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Rolling the Retirement Dice
Why the MBTA Should Steer Clear of Pension Bonds

By E.J. McMahon

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Introduction

The Massachusetts Bay Transportation Authority (MBTA) faces challenging budget shortfalls in the wake of the 2020 Covid-19 outbreak and its resulting impact on transit ridership. Fare revenues are projected to remain more than 25 percent below pre-pandemic levels in fiscal 2023, and the Authority will draw down reserves to help close a gap of nearly $300 million in a projected $2.6 billion budget.

Even before the pandemic, the MBTA's rising pension liabilities were a worsening and well-documented problem, prompting the agency's then-general manager to warn in 2019 that pension costs were "on an unsustainable trajectory."[1] Employer contributions to the MBTA Retirement Fund (MBTARF) had risen steeply, adding nearly $100 million to operating expenses over the past decade. Those costs are slated to continue rising in years ahead as the T seeks to chip away at a $1.3 billion unfunded pension liability—which can be blamed largely on the MBTARF's own poor investment practices, shortsighted management decisions and underfunding of its pension plan in the early 2000s.

Understandably distracted by its post-pandemic budget woes, the MBTA board has made little or no public mention of pension issues over the past two years, but a recent Authority request for bids from investment banks provided a hint of one "quick-fix" under consideration for the near future. The document revealed that the MBTA was seeking managers for a $360 million taxable pension obligation bond issue (POB). Under this gambit, the Authority would borrow money to eliminate a portion of an unfunded long-term pension liability estimated at $1.3 billion, or nearly triple its total payroll.

For the MBTA, a pension obligation bond would be a wrong turn at the worst possible time. It would only compound the financial risk already built into pension calculations that assume the Retirement Fund will earn 7.25 percent a year, a gamble with especially long odds in the current financial and economic climate. By substituting a "hard" debt service payment for the RF's current "soft" schedule of amortization payments from now through the 2030s, a POB would reduce the pension fund's flexibility at a time when the MBTA's own future is still fundamentally uncertain. It would be much like taking out a home equity loan to pay off a credit card cash balance, without generating any meaningful structural reforms that are needed to fix the actual issues.

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Basic and background

The T's Retirement Fund was established in 1948 by a trust agreement between the Authority and Local 589 of the Amalgamated Transit Union, its largest bargaining unit, better known as the Carmen's Union.[2] The Retirement Fund provides its members with a traditional defined benefit (DB) pension plan, guaranteeing a stream of post-retirement income, based on a formula taking account of an employee's age, peak average salary and career duration.

As with all DB plans, MBTARF benefits are not paid directly out of current employer revenues but from a larger pool of financial assets, replenished by a combination of investment earnings and by annual contributions from employers and employees, which are calculated as a percentage of total covered payrolls. Pension plans are considered fully funded when they have sufficient assets to cover all projected current and future obligations—a cash flow stretching for decades to come, across the remaining lifespans of the T's youngest vested employees.

Like nearly all Massachusetts public plans, the MBTA plan is far from fully funded, although it technically has a long-term plan for getting there.

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But how much funding constitutes "full"? For pension systems, the answer depends on complex actuarial calculations taking account of projected employee lifespans, salary increases, and inflation. Once all those factors are identified (and periodically updated to reflect changes in mortality rates, inflation expectations and actual experience) funding requirements hinge on the discount rate used to convert the projected cash flow into a present value.

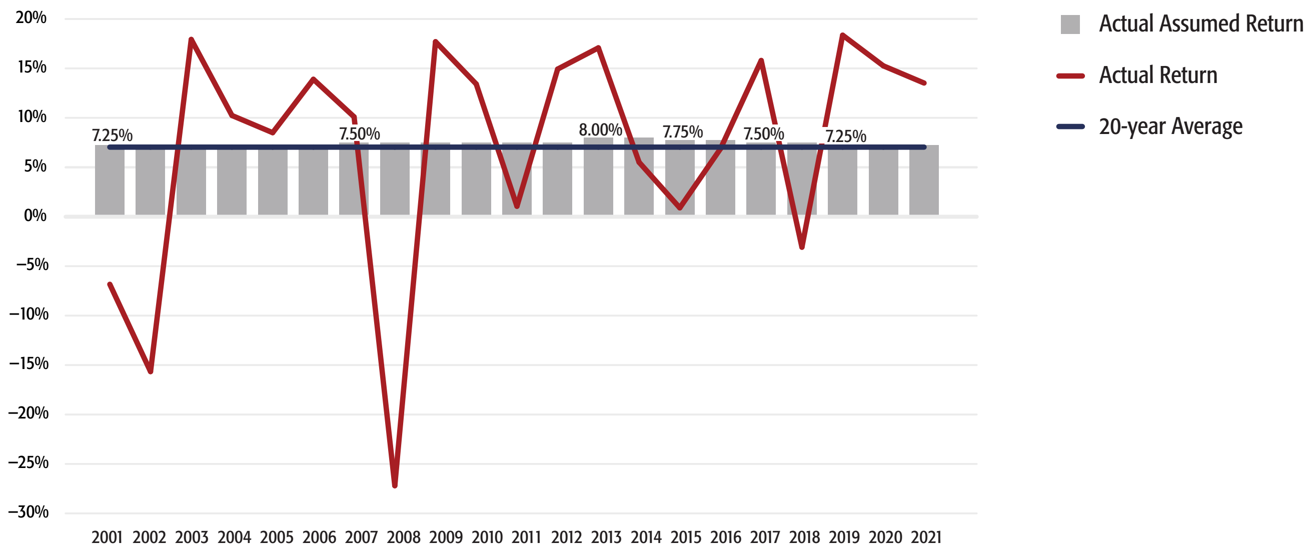
A discount rate is designed to reflect the time value of money. The lower the rate, the higher the annual contributions required to maintain or improve the funded level of all current and future pension obligations — and vice versa. For example, using an 8 percent discount rate — i.e., assuming principal will grow at 8 percent annually — a pension plan owing a $1 million lump sum payment in 15 years would be considered fully funded with an investment of $300,000 today. But with a discount rate of 4 percent, the required deposit would be nearly $549,000.[3]

