Massachusetts School Building Authority

Deborah B. Goldberg, State Treasurer and Receiver-General Chairperson

Jack McCarthy

Executive Director





Board Meeting

June 23, 2021



Table of Contents

Project Votes

- Invitation to Feasibility Study | Vote
- Authorization to Execute Project Funding Agreement Accelerated Repair Program, Estimated Maximum Total Facilities Grant of \$1,738,655 | Vote
- Recommendation for Preferred Schematic Design | Vote
- Invitation to Project Scope and Budget | Vote

Audit Update

- Audit Status Report
- Approval of Final Audits with no appeals, MSBA Capital Pipeline Projects grants | Vote

MSBA Updates

- Executive Director's Report
- Project Status Updates
 - Post Occupancy Contract Update | Vote
 - Recommendation to Revise MSBA Funding Policy | Vote
 - Project Overview Report

Finance Update

- Sales Tax Collection | Update
- Grant Payments | Update
- FY21 Budget and FY21 Year-End Spending Projections | Update
- Authorization for a Defeasance of Outstanding Bonds

Legal

Litigation Update

Executive Session



Project Votes



Invitation to Feasibility Study | Vote

District	School
East Longmeadow	East Longmeadow High School
Whittier Regional Vocational Technical School District	Whittier Regional Vocational Technical High School



Authorization to Execute PFA – ARP | Vote

District	School	Project Scope	Total Project Budget	Estimated Maximum Total Facilities Grant
Cambridge	Cambridgeport School	Window/ Door	\$2,242,100	\$809,827
Haverhill	Haverhill High School	Partial Roof \$1,343,28		\$928,828
	•	Totals	\$3,585,384	\$1,738,655

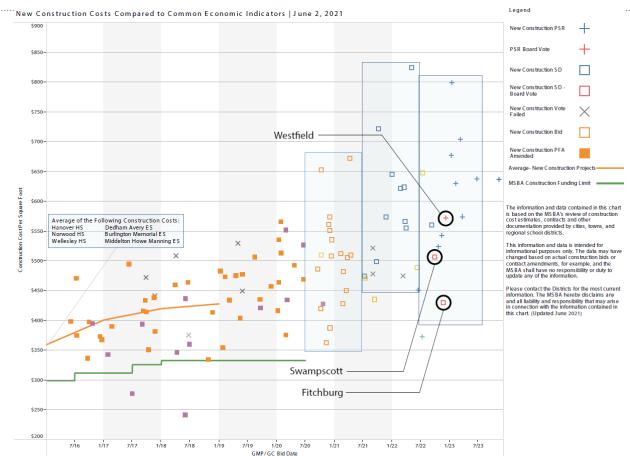


Preferred Schematic Design | Vote

District	School	Project Scope	Estimated Total Construction	Estimated Total Project Costs		
Westfield	Franklin Avenue Elementary School	New	\$50,442,405	\$59,552,038		
		Totals	\$50,442,405	\$59,552,038		



New Construction Cost Chart





Preferred Schematic Design | Westfield

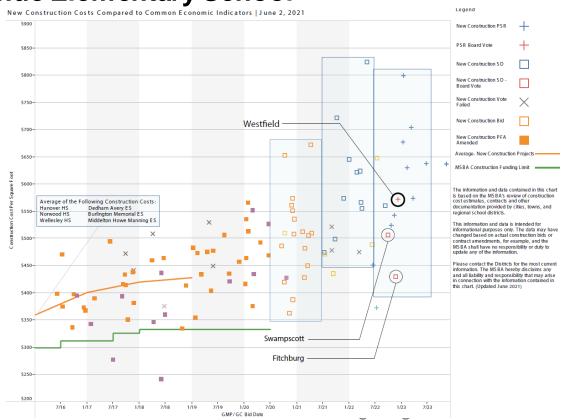
Franklin Avenue Elementary School

- Year Opened: 1953
- Current Grade Configuration: K-4
- Agreed Upon Grade Configuration: PK-4
- Agreed Upon Enrollment: 395
- Proposed Scope of Project: New Construction to replace the existing Franklin Ave and Abner Gibbs Elementary Schools on the Franklin Ave Elementary School site
- Existing Square Footage: 33,804 sf
- Proposed Square Footage: 88,227 sf
- Estimated Total Construction Cost of Preferred Schematic: \$50,442,405



Preferred Schematic Design | Westfield

Franklin Avenue Elementary School





Project Scope and Budget | Vote

District	School Project Total Project Scope Budget		Total Project Budget	Estimated Maximum Total Facilities Grant
Fitchburg	Crocker Elementary School	New	\$65,032,984	\$39,747,562
Swampscott	Hadley Elementary School	New	\$98,316,523	\$31,809,775

Totals

\$163,349,507

\$71,557,337



Project Scope and Budget | Fitchburg

Crocker Elementary School

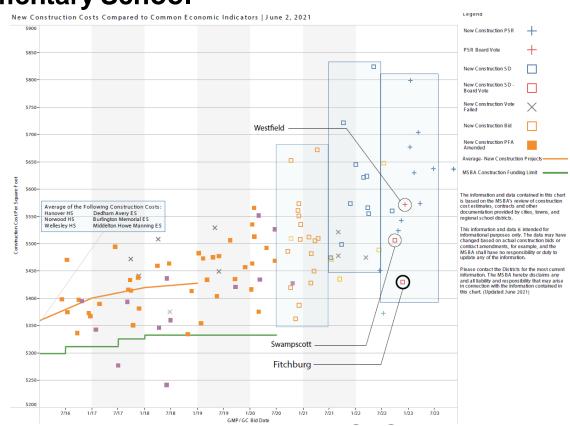
- Year Opened: 1964
- Current Grade Configuration: PK-4
- Agreed Upon Grade Configuration: 1-5
- Agreed Upon Enrollment: 845
- Scope of Project: New Construction
- Existing Square Footage: 73,081 sf
- Proposed Square Footage: 115,788 sf
- District Total Project Budget: \$65,032,984
- Estimated Basis Total Facilities Grant: \$49,684,453
- Reimbursement Rate*: 80%
- Estimated Maximum Total Facilities Grant: \$39,747,562

^{*} By statute, 80.00% is the District's maximum reimbursement rate and the District's base reimbursement rate is 80.00% before applying any incentive points. Therefore, the District is not eligible to receive any incentive points as the base reimbursement rate results in a maximum reimbursement rate of 80.00%.



