



# Commonwealth of Massachusetts

**Executive Office for Administration and Finance**

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Higher Education Capital Working Group

*September 12, 2024*



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## Today's Agenda

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1. Introductions (10 minutes)
2. Presentation from Mark Fine, Assistant Secretary for Administration at EOANF: (10 minutes)
  - The challenge
  - Objectives for the working group
  - Meeting schedule and topics
  - History of higher education financing reform and the Healey-Driscoll approach
3. Presentation from Commissioner Baacke, Commissioner of DCAMM (20 minutes)
  - Overview of higher education portfolio
  - Current capital investment
  - Discussion: future capital investment
4. Presentation from Kaitlyn Connors, Assistant Secretary for Capital at EOANF (10 minutes)
  - Overview of the Commonwealth's Capital Investment Plan (CIP)
5. Presentation from Barbara Kroncke, Executive Director of UMBA, and LeeAnn Pasquini, Associate Vice President at UMass (10 minutes)
  - Financing and prioritization of projects by UMBA
6. Presentation from Janet Chrisos, Executive Director of MSCBA: (10 minutes)
  - Financing and prioritization of projects by MSCBA
7. Group Discussion and Questions (until close)



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## The Challenge

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- Construction in our higher education system peaked in the 1970s
- The result is an inventory of aging academic buildings and infrastructure in urgent need of significant upgrades and deferred maintenance.
- While each campus is different, the capital challenges across higher education are similar:
  - Older facilities that do not meet the technology and space needs required to provide students with cutting edge educational opportunities; and
  - Ambitious climate and decarbonization goals requiring new energy systems, means of construction and creative approaches to space usage
- And this is occurring in an environment where:
  - The costs of construction have increased dramatically;
  - Demographic pressures suggest flat or declining enrollment across many of our higher education institutions; and
  - Making the investments required to address these issues are impossible within the constraints of the state's traditional capital program.



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## Objectives for the Working Group

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***Our charge is:* identifying new sources of capital to support higher education transformation and considering options for best deploying that capital to address the challenges facing the system. The Working Group will work to achieve consensus around:**

- A financing structure for using fair share revenues to support the issuance of debt for higher education capital
- A level of funding that can be supported by new sources of capital and a time period in which that capital can be deployed
- Options for how this capital can be distributed across the higher ed system – to address major capital projects, deferred maintenance, decarbonization and critical repairs
- The outlines for a higher education financing legislative package (including a bond bill)
- Additional reforms the state could pursue to improve the funding of higher ed capital improvements

The Group should agree on policy proposals in December to inform the Governor's budget and potential bond bill filing and get in front of the report deadline of March 1, 2025.



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## Meeting Schedule and Topics

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Date	
1. September 12 <sup>th</sup>	Objectives, Background and Level-Setting
2. October 10 <sup>th</sup>	Financing Structure and Sources
3. November 14 <sup>th</sup>	Options for Distributing and Allocating Resources
4. December 12 <sup>th</sup>	Policy/Authorization Discussion to Inform Bond Bill and Final Report



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## History of Higher Education Financing Reform

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- In 2008, Massachusetts launched a \$2.2 billion, 10-year Higher Education Bond Bill to enhance capital projects across community colleges, state universities, and UMass campuses.
- By FY 14, every campus had at least one major new project, with a notable emphasis on new science and allied health facilities. For many institutions, these were the first new construction projects since the 1970s, reflecting decades of inadequate funding and maintenance.
- Campuses incurred substantial additional debt beyond the bond bill to support further projects and enhancements. A 2014 report from the Higher Education Finance Commission found that:
  - "In the aggregate, the MSCBA paid \$78 million in FY 14 debt service from campus operating budgets on \$1.2 billion in outstanding debt issued in support of campus projects."
  - "In the aggregate, the UMass Building Authority paid \$177.6 million in FY 14 debt service from campus operating budgets on \$2.7 billion in outstanding debt issued in support of campus projects."
- Despite this significant investment, there remains a substantial backlog of deferred maintenance that continues to need attention.



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## The Healey-Driscoll Approach

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- The Healey-Driscoll Administration sought \$140 M in its FY24 budget in Fair Share revenue to support higher ed capital, including ability to securitize it. Final budget included \$50M that has gone to support existing or smaller energy and decarbonization related projects – with no expanded borrowing capacity.
- The Healey-Driscoll FY25 budget proposed setting aside \$125 M from Fair Share revenue to support capital investments on university and community college campuses to address the substantial backlog in deferred maintenance and the goal of reducing carbon emissions through decarbonization projects.
- The Administration intended this proposal to be a long-term commitment of Fair Share resources that, over the next 10 years, could unlock \$2-3 B in borrowing capacity by securitizing this new revenue stream.
- The funding was proposed to support capital investments in our higher education campus facilities, including for academic buildings and research space that will give students access to equipment and facilities that will prepare them for jobs in our modern economy, while addressing deferred maintenance and decarbonization priorities across the system.
- FY25 final budget created this working group, providing us the opportunity to build consensus around the need, sources and priorities for new higher education capital.



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# APPENDIX



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## Appendix: Section 96 Language Establishing Working Group, Part 1

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SECTION 196. (a) There is hereby established a working group to develop and identify the future needs of the public higher education system to provide affordable, equitable and competitive higher education in the commonwealth.

(b) The working group shall include, but shall not be limited to: the secretary of administration and finance or a designee; the secretary of education or a designee; the Massachusetts climate chief or a designee; the commissioner of higher education or a designee; the commissioner of capital asset management and maintenance or a designee; the executive director of the Massachusetts clean energy center or a designee; the chairs of the joint committee on higher education; the chairs of the joint committee on bonding; a representative from the University of Massachusetts, appointed by the president of the University of Massachusetts; a representative from the state universities, appointed by the State Universities Council of Presidents; a representative of the Massachusetts association of community colleges; a representative of the University of Massachusetts Building Authority; and a representative of the Massachusetts State College Building Authority.



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## Appendix: Section 96 Language Establishing Working Group, Part 2

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(c) The working group shall study and report on: (i) the feasibility and impacts of establishing a permanent financing structure using income surtax revenues for the issuance of debt for the benefit of public higher education capital needs; (ii) support for the University of Massachusetts Building Authority and the Massachusetts State College Building Authority to identify and finance investments in public higher education infrastructure; (iii) the capital funding necessary for public higher education campuses, broken down by campus; (iv) potential federal sources of reimbursement or grant funding for public higher education capital projects; (v) a prioritization process for public higher education capital needs; (vi) the total bonding capacity available for a public higher education capital projects bond legislation, including recommendations for the use of any general or special obligation bonds; (vii) a recommendation for a funding amount for future bond legislation for public higher education capital needs; (viii) potential processes for application, approval, design and delivery of capital projects for public higher education campuses; and (ix) possible investments for future bond legislation for public higher education capital needs, including, but not limited to, decarbonization, deferred maintenance and facilities improvement for the public higher education system of the commonwealth.

(d) Not later than March 1, 2025, the working group shall submit its report, including any proposed legislation necessary to carry out its recommendations, to the governor, the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on higher education and the joint committee on bonding.



Executive Office of  
Education



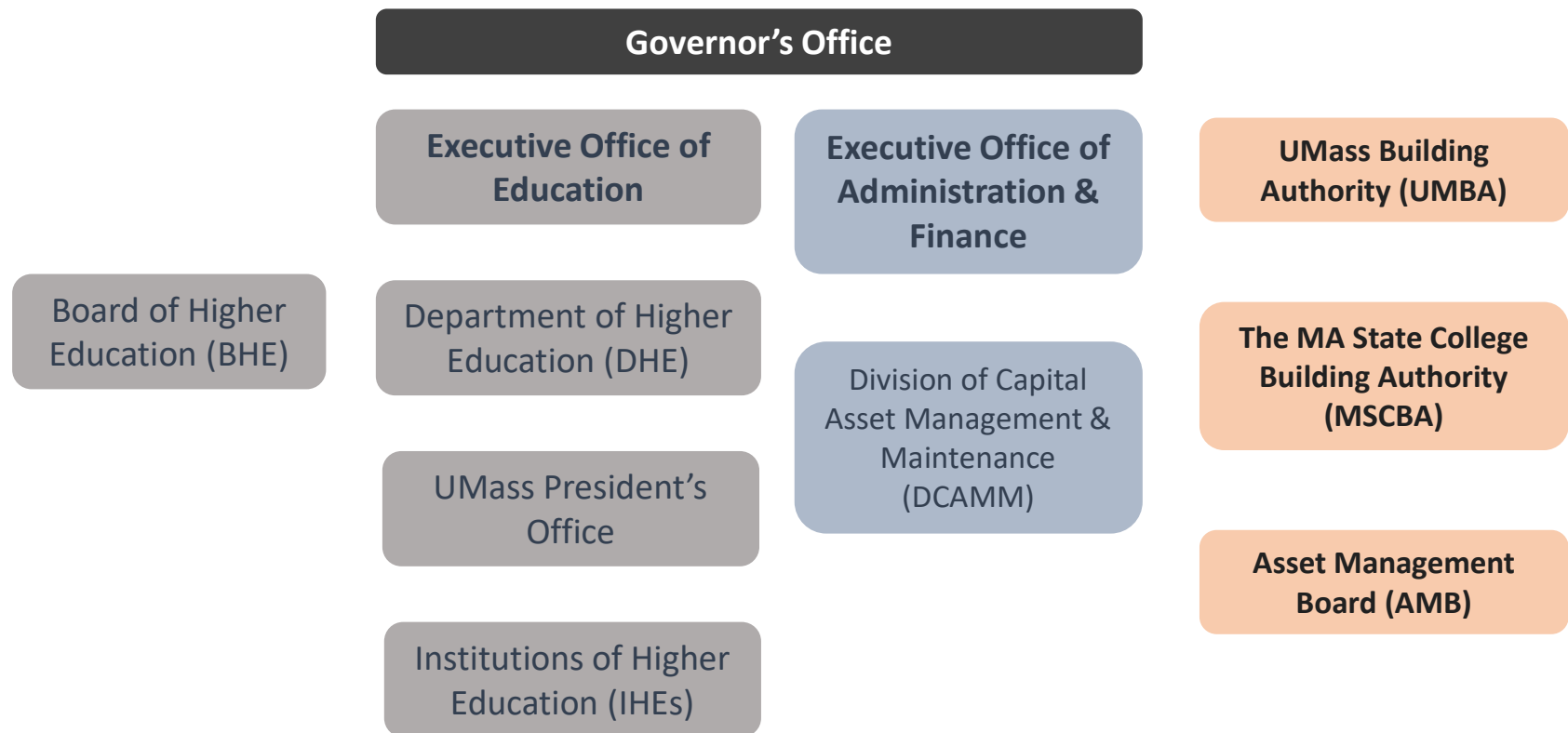
DIVISION OF  
CAPITAL ASSET  
MANAGEMENT &  
MAINTENANCE

MASSACHUSETTS  
Department of Higher  
Education

**Higher Education**  
Capital Working Group

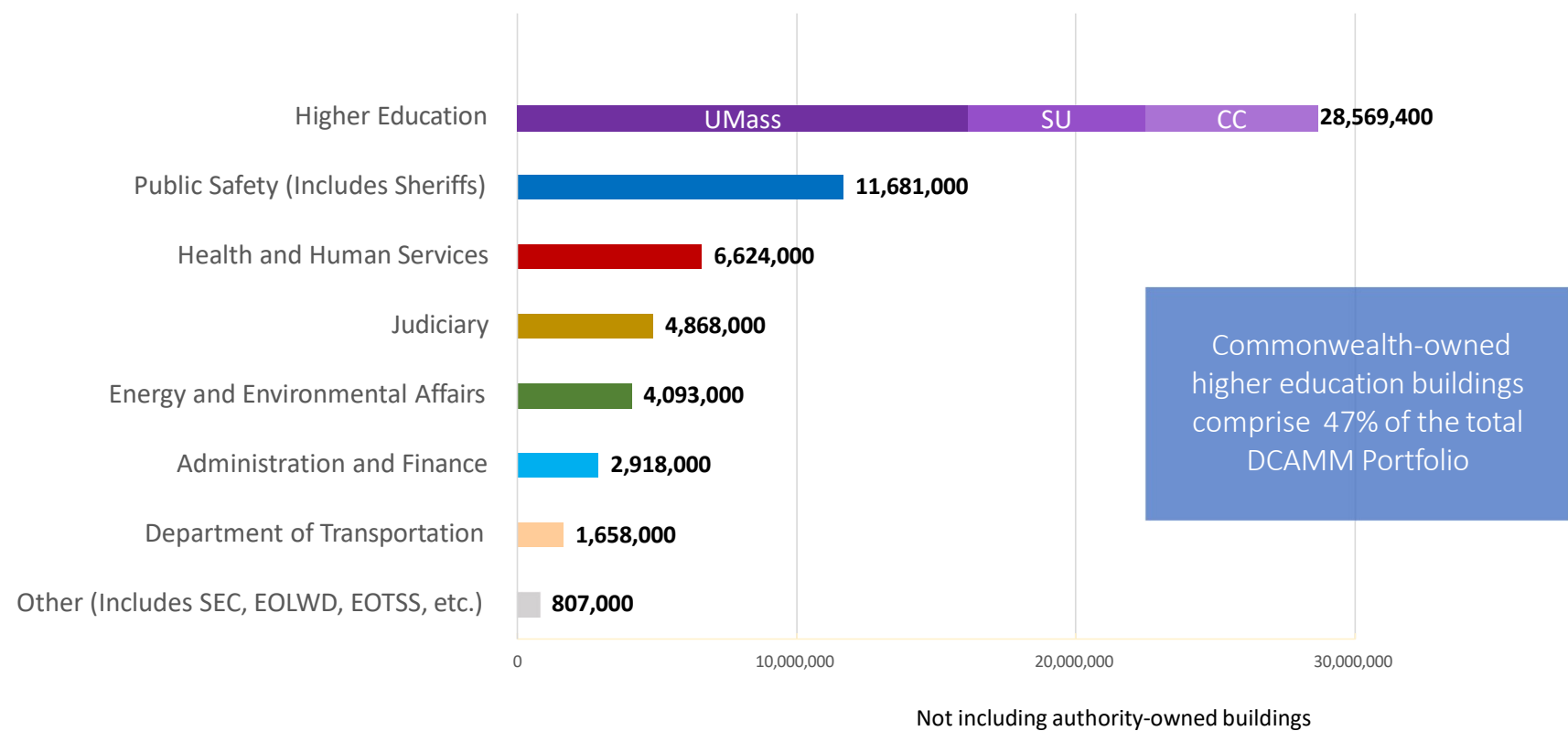
September 12, 2024

# Higher Education Overview – Partners in Capital Planning

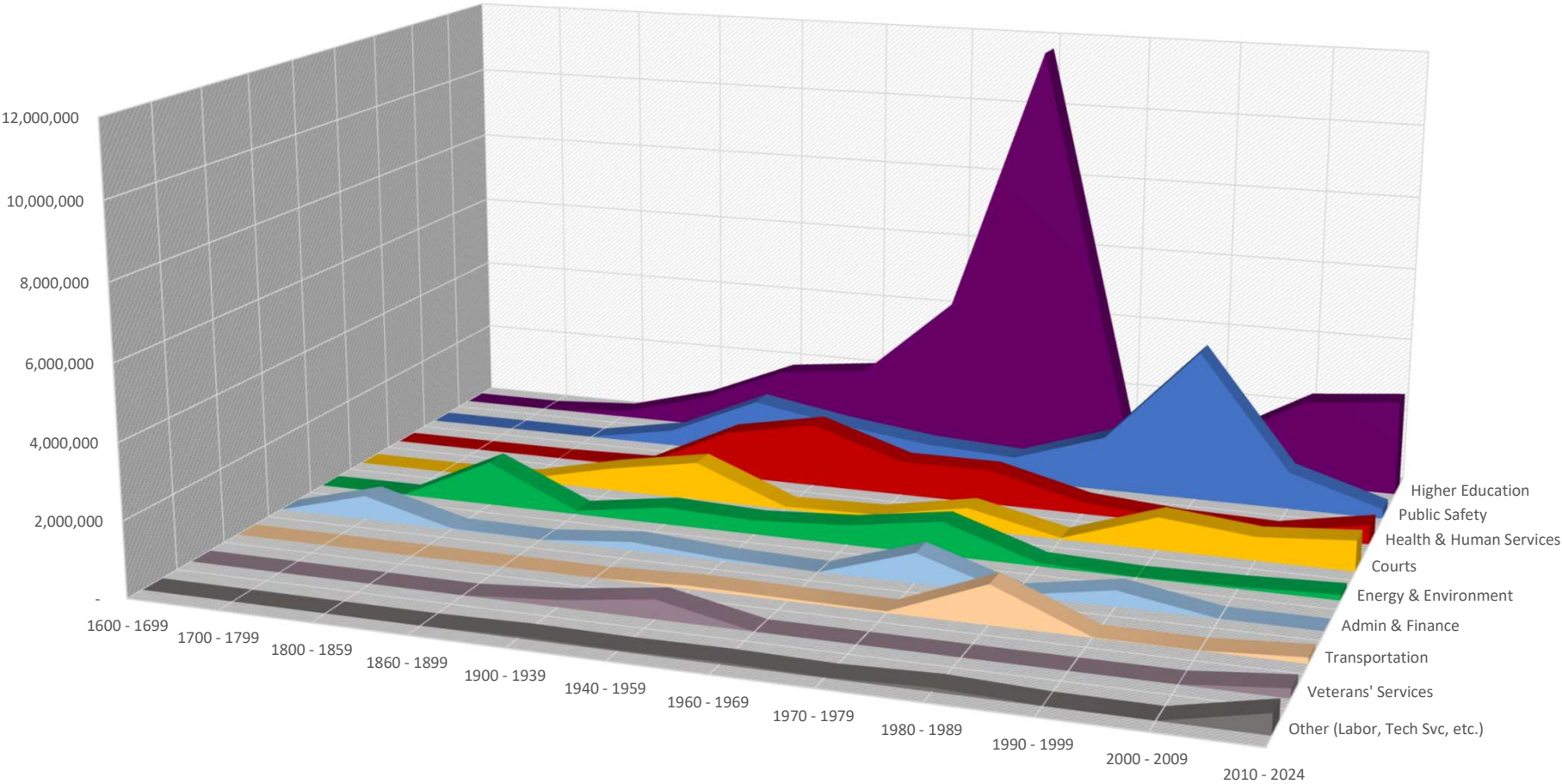


# DCAMM Portfolio Size

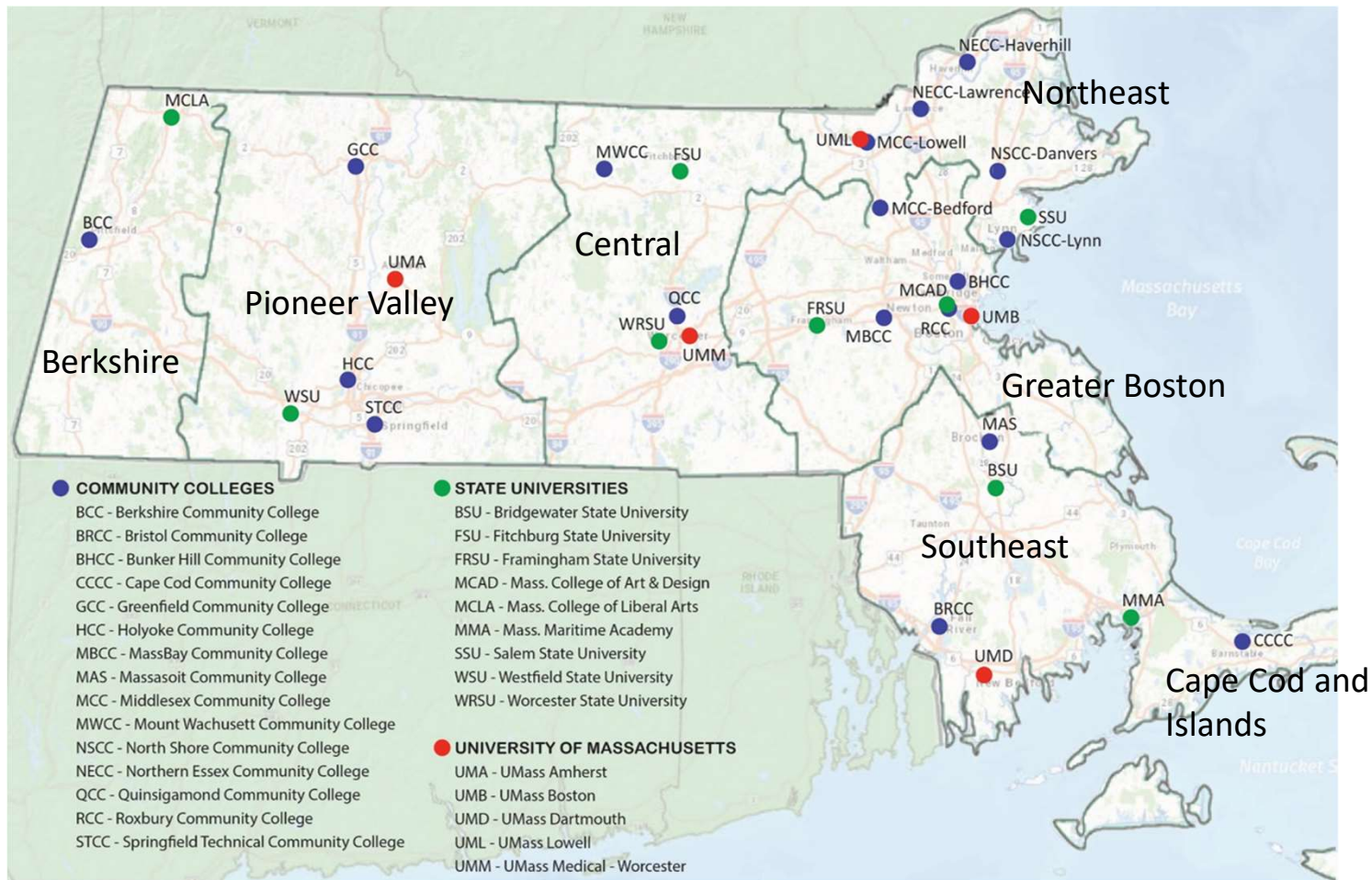
DCAMM oversees the capital planning for over 1,700 major buildings comprising 61 million GSF



# DCAMM Portfolio Age

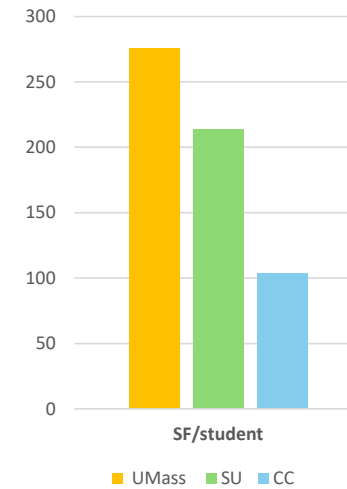
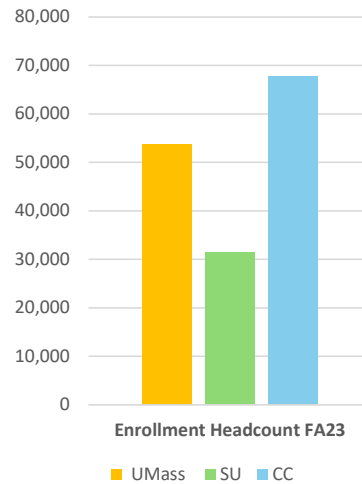


# MA Institutions of Higher Education (IHE's)



# Higher Education System Overview - Enrollment

	GSF*	% of total GSF	Enrollment Headcount Fall 23	% of Total Headcount	SF /Student
HE Community Colleges (15)	6,999,156	24%	67,744	38%	\$ 103
HE State Universities (9)	6,733,508	24%	31,481	22%	\$ 214
HE University of Massachussets (5)	14,836,733	52%	53,812	40%	\$ 276
Grand Total	28,569,397		153,037		



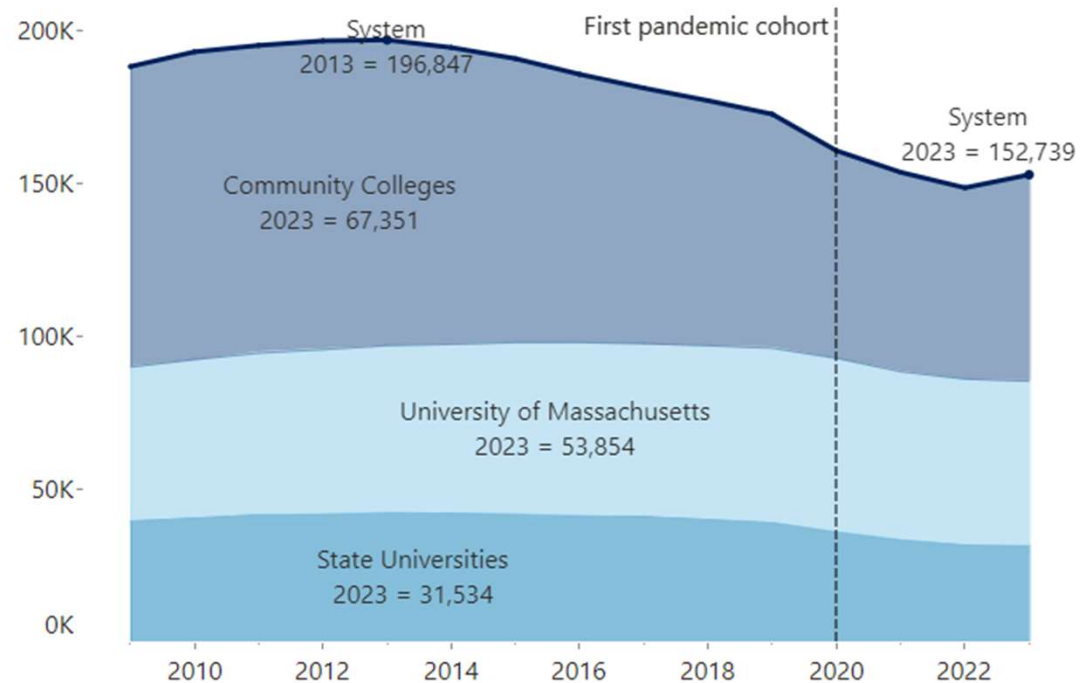
\*GSF- Gross Sq Ft include State owned Major Buildings



# Higher Education Enrollment Trends

- Enrollment has declined 34% since 2010
- Tuition-free programs have boosted community college enrollments over the past two years
- A "demographic cliff" looms in 2026 as the number of high school graduates in Massachusetts is expected to decline by 10% between 2026 and 2036 (Source: WICHE)

## All Undergraduate Students Enrolled 15-Year Trend

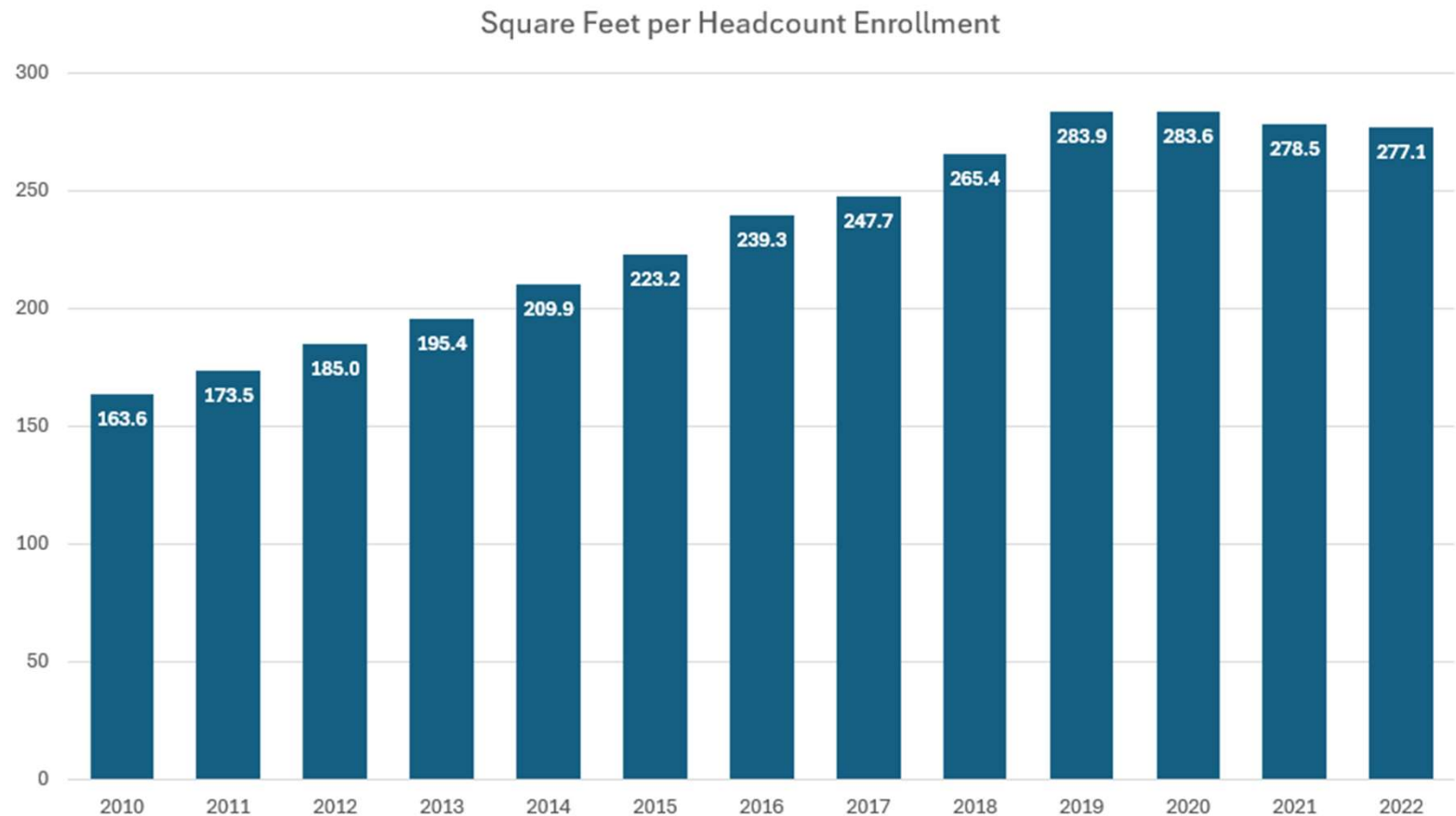


Data displayed is headcount enrollment of undergraduate students enrolled for credit in Massachusetts public higher education each fall. 2023 data are estimates prior to final fall data collection in December 2023. Source: Massachusetts Department of Higher Education.



