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# Massachusetts State College Building Authority

Credit Presentation

November 2017



# Introduction

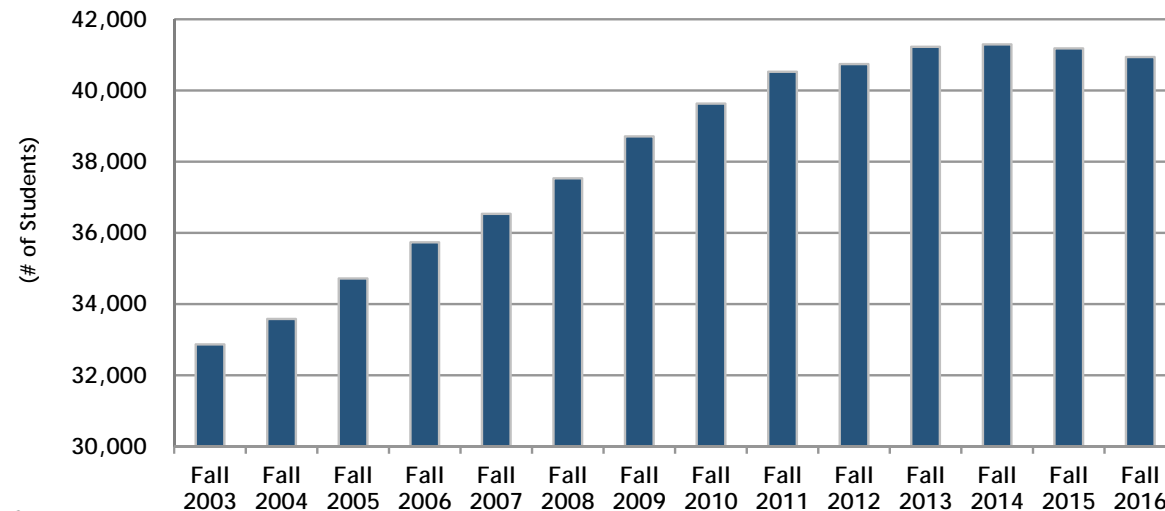


West Hall  
Framingham State University

## 1. Demand: State University Full-time Equivalent

- Full-time equivalent enrollment has increased from 32,868 in Fall 2003 to 40,938 in Fall 2016, an increase of 24.6% or a compound annual growth rate of 1.9%
- According to the BHE data, growth in state university undergraduate enrollment has slowed in recent years, with 0.5%, 1.3%, -0.6% and -1.0% growth in the fall of 2013, 2014, 2015, and 2016 respectively.

