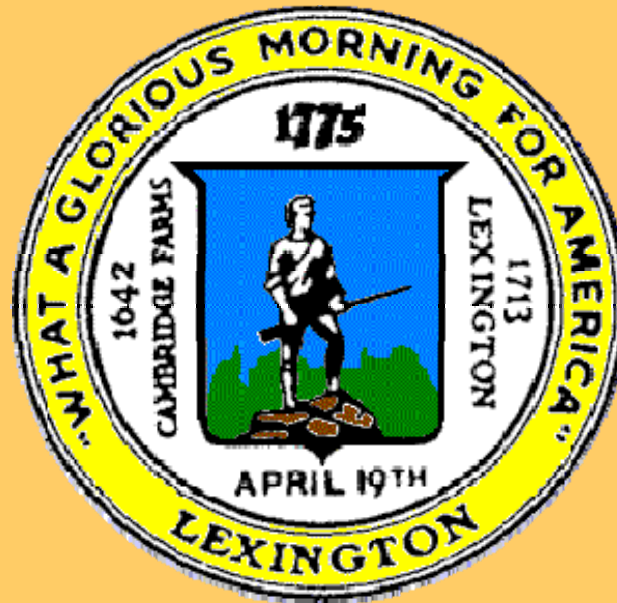


Department of Public Facilities
Progress Report To School Committee
Update on the Ten – Year Master Plan

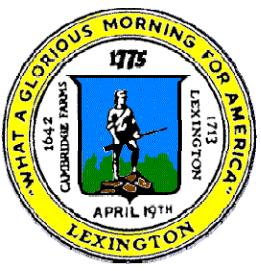


Pat Goddard / Shawn Newell
October 19, 2010



Agenda

- **Organization Update**
- **Accomplishments**
- **Objectives**
- **Back Up Information**