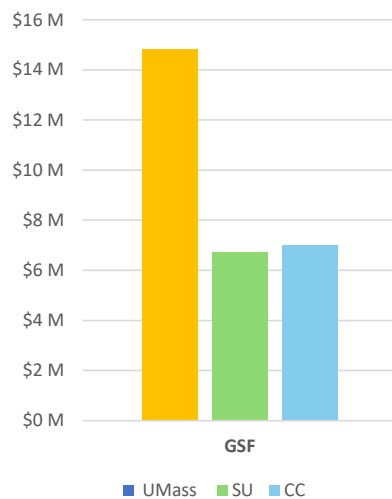
# HE Trends: Enrollment and Square Footage

- Enrollment is down 34% since 2010
- Building square footage has increased by 12% since 2010
- The result is a 70% increase in square feet per student
- Increased research activity and shifts in the proportions of resident students may justify some increases
- Modest downward trend since 2020 may be impacted by remote instruction



# Higher Education System Overview - Deferred Maintenance

	GSF*	% of total GSF	10yrs backlog TPC Estimate**	10yr BL/SF	10yr BL total %
HE Community Colleges (15)	6,999,156	24%	\$ 1,315,493,564	\$ 188	30%
HE State Universities (9)	6,733,508	24%	\$ 1,072,991,658	\$ 159	24%
HE University of Massachussets (5)	14,836,733	52%	\$ 2,066,811,500	\$ 139	46%
Grand Total	28,569,397		\$ 4,455,296,722		



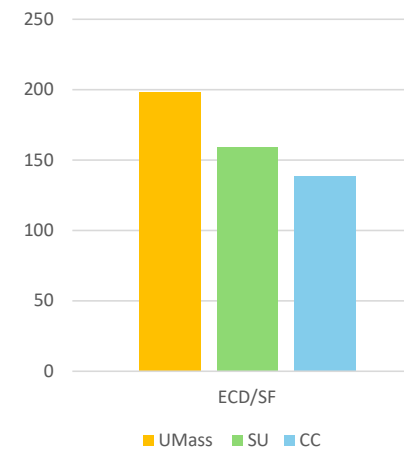
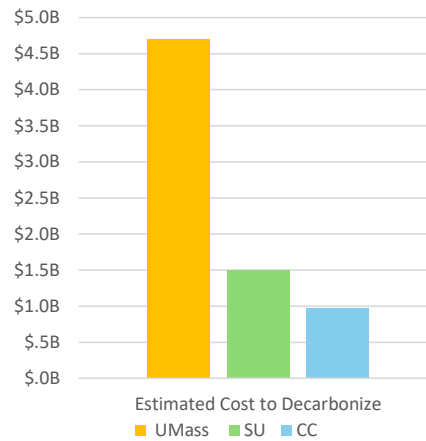
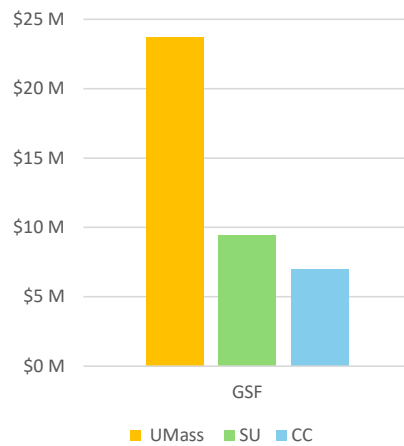
\*GSF- Gross Sq Ft include State-owned Major Buildings

\*\*10yrs backlog includes deferred maintenance items replaced in kind, does not include decarbonization, modernization and renovation



# Higher Education System Overview – Decarbonization Costs

	GSF w/ Authorities	% of total GSF	Estimated Cost to Decarbonize(ECD) ***	ECD % of total	ECD/SF	2023 Tones CO2
HE Community Colleges (15)	6,999,156	17%	\$1.0B	14%	139	13,937
HE State Universities (9)	9,414,382	23%	\$1.5B	21%	159	46,169
HE University of Massachussets (5)	23,717,460	59%	\$4.7B	66%	198	225,009
Grand Total	40,130,998		\$7.2B			285,115

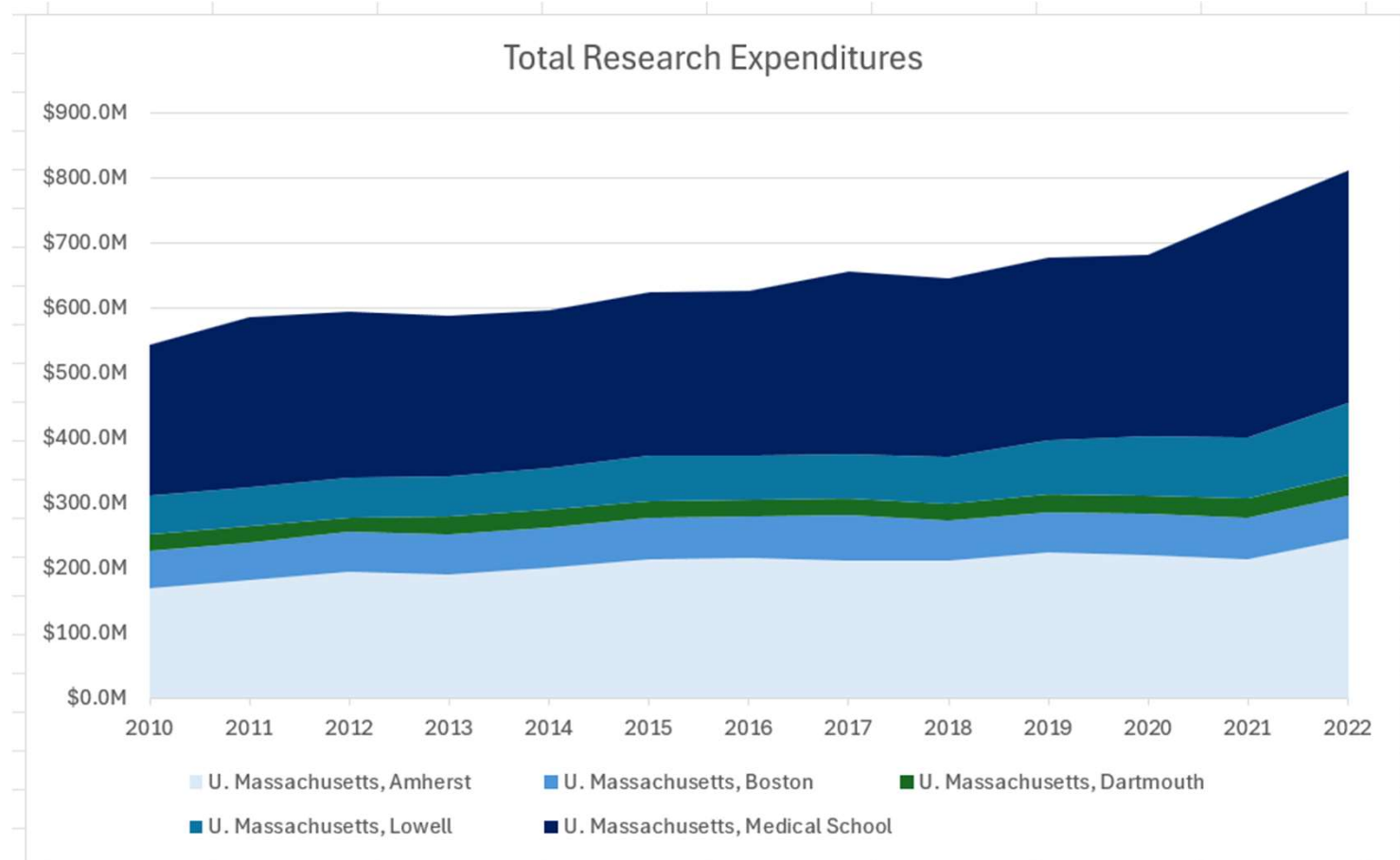


\*\*\*Estimated Cost to Decarbonize numbers are in 2024 dollars and include Residence Hall information for SU and UMass.



## Higher Education Overview - Research Expenditures

- Research expenditures by the UMass system have increased by 50% since 2010
- Research space demand increases by one SF for every \$200-400 in expenditures
- Research space carries a disproportionate cost to address deferred maintenance, decarbonize, and modernize



Bridgewater State (\$1M in 2022) and Framingham State (\$2.8M in 2022) also reported research expenditures



# Support for Higher Education - Planning Initiatives

State-wide planning initiatives and data are foundational to making long-term strategic higher education capital investments.

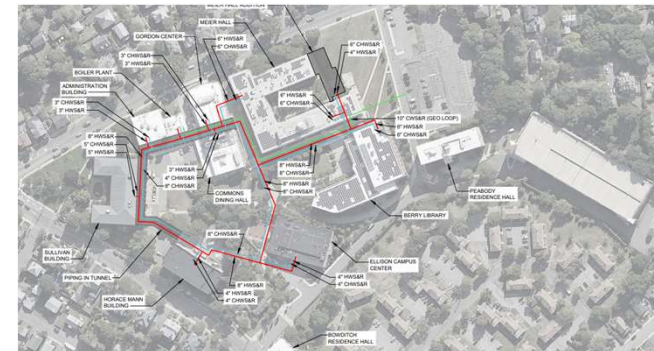
These include:

- Facility Conditions Assessment –Summer 2024
- Regional Workforce Blueprints –Summer 2024
- Utilization Analysis - FY2025
- Building and Property Data (CAMIS)
- Decarbonization Roadmaps
- 5-Year Critical Repair Plans

Together with the IHE Strategic Plans and Master Plans, these elements support capital investment prioritization.



Mass Maritime Decarbonization Roadmap

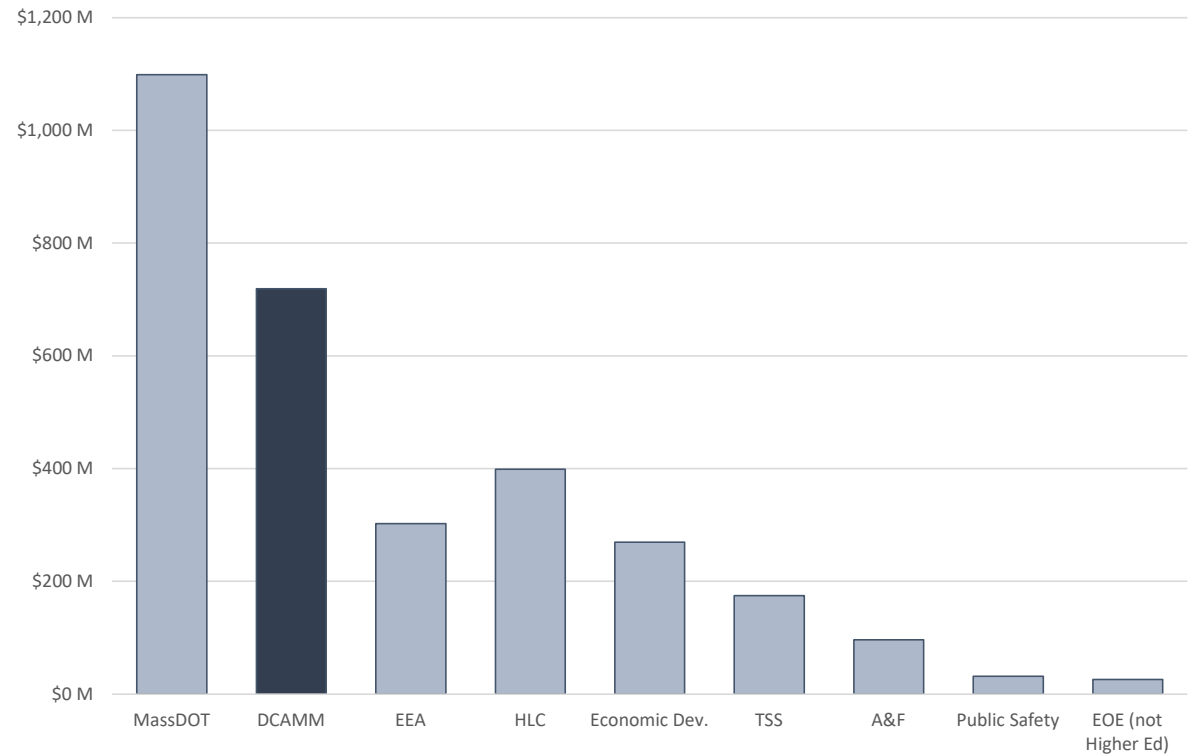


Salem State Decarb Project 1



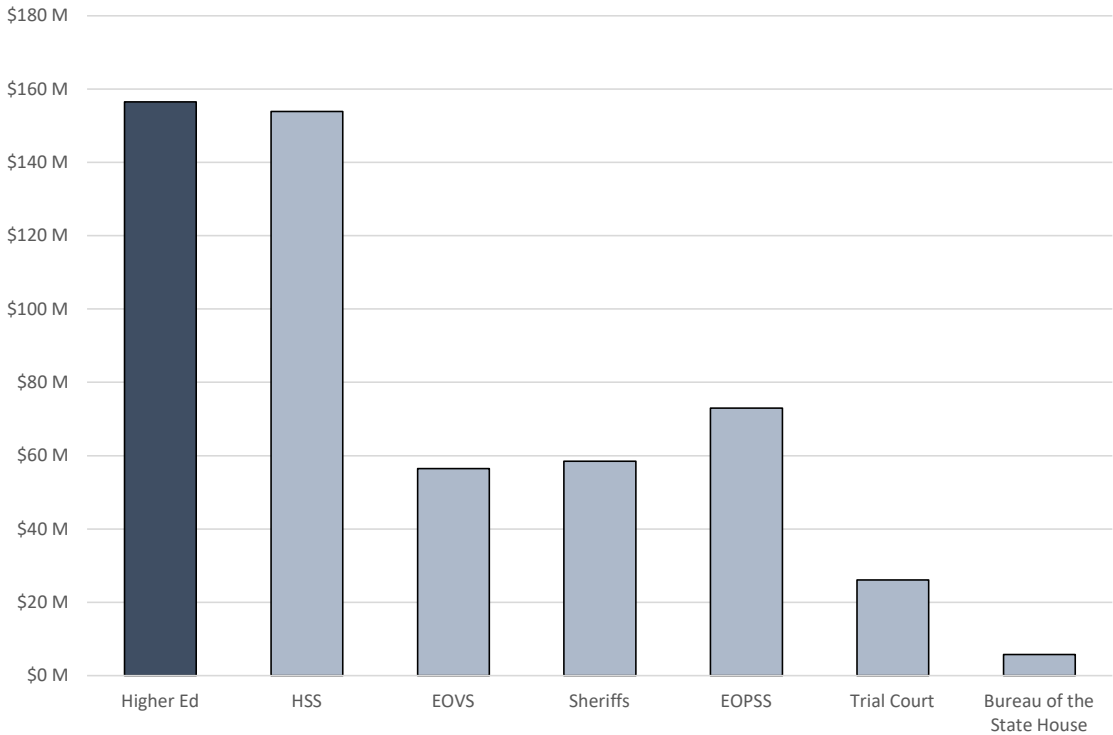
# FY25 State Capital Investment Plan

Capital Agency	State Bond Cap	%
MassDOT	\$1,099 M	35%
<b>DCAMM</b>	<b>\$722 M</b>	<b>23%</b>
EEA	\$303 M	10%
HLC	\$399 M	13%
Economic Dev.	\$269 M	9%
TSS	\$175 M	6%
A&F	\$96 M	3%
Public Safety	\$32 M	1%
EOE (not Higher Ed)	\$26 M	1%
<b>TOTAL</b>	<b>\$3,120 M</b>	<b>100%</b>



# FY25 DCAMM Capital Investment Plan

Agency	State Bond Cap
Higher Ed	\$156.5 M
HHS	\$153.9 M
EOVS	\$56.5 M
Sheriffs	\$58.6 M
EOPSS	\$73.0 M
Trial Courts	\$28.5M
Bureau of the State House	\$5.8 M



# Current Investment in Higher Education – Capital Investment Program

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## Baker Administration Approach

- Focus on deferred maintenance and critical repairs
- Align investments with workforce development priorities
- Encourage partnerships
  
- State capital funding apportioned to three programs
  - Formula distribution of Critical Repairs funding to address deferred maintenance
  - Accelerated Infrastructure Program
  - Competitive program for awarding major capital funding capped at \$30M/project



# Current Investment in Higher Education – Critical Repairs

## FY24-FY28 Deferred Maintenance/Critical Repairs Program

- \$250M distributed to the IHE's for expenditure based on 5-year plans
- Distributed through formula based on segment square footage, facility condition assessments, and headcount

### Distribution Formula

#### Baseline Allocation

*Same baseline for all 29 IHE's*

- \$675,000/IHE/yr.



#### Variable Allocation

*Basis for required matching contributions*

##### Segment distribution

- Based on state-owned GSF
- Adjusted for 50% \$ co-share for State Universities & UMass
- Adjusted for demolition, dispositions resulting from FY19, FY22, and FY23 Major Capital Projects.

##### IHE distribution

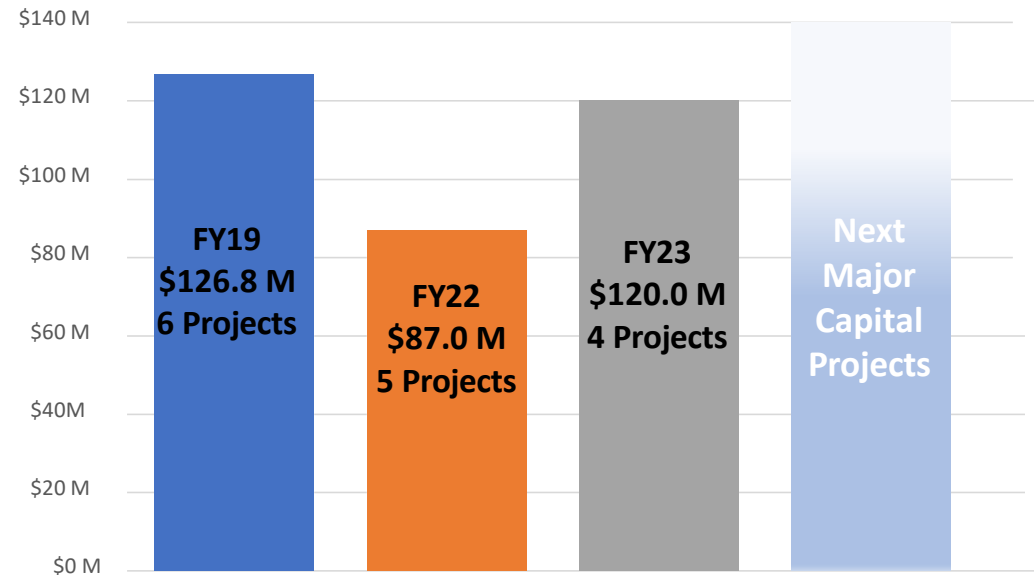
- State Universities and Community Colleges allocated by campus based on formula (80% FCA , 20% headcount)
- Adjusted for demolition, renovations and dispositions resulting from FY19, FY22, and FY23 Major Capital Projects.
- UMass campus distribution managed through UMass President's Office



# Current Investment in Higher Education – Major Capital Projects

- Initiated in FY19 following the Strategic Framework for Massachusetts Public Higher Education which involved:
  - Regional collaboration
  - Data Analysis
    - Demographics and enrollment projections
    - Classroom & laboratory utilization
    - Building condition
    - Workforce and economic development needs
- Goal has been to provide an open, competitive and information driven process for evaluating capital projects based on the needs across the whole higher education system.

**Major Capital Project Awards**



## Current Investment in Higher Education – Major Capital Projects

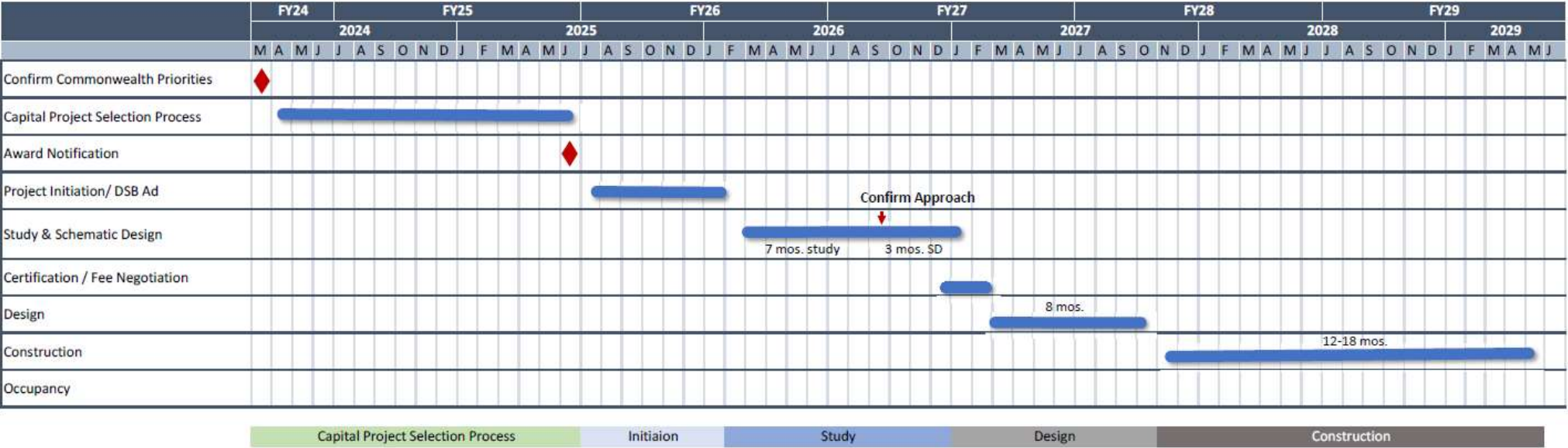
Major Capital Projects- State Funding \$451.6M; Institutional Funding \$375.5M

MCPR AWARD	INSTITUTION	PROJECT	State Funding	Institutional Contributions	Projected Occupancy
FY19	Berkshire CC	One Stop Student Success Center	\$7.6 M	\$196 K	Completed
FY19	Bunker Hill CC	Academic Student Success Center	\$41.2M	\$43.1 M	Summer 2025
FY19	Cape Cod CC	New Science and Eng. Tech. Innovation Bldg.	\$25.6 M	\$13.1 M	Completed
FY19	Mass Bay CC	New Health Science Center	\$60 M	\$2.3 M	Completed
FY19	UMass Dartmouth	Seng Building Systems Renovation	\$25 M	\$45 M	Completed
FY19	Westfield SU	Renovation of Parenzo Hall	\$26.3 M	\$21.5 M	Occupied
FY22	Bridgewater SU	Burnell Hall Renovation	\$32 M	\$18.9 M	Summer 2027
FY22	Mass Maritime Academy	Renovated Labs (Harrington) & New Science and Technology Bldg.	\$21.7 M	\$41 M	Summer 2026
FY22	North Shore CC	Life Sciences Pathways Center (Danvers)	\$17.5 M	\$0	Summer 2026
FY22	Quinsigamond CC	IQ Center; Integration, Innovation, Impact (Athletic Center Renovation)	\$31.1 M	\$5.2 M	Summer 2026
FY22	UMass Medical	Medical School Building Clinical Wing Lab Renovation	\$6.1 M	\$6.1 M	Fall 2025
FY23	Massasoit CC	Nursing and Allied Health Renovations	\$38.1 M	\$13.7 M	Summer 2027
FY23	Salem State U	SSU Bold: A Campus Unification and Modernization	\$45 M	\$63.4 M	Fall 2026
FY23	Springfield Technical CC	School of Health & Patient Simulation (SHPS)	\$38 M	\$12 M	Fall 2026
FY23	UMass Lowell	Olney Hall Instructional Modernization	\$37 M	\$90 M	Fall 2026
<b>Total Funding</b>			<b>\$451.6 M</b>	<b>\$375.5 M</b>	



# Current Investment in Higher Education – Major Capital Projects

## Typical Capital Project Timeline



# Current Investment in Higher Education – Accelerated Infrastructure Program

## Campus Infrastructure Projects – State Funding \$193.1M; Institutional Funding \$38K

Round 1	
Bridgewater SU	Primary Electrical Infrastructure
Bristol CC	Primary Electrical & Central Heating/Steam
Bunker Hill CC	Primary Electrical Infrastructure
Holyoke CC	Primary Electrical Infrastructure
Mass Maritime Academy	Primary Electrical Infrastructure
Mount Wachusett CC	Central Heating / Steam
North Shore CC	Primary Electrical Infrastructure
Springfield Technical CC	Primary Electrical Infrastructure
Westfield SU	Central Heating / Steam
Round 2	
Fitchburg SU	Primary Electrical Infrastructure
Northern Essex CC	Primary Electrical Infrastructure
Quinsigamond CC	Primary Electrical Infrastructure
Worcester SU	Primary Electrical Infrastructure
Round 3	
Berkshire CC	Electrical, Sewer, Water Distribution
Holyoke CC	Water Distribution
Mass College of Liberal Arts	Steam Infrastructure
Springfield Technical CC	Water & Soil Remediation



Westfield State University - Manhole



MCLA – Steam Infrastructure



Springfield Technical Community College – Water & Soil Remediation



# Current Investment in Higher Education – Accelerated Infrastructure Program

## Building Infrastructure Projects

Critical Building Infrastructure Projects		State Funded	Agency Funded
Berkshire CC	Window Replacements Koussevitzky and Edwards Library	\$3.2 M *	\$ 0 M
Mass Maritime Academy	Pier Infrastructure Upgrades	\$10.5 M	\$0 M **
Northern Essex CC	General Services and Science Buildings	\$ 20 M	\$ 2 M
UMass Dartmouth	Liberal Arts Building (LARTS)	\$ 81 M	\$ 16 M
UMass Boston	ISC Systems Retro Commissioning	\$ 1.1 M	\$ 0 M
Total		\$ 115.8 M	\$ 2 M

\* Completed with Accelerated Infrastructure Projects

\*\* Approximately \$27.2 M Federal Funds



Mass Maritime Academy



Berkshire CC



UMD LARTS Infrastructure

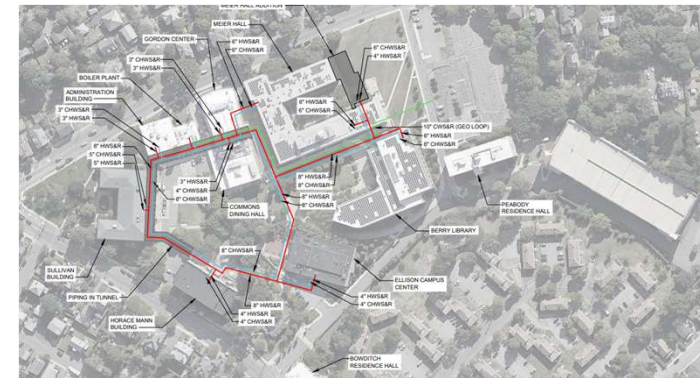


## Current Investment in Higher Education – Decarbonization

- Decarbonization and Energy Studies since 2021

Project #	Institution	Project Location	Project Type	Phase
BSC2101	Bridgewater State U	Campuswide	Decarbonization Roadmap Study	Study
DCP2032	Multisite	Campuswide as appropriate	Building Generator Upgrades for Demand Response Participation	Study
FSC2501	Fitchburg State U	Campuswide	Decarbonization Roadmap Study	Study initiation
TBD	Framingham State U	Campuswide	Decarbonization Roadmap Study*	Study initiation
GCC2101	Greenfield CC	Campuswide	Decarbonization and Energy Efficiency	Study complete
HCC2401	Holyoke CC	Campuswide	Decarbonization Roadmap Study	Study initiation
MAS2202	Massasoit CC	Campuswide	Decarbonization Roadmap Study*	Study complete
MCC2301	Middlesex CC	Bedford and Lowell campuses	Decarbonization Roadmap Study*	Study complete
MMA2203	Mass Maritime Academy	Campuswide	Decarbonization Roadmap Study	Study complete
NAC2402	Mass College of Liberal Arts	Campuswide	Decarbonization Roadmap Study	Study initiation
NEC2401	Northern Essex CC	Campuswide	Decarbonization Roadmap Study	Study initiation
NSC2401	North Shore CC	Danvers and Lynn campuses	Decarbonization Roadmap Study	Study
QCC2201	Quinsigimond CC	Campuswide	Decarbonization Roadmap Study*	Study complete
SSA2301	Salem State U	North Campus	Decarbonization Roadmap Study	Study complete
SSA2301	Salem State U	O'Keefe Complex and Harrington Campus	Decarbonization Roadmap Study	Study
STC2202	Springfield Tech CC	Campuswide	Decarbonization Roadmap Study*	Study
UMD2302	UMass Dartmouth	Campuswide	Decarbonization Roadmap Study	Study complete
WOR2401	Worcester State U	Campuswide	Decarbonization Roadmap Study	Study
WSC2302	Westfield State U	Campuswide	Decarbonization Roadmap Study	Study

\* study with master plan or capital project.