Project Scope and Budget | Fitchburg

Crocker Elementary School





Project Scope and Budget | Swampscott

Hadley Elementary School

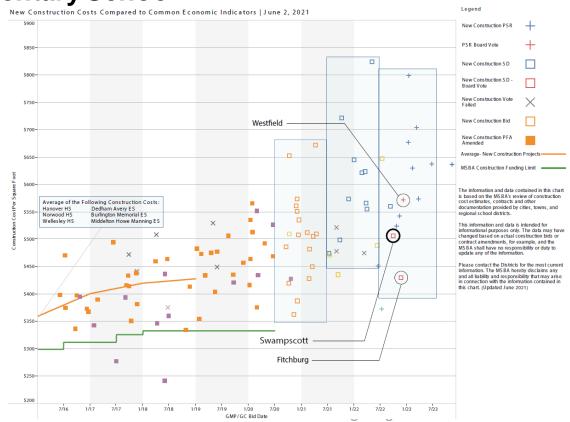
- Year Opened: 1911
- Current Grade Configuration: K-4
- Agreed Upon Grade Configuration: K-4 district-wide
- Agreed Upon Enrollment: 900
- Scope of Project: New Construction to replace the existing Hadley Elementary School, Clarke Elementary School, and Stanley Elementary School with a new district-wide grades K-4 facility on the site of the existing Stanley Elementary School
- Existing Square Footage: 46,000 sf
- Proposed Square Footage: 153,855 sf
- District Total Project Budget: \$98,316,523
- Estimated Basis Total Facilities Grant: \$65,053,343
- Reimbursement Rate*: 48.90%
- Estimated Maximum Total Facilities Grant: \$31,809,775

^{*} The MSBA has provisionally included two (2) incentive points for energy efficiency, subject to the District meeting certain sustainability requirements for the project. If the District does not meet the requirements for the energy efficiency, the District will not qualify for these incentive points, and the MSBA will adjust the reimbursement rate accordingly.



Project Scope and Budget | Swampscott

Hadley Elementary School





Audit Update



Audit Status Update

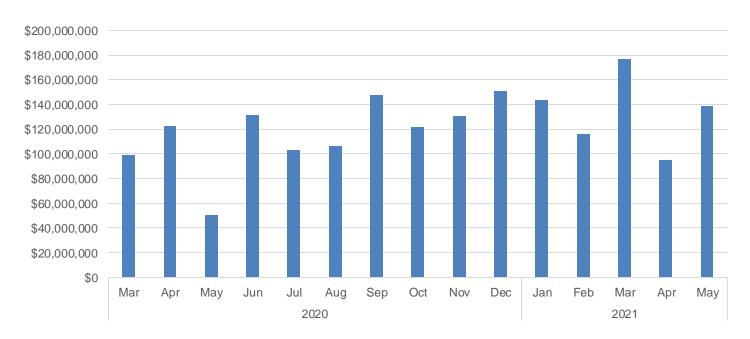
Today's Vote Capital Pipeline Program Projects Estimated Costs Currently Have Remaining Executed FSA Completed Projects and PFA 573 234 \$4.7 billion of Approx. \$6.9 billion of costs \$ 3.8 billion of costs submitted and audited submitted and costs audited to be submitted*

^{*}Estimated based on Total Project Budgets from executed funding agreements and submitted costs as of June 7, 2021.



Capital Pipeline Program | Monthly Audited Project Costs

Rolling 12 month submitted costs monthly average of \$130.3 million Total 12 Month Audited Costs = \$1.56 billion





Capital Pipeline Program | Closeout Audits

Today's Vote: June 23, 2021 Approval of Final Audits – Capital Pipeline Projects

	MSBA ID	District Name	School Name	Project Type	Project Scope	Reimb. Rate	Total Project Budget	Final Costs Submitted	Ineligible Costs	Basis for Final Total Facilities Grant	Final Total Facilities Grant	Final Total Facilities Grant	Grant Reconciliation FY	Additional Savings in Final Audit Grant for Cap Reconciliation
1	201600380013	Boxford	Spofford Pond	Accelerated Repair	Roof, Windows / Doors	39.84%	\$4,957,379	\$4,516,234	\$746,247	\$3,769,987	\$1,501,963	\$1,501,963	ARP FY17	\$218,706
2	201100460015	Brookline	Edward Devotion	Core Program	Addition / Renovation	38.30%	\$120,150,000	\$113,226,648	\$47,541,582	\$65,685,066	\$25,157,380	\$25,157,380	FY15	\$1,827,882
3	201601510015	Leicester	Leicester Middle	Core Program	New Construction	59.21%	\$750,000	\$742,258	\$10,432	\$731,826	\$433,314	\$433,314	FY18 FSA	\$10,761
4	201808520605	Nashoba Valley Regional Voc Tech	Nashoba Valley Technical High	Accelerated Repair	Roof, Windows / Doors	55.00%	\$3,704,616	\$3,491,431	\$733,973	\$2,757,458	\$1,516,602	\$1,516,602	ARP FY19	\$120,764
5	201301990035	Needham	Hillside Elementary	Core Program	New Construction	34.72%	\$63,219,631	\$54,067,599	\$17,445,381	\$36,622,218	\$12,715,234	\$12,715,234	FY17 PS&B / FY20 FSA	\$1,299,640
6	201507730025	Triton	Pine Grove	Core Program	Addition / Renovation	50.46%	\$38,992,086	\$37,872,092	\$6,172,235	\$31,699,857	\$15,995,748	\$15,995,748	FY17 FSA / FY17 PS&B	\$944,336
						TOTAL	\$231,773,712	\$213,916,262	\$72,649,850	\$141,266,412	\$57,320,241	\$57,320,241		\$4,422,089

