

School Modernization in Vermont

A Brief Presentation to House Education and Corrections
and Institutions Committees

February 18, 2020

David Epstein, TruexCullins Architecture + Interior Design

**Jeff Francis, Executive Director of Vermont Superintendents
Association**

Contents

- **The Context**
 - The Massachusetts Program
 - **The Opportunities**
 - **Program Framework Ideas**
 - **Moving Forward**
-

The Context: Working Group

- **H209**
 - **Misc. Education Bill**
 - **Ad Hoc Group formed**
 - Superintendents
 - Architects
 - Facility Directors
 - Agency of Education
 - VT Community Bond Bank
 - **Met Summer and Fall 2019**
-
-

The Context: Historical

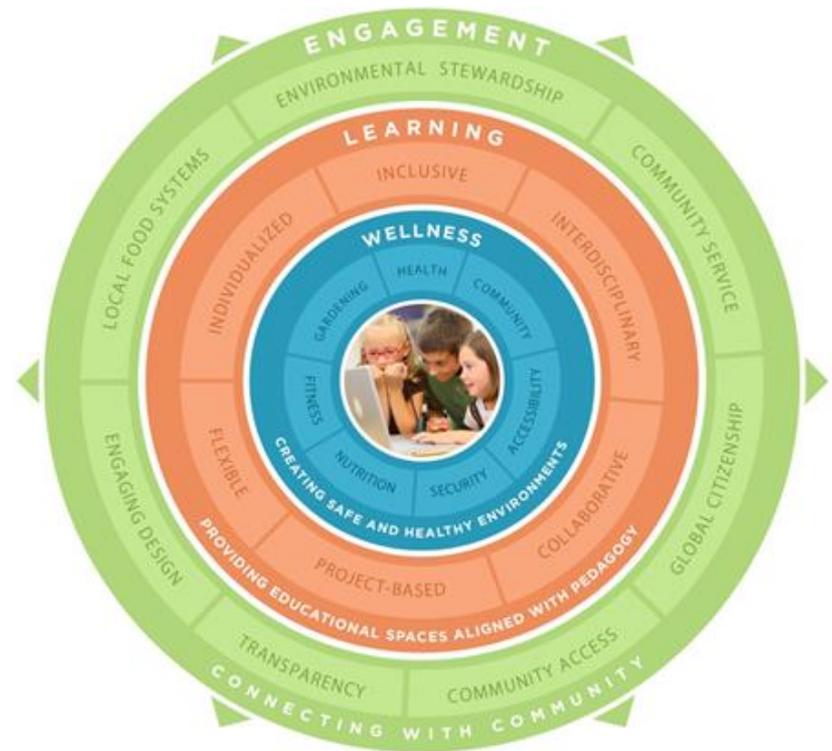
- **1892**: Local towns were forced to consolidate their 2500 boards into 279.
 - **1923**: Supervisory Unions formed
 - **1950-60s** Union High School era
 - **1990s** - Last population boom - additions built - that work is now 30 years old
 - Little significant work since then - result is **many buildings in poor condition**
-