*Salem State Decarbonization Roadmap*

# Current Investment in Higher Education – Decarbonization

- Decarbonization, Energy Efficiency, and Sustainability Capital Projects since 2021

Project #	Institution	Project Location	Project Type	Phase	Total Project Estimate
AEP2302	Multisite	Berkshire CC, Fitchburg CC, Framingham State U, Massasoit CC, North Shore CC, Salem State U	Solar Inverter Replacements/Repairs	Design	\$498,095
AEP2303	Multisite	UMass Dartmouth, UMass Lowell	Solar Inverter Replacements/Repairs	Design	\$1,453,547
BHC2301	Bunker Hill CC	Building B	Existing Building Commissioning (UV)	Construction	\$270,000
CCC1902	Cape Cod CC	Campuswide	Decarbonization and Energy Efficiency	Construction	\$22,392,826
CSFDCP240	Westfield State U	Westfield	Fleet Vehicle Charging (UV)	Construction	\$163,430
FSC2301	Fitchburg State U	Conlon Industrial Arts Building	Existing Building Commissioning (UV)	Construction	\$291,447
MMA2203	Mass Maritime Academy	Campuswide	Decarbonization and Energy Efficiency	Construction Procurement	\$25,500,000
NAC2401	Mass College of Liberal Arts	Amsler Center	Existing Building Commissioning (UV)	Construction	\$300,000
NSC2301	North Shore CC	McGee Building	Energy Efficiency (UV)	Close-out	\$100,000
SSA2001	Salem State U	Campuswide	Lighting Upgrades	Close-out	\$2,183,610
SSA2301	Salem State U	North Campus	Decarbonization and Energy Efficiency	Construction Procurement	\$44,000,000
UMA2002	UMass Amherst	Campuswide	Lighting Upgrades	Close-out	\$6,617,335
UMA2003	UMass Amherst	Campuswide	Existing Building Commissioning, Controls upgrade	Design	\$10,793,000
UML2401	Umass Lowell	McGauvran Center	Existing Building Commissioning (UV)	Project Initiation	\$300,000
WSC2303	Westfield State U	Maintenance Building	Energy Efficiency (UV)	Close-out	\$136,557
					<b>\$114,999,847</b>



Mass Maritime Academy Ground Source Test Well



# Current Investment in Higher Education - Decarbonization

## Decarbonization- FY24-FY25 Fair Share Funding

**\$50M appropriated in FY24 budget** *(No match required)*

**Purpose:**

Provide funding to the IHEs to assist with meeting state decarbonization mandates and improve energy-efficiency.

Segment	Segment Distribution*	To each IHE Distribution**	Proposed/ Requested by segment (Feb 2024)
State Universities	\$11,628,518	\$1,292,058	\$11,514,802
Community Colleges	\$11,875,404	\$791,694	\$8,176,570
University of Massachusetts	\$26,496,078	***	\$26,496,078

\* *Segment Distribution based on gross square footage of state-owned major buildings*

\*\* *Segment allocation distributed equally among IHEs*

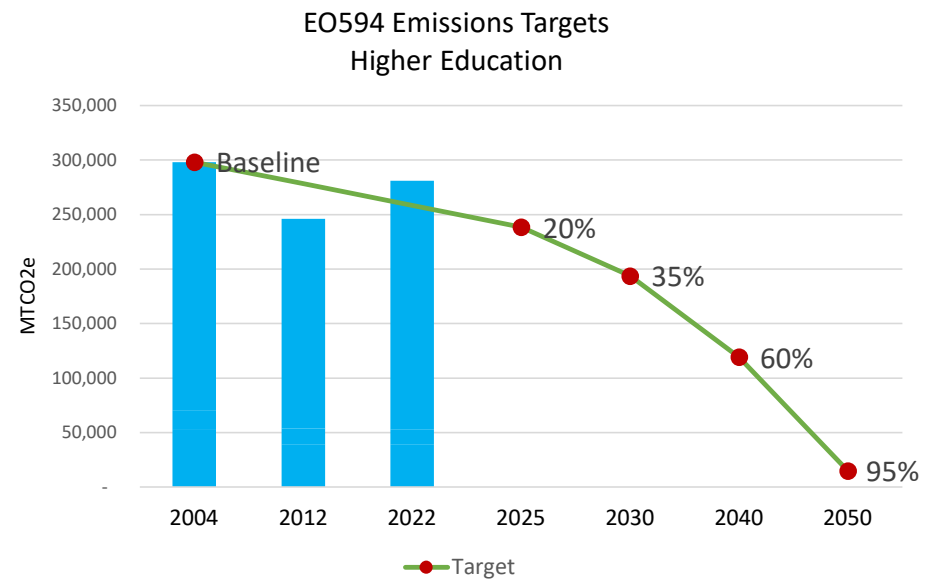
\*\*\* *Individual campus allocations determined by UMass Presidents Office*



# Higher Education Legislation and Mandates

## Decarbonization

- Legislative mandates
  - Act Creating A Next-Generation Roadmap for Massachusetts Climate Policy (2021)
  - Global Warming Solutions Act (2008)
- Executive Order 594 requirements
  - All electric
  - Low Energy Use Intensity (EUI)
  - LEED Silver minimum
- New energy code effective July 1, 2023
  - “Specialized” code for state buildings
  - New construction and substantial renovation
  - Focus on building envelope
  - Heating and cooling demand reduction
  - Solar and EV charging requirements



# Higher Education Legislation and Mandates

- Housing

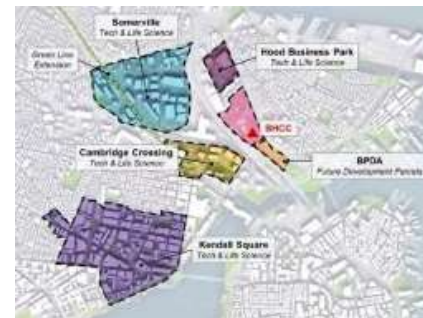
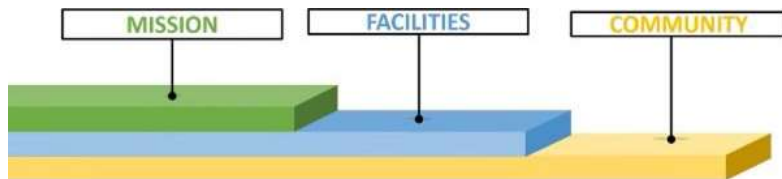
- [Executive Order 623](#) - Identifying Opportunities for the Use of Surplus and Underutilized Land for Housing

*DCAMM and the Executive Office of Housing and Livable Communities were tasked with identifying surplus and under-utilized state-owned real property that could potentially be made available for housing development.*

- Affordable Homes Act – Housing Bond Bill

*Legislative authority to convey surplus and underutilized property for housing production; relief from local zoning; vehicle to return disposition proceeds to institutions.*

- Real Estate Partnership Initiatives



Bunker Hill Community College



Northern Essex Community College



## Future Discussion

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# Legislative Authorization – Higher Education Capital Working Group

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SECTION 196. (a) There is hereby established a working group to develop and identify the future needs of the public higher education system to provide affordable, equitable and competitive higher education in the commonwealth.

(b) The working group shall include, but shall not be limited to: the secretary of administration and finance or a designee; the secretary of education or a designee; the Massachusetts climate chief or a designee; the commissioner of higher education or a designee; the commissioner of capital asset management and maintenance or a designee; the executive director of the Massachusetts clean energy center or a designee; the chairs of the joint committee on higher education; the chairs of the joint committee on bonding; a representative from the University of Massachusetts, appointed by the president of the University of Massachusetts; a representative from the state universities, appointed by the State Universities Council of Presidents; a representative of the Massachusetts association of community colleges; a representative of the University of Massachusetts Building Authority; and a representative of the Massachusetts State College Building Authority.

(c) The working group shall study and report on: (i) the feasibility and impacts of establishing a permanent financing structure using income surtax revenues for the issuance of debt for the benefit of public higher education capital needs; (ii) support for the University of Massachusetts Building Authority and the Massachusetts State College Building Authority to identify and finance investments in public higher education infrastructure; (iii) the capital funding necessary for public higher education campuses, broken down by campus; (iv) potential federal sources of reimbursement or grant funding for public higher education capital projects; (v) a prioritization process for public higher education capital needs; (vi) the total bonding capacity available for a public higher education capital projects bond legislation, including recommendations for the use of any general or special obligation bonds; (vii) a recommendation for a funding amount for future bond legislation for public higher education capital needs; (viii) potential processes for application, approval, design and delivery of capital projects for public higher education campuses; and (ix) possible investments for future bond legislation for public higher education capital needs, including, but not limited to, decarbonization, deferred maintenance and facilities improvement for the public higher education system of the commonwealth.

(d) Not later than March 1, 2025, the working group shall submit its report, including any proposed legislation necessary to carry out its recommendations, to the governor, the clerks of the house of representatives and the senate, the house and senate committees on ways and means, the joint committee on higher education and the joint committee on bonding.





**Commonwealth of Massachusetts**  
Executive Office for  
Administration and Finance

# Capital Investment Plan (CIP) Overview

September 2024

CONFIDENTIAL DRAFT: FOR POLICY DEVELOPMENT PURPOSES





## CIP Overview | CIP Introduction

**The Capital Investment Plan (CIP) is MA's blueprint for capital spending over the next five years.**

- A five-year rolling plan that funds construction and maintenance of key infrastructure.
- Updated annually on or before July 1<sup>st</sup>
- **Focused on state-owned assets and community grant programming. Investments heavily geared towards:**
  - Maintaining/repairing/modernizing/strengthening state assets (facilities, infrastructure, land/natural environment)
  - Supporting housing development
  - Fostering economic development
  - Supporting cities and towns through grant programming



## CIP Overview | FY25 CIP Budget Overview

**MA has roughly \$3 B to support all state infrastructure needs and capital investments; and annual budget is not anticipated to grow by more than \$125 M per year, at this time**

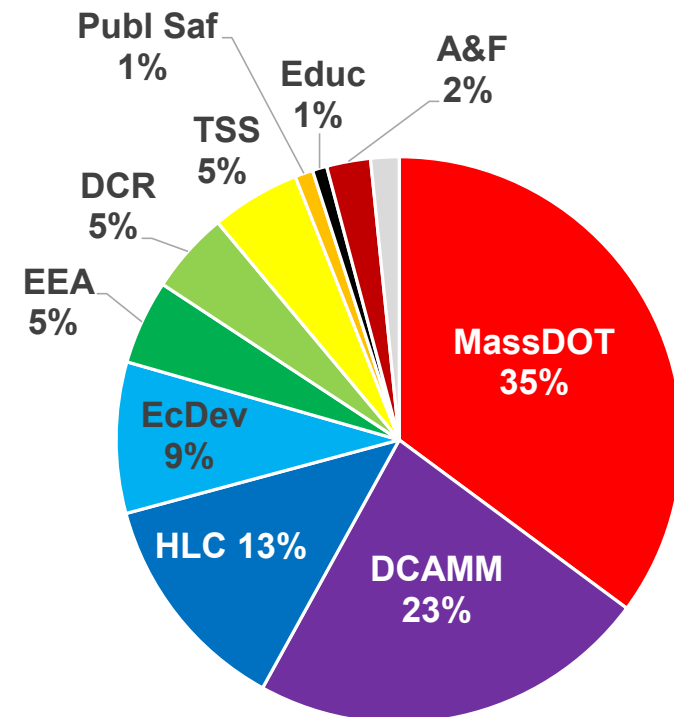
### 1. FY25 Bond Cap Budget: \$3.117 B

- Bond Cap = Tax-exempt General Obligation (GO) Bonds issued by MA to pay for capital expenses
- Annual debt service on GO Bonds is paid via the operating budget
- Annual Bond Cap budget is based on Debt Affordability Committee's (DAC) annual recommendation on the amount of new debt the Commonwealth can prudently afford.

### 2. Bond Cap is the primary source of funding to address MA capital needs.

- Bond authorization, secured through the Legislature, enables the Commonwealth to spend bond cap.
- Authorization does not require bond spending; actual spending is determined through the annual CIP process, which factors in current needs and affordability.

FY25 CIP Budget by Agency





# CIP Overview | FY25 CIP Budget Overview

## CIP Agencies at Glance

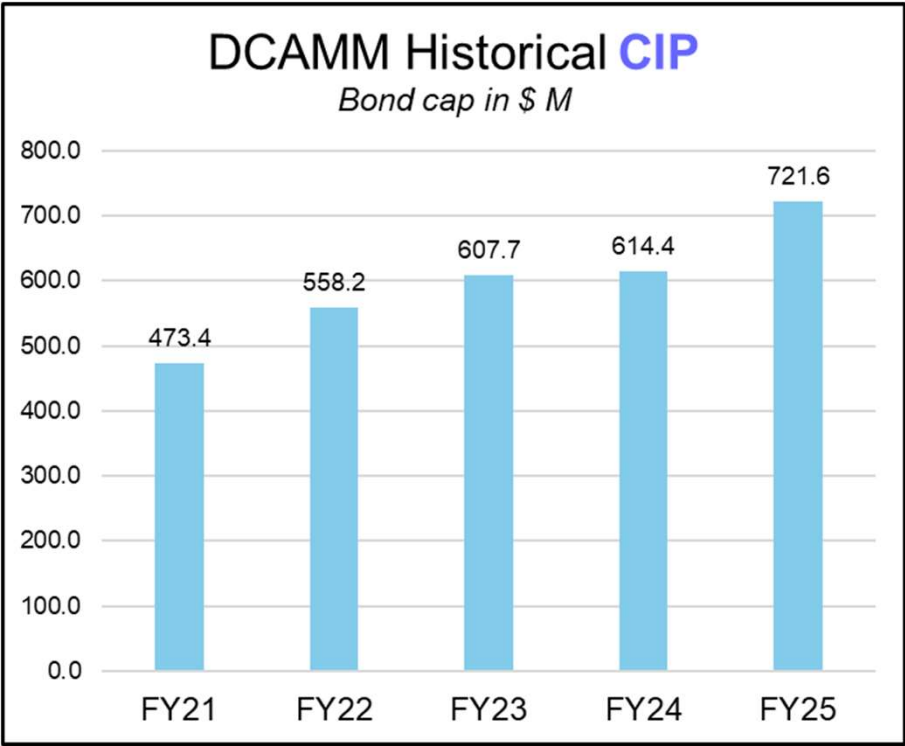
FY 2025 CIP Agency Overview				
<i>All figures \$ M bond cap</i>	<b>FY25</b>	<b>5yr Total</b>	<b>% of 5yr Plan</b>	
MassDOT	\$1,099	\$5,701	35%	Focuses on-going state of good repair and modernization programs for transportation related infrastructure. Also includes Chapter 90 and community grant and investment programs.
DCAMM	722	3,353	23%	Mostly composed of discrete capital projects that repair, modernize, & enhance state-owned infrastructure and on-going state facilities' repair and maintenance programs. <u>Nearly 98% of DCAMM's budget is committed to delivering active construction projects and ongoing critical repairs &amp; maintenance.</u>
HLC	399	1,999	13%	Invests in on-going housing programming that support increased housing production, housing preservation, and supportive housing.
EEA & DCR	303	1,555	10%	Largely focuses on on-going state of good repair, conservation, and resiliency programs
Ec Dev	269	1,365	9%	Funds on-going economic development programming, largely rooted in community grant programs, and business development initiatives.
TSS	175	876	5%	Includes a mix of ongoing IT maintenance & cyber security programming and discrete IT modernization projects.
A&F	94	463	2%	Mostly composed of community grant programming administered by agencies that fall within A&F.
Public Safety	32	145	1%	Consists largely of investments in public safety vehicles and equipment (e.g. body worn cameras and body armor).
Education	26	129	1%	Funds Workforce Skills and Early Education & Out-of-School Time capital grants
<b>Total</b>	<b>\$3,117</b>	<b>\$15,586</b>	<b>100%</b>	

CONFIDENTIAL DRAFT: FOR POLICY DEVELOPMENT PURPOSES



# CIP Overview | FY25 DCAMM CIP Budget Overview

FY25 CIP funds DCAMM at \$722 M bond cap, a \$107 M (+17%) increase over FY24 CIP





## CIP Overview | Bond Cap Constraints Recap

**CIP growth is constrained by statutory & administrative policies designed to ensure debt burden remains affordable**

- **Adherence to Bond Cap Limits**
  - Statutory Direct Debt Limit: amount of outstanding principal of Commonwealth “direct” debt is capped at 105% of the previous fiscal year’s limit
  - Annual Borrowing Limit: Annual Debt Service Payments < 8% of budgeted revenues
  - Growth Limit: Annual growth in the bond cap ≤ \$125 million capped by statutory limits and admin policies, generally does not grow by more than \$125 M (FY25 is an exception)
- **Consider Credit factors** – Rating agencies continually cite elevated debt levels as MA’s biggest credit negative factor
  - MA is ranked 2nd / 3rd in the nation for highest debt burden and is an outlier in the AA+ category – see *following slides*
  - If not carefully managed, could result in a credit rating downgrade which increases cost of borrowing
- **Unmoderated bond gap growth could strain MA’s financial position**
  - Increases operating budget pressures via increased debt service payments
  - Limits future flexibility to debt-finance critical infrastructure



# CIP Overview | Bond Cap Constraints Recap

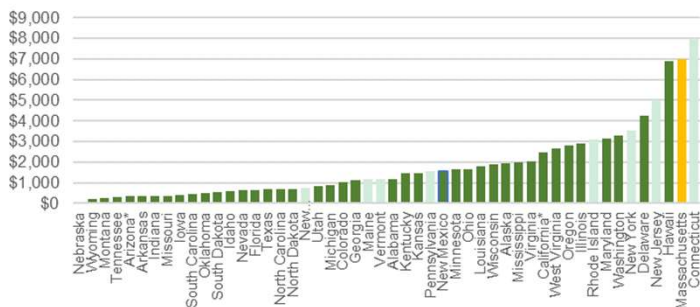
## Current debt levels constrain our ability to significantly increase the annual CIP budget

- **MA's debt burden is considered high – our debt burden is one of the highest in the nation**
  - Rating agencies consistently cite long-term liabilities as the greatest negative factor in our credit rating
- **Unmoderated bond gap growth could strain MA's financial position**
  - Increases operating budget pressures via increased debt service payments
  - Limits future flexibility to debt-finance critical infrastructure
  - Could result in a credit rating downgrade

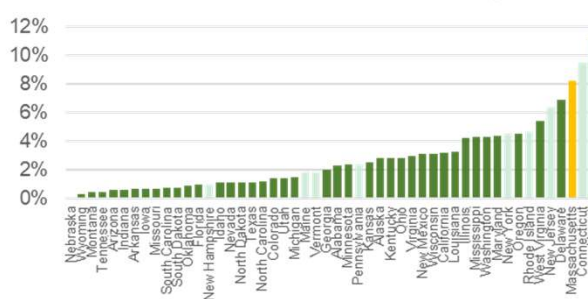
## MA Debt Burden Relative to Other States

In the charts below, MA is highlighted in **yellow**; New England states are in **light green**

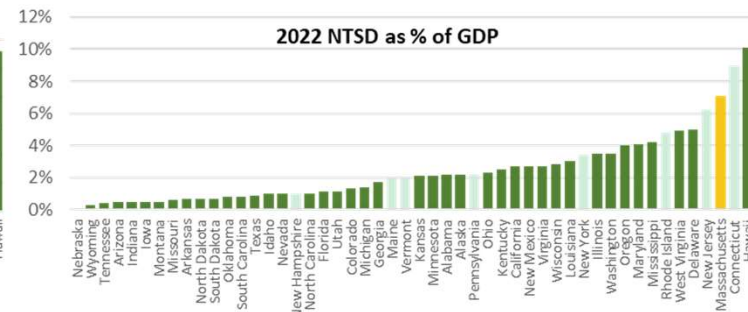
FY22 Debt per Capita by State



FY22 Debt as % of Personal Income by State



2022 NTSD as % of GDP



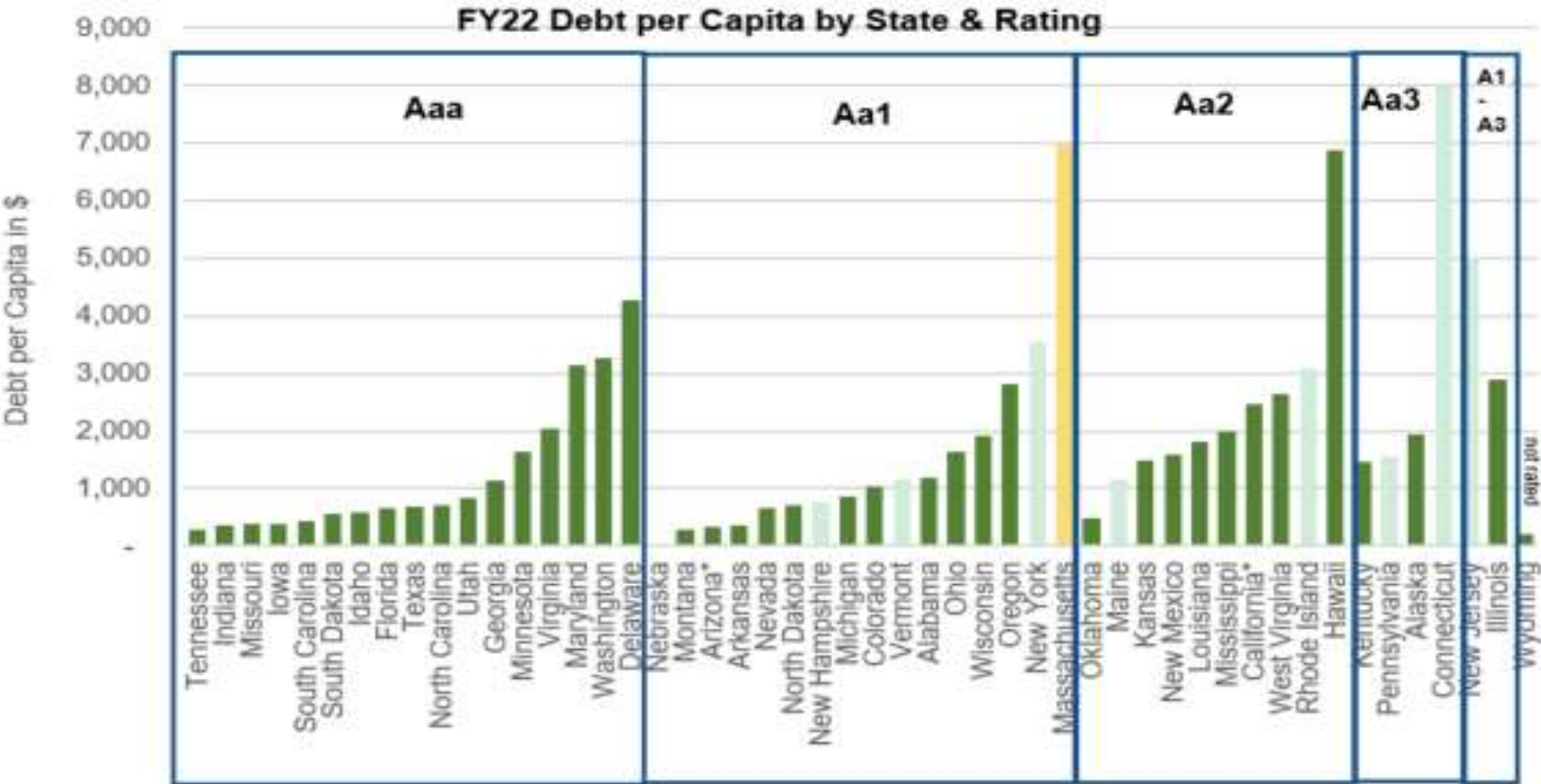
Source: U.S. Bureau of Economic Analysis, Moody's Analytics

CONFIDENTIAL DRAFT: FOR POLICY DEVELOPMENT PURPOSES



# CIP Overview | Bond Cap Constraints Recap

Massachusetts is an outlier within its rating category with respect to outstanding debt.