State University Full-time Equivalent

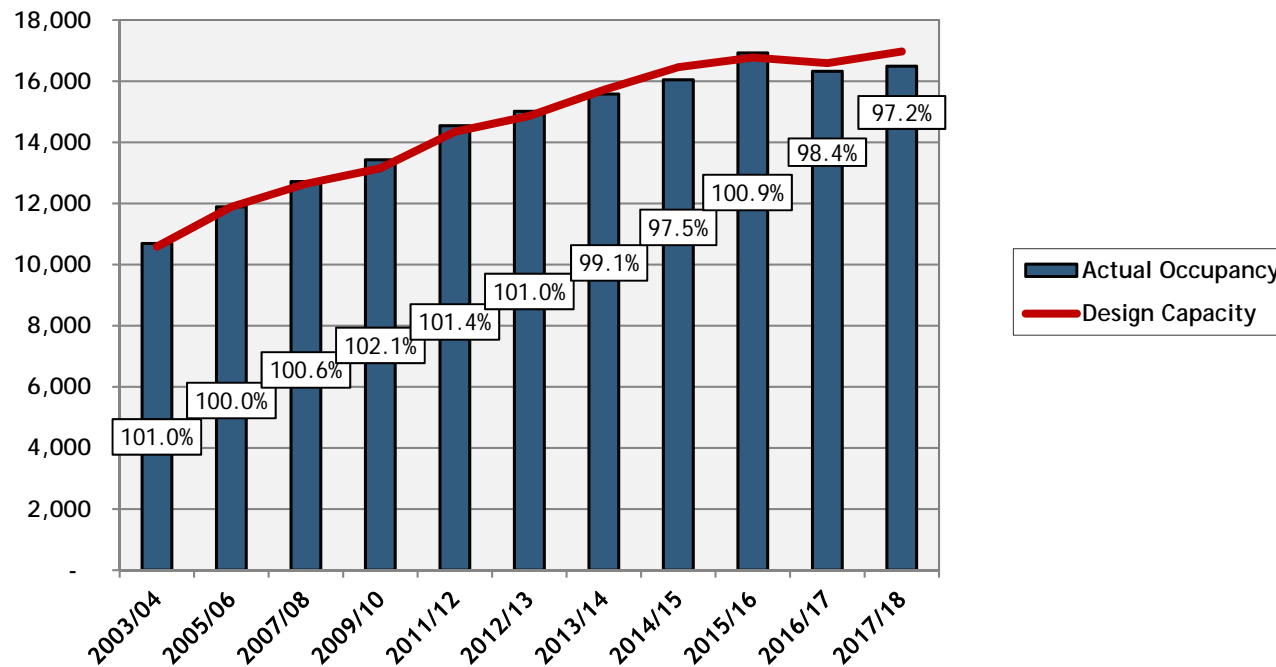


Source

# 1. Demand: State University Residence Hall Capacity and Occupancy

- Residence hall design capacity (# of beds) has increased 68% from 10,065 in 2001 to 16,971 in fall 2017
- Residence halls have been nearly fully occupied since academic year 2003-2004, even as the number of beds has increased by 6,906
- Total aggregate occupancy of all university residence halls was 97.2% in Fall 2017; fall occupancy rates are typically higher than spring occupancy rates.

System Actual Occupancy versus Design Capacity



## 1. Demand Facility Renewal Planning and Funding

- Interactive database of all building components, useful life, and replacement cost
- Schedule of future renewal projects, costs and fund source
- Deferred Maintenance (DM) has been reduced from \$49.3 million in 2002 to \$10.2 million in 2016 on Residence Halls constructed prior to 2002
- The Facility Condition Index (FCI) is the ratio of the estimated cost of DM to the Current Replacement Value (CRV) of Authority buildings:  $FCI = DM/CRV$ 
  - The current Authority System CRV is \$534 million, System DM is \$10.2 million and System FCI equals 2.0%
  - The industry FCI range is 5-15%
- The goal is to fully fund future scheduled repairs from current year revenue
- FY16-FY20 Capital Improvement Reserve funding (\$23.1M) exceeds project requirements (\$22.3M)
- Improved desirability of on-campus housing results in full occupancy and revenue.

Annual System Deferred Maintenance			
Year	CRV <sup>1</sup>	DM <sup>1</sup>	FCI
2016	\$ 534	\$ 10.2	2.0%
2014	517	11.0	2.1%
2012	484	10.6	2.1%
2010	464	13.0	2.8%
2008	416	15.2	3.6%
2006	374	22.7	6.1%
2004	330	39.1	11.8%