The Context: Facility Conditions



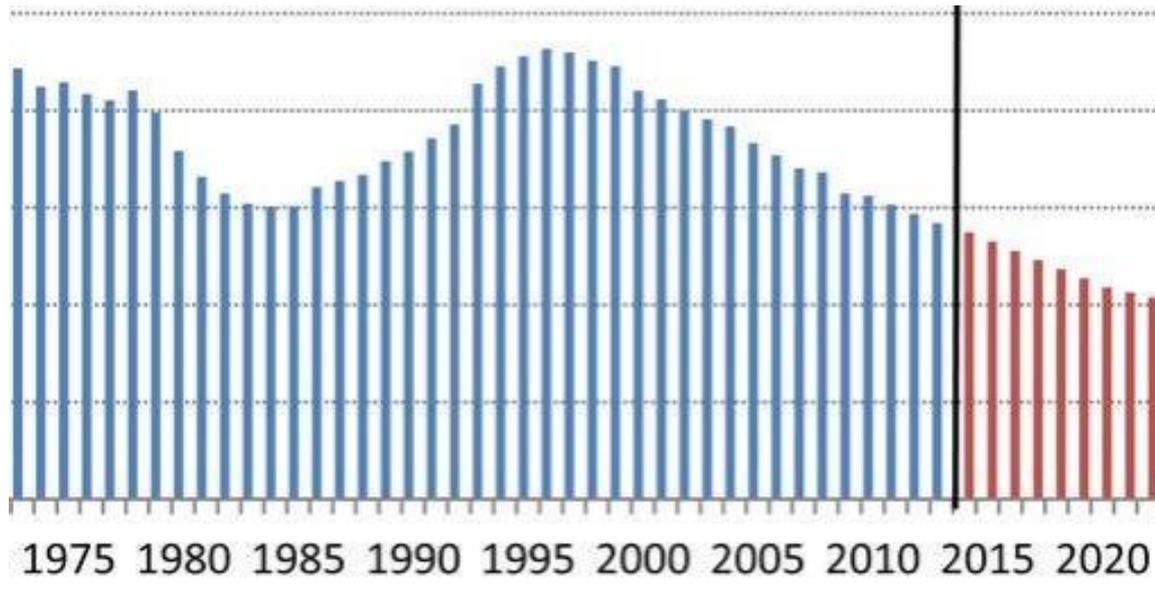
The Context: Education

- Changed from teacher-centered instruction to student-centered learning
- More student needs – more support services
- New paradigm has different space needs than past
- Education has changed – buildings have not



The Context: Enrollment

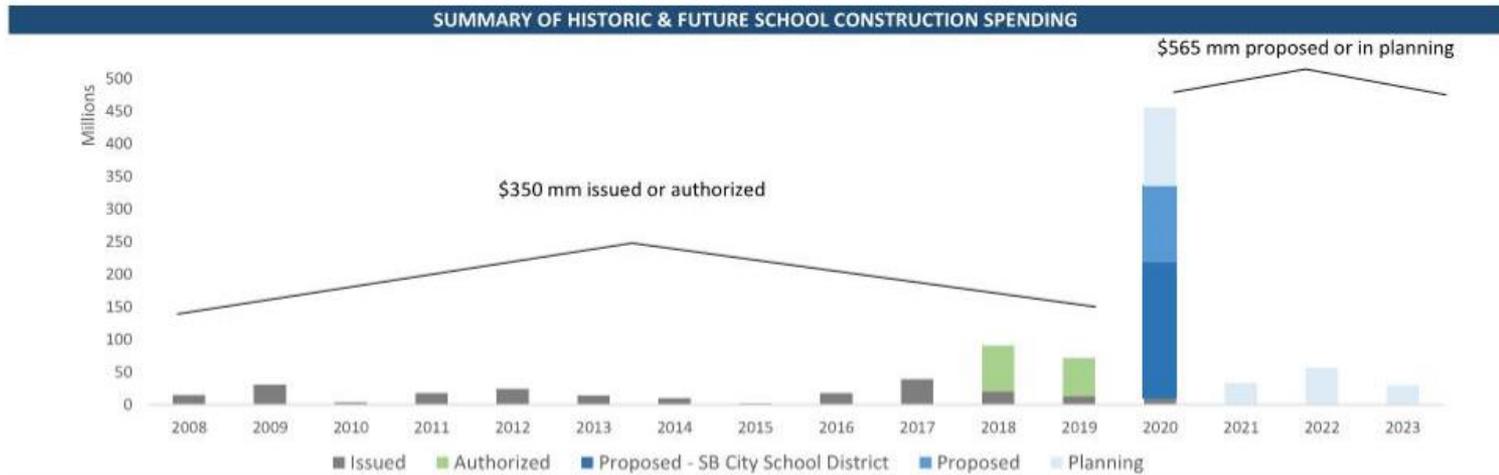
- Declining enrollment in many rural areas



The Context: Moratorium

- Enacted in 2007 due to backlog of projects
 - No state school construction program since then - now huge backlog of projects and demand
 - Consequence: state does not have a big hand in directing how resources are allocated across the state.
 - Result is increased inequity in the quality of education between rich and poor towns
-