# University of Massachusetts Capital Planning Overview

Higher Education Capital Working Group  
September 12, 2024



University of Massachusetts

Amherst • Boston • Dartmouth • Lowell • Medical • Law

# Agenda

- Capital Planning Governance
- Capital Planning Context
- Capital Plan Summary

# Capital Planning Governance

# University Capital Plan

## **What is it?**

Comprehensive, five-year plan of capital investment based on financial planning, policy priorities, and strategic plans to ensure effective investment in the future and management of capital assets

## **What is included?**

- ✓ Prioritized list of projects
- ✓ Connection to strategic plans
- ✓ Funding sources
- ✓ Impacts on deferred maintenance and key ratios
- ✓ Informed by the 5-year financial forecast

## **When do we do it?**

Developed and presented to the Board of Trustees biennially; updates prepared and presented quarterly

## **Why do we do it?**

- ✓ To identify and prioritize capital needs
- ✓ To evaluate available sources of funding
- ✓ To understand the financial impact and timing of needs, informing the 5-year financial forecast
- ✓ To promote effective communication with stakeholders on capital needs and borrowing plans

## **Who is involved?**

- ✓ President's Office
- ✓ Campuses
- ✓ UMass Building Authority (UMBA)
- ✓ Gordian (formerly Sightlines)
  - UMass contracts with Gordian to obtain the data and contextual understanding of the deferred maintenance backlog via an annual assessment and report

## Campus Master Planning

- Master plans provide a framework for campus development & capital improvements
- Master planning engages key stakeholders including students, staff, faculty and external partners in how to best meet campus needs into the future
- Investing in deferred maintenance helps meet climate and sustainability goals and is reflected in the energy/climate master plans
- The most recent master plans for each campus were published / updated:

Campus	Master Plan	Energy	Carbon/Climate
Amherst	2012	2015	2021
Boston	2022	2022	2014 (climate resiliency plan)
Dartmouth	2017	2021	2020
Lowell	2023	2021	2021
UMass Chan	2019	2019 (Power plant master plan refresh in progress)	2021 (Decarbonization study in progress)

# University & State are Aligned on Energy Efficiency Goals

*Significant investment required to meet these goals.*

## University Priorities:

- Board adopted Sustainability policy in 2016 with strategies around reducing carbon emissions and energy use; increasing use of renewable energy
- University leads in new construction and renovations with 35 buildings LEED certified; 35% of statewide LEED certifications
- Partnership with DOER in emissions reduction efforts
- The 5 UMass campuses together contribute 43% of total Lead By Example portfolio onsite fossil fuel emissions, meaning these campuses play a significant factor in overall portfolio progress

## State Priorities:

- Executive Order 594 signed in April 2022; directing state agencies to reduce greenhouse gas emissions and improve energy efficiency toward net zero goal by 2050
- Focus on existing buildings, reducing onsite fossil fuel consumption and optimizing building performance
- Requires new construction to have efficient electric heating/cooling/hot water, be LEED Silver or higher, and perform 20% better than existing energy code requirements

# Deferred Maintenance Projects that Drive Sustainability

Approximately \$961M of the \$4.8B deferred maintenance is for projects that combine immediate needs and significant sustainability components

## Addressing Deferred Maintenance Backlog through a Sustainability Lens

- Evaluate projects for sustainability impacts.
- Specifically, each proposed project is evaluated to:
  - Assess if the project will drive cost savings; and
  - Enhance energy efficiency and reduce emissions.
- Notable sustainability improvement projects include: HVAC; building envelopes (exteriors); window replacements; energy efficiency; and changes to fuel sources.

## Deferred Maintenance and Sustainability

Portion of Backlog by Campus to Address Sustainability	
Amherst	282,302
Boston	64,403
Dartmouth	170,839
Lowell	257,532
UMass Chan	185,818
<b>Total</b>	<b>960,894</b>

*\$ in thousands*

# Capital Project Approvals

## Approving Authority

### Board of Trustees

- \$10M+ total project cost, or
- \$2M+ total project cost and requires debt

### President

- \$2M-\$10M total project cost
- Does not include debt

### Campus

- <\$2M total project cost

## Multi-Step Board Approval Process

### Vote 1

- Initial authorization from Board or President; allows for project study

### Vote 2

- Final approval from Board or President; construction to begin

### Cost Changes

- Changes >10%

# Key Financial Ratios Defined

*Ratios used to assess financial capacity to issue debt; Board imposed 8% debt burden consistent with State's limits.*

**Debt burden** – Compares the relative cost of borrowing to overall expenditures

$$\frac{\text{Debt service (P\&I)}}{\text{Total expenses}}$$

---

**Debt service coverage** – Measures the ability to make debt service payments from annual operations

$$\frac{(\text{Total revenues} - \text{total expenses}) + \text{depreciation} + \text{interest}}{\text{Debt service (P\&I)}}$$

---

**Financial Leverage Ratio** – Measures the ability to repay bondholders from wealth that can be accessed over time or for a specific purpose

$$\frac{\text{Total Cash \& Investments}}{\text{Total Adjusted Debt}}$$

# Capital Planning Context

# University Capital: by the Numbers

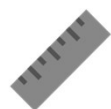
*With 518 buildings and 27.2 million gross square feet of space, the University has a complex and extensive real estate profile that needs to be actively managed.*



**\$4.8 billion** deferred maintenance backlog



About **92,000** students, staff, and faculty



**27.2 million total GSF** across the university



**~3,677** maintained acres



**518 buildings** across 5 campuses



**~\$18.0 billion** replacement value

## Debt Facts

### **University credit rating:**

Aa2 stable (Moody's), AA- stable (S&P), AA stable (Fitch)

### **Total debt outstanding:**

\$3.2 billion *as of 6/30/23*

- Excludes outstanding commercial paper
- Excludes \$112.1k UMass Global notes

### **Annual debt service:**

\$243 million as of *6/30/23*

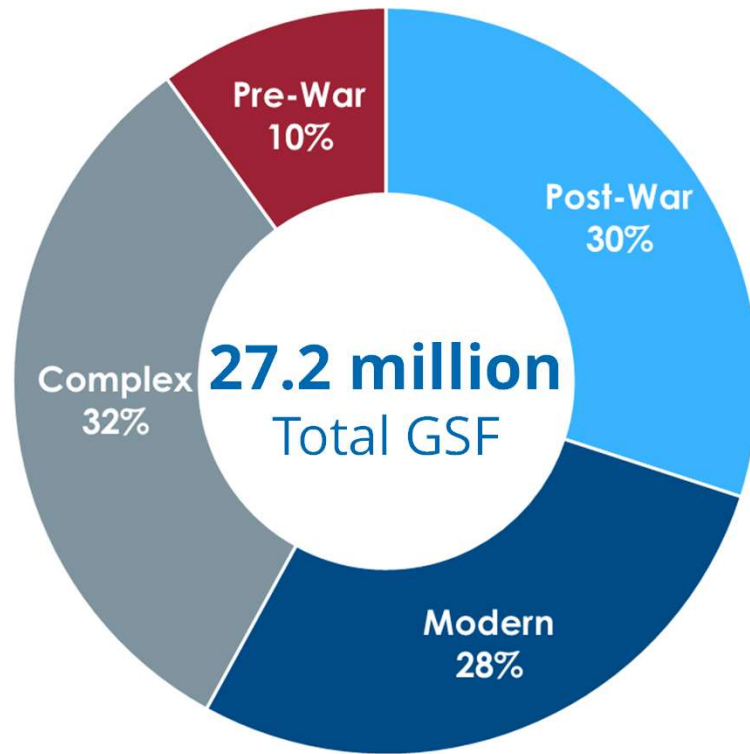
### **Deferred Maintenance:**

\$4.8 billion 10-year backlog *as of 6/30/23*

- Academic \$3.6 billion
- Auxiliary \$1.3 billion

# UMass Building Age

*58% of University built in eras requiring higher levels of care and maintenance today*

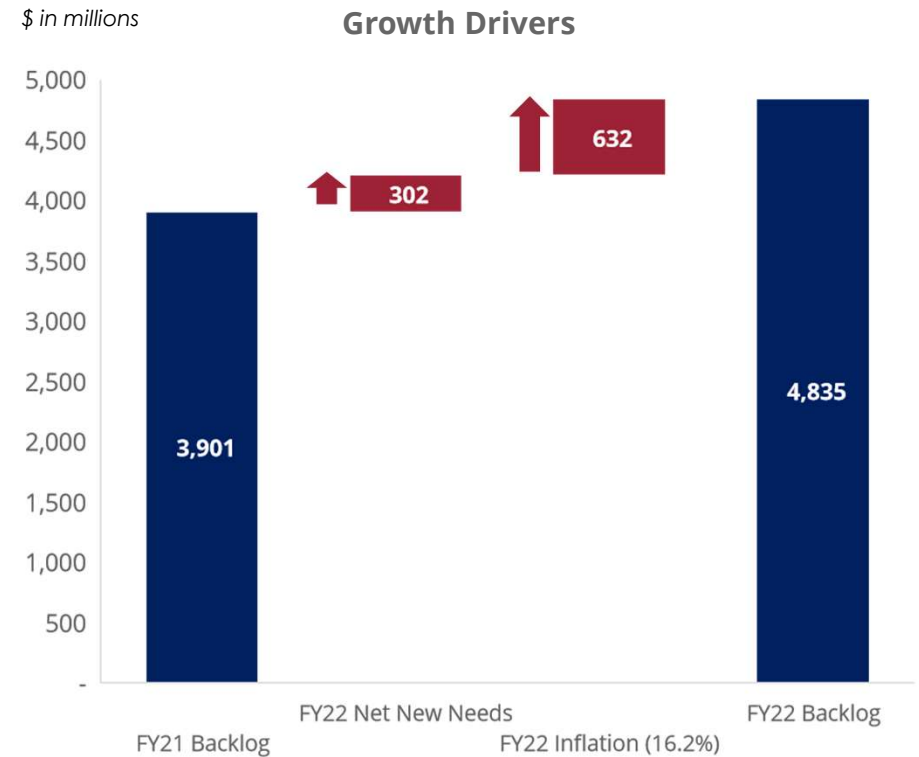
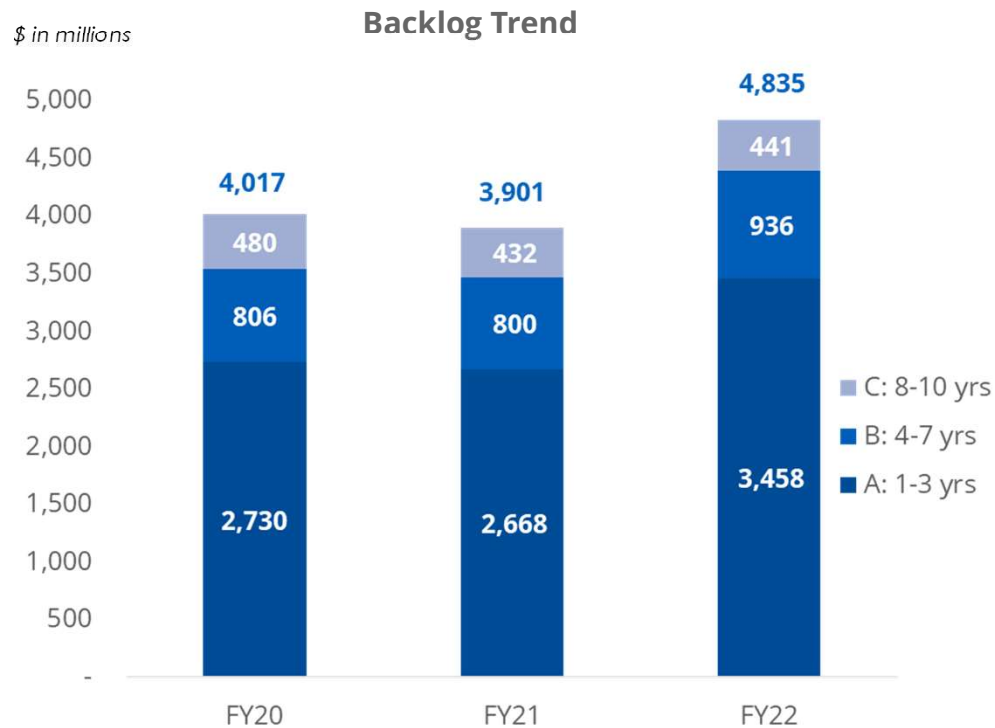


## Construction Eras

- Pre-War (pre-1951): durable construction, older but lasts longer
- Post-War (1951-1975): lower quality, needs more repairs & renovation
- Modern (1975-1990): quick flash construction, low quality components
- Complex (post-1990): technically complex, higher quality, more expensive to maintain or repair

# Deferred Maintenance Backlog

*Inflation creates challenges for reducing deferred maintenance*



# Deferred Maintenance – Key Terms

## Established Definitions and Set Targets Based on Industry Best Practice

### Keep Up:

- Defined as the annual investment needed to ensure buildings perform properly and reach their useful lives.
- Includes projects funded from a recurring funding source.
- Includes preventive/proactive maintenance funded from the operating budget.

### Catch Up:

- Defined as projects funded by one-time funds such as bond proceeds, State resources (also typically bond funds), and in some cases reserves.
- Large backlog that requires funding over a specified time period.

### Annual Investment Targets:

- Keep Up - defined as the annual minimum investment required to prevent the deferred maintenance backlog from growing. Gordian calculates the target by discounting the total cost necessary to replace each building component at the completion of its useful life.
- Catch Up – defined as the annual investment needed to eliminate the backlog over a specified time period. This target is still to be determined.

# Deferred Maintenance - Annual Investment

FY24 Keep Up

**\$112 M**

FY24 Keep Up

**\$302 M**

**37%**  
of target



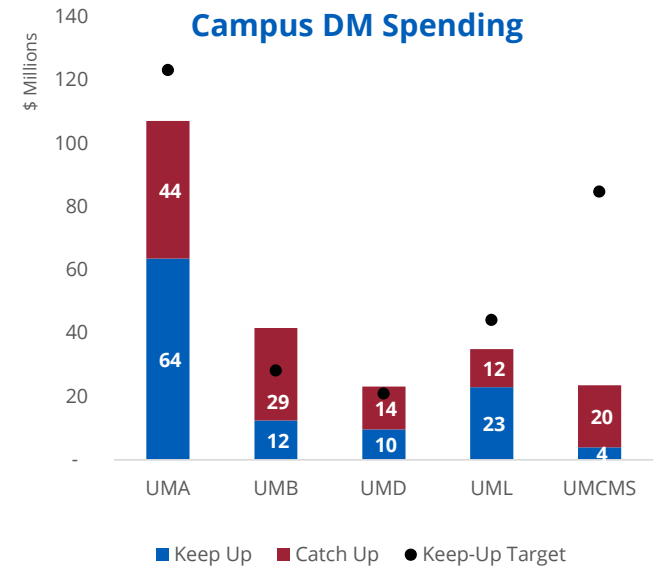
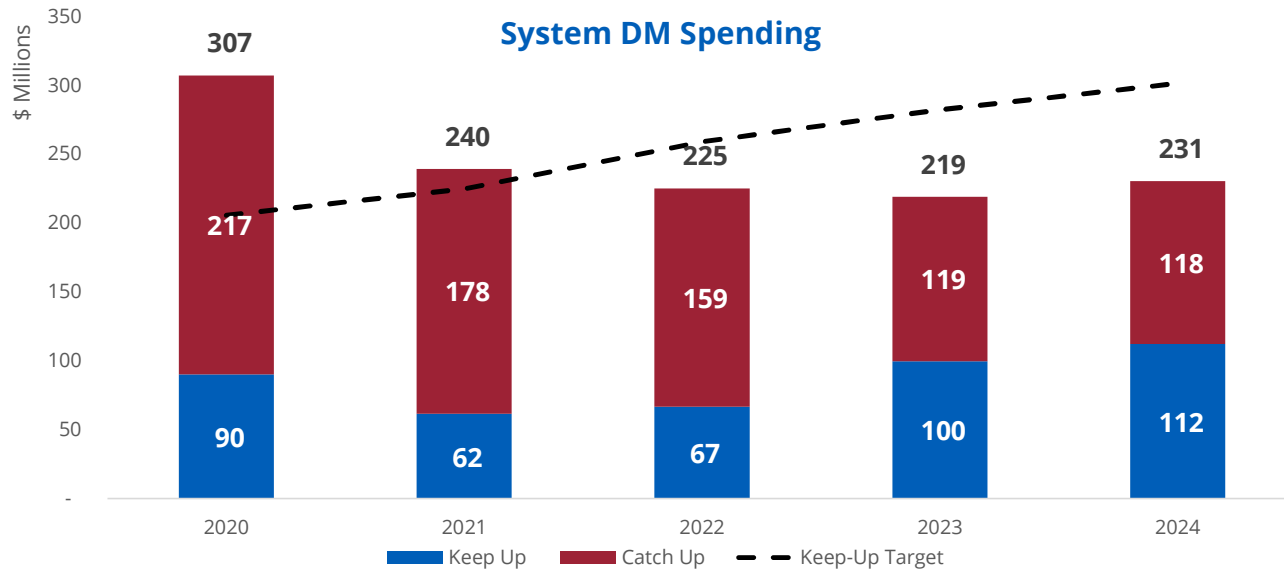
FY24 Catch Up

**\$118 M**

FY24 Catch Up

**\$345 M**

**34%**  
of target



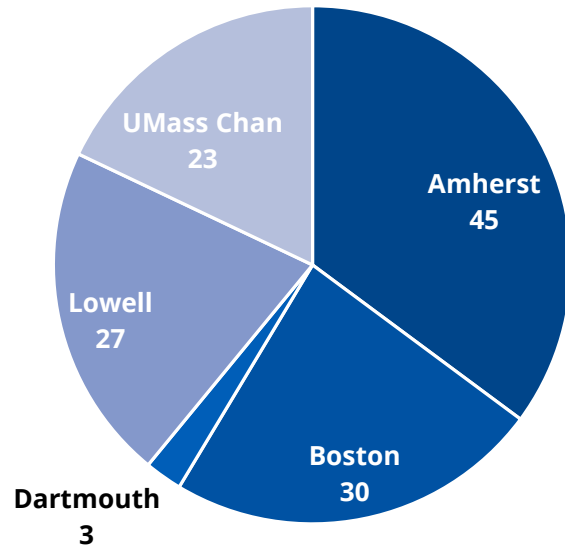
# Capital Plan Summary

*(as of September 2024)*

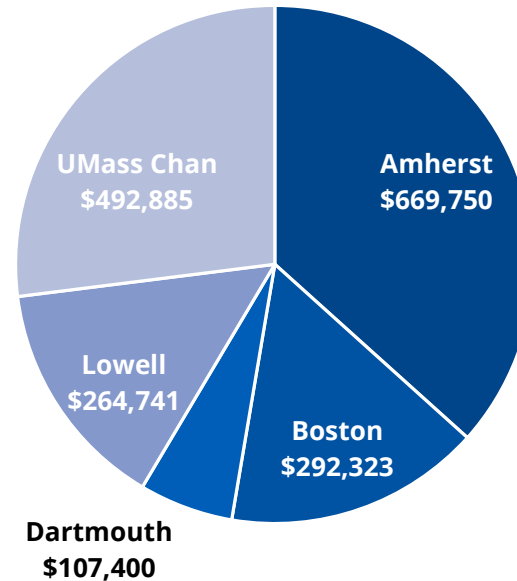
# Capital Plan

Current capital plan includes 128 projects totaling \$1.8 billion.

Number of Projects  
128



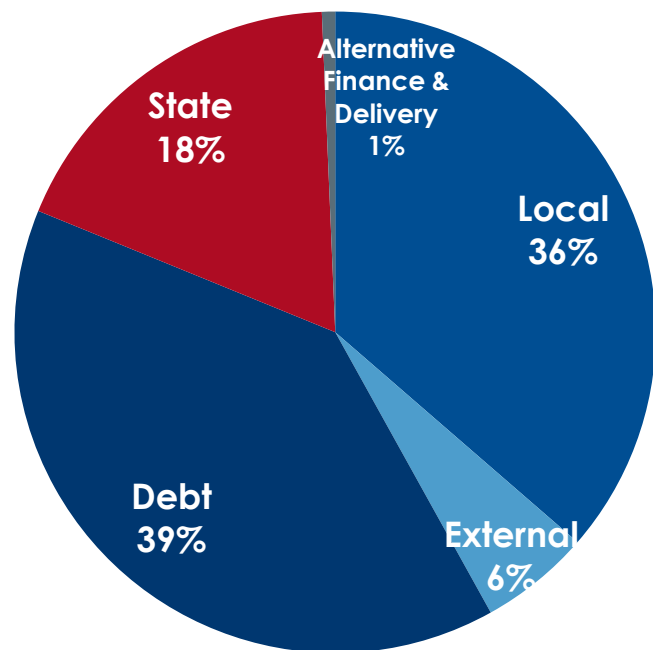
Estimated Cost of Projects  
\$1.8B



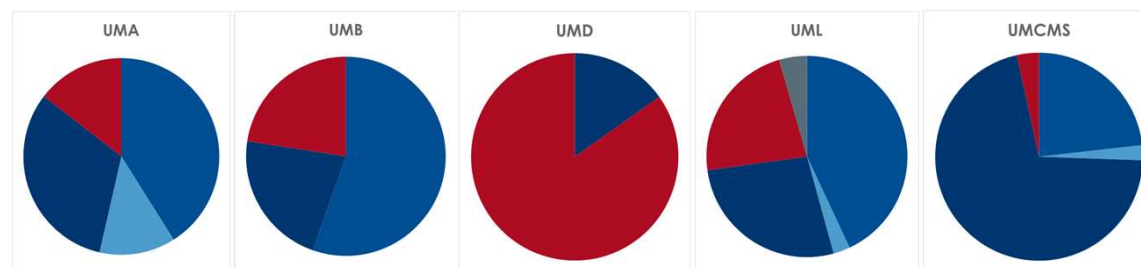
*\$ in thousands*

# Funding Sources Dashboard

81% of Capital Plan funded by University resources.



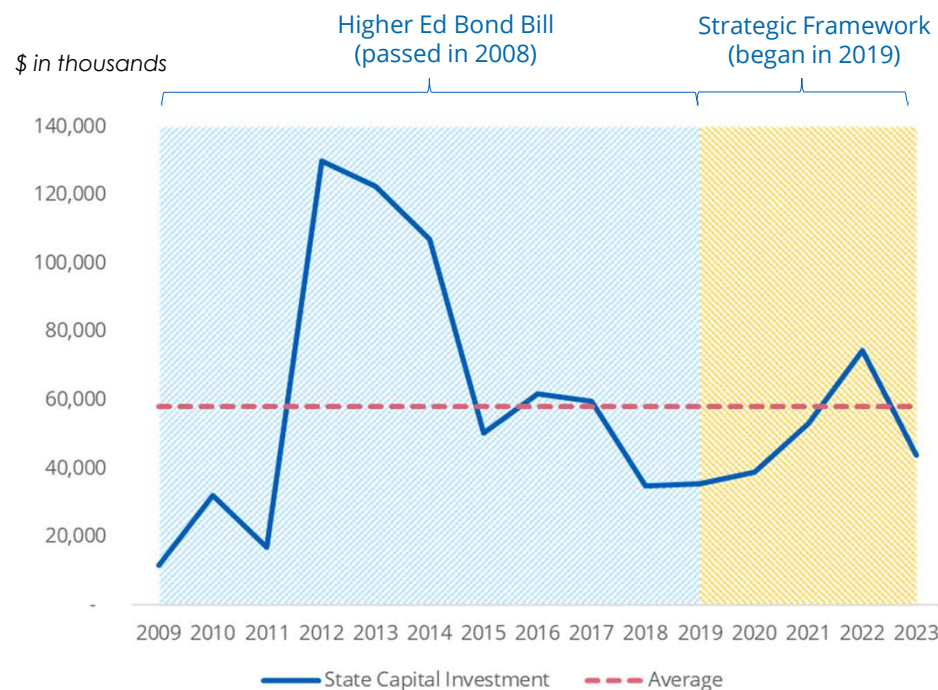
FY2025 Q1		
Funding Source	Total Capital Plan	% Total
Local Funds	664,205	36%
External Funds	101,810	6%
Debt	716,980	39%
Subtotal University Funding	1,482,995	81%
State	332,104	18%
Alternative Finance & Delivery	12,000	1%
Subtotal Non-University Funding	344,104	19%
<b>TOTAL Authorized Projects</b>	<b>1,827,099</b>	



# State Capital Investment

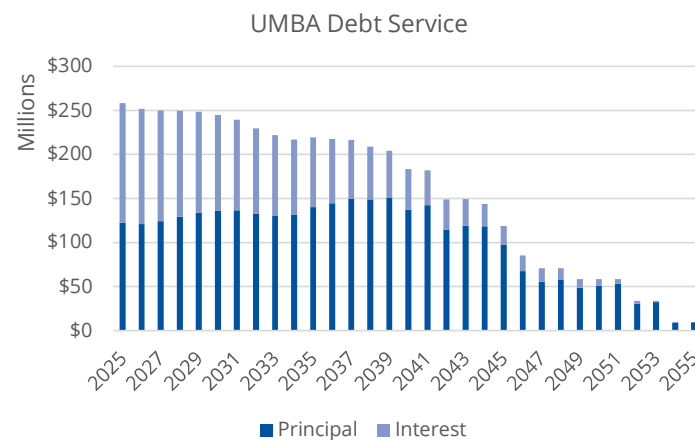
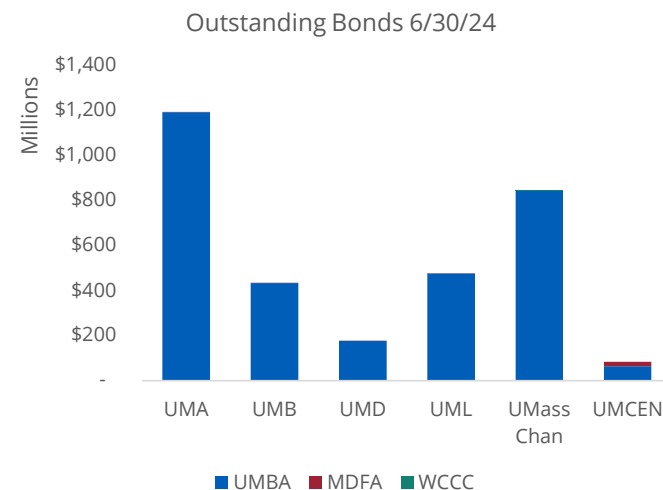
- Executive Office for Administration & Finance develops an annual statewide capital plan, approves projects funded by University debt and, through the Division of Capital Asset Management & Maintenance, manages state funded projects.

