



The Bombshell Cheiron Report: The MBTA Just Got A \$1.485 Billion Pension Bill That It Can't Possibly Pay

By Greg Sullivan
June 2017

The MBTA released a report on Monday May 22, 2017 with extremely grave projections about the MBTA Retirement Fund's (MBTARF's) future finances. According to the T's actuarial consultant, Cheiron, Inc. of Washington, D.C., the MBTA's pension contributions will rise under the terms of its current contract from 18.04 percent of payroll in FY2017 to 36.0 percent in FY2035. Cheiron projects that the cost of the increase will total \$1.051 billion between FY2018 and FY2035, an amount that should make heads spin on Beacon Hill since, as explained below, the commonwealth will ultimately be responsible to pay the entire amount.

As if the \$1.051 billion projection were not bad enough, the news gets worse. The details of the MBTA report show that this \$1.051 billion shortfall is just one component of a three-part pension funding crisis. The MBTA faces a second unfunded shortfall of \$276 million from FY2018 to FY2035 to pay for the expected rise in annual pension contributions that will result from increased payroll amounts. Importantly, the projection shows that that this increase will take place even if the T's employer contribution rate were held at 18 percent.

Lastly, the MBTA faces a third pension shortfall of \$158 million for the increase in its 6.2 percent Social Security contribution due to payroll growth from FY2018 to FY2035.ⁱ Added together, the MBTA faces a projected \$1.485 billion funding shortfall for retirement expenses over the next 18 years.

The MBTA has virtually no way to pay for this \$1.485 funding shortfall (Fig. 1) without legislative intervention, except through fare increases or service cuts. This is largely due to the MBTA's annual operating deficit. The agency's fare and operating revenue cover only 44 percent of its operating expenses and 33 percent of total expenses, leaving no self-generated revenue to pay for the \$1.485 shortfall. Even with raising fares and cutting service on the table, this means that the MBTARF will become insolvent unless the legislature provides an additional \$1.485 billion in state funding or empowers the T to restructure the retirement system.

Figure 1. The MBTA faces \$1.485 billion in additional unfunded pension and Social Security expenses FY2018-FY035 (\$000,000s)