The Context: Growing Needs

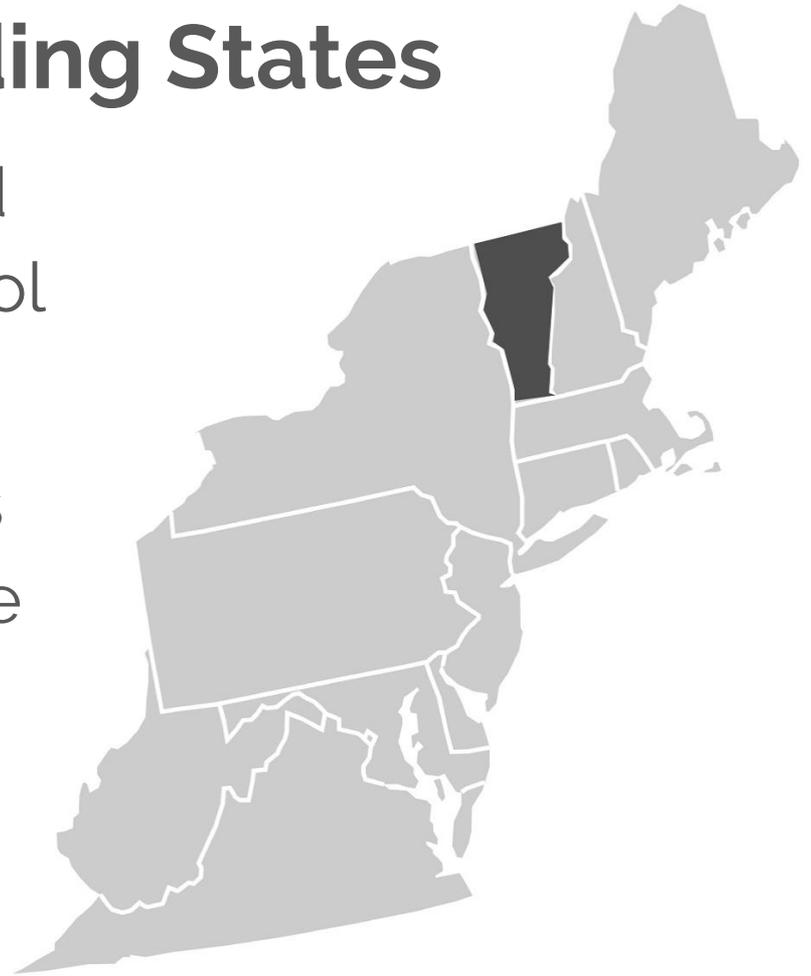


SUMMARY OF HISTORIC & FUTURE SCHOOL CONSTRUCTION SPENDING

Year	Authorized	Issued	Planning	Proposed	Proposed - SB City SD	Total	Avg Size	Count		
								< \$10 mm	>= \$20 mm	>= \$40 mm
2008		\$15,210,000				\$15,210,000	\$1,267,500	12	0	0
2009		30,795,000				30,795,000	5,132,500	5	1	0
2010		3,715,000				3,715,000	928,750	4	0	0
2011		17,880,000				17,880,000	2,235,000	8	0	0
2012		24,519,367				24,519,367	1,532,460	16	0	0
2013		14,609,000				14,609,000	2,434,833	6	0	0
2014		10,210,000				10,210,000	1,276,250	8	0	0
2015		1,930,000				1,930,000	643,333	3	0	0
2016		18,190,000				18,190,000	2,598,571	7	0	0
2017		39,384,431				39,384,431	6,564,072	5	0	0
2018	70,000,000	20,909,500				90,909,500	11,363,688	7	1	1
2019	58,000,000	13,899,513				71,899,513	14,379,903	4	1	1
2020		10,567,000	120,000,000	114,900,000	210,000,000	455,467,000	37,955,583	5	7	4
2021			33,300,000			33,300,000	5,550,000	5	0	0
2022			57,000,000			57,000,000	19,000,000	2	1	1
2023			30,000,000			30,000,000	30,000,000	0	1	0
Total	\$128,000,000	\$221,818,811	\$240,300,000	\$114,900,000	\$210,000,000	\$915,018,811	\$8,243,413	97	12	7
Post 2019	\$0	\$10,567,000	\$240,300,000	\$114,900,000	\$210,000,000	\$575,767,000	\$26,171,227	12	9	5

