



# The End of Its Line

**MARCH 2015**

*MTF*

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## EXECUTIVE SUMMARY

The Massachusetts Bay Transportation Authority's (MBTA, or the T) inability to maintain regular service during historic snowfalls and bitter cold this winter is the consequence of several unpleasant realities. Clearly, the infrastructure is antiquated and worsening each day. The abundance of vehicles in service well beyond their useful life, faulty power and signal systems, and the T's lack of proper snow and ice removal equipment reveal the breadth of underinvestment in infrastructure.

The physical breakdowns are the manifestation of a system plagued by a cornucopia of problems: a stark mismatch between spending and revenues, old equipment, an inoperative asset management system, little public accountability, and even less transparency. Various attempts to address these problems have been strikingly unsuccessful.

In short, the T has reached the end of its line.

Just as infrastructure is only part of the problem, additional revenues are only a part of the answer. Before the state commits any more revenues to the MBTA, it must determine the full size and scope of the system's challenges – a feat that has so far been impossible – and then devise and implement solutions. Whatever those are, cooperation from stakeholders in all sectors – legislators, the administration, riders, businesses, and the T itself – is necessary.

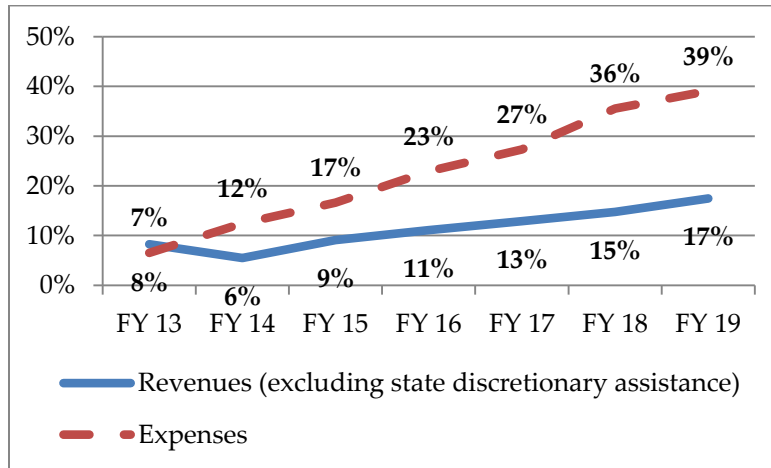
This report begins that process by presenting the most critical and engrained flaws in the T's finances. The T's current state of dysfunction is the confluence of many factors: inadequate revenue growth, fast-growing expenses, an enormous debt burden that is worsened by policy decisions, and tremendous capital needs. These factors combine to create an uncontrolled financial system that has gone off the rails, with a grim outlook for the future.

As the system shutdowns proved, the T is a vital service that brings millions of riders to work and school and relieves road congestion every day. Its survival and successful operations are critically important to the state's economic health. Fixing the T is of utmost importance to the long-term well-being of the Commonwealth.

The T projects that three key revenue sources will grow at just over two percent annually from FY 2015 to FY 2019, while operating expenses are projected to grow at five percent annually

through FY 2019. With expenses growing two and a half times faster than revenues, the structural budget gap widens each year. As a result, the MBTA now depends on ever-increasing support from the state to meet both its operating and capital needs.

**Year-over-Year Growth in MBTA Expenses and Revenues (FY 2012 Base)**



Hopes that the enactment of Forward Funding in 2000 and other reforms would fix problems at the T have been dashed. The only difference between now and pre-Forward Funding is that the state makes the payment at the beginning rather than the end of the fiscal year.

### Revenues

The T has four major revenue sources: fares, local assessments, the dedicated sales tax, and discretionary state assistance. The first three sources, which account for more than 90 percent of all T revenues in FY 2015, are all statutorily capped, leaving the state to assume the risk of revenue shortfalls or cost overruns.

State discretionary assistance is the only major source of funds without a cap; therefore, the state has become financially responsible for balancing the T's budget. The state is on the hook for a projected \$200 million contribution in FY 2016 to close a 10 percent shortfall in the T's \$2 billion budget; that figure is projected to grow to \$360 million by FY 2019.

If current revenue and expense trends persist, by FY 2024 the state would have to contribute approximately \$800 million in additional discretionary assistance to balance the T's near \$3 billion budget. Those general fund revenues would not be available to meet other critically important needs.

### *Operating Expenses*

The T's operating expenses grew at an average of 7.2 percent annually between FY 2001 and FY 2014, significantly outpacing revenue growth during that time. The disparity between expenses and revenues is particularly apparent in the commuter rail and the Ride – both services managed by outside vendors – and are largely driven by expansions in services.

Another significant driver of expenses were labor costs and, in particular, benefits. Prior to recent reforms, the T's health care, pension, and retiree health care benefits were notoriously and excessively generous. Even after reforms, the T offers employees a very generous set of benefits that do not align with its overall financial condition or with those offered to other public sector employees.

### *Debt Service Costs*

The MBTA is one of the most indebted transit systems in the United States, with \$5.45 billion in outstanding debt – a figure that rises to \$8.8 billion inclusive of interest.<sup>1</sup>

Yet ironically, the MBTA has used debt service to help balance its budgets over the past decade. Because it chose not to implement substantial fare increases or service cuts; had a limited ability to control its revenues; and struggled to rein in non-debt operating costs, the MBTA sought largely temporary reductions in its growing debt service through a series of debt restructurings.

As a result, debt service appears to be the slowest growing of all components of the operating budget, increasing by approximately three percent per year from \$306 million in FY 2000 to \$440 million in FY 2014.<sup>2</sup> However, underlying the reduction in debt service spending is a series of costly actions, most of which imperil the long-term viability of the T.

The effects of these decisions are two-fold. First, carrying such a high level of debt hinders the T's ability to borrow and invest. Second, as it tried to keep debt service costs from growing, the T drastically underinvested in its infrastructure over the past decade.

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<sup>1</sup> MBTA FY 2015 Operating Budget Staff Summary (April 2, 2014).

