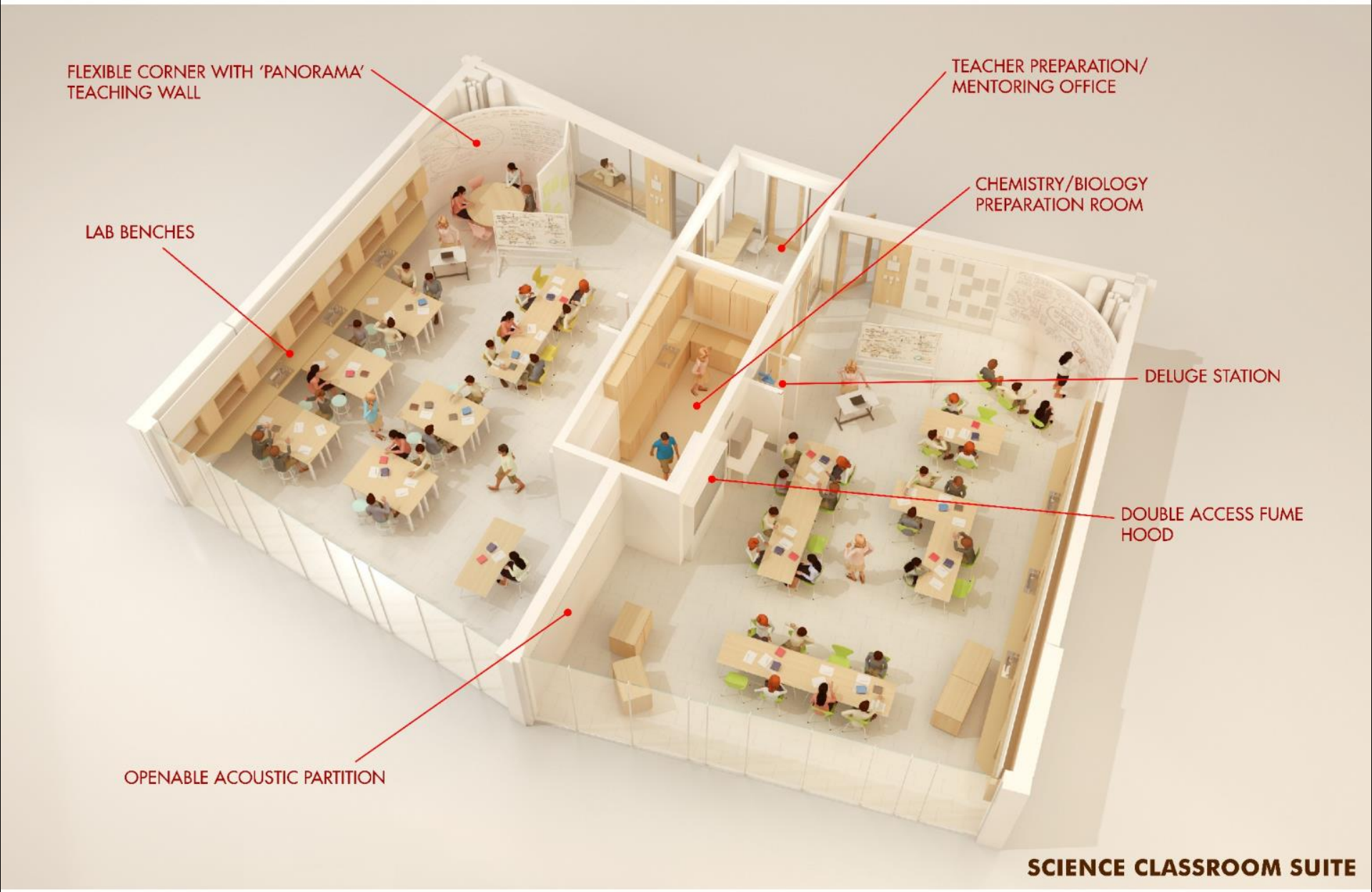
FABRICATION LAB



CAFETERIA/LEARNING COMMONS


MAKER SPACE SHOP
OVERHEAD DOOR TO OUTDOORS
MAKER SPACE/FABLAB OUTDOOR CLASSROOM
OPENABLE WALL TO LEARNING COMMONS

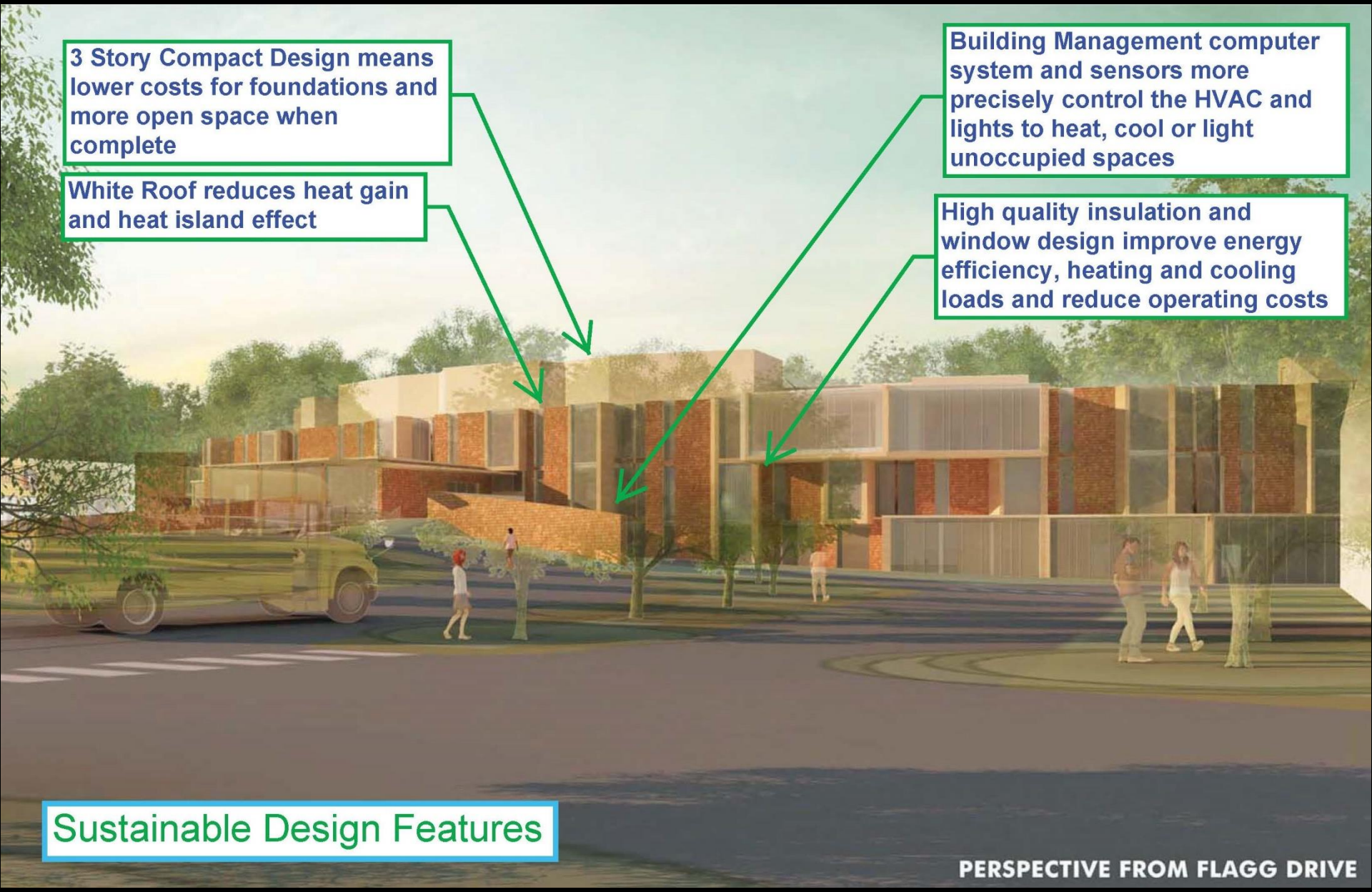
MAKER SPACE



SCIENCE CLASSROOM SUITE

CROSS SECTION THROUGH CAFETERIA/LEARNING COMMONS

PERSPECTIVE FROM FLAGG DRIVE


3 Story Compact Design means lower costs for foundations and more open space when complete
White Roof reduces heat gain and heat island effect
Building Management computer system and sensors more precisely control the HVAC and lights to heat, cool or light unoccupied spaces
High quality insulation and window design improve energy efficiency, heating and cooling loads and reduce operating costs
Sustainable Design Features
PERSPECTIVE FROM FLAGG DRIVE