The Context: Surrounding States

- All surrounding states (and all states in NE) have school construction programs.
- Vermont will fall behind its neighbors and will become less competitive in attracting companies and individuals to the state



The Context: Surrounding States

	VT	RI	NH	ME	MA
State Information					
State Population	626,299	1,057,000	1,356,000	1,338,000	6,902,000
Number of Schools	250	304	481	600	1863
Number of Students	83,710	143,436	177,365	182,496	951,631
School Construction Program					
Moratorium	2007 to present	2011 - 2015	2011-2020	None	2004-2007
Estimate of Need	Unknown	\$3b	Unknown	Unknown	\$24b audited to date
Governing Body	N/A	AOE/SBA	AOE	AOE	MSBA
Funding Source	N/A	\$250m bond 2018	Appropriation	Appropriation	1% Sales Tax
Max Reimbursement	N/A	None	\$50m per project	None	None
Percentage Reimbursement range	N/A	35% to 90%	30% to 60%	Unknown	31% to 80%
Criteria/Bonus Incentives	N/A	Health/Safety, Replacement, Consolidation, Educational Enhancements, Decrease Overcrowding, Increase Utilization	Maintenance, FRL, Security, Consolidation, Energy Efficiency, Historic Pres	Safety, Health, Educational Appropriatenes, System Deficiencies, Overcrowding, Enrollment	Community Income, Wealth, Poverty, Energy Efficiency, Maintenance, Overlay Zoning, Renovation
Ranking System	N/A	Yes	Yes	Yes	Yes
Guaranteed Reimbursement	N/A	Yes?	No	Unknown	No

Massachusetts School Building Authority

Deborah B. Goldberg

State Treasurer and Receiver-General

Chairperson

James A. MacDonald

Chief Executive Officer

Jack McCarthy

Executive Director



MSBA Overview

Massachusetts School Building Authority

Deborah B. Goldberg

State Treasurer and Receiver-General

Chairperson

James A. MacDonald

Chief Executive Officer

Jack McCarthy

Executive Director



Our Mission

Partner with Massachusetts communities to support the design and construction of educationally-appropriate, flexible, sustainable, and cost-effective public school facilities.



Created in 2004, M.G.L. c. 70B

- The Legislature created the MSBA in **2004** to replace the former school building assistance program administered by the Department of Education (now the Department of Elementary and Secondary Education).
- The MSBA, which has a **dedicated revenue stream of one penny of the state's 6.25-percent sales tax**, is collaborating with municipalities to equitably invest in finding the right-sized, most fiscally responsible and educationally appropriate solutions to create safe, sound, and sustainable learning environments.
- The MSBA is a non-entitlement, competitive grant program that **reimburses projects between 31% to 80%** of eligible project costs.



Enabling Legislation

The MSBA's enabling statute creates an autonomous Authority

- The **MSBA is an independent public authority** governed by a 7 member Board, with Treasurer as Chair. A quorum is 4 members. Any official Board action must be approved by the affirmative vote of 4 members. There is currently 1 vacancy on the Board.
- The MSBA has a **separate dedicated revenue stream** not subject to appropriation or allotment.
- Dedicated revenues flow directly to the MSBA, they are **not part of the Commonwealth's annual budget.**
- The MSBA may borrow and repay money by issuing bonds and notes – the **MSBA is solely responsible for its debt, it is not a General Obligation of the Commonwealth.**
- The MSBA can sue and be sued, the MSBA is not subject to sovereign immunity like the Commonwealth.