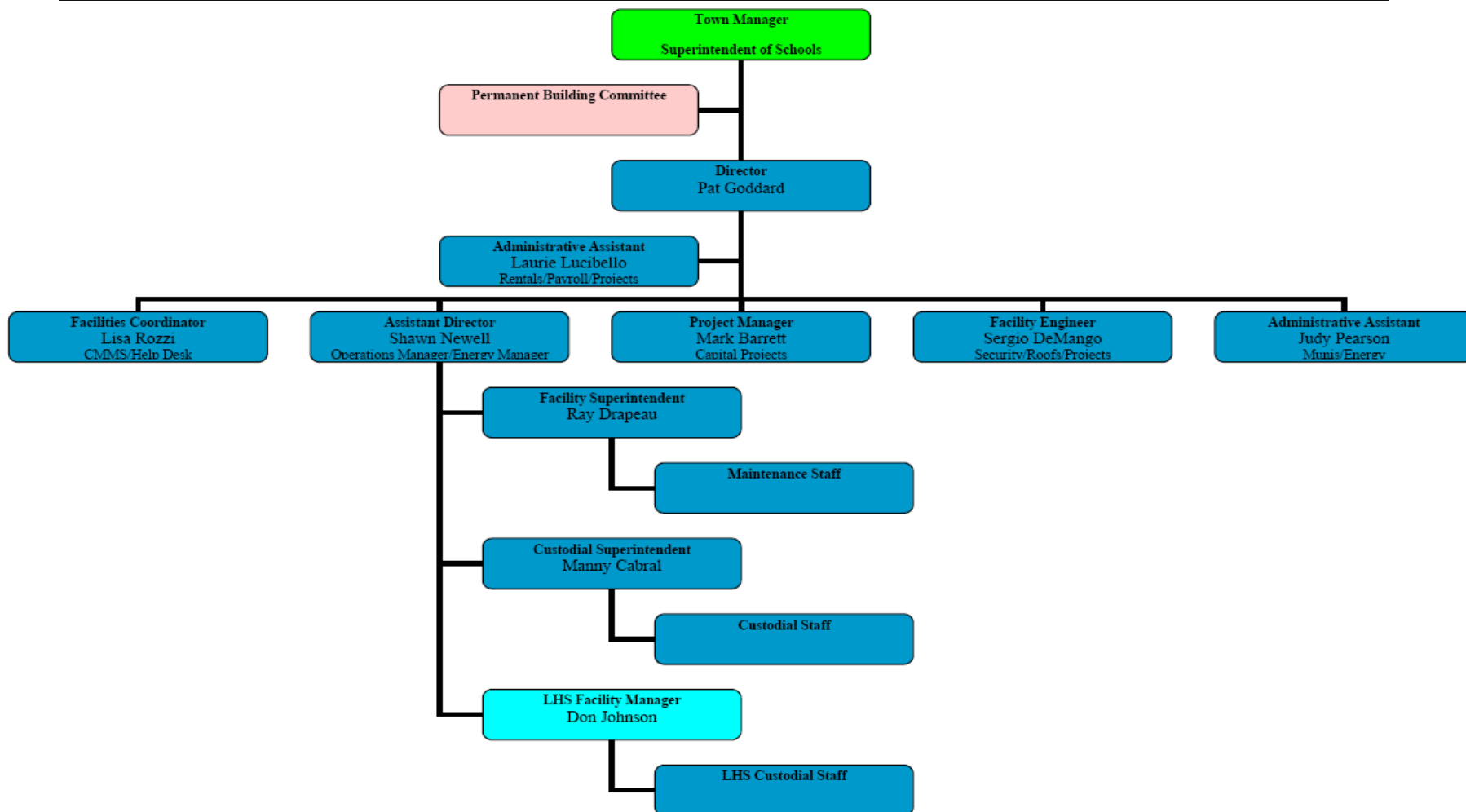


DPF Organization Update

- Don Johnson hired as LHS Facility Manager June, 2010
- LHS Facility Manager oversees and manages all DPF functions at LHS
- Day shift and night shift assistant head custodians report to the Facility Manager
- LHS Facility Manager insures that DPF staff support the educational needs of LHS
- Don Johnson most recently was the Assistant Director of Facilities at Reading Public Schools and has technical proficiency in building controls



DPF Organization





Operational Accomplishments

Custodial

Partnered with custodial staff on snow and ice support to keep school safe

Partnered with custodial staff on new flex system wide custodial position to be able to respond to absences and events

Implemented Kronos time and attendance system to improve efficiency staffing



Operational Accomplishments

Maintenance

Utilizing planning and improved PM program to reduce reactive work and increase planned work

7/1/07 – 6/30/08 (2,740 work orders)

7/1/08 – 6/30/09 (2,874 work orders)

7/1/09 – 7/30/10 (3,419 work orders)



Operational Accomplishments

Utilities

Energy Challenge, school buildings on target and have achieved 9% reduction after two years

Energy Champions received 83% commitment to Energy Challenge from school employees

Energy projects in process 2010

- 1) ARRA Grant Central Office Boiler conversion
- 2) Diamond Middle School Boiler controls
- 3) NSTAR energy link being added to Diamond and LHS to track peak demand times



Operational Accomplishments

Safety & Security

- Implemented improvements to the reliability of existing intrusion alarms, added sensors as required and activated alarm systems for all school buildings
- Commissioned access control for Harrington and Fiske, added access control to Hastings and Estabrook and in process of adding access control to Diamond and Clarke so that all elementary and middle schools can control access during school hours. Partial access control has been installed at LHS for use on weekends
- Security cameras are in operation at Harrington, Fiske, Clarke, and LHS
- All fire alarm system are on quarterly inspection schedules and are now monitored 24 hours a day by alarm monitoring company
- DPF operational staff rotate 24/7 on call duty to respond to fire and intrusion alarms



Operational Accomplishments

Project Management

- 13 FY 2011 capital projects authorized
- Nine of 13 projects have been completed, or will be completed in October
- Procurement complete on two projects
- Two remaining projects to be bid and completed this winter
- Back log of capital projects has been eliminated



Objectives

- Negotiate new contract with SEIU that recognizes the hard work and dedication of the custodians and maintenance employees while also presenting opportunities for SEIU to partner with management on operational efficiencies.



Objectives

Progress 10 Year Facility Master Plan:

- Complete design of Bridge & Bowman renovation
- Green Repair SOI submitted to MSBA for Bridge/Bowman/LHS
- Submit Emergency SOI for Estabrook
- Work with DPW/Engineering to make improvements to Robinson Road for Estabrook construction



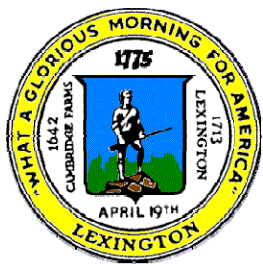
Objectives

Project Management

- Continue to plan projects that sustain school facilities for educational objectives, prioritizing building envelope and environmental control
- Continue to plan projects that enhance operational efficiency, such as energy efficiency and equipment and system reliability