^{*}The Fiscal Years highlighted in bold are not included in the original FY08-FY16 Grant Reconciliation summary.

^{*}The two FY labels reflect the approach to projects after FY16 where the FSA obligation is captured in a different fiscal year than the PS&B obligation.



MSBA Updates

- Executive Director's Report
- Project Status Updates
 - Post Occupancy Contract Update | Vote
 - Project Overview Report
 - Recommendation to Revise MSBA Funding Policy | Vote



Project Visits/ Meetings and Local Votes

- Since the April 14th Board meeting, the MSBA has visited or spoken with 26 projects.
- 8 Districts have voted affirmatively to appropriate feasibility study funds or full project funds as of June 18, 2021.

Project Visi	ts/Meetings	Local Votes			
Acton-Boxborough	Ludlow	Feasibility Study	Full Project Funds		
Arlington	Manchester-Essex	Funds			
Attleboro	Marblehead		Andover		
Belmont	Natick	Clinton	Groton-Dunstable		
Boston	North Adams	East Longmeadow	Lawrence (Oliver		
Bridgewater-Raynham	Northbridge	Hopkinton	Partnership)		
Bristol County	Pentucket	Stoughton	Somerset		
Cape Cod	Sharon	_			
Danvers	Shrewsbury				
Easthampton	Somerville				
Fall River	Wareham				
Framingham	Weymouth				
Gardner	Worcester				



Project Visits/Meetings

Upcoming site visits and calls anticipated in June, July, and August:

Project Visits/Meetings

Acton-Boxborough

Arlington

Attleboro

Belmont

Boston

Bridgewater-Raynham

Bristol County

Cape Cod

Central Berkshire

Danvers

Easthampton

Fall River

Framingham

Gardner

Ludlow

Manchester Essex

Marblehead

Northbridge

Pentucket

Sharon

Shrewsbury

Somerville

Wareham

West Springfield

Weymouth

Worcester



Outreach & Milestones

• 4/21/2021 Marlborough Plaque Dedication

4/27/2021 Lexington School Committee Meeting

• 5/13/2021 A, O, & F Subcommittee Meeting

• 5/20/2021 K-12 Educational Design

• 5/25/2021 Belmont Meeting

• 5/26/2021 American Rescue Program & Mass Schools



Taunton Mulcahey Ribbon Cutting 6/5/2021





Groundbreakings

Dennis-Yarmouth Groundbreaking





Millbury Shaw Elementary School Groundbreaking 5/19/2021

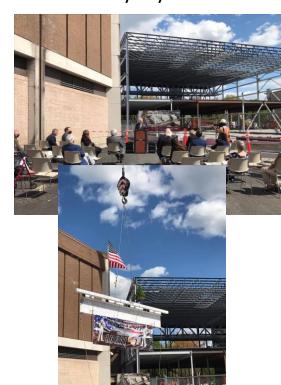
Josiah Quincy Groundbreaking 6/15/2021





Topping Offs

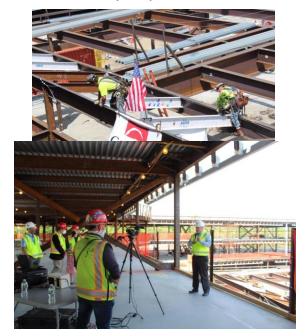
Lowell High School Topping Off 5/13/2021





West Springfield Coburn Elementary School Topping Off 5/17/2021

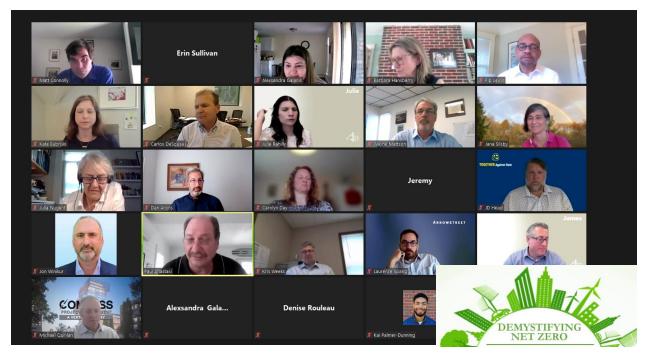
Acton Boxborough Douglas
Gates Elementary Topping Off
5/18/2021





Outreach | Demystifying Net Zero

May 27th, 2021 Technology to achieve NET Zero – Paying for NET Zero – Operating Net Zero – Assembling the right team





Roundtables | Commissioning Roundtable





- Owner's Project Requirements
- Design Intent Document
- · Project Intent Document

May 6th, 2021



Abdullah Khaliqi, PE, CPQ Academic Market Leader



Johanna Brau, LEED, BCxP, CCP Commissioning Engineering Manager





Randy Gruberman, PE, RCDD, CxA Southeast Market Leader/ Low Voltage Service Leader