The Former School Building Assistance Program (“Inherited Programs”)

- The former school building assistance program was established by the Legislature in **1948** as a temporary program in response to post World War II baby boom
- It was not set up to examine and improve the delivery of education or work with Districts to plan, construct, and pay for educational facilities that would achieve that goal
- During the next 40 years, the former program continued to grow
 - Reimbursement rates increased to a maximum of 90%
 - Proposition 2 ½ made cities and towns more reliant on state funding
- **By the late 1990s, the scale and pace of the program was no longer financially sustainable**
 - **Ineffective control and uncertainty through annual appropriation process**
 - **Lengthy Waiting List for funding**
 - Led to increased issuance of local debt



The Former School Building Assistance Program (“Inherited Programs”)

- The Program was to be temporary
- **The Program was perceived as an entitlement**
 - **Districts were generally "approved" for funding**
- The Program was retroactive
 - Districts typically borrowed to pay for the cost of a project. When completed, the School Building Assistance Commission (SBA) would fund from 50-90 percent of all project costs, including the cost of financing
- **There was no dedicated source of revenue**
 - Money was appropriated to the SBA on an “ad hoc” basis
- **There was no cap upon the number of projects that could be funded nor upon the total amount that could be paid out in funding**



The Need for Reform

- **The program became a quasi-entitlement program and was financially unsustainable**
- Once a project was approved, it committed the Commonwealth to annual payments over 20 years
- Prior Grants estimated commitments of the Commonwealth totaled \$5.1 billion from 2005 to 2023
- **Waiting List grew to 428 projects with the Commonwealth's share of project costs estimated at \$5.5 billion**
- **Expected wait for Commonwealth's first payment could be more than 10 years**
- **Audit backlog to reconcile project costs grew to more than 750 projects and the expected wait for an audit was 7-10 years**
 - Created uncertainty for the municipalities as well as the Commonwealth

Massachusetts School Building Authority

Deborah B. Goldberg

State Treasurer and Receiver-General

Chairperson

James A. MacDonald

Chief Executive Officer

Jack McCarthy

Executive Director



Finance Overview

- Background
- Achievements
- Current State of Affairs
- A Look Ahead



Program Solutions

MSBA Implemented Programmatic Oversight and Controls to Ensure Grant Program Stays within Available Resources:

- **Limit Grant Approvals to Available Funds**
 - Develop individual project budgets and require multiple independent cost estimates for projects
 - Require districts to design to agreed-upon budget/scope
 - MSBA/local district financial commitment clearly documented
 - Funding agreements explicitly protect MSBA from project budget or scope increases
 - MSBA has been disciplined in applying policies and procedures and has demonstrated its willingness to halt funding to enforce compliance with funding agreements

- **Focused New Program Spending**
 - Emphasis on core academic spaces, such as classrooms and science labs
 - Adherence to educationally-sound MSBA space guidelines/standards
 - “Pay as you build” Progress Payment system

- **Completed Three Capital Surveys of Approximately 1,800 School Facilities Across the Commonwealth**
 - Identified baseline public school inventory

- **Developed Data-Based Enrollment Projection Methodology in Order to Build Right-Sized Schools**



Progress Payment System

- **Enables MSBA to audit and pay as projects progress**
 - Captures detailed project budget and cost data
- Districts submit paid project costs monthly for MSBA review and applicable reimbursement
 - MSBA auditors review individual invoices, compare expenditures to the budget line items, and review contract amounts versus payments for the general contractor, designer, and Owner's Project Manager.
- **Districts avoid having to borrow the MSBA's share of project costs**
 - **Reduces local debt**
- Consistent, predictable payments allow communities to better manage their cash flow
- The MSBA holds back 5% of the Estimated Maximum Total Facilities Grant until the final audit is complete.
 - During the final audit, the MSBA reviews invoices, contracts, and budget line items again. Final payment is made after the Board votes to approve the final audit.



Reimbursement Rates (M.G.L. c. 70B)

- **Base rate for each district of 31 percentage points up to a maximum of 80 percent**
- **Three Ability-to-Pay Factors can increase the reimbursement rate** from the base before addition of any applicable incentives:
 - **Community Income Factor (0-12 percentage points)**
 - Per capita income
 - Source: MA DOR
 - **Community Property Wealth Factor (0-28 percentage points)**
 - Per capita equalized property valuation
 - Source: MA DOR
 - **Community Poverty Factor (0-17 percentage points)**
 - Eligibility for Federal Free/Reduced Lunch
 - Source: MA DESE
- Maximum rate, including incentives, not to exceed 80%