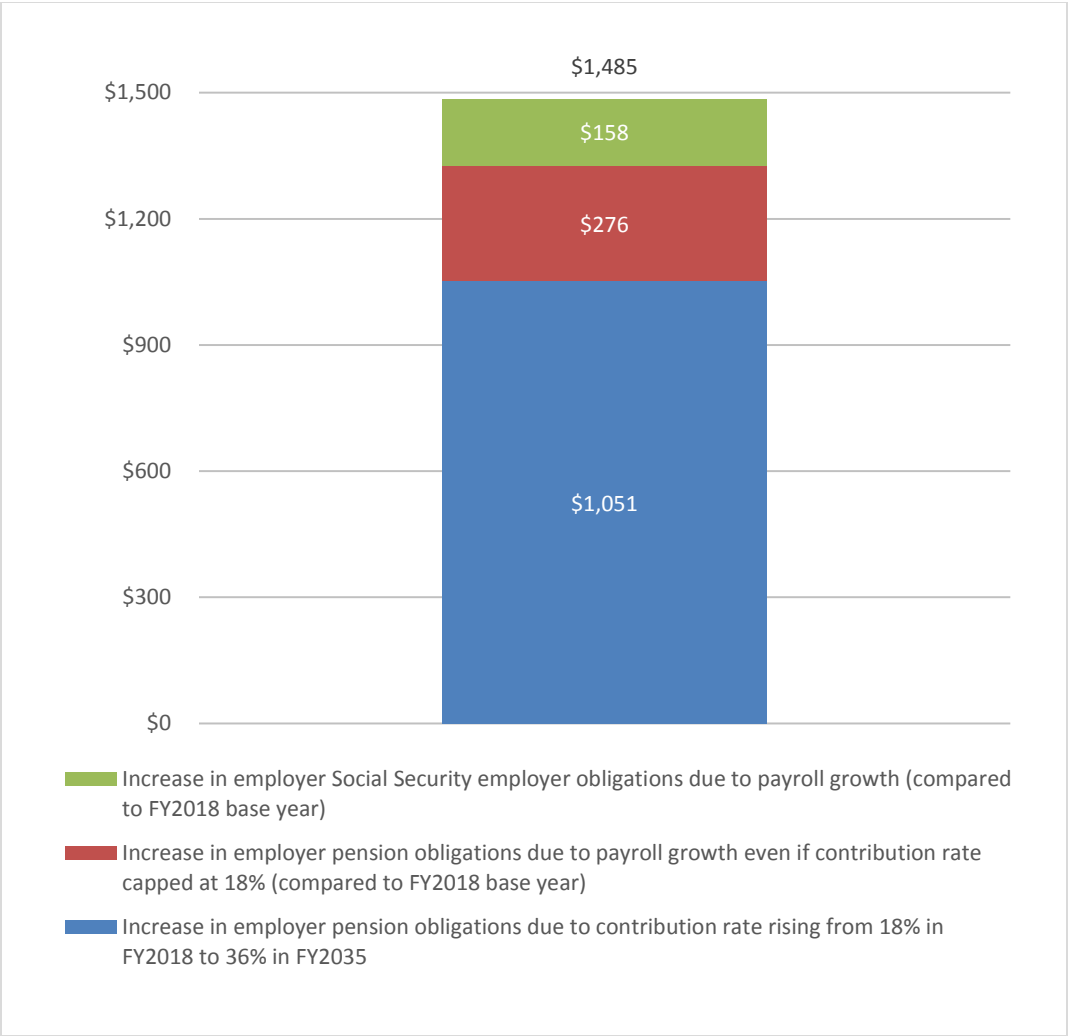


Figure 2 shows Cheiron’s projection that, under the terms of its current retirement contract, the MBTA will have to pay \$1.051 billion more between FY2018 and FY2035 than it would if its employer contribution rate were capped at the FY2018 level of 18 percent. To fund its actuarially projected obligations going forward under the terms of its current contract, the MBTA’s employer contribution rate will rise from 18 percent to 36 percent over this period.

Figure 2. Increase in MBTA’s employer pension obligations due to contribution rate rising from 18% in FY2018 to 36% in FY2035

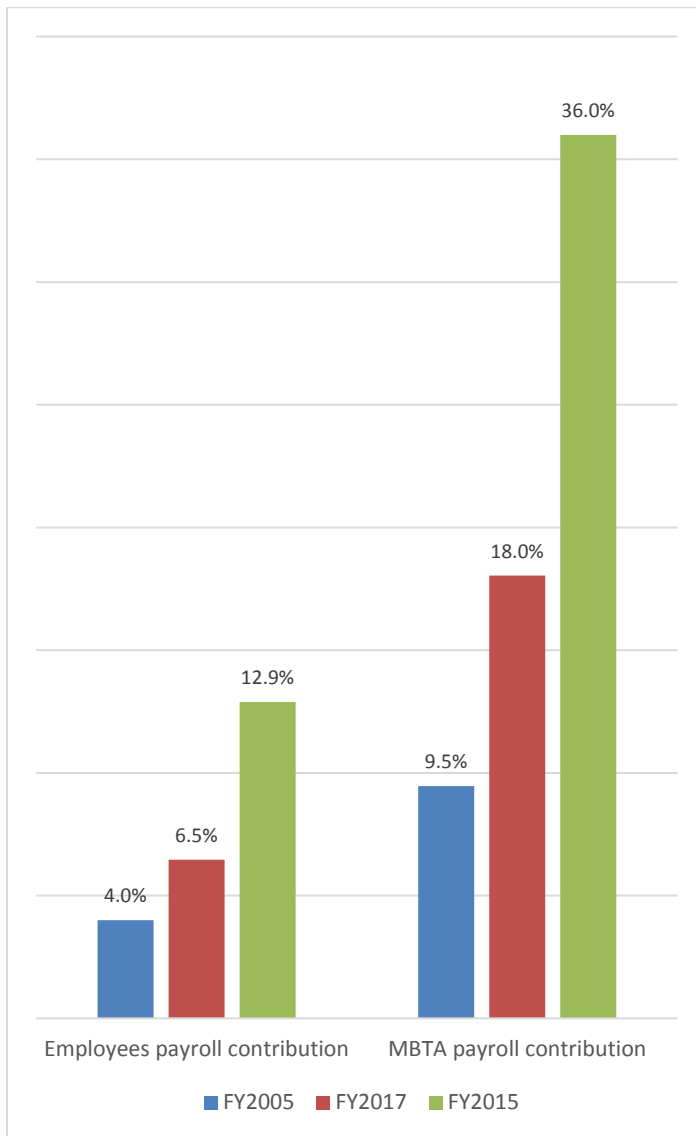
Fiscal Year	Annual employer contributions rise from 18% to 36% from FY2018 to FY2035	Annual employer contribution if capped at 18%	Increase due to employer contribution rate rising from 18% to 36% from FY2018 to FY2035
FY2018	\$91	\$83	\$8
FY2019	\$98	\$84	\$14
FY2020	\$105	\$86	\$19
FY2021	\$112	\$88	\$24
FY2022	\$119	\$89	\$30
FY2023	\$126	\$91	\$35
FY2024	\$134	\$93	\$41
FY2025	\$142	\$95	\$47
FY2026	\$151	\$97	\$54
FY2027	\$160	\$99	\$61
FY2028	\$168	\$101	\$67
FY2029	\$177	\$103	\$74
FY2030	\$185	\$105	\$80
FY2031	\$193	\$107	\$86
FY2032	\$201	\$109	\$92
FY2033	\$210	\$111	\$99
FY2034	\$219	\$113	\$106
FY2035	\$230	\$116	\$114
TOTAL	\$2,821	\$1,770	\$1,051