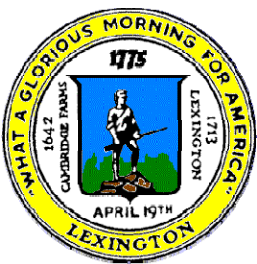
Back Up



FY 2011 Capital Projects

2010 Town Meeting FY 2011

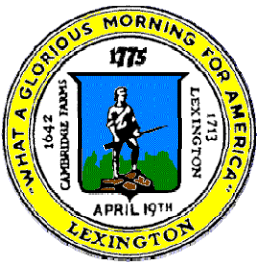
LOCATION	PROJECT/ DESCRIPTION	Project Manager	Total Approved	Actual	Encumbered	Available	Comments
Art 16 Public Facilities Capital							
LHS	School Building Roofing Program	S. DeMango	\$147,400	\$66,405	\$3,495	\$77,500	Complete, LHS Auditorium Roof.
Clarke	Auditorium Upgrade	M. Barrett	\$174,000			\$174,000	Fall/winter project
Bridge/Bowman	Renovation	M. Barrett	\$750,000		\$680,000	\$70,000	Began design meetings September with Design Partnership of Cambridge
District Wide	Accessibility Improvements	S. DeMango	\$30,000		\$24,140	\$5,860	Implemented Clarke, Bridge, Hastings, Estabrook, & CO. LCP in progress
CO	Removal of Modulares	S. Newell	\$30,000			\$30,000	Planned for November, 2010
Hastings	Modular Upgrade	S. DeMango	\$75,000	\$45,388	\$15,584	\$14,028	Implemented, complete October 2010
Hastings	Cabinetry	M. Barrett	\$38,000	\$54,308	\$43	(\$16,351)	Complete
Clarke	School Building Flooring Program	S. Newell	\$100,000	\$106,960	\$5,485	(\$12,445)	Complete, Clarke stairwells and ground floor VCT.
Diamond	Boiler Controls	S. Newell	\$30,000			\$30,000	Planned for December 2010
LHS	ILP Space	S. Newell	\$75,000	\$47,120	\$1,671	\$26,209	Complete
			\$378,000	\$253,776	\$46,923	\$77,301	
District Wide	Building Envelope	S. DeMango	\$125,000		\$125,000	\$0	Complete Clarke October 28, 2010
Hastings	Parking Area Improvements	S. Newell	\$50,000	\$20,000	\$11,304	\$18,696	Complete, Hastings parking improvements and water infiltration
Estabrook	Playground	S. DeMango	\$125,000	\$129,661		(\$4,661)	Complete
			\$175,000	\$149,661	\$11,304	\$14,035	



FY 2010 Capital Projects

2009 Town Meeting FY 2010

<u>LOCATION</u>	<u>PROJECT/ DESCRIPTION</u>	<u>Project Manager</u>	<u>Total Approved</u>	<u>Actual</u>	<u>Encumbered</u>	<u>Available</u>	<u>Comments</u>
Art 19 Public Facilities Capital							
LHS	LHS Gillespie Auditorium Renovation	M. Barrett	\$305,000	\$239,689	\$704	\$64,607	Sound system 2009, complete
LHS	LHS Heating System Upgrade	M. Barrett	\$350,000	\$316,629	\$0	\$33,371	Complete, modifying controls program to address cold complaints.
District Wide	School Building Roofing Program	S. DeMango	\$201,500	\$146,117	\$0	\$0	Complete, \$55,383 returned
District Wide	Relocate Old Harrington Playground Structures	S. Newell	\$40,000	\$39,445	\$0	\$555	Complete
Bowman	Bowman Play Area Improvement	S. Newell	\$80,000	\$50,504	\$0	\$0	Complete, \$29,496 returned
LHS	LHS Elevator Piston Replacement	S. Newell	\$40,000	\$22,465	\$2,500	\$15,035	Complete, awaiting state inspection.
District Wide	School Building Envelope Program	S. DeMango	\$125,000	\$49,329	\$77,374	(\$1,703)	Clarke Middle School, in process, complete September 2010
District Wide	School Accessibility Improvements	S. DeMango	\$50,000	\$27,615		\$0	Completed, LHS, Diamond, Harrington, Fiske, Bowman. \$22,385 returned
Art 4 2009 STM Public Facilities Capital							
Clarke	Relocate/Add Sprinkler Heads	M. Barrett	\$84,324	\$61,411	0	\$22,913	Complete