BENEFITS TO THE STUDENTS AND EDUCATORS

- Appropriate classroom sizes and relationships according to contemporary educational standards.
- Collaboration spaces that support project based learning - preparing students for the contemporary workforce.
- Natural daylighting and healthy ventilation for improved educational outcomes.
- Full range of special education spaces to support individual student needs.
- STEAM (science, technology, engineering, art and mathematics) instruction spaces to fulfill district's elementary feeder school commitment to STEM curricula.
- Spaces that facilitate teacher collaboration toward improved teaching practices.

BENEFITS TO THE COMMUNITY

- Replacement of decaying, inefficient facility with ever increasing maintenance and operation cost burden to the City. Reduced building size, modern materials, and far more energy efficient HVAC systems will increase operating efficiency over the next 70 years.
- Reduced building footprint yields increased City open space and playfield space, and improves impact to adjacent conservation lands.
- Traffic calming measures improve public safety.
- Renewal of community access athletic and performance facilities for future use.

PROJECT TIMELINE

December 2018 – Detailed Design Commences

Summer 2019 – Construction Commences

Summer 2021 – New Building is Completed

December 2021 – Demolition and Sitework Completed

TOTAL PROJECT COST

CONSTRUCTION COST (BUILDING + SITE WORK+ MARK-UPS)	$77.9M
FEES & EXPENSES	$12.6M
FURNITURE, FIXTURES & EQUIPMENT	$2.3M
CONTINGENCIES	$5.5M
TOTAL	**$98.3M**

WAS THE TOTAL PROJECT COST REDUCED?