Under an adjustment formula contained in the July 1, 2002 Pension Agreement between the MBTA and its employees, 75 percent of the increase in actuarially required pension contributions is allocated to the MBTA and 25 percent is allocated to the members (“the 75/25 adjustment formula”). Importantly, this formula automatically to the current agreement and into the future agreements under an “evergreen provision.”

Because the formula shifts a disproportionate share of increased pension costs to the MBTA, the agency’s contribution rate has grown significantly and will continue to grow much faster than the members’ unless the contract is modified. Because of the adjustment formula, the MBTA’s contribution rate has increased from 9.47 percent on FY2005 to 18.04 percent in FY2017, an increase of 8.57 percent of payroll, while the employees’ contribution rate has increased from 4.00 percent on FY2005 to 6.46 percent in FY2017, an increase of 2.46 percent of payroll.

Because of the 75/25 adjustment formula, by FY2035 the MBTA’s employer contribution will be required to increase to 36 percent of payroll, while employees will be required to contribute 12.9 percent. This means that between FY2005 and FY2035, the MBTA will have increased its contribution by 26.5 percent of payroll (from 9.5 percent in FY2005 to 36.0 percent in FY2035), while employees will have risen by 8.9 percent of payroll (from 4.0 percent in FY2005 to 12.9 percent in FY2035).

Figure 3. MBTA and MBTA employee required payroll contribution rate (FY2005-2015)



In addition to the projected \$1.051 billion increase in pension contribution expenses, the MBTA will be responsible for another \$276 million in pension obligations from FY2018 to FY2035 in the form of contributions for the base growth in payroll of 2 percent per year—and this is even if the contribution rate remains at 18 percent. This amount is in addition to the \$1.051 billion shortfall described above. Figure 4 shows that the MBTA’s base pension contribution payments (held constant at 18 percent of payroll) will increase from \$83 million in FY2018 to \$116 million in FY2035 as payrolls rise. The total of extra payments above the FY2018 base year equals \$276 million over this period.