Programs		State Funding
Major Projects	Major renovation, demolition, or replacement of existing facilities	\$75M UMA Computer Sciences; \$75M UMB SDQD; \$37M UML Olney Renovation
Critical Repairs	Renewal/repair/replacement of equipment, systems and infrastructure	\$82M commitment FY24 – FY28 (~\$16.4M annually)
Accelerated Infrastructure	Repairs to HVAC, building envelopes, and elevators, to improve functionality and efficiency	\$81M UMD LARTS Renovation
Fair Share	Higher Ed deferred maintenance capital program	\$50M for all of Higher Ed



# University Outstanding Debt

- University typically issues debt every 2 years; timing & structuring developed by UMBA in consultation with the President's Office and the campuses.
- UMBA uses \$200 million Commercial Paper to support project spending in advance of long-term debt issuance
  - Further's UMBA's and the University's efforts to establish a "just in time" borrowing program to fund the University's capital plan as needed during construction periods.
- The University had \$3.2 billion\* in outstanding bonds as of 6/30/24
- University debt consists of UMBA, MDFA, & WCCC bonds:
  - UMBA debt = \$3.18 billion
  - MDFA debt = \$20.3 million
  - WCCC debt = \$425 thousand
- 64.0% of outstanding UMBA bonds mature within 15 years



# Ratings Affirmed by Moody's, S&P and Fitch

## MOODY'S

Aa2  
(Stable)

## S&P Global

AA-  
(Stable)

## FitchRatings

AA  
(Stable)

### Favorable Credit Factors:

- Favorable financial strategy and risk management
- Disciplined fiscal oversight and expense management
- Management targeting surpluses; focused on maintaining operating performance
- Strong internal controls, specific reserve requirements and efficiencies
- Historically healthy support by the Commonwealth

### Credit Challenges:

- Elevated debt levels putting pressure on the balance sheet
- Substantial remaining capital needs requiring additional debt
- Weaker cash and investments to operations and debt relative to peers
- Constraints on expense flexibility due to highly unionized environment

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# Massachusetts State College Building Authority

State University Program

Higher Ed Working Group Introduction to MSCBA Presentation

September 12, 2024



1. Introduction
2. Financing Process/Capacity
3. Capital Project Planning and Prioritization

## 1. Introduction to MSCBA

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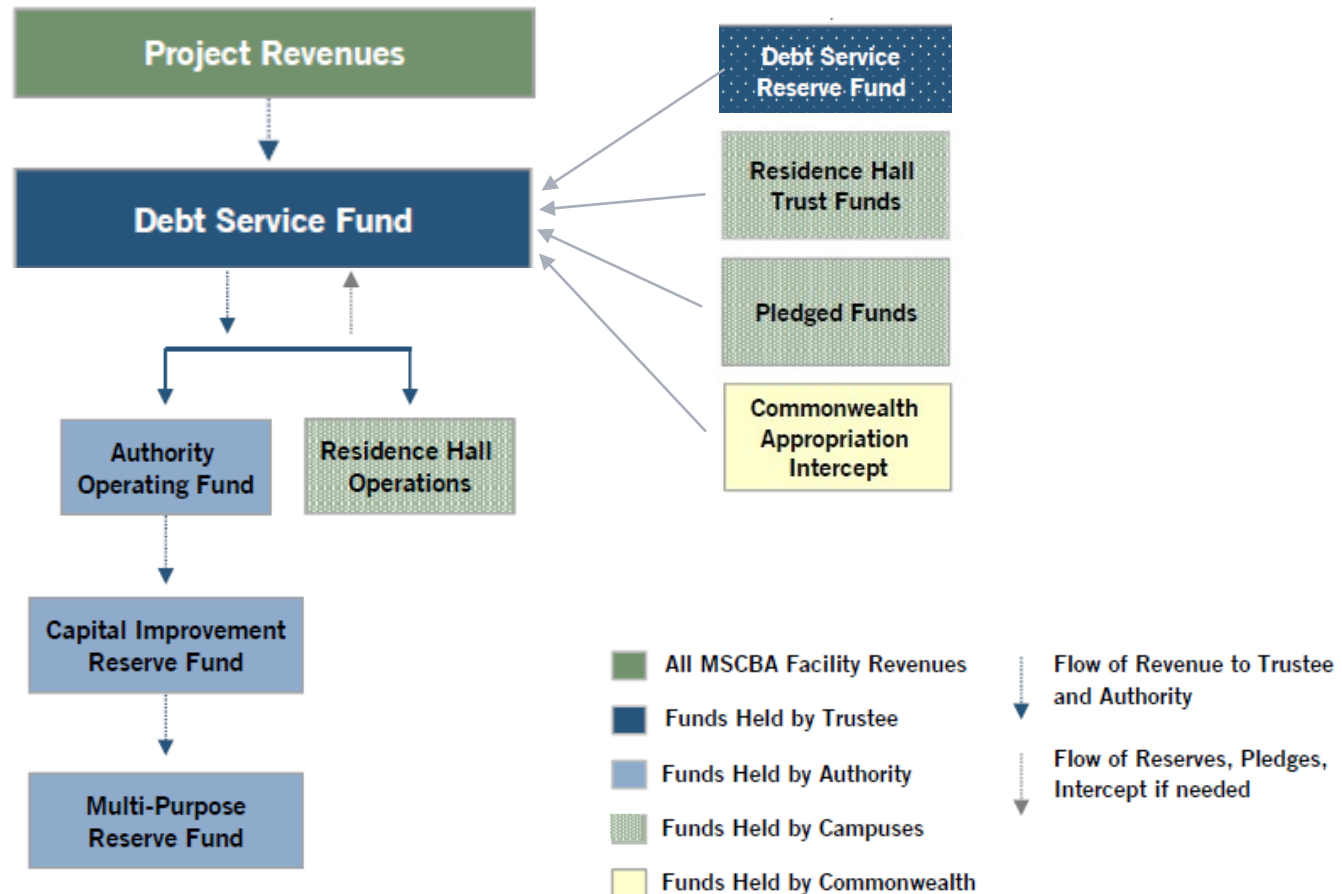
- The Massachusetts State College Building Authority is charged with financing, designing, constructing, and overseeing the management of housing, dining, athletic, parking, and other student activity life facilities for the 9 Massachusetts State Universities and 15 Community Colleges.
- Currently, there are 16,616 beds designated for the 9 State Universities.
- The Authority owns 54 residential complexes, 3 parking structures, 2 parking lots, an office building, a cultural arts building and the Warren Conference Center in Ashland.

# 1. Introduction to MSCBA

- The Authority is also able to finance certain academic facility projects at these institutions when specifically authorized, such as through the 2008 higher education bond bill.
- Examples of Supplemental Debt Issuance (2008 Bond Bill Projects)
  - Community Colleges
    - Mt Wachusett - Haley Academic Center
    - Bunker Hill Community College
  - State Universities
    - Worcester State - Wellness Center
    - Framingham State - Hemenway Science
    - Salem State - Main Stage Theater
- Additionally, The Authority works in collaboration with the universities/community colleges and DCAMM in order to assist with delegated projects.

# 1. Introduction to MSCBA Flow of Funds

- As of May 1, 2016, all outstanding Commonwealth guaranteed debt was paid off
- All outstanding bonds constitute Parity Bonds under the Trust Agreement
- Issuance of the 2019C Refunding Bonds removed the Debt Service Reserve Fund Requirement



## 2: Financing Outstanding Indebtedness



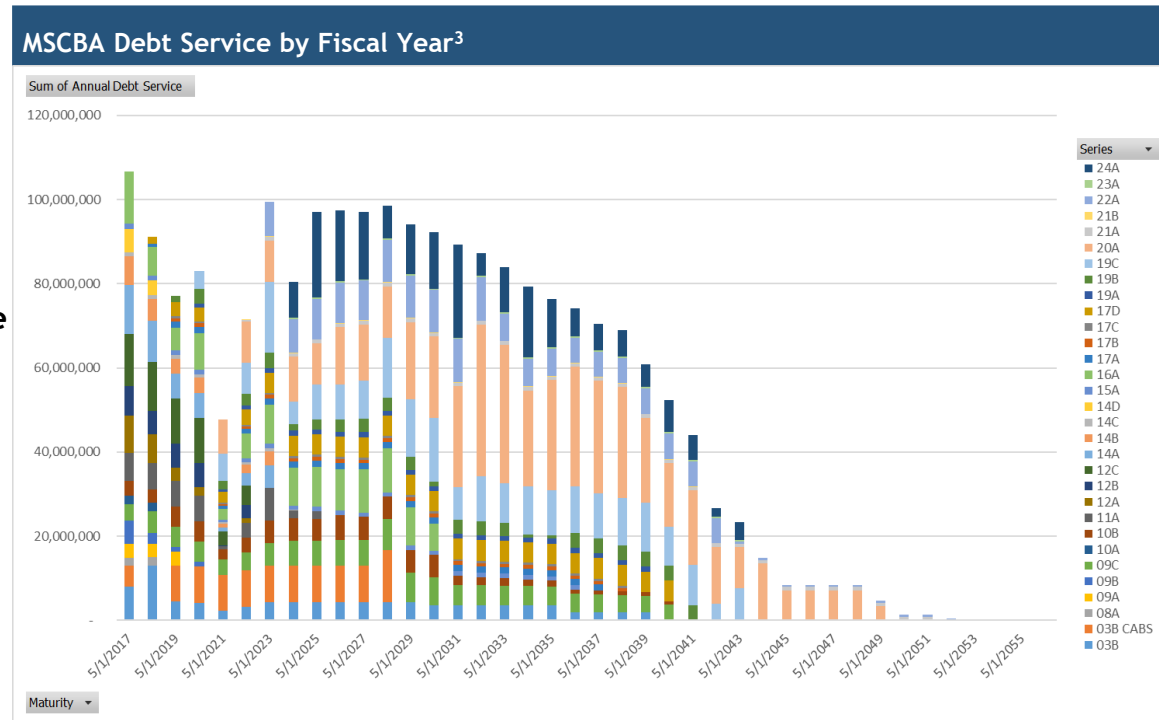
**West Hall**  
**2015**  
Framingham State University



**Woodward Hall**  
**1912**  
Bridgewater State University

## 2: Financing Outstanding Indebtedness

- **Total Outstanding Par \$1.06 Billion<sup>1</sup>**
  - All Parity Bonds
- **Maximum Annual Debt Service**
  - \$98.6 Million<sup>1</sup>
- **Aggregate Average Annual Gross Debt Service**
  - \$53.5 Million<sup>1</sup>
- **DSRF Balance**
  - \$36.7 Million<sup>2</sup>
- **Weighted Average Life of Debt**
  - 9.8 Years<sup>1</sup>
- **Fixed Rate Debt:**
  - The Authority has no variable rate debt
  - The Authority has no derivatives exposure



Note: Series 2009C and 2010B do not include impact of BAB's subsidy

<sup>1</sup> As of June 30, 2024

<sup>2</sup> Based on market value as of 6/5/2024

<sup>3</sup> Gross debt service. In most years between FY 25 and FY 49, a portion of debt service is scheduled to be paid from the Debt Service Reserve Funds.

## 2. Financing

### Parity Bond New Money Financings To-Date

- Since 1999, the Authority has financed \$1.41 billion in project funds with bond proceeds, including the Series 2023A project funds issued in July:

Summary of New Money Proceeds <sup>1</sup>						
Series	New Housing Capacity	Repair and Renovation Projects	Student Activity Projects	University / Commonwealth-Owned Projects	University / Commonwealth-Managed Projects	Total
1999-2000	\$47.02	\$33.45	\$11.62	\$1.80		\$93.90
2003A,B	\$67.00	\$19.00		\$2.10		\$88.10
2004A	\$32.00	\$24.00	\$2.00			\$58.00
2005A		\$19.00		\$14.90		\$33.90
2006A	\$54.10	\$19.60	\$10.00	\$8.28		\$91.98
2008A	\$49.00	\$32.60	\$0.00	\$0.80		\$82.40
2009A,B,C	\$182.72	\$31.10	\$4.08	\$23.00		\$240.90
2010A,B	\$1.60	\$12.50	\$12.50	\$18.31	\$10.00	\$54.91
2012A	\$113.00	\$11.50	\$31.00		\$3.00	\$158.50
2012C	\$75.39	\$10.50	\$17.71	\$35.95	\$15.00	\$154.55
2014A	\$50.20	\$27.80	\$4.80	\$41.85	\$5.00	\$129.65
2014B,C	\$44.00	\$10.00	\$22.50	\$12.90	\$17.70	\$107.10
2015A	\$0.00	\$11.00	\$6.20	\$1.22		\$18.42
2017A	\$9.00	\$8.00	\$0.00	\$4.00		\$21.00
2017BC	\$1.80	\$8.00	\$10.00			\$19.80
2019A		\$10.90	\$4.90			\$15.80
2021A,B	\$17.00	\$1.50			\$1.00	\$19.50
2022A	\$1.00	\$6.50		\$9.00	\$1.50	\$18.00
2023A		\$2.86		\$1.52		\$4.375
<b>Project Fund Total</b>	<b>\$744.83</b>	<b>\$299.81</b>	<b>\$137.31</b>	<b>\$175.63</b>	<b>\$53.20</b>	<b>\$1,410.78</b>

<sup>1</sup> \$'s in millions

### 3. Capital Project Planning and Prioritization



Pier Renovation for New Multi-Mission Vessel - Massachusetts Maritime Academy

### 3. Capital Project Planning and Prioritization

#### Project Types

##### ■ Residence Halls - Renewal or Adaption

- Renewal (replace in-kind) expected to be funded from reserves
  - a. System Reserves (jointly held for buildings prior to 2002)
  - b. Campus Reserves (facilities after 2002 have their own reserve)
- Adaption (new code requirements or standards) are funded from proceeds of revenue bonds serviced by increases in room rents

##### ■ Student Life Projects (see appendix)

- To create valuable residential communities, these facilities are not negotiable.
- Funded from proceeds of revenue bonds serviced from student fees or from other external Campus sources such as grants or fund raising

##### ■ OTHER (Bond Bill, etc)

### 3. Capital Project Planning and Prioritization



To what extent is the current capacity of MSCBA able to meet the needs of the state institutions of higher education?

Unmet needs are substantial across the state university system

Due to age of facilities, deferred maintenance, adaption of halls to meet current student population needs/desires, rising costs of operations and other factors

Other financial factors:

- Revenue no longer sufficient to cover expenses/capital work

- Construction costs are rising faster than expected

- Reserve deposit are down because revenue base is down

- Energy code requirements impact design plans

- Technology updates for environmental controls and life safety systems

Residence Hall Systems were always meant to be truly auxiliary and self sustaining  
- COVID and its associated effects have changed the game.

MSBCA has partnered with campuses and Commonwealth partners to be creative in our approach to finances as well as capital planning but creativity is no longer enough.

Decarbonization plans are unfolding but without a clear funding plan.

### 3. Capital Project Planning and Prioritization



#### MSCBA Process for Identifying Capital Projects

Constant communication with our campuses to discuss short term, long term and emergent needs as they come up

#### Annual Capital Planning process for Residence Hall Projects

- Building Data

- Facility Surveys

- Projects assigned by need and equity among 9 state universities

#### Decision Factors for Student Life or Other Projects (Financing and/or Project Management)

- MSCBA Statute

- Campus masterplan - coordination with DCAMM

- Study-Cost Estimate

- Financial Feasibility - proforma - ability for revenue to cover borrowing/expenses

- MSCBA Board Approval

- BHE & ANF Approval

- DCAMM delegation for project delivery

### 3. Capital Project Planning and Prioritization

#### Example- Projects Underway FY25

State University	Project Name	Total Project Costs	MSCBA Reserves	Debt Financing	Campus/Other Funded
Bridgewater	Shea 2024 Bathroom Renovations	4,680,147	1,555,147	1,500,000	1,625,000
Bridgewater	Great Hill Heating System Repairs	300,000	300,000		
Bridgewater	Woodward Basement Ceiling	255,000	255,000		
Bridgewater	Miles DiNardo Door Repairs	111,886	75,000		36,886
Bridgewater	Crimson Residence Hall Repairs	475,000	475,000		
Bridgewater	Weygand Multistack Repairs 24	50,000	50,000		
Fitchburg	Main Street Theater Roof Replacement	7,464,295			7,464,295
Fitchburg	Main Street Theater Black Box - Design	2,151,389			2,151,389
Framingham	Warren Center -Main Lodge Ballroom Addition	6,891,116			6,891,116
Framingham	Warren Center Sewer System Upgrades	1,560,000			1,560,000
Framingham	Peirce Annex Roof	1,250,000	1,250,000		
Framingham	Warren Center Barn	130,000			130,000
MassArt	Smith Mattress Replacement	30,000	30,000		
MCLA	Hoosac Upper Roof Replacement	700,000	700,000		
MCLA	Hoosac Elevator Design	47,500	47,500		
Maritime	Co. 5 Renovations: Res Hall Renovations	4,300,000	1,100,000	3,200,000	
Maritime	Pier Upgrades	27,522,102			27,522,102
Maritime	Athletics & Wellness Center-Design	20,000,000			1,400,000
Salem	Marsh Boilers & Storefront Doors	1,435,600	1,435,600		
Westfield	Apartments Plumbing Stack Repairs	120,000	120,000		
Westfield	New Hall Hot Water Replacement	1,229,000	1,229,000		
Worcester	Wasylean Hall Fire Pump Replacement	282,000	282,000		
<b>Totals</b>		<b>\$80,985,035</b>	<b>\$8,904,247</b>	<b>\$4,700,000</b>	<b>\$48,780,788</b>

## Appendix Commonwealth Projects Financed and Constructed by MSCBA (partial)



Fitchburg State University - Hammond Campus Center

## Appendix Commonwealth Projects Financed and Constructed by MSCBA (partial)



Salem State University- Gassett Fitness Center

## Appendix Commonwealth Projects Financed and Constructed by MSCBA (partial)



**Mount Wachusett Community College- Student Center**

## Appendix Commonwealth Projects Financed and Constructed by MSCBA (partial)



Westfield State University - Eli Campus Center Renovation

## Appendix Commonwealth Projects Financed and Constructed by MSCBA (partial)



photo credit - Emma Odell

## Appendix Commonwealth Projects Financed and Constructed by MSCBA (partial)

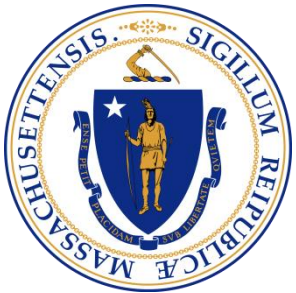


Massachusetts Maritime Academy - Fantail Student Lounge

## Appendix Commonwealth Projects Financed and Constructed by MSCBA (partial)



Massachusetts College of Liberal Arts- Soccer Field



# Commonwealth of Massachusetts

**Executive Office for Administration and Finance**

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Higher Education Capital Working Group

*October 10, 2024*



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## Meeting Schedule and Topics

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Date	
1. September 12 <sup>th</sup>	<del>Objectives, Background and Level-Setting</del>
2. October 10 <sup>th</sup>	Campus Needs and Financing Structure and Sources
3. November 14 <sup>th</sup>	Options for Distributing and Allocating Resources
4. December 12 <sup>th</sup>	Policy/Authorization Discussion to Inform Bond Bill and Final Report



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## Today's Agenda

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### 1. Higher Education Institution Needs

- Community College Dashboards – DCAMM (10 min)
- Context for Community Colleges – Nate MacKinnon, Executive Director of the Mass. Association of Community Colleges, and Bill Mitchell, Interim President of Massasoit Community College (10 min)
- State University Dashboards – DCAMM (10 min)
- Context for State Universities – John Keenan, President of Salem State University (10 min)
- UMass Dashboards – DCAMM (10 min)
- Any Questions Related to UMass – LeeAnn Pasquini, Associate Vice President at UMass (3 min)

### 2. Financing Structure and Sources

- Commonwealth Debt Overview – Kaitlyn Connors, Assistant Secretary for Capital at EOANF (20 min)
- Fair Share Credit Structure and Pledge – Joe DaBreo and Andrew Estrada from PFM (20 min)

### 3. Group Discussion and Questions (until close)



Date



Executive Office of  
Education



DIVISION OF  
CAPITAL ASSET  
MANAGEMENT &  
MAINTENANCE

MASSACHUSETTS  
Department of Higher  
Education

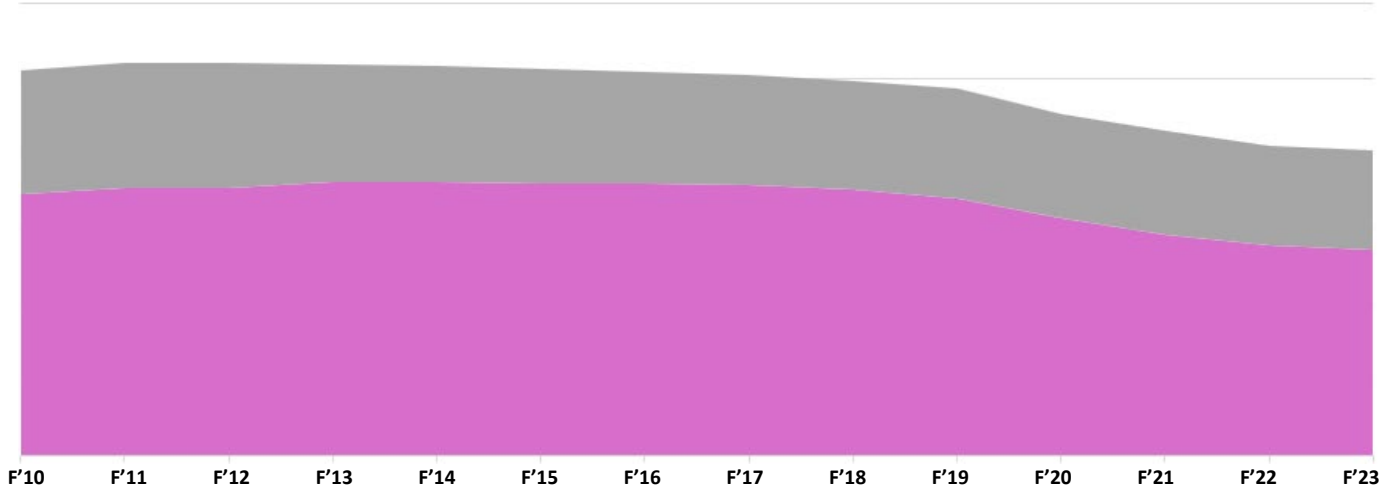
**Higher Education Capital Working Group**  
Meeting 2  
October 10, 2024

# DASHBOARD TEMPLATE

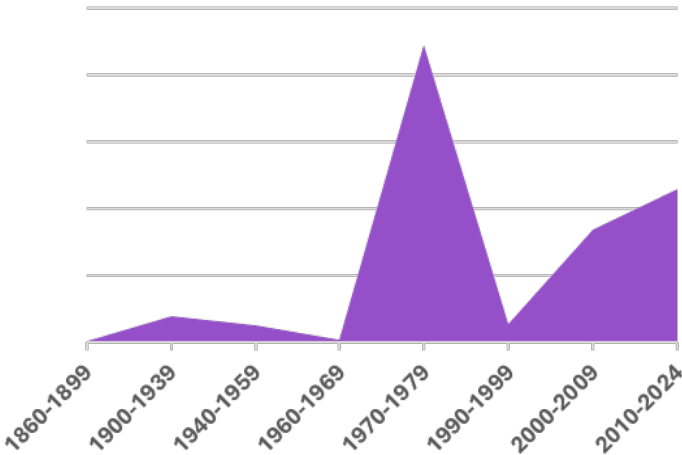
ENROLLMENT

FT

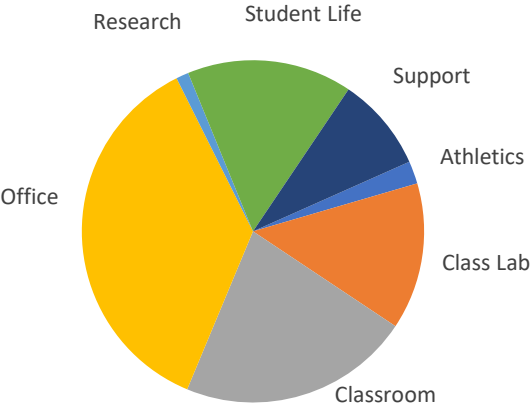
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AGE OF BUILDINGS

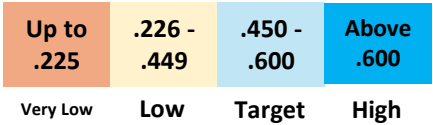


SPACE USE AND UTILIZATION



.XXX

Classroom Utilization



10-year Backlog DM

\$XXM

\$xxx/sf

Current State Investments

\$XXM

Decarbonization

\$XXM

Campus/Other Funding

\$XXM

Programmatic Modernization

\$XXM

Potential Real Estate Opportunity

TBD

\$XX

Total Gross Need

\$XX

Total Net Need

# Emerging Themes

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**Coordinated investment that addresses multiple goals is the most cost-effective approach and will result in long-term fiscal and environmental sustainability but requires significant up-front capital.**

## **Deferred Maintenance**

- Most campus buildings date to the 1960s and 1970s – original equipment has exceeded its useful life, parts are no longer available, and repair is not possible
- Replacement of mechanical and electrical equipment should be coordinated with decarbonization but that often requires additional capital
- Bundling repairs to address multiple needs can be more cost effective
- Demolition/replacement/disposition can reduce deferred maintenance backlog

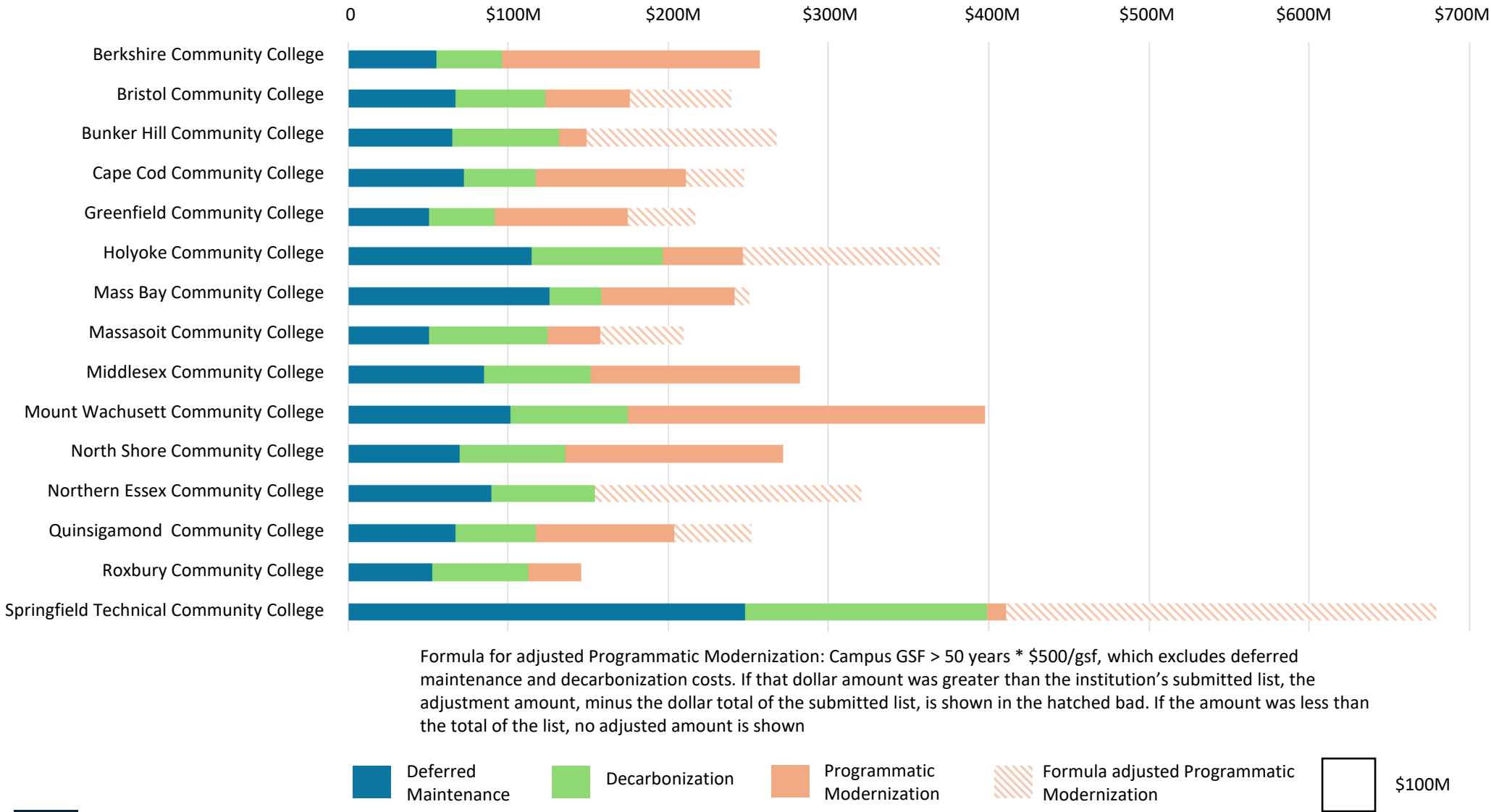
## **Decarbonization**

- Converting central plant/generation to eliminate fossil-fuel use
- Envelope improvements should precede replacement of mechanical equipment to avoid oversizing and improve comfort but are difficult to implement in occupied buildings
- Replacing distribution and delivery systems is necessary to convert to low temp water
- STEM and medical research and instruction are the largest contributors of carbon emissions among state buildings
- Demolition/replacement/disposition of underutilized facilities should be a priority

## **Programmatic Modernization**

- Modernizing instructional space, especially teaching labs
- Student life, residential, athletics, and amenities for recruitment and retention
- Workforce development: STEM, Nursing, Cyber
- Academic support and affinity spaces
- Right-sizing and updating for hybrid learning and work requires capital to implement