If the MBTA was a private corporation, its employee pension fund would be required by federal law to discount its liabilities based on current and historic yields for low-risk assets such as high-quality corporate bonds. As of April, that rate was hovering around 4 percent.

However, like all publicly sponsored pension plans, the MBTARF conforms to a more permissive government accounting standard, which allows the fund to discount its liabilities at a rate identical to its assumed rate of return on investments. The key word is "assumed" — because future stock market performance is an "educated" guess by pension actuaries, based on historical trends modified by statistical probability modeling.

The MBTA's discount rate has been adjusted multiple times over the past 20 years within a range of 7 percent to 8 percent, as illustrated in Figure 1. Since 2018, the discount rate has been 7.25 percent, which matched the reported median for the nation's largest public funds that year.[4] In Massachusetts, most local funds were at 7.25 percent or higher as of 2020, while the Massachusetts State Employee Retirement System)(MSERS) nudged its rate down to 7 percent that year.[5]

Figure 1: Assumed vs. Actual Investment Returns for MBTA-RF, 2001–2021



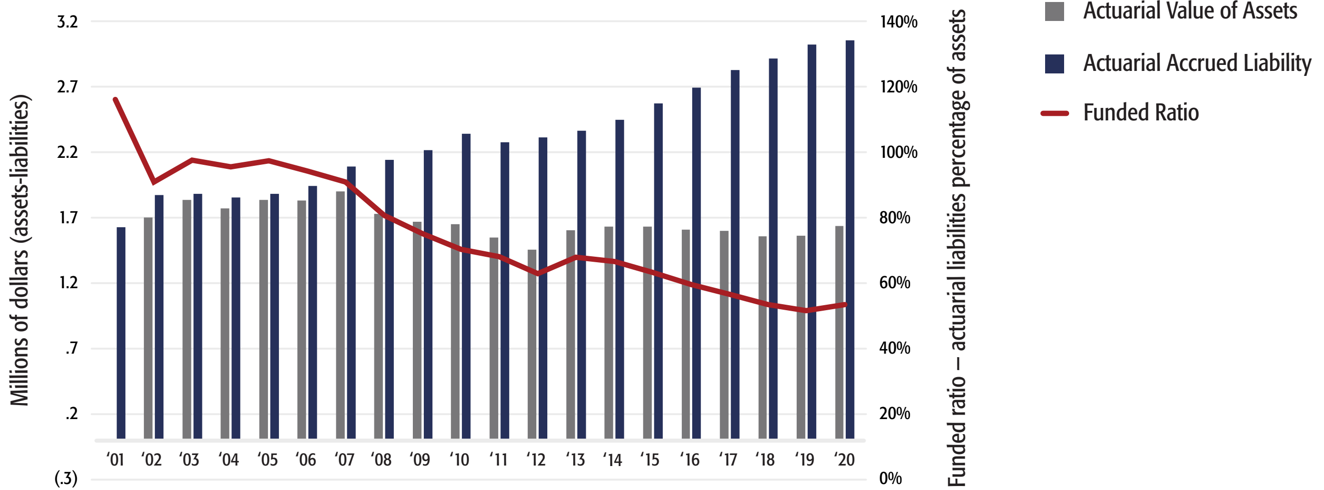
The T's pension fund in context

With assets valued at nearly $1.8 billion in fiscal 2020, the MBTARF was the fourth largest public pension plan in Massachusetts, exceeded only by the MSERS, the Boston city and Boston Teachers pension funds, and the pension fund of Middlesex County.

The MBTARF's reporting "funded ratio" — the quotient of its actuarial value of assets and actuarial accrued liabilities — has dropped sharply over the past 20 years, as shown by Figure 2. Estimated at more than 100 percent in 2001, and remaining above 90 percent for the next six years, the funded ratio by fiscal 2020 was down to 53.55 percent, meaning the MBTARC had barely half the assets needed to cover its projected liabilities.