Figure 4. Annual increases in MBTA employer pension obligations due to payroll growth (with contribution rate capped at 18%) (millions)

Fiscal Year	Annual employer contribution with 18% Cap Imposed	Cumulative Increase in employer contributions due to payroll growth
FY2018	\$83	Base year
FY2019	\$84	\$1
FY2020	\$86	\$3
FY2021	\$88	\$5
FY2022	\$89	\$6
FY2023	\$91	\$8
FY2024	\$93	\$10
FY2025	\$95	\$12
FY2026	\$97	\$14
FY2027	\$99	\$16
FY2028	\$101	\$18
FY2029	\$103	\$20
FY2030	\$105	\$22
FY2031	\$107	\$24
FY2032	\$109	\$26
FY2033	\$111	\$28
FY2034	\$113	\$30
FY2035	\$116	\$33
TOTAL	\$1,770	\$276

The MBTA also faces a projected increase in Social Security contributions (6.2 percent of payroll) to cover annual payroll increases of approximately 2 percent. As shown in Figure 5, total payments above the FY2018 base year add up to \$158 million over this period.

Figure 5. Annual increases in MBTA Social Security payments due to payroll growth (millions)

Fiscal Year	Social security employer contributions rise due to wage increases	Increase in Social security employer contributions over FY2018
FY2018	\$36	Base year
FY2019	\$37	\$1
FY2020	\$38	\$2
FY2021	\$39	\$3
FY2022	\$40	\$4
FY2023	\$41	\$5
FY2024	\$42	\$6
FY2025	\$43	\$7
FY2026	\$44	\$8
FY2027	\$45	\$9
FY2028	\$46	\$10
FY2029	\$47	\$11
FY2030	\$48	\$12
FY2031	\$50	\$14
FY2032	\$51	\$15
FY2033	\$52	\$16
FY2034	\$53	\$17
FY2035	\$55	\$19
TOTAL	\$806	\$158

Figure 6 shows the total of the three extra payments described above: \$1.051 billion for the employer contribution rate growth, \$276 million base for payroll growth at the 18 percent employer contribution rate, and \$158 million for payroll growth at the 6.2 percent Social Security contribution rate. Together these extra payments above the FY2018 base year will total \$1.485 billion from FY2018 to FY2035.

Figure 6. Total unfunded pension and Social Security obligations (FY2018-FY2035)

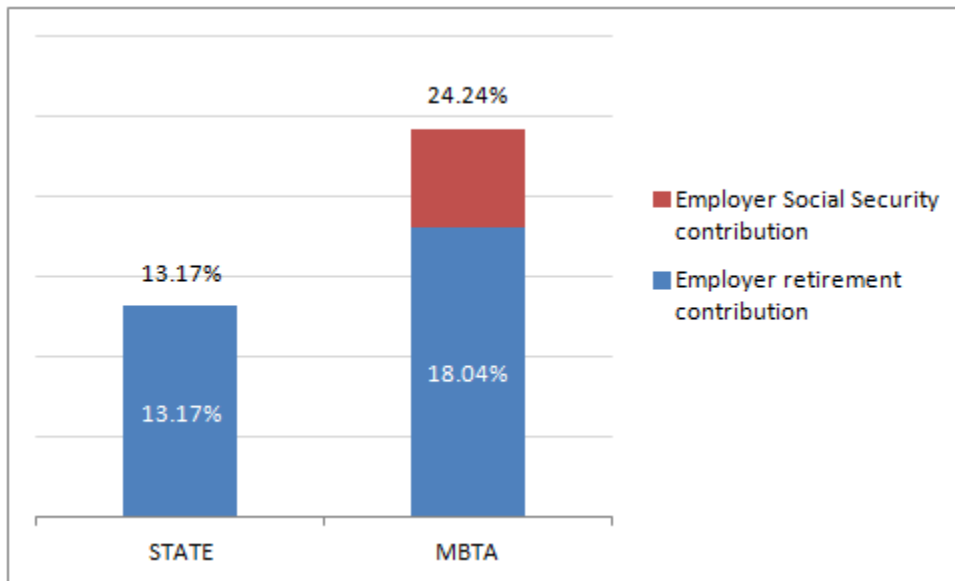
Fiscal Year	Increase in employer pension obligations due to contribution rate rising from 18% in FY2018 to 36% in FY2035	Increase in employer pension obligations due to payroll growth even if contribution rate capped at 18% (compared to FY2018 base year)	Increase in employer Social Security employer obligations due to payroll growth (compared to FY2018 base year)	Total Increase in employer pension and Social security obligations
FY2018	\$8	\$0	\$0	\$8
FY2019	\$14	\$1	\$1	\$16
FY2020	\$19	\$3	\$2	\$24
FY2021	\$24	\$5	\$3	\$32
FY2022	\$30	\$6	\$4	\$40
FY2023	\$35	\$8	\$5	\$48
FY2024	\$41	\$10	\$6	\$57
FY2025	\$47	\$12	\$7	\$66
FY2026	\$54	\$14	\$8	\$76
FY2027	\$61	\$16	\$9	\$86
FY2028	\$67	\$18	\$10	\$95
FY2029	\$74	\$20	\$11	\$105
FY2030	\$80	\$22	\$12	\$114
FY2031	\$86	\$24	\$14	\$124
FY2032	\$92	\$26	\$15	\$133
FY2033	\$99	\$28	\$16	\$143
FY2034	\$106	\$30	\$17	\$153
FY2035	\$114	\$33	\$19	\$166
TOTAL	\$1,051	\$276	\$158	\$1,485