<sup>2</sup> Debt service costs dropped by \$15 million in FY 2001 from FY 2000 due to a large reduction in principal payments before jumping to \$343 million in FY 2002

### *Capital Needs*

As is the case with the T operating budget, the T's inability to maintain its core system has forced the state to assume responsibility for the requisite capital investments to fix the T, further evidencing the end of Forward Funding. However, recent capital plans from the T and the state Department of Transportation (MassDOT) that include nearly \$8 billion in additional state commitments to the T do not provide adequate funding for State of Good Repair ("SGR") projects.

To make matters worse, it is unclear precisely how much it will cost to fix the T because its SGR database has been inoperative for years. It would be wasteful and ineffective to provide additional funding before identifying the size and extent of the T's problems.

The T simply lacks the capacity to stabilize its crumbling system, resulting in deterioration of the system at a much faster rate and to a greater extent than if the system had been properly maintained. In fact, the SGR backlog, the best measure of the condition of the T's infrastructure, doubled in size from \$2.7 billion in 2006 to more than \$6.7 billion in 2015 due to persistent underinvestment in capital spending. Troublingly, the SGR backlog is likely higher than the T's March 2015 estimate because it is based on an incomplete inventory of its transit assets.

### *Next Steps*

What happened this winter was not simply a meteorological fluke that disrupted the T's operations – it was a stress test that brought to light underlying financial, managerial, and structural weaknesses. The T's dire state is indisputable, and all agree that it must be fixed to serve the people and economy of the Commonwealth. As enticing as a quick fix may be, first and foremost the state must determine the full size and scope of the system's challenges and needs. To do this, the Foundation recommends that the state prioritize the following nine steps to begin a more detailed analysis so that it may develop a plan for rescuing the T:

► **Tie FY 2016 state contract assistance to the release of up-to-date SGR backlog data**

The MBTA's asset management system, which quantifies the SGR backlog and helps to prioritize maintenance projects, has been inoperative for several years and full implementation of a new Federal Transit Administration (FTA)-funded system is several years away. This is an enormous management failing and the state should withhold additional



assistance until the T can produce a comprehensive SGR backlog project list that clearly and accurately states both the size of total maintenance shortfall and the cost to keep the system from deteriorating further.

▶ **Conduct a detailed audit of the MBTA's maintenance protocols**

The state should insist on an independent assessment of the T's maintenance protocols, project selection criteria, and capital spending to determine whether the T has the capacity to bring its infrastructure into a state-of-good repair.

▶ **Require an independent fiscal audit of the T**

The Governor should request an independent, third-party, in-depth analysis of the T's finances. The T's long history of using financial maneuvers such as debt restructurings and securitizing long-term revenue streams have complicated its debt obligations, and the T provides minimal information on unfunded pension and retiree health care liabilities. All pose substantial hurdles to the T's ability to continue as a going concern. Full analysis and disclosure of the T's financial exposures is necessary before solutions can be found.

▶ **Halt expansion contracts for the remainder of 2015**

Before the MBTA undertakes any further expansion, it must get its current fiscal house in order. The state and the T must perform more analysis of the impact that expansions will have on the operating budget and maintenance expenditures and must identify revenue streams to cover the ongoing costs of expansions before any additional outlays are made. A brief delay will afford an opportunity to re-examine both the way in which projects are being carried through and the sustainability of each expansion as a part of the T system as a whole.

▶ **Reform the procurement process including a two-year moratorium of the Pacheco Law with a report on savings**

Just as its maintenance systems require a careful review, so too do the T's procurement practices. A series of problems with T procurement practices and other policies have further eroded public confidence in the T. The size and uniqueness of the T's capital purchases warrant a centralized procurement process with in-house experts overseeing contracts to ensure purchases are delivered on time, on budget, and fully operative.

▶ **Reexamine the MBTA's governance structure**

The T's long-term problems cannot be addressed effectively unless the Authority's own leadership is fully committed to the reform effort. Currently, the T's Board is independent and not accountable to the Secretary of Transportation, the Governor, or the Legislature and management has too often been resistant to external examination and proposals for change. The Administration should have control over the MBTA board in the short-term to ensure compliance, accountability, and full transparency. The Administration should also have the authority to select the next general manager and work with the Legislature to determine the most suitable governance structure to develop and execute a rescue plan for the T.

▶ **Eliminate Social Security eligibility to align with the state pension system**

The unique dual pension eligibility of T employees, dating back to the state takeover of private operators, makes no sense decades later, and it imposes significant unnecessary costs on a financially stressed system.

▶ **Eliminate binding arbitration**

Binding arbitration stands in the way of the responsible cost-conscious management the T requires. It was eliminated for most public employees a generation ago.

▶ **Require full disclosure of the pension system finances**

Despite efforts by the Legislature, the T has not released details regarding its pension system and assets because it asserts that the pension system is a private entity. However, the T would have no hope of meeting its annual pension obligations without the annual infusion of hundreds of millions of dollars in tax revenues. At a minimum, the T pension system should release the details on its investments and cash flows and provide actuarial valuations.