FY 2009 Capital Projects

2008 Town Meeting FY 2009

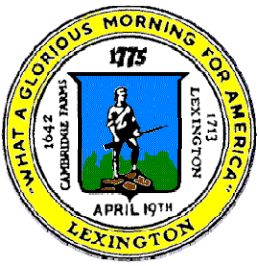
<u>LOCATION</u>	<u>PROJECT/ DESCRIPTION</u>	<u>Project Manager</u>	<u>Total Approved</u>	<u>Actual</u>	<u>Encumbered</u>	<u>Available</u>	<u>Comments</u>
Art 9 Community Preservation Act							
Harrington/District Wide	Supplement	S.DeMango	\$35,135	\$19,278	\$0	\$15,857	Complete
Harrington/District Wide	Preschool Play Ground	S. DeMango	\$75,000	\$75,000	\$0	\$0	Complete
LPS Central Administration	School Administration Building	M. Barrett	\$151,461	\$128,093	\$23,369	\$0	Superintendent's Area and Lobby in process, complete October '10
Art 18 School Capital							
District Wide	Pre-K - 12 Master Plan (including detailed LHS plan)	P. Goddard	\$155,000	\$153,887	\$0	\$1,113	Complete
Art 19 Public Facilities Capital							
Bowman/Estabrook	Install lockers (per LFD)	M. Barrett					Complete
	Mechanical System Replacement ,						
Clarke	Phase 2	M. Barrett					Complete
District Wide	Roofing renovation	S. DeMango					Complete
Diamond	Auditorium	M. Barrett					Complete
Clarke/Diamond	Extraordinary Repairs	S.DeMango					Complete
LHS	MST department construction	M. Barrett					Complete
Estabrook/Bridge	Safe Parent Pick Up and Parking	S. DeMango					Complete
Estabrook	Remove Estabrook Oil Tank	S. Newell					Complete



FY 2008 Capital Projects

2007 Town Meeting FY 2008

<u>LOCATION</u>	<u>PROJECT/ DESCRIPTION</u>	<u>Project Manager</u>	<u>Total Approved</u>	<u>Actual</u>	<u>Encumbered</u>	<u>Available</u>	<u>Comments</u>
Art 34 School Capital							
LHS	Energy efficient lighting for Athletics	Complete				\$0 Complete	
LHS	Mechanical Systems Bldg G, H, J, F	M. Barrett				\$0 Complete	
	Demand ventilation and controls for						
District Wide	large areas	Complete				\$0 Complete	
Dia./Esta/Brid/Bow/Hast.	Replace all steam traps	Complete				\$0 Complete	
(Bridge, Bowman, Hastings)	Reinsulate above all ceilings	Complete				\$0 Cancelled	
District Wide	Classroom FF & E (25 year cycle)	Complete				\$0 Complete	
District Wide	Interior finishes (10 year cycle)	Complete				\$0 Complete	
3)	Central Office (relocation to "old					\$0	
	Harrington")	Complete				Complete	
LHS	Renovate mens'/womens' locker					\$0	
	rooms (add lockers)	Complete				Complete	
	Ventilation, HVAC - LHS pottery						
LHS	room; AC - LHS Foreign Lang. Lab;	M. Barrett				\$57,949	Kitchen Exhaust modifications in process
	AHU LHS kitchen; AHU LHS music						
	composition room, IT Center						
LHS	Mechanical Systems Bldg G, H, J, F	M. Barrett				\$0	
	Retro-Com Rpt 3, 9					Complete	
Hastings	Install lockers (per LFD)	Complete				\$0 Complete	
Estabrook	Paving - modify drop off area	Complete				\$0 Complete	
Estabrook	HVAC deferred maintenance	Complete				\$0 Complete	
Clarke	Mechanical System Replacement	M. Barrett				\$0 Complete	
LHS	Auditorium repairs	M. Barrett				\$0	Painting, seating, stage, and carpeting



FY 2007 & 2006 Capital Projects

2006 Town Meeting FY 2007

<u>LOCATION</u>	<u>PROJECT/ DESCRIPTION</u>	<u>Project Manager</u>	<u>Total Approved</u>	<u>Actual</u>	<u>Encumbered</u>	<u>Available</u>	<u>Comments</u>
Clarke	Clarke Bleachers	Complete				\$0 Complete	
District Wide	Strategic Plan for Elementary Schools	Complete				\$0 Complete	
Bridge	Bridge School Lockers	Complete				\$0 Complete	
Diamond	Diamond Auditorium Roof	Complete				\$0 Complete	
Diamond	Diamond Digital Temp. Controls	Complete				\$0 Complete	
LHS	LHS Auditorium Repairs	M. Barrett				\$0 Complete	
LHS	LHS Bleachers	Complete				\$0 Complete	
LHS	LHS Digital Temp. Controls	Complete				\$0 Complete	
LHS	LHS Gym and Science Building Roof	Complete				\$0 Complete	
LHS	LHS Univent and Pipe Replacement	Complete				\$0 Complete	

2005 Town Meeting FY 2006

District Wide	Exterior Lighting	S. DeMango	\$57,706	\$0	\$0	\$57,706	Retrofit school street lights with DPW project to induction, Bridge & Diamond.
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10 Year Roof Replacement Plan