Underlying problems driving MBTA pension expense increases

One major reason for the current MBTA pension crisis is that the agency makes much higher retirement contributions under its current pension contract than the commonwealth does to the state employee retirement plan. In FY2017, the pension agreement requires the T to contribute 18.04 percent of payroll to the MBTARF and an additional 6.2 percent to Social Security.ⁱⁱ By comparison, the Commonwealth contributes 13.17 percent of payroll to the Massachusetts State Employee Retirement System (MSERS) and does not contribute to Social Security.^{iii iv} The reason that the state does not have to contribute to Social Security for its employees is that Massachusetts already offered its employees a qualified pension plan at the time that the federal government expanded Social Security to cover public employees.

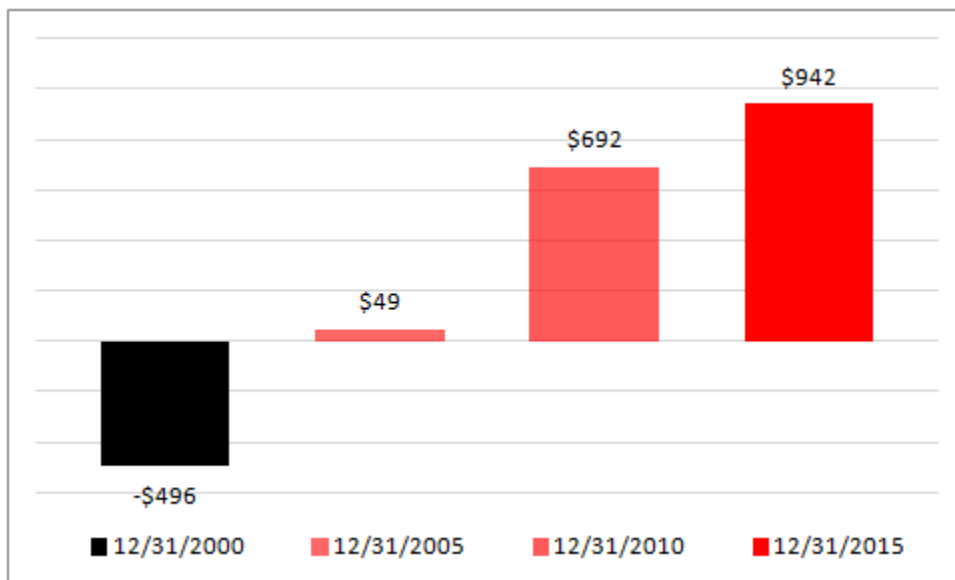
The MBTARF is virtually the only major public pension system in Massachusetts that contributes to Social Security, with both its employees and the MBTA contributing 6.2 percent of payroll each year. Most states that were not “grandfathered” out of making Social Security contributions offer pension plans that are coordinated with Social Security so the combined benefits of both retirement sources add up to a full pension benefit. In contrast, MBTA retirement benefits are far more generous than those that state employees receive. MBTA employees also receive Social Security benefits upon reaching the age of 65. For some of them, paying 6.2 percent of payroll on top of their own pension contribution presents a fiscal burden. Figure 7 offers a comparison of MBTA and state retirement contributions, showing that in FY2017 the MBTA is contributing a total of 24.24 percent of payroll for its employees (to MBTARF and Social Security) while the state is contributing 13.17 percent to the state employees’ retirement plan.