## **PART 1. THE MBTA'S OPERATING BUDGET**

### **SECTION I: OPERATING REVENUES**

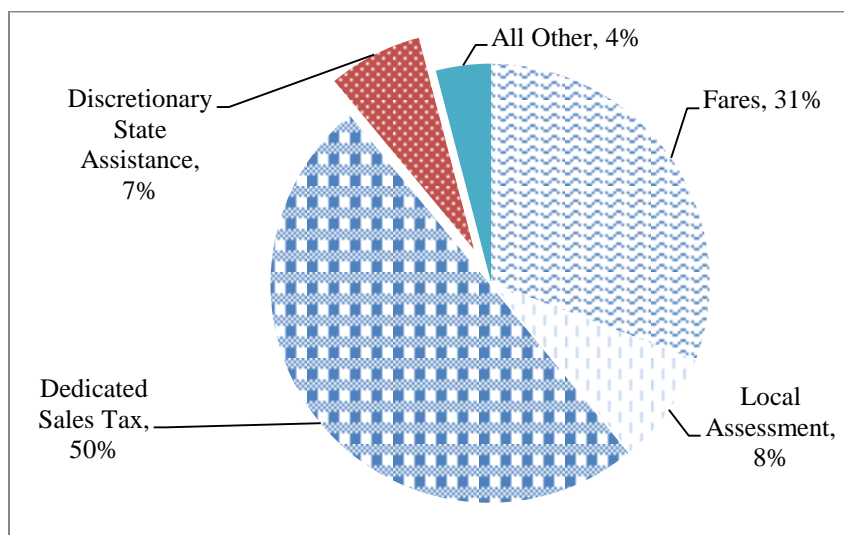
#### *History of Forward Funding*

In 2000, lawmakers passed the “Forward Funding” law which required the MBTA to operate on annual balanced budgets based almost entirely on revenue from fares, a dedicated penny of the state sales tax, and assessments on local communities served by the T. By imposing this budget discipline, the Legislature believed it had ended the MBTA’s practice of spending whatever it took to run the system and then sending the state an annual bill to cover those costs. The state would no longer have to dig too deeply into its discretionary assistance funds – money otherwise used for general budgetary purposes – to cover annual operating costs at the T.

Despite the best of intentions, the T has not achieved that key goal. With three of the T’s four primary revenue sources tightly capped and thus unable to provide sufficient money to cover increasing costs, the MBTA once again is turning to the state’s discretionary assistance to cover growing deficits. A decade and a half after Forward Funding, it is Groundhog Day at the MBTA: the Commonwealth is once again reimbursing the T for costs not covered by its own revenues.

The T has four major revenue sources: fares, local assessments, the dedicated sales tax, and discretionary state assistance (Figure 1). The first three sources, which account for more than 90 percent of all T revenues in FY 2015, are all statutorily capped, leaving the state to assume the risk of revenue shortfalls or cost overruns. The T projects that revenues from those three sources will grow by 2.1 percent per year through FY 2019, while MBTA operating costs are expected grow by more than twice as much. This will create a widening gap that can be filled by the only revenue source without a statutory limit – discretionary state assistance – and while state assistance is not capped, that does not mean it comes without other costs.

**Figure 1 – MBTA Sources of Revenue in FY 2015**



*Capped Source 1: Fares*

Fares account for approximately 30 percent of revenues from all sources and 90 percent of the revenues that the T directly generates (“own source revenues”). The share of revenues from fares has increased in recent years, as the T raised fares four times since 2000 to help close its budget gaps. Subway fares tripled from \$0.85 to \$2.50 between 2000 and 2012 (Figure 2).

When Forward Funding was implemented in 2000, T riders paid the lowest subway fares of any of the 10 largest transit systems in the country, and they had not seen a fare hike in nearly a decade.<sup>3</sup> Low fares was the primary reason that the T’s revenue recovery ratio, defined as total fare and other self-generated revenues divided by total operating costs, was only 36.5 percent. This was substantially lower than that of transit systems in New York, San Francisco, Washington D.C., and Chicago, all of which exceeded a 50 percent revenue recovery ratio.<sup>4</sup>

As part of the Forward Funding restructuring plan, both the MBTA Blue Ribbon Committee and the Massachusetts Taxpayers Foundation recommended a series of fare increases to bring the T’s fare structure in line with comparable transit systems and to achieve a revenue recovery ratio of 50 percent. Following these recommendations, the T raised subway fares from \$0.85 to \$1.00 in

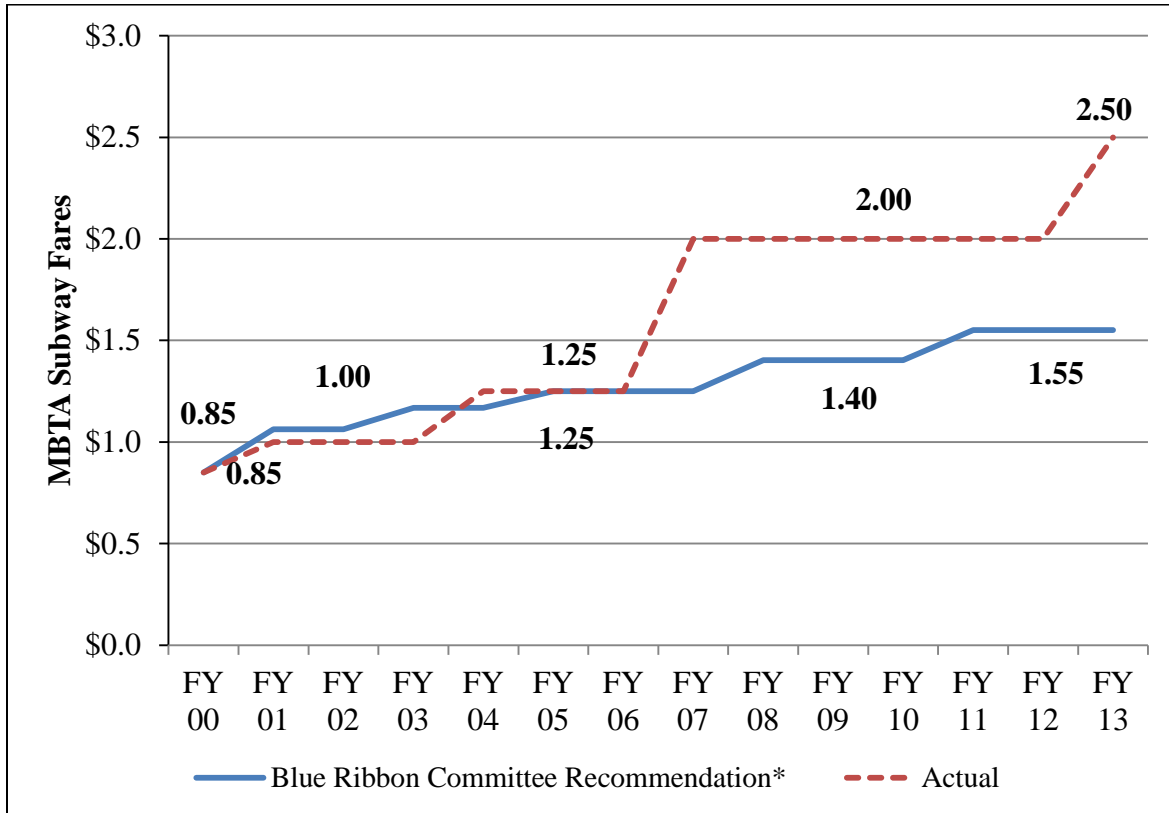
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<sup>3</sup> *The Third Rail: Financing the MBTA*, Massachusetts Taxpayers Foundation, June 1999