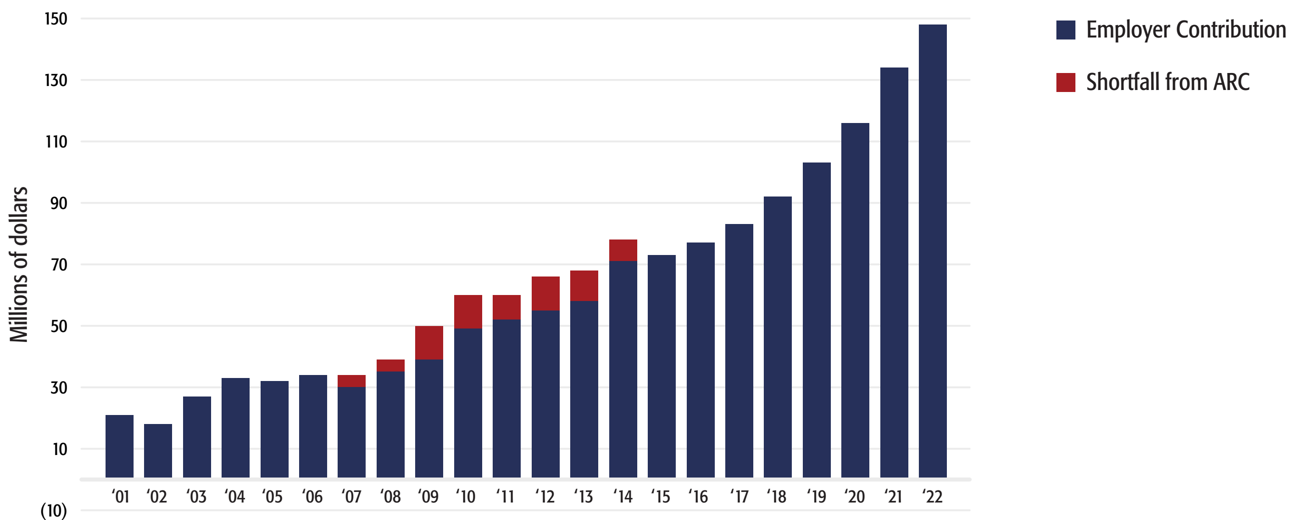
The MBTARF's reporting "funded ratio" has dropped sharply over the past 20 years.

Figure 2: "T" as in Troubling - Eroding Finances of the MBTA Retirement Fund, 2001–2020



As shown in Figure 3, employer contributions to the MBTARF more than doubled from 2001 to 2011, rising from $21 million to $52 million, and nearly tripled over the next decade, reaching $148 million as of 2021. During that period, the "normal" employer contribution required to finance newly accrued pension benefits changed very little, from 11.63 percent in 2000 to 12.13 percent in 2020. The big increase has been in the amount spent to "amortize" the retirement fund's growing unfunded liability, which now consumes two-thirds of total annual contributions. As of 2020,the employer contribution rate was 26.7 percent of covered salaries, while employees contributed 9.33 percent of their salaries on a pre-tax basis.

Figure 3: MSRB Employer Pension Contributions and Actuarially Determined Contribution,* FY2001–2021



* actuarially required contribution, or ARC, before 2015

Based on its own actuarial standards, the MBTARF had funded a smaller percentage of its actuarial liability than 50 of the Commonwealth's 68 local public pension plans that had reported 2020 valuations. The median Massachusetts pension plan had a funding ratio of 63 percent in 2020, well below the 73 percent aggregate funding ratio of the nation's top public plans that year.[6] MSERS reported a funded ratio of just 58 percent.

The MBTARF also stacks up poorly when compared only to its peers among the nation's handful of large regional transit systems, which face similar long-term budget challenges in the wake of the pandemic.

As shown in Figure 4, compared to the MBTA, the Chicago Transit Authority (CTA) is the only large public transit system whose main pension plan has a lower funding ratio and a larger unfunded liability relative to its payroll (numbers that would look even worse if the fund's discount rate also wasn't unusually high). Chicago's employer contribution rate is almost the same as the MBTA's, but fully half of the CTA's employer share was needed to cover debt service on a 2008 pension obligation bond. By contrast, with all the usual shortcomings of public government retirement plans, the pension funds of the New York City, Washington, and San Francisco transit systems all are in much better shape than the MBTARF—even more reason to be concerned.

The MBTARF stacks up poorly when compared only to its peers among the nation's handful of large regional transit systems.

Figure 4: Pension Funding Measures for Largest U.S. Mass Transit Systems as of 2020 fiscal years[7]

	Boston MBTA[A]	New York City Transit Authority[B]	Chicago Transit Authority[C]	Washington Metro[D]	San Francisco BART[E]
Active Transit* Employees	5,674	38,336	8,078	8,671	3,387
Net pension liability (000s)	$1,285,000	$5,150,000	$1,832,000	$775,092	$622,836
Actuarial discount rate	7.25%	7.00%	8.25%	7.00%	7.15%
Pension Funded Ratio[F]	53.6%	76.8%	53.3%	81.6%	75.7%
Total Employer Pension Contribution (000s)	$116,286	$882,690	$308,000	$133,500	$77,622
Employer Contribution % of covered payroll	26.7%	23.4%	26.6%	16.8%	19.3%
Employee contribution	9.33%	3%–6%	13.32%	3.0%	6.25%
Net liability as percentage of payroll	279%	146%	286%	102%	188%

* Excluding police, non-union executives, commuter rail, and non-transit subsidiaries
A MBTA figures are for Retirement Fund only
B New York City Employee Retirement System members only; data are TA's proportionate share of NYCERS
C Chicago Transit employer contribution includes 6% for POB debt service
D Local 689 plan
E BART pensions funded through Calpers; BART does not participate in Social Security
F MBTA, NYCTA and CTA funded ratios are Actuarial Assets/Actuarial Liabilities. Washington Metro and BART ratios calculated on basis of net pension liability, which yields slightly higher values

Fund performance

While the MBTARF's audited financial and actuarial statements for 2021 are not due for release until mid-2022, the funded ratio for T pensions is likely to have improved on the strength of a reported 13.52 percent return last year. More recently, however, the outlook has dimmed considerably.