Bldg. Name	Roof Type	Roof Area (SF)	Work Item	2008 Cost	Recommended Work Year Summer	Complete FY 2009	Complete FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
1 Estabrook School - Area C partial	BUR	4,700	Replace	\$52,500	2008	\$52,500									
Estabrook School - Area C partial	BUR	12,810	Replace	\$180,125	2009							\$195,352			
Estabrook School - Area D	BUR	8,500	Replace	\$97,750	2010							\$119,255			
Estabrook School - Area E	BUR	3,930	Replace	\$49,125	2011							\$59,932			
Estabrook School - Area F	BUR	8,400	Replace	\$96,600	2012							\$117,852			
Estabrook School - Area G	BUR	6,200	Replace	\$74,400	2013							\$90,768			
Estabrook School - Areas A & B	EPDM	6,635	Replace	\$79,620	2014							\$97,136			
			Remaining	\$557,620								\$680,295			
2 Bowman School - Areas E & F	EPDM/BUR	16,800	Replace	\$235,000	2009				\$244,400						
Bowman School - Areas A & B	EPDM/BUR	21,000	Replace	\$290,000	2010				\$313,684						
Bowman School - Area C	EPDM/BUR	19,000	Replace	\$265,000	2011				\$298,089						
Bowman School - Area D	EPDM/BUR	11,200	Replace	\$155,000	2012				\$181,328						
Bowman School - Area G	EPDM	3,000	Replace	\$40,000	2013				\$48,666						
			Remaining	\$985,000					\$1,086,147						
3 Bridge School - Areas A, B, C, D	MOD. BIT.		Repairs	\$8,000	2009		\$8,320								
4 Clark School - Area B	EPDM	5,400	Replace	\$73,000	2008	\$73,000									
Clark School - Area A	EPDM		Repairs	\$4,500	2008	\$4,500									
5 Diamond School - Area I	EPDM	1,600	Replace	\$11,000	2009								\$11,440		
Diamond School - Area J	PVC	5,800	Repairs	\$3,000	2009		\$3,120								
Diamond School - Area J	PVC	5,800	Replace	\$70,000	2017										\$99,632
Diamond School - Areas B thru G	EPDM	20,800	Replace	\$265,000	2015								\$348,722		
6 Hastings School - Areas A & B	Shingle		Repairs	\$8,000	2009		\$8,320								
Hastings School - Area P	PVC	6,500	Replace	\$85,000	2010		\$91,936								
7 High School - Area J partial	BUR	7,600	Replace	\$95,000	2008	\$95,000									
High School - Area D8	BUR	4,740	Replace	\$65,000	2011		\$73,116								
High School School - Area D1	BUR	8,930	Replace	\$115,000	2012			\$134,400							
High School - Area J partial	BUR	15,587	Replace	\$190,000	2013				\$222,273						
High School - Area H	BUR	23,205	Replace	\$280,000	2014				\$327,560						
High School - Area C	BUR	10,395	Replace	\$120,000	2015				\$140,383						
High School - Areas E2,D2,D4,B1	EPDM		Repairs	\$3,500	2008	\$3,500									
High School - Fieldhouse shingles	Shingle	17,000	Replace	\$200,000	2016				\$224,972						
			Remaining	\$790,000					\$915,188						
8 Central Admin. - Areas E, F, G, H	EPDM	11,100	Replace	\$135,000	2009					\$157,930					
Total				\$3,454,243		\$228,500	\$184,812	\$134,400	\$1,086,147	\$0	\$0	\$1,360,590	\$360,162	\$0	\$99,632
Engineering							\$18,000	\$13,000	\$120,000	\$91,000		\$136,000	\$36,000		\$10,000
Project Total							\$202,812	\$147,400	\$1,206,147	\$91,000	\$0	\$1,496,590	\$396,162	\$0	\$109,632