Roundtables | Contractor Roundtable

MSBA Contractor Roundtable

Creating a Diverse, Equitable & Inclusive Project Environment

June 3, 2021



Speakers:

Maureen Kirkpatrick
Eudad Gonzalez
Bill Aalerud
Vrajesh Patel
Mary Vogel
Natesha West
Shamajah Turner



Roundtables | MSBA Roundtable

June 8th, 2021



Barbara Ayotte | Vice President of Sales and Marketing, Guardian Energy Management Solutions

Dean Saputa | Vice President, UV Resources

Steve Di Giacomo | Founder & Professional Engineer, Energy Management Associates

Michael D'Angelo | Director of Public Facilities, Town of Franklin



Roundtables | Designer Roundtable

MSBA Designer Roundtable

Healthier Building Materials

June 17th, 2021

Facilitator:

Heather Henrinksen
Chief Sustainability Officer
Harvard University



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MSBA Post Occupancy Status Update | Vote

Key Points:

- Historic Timeline & Projections
- Technology Components, Goal & Approach
- Anticipated Roll-out



Historic Timeline & Projections (Updated as of June 2021)

- Internal Kick-off
- Establish Pilot Scope
- ➤ Identify Participants ✓
- ➤ Pilot Recommendation ✓

- ➤ Pilot Test ✓
- District Outreach
- Develop Application
- Initial Building Visits
- Analyze Data
- Designer Roundtable
- Pilot Extension

- ➤ Establish Scope ✓
- District Outreach
- Consultant Procurement
- ➤ Bldg. Visits to Observe Operation/Perf ✓
- ➤ Review of the MSBA Process, Guidelines, Data Col. Opps ✓
- ➤ Consultant Collaboration ✓

- Consultant Collaboration
- ➤ Final Reporting (Pilot) ✓
- Implementation Approval
- > IT Development
- MSBA Recruitment
- Application Testing
- District Outreach

FY17

FY18

FY19

Y20

FY21

- > POE Commencement
- Memorialize Mod 9
- Est. Consultant W.O.'s
- Provide Consultant Training
- Coordinate Bldg. Visits
- ➤ Initial Visit Check-in

Continue Bldg. Visits

- Apply Lessons from Year 1
- Consider Adirector and
- Consider Adjustments
- Coordinate Bldg. Visits

Continue Bldg. Visits

- Apply Lessons from Year 1-2
- Consider Adjustments
- Coordinate Bldg. Visits

Continue Bldg. Visits

- Apply Lessons from Year 1-3
- Consider Adjustments
- Coordinate Bldg. Visits

FY22

FY23

FY24

FY25

125



Technology Goal and Approach

Project Data Collection (Info from Modules 1-8)

Online Survey for End-users (Feedback from occupants)

Pre-Visit Questionnaire (Data from District and Facilities)

Building Visit (Observations by Professionals)

Build a new application as an extension of the current MSBA suite of applications, leveraging existing project data and supporting new Post Occupancy data collection for analysis and reporting.

- Easy to access web applications for different user groups (internal and external) on various types of devices
- Easy to use interfaces and screens
- Central, consolidated data repository
- Easy access to data and templates for reporting
- Administration tool for POE Team to setup and manage systems for projects in Post Occupancy phase



Online Survey

Leadership - District or Schools Questionnaire

Site & Circulation Safety & Security Materials & Systems Maintenance Space

Maintenance

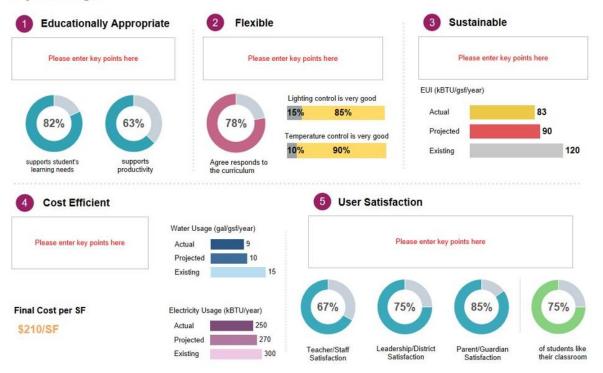
M1. Please indicate how strongly you agree or disagree with the following statements about the maintenance practices in the building:*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
The district has general maintenance protocols for the site (the grounds and outdoor spaces)	0	0	0	0	0	0
The district has general maintenance protocols for the building	0	0	0	0	0	0
The district has changed their maintenance practices to adapt to the building	0	0	0	0	0	0
There was training for staff for all building systems (e.g. HVAC, lighting) when the building opened	0	0	0	0	0	0
Retraining for staff is available if needed	0	0	0	0	0	0
There is training for new staff for all building systems	0	0	0	0	0	0
The district responds to repairs or malfunction of equipment	0	0	0	0	0	0
Systems and components in the ceiling are easy to access for maintenance	0	0	0	0	0	0
There is easy-to-use documentation of the materials used in the building for maintenance, updates, and replacements.	0	0	0	0	0	0



