

# MEMORIAL SCHOOL BUILDING PROJECT

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Manchester Essex Regional School Building Committee

# Memorial School Building Project

## What's the problem were trying to solve?

- Memorial is a 67-year-old building with timber frame construction. It has exceeded its useful life, has become a health and safety concern for students, no longer serves the regional district's educational program, and is costing the District more and more money.
- The State immediately accepted Memorial School into the MSBA program, a sign that it is among the schools in most need of remedy in Massachusetts.

# How does Memorial School's condition compare to other schools in the state?

- In 2010, MSBA rated Memorial School in the bottom 16% of all public schools in MA.<sup>1</sup>
  - Only 13 MA schools that were not already in MSBA's grant program were rated lower.<sup>1</sup>

District Name	School Name	Type	Year Founded	Last Reno.	Enrollment	GSF	SF / Student	Class-rooms	Students / Classroom	Building Condition	Space Utilization	General Environ.
Manchester Essex Regional	Manchester Essex Regional MS	MS	2009	347	71,519	206	22	16	1	Average Util.	1	1
Manchester Essex Regional	Essex Elementary	ES	1955	266	42,780	168	21	12	3	Average Util.	1	1
Manchester Essex Regional	Manchester Essex Regional HS	HS	2009	439	90,481	206	32	13	1	Average Util.	1	1
Manchester Essex Regional	Memorial Elementary	ES	1950	405	62,000	156	26	16	3	Average Util.	1	1

- In 2016, Memorial School was one of 26 schools invited into MSBA's grant program
  - Invitations are based on building condition/need.
  - MSBA's invitation is an acknowledgement that Memorial is among the neediest schools in MA
  - Memorial was accepted after its first application to MSBA which is uncommon
- <sup>1</sup>MSBA's 2010 Needs Survey report.

## Current conditions...

- Existing Building is substandard and past its useful life
- Most Costly & Time Sensitive Issues to Address
  - Non Compliant ADA
  - Asbestos and lead limit maintenance/replacement options
  - Roof significantly past due for replacement
  - Energy inefficient single pane glass throughout building
  - HVAC systems past due for replacement
  - Electrical infrastructure unable to handle modern load
- Estimated Cost of Addressing Current Needs is \$10 million

## What the MSBA will do...

- Acts as a third party reviewer that guides and assesses building projects relative to
  - Cost effectiveness
  - Needs of the educational program
- Sets process with benchmarks
  - Requires local citizens on Building Committee with credentialed field experts (builders, architects, engineers, town representatives and educators)
  - Requires District contract an Owner's Project Manager and Design Team
  - Establishes a format for data-driven decision making with MSBA approval to advance through the project steps
- Reimbursement
  - Based on socio-economics and incentive points system

The MSBA process is driven by the educational program (curriculum) and submissions are measured by their alignment and adherence to the District's educational program

Why is MERSD  
reimbursement  
estimate just  
24% ?

- Reimbursement formula: 35.98% of eligible costs
  - 31% by statute/MGL, based on MERSD socio-economics
  - 4.98% additional incentive points awarded to MERSD for:
    - Energy efficient design (2% - max award)
    - Construction Manager (1% - max award)
    - MERSD's maintenance practices (1.98% - highest award given, per MSBA)
  - MSHS project reimbursement of 40% no longer offered by MSBA
- SBC choices in Schematic Design intended to maximize reimbursable costs, but only \$35 mil. of \$52 mil. project (67%) is eligible because:
  - MSBA intentionally caps cost/sq. foot well below market rates in order to fund more projects each year
  - MSBA caps site costs reimbursement at 8%, and does not reimburse asbestos abatement
  - Phasing plan necessitated by constrained Memorial site adds 4 months to timeline, pushing OPM/Design fees beyond MSBA limits.
  - Modular classrooms, moving costs, and legal costs are categorically non-reimbursable