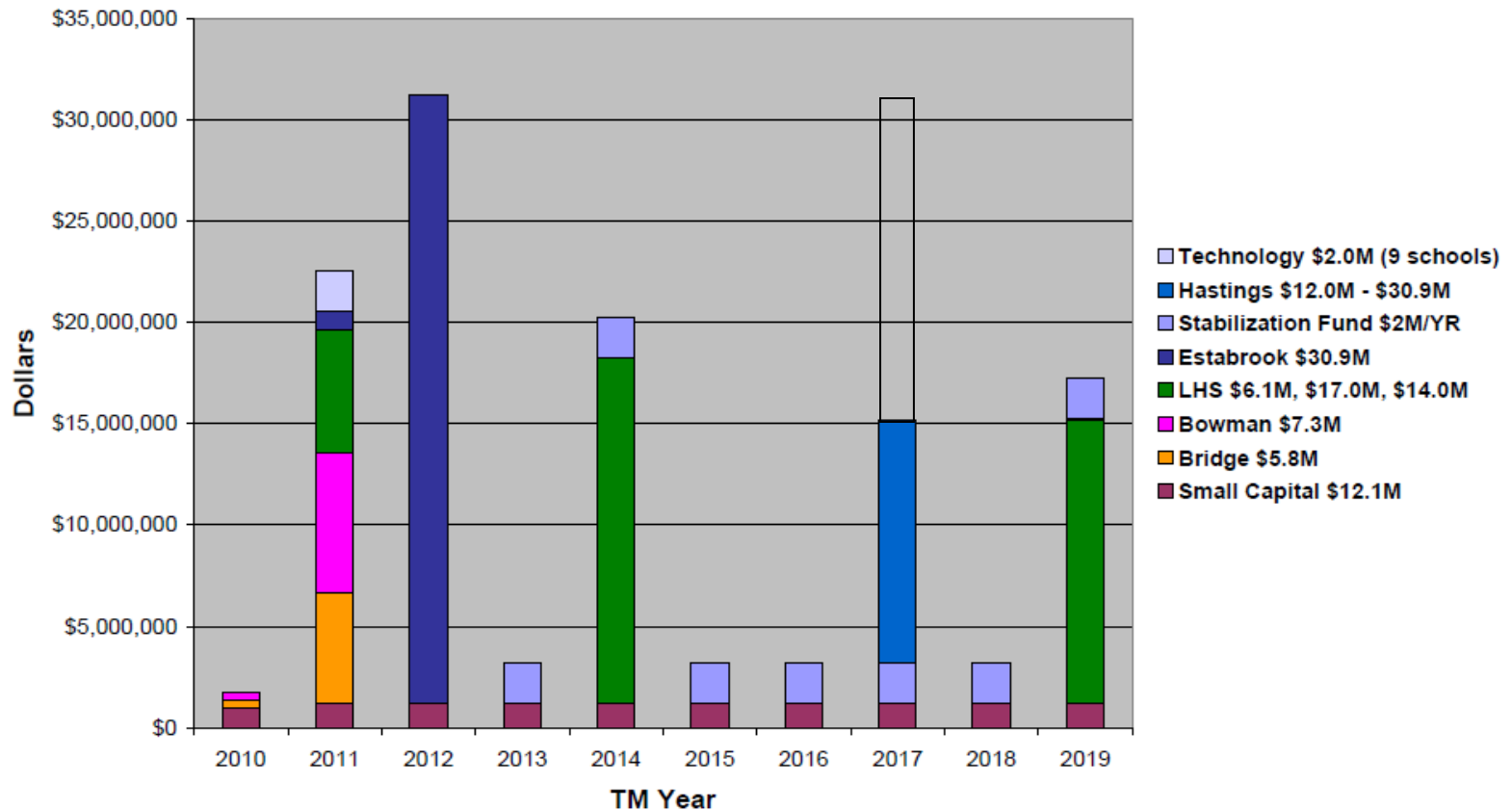
October 19, 2010



10 Year Facility Master Plan

Total School Facility Capital Spending \$117.6M - \$138.5M
2010 - 2019 TM
(revised October 14, 2010)