District Report

Key Findings



Massachusetts School Building Authority 35



Interactive Dashboard

MSBA Post Occupancy Evaluation / Summary

School Name Procurement Type Project Scope Multiple values All All All

Number of Schools with POE's

10

Total Gross Square Footage

950K

Total Project Cost

\$3.0B

Average Project Cost

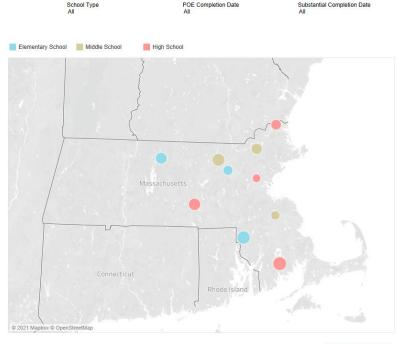
\$300M

Board Approved TFG Amount

\$1.5B

Total POE Survey Respondents

3200



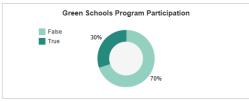
Last Updated: 5/14/2021

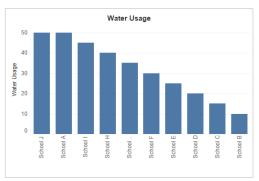


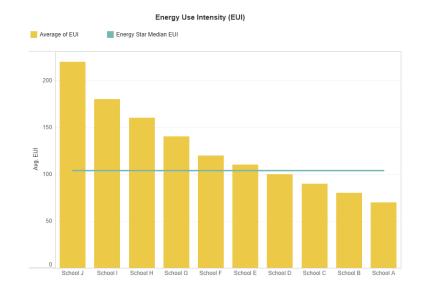
Interactive Dashboard

MSBA Post Occupancy Evaluation / Sustainability

School Name Procurement Type Project Scope School Type POE Completion Date Substantial Completion Date Multiple values All All All All

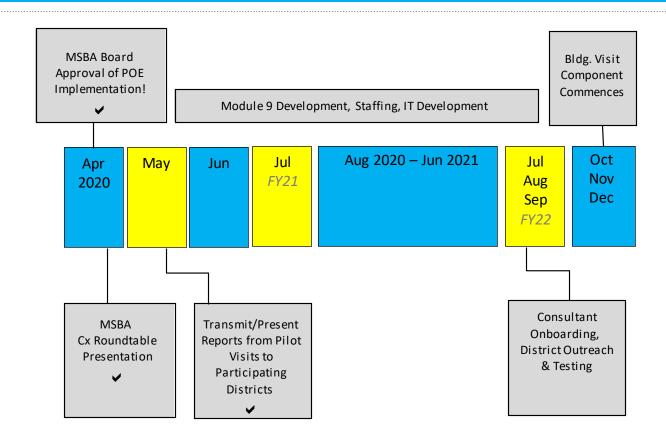






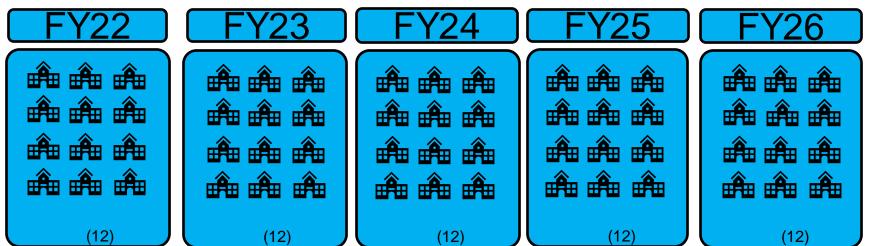


Anticipated Roll-out, Revised June 2021





Projected POEs & Associated Construction Cost (FY22-26)*



~9M sf ~\$4B*

Approximate totals

^{*}Based on project schedules, this assumes an average of (12) visits per year. Assume 60 evaluations through FY26.



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Accelerated Repair – Bid Summary

2019 Accelerated Repair Program

- 36 of the 36 reported projects bid within the estimated budget
- Additional 2 projects are anticipated to be reported for the August Board of Directors meeting



Core Program – Bid Results 2021

- Of the 14 projects scheduled to receive sub-bids in 2021, 6 have reported DBB bids or GMP executions to date
- 5 reported bids came in within the estimated budget

District	School	Scope	Project Type	Bid Date	Construction Estimate *	Bid Amount *	Variance from Construction Estimate	Reim. Rate	Potential Grant Variance **
Millbury	Raymond E. Shaw ES	New	DBB	2/10/2021	\$49,269,791	\$46,273,468	-\$2,996,323	61.37%	-\$1,838,843
Rockland	Jefferson ES	New	DBB	2/24/2021	\$68,249,754	\$58,190,000	-\$10,059,754	67.08%	-\$6,748,083
Easton	Center School	New	DBB	2/23/2021	\$74,886,581	\$63,637,537	-\$11,249,044	55.93%	-\$6,291,590
Dennis-Yarmouth	Mattacheese Middle School	New	DBB	3/16/2021	\$93,744,492	\$84,013,640	-\$9,730,852	57.68%	-\$5,612,755
Sharon	Sharon HS	New	CMR	3/22/2021	\$126,242,153	\$121,544,639	-\$4,697,514	48.95%	-2,299,433
Amesbury	AmemsburyES	New	DBB	4/20/2021	\$48,946,932	\$50,040,000	\$1,063,068	58.98%	\$0
				Total	\$461,369,703	\$423,699,284	-\$37,670,419	-	-\$22,790,705

^{*}The construction estimate and bid amount include pre-construction services and alternates.

^{**}These numbers are based on preliminary information received from the district and are subject to further review and calculation.