# Community Colleges: Projected Capital Funding Needs



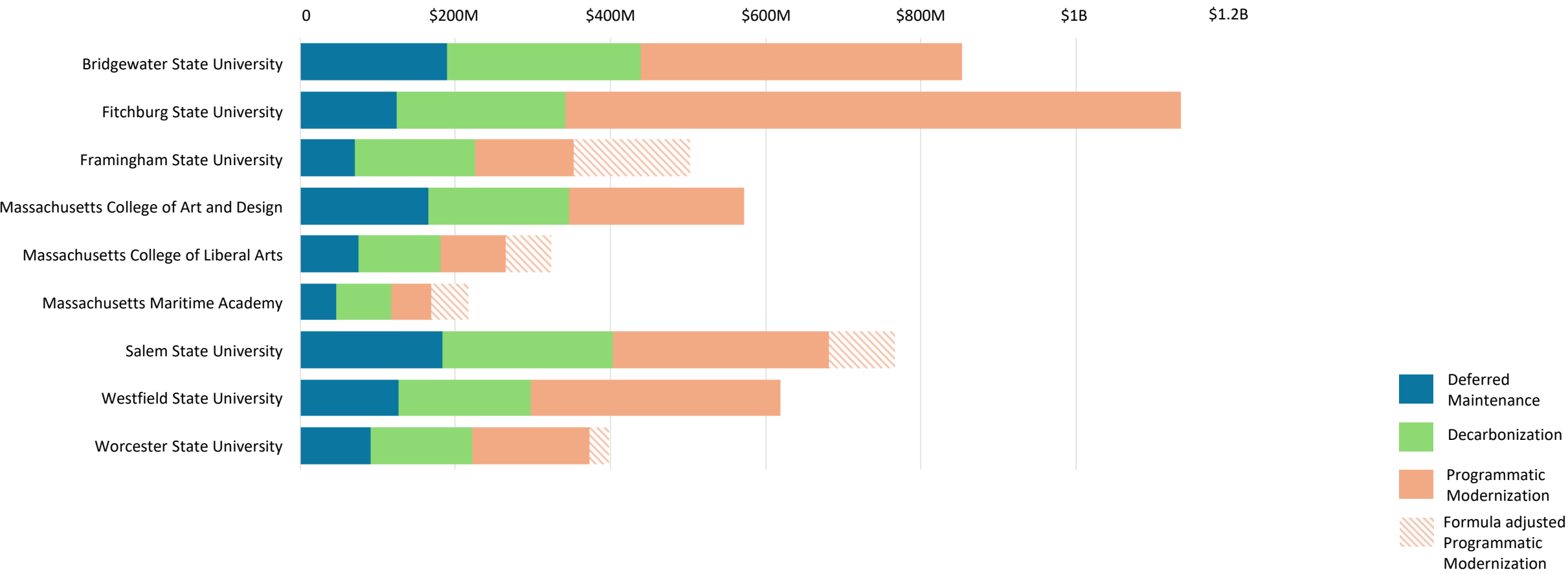


**Nate MacKinnon**  
Executive Director of  
the Mass. Association  
of Community Colleges



**Bill Mitchell**  
Interim President of  
Massasoit Community  
College

# State Universities: Projected Capital Funding Needs



Formula for adjusted Programmatic Modernization: Campus GSF > 50 years \* \$500/gsf, which excludes deferred maintenance and decarbonization costs. If that dollar amount was greater than the institution’s submitted list, the adjustment amount, minus the dollar total of the submitted list, is shown in the hatched bad. If the amount was less than the total of the list, no adjusted amount is shown

\$100M

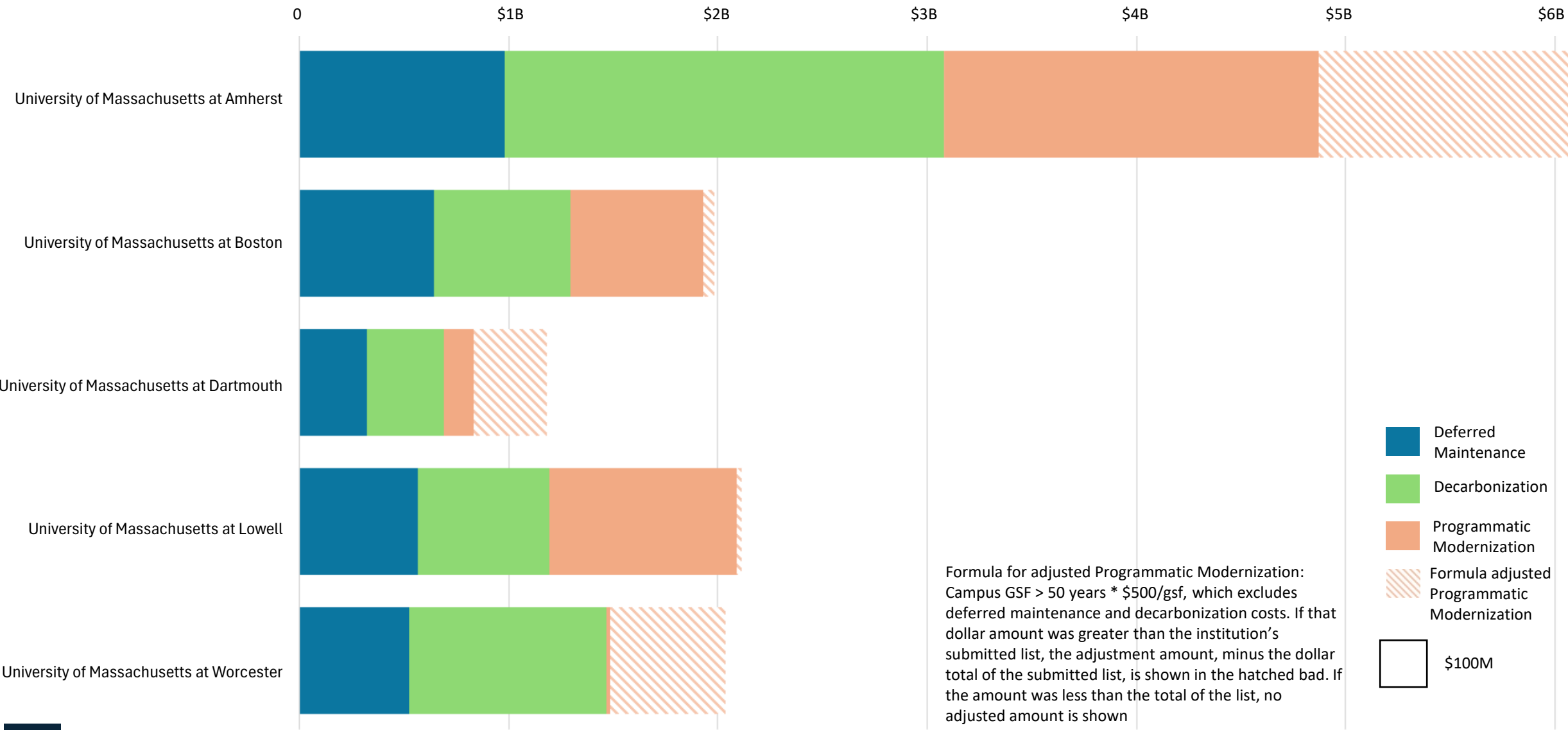


**John Keenan**  
President of  
Salem State  
University

## SSU BOLD Total Project Cost and Source of Funds (July 2024)

	<u>\$ Amount</u>	<u>Share</u>
<b>Certified Study Cost Estimate (TPC)</b>	<b><u>108,407,167</u></b>	
SOURCES OF FUNDS:		
DCAMM - state bond	45,000,000	
DCAMM - use of SSU's critical maintenance funds	2,927,167	
DCAMM - use of SSU's FY24 Fair Share allocation	900,000	
<b>Total Commonwealth</b>	<b><u>48,827,167</u></b>	<b>45.0%</b>
University:		
Cash/Debt	35,391,000	
Proceeds from sale of South Campus	14,189,000	
Fundraising campaign	10,000,000	
<b>Total University</b>	<b><u>59,580,000</u></b>	<b>55.0%</b>
<b>Total Sources of Funds</b>	<b><u>108,407,167</u></b>	<b>100.0%</b>

# UMass System: Projected Capital Funding Needs





**Commonwealth of Massachusetts**  
**Executive Office for**  
**Administration and Finance**

# **Commonwealth Debt Overview**

October 2024



# Massachusetts State-Level Issuers



- The below table lists the credit ratings for select Massachusetts state-level Issuers.
- Most state-level issuers have a credit rating in the double-A range, demonstrating the strong credit profile of Commonwealth issuers.
- Some issuers have established credits that have senior and subordinate liens – which refer to the order in which investors are prioritized for repayment. Repayment to bondholders of senior lien debt takes priority over bond holders of subordinate debt.

Agency	Bond Security/Pledged Revenues	Moody's	S&P	Fitch	Kroll
<b>MBTA Senior Lien</b>	\$0.01 of dedicated sales tax		AA+ (stable)	AAA (stable)	AAA (stable)
<b>MBTA Subordinated Lien</b>	\$0.01 of dedicated sales tax	Aa3 (stable)	AA (stable)		
<b>MSBA Senior Lien</b>	\$0.01 of dedicated sales tax	Aa2 (stable)	AA+ (stable)	AAA (stable)	
<b>MSBA Subordinated Lien</b>	\$0.01 of dedicated sales tax	Aa3 (stable)	AA (stable)	AA+ (stable)	
<b>MSCBA State University Program</b>	rents & fees paid by students for use of related facilities & services	Aa2 (stable)	AA (stable)		
<b>MSCBA Community College Program</b>	rents & fees paid by students for use of related facilities & services	Aa2 (stable)	AA (stable)		
<b>UMBA</b>	University revenues ( <i>e.g. tuition, student fees, service fees</i> )	Aa2 (stable)	AA- (stable)	AA (stable)	
<b>MassPort General Airport Revenue Bonds</b>	MassPort revenues ( <i>e.g. rates, fees, rentals</i> )	Aa2 (stable)	AA (stable)	AA (stable)	
<b>Massport Passenger Facilities Charge Bonds</b>	Fees assessed on eligible enplaning passengers at the Airport	A2 (positive)	A (stable)	A+ (stable)	
<b>MWRA Senior Lien</b>	MWRA revenues ( <i>e.g. rates &amp; charges for water and sewer services</i> )	Aa1 (stable)	AA+ (stable)	AA+ (stable)	
<b>MWRA Subordinated Lien</b>	MWRA revenues ( <i>e.g. rates &amp; charges for water and sewer services</i> )	Aa2 (stable)	AA (stable)	AA (stable)	
<b>Massachusetts Clean Water Trust</b>	Borrower payments, contract assistance, loans & financing agreements, other revenues	Aaa (stable)	AAA (stable)	AAA (stable)	
<b>Commonwealth of Massachusetts</b>					
General Obligation (GO) Bonds	Full faith & credit of the Commonwealth (i.e. all available revenues)	Aa1 (stable)	AA+ (stable)	AA+ (stable)	
Commonwealth Transportation Fund (CTF) Bonds	Motor fuels special tax (\$0.24 per gallon) and registry fees	Aa1 (stable)	AAA (stable)		AAA (stable)
Convention Center (Conv Ctr) Bonds	Room occupancy taxes, rental vehicle surcharges, meals tax, parking surcharges	A1 (stable)	A- (stable)		
Unemployment Insurance (UI) Bonds	Special assessment on UI contributory employers	Aa1 (stable)		AAA (stable)	AAA (stable)
Grant Anticipation Notes (GANs)	Federal-Aid Highway Reimbursements and Subordinate Lien on CTF Revenues	Aa2 (stable)	AAA (stable)		

# Credit Structures for Bonds Issued by the Commonwealth of Massachusetts



- Over the years, the Commonwealth has created alternative credit structures away from its general obligation credit.
- Alternative credit structures reduce the Commonwealth's reliance on GO bonds, enhancing market access and pricing.
- Innovative credit options also help facilitate more strategic funding for specific projects, such as transportation infrastructure and water and sewer.

## **Commonwealth General Obligation (GO) Bonds**

\$25.3 Billion Outstanding  
2054 Final Maturity  
Aa1/AA+/AA+ (M/S/F)  
Annual Debt Service ~\$1.1 B

**Pledge of the Full Faith and Credit of the Commonwealth**  
(e.g., Income Taxes, Sales Taxes\*, Assessments)

**General Obligation Bonds**

**Capital Investment Plan**

## **Commonwealth Transportation Fund (CTF) Bonds**

\$3.9 Billion Outstanding  
2054 Final Maturity  
Aa1/AAA/AAA (M/S/K)  
Annual Debt Service ~\$270 M

**Payable Solely from Pledged Funds**  
(e.g., Motor Fuels Tax Revenues and Registry Fees)

**CTF Bonds**

**Rail Enhancement Program and Accelerated Bridge Program**

## **Grant Anticipation Notes (GANs)**

\$389.7 Million Outstanding  
2027 Final Maturity  
Aa1/AA+/AA+ (M/S/F)  
Annual Debt Service ~\$110 M

**Payable Solely from Pledged Funds**  
(e.g., Federal-Aid Highway Reimbursements and Subordinate Lien on CTF Revenues)

**GANs**

**Accelerated Bridge Program**

All outstanding amounts are as of June 30, 2023.

\* Less amounts pledged to MSBA and MBTA

# Credit Structures for Bonds Issued by the Commonwealth of Massachusetts



## Unemployment Insurance (UI)

### Trust Fund Bonds

\$2.6 Billion Outstanding  
2031 Final Maturity  
Aa1/AAA/AAA (M/F/K)  
Annual Debt Service ~\$240 M

**Payable Solely from Pledged Funds**  
(e.g., the COVID-19  
Recovery Assessment)

**Special Obligation  
Revenue Bonds**

**Repayment of Federal Advances to  
the State's Unemployment  
Insurance Trust Fund and Fund a  
Reserve for Future Benefit  
Payments**

## Convention Center (Conv Ctr) Bonds

\$426.2 Million Outstanding  
2034 Final Maturity  
A1/A- (M/S)  
Annual Debt Service ~\$52 M

**Payable Solely from Pledged Funds**  
(e.g., room occupancy taxes, rental  
vehicle surcharges, meals tax, parking  
surcharges)

**Special Obligation  
Dedicated Tax Bonds**

**Fund the Construction of the Boston  
Convention and Exhibition Center**

All outstanding amounts are as of June 30, 2023.

# Massachusetts General Obligation (GO) Credit Summary



<b>Economy</b>	<ul style="list-style-type: none"><li>• Broad and diverse economy including significant strength in healthcare, technology and education sectors</li><li>• Well-trained labor pool experiencing strong wage growth over the last 10 years</li><li>• Statewide per capita income of \$84,945 was the second highest among all states and was 130% of the national per capita income in 2022</li></ul>
<b>Finances &amp; Liquidity</b>	<ul style="list-style-type: none"><li>• Massachusetts' individual income taxes and sales taxes accounted for approximately 80% of total tax revenue in FY 2023</li><li>• From \$2.0 billion in FY 2018, the Stabilization Fund balance has increased by roughly 341% to a preliminary \$8.9 billion for FY2024.</li><li>• The Commonwealth has access to a \$500 million line of credit through May 2026</li></ul>
<b>Budget and Financial Management Controls</b>	<ul style="list-style-type: none"><li>• Strong financial, debt and budget management policies include: (i) estimating consensus revenue; (ii) forecasting multi-year financial plans; (iii) issuing annualized formal debt affordability statements and (iv) planning multi-year capital investments</li><li>• Strong budget gap closing capacity – if there is a revenue shortfall, the Governor has the authority to cut expenses for executive agencies without legislative approval</li><li>• Ongoing economic and revenue monitoring throughout the Commonwealth</li></ul>
<b>Long-term Liabilities</b>	<ul style="list-style-type: none"><li>• There is an annual administrative limit on the amount of bond-funded capital expenditures, or "bond cap", to keep the Commonwealth's debt within affordable levels (FY 2025 bond cap is \$3.117 billion)</li><li>• Debt is elevated compared to other states in part because of the Commonwealth's practice of financing projects for highly-rated local governments</li><li>• As of January 1, 2023, the funded ratio of the pension system based on the actuarial value was 63.5%</li><li>• Under current law, the unfunded pension liability must be fully amortized by June 30, 2040. The current funding schedule fully amortizes the liability by June 30, 2037</li></ul>



# Massachusetts Industry Mix Compared to US

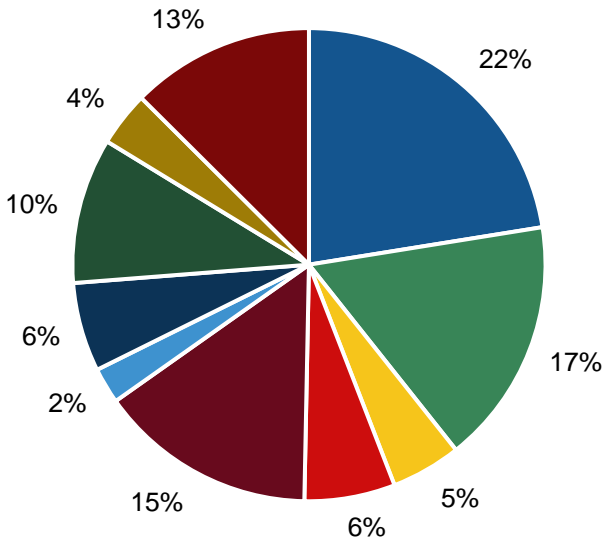
## Key Takeaways

- Massachusetts’ industry sector diversification is similar to that of the US with the top 5 sectors comprising approximately 77% of employment
- Education and Health Services sector has consistently been the top sector in the Commonwealth. The clusters of colleges, universities, and teaching hospitals contribute to Massachusetts being a hub for technology and research
- Professional & Business Services sector has been increasingly important in the Commonwealth, both as a share of employment and in terms of its contribution to state gross domestic product (“GDP”)
- Several NAICS<sup>(1)</sup> service sectors (Education and Health Services, Professional Services, and Leisure and Hospitality) have grown to take the place of manufacturing in driving the Massachusetts economy

(1) North American Industry Classification System  
Source: U.S. Bureau of Labor Statistics, as of May 2024 (<https://www.bls.gov/sae/data/>)  
Source: U.S. Bureau of Labor Statistics, as of May 2024 (<https://www.bls.gov/web/empsit/cese1b.htm>)  
Notes: Not seasonally adjusted

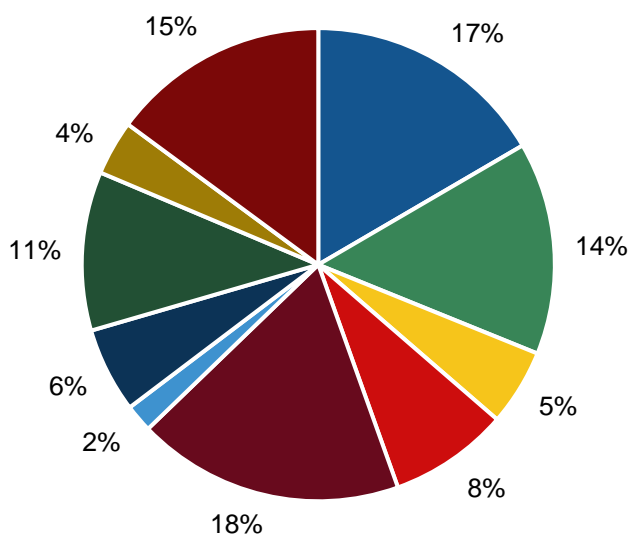
## Employment Composition of Massachusetts and the United States as of May 2024

### Massachusetts



Industry Sector	MA	US
Educ. & Health Services	22%	17%
Prof & Business Services	17%	14%
Trade, Transp., Utilities	15%	18%
Government	13%	15%
Leisure & Hospitality	10%	11%
<b>Top 5 Total</b>	<b>77%</b>	<b>76%</b>

### United States



- Education and Health Services
- Professional and Business Services
- Construction
- Manufacturing
- Trade, Transportation, and Utilities
- Information
- Financial Activities
- Leisure and Hospitality
- Other Services
- Government

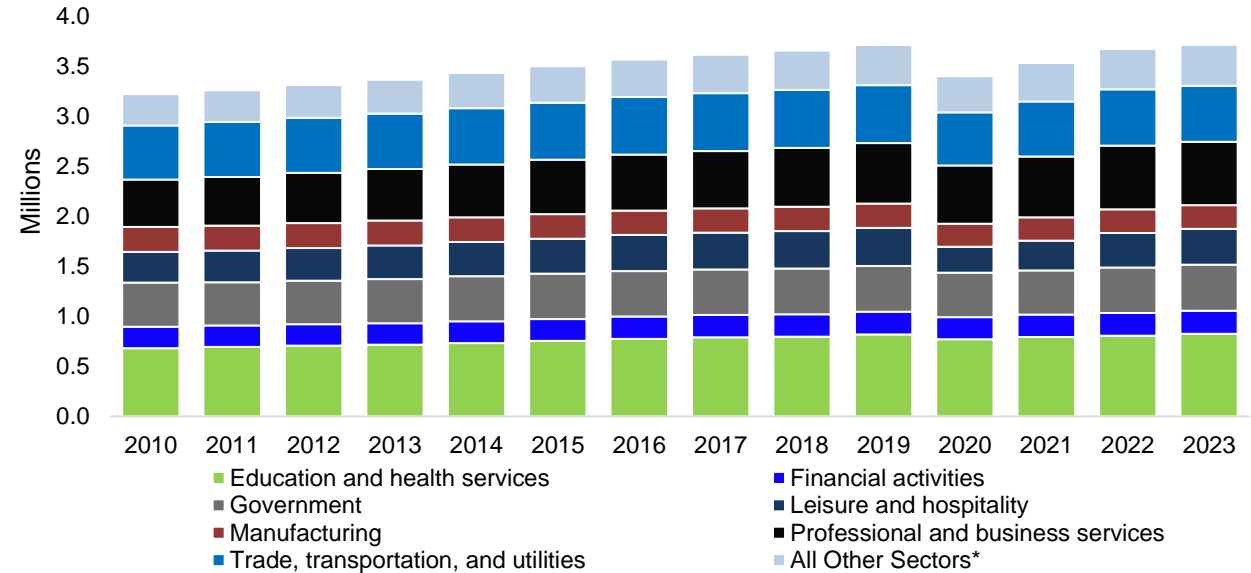
# Strong, Diverse, and Resilient Economy



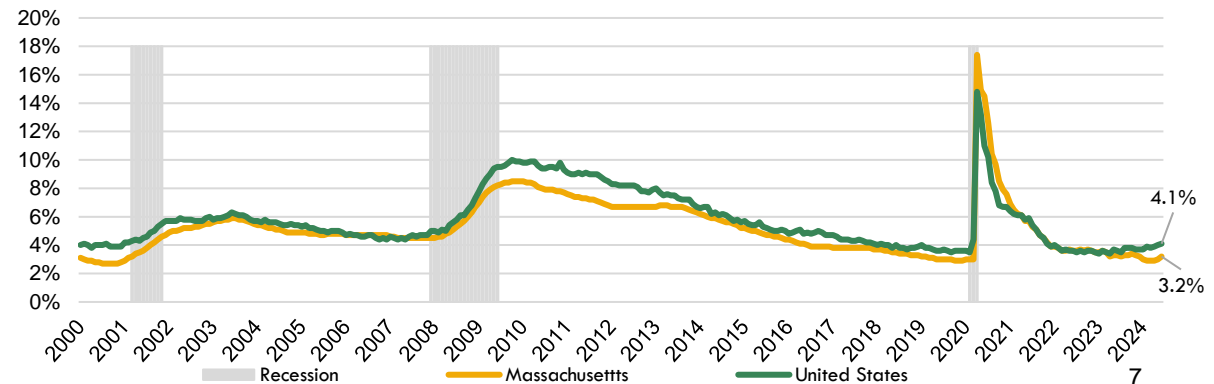
## Key Takeaways

- The Massachusetts economy has generally performed better than the US economy, with the Commonwealth unemployment rate typically below the national rate – especially during and following the period of the Great Recession
- The Commonwealth's mix of knowledge-based industries and a well-educated workforce, with over 46% of all residents 25 years of age or older earning a bachelor's degree or higher, led to high levels of labor force participation and low levels of unemployment in the Commonwealth
- The early outbreak of COVID-19 in the northeastern part of the US, coupled with proactive social distancing efforts by the Commonwealth in the spring and summer of 2020, led to significant job losses
- Massachusetts' unemployment rate peaked at 17.4% in April 2020, while US unemployment peaked at 14.8% in the same month
  - Unemployment continued to fall in 2024 and stood at 3.2% in June 2024 for the Commonwealth and 4.1% for the US, surpassing pre-pandemic employment levels in the Commonwealth
- The higher-paying industries of Professional & Business Services have both returned to well above their respective pre-pandemic employment levels

## Annual Average Employment in Massachusetts, 2010-2023 by NAICS Supersector <sup>(1)</sup>



## Unemployment Rates in Massachusetts and the United States as of June 2024 (Seasonally Adjusted) <sup>(2)</sup>



<sup>(1)</sup>Source: Commonwealth of Massachusetts Information Statement dated May 9, 2024 – Exhibit A Socioeconomic Indicators for Massachusetts

\*Includes Mining & Natural Resources, Construction, Information, and Other Services

<sup>(2)</sup>Source: U.S. Bureau of Labor Statistics, \*seasonally adjusted as of June 2024

# Consistent Per Capita Income Growth, Outpacing the Country

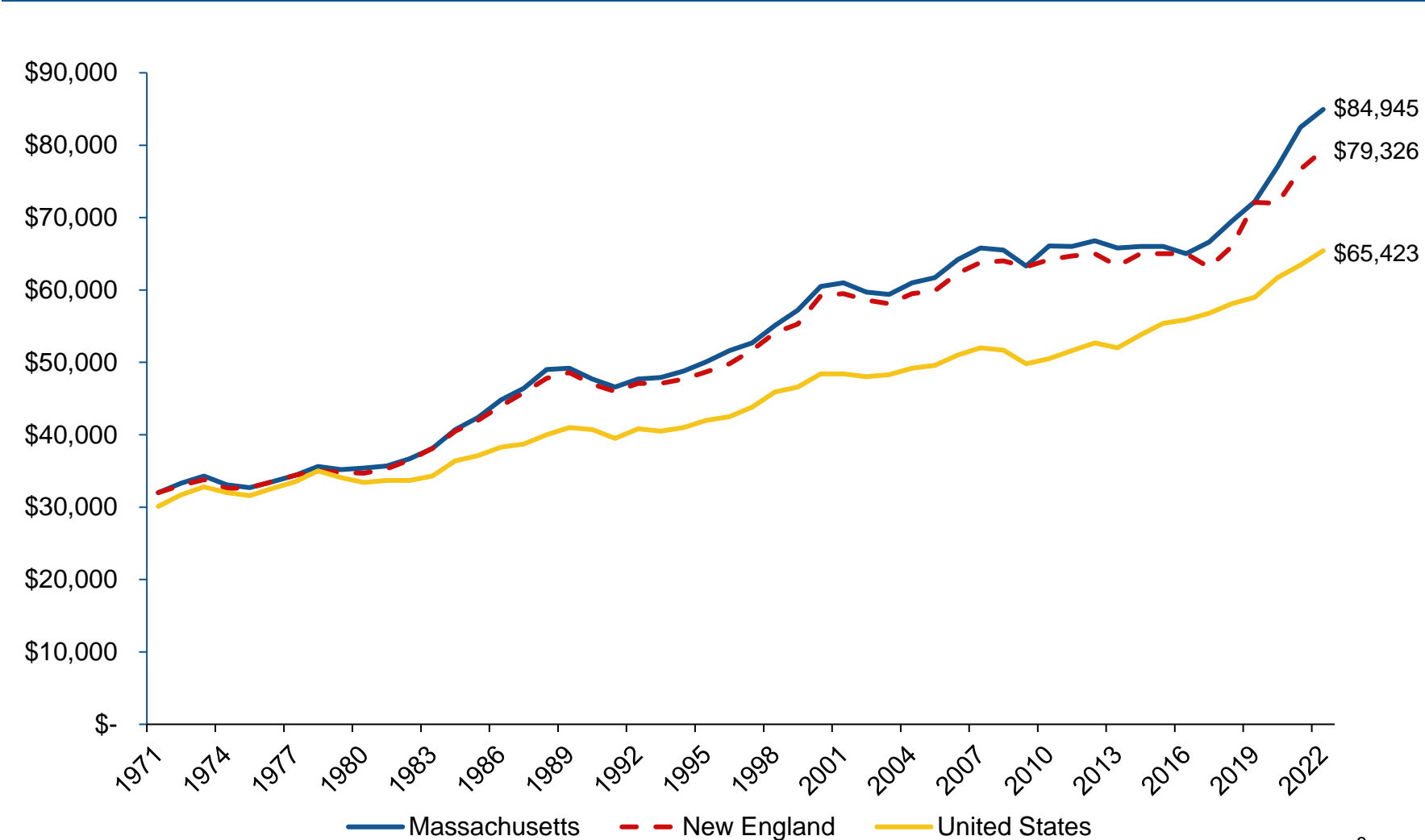


## Key Takeaways

- Massachusetts has consistently been near the top of the nation in resident income and ranks as one of the wealthiest states based on mean household income and per capita income
- In 2022, the Commonwealth's real per capita personal income of \$84,945 was 130% of the US' real per capita personal income
- In 2022, the Commonwealth's real per capita personal income of \$84,945 was 107% of New England's real per capita personal income