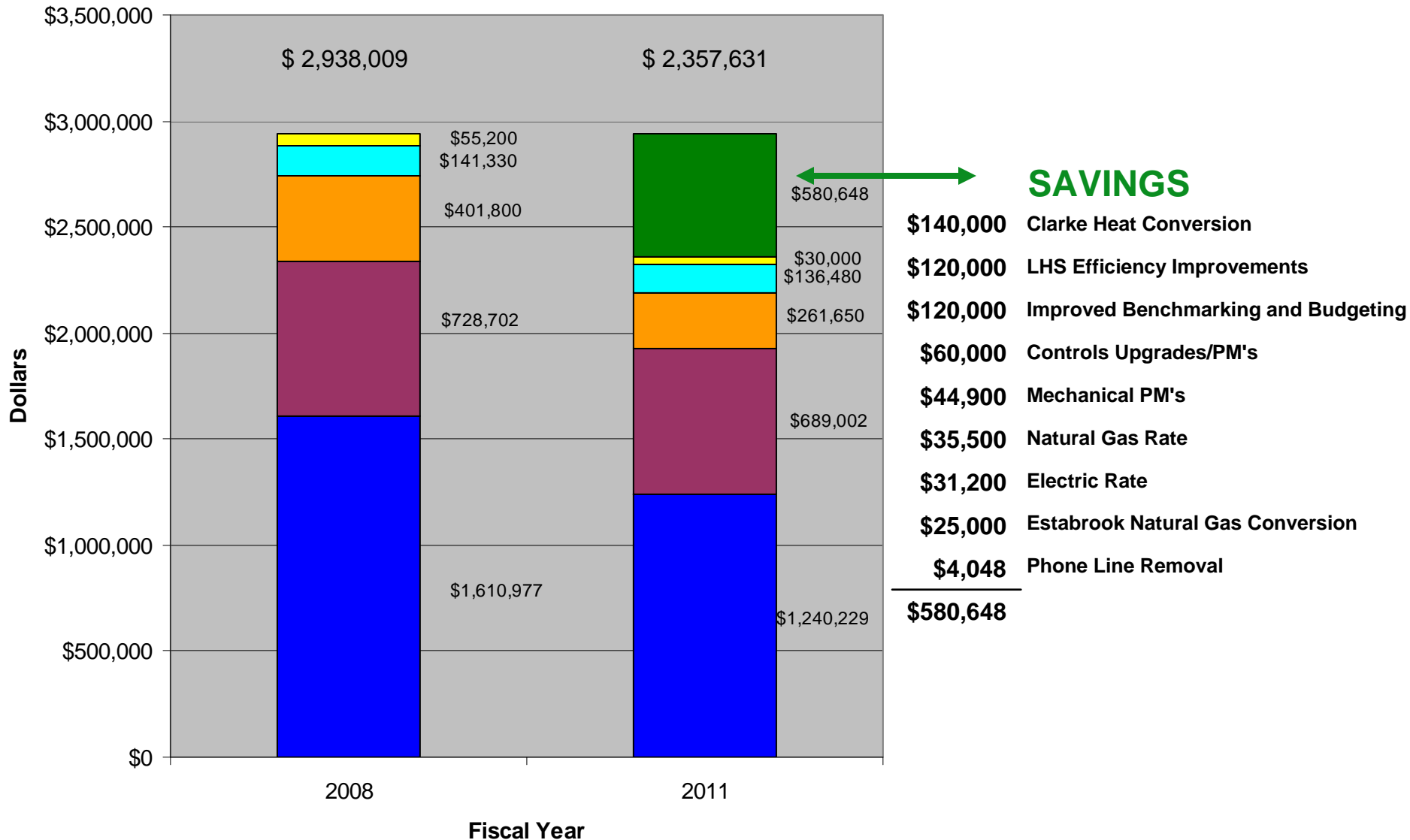
2020 -2029 TM
LHS \$160 M





School Utility Budget Savings

■ Electric ■ Natural gas ■ Fuel Oil ■ Phones ■ Water/Sewer ■ Savings

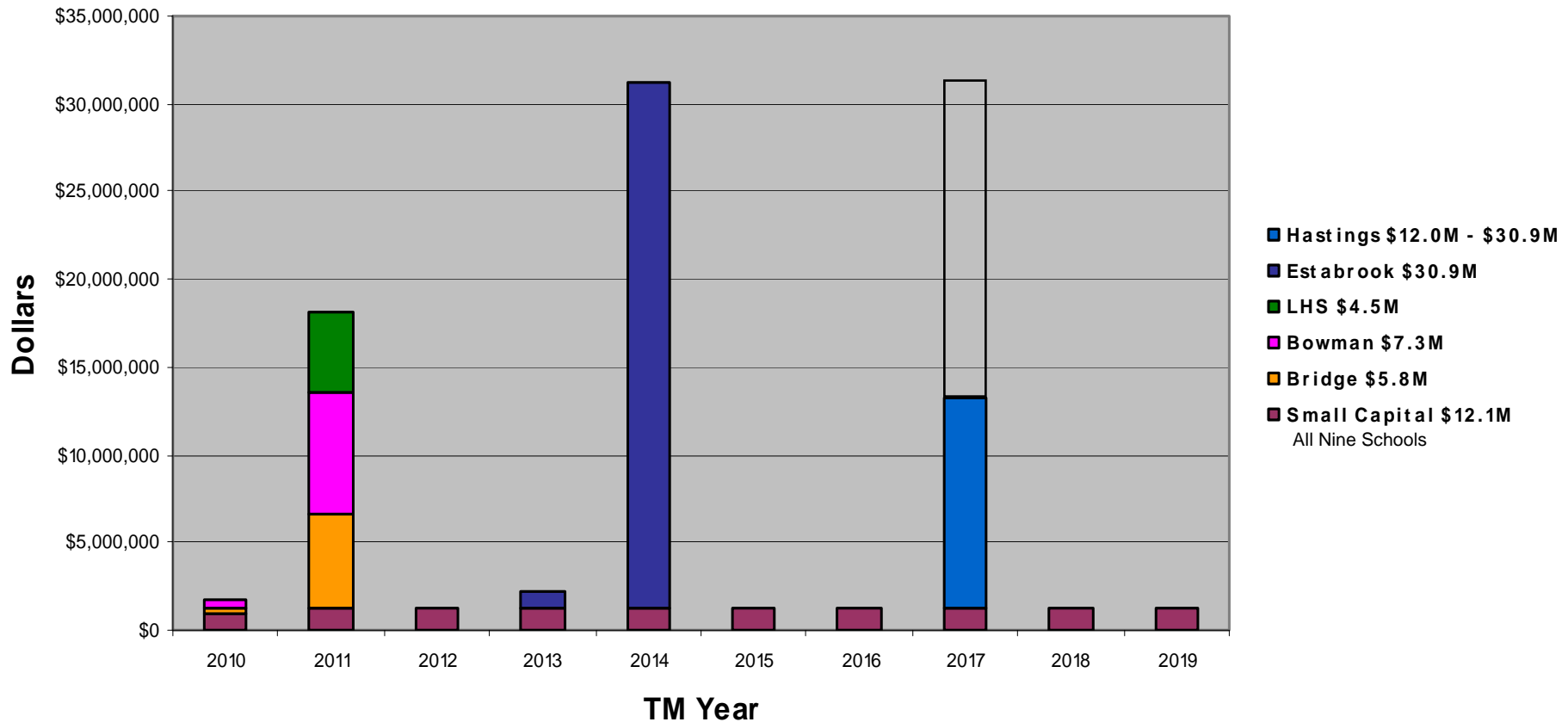




10 Year School Facility Capital Spending With Out MSBA Approval of LHS Project

Total School Facility Capital Spending \$72.6M - \$91.5M

2010 - 2019 TM
2010 Dollars



Projects Identified in 20% Reduction Green Community Plan

	<u>Windows</u>	<u>Roof</u>	<u>Boiler/ HVAC</u>	<u>Green Repair Total</u>	<u>Project Balance</u>	<u>Total Project</u>
Lexington High School	\$1,465,378	\$1,532,600	\$3,098,122	\$6,096,100		\$6,096,100
Bridge Elementary	\$755,201	\$0	\$1,632,140	\$2,387,341	\$3,389,705	\$5,777,046
Bowman Elementary	\$605,202	\$1,185,000	\$1,616,340	\$3,406,542	\$3,895,353	\$7,301,895
Total Project	\$2,825,781	\$2,717,600	\$6,346,602	\$11,889,983		\$19,175,041
40% MSBA				\$4,755,993		(\$4,755,993)
Lexington Net Costs						\$14,419,048

(Costs estimates from Design Partnership of Cambridge 2009 PreK-12 Master Plan)

Massachusetts School Building Authority (MSBA) is utilizing ARRA funds to support energy projects for schools

Budget Year	FY11		FY12		FY13		FY14		FY15		FY16	
Year	2010	2011		2012		2013		2014		2015		2016