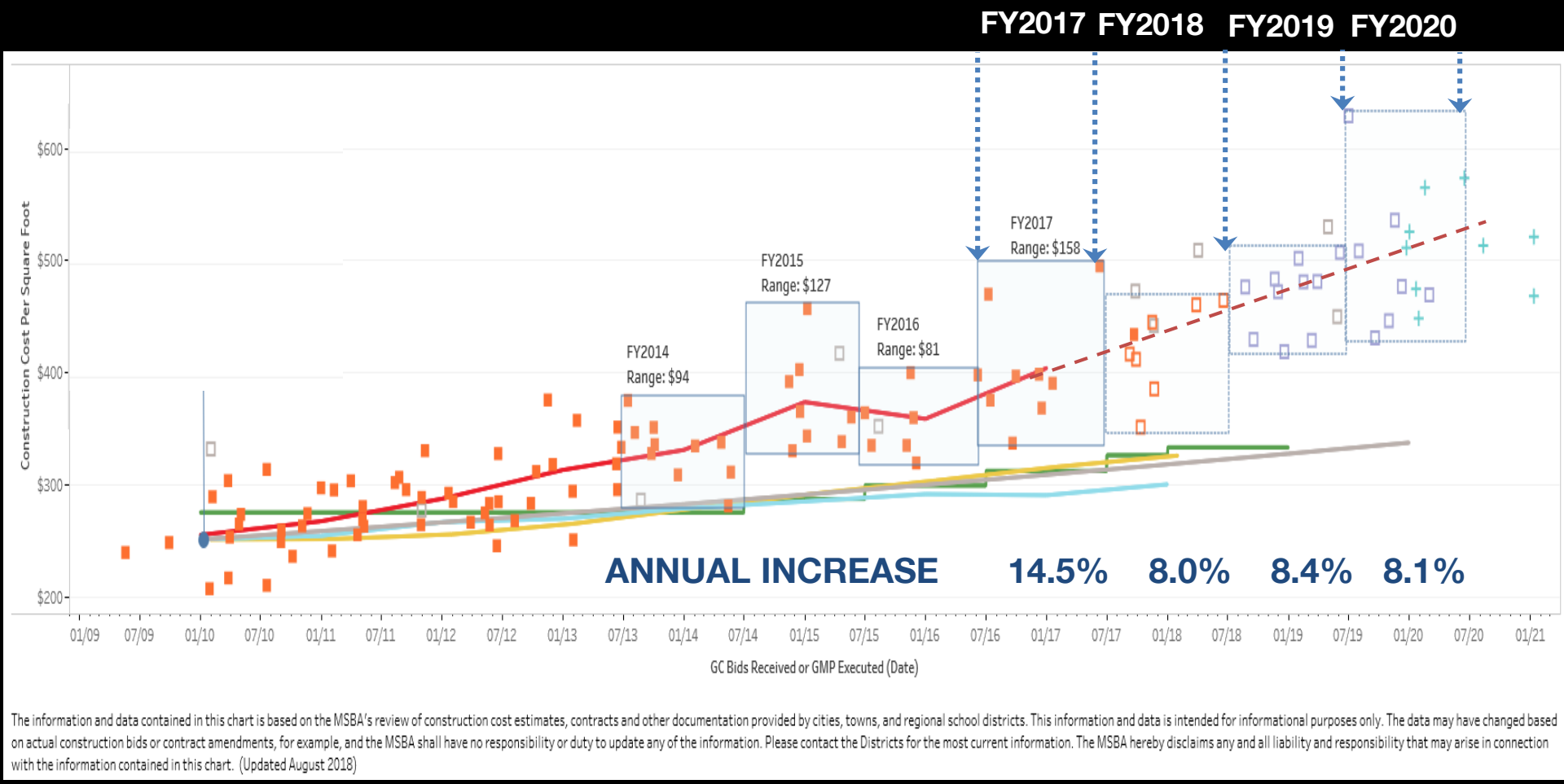
	PROJECT COST	COST TO CITY	BUILDING SIZE
PSR SUBMISSION - 5/9/2018	$110.5M	$66.6M	153,905 SF
REDUCED ELL SPACES - 6/18/2018	$104.5M	$63.6M	141,750 SF
REDUCED AUDITORIUM - 7/16/2018	$101.3M	$60.8M	136,790 SF
SCHEMATIC DESIGN SUBMISSION - 9/12/2018	$ 98.3M	$58.8M	136,790 SF
TOTAL REDUCTION	**$ 12.2M**	**$7.8M**	**17,115 SF**

COLLABORATIVE COST REDUCTION STRATEGY ACTION

- Reduce 30 Classrooms to 27
- Reduce 9 Science Classrooms to 6
- Combine Tech Classroom with Fabrication Lab
- Combine Small Group Seminar with Teacher Work Rooms
- Reduce Auditorium from 750 seats to 420 seats

Combined total reduction of 17,115 GSF, representing a savings of approximately $12.2M in total project costs, representing a savings of $7.8M to the City.

HOW DOES THAT COMPARE TO RECENT MIDDLE SCHOOL PROJECTS?