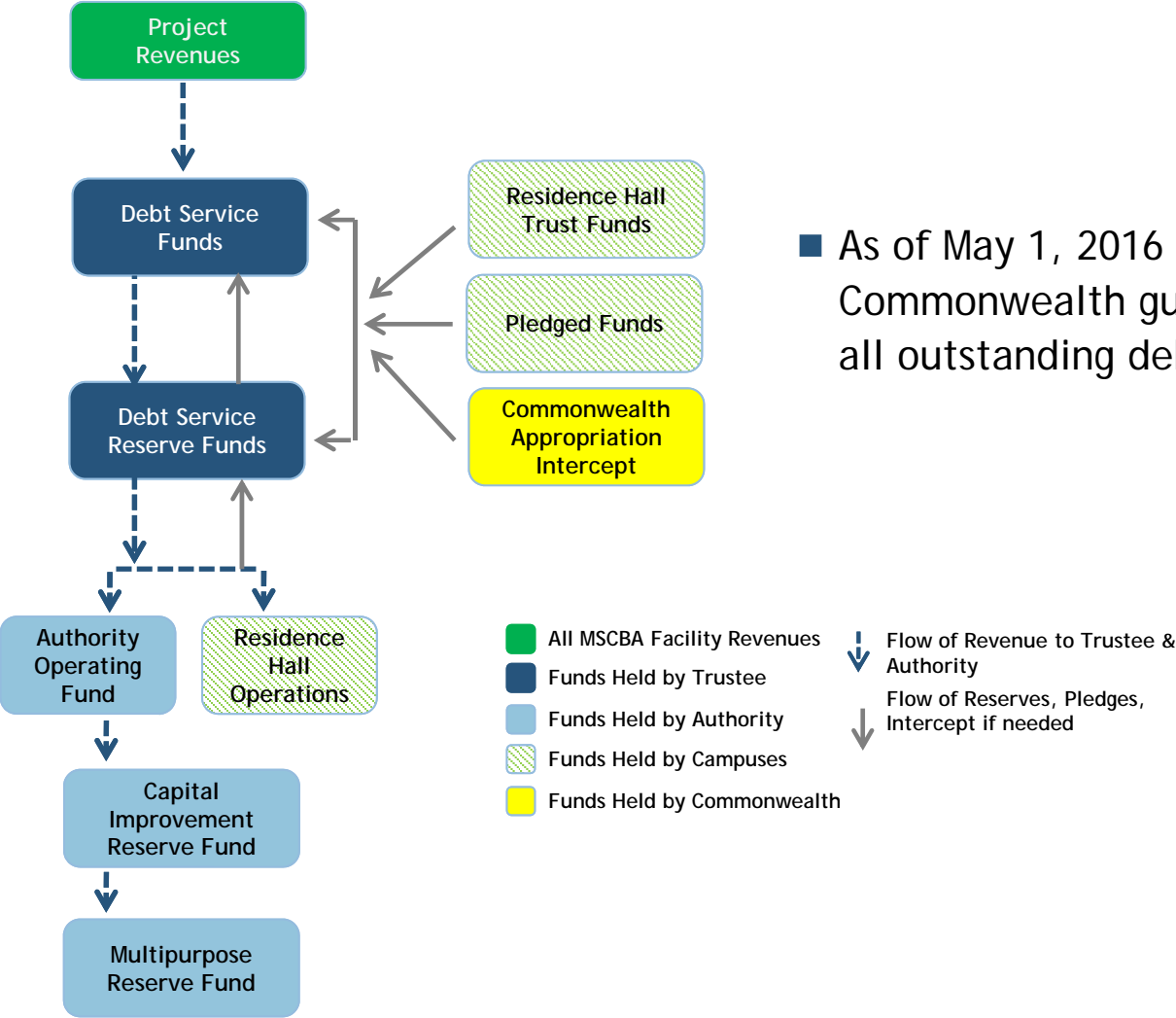
<sup>1</sup> \$'s in millions

## 2. Credit and Security Features



Hammond Campus Center and Library  
Fitchburg State University

## 2. Credit & Security Features: Flow of Funds



■ As of May 1, 2016 all of the outstanding Commonwealth guaranteed debt was paid off; all outstanding debt are now parity bonds

## 2. Credit & Security Features: Projected Reserve Balances

- The State Universities and the Authority maintain significant reserve balances
  - RHTF balance is required to be at least 5% of prior year expenses; as of 6/30/17, the RHTF balance equals 19.6% of prior year expenses
  - Debt Service Reserve Fund
    - Beginning with the issuance of the Series 2014BCD Bonds, the DSRF Requirement is zero, once 50% bond holder consent is obtained. When this consent is received, the current DSRF balance will likely be utilized, at the discretion of the Authority, to redeem bonds.