Core Program - Anticipated Bids

Anticipated Sub-Bids in June, July, and August:

- June Orange (DBB)
- July None
- August Waltham (CMR)

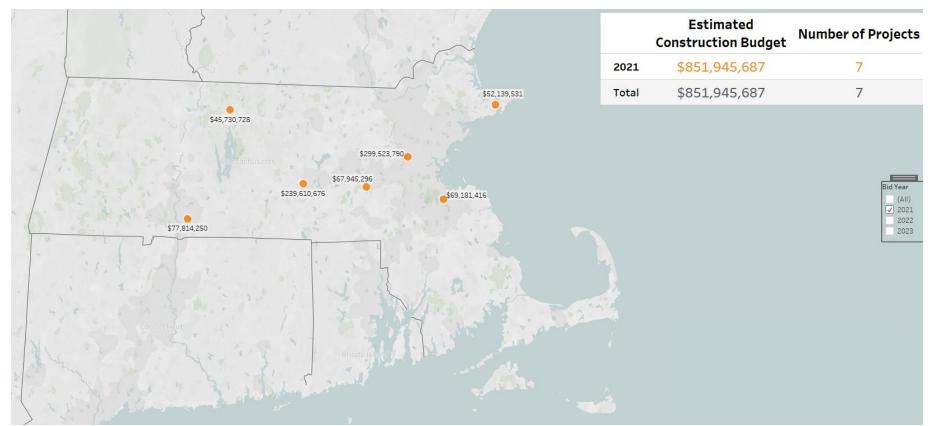
Anticipated DBB Bids or GMP Executions in June, July, and August:

- June None
- July Orange (DBB)
- August None

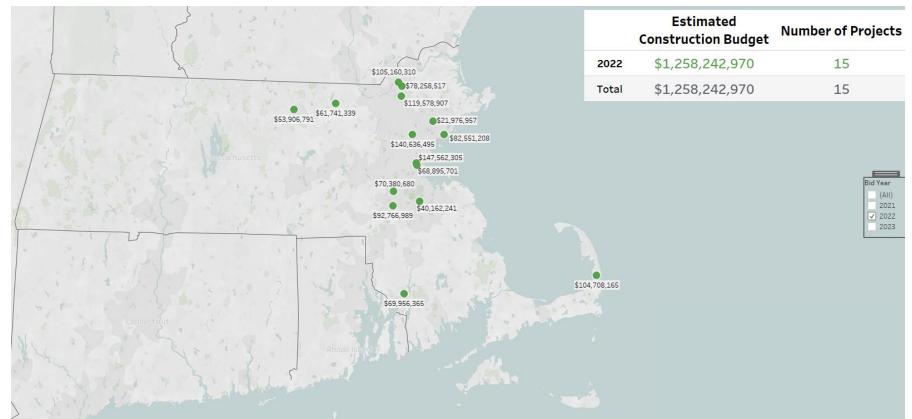




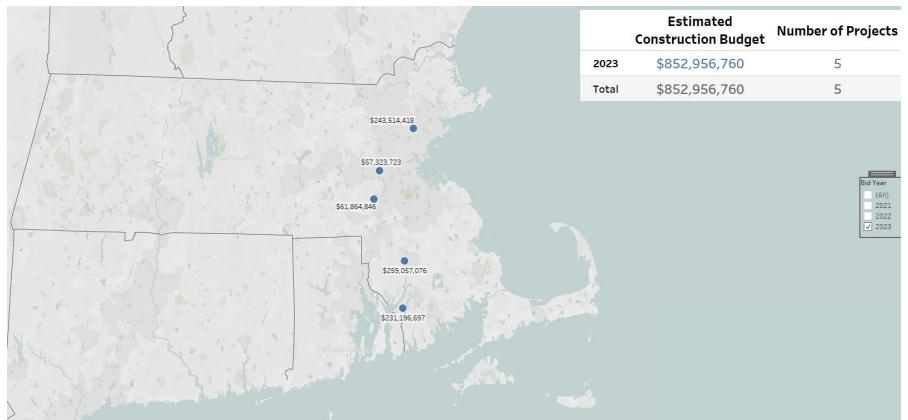














MSBA Updates

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Recommendation to Revise MSBA Funding Policy | Vote

Big Picture Goal

- To continue to review and refine the grant program to ensure the MSBA can maximize the number of invitations to the program and its funds are distributed as equally and effectively across the Commonwealth as possible.
- Review to ensure caps are applied in an equivalent manner across consultants and project costs as well as grants are placed where the greatest number of districts will benefit from the grant value and to maximize reimbursement to districts.



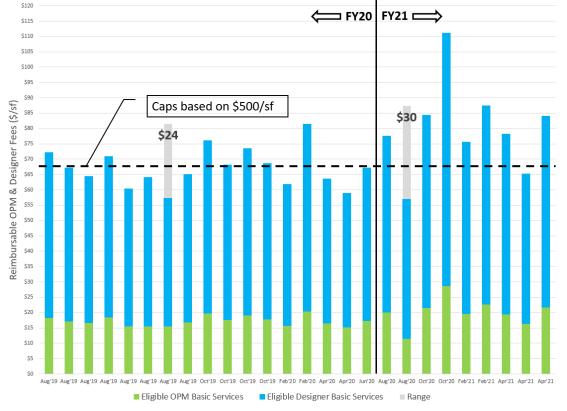
Background

Date	Funding Limit
January 2009 to June 2014	\$275 + D&A
July 2014	\$287 + D&A
July 2015	\$299 + D&A
July 2016	\$312 + D&A
July 2017	\$326 + D&A
January 2018	\$333 + D&A

- Early in 2009 set construction funding up to \$275/sf + eligible demolition and abatement
- August 2012 Procured Rider Levett
 Bucknall ("RLB"), evaluated
 construction cost data and reported
 in June 2013 that funding up to
 \$275/sf + eligible D&A continued to be
 appropriate
- Staff have reviewed construction cost trends and dedicated sales tax growth annually since 2013 resulting in five increases.