<sup>4</sup> *Taking The T ... To the Next Level of Progress*, MBTA Blue Ribbon Committee, Report on Forward Funding, April 2000

2001 and to \$1.25 in 2004. But even with these increases, higher than expected operating costs resulted in a \$70 million shortfall in the T's FY 2007 budget.

**Figure 2 – MBTA Subway Fare Increases**



\*Assumes fares would be raised to keep pace with inflation after 2007

To help fill that gap, the T again turned to fare increases, raising subway fares to \$2.00, a 60 percent increase that generated an additional \$50 million and increased the T's revenue recovery ratio to 47 percent in FY 2008. That is the highest ratio the T has achieved to date.

Facing another large budget gap in FY 2010, the T considered raising fares again. Instead, the state increased the sales tax rate from five percent to 6.25 percent to generate approximately \$1 billion in new revenues, of which \$160 million was appropriated to the T. Despite these two revenue measures, the deficit grew to \$160 million in FY 2013, forcing the fourth fare increase since 2000. Subway fares rose by 50 cents to \$2.50, a 25 percent hike that brought the revenue recovery ratio from 40 percent in FY 2012 to 46 percent in FY 2013. Still, the T's budget gap kept growing, reaching to more than \$100 million in FY 2014.

After the major fare hikes of 2007 and 2013, the Legislature wanted to limit the T's ability to raise fares. In the 2013 Transportation Finance Act, the most recent reforms to the MBTA, lawmakers capped transit fare increases at five percent every two years, which is roughly the rate of inflation.

Four fare increases over the past 15 years and a growth in ridership drove the T's fare revenues from \$230 million in FY 2000 to \$564 million in FY 2013 (Figure 3), an average annual increase of 11 percent. However, that rate of growth is projected to slow dramatically in the coming years to only 2.6 percent annually, from \$598 million in FY 2015 to \$659 million in 2019.

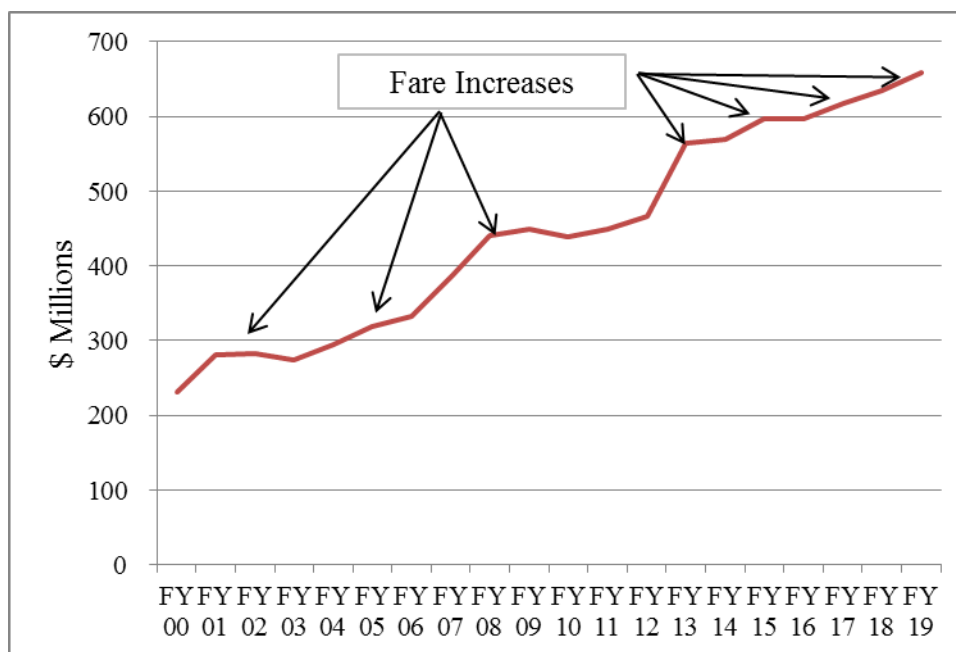
This slowdown in growth is partly because while the T plans to raise fares by five percent in both FY 2017 and FY 2019, a decline in ridership is expected to offset some of the potential revenue growth. As a result, total fare revenues are projected to grow by only 3.3 percent each time, according to its most recent financial plan (also referred to as the "pro forma");

Furthermore, the launch of the Green Line Extension in 2018 is expected to generate an additional \$16.5 million in fare revenues in FY 2018, rising to \$21.3 million in FY 2019.<sup>5</sup> However, delays in completing the Green Line would put these revenues at risk and further depress the growth rate.

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<sup>5</sup> The T projects that wage costs to staff the Green Line Extension will cost \$22.3 million in FY 2018 and \$28.3 million in FY 2019, leaving operating gaps of \$6 million and \$7.5 million respectively.

**Figure 3 – Total Fare Revenues, FY 2000 - 2019**



The slow growth in fare revenues will reduce the T’s revenue recovery ratio from approximately 43 percent in FY 2015 to a projected 39.6 percent in FY 2019, only slightly higher than the 36.5 percent before implementation of Forward Funding. If the system continues on its current path, the goal of achieving 50 percent revenue recovery ratio to keep the MBTA financially independent appears permanently out of reach.