With an asset mix similar to those other public pension funds, the MBTARF began the year with nearly half its assets in domestic stocks and international equities—which have slumped badly since the end of 2021. In the first quarter of 2022, the MBTARF's investments lost 3.88 percent[8]—somewhat worse than the 3.01 percent median loss reported for all public pension funds with assets of more than $1 billion.[9] By April, the T's pension fund losses for the year had increased to 5.38 percent.[10] To achieve its 7.25 percent assumed return, the fund will need to earn 13.3 percent over the last eight months of 2022. However, continuing financial market trends through May pointed towards further losses in an uncertain economic environment rocked by high inflation, the Russia-Ukraine war, and continuing supply-chain snags.

Measured by its own current discount rate of 7.25 percent, the MBTARF had a total pension liability of $3.07 billion as of 2020, resulting in a net unfunded liability of about $1.3 billion. But as shown in Figure 5, the liability is $3.37 billion if the discount rate is reduced by a single percentage point. The liability rises above $4 billion if discounted by the most recent yield on high-quality corporate bonds, and to $4.7 billion using the 3 percent yield of 30-year Treasury bills as of late May. In other words, discounted as a nearly risk-free proposition, the MBTA's pension promises are worth at least $1 billion more than currently assumed.[11]

Figure 5: Alternative Measure of Pension Funded Status What the MBTARF Owes at Different Discount Rates* [12]

Discount Rate	Total Pension Liability (000s)	Net Fiduciary Position[A]	Unfunded Liability	Funded Ratio
7.25%	$3,055,123	$1,769,941	$1,285,182	57.9%
6.25%	$3,366,096	$1,769,941	$1,596,155	52.6%
4.37%	$4,077,785	$1,769,941	$2,307,844	43.4%
3.00%	$4,700,896	$1,769,941	$2,930,955	37.7%

* As of 12/31/2020

A Reflects market value of assets on measurement date

Questionable investment practices also have played an important role in the MBTARF's financial deterioration. As documented in a 2016 Pioneer Institute report, the fund would have earned an additional $900 million from 2001 through 2014 if its funds had been deposited in the better-performing state pension fund during that period. Moreover, the same report noted, the fund "has been plagued by scandals and resisted efforts to open its books to public scrutiny."[13]

In more recent years, the MBTARF has begun steering a small portion of its assets to the Pension Reserves Investment Management Trust Fund, which manages funds for the state MSERS and several of the Commonwealth's largest local systems. The MBTARF's investment returns have been comparatively strong since 2018—but not strong enough to significantly improve its funded ratio.

The MBTARF's poor investment management and performance has been exacerbated by a combination of bad luck and shortsighted funding decisions on the part of both the pension fund and the Authority itself. As shown in Figure 1, the MBTARF sustained big losses in both 2001 and 2002—a not-uncommon result for pension funds, considering market conditions during that period. Based on Wall Street's rebound over the next four years, however, the MBTARF chose in 2007 to increase its assumed rate of return from 7.25 percent to 7.5 percent. The timing of this move couldn't have been worse: the very next year, the MBTARF's investment portfolio lost 28 percent amid the global financial crisis.

The MBTARF's poor investment management and performance has been exacerbated by a combination of bad luck and shortsighted funding decisions.

Self-inflicted wounds

The 2007 increase in the MBTARF's assumed rate of return automatically raised the discount rate as well, which by itself would have reduced the actuarially required employer contribution to the pension fund. Yet that same year, the MBTA also began to shortchange the fund. From 2007 through 2014, the Authority underpaid its annual pension contribution by a cumulative total of $66 million. If that money had been added on schedule to the asset pool, it would have grown to $98 million by 2014, and to more than $183 million by the end of 2021.

Capping off these maneuvers, the MBTARFin 2013 hiked its assumed rate of return to 8 percent. It then lowered its sights to 7.75 percent in 2015, 7.5 percent in 2017, and the current level of 7.25 percent in 2019.

Throughout these changes, there was one constant: benefits kept rising, nearly doubling from $96 million in 2001 to $170 million in 2011 as shown in Figure 6 . Payments reached $221 million in 2020—a slower pace in the last decade, but much of the total liability reflects the fund's failure to keep pace with those previous increases.