Fiscal Year 2017; Projected Fiscal Year 2018 and 2019 Reserve Funds			
Fund	2017 Actual	2018 Projected	2019 Projected
<b>Reserves</b>			
Residence Hall Trust Funds	\$23.36	\$22.49	\$23.13
Pledged Funds	\$23.30	\$22.91	\$22.77
Capital Improvement Reserve Funds	\$17.90	\$26.17	\$34.92
Multi-Purpose & Supplemental Reserve Funds	\$5.05	\$6.45	\$7.85
Aggregate Debt Service Reserve Fund	\$86.97	\$86.10	\$86.10
<b>Total Reserves</b>	<b>\$156.59</b>	<b>\$164.12</b>	<b>\$174.78</b>
Commonwealth Appropriation Intercept <sup>2</sup>	\$248.07	\$250.26	\$250.26
<b>Total Reserves and Intercept</b>	<b>\$404.65</b>	<b>\$414.37</b>	<b>\$425.04</b>

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

<sup>2</sup> 2018 and 2019 Projected appropriations based on fiscal year 2018 appropriations



## 2. Credit & Security Features: Total Available for Debt Service on Non-Guaranteed Bonds

### ■ Funds Available - FY17

Total Revenue and Reserves Available for Coverage <sup>1,2</sup>							
Campus	Gross Revenue	Building Expenses	Reserves	Pledges	Total	Average Annual Net Debt Service	Coverage
Bridgewater State	\$26.80	(\$8.59)	\$6.16	\$4.59	\$28.97	\$15.74	1.84x
Fitchburg State	\$14.35	(\$3.39)	\$3.86	\$2.58	\$17.40	\$8.46	2.06x
Framingham State	\$19.74	(\$5.43)	\$6.53	\$3.29	\$24.13	\$9.64	2.50x
MA College of Art and Design	\$13.48	(\$4.71)	\$6.19	\$2.24	\$17.21	\$9.00	1.91x
MA College of Liberal Arts	\$5.25	(\$2.22)	\$2.09	\$0.51	\$5.63	\$1.75	3.22x
MA Maritime Academy	\$11.62	(\$3.34)	\$2.50	\$1.63	\$12.42	\$5.06	2.46x
Salem State	\$24.50	(\$7.53)	\$4.73	\$3.69	\$25.39	\$12.51	2.03x
Westfield State	\$20.39	(\$7.29)	\$9.45	\$2.65	\$25.20	\$8.76	2.88x
Worcester State	\$13.26	(\$4.16)	\$4.80	\$2.11	\$16.01	\$8.19	1.95x
<b>Aggregate</b>	<b>\$149.40</b>	<b>(\$46.65)</b>	<b>\$46.31</b>	<b>\$23.30</b>	<b>\$172.36</b>	<b>\$79.10</b>	<b>2.18x</b>
Commonwealth Appropriation Intercept <sup>3</sup>					\$248.07		
<b>Total (Including Intercept)</b>					<b>\$420.43</b>	<b>\$79.10</b>	<b>5.31x</b>
DSRF, Non-Guaranteed Bonds					\$86.97		
<b>Total (Including DSRF)</b>					<b>\$507.40</b>	<b>\$79.10</b>	<b>6.41x</b>