The information and data contained in this chart is based on the MSBA's review of construction cost estimates, contracts and other documentation provided by cities, towns, and regional school districts. This information and data is intended for informational purposes only. The data may have changed based on actual construction bids or contract amendments, for example, and the MSBA shall have no responsibility or duty to update any of the information. Please contact the Districts for the most current information. The MSBA hereby disclaims any and all liability and responsibility that may arise in connection with the information contained in this chart. (Updated August 2018)

HOW DOES THAT COMPARE TO RECENT MIDDLE SCHOOL PROJECTS?

(Sorted by Total Project Cost)

Project Name	Students	Cost Escalated to Fuller ($M)
Lynn Middle Schools	1,660	$213
Saugus Middle/High School	1,360	$186
Beverly Middle School	1,395	$136
Holyoke Lawrence Middle School	1,100	$132
Abington Middle/High School	1,115	$129
Natick Kennedy Middle School	1,000	$116
Dennis-Yarmouth Mattacheese Middle School	940	$113
Westport Middle/High School	860	$112
Framingham Fuller Middle School	**630**	**$98**
Boston Dearborn STEM Academy	600	$94
Quincy Sterling Middle School	430	$70

HOW DOES THAT COMPARE TO RECENT MIDDLE SCHOOL PROJECTS?

(Sorted by Cost per Student)

Project Name	Students	Cost/Student ($K)
Quincy Sterling Middle School	430	$162
Boston Dearborn STEM Academy	600	$156
Framingham Fuller Middle School	**630**	**$156**
Saugus Middle/High School	1,360	$137
Westport Middle/High School	860	$130
Lynn Middle Schools	1,660	$129
Dennis-Yarmouth Mattacheese Middle School	940	$120
Holyoke Lawrence Middle School	1,100	$120
Natick Kennedy Middle School	1,000	$116
Abington Middle/High School	1,115	$115
Beverly Middle School	1,395	$97

HOW DOES THAT COMPARE TO RECENT MIDDLE SCHOOL PROJECTS?

(Sorted by Cost per Square Feet)

Project Name	Students	Cost/SF
Boston Dearborn STEM Academy	600	$730
Quincy Sterling Middle School	430	$727
Framingham Fuller Middle School	**630**	**$718**
Saugus Middle/High School	1,360	$693
Lynn Middle Schools	1,660	$674
Natick Kennedy Middle School	1,000	$638
Holyoke Lawrence Middle School	1,100	$617
Dennis-Yarmouth Mattacheese Middle School	940	$614
Westport Middle/High School	860	$597
Beverly Middle School	1,395	$586
Abington Middle/High School	1,115	$546

COST PER SQUARE FEET DIFFERENTIATORS

- Increased Site Costs against Small Building Area
- Overlarge Existing Building Demolition and Abatement
- Soil Conditions Foundation Support
- Auditorium and Added Gymnasium Premium
- Full Air Conditioning

MSBA REIMBURSEMENT RATE

Base Points	31.00
Income Factor	7.73
Property Wealth Factor	17.68
Poverty Factor	1.42
BASE RATE	**57.83**
Maintenance	1.48
CM @ Risk	1.00
"Green Schools"	2.00
INCENTIVE POINTS	**4.48**
REIMBURSEMENT RATE	**62.31**

WHAT WILL BE FRAMINGHAM'S SHARE?

Total Project Cost	$ 98,276,878
Approximate Ineligible Costs	$ 34,910,495
Eligible Costs	$ 63,366,383
Eligible Costs	$ 63,366,383
Reimbursement Rate	62.31%
Approximate MSBA Grant	$ 39,483,593
Total Project Cost	$ 98,276,878
Approximate MSBA Grant	$ 39,483,593
Approximate Cost to the City	**$ 58,793,285**

WHAT ARE THE APPROXIMATE INELIGIBLE COSTS?