Reimbursement Rates - Incentives

- **Energy Efficiency/Green Schools:** 0-2 percentage points
- **Routine and Capital Maintenance:** 0-2 percentage points
- **Newly Formed Regional School Districts:** 0-6 percentage points
 - Maximum of 6 incentive points for establishment of new regional district, or amendment of existing agreement to add a new member
 - Maximum of 3 incentive points for inclusion of additional grades into existing regional agreement (one percentage point per additional grade)
- **Construction Management At Risk delivery method:** 1 percentage point for projects invited to the pipeline prior to 1/1/17.
- **Model School:** 5 percentage points for projects invited to the pipeline prior to 1/1/16.
- **M.G.L. c.40R/c.40S Overlay Zoning District:** 0-1.5 percentage points
- **Renovation/Reuse of an Existing Facility:** 0-5 percentage points

Massachusetts School Building Authority

Deborah B. Goldberg

State Treasurer and Receiver-General

Chairperson

James A. MacDonald

Chief Executive Officer

Jack McCarthy

Executive Director



The Current Program Process & Our Capital Pipeline

- *Key Elements of the Current Process*
- *Projects and Process*
- *Statements of Interest Overview*
- *A look ahead*
- *Building Program Challenges*



Statements of Interest

- **Submitting a Statement of Interest (“SOI”)** is the critical first step in the MSBA’s program to partially fund the construction, renovation, addition or repair of municipally or regionally owned school facilities located in cities, towns and regional school districts. The SOI allows districts to inform us about deficiencies that may exist in a local school facility and how those deficiencies inhibit the delivery of the district’s educational program. A district would identify whether they are filing under the Accelerated Repair Program or the Core Program.
- **The MSBA Accelerated Repair Program (“ARP”)** is for the partial or full replacement of roofs, windows/doors, and boilers. In some cases, a project which is inappropriate for the MSBA ARP may be appropriate for the MSBA CORE program.
- **The Core Program** is primarily for projects beyond the scope of the Accelerated Repair Program, including extensive repairs, renovations, addition/renovations, and new school construction.



Key Elements of the Current Process

Process for grants is based on collaboration between districts and the MSBA

- The MSBA needs to be involved in all phases of a project from initial statement of the problem (Statement of Interest application) through feasibility study, design development, construction and project close-out
- **Studies/design/work done without MSBA participation is not eligible for reimbursement**

Enrollments

- **Projected enrollments must be generated through the MSBA's on-line enrollment projection system and must be agreed upon before project can move forward**

Educational Program

- **Focus on District's educational program to inform options study**

MSBA Space Guidelines

- **Space Allowance by Program Activity - For new schools, basic classrooms sizes for Pre-K, elementary, middle and high school must meet MSBA guidelines.**



Key Elements of the Current Process (continued)

Local Votes

- The MSBA requires a very specific form/language for local votes
- One project – One Vote

Owner's Project Managers (OPMs)

- Any project over \$1.5 Million is required to have an Owner's Project Manager (OPM)
- The MSBA must approve OPM's for potential school projects

Designer Selection

- The Designer Selection Panel (DSP) was created by the MSBA to ensure an impartial and objective designer selection process

Project Scope, Schedule, and Budget

- The MSBA and the District must have agreement on scope, schedule, budget *before* project can be approved by the MSBA Board

Project Scope Monitoring

- The MSBA continues to monitor scope, schedule and budget through project completion

Commissioning

- The MSBA funds 100% of the commissioning for all projects

Massachusetts School Building Authority

Deborah B. Goldberg

State Treasurer and Receiver-General

Chairperson

James A. MacDonald

Chief Executive Officer

Jack McCarthy

Executive Director



Guidelines, Programs & Initiatives

- Enrollment & Space Guidelines
- Site Issues
- Model School Program
- Repair Program
- Commissioning
- Science Lab Initiative



Enrollment Guidelines

Projected enrollment dictates how large/small a school building needs to be

- **Projected enrollment needs to be realistic**
 - **Enrollments are dropping across the state for the majority of districts**
 - When projected enrollments do not materialize, that is another district's roof, classroom addition, or science lab not done
- **MSBA will not authorize a project for further development until enrollment is agreed upon with the District**
- MSBA had a task force of superintendents to develop our online enrollment model, available for every district
- MSBA will work with districts to accommodate local enrollment idiosyncrasies....
 - ...but will not engage in wishful thinking