*Capped Source 2: Local Assessments*

A second source of revenue for the MBTA is local assessments which is the amount that municipalities serviced by the T contribute to its ongoing operations. However, as with other revenue sources, tight caps constrain how much the T can collect from its user communities. In 2015, the T will realize 8.2 percent of its operating revenues from local assessments. In sharp contrast, the 10 largest transit systems across the country receive, on average, nearly 25 percent of their operating revenues from assessments on local communities.<sup>6</sup>

The cap on local assessments originated with Proposition 2½, which in 1980 limited the annual growth of municipal payments by cities and towns to the MBTA to no more than 2.5 percent.<sup>7</sup> In

<sup>6</sup> Northeastern University, Kitty and Michael Dukakis Center for Urban and Regional Policy, *MBTA Fare and Finance Data*, National Transit Database, 2010 Data

<sup>7</sup> Proposition 2½ included other significant policy changes affecting municipal finance and management. The most notable change was it limited the annual increase in municipal property tax levies to 2.5 percent.

FY 2000, 78 communities paid \$144.5 million to the T, which accounted for approximately 14 percent of T revenues. This amounted to an average contribution of more than \$1.8 million per community.

Forward Funding more than doubled the number of communities responsible for paying assessments to the T – from 78 to 175 – but it also implemented three changes that reduced the T’s total collections.

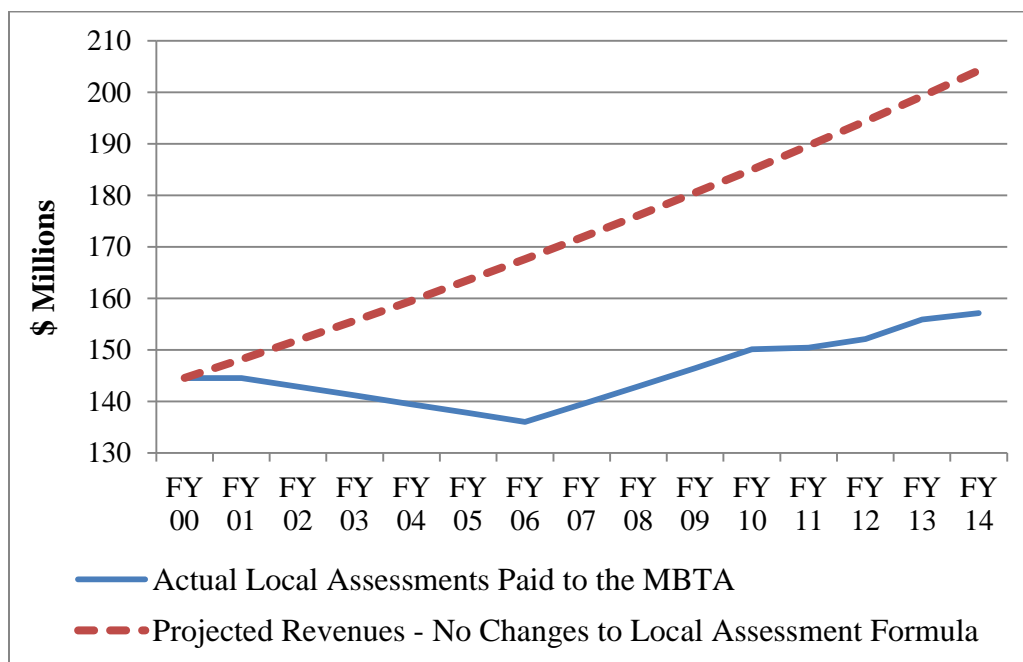
Forward Funding froze total local assessments in FY 2001 and reduced them for the following five years by \$1.7 million annually. As a result of these two measures, T revenues from local assessments declined from \$144.5 million in FY 2001 to \$136 million in FY 2006.

In addition, Forward Funding took the cap on annual increases in Proposition 2½ one step further and set the cap at the lesser of 2.5 percent or the rate of inflation, further cutting into the T’s local assessment revenue. From FY 2011 through FY 2014, local assessment payments to the T increased at an average annual rate of just over one percent, well under the 2.5 percent annual maximum.

These three factors included in the Forward Funding plan – the freeze on assessments in FY 2001, the subsequent five-year reductions, and limiting increases in assessments to the lesser of 2.5 percent or inflation – cost the T \$47 million in local assessment payments in FY 2014. As a result, the average contribution per municipality was approximately \$900,000 – half of what it was in fiscal 2000 – and total payments were \$157 million compared to \$204 million (as shown in Figure 4).



**Figure 4 – Impact of Local Assessments Caps**



*Capped Source 3: Dedicated Sales Tax*

Lawmakers sought a more predictable revenue stream than ad hoc and politically unpopular fare increases, so the Forward Funding plan dedicated 20 percent, or one penny, of the state sales tax revenues to the MBTA.<sup>8</sup> While the annual growth of this source is capped, there is also a floor. The legislation required that the annual sales tax distribution to the T be no less than the previous year, regardless of total sales tax collections in any year and no more than the lesser of inflation or three percent. In other words, the T will not receive less in sales tax revenues than in the prior year, nor will it receive greater than a three percent increase.