MBTARF's rising costs also reflect the exceptionally "mature" profile of its membership, which as of 2020 consisted of 5,674 active employees (who were required to contribute 9.33 percent of their salaries to the fund) and 6,710 retirees and other annuitants (who drew money out of it). The fund's low active-to-annuitant ratio of 0.845 is a significant driver of the MBTA's pension costs. For all state funds nationally, the ratio as of 2020 was 1.295 active members to annuitants; in Massachusetts, the state fund's ratio was 1.358, and only three out of 105 local pension funds in the Commonwealth had ratios below 1.000.[14]

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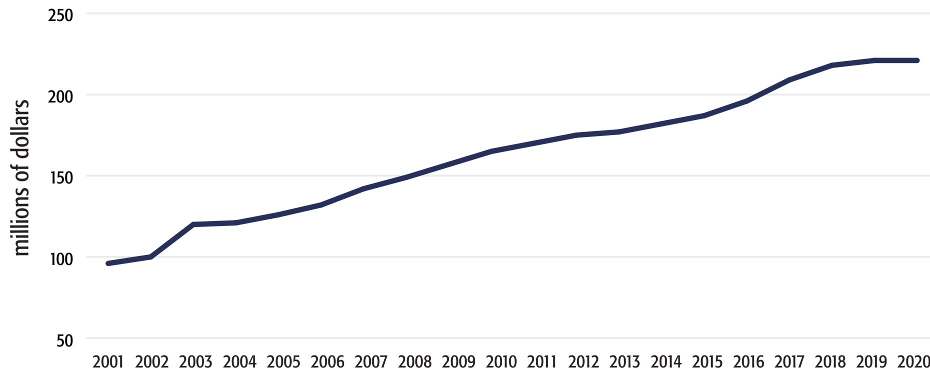
MBTA Retirement Fund Benefits Paid, 2001–2020[15]



The MBTARF's low active-to-annuitant ratio largely reflects a benefit structure that, until late 2012, allowed the T's employees to retire with full benefits after just 23 years of service, regardless of age. Pursuant to a 2012 agreement between the Authority and its unions, employees hired since December 2012 have to work at least 25 years and be at least 55 years old to draw a full benefit, which remains generous even by public-sector standards.[16] Meanwhile, as of 2020, roughly half of RF's active members were pre-2012 hires still eligible for the lucrative and costly "23 and out" benefit.[17]

Figure 7: The Amortization Outlook: How the MBTA-RF Unfunded Liability Supposedly Will be Paid Back*

	Projected 19-Year Amortization Schedule of Unfunded Liabilty	Interest rate	Alternative exhibit: Flat Payment
2020	100,594	1.04	135,070
2021	104,618	1.04	135,070
2022	108,802	1.04	135,070
2023	113,155	1.04	135,070
2024	117,681	1.04	135,070
2025	122,388	1.04	135,070
2026	127,284	1.04	135,070
2027	132,375	1.04	135,070
2028	137,670	1.04	135,070
2029	143,177	1.04	135,070
2030	148,904	1.04	135,070
2031	154,860	1.04	135,070
2032	161,054	1.04	135,070
2033	167,496	1.04	135,070
2034	174,196	1.04	135,070
2035	181,164	1.04	135,070
2036	188,411	1.04	135,070
2037	195,947	1.04	135,070
2038	203,785	1.04	135,070
2039	211,936	1.04	135,070
Total Amortization Payments	**2,995,497**		**2,701,400**

* According to the MBTA-RF's 2020 ACFR

For all its past missteps, the MBTARF has at least laid out a roadmap for backfilling its current pension liability. As shown in Figure 7, the combined employer and employee contributions for 2020 included $100 million as first installment on a schedule intended to fully amortize the unfunded liability for the end of the 2030s. Under the current plan, that would be boosted by 4 percent a year, reaching $143 million by 2029 and $211 million by the end of the period, with payments ultimately totaling about $3 billion. (The actuary also sketched out alternative schedules that included flat payments of $135 million a year for all 19 years, which would cost more through 2028 but produce savings of nearly $300 million by the end of the period.)

The schedule for amortizing the unfunded liability shares the same underlying flaw as the MBTARF's accounting in general: it is premised on investment returns that won't necessarily materialize.

The MBTARF's accounting is premised on investment returns that won't necessarily materialize.

A free-lunch illusion

Pension Obligation Bonds, or POBs, were first conceived in the 1980s, when most public pension funds were investing heavily in low-risk assets such as U.S. Treasury bonds, which then paid higher rates than tax-exempt municipal debt. In 1985, Oakland, California, was the first U.S. municipality to reduce pension obligations by selling its own tax-exempt bonds and depositing the proceeds in the pension fund—which, in turn, used the proceeds to buy Treasury bonds paying higher interest. The rate spread more than covered debt service on the borrowing—a textbook arbitrage that reduced pension costs at no net financial risk to taxpayers or retirees.[18]

The original POB arbitrage window—effectively subsidized by the federal government—closed with the enactment of the 1986 federal tax reform law. But in ruling out the use of tax-exempt state and local bonds for pension financing, the new law continued to allow states and localities to issue higher-interest taxable bonds for the same purpose.

By the 1980s and 1990s, pension funds across the country had begun shifting their asset allocations into a booming stock market, which offered a combination of higher rewards coupled with higher risk. Pension fund managers cited strong stock market returns to justify raising their assumed rates of return (and discount rates) to new highs, typically topping 8 percent. This fueled new appetites for a new generation of POBs.

By the early 2000s, states and local governments had issued hundreds of taxable POBs totaling well over $100 billion, with much of the dollar volume concentrated among multiple state and local level issues in New Jersey, California and Illinois. Reviewing the initial outcomes of these POBs, the Center for Retirement Research at Boston College found the bonds had a negative real rate of return from 1992–2009, but showed small gains when the time period was extended to 2014.