Figure 7. Comparison of employer contribution rates of the state and the MBTA (FY2017)



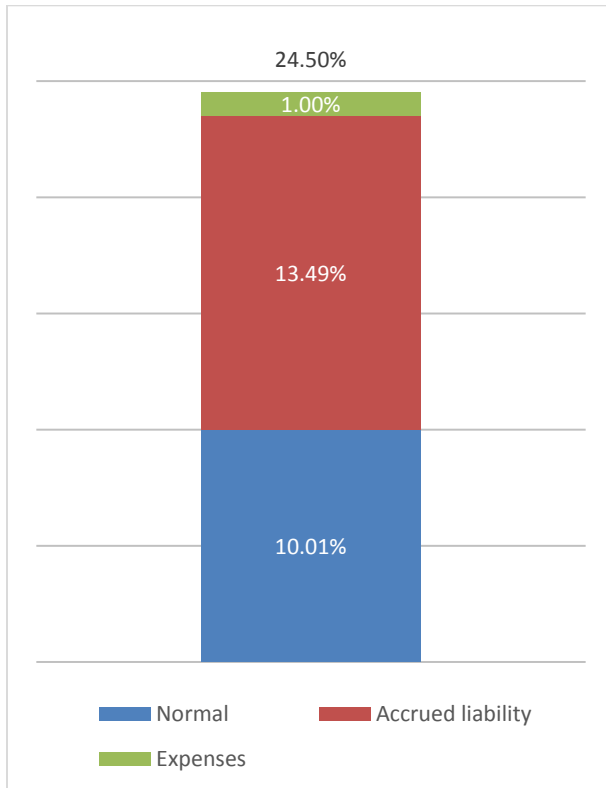
Another major contributor to the MBTA’s pension crisis is the MBTARF’s skyrocketing unfunded accrued liability. This is the obligation owed by retirement systems to employees in future years in excess of current assets and their projected growth. Figure 8 shows that, rather than having unfunded liability, the MBTARF had a \$496 million surplus as of December 31, 2000. This figure flipped to an unfunded amount of \$49 million on December 31, 2005^{v(vi)}, \$692 million on December 31, 2010^{vii(viii)}, and \$942 million on December 31, 2015. ^{ix(x)} This means the MBTARF’s actuarially determined unfunded accrued liability on December 31, 2015 (used to establish FY2017 contribution rates) was 22 times more than it was 10 years earlier.

Figure 8. Growth of unfunded accrued liability of MBTARF (December 31, 2000 - December 31, 2015)



This unfunded accrued liability growth is in large part responsible for the MBTA’s problems because the majority of the 24.5 percent of payroll contributed by the T and its employees to MBTARF in FY2017 pays for accrued liability.^{xi} The remainder goes towards normal obligations and administrative expenses (Figure 9).

Figure 9. MBTA payroll contributions by category (FY2017)



Conclusion

The current MBTARF pension contract expires on June 30, 2018 and MBTA leadership has notified state leaders in its detailed and sobering Cheiron report that the MBTA Retirement Fund needs crisis intervention. The T is virtually powerless to address this problem on its own because the current contract contains an “evergreen provision” that automatically extends terms of the existing agreement unless labor and management reach a new one. History teaches that under the MBTA’s restrictive final and binding arbitration system, T employees can rely on the arbitrator not to diminish existing rights.

In light of this extraordinary funding crisis, the MBTA’s Fiscal and Management Control Board (FMCB) should act to prohibit the T from executing any new contract that extends the current terms. To do otherwise would commit the agency to financial obligations it cannot fulfill. To address this crisis, the FMCB should seek one of the following four rescue solutions:

1. Request that the legislature make a commitment to provide \$1.485 billion in funding
2. Request that the legislature pass legislation to impose terms of the legislature’s 2013 state employee pension reform act on the MBTARF and mandate that the T retirement agreement be restructured to become an integrated Social Security/pension system similar to those used in virtually every other state
3. Request that the legislature suspend the MBTA’s final and binding interest arbitration law and, in its place, apply the one used by public safety systems, which would allow the FMCB to approve or disapprove the arbitrator’s decision based upon a determination of whether the MBTA can afford it
4. Declare the MBTA Retirement Fund insolvent under terms of the current agreement