## Real Per Capita Personal Income in Massachusetts, New England, and the United States, 1971-2022



# Conservatively Managed Debt Portfolio



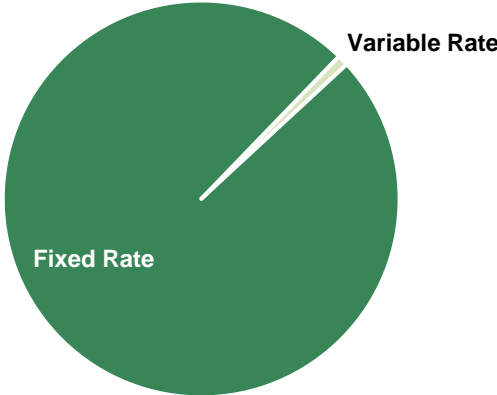
## Key Takeaways

- As of March 31, 2024, total GO debt outstanding was \$27.2 billion:
  - \$26.9 billion or 99.1% was fixed rate
  - \$258.2 million or 0.9% was variable rate
- 40% of outstanding principal amortizes through FY 2034
- The Commonwealth has actively managed its debt profile by increasing the ratio of fixed rate debt as interest rates have decreased and utilizing refundings to manage debt service
- There are no interest rate swaps outstanding as of March 31, 2024



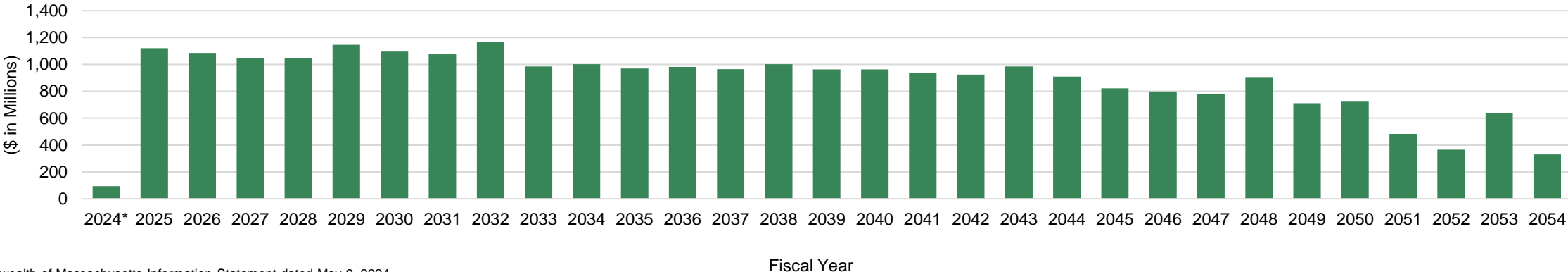
## GO Debt Composition

99.1% of Debt in Fixed Rate Mode



## GO Principal Amortization

40% of Outstanding Principal Amortizes Through FY 2034



Source: Commonwealth of Massachusetts Information Statement dated May 9, 2024  
\*Remaining principal payments in FY 2024

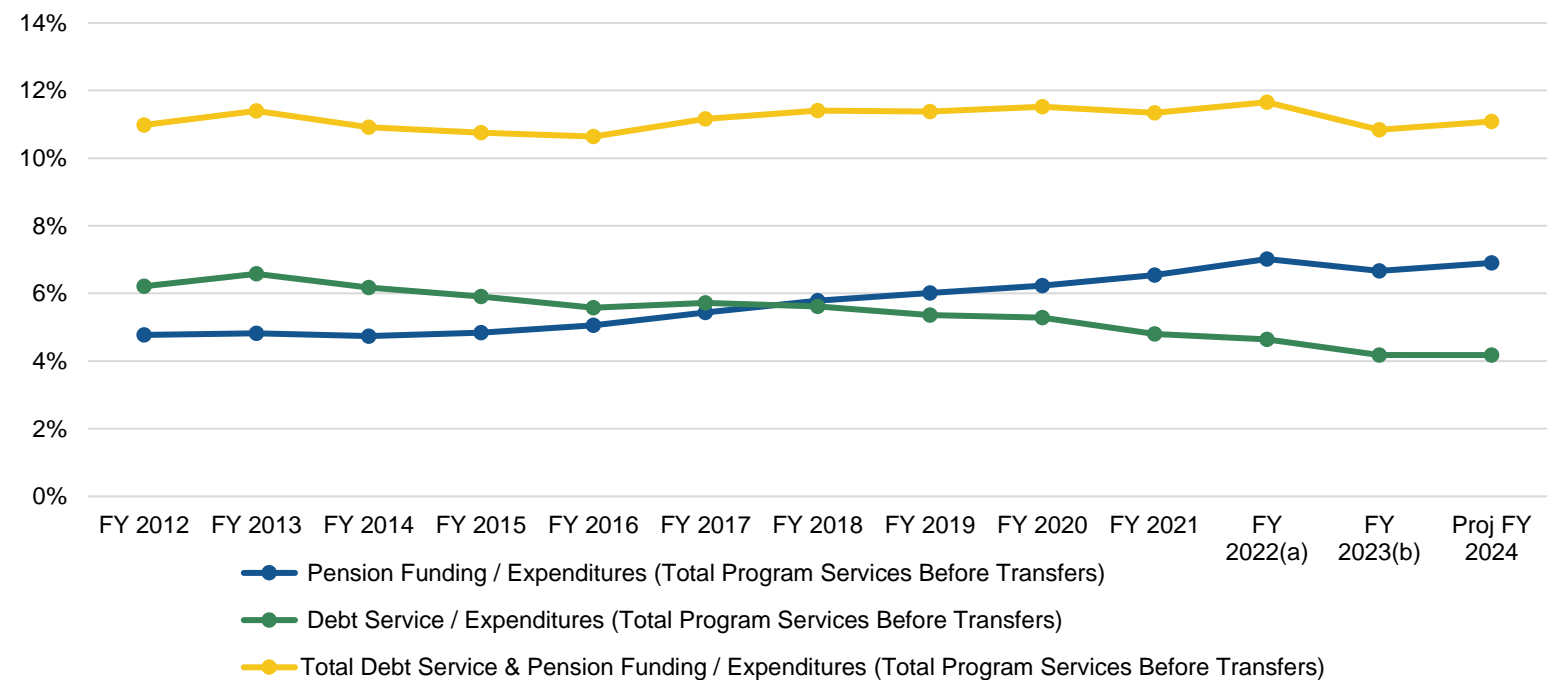


# Long-Term Liabilities Have Been Manageable

## Key Takeaways

- The Commonwealth’s debt service represents 4.2% of total expenditures in FY 2023. This is a reduction from a high of 6.6% in FY 2013
- As debt service as a percent of expenditures decreased, pension funding as a percent of expenditures increased. Combined, these long-term liabilities remained relatively flat
- Historical stability of aggregate long-term liabilities enhances budgetary predictability

## Pension Funding and Debt Service as % of Expenditures (Total Program Services Before Transfers)



- (a) FY2022 Pension Funding includes a \$250 million supplemental transfer to the Pension Liability Fund.
- (b) FY2023 Pension Funding includes a \$250 million supplemental transfer to the Pension Liability Fund and a further \$100 million to fully pay down pension liabilities attributable to the fiscal 2015 early retirement incentive program.

Source for Projected FY2024 Pension Funding amounts is the Commonwealth of Massachusetts Information Statement (IS) dated May 9, 2024 – Current Funding Schedule for Pension Obligations table. Debt service and Expenditure amounts are sourced from Budgeted Operating Funds – Statutory Basis table

Source for FY2019 – FY2023 Pension Funding amounts is the IS dated May 9, 2024 – Annual Required Contributions and Other Pension Contributions table. Debt service and Expenditure amounts are sourced from Budgeted Operating Funds – Statutory Basis table

Source for FY2015 – FY2018 Pension Funding amounts is the IS dated November 29, 2018 – Annual Required Contributions and Other Pension Contributions table. Debt service and Expenditure amounts are sourced from Budgeted Operating Funds – Statutory Basis table

Source for FY2012 – FY2014 Pension Funding amounts is the IS dated November 13, 2015 – Annual Required Contributions and Other Pension Contributions table. Debt service and Expenditure amounts are sourced from Budgeted Operating Funds – Statutory Basis table

## Summary

- Commonwealth agencies utilize various debt credits to address their capital needs.
  - General Obligation (GO) Bonds**: Commonwealth of MA
  - Revenue Bonds**: MSCBA, UMBA , MassPort, MWRA
  - Special Obligation Bonds**: Commonwealth of MA (CTF, Conv Ctr, UI bonds); MBTA; MSBA
- The Commonwealth's general obligation (GO) credit rating is strong, supported by a robust and diverse economy, high income levels and a history of strong financial management.
- Relatively high debt levels compared to other states (discussed at the last meeting) is the biggest credit offset - a factor that is carefully considered when updating the Commonwealth's Capital Investment Plan (CIP).
- Capital needs across state owned assets – including the higher education portfolio – exceed the current capital resources available.

## Future Opportunities

- There is precedent across the state for creating stand alone credits to strategically address needs while insulating the Commonwealth's GO credit.
- The passage of the FairShare Act creates a new opportunity to expand the Commonwealth's capital borrowing program to meaningfully address infrastructure needs and meet strategic priorities.
- Pledging FairShare revenues would provide the Commonwealth the opportunity to create a new stand-alone credit that could be used to issue bonds that support higher ed capital investments.



# **Commonwealth of Massachusetts**

## **Executive Office for Administration and Finance**

### **Fair Share Tax Credit Analysis**

October 10, 2024

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PFM Financial Advisors

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## Goals of the New Credit Structure

### Expand Commonwealth's Capital Borrowing Program

- Standalone credit structure with debt secured by the FairShare revenues.
- Debt capacity contingent on allocable revenues capped at the coverage requirement of the final credit structure.
- Revenues are pledged to pay debt service while the bonds are outstanding.

### No Negative Impact to Commonwealth's Credit Ratings

- New revenue source segregated from General Fund and pledged to bondholders.
- No pledge of the Commonwealth's taxing power or implied moral obligation.
- No Contract Assistance pledge.

### Credit Rating in the High Investment Grade Category (Double-A ratings)

- Securitizing FairShare revenue provides the opportunity to create significant coverage of liabilities without constraining operational goals.
- Excess coverage up to \$150 million can be used to fund a PAYGO capital program.



## Creation of a New Credit Structure

- Similar to the creation of the Commonwealth Transportation Fund in 2009. Several transportation-related fees and taxes are allocated to the CTF which provides over 4.5 times coverage for bonds while still allowing for significant expenditures (over \$1.0 billion) on a pay-as-you-go basis after all CTF bonding obligations are met.
- The MBTA also utilizes a similar structure with the gross pledge of its Dedicated Sales Tax Revenue. Revenues flow to cover debt service before operations are paid; however, enough revenue needs to flow through to subsidize operations.
- Likewise, passing Fair Share revenues through the flow of funds creates large amounts of debt service coverage without impacting the ability to use the remaining Fair Share revenue as those revenues would pass through to the Commonwealth after debt service has been captured.
- Credit would be a financing entity only. New credit could be funded with Fair Share revenues (less funds already earmarked for Commonwealth Transportation Fund).
- Securing Bonds with existing FairShare revenues allows for leveraging funds on a one-to-one basis while still providing coverage of debt service costs that the rating agencies and bondholders will seek.

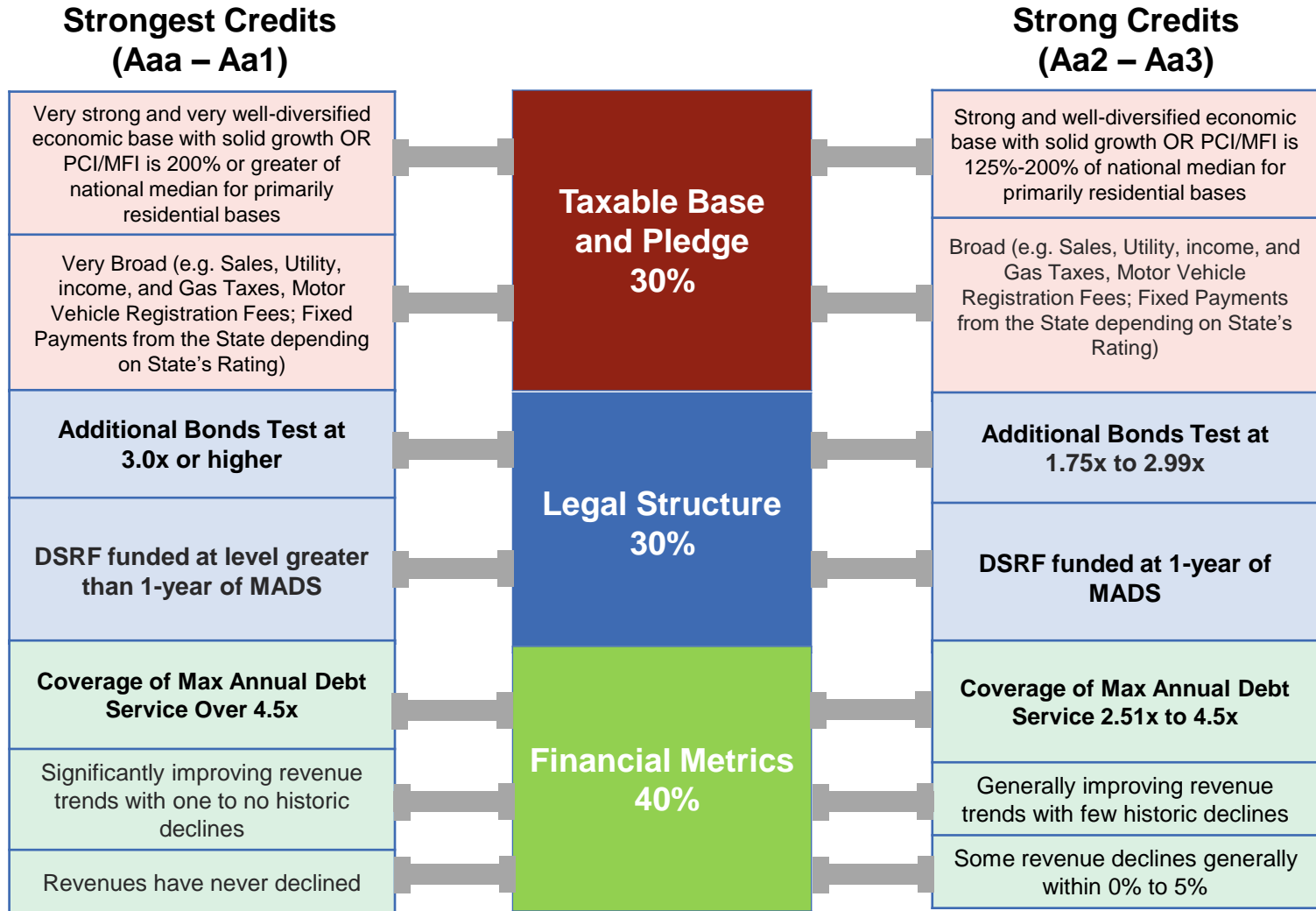


## Glossary of Key Terms

- ◆ **Bond Security** – bonds which are backed by specific assets, such as real estate or tax revenue. If the issuer defaults, the bondholders have a claim on those assets.
- ◆ **Pledged Revenues** – the specific income streams that are designed to repay a bond.
- ◆ **Lien** – a legal claim against a specific asset or revenue stream that serves as collateral for a bond.
- ◆ **Coverage** – refers to the ratio that indicates the ability of the issuer to meet its debt obligations using its revenue streams.
- ◆ **Coverage Requirements** – specific financial ratios that issuers must maintain to ensure they have sufficient revenue to meet their debt obligations. These requirements are often outlined in the bond indenture and serve to protect the interests of bondholders.
- ◆ **Debt Service Coverage Ratio (DSCR)** – measures an issuer's pledged revenues compared to its debt service obligations. A DSCR of 1 times indicates that the issuer's revenue stream is sufficient to pay its debt service obligations.
- ◆ **Maximum Annual Debt Service (MADS)** - highest total amount of principal and interest payments that an issuer is required to pay in any single year.
- ◆ **Additional Bonds Test (ABT)** – is a financial requirement included in the covenants of a bond issue that determines whether the issuer can issue additional bonds secured by the same revenues as existing bonds.
- ◆ **Debt Service Reserve Fund (DSRF)** - provides a safety net for bondholders. It acts as a buffer to cover any shortfalls in cash flow, ensuring that debt obligations can be met even during periods of reduced revenue.
- ◆ **Contract Assistance** – financial support mechanism provided by the state to assist issuers in managing debt service obligations. Represents a general obligation of the Commonwealth and is often provided for the life of a bond issue.



## Creating the Strongest Credit Profile to Enhance Leverage\*



\* Based on Moody's Special Tax Methodology.



## New Credit Meets Goals of Key Stakeholders

### Commonwealth of Massachusetts



- Strong new credit with significant debt capacity
- After paying debt service, excess coverage flows to Commonwealth for other priorities
- No impact on existing credits or the Commonwealth's GO debt capacity

### UMass, State Universities and Community College Campuses



- Addresses significant deferred maintenance on campuses
- Reduces exposure to emergency repairs which can be costly
- No impact on UMass or state university debt capacity
- Modernization of campus buildings should lead to better retention and enhance student experience

### Investors



- New highly rated credit
- Diversification away from general obligation credit
- Open lien with significant debt capacity will allow for secondary market liquidity



## Summary

- ◆ There is a path forward to achieve a new capital bonding program using existing CTF and MBTA as example templates.
- ◆ Ideal structure would have Fair Share revenues in the Education and Transportation Fund securing debt with a valid security interest in the pledged revenues.
- ◆ Amounts allocated to education or transportation could be set by policy away from any bondholder requirements for coverage or additional bonds tests.
- ◆ Remaining revenues net of debt service would flow to the Commonwealth for other valid uses.
- ◆ PFM has built a financial model that is extremely flexible with multiple levers that can be adjusted for different scenarios.
- ◆ The preliminary modeling scenarios that PFM analyzed indicate the Commonwealth would be able to generate **\$2.5-3.2 billion** in combined bond and PAYGO proceeds over 10 years without any growth in the annual appropriation.



# Appendix



## Path to Strong Ratings: Components of the Rating Scorecard

Scorecard Factors	Sub-factors	Aaa	Aa	A
<b>1. Taxable Base &amp; Pledge – 30%</b>	<b>Economic Strength: 15%</b>	Very strong and very well-diversified economic base with solid growth OR PCI/MFI is 200% or greater of national median for primarily residential bases	Strong and well-diversified economic base with solid growth OR PCI/MFI is 125%-200% of national median for primarily residential bases	Developed and reasonably diversified economic base with average growth OR PCI/MFI is 75%-125% of national median for primarily residential bases
	<b>Nature of the Special Tax Pledge: 15%</b>	Very Broad (e.g. Sales, Utility, income, and Gas Taxes, Motor Vehicle Registration Fees; Fixed Payments from the State depending on State's Rating)	Broad (e.g. Sales, Utility, income, and Gas Taxes, Motor Vehicle Registration Fees; Fixed Payments from the State depending on State's Rating)	Average (e.g. Sales, Utility, income, and Gas Taxes, Motor Vehicle Registration Fees)
<b>2. Legal Structure – 30%</b>	<b>Additional Bonds Test (ABT): 20%</b>	3.0x or higher OR a closed lien	1.76x to 2.99x	1.26x to 1.75x
	<b>Debt Service Reserve Fund Requirement: 10%</b>	DSRF funded at level greater than 1-year of MADS	DSRF funded at 1-year of MADS	DSRF funded at lesser of standard 3-prong test
<b>3. Financial Metrics- 40%</b>	<b>Maximum Annual Debt Service Coverage: 20%</b>	Over 4.5x	2.51x to 4.5x	1.51x to 2.5x
	<b>Revenue Trend: 10%</b>	Significantly improving with one to no historic declines	Generally improving with few historic declines	Stable with some historic declines
	<b>Revenue Volatility: 10%</b>	Has never declined	Negative fluctuations generally within 0% to 5%	Negative fluctuations generally within 5% to 10%

Source: Moody's Investor Service



# Disclosures

## ABOUT PFM

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# Thank You





# Discussion



**Commonwealth of Massachusetts**  
**Executive Office for**  
**Administration and Finance**

# **Higher Education Capital Working Group**

**Meeting 3**

**November 14, 2024**





# Meeting Schedule and Topics

Date	
1. September 12 <sup>th</sup>	Objectives, Background and Level-Setting
2. October 10 <sup>th</sup>	Campus Needs and Financing Structure and Sources
3. November 14 <sup>th</sup>	Review of Current Process and Discussion of Priorities and Concerns for Allocation of Funding
4. December 12 <sup>th</sup>	Policy/Authorization Discussion to Inform Bond Bill and Final Report



# Today's Agenda

Topic	Lead	Est. Time
Working Group Report Development	A&F	10 min
Responding to Questions Raised in Survey Responses	A&F	10 min
Reviewing Current and Recent Capital Distribution Methods	DCAMM	20 min
Discussion: What Worked and What Did Not Work	Guided by A&F	20 min
Discussion: Guiding Principles for Funding Allocation and Project Selection	Guided by A&F	20 min
Discussion: Considerations for Allocation of Funding	Guided by A&F	20 min
Discussion: Supports for Campuses and Authorities	Guided by A&F	20 min



## Working Group Report

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**Goal:** Generate policy proposals that reflect the discussions in this working group and **release a report in December** that may inform the Governor's budget and potential bond bill filing, ahead of the report deadline on March 1, 2025.

**What we plan to include:**

- A summary of the challenges facing higher education facilities and the state's capital constraints that necessitate identifying new sources of capital
- To address these challenges, we expect the final report to recommend:
  - Establishing a new standalone credit by securitizing Fair Share revenues – and demonstrating why this is a feasible and affordable approach for the Commonwealth
  - A set of principles that the Administration and school building authorities should use to inform distribution of funds across higher education sectors
  - Possible criteria for the Administration and school building authorities to consider when prioritizing and selecting specific projects
  - Filing a Higher Education Bond Bill and associated budget legislation this winter that authorizes borrowing, creates the new credit program and provides initial funding to cover debt service and in-year capital
  - Any relevant potential federal sources of reimbursement or grant funding to explore
  - A summary of any specific policy ideas/changes the group elevates for potential inclusion in the bond bill
- Campus dashboards
- A compilation of working group meeting slides



## Expectations for Working Group Engagement on Report

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A&F will provide a draft ahead of the December meeting to gather your input and ensure your feedback is incorporated into the final report. There will not be a formal vote on the report. It will be clearly stated that not all recommendations have unanimous support, so that working group members are not held accountable for every recommendation and to create space for different opinions.

The report will summarize the key focus areas of our monthly meetings and give recommendations that reflect the opinions and discussions of the working group. The report will be addressed to the Governor, the clerks of the House of Representatives and the Senate, the House and Senate Committees on Ways and Means, the Joint Committee on Higher Education, and the Joint Committee on Bonding.



## Survey Responses

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The questions submitted broadly fell into four categories:

1. On the financing mechanism and funding
2. On the allocation of funding
3. On supporting campuses and building authorities
4. On additional materials, including the final report and other charts, data, or persuasive documents

We plan to address some questions today, discuss others during the discussion portion of our meeting, discuss some in a separate meeting focused on the financing mechanism, and discuss others in the December meeting (for which we plan to provide a draft of the report and any other supporting materials).

The following slides summarize the questions and our plans for addressing them.



## Questions We Will Answer Now

---

- ✓ Is the pay-go program that we're talking about, using excess Fair Share coverage, related to the federal funds pay-go bill?
- ✓ How much of the 2008 Higher Education Bond Bill's authorization has been expended, to date? Has there been additional authorization for higher education projects in other vehicles?
- ✓ How are current funds being allocated?
- ✓ How is this Fair Share proposal part of a larger strategy to address the \$6 B backlog of deferred maintenance and \$12 B in projected need?



**Q: How much of the 2008 Higher Education Bond Bill's authorization has been expended, to date? Has there been additional authorization for higher education projects in other vehicles?**

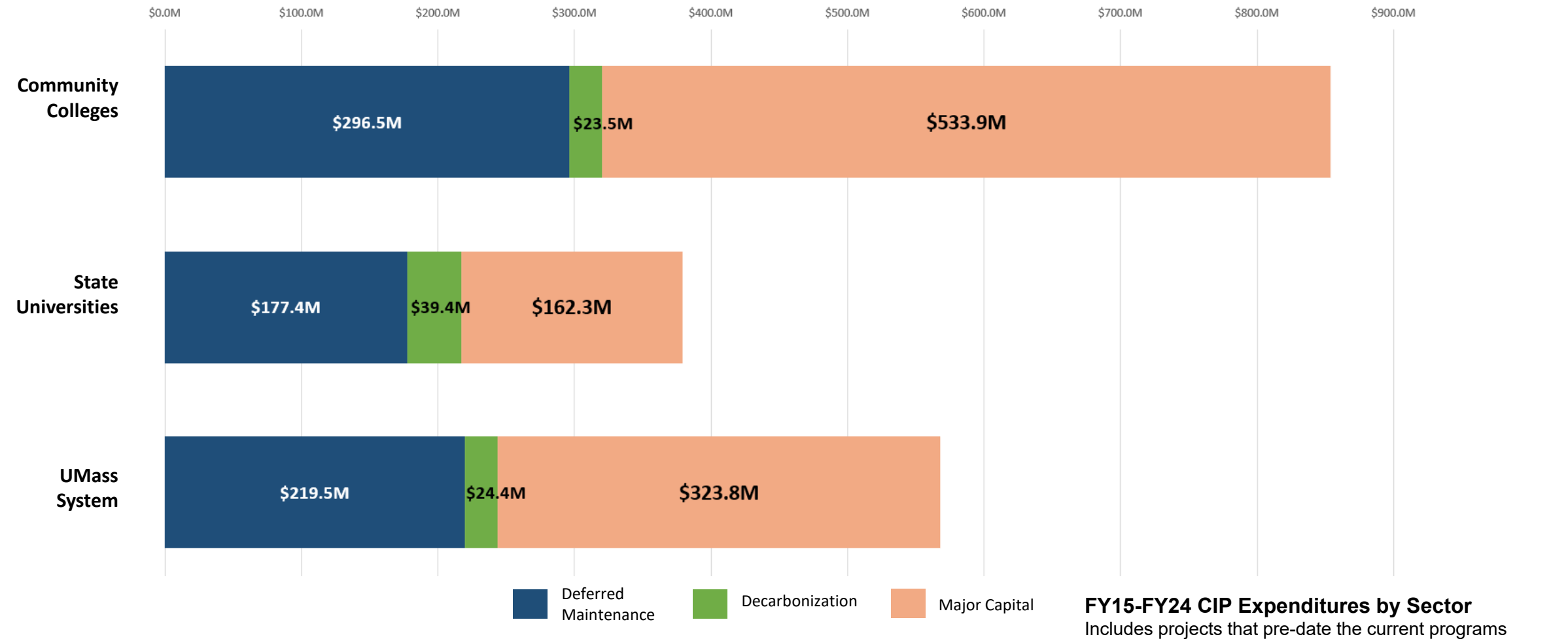
Current Bond Appropriations			Used Authorization	As %age of Total Authorization	Unused Authorization	As %age of Total Authorization
Acts & Chapter	Use	Total Authorization				
2008 Ch. 258 & 2018 Ch. 113 S16	State and Community College	\$1,425,955,630	\$1,411,978,502	99%	\$13,977,128	1%
2008 Ch. 258	UMASS	\$1,201,500,000	\$1,108,726,647	92%	\$92,773,353	8%
2018 Ch. 113	Higher Ed	\$950,000,000	\$909,630,982	96%	\$40,369,018	4%
2022 Ch. 140	Higher Ed	\$750,000,000	\$383,681,831	51%	\$366,318,169	49%
<b>Totals</b>		<b>\$4,327,455,630</b>	<b>\$3,814,017,962</b>	<b>88%</b>	<b>\$513,437,668</b>	<b>12%</b>

Some authorization remains available. However, authorization is not the constraint that the Fair Share special obligation bond mechanism is meant to address.