Legal fees	$ 80,000
OPM fee associated with Ineligible Spaces	$ 286,361
Architect fee associated with Ineligible Spaces	$ 837,936
Asbestos flooring abatement	$ 388,800
Site costs over 8%	$ 4,162,845
Building costs over $333/s.f.	$16,912,791
Auditorium ineligible space	$ 5,823,829
Gymnasium ineligible space over 6,500 s.f.	$ 1,440,421
Administration ineligible space over MSBA Guideline	$ 904,095
Furnishings and equipment over $1,200/student	$ 378,000
Educational technology over $1,200/student	$ 378,000
Moving expenses	$ 200,000
Construction contingency over 1%	$ 3,117,417
Total Approximate Ineligible Costs	**$34,910,495**

WHAT WILL BE FRAMINGHAM'S SHARE?

PROJECT COST	$98.3M
APPROXIMATE MSBA GRANT	$39.5M
APPROXIMATE COST TO FRAMINGHAM	$58.8M

WHAT DOES THIS MEAN TO THE AVERAGE TAXPAYER?

29 Cents annual tax increase per $1,000 valuation

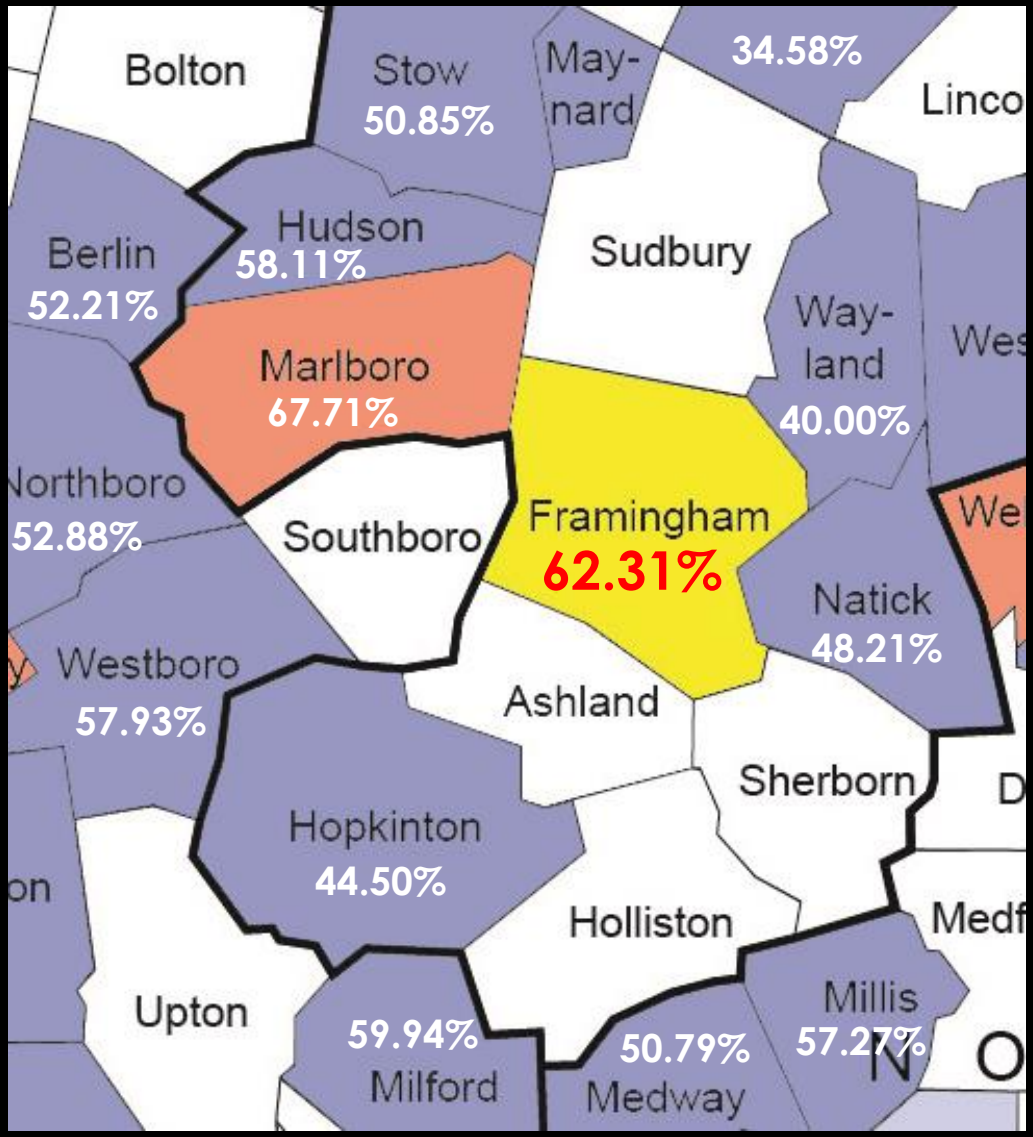
$101 per year, OR

$8.41 per month, OR

28 Cents per day

Based on a 20-year bond utilizing $8 million of the Capital Stabilization Fund

WHAT HAVE OUR NEIGHBORS BEEN DOING?



51.26% Average

MSBA CORE PROGRAM PROJECTS IN NEIGHBORING TOWNS

(within past ten years):

Completed or Under Construction

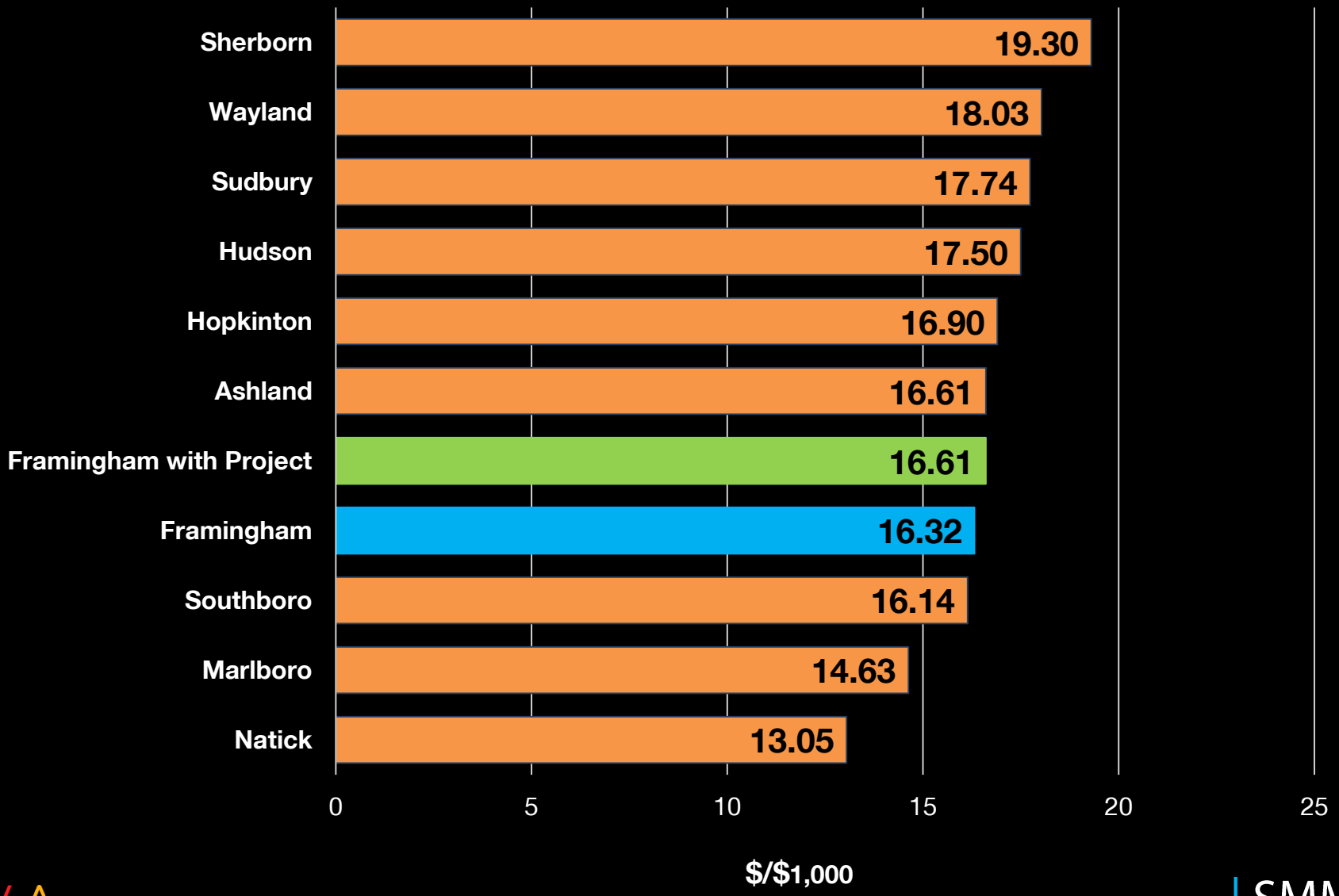
In Feasibility to Design Development Phase