Reimbursement Limits on OPM & Designer Fees

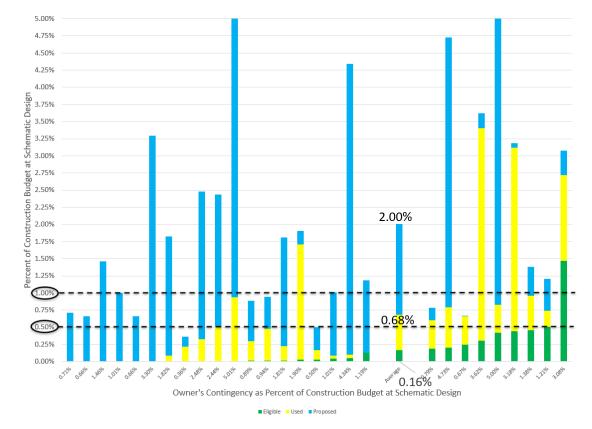


- To promote parity in MSBA's reimbursement on consulting fees and align the approach used to reimburse on eligible construction costs
- MSBA recommends that OPM and Designer Fees be based on an upper limit of \$500/sf.



Owner's Contingency

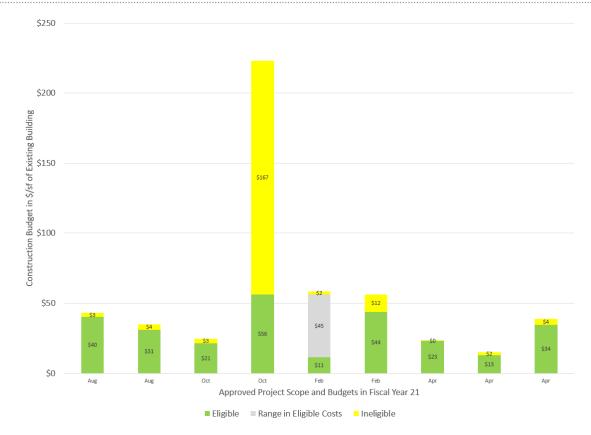
- Districts are budgeting 2% and using 0.68% on average
- MSBA is only finding 0.16% of construction budget as eligible for reimbursement
- Recommend caps of 0.5% for new construction and 1.0% for Addition/Renovation





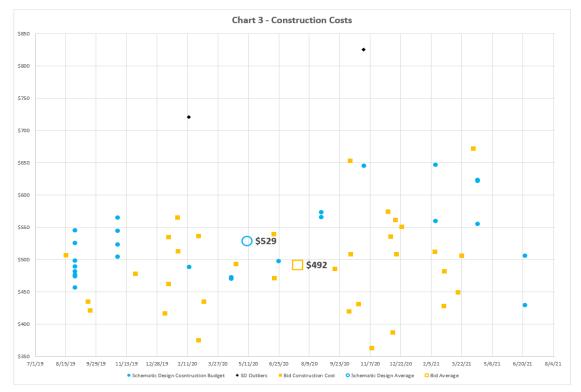
Demolition & Abatement

- Based on 9 core program projects approved in FY21 eligible Demolition & Abatement Budgets varied by \$45/sf for the existing building
- Additional work is required to review final audited projects to better understand actual costs





Construction Costs

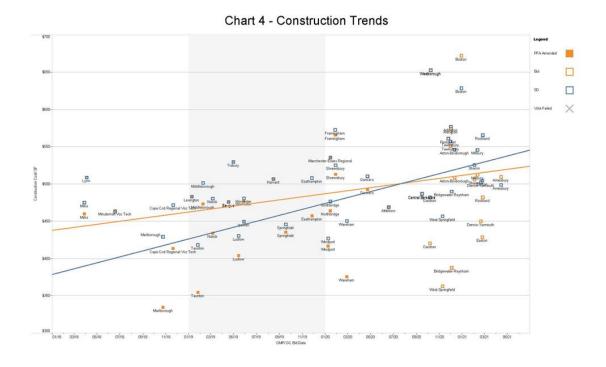


- Construction budgets for Schematic Design Submittals averaged \$529/sf over the last two years.
- Construction Bids averaged \$492/sf over the last two years



Construction Trends

Schematic design construction budgets and construction bids continue to outpace the growth in the available grant cap space





Estimated Grants and Cap Space

- Based on current understanding of the projects in the capital pipeline and continued growth in the dedicated sales tax revenue the MSBA's Grant Cap space could support the recommended increase in construction cost funding limit if combined with the recommended upper limits on OPM and Designer Fees and a cap on eligible Owner's contingency
- Implementation of these recommendations is expected to result in a more consistent distribution of limited grant funds and maximize the amount of funding that can be awarded and distributed within Grant Cap limitations



Proposed Recommendations

	Current Practices	Proposed
Owner's Contingency	No defined limit	Implement a cap on eligibility of up to 0.5% for new construction and 1.0% for addition renovation projects of construction budget
OPM & Designer Fee Caps	OPM: 3.5% & Designer 10% of construction budget exclusive of ineligible scope	Base 3.5% and 10% on an upper limit of \$500/sf
Demolition & Abatement	Eligible Scope is fully funded	Perform additional review to better understand budgeted and actual costs
MSBA Construction Cap	\$333/sf + eligible demo & abatement	\$360/sf + eligible demo & abatement



Finance Update

- Sales Tax Collections Update
- Grant Payments Update
- FY 2021 Budget Update and Year-End Projections