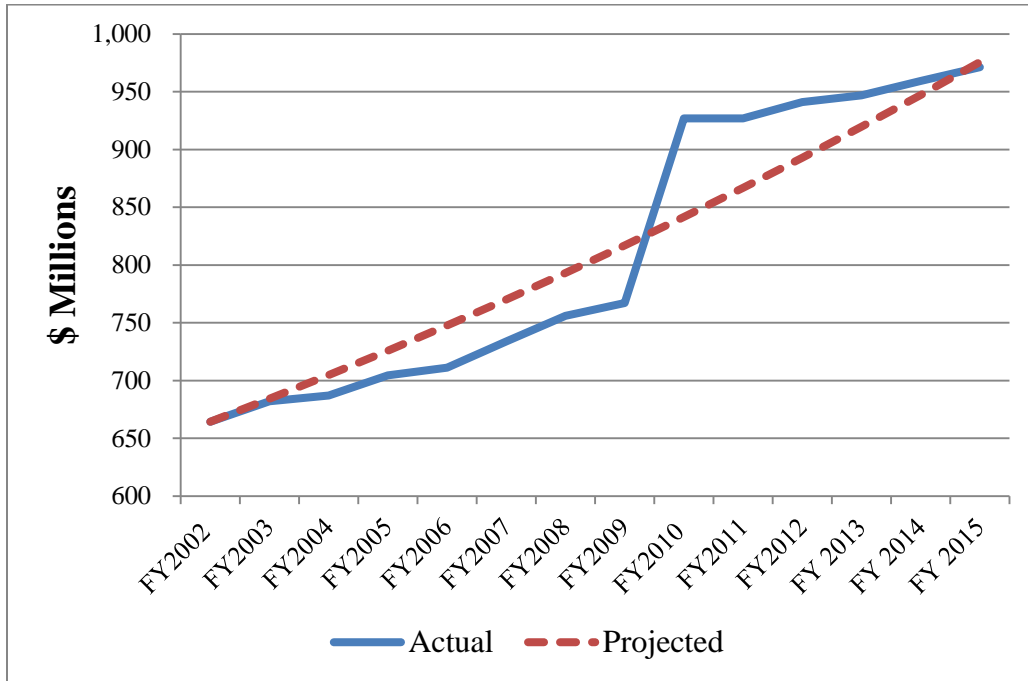
For FY 2001, Forward Funding set the base amount that the T would receive from sales taxes at \$644 million.<sup>9</sup> The Blue Ribbon Committee and the Forward Funding financial plan projected sales taxes to the T would increase by three percent annually above that base. That was a relatively conservative forecast following the 1990s when sales taxes grew by about eight

<sup>8</sup> The 20 percent of the sales tax excludes taxes on meals. The 20 percent was adjusted to 16 percent when the sales tax rate was increased from 5.0 percent to 6.25 percent in FY 2010 because the state’s contribution is still equal to one penny of the tax.

<sup>9</sup> The MBTA received 11 of the 12 monthly sales tax payments in FY 2001, or \$590 million, because sales tax revenues are collected one month after they are charged.

percent annually. However, growth in sales tax revenues plunged to an annual average of less than one percent over the next decade due to a number of economic factors.<sup>10</sup>

**Figure 5 – Sales Tax Revenues Dedicated to the T, Actual vs. Projected**



This slower growth in sales tax revenues will likely continue through the remainder of this decade as Massachusetts recovers from the impact of two severe recessions, the resulting lackluster growth in personal income and savings, and restricted access to credit. State sales tax revenues have also been hit hard by the growth of consumer purchases on the largely sales-tax-free Internet.

As shown in Figure 5, the gap between the projected three percent annual growth in sales tax revenues (the dotted line) and actual revenues delivered to the T began in FY 2004 and expanded to approximately \$50 million in FY 2009. This shortfall was partially responsible for yearly budget gaps that forced the T to turn to other revenues such as fare hikes, real estate sales, and debt restructurings.

Beginning in FY 2010, the Legislature increased aid to the T by an additional \$160 million annually when it raised the sales tax rate from five to 6.25 percent.<sup>11</sup> These funds brought total

<sup>10</sup> This calculation adjusts for the sales tax rate increase in 2010.

state support to \$927 million in FY 2010, \$85 million more than the T was originally projected to receive from the annual growth in dedicated sales taxes. As Figure 5 demonstrates, this trend continued into FY 2014.

However, increases in dedicated sales tax revenues to the T are also limited by the rate of inflation. Despite a 6.7 percent growth in dedicated sales taxes in FY 2014 over FY 2013, the change in state support was capped at 1.4 percent due to low inflation. The T expects continued modest growth in sales tax revenue of 1.6 percent through FY 2019.

The consequences of poor sales tax revenue performance and/or low inflation rates are born entirely by the state budget because Forward Funding guaranteed that sales tax revenues distributed to the T would not be lower than the prior year. When sales tax revenues declined following both the 2002 and 2008 recessions, the state had to dip into its general fund to make up the difference between the guaranteed floor and the reduced sales tax revenues collections. As shown in Table 1, the state's general fund has subsidized the state's sales tax support to the T by tens of millions of dollars each year since FY 2002.

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<sup>11</sup> The \$160 million in annual appropriations begun in FY 2010 was added to the base sales tax revenue amount in the 2015 budget increasing the dedicated sales tax revenue floor to \$970.6 million in FY 2015.

**Table 1 - State Funds to Bridge Gap in Sales Tax Distributions to the MBTA**  
*in \$ millions*

Fiscal Year	T Distribution	1 Penny Sales Taxes	Difference
2001	645	655	10
2002	664	639	-25
2003	684	639	-45
2004	684	642	-42
2005	705	666	-38
2006	713	684	-29
2007	734	692	-42
2008	756	691	-65
2009	767	648	-119
2010	767	637	-130
2011	767	655	-112
2012	779	670	-109
2013	787	682	-105
2014	799	728	-71
<b>Total</b>	<b>10,251</b>	<b>9,329</b>	<b>-922</b>

*Uncapped Source 4: State Contract Assistance*

Tight caps on revenues from fares, local assessments, and the sales tax leave the T with only one other source of funds to close its ever increasing budget shortfalls: discretionary assistance from the state budget.

The state began providing assistance in FY 2010 above what was laid out in Forward Funding with the \$160 million in annual payments from the increase in the sales tax rate. This helped to close the T's FY 2010 budget gap, but even with this additional funding, budget shortfalls quickly developed again.

Seeking to avoid another fare hike, the T took several steps to balance its FY 2011 and FY 2012 budgets, including relying on one-time revenues. The T restructured its debt twice, leased out its North Station garage to Delaware North, and issued bonds securitized by parking garage revenues to pay down \$35 million of debt (Table 2).