Every study of POBs agrees that timing and duration of bond issues matter greatly. Bonds floated at the end of stock market run-ups (which describes the situation in mid-2022) are most likely to lose money. Another pattern noted by studies of POBs is that they are most commonly issued by financially stressed government entities that have already dug themselves into deep pension liability holes.

An example of how POBs can go wrong was provided by one of the MBTA's peer organizations, the (larger) Chicago Transit Authority (CTA). In 2008, the Second City's transit system floated a $2 billion POB with the goal of "lifting the burden of unfunded pension liabilities from the CTA's operating budget, [so] it can more appropriately be focused on delivering high-quality service," as the agency's chairman put it in February of that year.[19] As of 2007, the Authority's combined retirement plan was 30 percent funded, and state legislation allowing the POB issue set a goal of reaching 60 percent through 2039 and 90 percent by 2060.

The timing of the Chicago Transit POB turned out to be awful, coming just as the stock market was about to crash, demolishing the pension fund's underlying assumed rate of return. As of 2020, a dozen years after the POB issue, the CTA's funded ratio was barely 53 percent—and would have been significantly lower if the CTA pension fund was not still discounting its liabilities at 8.25 percent, reflecting one of the highest assumed return rates of any pension fund in the country.

Finance officers: just say "no"

In 2015, the Government Finance Officers Association (GFOA) issued a simple and unequivocal advisory: "State and local governments should not issue POBs."

Such transactions, the GFOA warned, "involve considerable investment risk" and are "very speculative." The advisory continued:

> "Failing to achieve the targeted rate of return burdens the issuer with both the debt service requirements of the taxable bonds and the unfunded pension liabilities that remain unmet because the investment portfolio did not perform as anticipated. In recent years, local jurisdictions across the country have faced increased financial stress as a result of their reliance on POBs, demonstrating the significant risks associated with these instruments for both small and large governments."[20]

"State and local governments should not issue POBs."

The GFOA reaffirmed this guidance in February 2021, by which time public pension funds were nonetheless entertaining a new wave of POB proposals, inspired by record-low interest rates on taxable municipal debt.[21] Since March 2021, despite GFOA's advice, at least 78 more taxable pension obligation bond issues have been floated by government entities across the country, including POBs issued in late 2021 by the Massachusetts municipalities of Quincy ($475 million), Andover ($165 million) and Brockton ($300 million).

In Brockton's case, for example, the city issued pension bonds in November at a weighted 2.62 percent interest rate, betting that the pension fund will deliver on a (newly reduced) assumed annual return of 6.75 percent over the next 15 years. The deal hit the market when municipal borrowing rates were close to all-time lows. But as soon became apparent, Brockton also made its POB wager at a time when stock prices were close to peaking. Given current market trends, the Brockton Retirement Board (and its counterparts in Quincy and Andover) probably lost money through the first five months of 2022. If that trend continues, the average return over the remaining life of the bonds must exceed the original assumption — and the municipalities must fully fund their pensions — if the transactions are to deliver on promised net savings.

A POB for the T?

In December 2021, the MBTA posted a Request for Responses from investment banks interested in serving as senior managers and co-managers for three categories of forthcoming bond issues. In addition to seeking proposals for bond issues to refinance $411 million in existing debt and $443 billion in new capital project financing, the bid document contained this passage under the heading of "Pension Bonds":

> The Authority is also considering a Pension Bond issuance (the "Pension Bonds") to provide funds to the MBTA Retirement Fund (the "MBTARF"). The preliminary plan of finance for Pension Bonds includes issuing taxable bonds to generate net proceeds of $360 million for the MBTARF. The issuance of the Pension Bonds is contingent on the approval of reforms related to negotiations between the MBTARF and its pensioners. The proceeds of these bonds will be invested along with the assets currently held with the MBTARF to decrease the Authority's long-term pension liability.[22]

The preliminary plan of finance for Pension Bonds includes issuing taxable bonds to generate net proceeds of $360 million for the MBTARF.

The bid document left unexplained why the MBTA would consider a pension bond issue totaling only $360 million, a small slice of the $1.3 billion unfunded liability, and the duration of the bond issue (which might typically range from 15 to 30 years). Investment bank responses to the request have not been publicly released, but it's not hard to guess at the basic investment bank pitch. It would have gone something like this:

With municipal bonds yields near historically low levels, the MBTA now has a golden opportunity to reduce its unfunded pension liability. It can borrow at a rate significantly below the 7.25 percent return the pension fund's assets are expected to earn over time, using the net proceeds to reduce pension funding costs. The Authority could borrow at less than 3 percent, invest that money in pension assets expected to earn 7.25 percent, pay off some of the pension debt and in the process reduce pension contributions.

One variable has changed since the bid notice was issued in December. Interest rates on investment-grade taxable municipal debt, below 3 percent near the end of the year, have since risen by more than a percentage point.[23] Yet even with somewhat elevated bond yields, the argument for a POB would be little changed: the Authority could borrow at 4 percent, invest at 7.25 percent, and effectively use the spread to reduce pension costs. Over time, the argument goes, the debt service on the bonds (which must be paid) will be lower than the investment earnings (which may or may not materialize).