Season	FALL	SPR	FALL	SPR	FALL	SPR	FALL	SPR	FALL	SPR	FALL	SPR
ESTABROOK												
Scenario 1 Apply for Emergency SOI MSBA approves.	Apply	MSBA YES \$800K - 1M(?) design funds for a model school.*	Design Note: special ed. facility needs & Enrollment	MSBA YES \$XM D/E May/June [X=30/18]	BUILD	BUILD	BUILD	Open?			<p>**Note: Presence of PCBs at Estabrook requires us to follow EPA orders with respect to timing. Emergency SOI would help us speed process and helps decrease our cost.</p> <p>*Note on model schools: Selecting a model school can save \$\$ and speed the process. However, we have special education facility needs and growing enrollment. We must anticipate need to customize the model schools.</p>	
Scenario 2 ER SOI not granted. Apply SOI. MSBA approves SOI	Apply	Wait	Wait (could know here)	MSBA YES \$800K- 1M design funds for a model school.*	Design Note: special ed. enrollment	If MSBA YES \$18M D/E May/June	BUILD	BUILD	BUILD	Open?		
Scenario 3 No MSBA approval. NOW	\$1.05M Design funds	Design phase *spec ed *enroll.	\$30 M D/E fall	BUILD	BUILD	BUILD	Open?					
Scenario 4 No MSBA approval. WAIT		←----waiting----→		\$1.05 Design funds	Design phase *spec ed *enroll.	\$30 M D/E fall	BUILD	BUILD	BUILD	Open?		