As a result, effective reimbursement estimated at 24% of  
total Project Costs

# Sunk costs to prolong life of Memorial

<b>FY11-FY18 Capital Repairs @ Memorial</b>	<b>\$1,035,236</b>	<b>Fiscal Year</b>
Water Line	\$340,946	FY16
Fire Alarm Upgrade	\$205,362	FY12
Security Investments	\$131,397	FY14
Boiler Replacement	\$96,947	FY17
Paving	\$75,252	FY13
Locker Room Conversion	\$67,439	FY13
Drainage	\$21,801	FY12
Electrical	\$21,414	FY13-15
Accessibility	\$17,963	FY17-FY18
Habeeb Report - MMES Physical Conditions Assessment	\$15,750	FY13
Shades	\$9,535	FY15
Hot Water heater	\$7,966	FY12
Painting (beyond annual)	\$7,625	FY13
Fire Doors	\$5,802	FY12
Flooring	\$5,037	FY13
Roof	\$5,000	FY18
<b>Pre Habeeb Report</b>	<b>\$419,172</b>	
<b>Since Habeeb Report</b>	<b>\$616,064</b>	
	<b>\$1,035,236</b>	

Water line will be retained, but most other costs will not

Fact: \$1 million spent over past 8 years in excess of routine maintenance

Options  
considered as  
part of  
Feasibility Study

- Application to MSBA was submitted to receive guidance on how to address failing building and qualify for reimbursement
- Renovation: \$36 Million
  - No MSBA reimbursement because doesn't meet educational program needs
  - Same floor plan; no increased space; risk of unknowns with renovation; significant code compliance costs
  - Total Cost to District: \$36 million
- Renovation Addition: \$56 million
  - Higher cost; risk of unknown costs; significant code compliance costs
  - Reimbursement \$14 million
  - Cost to District \$42 million
- New Build: \$52 million
  - Reimbursement \$12 million
  - Cost to District \$40 million

# New vs. Reno//Now vs. Later

	<b>New</b>	<b>Renovation</b>	<b>Variance (Reno vs. New)</b>	<b>Add Reno</b>
<b>Total Project</b>	<b>\$52,232,925</b>	<b>\$35,770,000</b>	<b>\$16,462,925</b>	<b>\$55,760,000</b>
District Share %	75.9%	100.0%		
District Share \$	\$39,657,812	\$35,770,000	\$3,887,812	\$41,820,000
Interest Rate	5%	5%		5%
Bond Term	30	30		30
Annual Debt Service (est.)	\$2,579,798	\$2,326,890	\$252,908	\$2,720,451
MBTS (67%)	\$1,728,464	\$1,559,016	\$169,448	\$1,822,702
Essex (33%)	\$851,333	\$767,874	\$83,460	\$897,749

Reno only  
saves  
MBTS  
\$169K/yr  
and TOE  
\$83K/yr

<b>Escalated 10 Yrs @5%</b>	<b>1.63</b>	<b>1.63</b>	<i>10 Yr Growth Factor</i>
Total Project	\$85,081,931	\$58,265,561	
District Share \$	\$64,598,397	\$58,265,561	
Annual Debt Service (est.)	\$4,202,218	\$3,790,258	
MBTS (67%)	\$2,815,486	\$2,539,473	
Essex (33%)	\$1,386,732	\$1,250,785	

Add/Reno  
more costly  
than new

**Now vs. Later:**  
Proposed \$52.2 mil. project could cost up to \$85 mil. if delayed 10 years, based on 5% annual cost escalation (63% compounded)

## Cost of “doing nothing”: unfunded liabilities

- Cost escalation is a significant factor:
  - \$7.5 million of yet-to-be addressed needs identified in 2013 by Habeeb Report
  - Current cost likely closer to \$9.6 million today
  - 10 years from now, could cost up to \$15.6 million
- Individually, these items exceed operating budget funding capacity
- These fixes unlikely to generate a ‘pay back’/ROI, given limited potential remaining lifespan of current building