Proposals from would-be underwriters are likely to downplay what the GFOA termed the "considerable risks" of issuing POBs. If anything, however, the MBTA should be even less risk-tolerant than most government entities looking for a painless quick fix to their pension woes. The Authority's financial outlook is already clouded by rising inflation and fundamental changes in commuting patterns that threaten to permanently reduce ridership revenues. Betting the proceeds of a POB on an "assumed" investment return is a gamble the T can't afford.

If anything, however, the MBTA should be even less risk-tolerant than most government entities looking for a painless quick fix to their pension woes.

Any pension bond underwriting pitch also is likely to downplay the impact of volatility in returns. For example, the MBTARF's compound annual return from 2000 to 2020 was 7.04 percent, slightly below the assumed average of 7.48 percent. But the earnings path across those 20 years was anything but smooth, as shown in Figure 1. The MBTARF's investment earnings effectively rode a roller-coaster of drops, spikes, crashing in 2008 and rebounding in 2009, all of which produced an annual average return of just 3 percent by 2010. In the following decade, earnings fell below assumptions in five out of 10 years, although the net gain averaged 9 percent. By adding a fixed annual debt service payment to funding calculations, a POB would actually compound the negative impact of such volatility.

Even without pension borrowing, the MBTARF is understating its long-term liabilities by failing to properly account for risk. If it did so, it would be discounting liabilities at a rate roughly equaling the current likely yield on a POB.

Accurate, risk-adjusted financial accounting would clarify a fundamental challenge the MBTARF and its government overseers clearly would prefer to ignore. The true cost of the Authority's pension promises is much higher than management or labor has ever been willing to acknowledge.

Conclusion

Several factors contributed to the T's pension woes, many of them all too common among pension funds, especially in Massachusetts. The MBTARF's 20-year cycle of underfunding was a product of mismanaged investments, misleading and self-deceptive actuarial accounting practices, and failure to collect the full required employer contribution to the pension fund during a financially critical eight-year period. The underlying problem: gratuitously generous benefits, which left the T supporting more retired workers and beneficiaries than there are employees contributing to the pension fund.

The financial condition of the MBTARF appears to have and continues to receive little or no attention at the MBTA's public board meetings since 2019. To be sure, the MBTA's overseers have been distracted in the meantime. Since the spring of 2020, the pandemic crash in ridership revenues has created a budget gap so large that the pension shortfall has paled in comparison. But pension funding will remain a real and growing problem for the T, even as elected officials call for major capital enhancements and reduced or even free fares.

If the T shut down half its trains and laid off half its workforce tomorrow, its retirement fund would still be contractually bound to make roughly $230 million in pension payments this year, rising to more than $300 million a year within the decade. If the authority skips or underpays its scheduled employer contribution—now $138 million, forecast to hit $147 million even if the annual growth rate slows in line with an optimistic forecast between now and 2027—it will hasten the day when it begins to run out of money.

The notion of issuing debt to cover a portion of the MBTARF pension liability came out of nowhere, as far as the public is concerned. An allusion to labor negotiations in the request for underwriter bids suggests that the MBTA may be considering the gambit as part of some sort of deal with the T's unions to change the pension equation. But taking on any level of bonded indebtedness in exchange for another 2012-style benefits tweak would just be a quick fix pointing to a deeper future hole. It wouldn't be in labor's best interests, either.

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A pension bond would only elevate the stakes of the MBTARF's long-term gamble on a level of asset return assumptions that Michael Bloomberg, the former New York mayor, once compared to a guarantee from Bernie Madoff.[24] As things now stand, a prolonged bear market on Wall Street could push the MBTARF into its deepest financial hole yet, and the "hard" debt of a POB would only pull it further down.

To protect the long-term interests of taxpayers, customers and employees alike, the MBTA and the Retirement Fund should commit to fundamental reform on both sides of the pension equation. Steps in the right direction would include:

- Rein in the pension benefits of future retirees, not excluding current employees, focusing on changes to minimum retirement age and service requirements, elimination of pension spiking from non-base pay such as unused vacation pay
- Unlike state employees, MBTA employees participate in Social Security. The MBTARF should begin to follow the generally accepted practice of adjusting pension payments to retirees upon commencement of Social Security benefits.[25]
- Establish a long-term funding goal and amortization schedule based on a risk-free discount rate adjusted with an explicit margin for expected equity and corporate bond premiums, as recommended by the Blue Ribbon Panel of the Society of Actuaries.[26]
- Apply savings from benefit changes to shift to a flat-payment amortization schedule based on the adjusted discount rate, which would more quickly reduce the liability in the short run and significantly reduce costs in the long run.
- Adopt a formal MBTA policy statement banning the use of bonds or fixed-debt financing of Retirement Fund pension costs.

Endnotes

1 “MBTA pension fund faces hard times after 2018 losses,” Salem News, Feb. 25, 2019. https://www.salemnews.com/news/state_news/mbta-pension-fund-faces-hard-times-after-2018-losses/article_fc2b974b-c7cb-5e47-8357-64f2fc487d86.html

2 Overseeing the fund is a seven-member board consisting of two trustees designated by the Local 589; one elected by other union employees of the MBTA; and three appointed by the board of the Massachusetts Department of Transportation. A seventh, elected by the other six trustees, votes only in case of a tie.