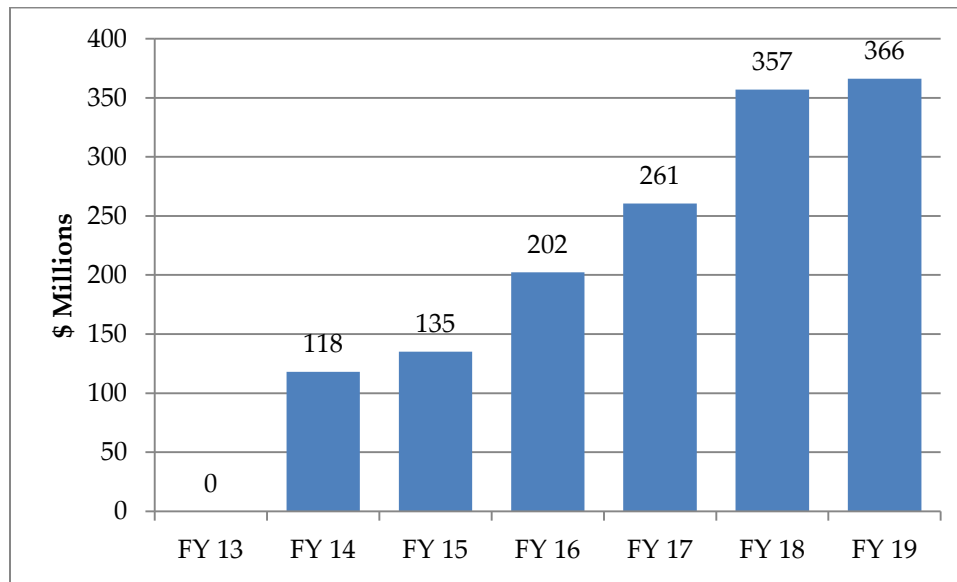
**Table 2 – MBTA One-Time Revenues, FY 2011 and 2012**  
*in \$ millions*

	<b>FY 11</b>	<b>FY 12</b>
Debt Restructuring	73	33
Parking Leases	0	45
Parking Revenue Securitization	0	35
<b>Total</b>	<b>73</b>	<b>113</b>

These one-time fixes provided only temporary relief. Facing another \$100+ million budget gap in FY 2013, the T considered fare increases of close to 40 percent, along with deep service cuts. Ultimately, the administration decided to raise subway fares by 25 percent and withdraw \$50 million from the Motor Vehicle Inspection Trust Fund to balance the T's FY 2013 budget.

After four consecutive years of budget crises, lawmakers sought to place the MBTA's operating budget on more solid financial footing through a series of reforms codified in the 2013 Transportation Finance Act. However, the T needed additional state support almost immediately and received \$118 million in additional assistance in FY 2014, and this trend shows no signs of abating. According to the T's most recent pro forma, the T expects to receive \$202 million in state discretionary assistance in FY 2016. That figure jumps to \$366 million by FY 2019 (Figure 6). It will almost certainly continue to rise thereafter if nothing changes.

**Figure 6 – State Discretionary Assistance to the MBTA, FY 2009 - 2019**



Total state support to the T – the dedicated sales tax revenues, \$160 million in state assistance, and additional discretionary assistance from the 2013 legislation – will increase from \$767 million in FY 2009 to \$1.4 billion in FY 2019, a \$623 million or 80 percent increase (Table 3). Strikingly, the increase in state support accounts for 72 percent of the total growth in T revenues during this period. State support is expected to grow from 53 percent of T revenues in FY 2009 to 60 percent in FY 2019, with the share continuing to grow for the indefinite future.

**Table 3 – MBTA Revenue Growth, FY 2009 – 2019**  
*in \$ millions*

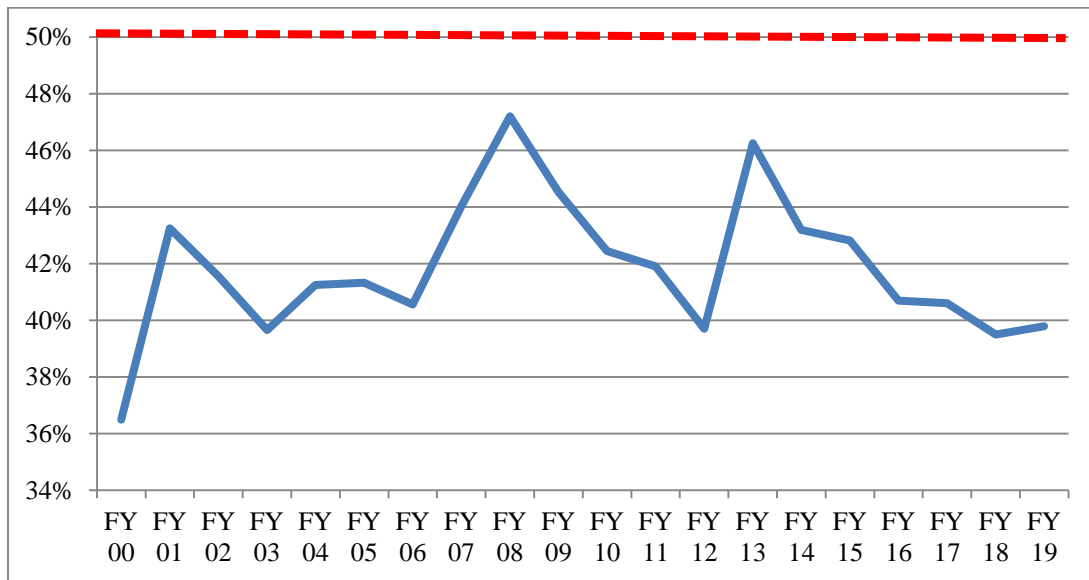
	<b>FY 2009</b>	<b>FY 2019</b>	<b>Change \$</b>	<b>Change %</b>
Operating Revenues	507	716	210	41%
Other Income	26	33	7	27%
Local Assessments	146	173	27	18%
State Support	767	1,390	623	81%
<b>Total</b>	<b>1,446</b>	<b>2,313</b>	<b>866</b>	<b>60%</b>

*Revenue Benchmarks: 2000 and 2013*

At two separate points, the state has focused its efforts on strengthening the T’s finances. In each instance, the state established benchmarks to measure whether the MBTA could operate as a fiscally sustainable authority. In each instance, the T failed to do so.