Cost Estimates (esc. @ 5%)				
Category	@ Habeeb Report	Today (est.)	2028	
⊕ Envelope	\$4,547,494	\$5,803,883	\$9,453,913	Roof, Windows
⊕ Mechancial	\$1,157,854	\$1,477,748	\$2,407,095	HVAC Distribution, Controls, Sprinkler, 2nd Boiler
⊕ Interiors	\$870,750	\$1,111,322	\$1,810,227	Accessibility
⊕ Site	\$627,850	\$801,313	\$1,305,255	Paving & Accessibility
⊕ Electrical	\$319,374	\$407,611	\$663,956	Distribution infrastructure
<b>Grand Total</b>	<b>\$7,523,322</b>	<b>\$9,601,877</b>	<b>\$15,640,446</b>	<b>(\$15.6MM at 5% escalation = \$12.5MM at 3.5% escalation)</b>

### Time Frame (based on Habeeb Report)

Imminent	\$6,712,985	\$10,934,745
Deficient	\$1,730,243	\$2,818,383
Compliance/Accessibility	\$1,158,650	\$1,887,318
<b>Total</b>	<b>\$9,601,877</b>	<b>\$15,640,446</b>

## Financials

- Total Project Budget \$52.2 million
  - Estimated MSBA Reimbursement \$12 million
  - District Share \$40 million
- Apportion Split Between
  - Manchester 67%
  - Essex 33%
- Estimated Annual Cost to Towns (30 Yr. Bonds @ 5%)
  - Manchester \$1.7 million
  - Essex \$850,000
- Cost Per Household (median)
  - MBTS \$530/yr
  - TOE \$478/yr
- Fiscal Year 2019 Estimated Tax Impact
  - MBTS: \$72/100k of assessed value
  - TOE: \$105.40/100k

## Next steps

- MSBA Board Approval of Project Scope and Sequence August 29th
- Vote from BOS and Fin Com to support the project
  - Essex – August 13 – Unanimous support
  - Manchester – September 5<sup>th</sup>
- Public outreach and forums (Sept/Oct)
- Town meetings & Ballot Vote
  - Manchester Town Meeting – October 15<sup>th</sup>
  - Essex Town Meeting – October 16<sup>th</sup>
  - Ballot Vote (both towns) – November 6<sup>th</sup> Election Day
- Upon Approval - Prepare for Build (November – June)
  - Design development and construction documents
  - Construction bid
  - Construction schedule
- Construction will begin in the summer of 2019 and end in the fall/winter of 2021

# APPENDIX

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Can we save  
money with  
single-phase  
construction?

Construction Manager evaluated Single Phase option in detail

- Space constraints of current site make Single Phase unfeasible
- No space on site to house 24-26 modular classrooms
- No off-site location identified
- Insignificant savings: \$64K, or 0.125% of construction cost
- \$2.2 million modular cost not reimbursable and limited use
- Significant disruption to students
- Lose ability to demo in summer

## Building highlights - educational

- 3 classrooms per grade
- Classrooms for two special education programs
- Two preschool classrooms
- Learning Commons
- Two project rooms
- Rooms for music, art, and foreign language
- A combined gym, cafeteria, and stage for performances
- A regulation-size basketball court for Middle High School and Community use
- Increased parking and circulation to alleviate congestion on Lincoln Street

## Building highlights

- Educational
  - Meets District's Space Program Goals
  - Provides Flexibility for Future Building Expansion
  - Flexibility for Grade Level Re-Configuration (Bubble Grades)
  - Minimizes Impact to Students During Construction
  - Provides Separate Whole School Gathering Space
- Community
  - Provides Independent Access to Community-Used Space
  - Allows for Competition-Size Gym with Bleachers
- Site
  - Increases Amount of Play Areas/ Fields
  - Welcoming Street Presence
  - Improves Parent Drop-Off/ Pick-Up Queuing
  - Improves Impact to Riverfront Resource Areas
  - Minimizes Potential Pedestrian/Vehicular Conflicts
- Building
  - Optimizes Building Area to Perimeter Ratio
- Costs and Schedule
  - Relative Capital Costs
  - Minimizes Number of Phases

## What's not included and why

Senior Center & Dedicated Parks & Rec Space

- Not approved by Manchester Town Boards

- Auditorium

- Not approved component of Elementary Building Projects
- No Reimbursement available
- Low use and would not fit full school community or town meeting (would need to be in excess of 500 seats)
- High School auditorium across the street