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

<sup>2</sup> Reflects FY2017 actuals

<sup>3</sup> Appropriation intercept based on fiscal year 2017 appropriations

## 2. Credit & Security Features: Total Available for Debt Service on Non-Guaranteed Bonds

### ■ Funds Available - FY18

Total Revenue and Reserves Available for Coverage <sup>1,2</sup>							
Campus	Gross Revenue	Building Expenses	Reserves	Pledges	Total	Average Annual Net Debt Service <sup>3</sup>	Coverage
Bridgewater State	\$28.54	(\$9.22)	\$8.02	\$4.46	\$31.80	\$15.69	2.03x
Fitchburg State	\$16.27	(\$4.27)	\$4.66	\$2.50	\$19.16	\$8.38	2.28x
Framingham State	\$19.83	(\$5.87)	\$6.97	\$3.23	\$24.16	\$9.53	2.54x
MA College of Art and Design	\$13.61	(\$4.73)	\$6.58	\$2.25	\$17.71	\$9.01	1.96x
MA College of Liberal Arts	\$5.33	(\$2.40)	\$2.57	\$0.46	\$5.95	\$1.71	3.48x
MA Maritime Academy	\$12.13	(\$3.44)	\$3.40	\$1.63	\$13.71	\$4.96	2.77x
Salem State	\$25.51	(\$7.66)	\$6.05	\$3.68	\$27.59	\$12.40	2.23x
Westfield State	\$20.50	(\$6.88)	\$11.22	\$2.58	\$27.42	\$8.67	3.16x
Worcester State	\$14.04	(\$4.50)	\$5.65	\$2.12	\$17.30	\$8.17	2.12x
<b>Aggregate</b>	<b>\$155.77</b>	<b>(\$48.97)</b>	<b>\$55.11</b>	<b>\$22.91</b>	<b>\$184.81</b>	<b>\$78.52</b>	<b>2.35x</b>
Commonwealth Appropriation Intercept <sup>4</sup>					\$250.26		
<b>Total (Including Intercept)</b>					<b>\$435.07</b>	<b>\$78.52</b>	<b>5.54x</b>
DSRF, Non-Guaranteed Bonds					\$86.10		
<b>Total (Including DSRF)</b>					<b>\$521.17</b>	<b>\$78.52</b>	<b>6.64x</b>

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

<sup>2</sup> Reflects FY2018 projections

<sup>3</sup> Series 2017BCD financing not included

<sup>4</sup> Appropriation intercept based on fiscal year 2018 appropriations

## 2. Credit & Security Features: Total Available for Debt Service on Non-Guaranteed Bonds

### ■ Projected funds available FY19 after the issuance of the Series 2017BCD Bonds

Total Revenue and Reserves Available for Coverage <sup>1,2</sup>							
Campus	Gross Revenue	Building Expenses	Reserves	Pledges	Total	Average Annual Net Debt Service <sup>3</sup>	Coverage
Bridgewater State	\$29.21	(\$9.43)	\$10.03	\$4.33	\$34.14	\$15.81	2.16x
Fitchburg State	\$16.48	(\$4.26)	\$5.57	\$2.56	\$20.34	\$8.71	2.34x
Framingham State	\$20.41	(\$6.11)	\$8.11	\$3.26	\$25.66	\$9.52	2.69x
MA College of Art and Design	\$14.03	(\$4.93)	\$6.94	\$2.21	\$18.24	\$8.68	2.10x
MA College of Liberal Arts	\$5.59	(\$2.48)	\$3.01	\$0.44	\$6.57	\$1.67	3.94x
MA Maritime Academy	\$12.67	(\$3.51)	\$4.63	\$1.62	\$15.41	\$4.85	3.18x
Salem State	\$26.02	(\$8.01)	\$7.45	\$3.67	\$29.13	\$12.28	2.37x
Westfield State	\$21.26	(\$7.17)	\$13.02	\$2.57	\$29.69	\$8.57	3.47x
Worcester State	\$14.76	(\$4.51)	\$7.16	\$2.12	\$19.53	\$8.14	2.40x
<b>Aggregate</b>	<b>\$160.44</b>	<b>(\$50.41)</b>	<b>\$65.91</b>	<b>\$22.77</b>	<b>\$198.71</b>	<b>\$78.24</b>	<b>2.54x</b>
Commonwealth Appropriation Intercept <sup>4</sup>					\$250.26		
<b>Total (Including Intercept)</b>					<b>\$448.96</b>	<b>\$78.24</b>	<b>5.74x</b>
DSRF, Non-Guaranteed Bonds					\$86.10		
<b>Total (Including DSRF)</b>					<b>\$535.06</b>	<b>\$78.24</b>	<b>6.84x</b>