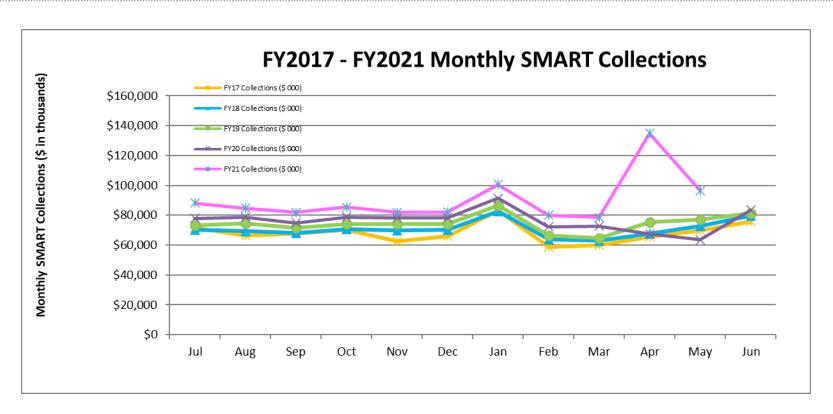
FY2021 SMART Collections Update

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD
FY20 Receipts	77,941	78,753	74,787	78,674	78,230	78,254	91,330	72,266	72,690	67,447	63,598	83,338	917,307
\$ Change vs. FY19	4,776	4,076	3,175	4,469	4,050	4,040	4,988	5,806	8,029	(7,752)	(13,383)	1,834	24,107
% Change vs. FY19	6.53%	5.46%	4.43%	6.02%	5.46%	5.44%	5.78%	8.74%	12.42%	-10.31%	-17.39%	2.25%	2.70%
FY21 Receipts	88,108	84,707	81,869	85,292	81,978	82,039	100,578	79,993	78,442	134,696	96,553		994,255
\$ Change vs. FY20	10,167	5,954	7,081	6,618	3,749	3,785	9,248	7,727	5,752	67,249	32,955		160,286
% Change vs. FY20	13.05%	7.56%	9.47%	8.41%	4.79%	4.84%	10.13%	10.69%	7.91%	99.71%	51.82%		19.22%

 FY 2021 unaudited collections for July 2020 through May 2021 are \$160.2 million or (19.22%) higher than FY 2020 audited collections for the same period

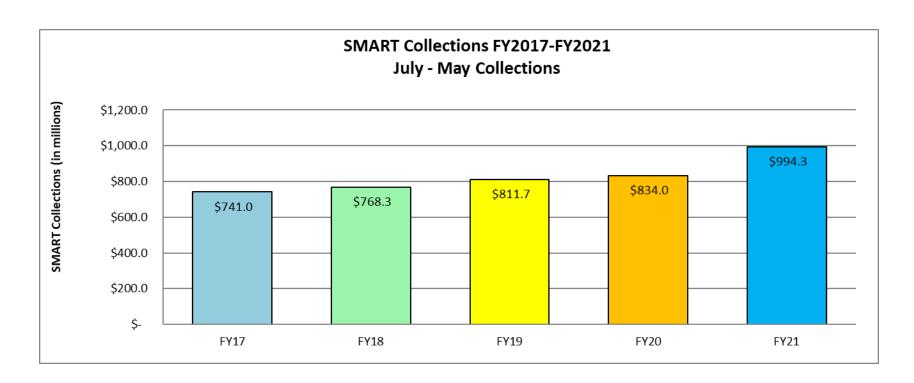


FY 2021 SMART Collections Update





Smart Collections Year To Date





Finance Update

- Sales Tax Collections Update
- Grant Payments Update
- FY 2021 Budget Update and Year-End Projections

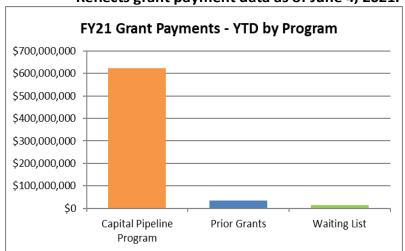


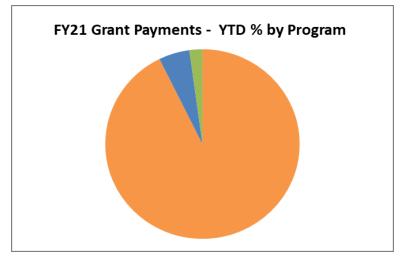
Grant Payments | FY2021 YTD Update

FY21 YTD Grant Payments Summary*

					% of FY21
Program	Gı	rant Payments	# Projects	# Districts	Payments
Capital Pipeline Program	\$	623,137,026	179	115	93%
Prior Grants	\$	34,470,395	38	30	5%
Waiting List	\$	14,535,071	25	18	2%
Total	\$	672,142,492	242	141	

*Reflects grant payment data as of June 4, 2021.







Finance Update

- Sales Tax Collections Update
- Grant Payments Update
- FY 2021 Budget Update and Year-End Projections

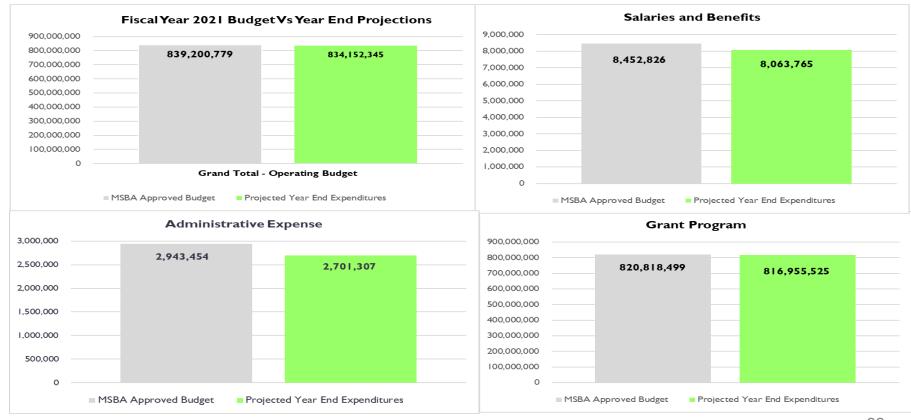


Fiscal Year 2021 Budget Update





Fiscal Year 2021 Year End Projections





Fiscal Year 2021 Spending Projections