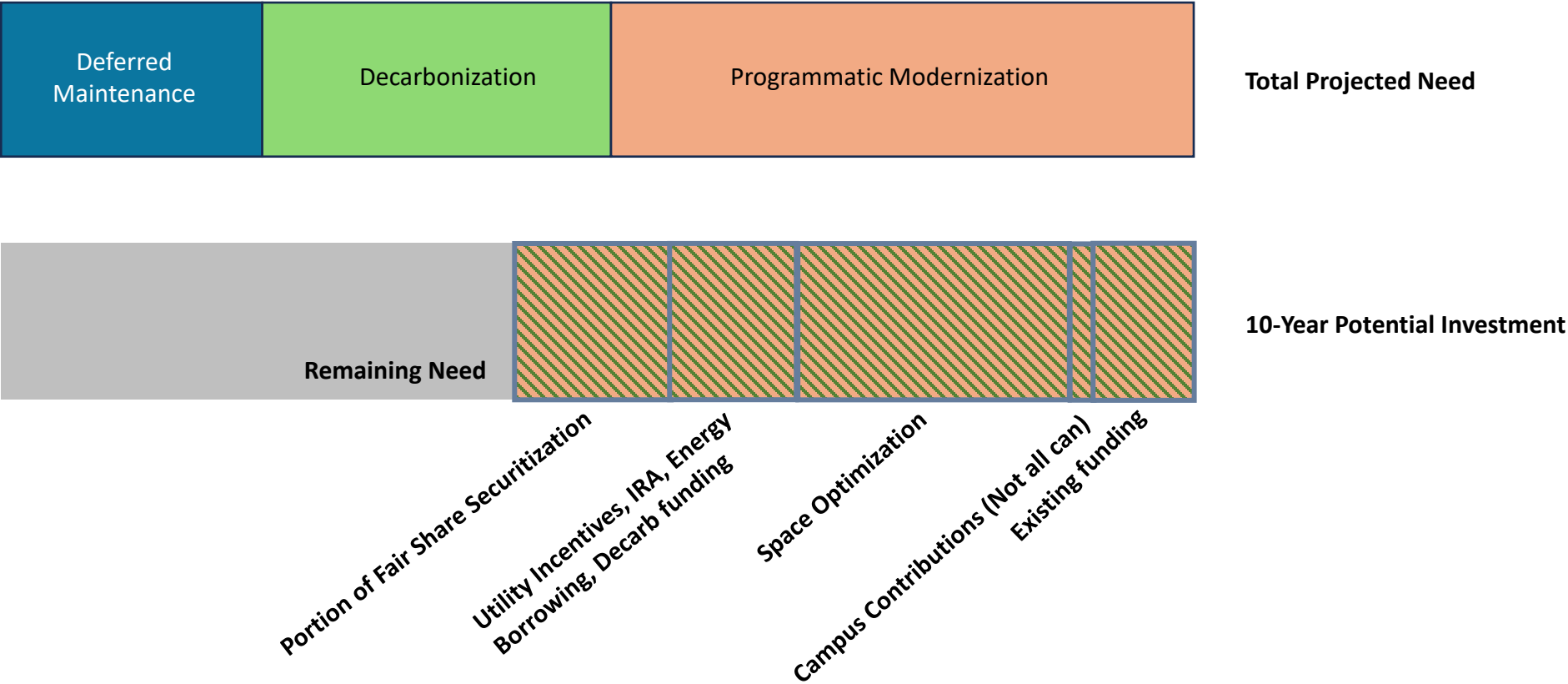
Funding for public higher education campuses is limited by CIP growth. CIP growth is constrained by statutory and administration policies designed to ensure the debt burden remains affordable, including:

- Adherence to debt limits
- Consider credit factors
- Unmoderated bond cap growth could strain MA's financial position

Q: How Are Current Funds Being Allocated?



Q: How is Fair Share Part of a Larger Strategy to Address the \$12 B in Projected Need?



These charts are ILLUSTRATIVE of proportional levels of need and investment.





## Questions We Plan to Discuss in the Discussion Portion of Today's Meeting

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- Can we be sure that resources are transparently and equitably allocated across the three segments?
- In allocating the Fair Share funding, can we take into account that different campuses will have different needs? Some will most benefit from directly spending any funds received, while others will benefit from using funds to retire debt.
- How will the Fair Share funds be allocated? Based on equity? Needs? How will they be split across sectors?
- Are we taking projected enrollment into account in allocating the Fair Share funding?
- Can we discuss using a different, less costly, matching requirement than was used in previous award rounds of the Major Capital Projects program?
- Can we discuss extending the scope of the MSCBA's authority? The '08 bond bill allowed the MSCBA to fund/bond for science-related projects.



## Questions We Will Answer in a Separate Meeting on the Funding Mechanism

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We anticipate that these questions will need more time to respond to and may not be relevant to the full working group. We have scheduled a meeting for Tuesday, December 3<sup>rd</sup> at 3:00 PM. We will share an invite to the meeting with the full working group, attendance is optional.

- How will recent bond bills (housing, eco dev) and upcoming bond bills (environmental) affect GO debt? How will they affect GO credit ratings? Will they affect Fair Share special obligation credit ratings?
- How has Fair Share been spent in FY24?
- Would Fair Share funding pledged to be bonded for higher education capital need to go through the annual fiscal year budget?
- Will this proposed fund exist and draw from Fair Share in perpetuity?
- Of the \$2.5-3 B projection, how much would be available through bond issuance vs. the pay-go portion?
- Will the Fair Share revenue stream be stable enough to support a program like we're proposing?
- How much debt service are UMBA and the MSCBA handling today? When are their existing debt obligations expected to mature.



## Questions We Will Discuss in December Meeting and/or Draft Report

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These are questions we will discuss in the December meeting, or that will be included in a draft of the report that we discuss in the December meeting.

- Will some higher education capital funding continue to be included in the CIP? Will there still be authorization in the general governmental bond bill?
- Can we see the buildup for each institution that led to the estimates of projected need presented in the last meeting?
- Can we see a breakdown of needs based on use? Administrative buildings, classrooms, dormitories, athletic facilities, etc.?
- Can we get clarity on the specific decarbonization opportunities and deferred maintenance needs across campuses? Is there, or can there be, intersection between the two?
- Can we have a list of the top priorities for each of the 29 campuses?
- Can we have a simple chart that compares current bonding capacity for higher education versus the bonding capacity that would be available under a separate higher ed bonding bill? What are the merits of a standalone bill?
- Can we have additional materials explaining the concept of the Fair Share credit structure?

## Overview of Current and Recent State Programs

- **Critical Repairs** - Allocates funding by formula to addresses the critical repair and deferred maintenance needs in Commonwealth-owned facilities as prioritized by the individual campuses for a five-year program period
- **Campus-Wide Infrastructure** - Strategic investment in larger repair projects to reduce risk of catastrophic failure of systems, such as sub-surface utilities and parking lots, selected based on campus infrastructure condition assessment
- **Major Capital Projects** - Open, competitive, information-driven process for awarding funds to larger campus priorities identified by campuses as their top priorities which also align with state goals for education and workforce development

## Current Programs: Critical Repairs

- **PURPOSE:** Address the critical repair and deferred maintenance needs in Commonwealth-owned facilities. Targets projects of less than \$5,000,000.
- **OVERVIEW**
  - Projects include building envelopes, MEP systems, accessibility, and life safety compliance
  - 5-year allocation creates predictability and allows campuses to plan and execute larger projects
  - Requires matching contributions from the institutions (campus \$ = state \$)
  - Gives campus discretion to prioritize projects
  - DCAMM monitors expenditures and reviews required Certified Studies
  - Campus matching investments required at various levels for each sector
  - Two 5-year rounds funded to date, each with \$250M in state bond funds plus campus matches
- **DISTRIBUTION METHODOLOGY**
  - Formula distribution
  - Equal base amount of \$3M allocated to each institution
  - Remaining funds apportioned to each sector by gross square footage
  - SU & CC funds allocated based on documented deferred maintenance (80%) and Fall Headcount (20%)
  - UMass President's Office determined allocation to UMass Campuses using similar factors
- **Critical Repairs program is expected to continue (and hopefully increase) under traditional CIP**

## Current Programs: Infrastructure

- **PURPOSE:** Addressing work between buildings, such as sub-surface utilities and parking lots, with costs that would not fit within the Critical Repairs program.
- **OVERVIEW**
  - Focuses on prevention of catastrophic failures
  - Enables campus leaders to not have to prioritize between program and large-scale infrastructure projects
  - State plans, manages, and executes projects
  - Projects typically take two years from the commencement of the study to complete
  - \$193.1M of state bond funds spent or committed to date, matched by \$38K from institutions
- **DISTRIBUTION METHODOLOGY**
  - State prioritized investments based on Infrastructure Assessments and Facility Condition Assessments
- Program is not currently funded for any new projects
- Possible model for tackling campus-wide **decarbonization** going forward

## Current Programs: Major Capital Projects

- **PURPOSE:** Invests in projects that are identified by campuses as their top priorities which also align with state goals for education and workforce development
- **OVERVIEW**
  - Designed to support larger projects which address programmatic priorities and needs of the institutions
  - Creates transparent and open process for state investment
  - UMass projects typically executed by UMBA
  - State plans, manages, and executes projects for Community Colleges and State Universities
  - Modest grants provided to institutions to support project and application development
  - \$451.6M of state bond funds spent or committed to date, matched by \$375.5M from institutions
- **DISTRIBUTION METHODOLOGY**
  - Periodic competitive project request process (originally announced as every other year pre-COVID)
  - All 29 institutions are eligible to submit one project each, with approximately 5 funded each round
  - Proposals with matching campus investment prioritized
  - 80% of funded projects have been at Community Colleges and State Universities
  - Program is not currently funded for any new projects

## DRAFTED: FY23 Major Capital Projects Program Criteria

### Criteria for Making Strategic Capital Investment

- **Invest in repairing, renovating, demolishing, or replacing current facilities**, while optimizing utilization and functionality of existing spaces.
- **Expand and deepen programmatic collaborations** between and among other academic institutions and outside public/private partners.
- **Align investments to the priorities of the Workforce Skills Cabinet (WSC) Regional Blueprint** or WSC statewide industry priorities and quantifiable occupational needs.
- **Develop more flexible and innovative program delivery models**, including online or hybrid learning, in order to increase space use, while improving student access and outcomes; incorporate impacts and best practices learned from the COVID-19 pandemic on the Future of Work and learning as they apply to long-term facility needs campus-wide

### *Evaluation Considerations:*

- Strength of alignment with campus strategic plans and the strategic priorities of the MA Public Higher Education System relating to the Equity Agenda.
- Comparative need across all the proposals based on data, both in terms of the project's impact and the IHE's overall facilities condition, suitability, enrollment, and facility utilization.
- Cost effectiveness and feasibility of the project's business case and implementation strategy, including long term operational funding need, enrollment, and ability to leverage state, federal, and private sector funding sources to support the project.
- Where applicable, demonstration of strategies to address climate resilience, low carbon emissions, and energy

Major Capital Projects: Typical Timeline

June	Early summer: application window opens
July	
August	
September	
October	Mid-fall: draft applications submitted for peer review and additional guidance
November	
December	Applications due
January	Winter: applications reviewed and recommended for funding by EOE/A&F/DCAMM
February	
March	GOV approves funded projects
April	
May	Awards announced with release of the CIP
June	
July	Funding available with the start of the new FY

Round 1	FY19	\$185.5 M
Round 2	FY22	\$108.2 M
Round 3	FY23	\$157.9 M



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## Discussion: What Worked and What Was Challenging

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These are the concerns we've heard raised so far:

- Insufficient funding levels in program to meet needs
- Cap (\$30M FY23, \$25M FY22 and FY19) on application requests is too low for project needs, especially with recent cost escalation
- Matching expectations can be too onerous
- Difficult for institutions to compete on same level with one another across sectors
- State priorities don't always align with what campuses see as greatest needs

### Questions:

- Are there important capital or strategic planning needs that have not been effectively addressed by current and recent processes and programs?
- What has worked about the way funding for higher education capital has been provided in recent years?
- What from the current method of support should be carried over? What should be changed or improved on?
- What about the current practice falls short of institutional needs – beyond funding levels?



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## Discussion: Guiding Principles for Funding Allocation and Project Selection

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What guiding principles should be used to inform investment priorities, regardless of sector or project type?

Principles could include:

- Ensuring greater transparency and predictability of funding
- Preserving flexibility to meet evolving needs
- Prioritizing deferred maintenance and critical repairs of existing facilities
- Selecting projects that respond to safety concerns
- Prioritizing alignment with administration priorities, including:
  - Net zero carbon emissions goals
  - Priorities in the Workforce Skills Cabinet Regional Blueprint
- Developing smarter and more innovative program delivery models, including:
  - Using existing space more efficiently – and reducing overall square footage
  - Recognizing changing demographics in institutions, sectors and across higher education
  - Finding opportunities for cross-institutional collaboration and space sharing
- Meeting needs for research and vocational space
- Requiring (and providing support for) longer-term planning to inform project evaluation and selection, in the form of master planning
- Others?



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## Discussion: Considerations for Allocation of Funding

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How should funding be allocated in a way that is equitable, transparent, and predictable?

- How can we effectively apportion funding across project or program types (decarbonization, deferred maintenance/critical need, programmatic modernization)?
- What are ways to effectively apportion funding across the system, or by sector?
- Further, what would be the impact of apportioning the funding down to the institutional level?
  - Example factors that have been used or considered for formulaic apportionment:
    - Gross square footage
    - Enrollment
    - Documented deferred maintenance or decarbonization need
    - Utilization
  - Are there other factors that could inform apportionment?
- How can the merits of individual project requests, regardless of sector or project type, be considered as part of the funding methodology?



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## Discussion: Supports for Campuses and Authorities

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What supports and activities can better enable schools to meet their planning and programmatic needs?

Examples of strategic planning and administrative needs:

- Master Plans
- Support for institutions with less capacity to be successful, beyond project and program funding
  - Planning capacity
  - Borrowing authority
  - Project management capacity
  - Financial administration and accounting support
- More centralized or holistic assessment of campus needs

Examples of capital needs that do not neatly fit (*costs are too big or too small*) into 3 existing programs:

- Individual lab renovations that respond to evolving instructional and research demands
- Nimble equipment replacement to quickly address emerging workforce needs per the Nevada model
- Very large projects like the Mass Art Tower, the UMass Boston garage, or major science buildings on various campuses from Salem State to UMass Lowell
- Projects beyond institutional capacity

Others?



# APPENDIX



# Brief Overview: Governance, Roles and Responsibilities of Building Authorities

	UMBA	MSCBA
Which institutions do they serve?	5 UMass campuses	9 state universities and 15 community colleges
What construction projects can they raise funding for?	All campus projects	Only revenue-funded facilities (housing, dining, athletic parking, and student life) and a limited set of academic facility projects specifically authorized, like in the 2008 HEBB
Which projects, within DCAMM's programs, do they support?	Major capital projects	Major capital projects
Who are the trustees?	11-member board appointed by Gov.	9-member board appointed by Gov., 3 of whom are on the BHE
What strategic planning does the authority or relevant institutions do?	The UMass president's office and UMBA biennially release updates to their five-year capital plan. Campuses sometimes release master plans.	Releases a biennial strategic plan that includes a system-wide view of housing and the strategic direction of the SUs
What role does the state play?	A&F approves projects funded by University debt and through DCAMM manages state-funded projects	Financing and oversight for the MSCBA are subject to written project approval from the A&F Secretary and vote of BHE and financing approval by the A&F Secretary, DHE Commissioner, and State Treasurer



**Commonwealth of Massachusetts**  
**Executive Office for**  
**Administration and Finance**

# **Higher Education Capital Working Group**

**Meeting 4**

**December 12, 2024**





# Meeting Schedule and Topics

Date	
1. September 12 <sup>th</sup>	Objectives, Background and Level-Setting
2. October 10 <sup>th</sup>	Campus Needs and Financing Structure and Sources
3. November 14 <sup>th</sup>	Review of Current Process and Discussion of Priorities and Concerns for Allocation of Funding
4. December 12 <sup>th</sup>	Review of Content in Final Report and Bond Bill, Discussion



# Today's Agenda: Review Report Draft

## **Report Table of Contents**

- The Challenges
  - Capital Funding Needs at Public Higher Education Institutions
  - Capital Constraints and Available Bond Capacity
    - CIP Uses and Constraints
    - History of Higher Education Financing and Investments
    - Current and Recent Higher Education Capital Project Programs Funded Through the CIP
- New Sources of Capital to Support Higher Education Transformation
  - Evaluation of Special Obligation Bonds as a Structure for New Capital Funds
  - The Feasibility and Impacts of Establishing a Permanent Financing Structure Using Income Surtax Revenue
  - What Special Obligation Bonds Issued Using Fair Share Revenues Could Look Like
  - Potential Federal Sources of Reimbursement of Grant Funding
- Findings on Deploying New Capital to Address Needs
  - Process of Prioritizing Higher Education Capital Needs
  - Process for Application, Approval, Design, and Delivery of Capital Projects
  - Supports for the Institutions and Authorities to Identify and Finance Investments
- Conclusion: Future Bond Legislation Investments and Next Steps



# Review Report: The Challenges

## **Capital Funding Needs at Public Higher Education Institutions**

- Much of the state's higher education infrastructure is reaching the end of its functional lifespan
- Several factors have driven escalating capital costs: enrollment pressures, material supply constraints, energy and climate objectives, etc.
- DCAMM has conducted a detailed assessment of needs, resulting in dashboards for each institution

## **Capital Constraints and Available Bond Capacity**

- **CIP Uses and Constraints**
  - The CIP is a 5-year rolling plan that funds construction and maintenance of state infrastructure
  - Growth in spending is subject to statutory and policy limits on levels of debt the state can incur, evaluated annually
- **History of Higher Education Financing and Investments**
  - The \$2.2 B 2008 higher education bond bill funded at least one major capital project on each campus
  - The 2022 General Government Bond Bill authorized \$750 M in additional debt issuance for repairs and improvements on campuses
  - Bond cap limits have precluded any new major capital projects for higher ed without new funding identified
- **Current and Recent Higher Education Capital Project Programs Funded Through the CIP**
  - In the FY25 CIP, \$156.5 M is programmed for higher education institutions
  - There are three current or recent programs:
    - Critical Repairs
    - Accelerated Infrastructure
    - Major Capital Projects

# Review Report: New Sources of Capital to Support Higher Education Transformation (1)



## **Evaluation of Special Obligation Bonds as a Structure for New Capital Funds**

- The CIP is primarily funded with General Obligation (GO) debt. There is however precedent for issuing special obligation bonds to address strategic priorities while safeguarding the GO credit rating that supports the CIP. For example:
  - The Commonwealth Transportation Fund, created in 2009, has effectively allocated transportation-related fees and taxes to fund its obligations transportation investment over the last 15 years. It has a strong credit profile, rated Aa1 by Moody's and AAA by S&P and Kroll.
- A standalone credit structure could similarly expand the Commonwealth's capital borrowing program for higher ed capital projects. Dedicating revenues to debt service while the bonds are outstanding ensures that the program minimizes risk while providing financial predictability.

## **The Feasibility and Impacts of Establishing a Permanent Financing Structure Using Income Surtax Revenue**

- The feasibility of establishing a permanent financing structure is supported by the constitutional dedication of Fair Share revenue to "quality public education and affordable public colleges and universities, and for the repair and maintenance of roads, bridges, and public transportation."
- Fair Share revenue is expected to be variable, but safeguards, such as budgeting against a limited amount of Fair Share funds and banking surpluses for targeted priorities, can ensure stability and sustainability while allowing for strategic long-term investments.
- Once revenues are pledged to support a capital financing structure, debt service must be paid before funds are used for other eligible purposes. The estimated scale of proposed debt obligation is modest relative to overall Fair Share collections.
- This commitment of funds to pay debt service would limit future flexibility to use that funding for other eligible purposes but the state will retain significant discretion to support other education and transportation initiatives with the majority of Fair Share funds.

# Review Report: New Sources of Capital to Support Higher Education Transformation (2)



## **What Special Obligation Bonds Issued Using Fair Share Revenues Could Look Like**

- A special obligation credit structure would likely secure a high investment-grade credit rating.
- This approach aligns with the priorities of key stakeholders, including the Commonwealth, UMass, the state universities, the community colleges, and investors.
- The preliminary modeling scenarios that financial advisory firm PFM analyzed indicate the Commonwealth would be able to generate an estimated \$2-3 billion in combined bond and PAY-GO proceeds over 10 years without any growth in the annual appropriation.

## **Potential Federal Sources of Reimbursement or Grant Funding**

- Growing the pool of funding for capital projects also means ensuring that no federal resources are left on the table
- Direct Pay reimbursements under the Inflation Reduction Act (IRA) are a promising federal funding source
  - This possibility is currently being explored in a collaboration between DCAMM, A&F's Federal Funds and Infrastructure Office, and Massachusetts' public higher education campuses
  - The program is designed to expand access to clean energy tax credits
  - Any refunds from this program will go directly to the state rather than to individual institutions, because the state officially pays the taxes on behalf of the institutions
  - The state is currently exploring options to reinvest these funds into additional decarbonization projects to further address climate goals
- Future federal reimbursement opportunities may emerge, so the Working Group advises monitoring developments under the incoming federal administration



# Review Report: Findings on Deploying New Capital to Address Needs (1)

## **Process of Prioritizing Higher Education Capital Needs**

The Working Group identified this set of guiding principles for consideration:

- Ensuring greater transparency and predictability of funding
- Preserving flexibility to meet evolving needs
- Prioritizing deferred maintenance and critical repairs of existing facilities
- Selecting projects that respond to safety concerns
- Prioritizing alignment with administration priorities, including:
  - Net zero carbon emissions goals
  - Priorities in the Workforce Skills Cabinet Regional Blueprints
- Developing smarter and more innovative program delivery models, including:
  - Using existing space more efficiently – and reducing overall square footage
  - Recognizing changing demographics in institutions, sectors, and across higher education
  - Finding opportunities for cross-institutional collaboration and space sharing
  - Meeting needs for research and applied learning space
  - Requiring (and providing support for) longer-term planning to inform project evaluation and selection, in the form of master planning

The state's three higher education sectors (i.e., UMass, State Unis, Community Colleges) have distinct missions and needs. Funding distribution should account for regional and institutional factors, demographic change, and strategic goals.



# Review Report: Findings on Deploying New Capital to Address Needs (2)

## Process for Application, Approval, Design, and Delivery of Capital Projects

- What has worked well:
  - The three historical programs – critical repairs, campus-wide infrastructure, and major capital projects – continue to address campus needs
  - The predictability and flexibility of the critical repairs program
  - The model of the infrastructure program to support priorities like decarbonization
  - The transparent and supportive application process in the major capital projects program
- Needs that are not fully addressed by current programs:
  - Planning and executing workforce-aligned projects
  - Demolishing or rebuilding outdated buildings
  - Vertical infrastructure projects (like projects to fix elevators) are not captured by the campus-wide infrastructure program (which focuses on projects like roads and steam pipes)
- Opportunities for improvement:
  - The timeline from award announcement to study certification is a significant bottleneck
  - Studies are hard to certify in an environment of high construction cost escalation that outpaces the design process, creating delays
  - Major project request funding cap level is a constraint to project delivery and creates financial burdens for campuses
  - Spending requirements should align with multi-year construction timelines
  - The matching funds model could benefit from greater flexibility and transparency
  - Statutory procurement and study thresholds have not kept pace with inflation, leading to burdensome procedural requirements



# Review Report: Findings on Deploying New Capital to Address Needs (3)

## **Supports for the Institutions and Authorities to Finance Investments**

- To support the MSCBA:
  - There is broad interest in strengthening the MSCBA.
  - One idea is to increase the MSCBA's ability to contribute resources to academic building projects and support community colleges as well as state universities. This might resemble the direction of the 2008 higher education bond bill.
- To support institutions:
  - One idea that surfaced is for the state to offer guidance to standardize the development of master plans and ensure consistent alignment with applicable state policy priorities that influence capital investment, including decarbonization mandates.

# Review Report: Conclusion – Future Bond Legislation Investments and Next Steps



- Two pieces of legislation will be needed to establish a permanent financing structure using income surtax revenues for the issuance of debt for the benefit of public higher education institutions: a higher education bond bill and legislation authorizing operating spending, e.g. FY26 GAA.
- The current proposal entails a series of bond issuances over the next 10 years, structured in such a way that debt service will not exceed a constrained amount in any given year. Required debt service in the early years will be less than the constrained amount given the relatively small amount of bonds that will be outstanding; excess coverage can be used to fund a PAY-GO capital program.
- To understand how quickly PAY-GO funds may become available, we can look at the \$50 M in Fair Share revenue allocated in FY24 to institutions for use on decarbonization, accessibility, and campus security projects.
  - The funding was allocated by formula, speeding up the process. However, new projects through Fair Share PAY-GO may be smaller than the projects funded by the \$50 M in FY24.
  - The program was launched in December 2023 and campuses have clear plans to expend all remaining funds by June 2025.
- The length of time for special obligation bond funding to become available may vary. To the extent any new program models need to be developed, time will be needed to design and administer a new program. If a new program requires applications, it may take an additional year between the launch of the application to funding becoming available.



# Review Report: Appendices

## Appendix 1 – Campus Dashboards

DATA	SOURCE
Enrollment, Fall 2014 – Fall 2023	<ul style="list-style-type: none"><li>• Department of Higher Education ODATA <a href="#">feed</a></li><li>• UMass Medical numbers from National Center for Education Statistics, Integrated Post-Secondary Education Data System (<a href="#">IPEDS</a>)</li></ul>
Research Expenditures	<ul style="list-style-type: none"><li>• National Science Foundation <a href="#">data</a></li></ul>
Age of Buildings	<ul style="list-style-type: none"><li>• DCAMM CAMIS database, exported 9.1.24, and filtered for Major Buildings</li><li>• Missing data was excluded</li></ul>
Space use broken down by high-level use categories (classroom, class lab, research, office, residence hall, student life, and support)	<ul style="list-style-type: none"><li>• Square footage includes State-owned and non-State-owned space</li><li>• Facilities Inventory and Classification Manual (FICM) use codes were grouped into display categories</li><li>• 23 of 29 institutions provided room-level space use data</li><li>• For the following 6 institutions, DCAMM Planning used building-level CAMIS use data and average use distributions for each sector from SCUP publication “Kings of Infinite Space”, Janks, 2012<ul style="list-style-type: none"><li>• Massasoit Community College</li><li>• Middlesex Community College</li><li>• Mount Wachusett Community College</li><li>• Springfield Tech Community College</li><li>• Massachusetts Maritime Academy</li><li>• Salem State University</li></ul></li></ul>



# Review Report: Appendices

## Appendix 1 – Campus Dashboards

DATA	SOURCE
10-year deferred maintenance backlog	<ul style="list-style-type: none"><li>• State-owned buildings only</li><li>• Data from DCAMM Facility Condition Assessment, 2024</li></ul>
Projected decarbonization costs	<ul style="list-style-type: none"><li>• State-owned buildings only</li><li>• DCAMM internal assessment based on square footage, recent dollar per square foot project costs, and adjusted to eliminate overlap with deferred maintenance</li></ul>
Estimate of 10-year capital needed for programmatic modernization	<ul style="list-style-type: none"><li>• For the UMass system, DCAMM used project lists and costs from the 2024 Board of Trustees Presentation</li><li>• For the Community College and State Universities, DCAMM requested and received, over a 2-week period in September 2024, a list of programmatic modernization projects<ul style="list-style-type: none"><li>• Where the institutions lists did not include dollar amounts, DCAMM analyzed the requests and developed total project costs based on:<ul style="list-style-type: none"><li>• \$720/square foot for non-lab renovation;</li><li>• \$1,000/square foot for lab renovation; and</li><li>• \$1,000/square foot for new construction.</li></ul></li></ul></li><li>• The following logic and formula was used to adjust the Programmatic Modernization dollar amount<ul style="list-style-type: none"><li>• Campus GSF &gt; 50 years * \$500/gsf, which excludes deferred maintenance and decarbonization costs</li><li>• If that dollar amount was greater than the institution’s submitted list, the adjustment amount, minus the dollar total of the submitted list was used</li><li>• If the amount was less than the total of the list, no adjustment was made</li></ul></li></ul>



# Review Report: Appendices

## Appendix 1 – Campus Dashboards

DATA	SOURCE
Current State and non-State planned investments	<ul style="list-style-type: none"><li>• DCAMM Budget/Finance Office, September 2024</li></ul>
Gross Need	<ul style="list-style-type: none"><li>• Sum of deferred maintenance, decarbonization, and project modernization</li></ul>
Net Need	<ul style="list-style-type: none"><li>• Gross need minus the sum of State and non-State investments</li></ul>

## Appendix 2 – Compilation of Slides from Working Group Meetings