-
- ⁱ The MBTA currently pays more than \$30 million per year in payments to Social Security.
- ⁱⁱ Massachusetts Bay Transportation Authority Retirement Fund, "Actuarial Valuation Report," July 2016. [http://www.mbta.com/uploadedfiles/Documents/MBTA_Retirement_Fund/MBTA%20Retirement%20Fund%20December%2031%202015%20valuation%20report%20\(jul16\)](http://www.mbta.com/uploadedfiles/Documents/MBTA_Retirement_Fund/MBTA%20Retirement%20Fund%20December%2031%202015%20valuation%20report%20(jul16).). Page 9.
- ⁱⁱⁱ Massachusetts Public Retirement Administration Commission, "State Retirement System Actuarial Valuation Report," January 1 2016. <http://www.mass.gov/treasury/docs/retirement/stateval15.pdf>. Funded Payroll: \$5,792,288,086, page 4; State Retirement System's allocation of the FY17 Commonwealth appropriation: \$763.1 million, page 2.
- ^{iv} Commonwealth of Massachusetts, "Information Statement – Comprehensive Annual Financial Report", November 1, 2016. <http://www.massbondholder.com/sites/default/files/downloads/Commonwealth%20Information%20Statement%20dated%20November%201%2C%202016%20%28with%20exhibits%29.pdf>. Actuarial Valuation as of January 1 2016 used for determination of FY2017 contributions: Funded Payroll \$5,792,288 (000s), page 38; State Retirement System Fiscal Year Actuarially Determined Contribution \$763 million, page 47.
- ^v Massachusetts Bay Transportation Authority, "Revised Report on an Actuarial Valuation of the Massachusetts Bay Transportation Authority Retirement Fund, Prepared as of December 31, 2005," August 2007. <http://www.mbta.com/uploadedfiles/Documents/Financials/MBTA%20Retirement%20Fund%20December%2031%202005%20valuation%20report.pdf>. Page 2.
- ^{vi} Note: The December 31, 2005 Actuarial Valuation is used to set contribution rates in FY2007. For more information, see page 3 of the "Revised Report" released in August 2007.
- ^{vii} Massachusetts Bay Transportation Authority Retirement Fund, "Report on an Actuarial Valuation of the Massachusetts Bay Transportation Authority Retirement Fund Prepared as of December 31, 2010," July 2012. <http://www.mbta.com/uploadedfiles/documents/MBTARetirementFundDecember312010valuationReportFinal.pdf>. Page 2.
- ^{viii} Note: The December 31, 2010 Actuarial Valuation is used to set contribution rates in FY2012. For more information, see page 3 of the "Revised Report" released in July 2012.
- ^{ix} Massachusetts Bay Transportation Authority, "MBTA Pension Update," June 27, 2016. http://www.mbta.com/uploadedfiles/About_the_T/Board_Meetings/MBTADebtandPensionHealthcareLiabilities.pdf. Page 17.
- Note: Market value adjustment per 6/23/16 updated valuation was \$1.074 billion. December 31 2015 actuarial valuation (for setting FY2017 contribution rates) was \$942 million, see [http://www.mbta.com/uploadedfiles/Documents/MBTA_Retirement_Fund/MBTA%20Retirement%20Fund%20December%2031%202015%20valuation%20report%20\(jul16\).pdf](http://www.mbta.com/uploadedfiles/Documents/MBTA_Retirement_Fund/MBTA%20Retirement%20Fund%20December%2031%202015%20valuation%20report%20(jul16).pdf) pg 3
- ^x Note: the market value adjustment per the 6/23/16 updated valuation was \$1.074 billion. The December 31, 2015 actuarial valuation (for setting FY2017 contribution rates) was \$942 million. For more info, see the MBTARF's July 2016 Actuarial Valuation Report (page 3).
- ^{xi} MBTARF "Actuarial Valuation Report," July 2016. Page 9.