Space Guidelines – Realistic and Affordable Education Plan

MSBA developed square footage space guidelines that are flexible and focus on Core Academic Spaces

- Allows a proposed school to grow or shrink based on projected enrollment
- If your educational plan reasonably is in excess of the guidelines in core academic spaces, we will work with your district to try to accommodate some variances
- Prove to MSBA that there is a budget to support new educational programs that are new to district
- The MSBA and the District need to assess whether there is empty/available capacity elsewhere in the district that could help solve the problem



Commissioning

MSBA fully-funded process involving independent third party testing a building's systems and materials and the operation of the building as a whole

- MSBA commissioned buildings undergo an intensive quality assurance process
- Many benefits of commissioning for the District
- 100% funded by the MSBA
- Building commissioning is also a critical component in any "green" building program including LEED and MA-CHPS

Commissioned Systems

- ✓ Building Envelope
- ✓ Roofing Systems
- ✓ HVAC Systems
- ✓ Plumbing Systems
- ✓ Electrical Power and Lighting Systems
- ✓ Voice, Data and Video Systems
- ✓ Life Safety Systems
- ✓ Building Automation and Control Systems

Total Value of commissioning work orders to date = \$37.2 million



Maintenance and Capital Planning

- Eligible Applicant must have expended the minimum maintenance expenditure requirements pursuant to M.G.L. c. 70B, § 8;
- Proposed Project is not due to the negligence or lack of maintenance of the Eligible Applicant;
- MSBA shall assess an Eligible Applicant's maintenance process and review the maintenance practices and procedures in place at the school and district level
- Based on twenty (20) best practices developed from discussions with:
 - industry professionals
 - school superintendents
 - maintenance staff
 - school business officials
 - guidance gleaned from the MSBA Maintenance Task Force



A Few Achievements

- **Since 2004, we have made over \$14.2 billion in payments to cities, towns and regional school districts.**
- A total of 312 projects that have received invitations from the Board of Directors (“Board”) to collaborate with the Massachusetts School Building Authority (“MSBA”) are currently in the MSBA’s Eligibility Period and Capital Pipeline.
- Currently, there are 325 projects that are either active or completed in the ARP. The 325 projects are located in 129 districts, many of whom have been invited to the ARP multiple times.
- **We have completed final audits of 1,315 projects, totaling over \$21.6 billion in submitted costs.**



The Opportunities

- **Educational Quality**

- Better learning environments help lead to better educational outcomes
- Reggio Familia: the learning environment as The Third Teacher

- **Educational Equity**

- Helps poorer communities improve their facilities
-

The Opportunities

- **Economic Development**

- Attracts people to the state
- Provides design and construction jobs

- **Workforce Development**

- Provides modern facilities geared towards today's industries

- **Resource efficiency**

- Helps shape how taxpayer dollars are directed
 - Helps reduce duplication of effort in nearby towns
 - Directs school development in alignment with state goals
-

Program Framework Ideas

- A statewide **stewardship program** for K-12 public schools in Vermont **that promotes modern high-quality learning environments** throughout the state



Program Framework Ideas

- The components of this program should include:
 - A **statewide survey** and database of all schools that includes important facility data
 - **Financial incentives** to school districts to modernize their facilities
 - **Criteria** to rank school needs
 - Healthy and energy efficient **building standards**
 - A **Facilities Director** or equivalent at each school district
-

Program Framework Ideas

- The components of this program should include:
 - Requirement that each district provide an updated **Facilities Master Plan** every 5 years
 - **Additional Staff** and Advisory Board as required to support this program at the AOE
 - **Planning grants** for communities to create strategies for re-purposing of closing schools
-

Moving Forward

- Fund a **statewide assessment** of school buildings to determine the scope of the issue.
 - Create an **official study group** with appropriate stakeholders to craft a proposal for consideration by legislature next year
 - Direct the **state treasurer's** office to work with the study committee to model multiple funding options.
 - **Fund an AOE position** to support this effort.
-