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

<sup>2</sup> Reflects FY2019 projections

<sup>3</sup> Includes Series 2017BCD financing, subject to change

<sup>4</sup> Projected appropriation intercept based on fiscal year 2018 appropriations

### 3. Debt Profile



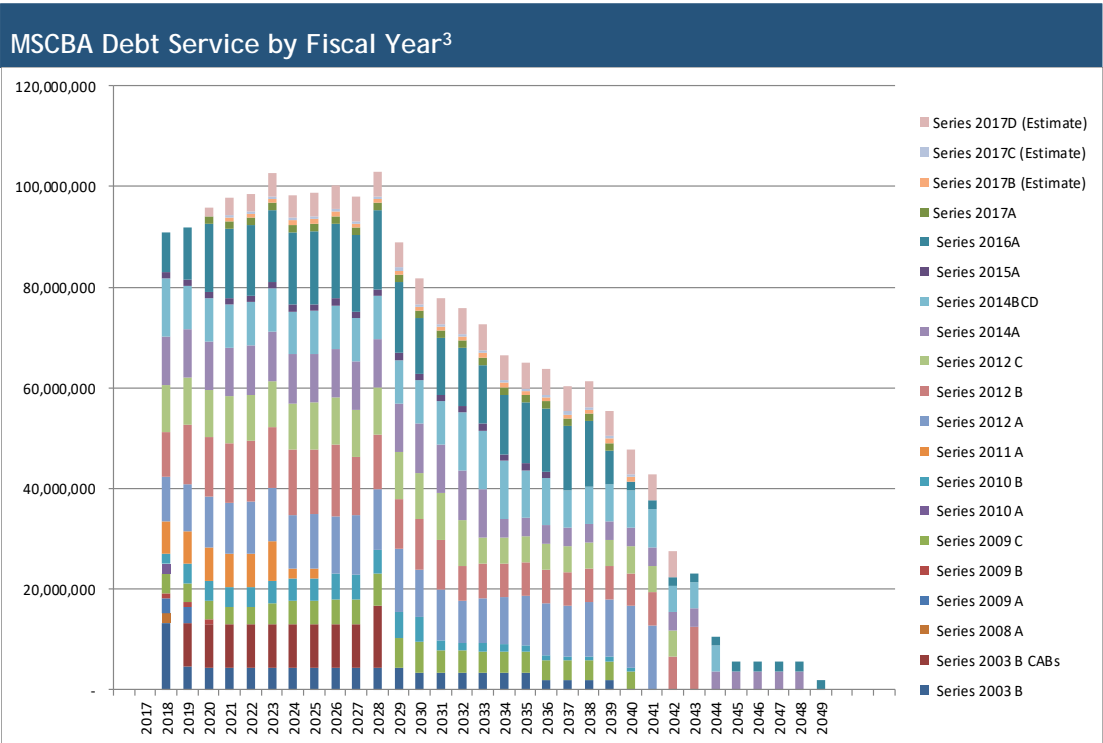
Viking Hall  
2015  
Salem State University



Woodward Hall  
1912  
Bridgewater State University

### 3. Debt Profile: Outstanding Indebtedness (including Series 2017BCD estimates)

- Total Outstanding Par: \$1.23 Billion<sup>1</sup>
  - All Parity Bonds
- Maximum Annual Debt Service: \$104.8 Million<sup>1</sup>
- Average Annual Debt Service: \$63.25 Million<sup>1</sup>
- DSRF Balance<sup>2</sup>: \$79.94 Million
- Weighted Average Life of Debt: 12.80 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 11/15/2017; includes estimated Series 2017BCD Bonds; subject to change  
<sup>2</sup> Based on amortized value as of 6/30/17; includes estimated Series 2017BCD debt service reserve fund deposit  
<sup>3</sup> A portion of debt service in fiscal years 2023, 2028, and 2043 will be paid from debt service reserve funds