JLA Jonathan Levi Architects

PROJECT MANAGEMENT | SMMA

SURROUNDING COMMUNITIES 2018 RESIDENTIAL TAX RATE

($/$1,000 Assessed Value)



JLA Jonathan Levi Architects

PROJECT MANAGEMENT | SMMA

THE COST OF VOTING "NO"?

Case Study: Lincoln – Paying More… Getting Less

- July 2012 (MSBA Board Approval)
- November 2012 (Lincoln Town Meeting Failed)
  - $50M Total Project Budget
  - $21M MSBA Grant
- Not re-accepted into MSBA program after several attempts
- Now evaluating options forecast to cost $90-100 million at 100% Town cost

THE COST OF VOTING "NO"?

Possible Scenarios

	COST TO CITY	AVERAGE RESIDENTIAL TAX IMPACT
VOTE PASSES		
NEW FULLER NOW (with MSBA GRANT)	**$ 58.8M**	**$101**
VOTE FAILS		
NEW FULLER IN 10 YEARS (ASSUMED with MSBA GRANT)	**$ 84.4M ***	**$145**
OPERATE AND MAINTAIN EXISTING FULLER	**$ 18.6M ****	**?**
	$103.0M	
REPAIR-ONLY FULLER NOW	**$131.0M**	**$244**

*** - Based on 4% escalation, current borrowing rate, 20 year term, using $11M of Capital Stabilization Fund, MSBA Grant not guaranteed.**

**** - Assumes no major system failures in next 10 years.**

THE COST OF VOTING "NO"?

- A "NO" vote means educational offerings continue to not meet the needs of students and educators due to facility needs
- A "NO" vote does not avoid future expenses. In fact, the opposite is true:
  - State aid ($39.5M) will go to another district and the City is unlikely to get another opportunity.
  - No benefit to show for the Feasibility Study funds expended by the City.
  - Current and future generations inherit an inadequate building with big costs ahead ($131M).
  - The cost of future repairs and construction will only go up, including their impact on taxes.

IMPORTANT DATES

- October 16, 2018 – City Council Public Hearing
- October 30, 2018 – City Council Meeting to approve funding
- October 31, 2018 – MSBA Board Meeting to approve project
- November 1, 2018 – Community Forum No. 9
- November 28, 2018 – Community Forum No. 10
- December 11, 2018 – Anticipated Debt Exclusion Ballot Vote

WHY A NEW FULLER?

- Physical and Educational Deficiencies
- STEAM based Educational Vision
- 6 Years of Study
- MSBA Partnership