3 Biggs, Andrew G, “Understanding the True Cost Of State and Local Pensions,” *State Tax Notes,* Vol. 63, No. 7, 2012.

4 NASRA public funds survey

5 A pension plan adopting a lower discount rate will need to make larger annual contributions — but will also be more consistently better funded. Leading the way in this category is the New York’s State and Local Retirement System, which last year reduced its discount rate to 5.9 percent, the latest in a series of discount rate reductions since. As of 2021, the NYSLERS reported an actuarial funded ratio of 100 percent, even discounted at the much lower T-bill rate, the funded ratio was 65 percent.

6 https://www.nasra.org/publicfundsurvey

7 Transit authority audited financial statements and reports

8 MBTA Retirement Fund Minutes of Regular Meeting, March 18, 2022, https://mbtarf.com/wp-content/uploads/2022/04/March-2022.pdf
The initial 2022 investment performance estimates did not include hedge funds, private equity funds and other alternative asset classes, whose valuations tend to lag the publicly traded equities market by several months.

9 “Pensions’ Bad Year Poised to Get Worse,” *Wall Street Journal,* May 10, 2022. https://www.wsj.com/articles/pensions-bad-year-poised-to-get-worse-11652175002?page=1

10 MBTA Retirement Fund Minutes of Regular Meeting, April 15, 2022, https://mbtarf.com/wp-content/uploads/2022/05/April-2022.pdf

11 The net pension liability measure is slightly different from the “actuarial” funded measure because it uses a current, latest year market value of assets, rather than asset values “smoothed” over a five-year period.

12 MBTARF Annual Comprehensive Financial report, author’s calculations

13 Atanasov, Iliya, “The Reckless Cost of Investment Mismanagement at the MBTA Retirement Fund,” Pioneer Institute for Public Policy Research, June 2016. https://pioneerinstitute.org/wp-content/uploads/dlm_uploads/MBTARFRecklessCost.pdf

14 The three were Haverhill, Quincy and Reading. Out of that group, the lowest active-annuitant ratio as of 2020 was 0.920.

15 MBTA Retirement Fund annual financial reports

16 The annual pension is calculated as average pay across the employee’s three highest-earning years, including any unused vacation pay, multiplied by 2.46 percent per year of creditable membership service, with the benefit capped at 75 percent of higher annual pay. After age 62, MBTARF retirees also can claim federal Social Security retirement benefits without any offsetting adjustment in their pensions.

17 MBTARF, FY 2020 Annual Comprehensive Financial Report, page 135.

18 In 1981, for example, highly rated municipal debt yielded 8.51 percent, while 30-year Treasury bond paid 11.43 percent. See https://www.govinfo.gov/content/pkg/ERP-2012/pdf/ERP-2012-table73.pdf

19 “CTA Readies for Pension and Healthcare Bond Issuance,” Chicago Transit Authority press release, Feb 26, 2008. https://www.transitchicago.com/cta-readies-for-pension-and-healthcare-bond-issuance/

20 GFOA Advisories, Pension Obligation Bond, Board Approval Date Jan. 1, 2015, at https://www.gfoa.org/materials/pension-obligation-bonds

21 “GFOA Committees Affirm Guidance That State and Local Governments Should Not Issue Pension Obligation Bonds,” February 2021 press release at https://www.gfoa.org/materials/pension-obligation-bonds-february-release

22 MBTA Request for Responses 187-21: 2022 Bond Financing Projects COMMBUYS Bid Number: BD-21-1206-40000-40000-69266

23 S&P Taxable Municipal Bond Index, at https://www.spglobal.com/spdji/en/indices/fixed-income/sp-taxable-municipal-bond-index/#overview

24 “Public Pensions Faulted for Bets on Rosy Returns,” *New York Times,* May 27, 2012. https://www.nytimes.com/2012/05/28/nyregion/fragile-calculus-in-plans-to-fix-pension-systems.html?searchResultPosition=1

Bloomberg’s full quote, concerning a plan to lower the discount rate for calculating New York City municipal pensions: “The actuary is supposedly going to lower the assumed reinvestment rate from an absolutely hysterical, laughable 8 percent to a totally indefensible 7 or 7.5 percent. If I can give you one piece of financial advice: If somebody offers you a guaranteed 7 percent on your money for the rest of your life, you take it and just make sure the guy’s name is not Madoff.” The rate subsequently was lowered to 7 percent — not immediately, but as a scheduled amortization goal.

25 To be sure, with inflation rising, unions will balk all the more at the suggestion of pension “givebacks.” But something literally has got to give, since the MBTARF’s last set of actuarial assumptions were based on a continuation of low annual inflation (2.75 percent). Any inflationary impact on salary increases will proportionately increase the cost of current pension contributions and future pension benefits beyond expectations.

26 Report of the Blue Ribbon Panel on Public Pension Plan Funding, Society of Actuaries, 2014.

About the Authors

E.J. McMahon is a public policy analyst focused on state and regional economic, fiscal, and demographic trends. McMahon is founding senior fellow of the Empire Center for Public Policy in Albany, New York, and an adjunct fellow at the Manhattan Institute for Policy Research. A former journalist, he also served in senior staff positions in New York state government. McMahon is a graduate of Villanova University.

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185 Devonshire Street, Suite 1101 Boston MA 02110 617.723.2277
www.pioneerinstitute.org Facebook.com/PioneerInstitute Twitter.com/PioneerBoston