### 3. Debt Profile: Parity Bond Financings To-Date

- Since 1999, the Authority has financed \$1.35 billion in project funds from bond proceeds including the estimated Series 2017BC project fund:

Summary of New Money Proceeds <sup>1</sup>					
Series	Repair and Renovation Projects	New Capacity	Student Activity Projects	Commonwealth Support	Total
1999-2000	\$33.40	\$58.60	\$1.80	N/A	\$93.80
2003A,B	\$19.00	\$67.00	\$2.10	N/A	\$88.10
2004A	\$24.00	\$32.00	\$2.00	N/A	\$58.00
2005A	\$19.00	\$0.00	\$14.90	N/A	\$33.90
2006A	\$19.60	\$64.10	\$8.30	N/A	\$92.00
2008A	\$32.60	\$49.00	\$0.80	N/A	\$82.40
2009A,B,C	\$38.10	\$180.50	\$22.30	N/A	\$240.90
2010A,B	\$12.50		\$32.40	\$10.00	\$54.90
2012A	\$11.50	\$113.00	\$31.00	\$3.00	\$158.50
2012C	\$10.50	\$80.60	\$37.45	\$26.00	\$154.55
2014A	\$18.50	\$62.80	\$27.35	\$21.00	\$129.65
2014B,C	\$10.00	\$44.00	\$37.60	\$15.50	\$107.10
2015A	\$15.95		\$2.75		\$18.70
2017A	\$8.32	\$9.37	\$4.16		\$21.85
2017BC <sup>2</sup>	\$8.00	\$1.80	\$10.00		\$19.80
<b>Project Fund Total</b>	<b>\$280.97</b>	<b>\$762.77</b>	<b>\$234.91</b>	<b>\$75.50</b>	<b>\$1,354.15</b>

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

<sup>2</sup> Preliminary numbers subject to change

### 3. Projected New Issuance - Series 2017BCD Bonds: Project Summary and Structure

Series 2017BC Approved New Money Projects		
Campus	Project/Building	Project Cost
<b>Residence Hall Renewal and Adaption Projects</b>		
Bridgewater State	Miles Dinardo Residence Halls	\$3.0
Fitchburg State	Russell Towers Repairs	\$5.0
Fitchburg State	Acquisition of 132 Highland Ave	\$1.8
<b>Student Activity Projects</b>		
Mass College of Art And Design	Gallery Project	\$7.5
Framingham State University	Maynard Building	\$2.5
<b>Total</b>		<b>\$19.8</b>

Sources and Uses of Funds Series 2017BCD (as of 11/16/2017) <sup>1</sup>	
Par Amount Series B	\$10.25
Par Amount Series C (Taxable)	7.58
Par Amount Series D (Refunding)	62.42
Premium / (Discount)	15.60
Excess DSRF	0.88
<b>Total Sources</b>	<b>\$96.73</b>
Deposit to Project Fund	\$19.80
Deposit to the Refunding Escrow	76.05
Cost of Issuance	0.88
<b>Total Uses</b>	<b>\$96.73</b>

<sup>1</sup> \$'s in Millions - Series 2017BCD preliminary numbers subject to change

## 4. Schedule

- Weeks of November 20 and 27, 2017:
  - Calls with Rating Agencies
- Week of December 4, 2017:
  - Requested Receipt of Ratings (12/5)
  - Finalize POS and NOS
- December 5, 2017 - Post POS and NOS
- December 11, 2017 - Price bonds
- December 21, 2017 - Close bonds

November 2017						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

December 2017						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

*\* Dates subject to change depending on market conditions and other considerations*

■ Edward Adelman  
 Executive Director  
[eadelman@mscba.org](mailto:eadelman@mscba.org)  
 617-933-8337

■ Karol Ostberg  
 Chief Financial Officer  
[kostberg@mscba.org](mailto:kostberg@mscba.org)  
 617-933-8348