In 2000, through Forward Funding, lawmakers worked to rein in finances that had spun out of control, with the intent of enabling the T to attain a 50 percent revenue recovery ratio, defined as its own source revenues divided by total operating costs.

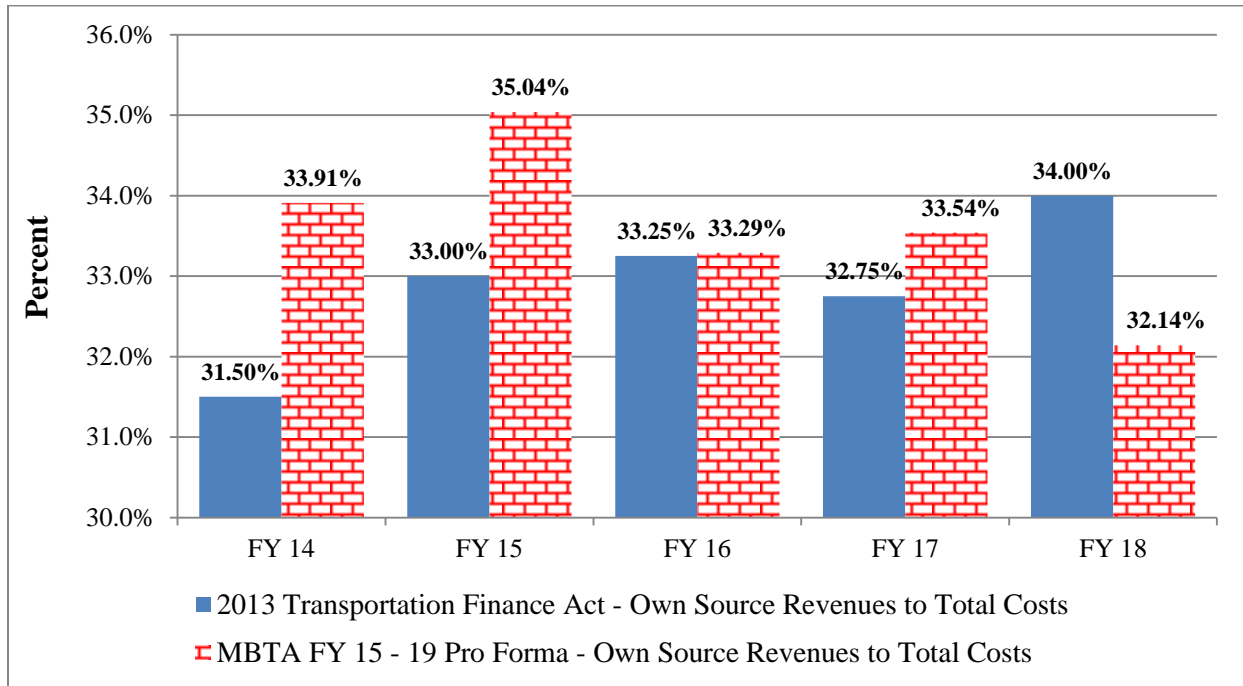
**Figure 7 – MBTA’s Revenue Recovery Ratio – FY 2000 - 2019**



As noted earlier in this report, before implementation of Forward Funding, the T’s revenue recovery ratio was 36.5 percent, well below the 50 percent goal (dotted line in Figure 7) and well below the ratio of other public transit systems. Fare hikes in FY 2001, FY 2007, and FY 2013 raised the ratio to a high of 47 percent in FY 2008. But with fare increases now capped at five percent every two years and expenses projected to grow much faster than that, it is clear that the T will not reach the 50 percent goal. Instead, the ratio will continue to decline as the growth in operating expenses outpaces the growth in self-generated revenues.

The second benchmark, in the Transportation Finance Act of 2013, required the T to generate own-source revenues to cover 31.5 percent of its total operating budget (including debt service costs) in FY 2014; 33 percent in FY 2015; 33.25 percent in FY 2016; 32.75 percent in FY 2017; and 34 percent in FY 2018 (Figure 8). To meet these benchmarks, the Legislature expected the MBTA either to raise additional own-source revenues, beyond the scheduled five percent fare increases; to cut costs by \$36 million in FY 2016, \$38 million in FY 2017, and \$79 million in FY 2018 to balance its budget; or some combination of the two.

**Figure 8 – MBTA Own Source Revenues as a Percent of Total Costs**



With the state available to write a check every year to close the T’s budget gap, there is no consequence for the T not meeting these goals. Even if the T were to achieve these mandated targets, the state will still have to increase its discretionary assistance to balance the budget.

For example, according to the MBTA’s own financial projections, it will achieve its own source revenue goals through FY 2017, but even so the state must contribute \$260 million to balance the budget. In FY 2018, the T anticipates falling well short of the 34 percent benchmark and would have to cut expenses by approximately \$120 million, or five percent, from its projected \$2.25 billion budget to meet the target.



## SECTION II: OPERATING EXPENSES

The rate at which expenses have grown since Forwarding Funding was introduced exacerbates the T’s revenue constraints. As shown in Table 4, MBTA operating expenses nearly doubled from \$737 million in FY 2001 to \$1.4 billion in FY 2014 representing a 7.2 percent average annual increase. The T’s spending has significantly outpaced its revenue growth in large part because it has a record of expanding services without any sources of funding to pay for those operations.

**Table 4 – MBTA Operating Expenses, FY 2001 – FY 2014**  
*in \$ millions*

	<b>FY 2001</b>	<b>FY 2014</b>	<b>Total Change \$</b>	<b>Annual Change %</b>
Wages and Payroll Taxes	313	467	154	3.8%
Fringe Benefits	99	192	93	7.2%
Materials/Service	66	148	82	9.5%
Energy	44	76	32	5.5%
Commuter Rail	173	388	215	9.6%
The Ride	25	106	81	24.9%
Other	16	45	30	14.7%
<b>Total</b>	<b>737</b>	<b>1,422</b>	<b>686</b>	<b>7.2%</b>

Four accounts – labor, materials and services, commuter rail service, and paratransit services (“the Ride”) – make up 96 percent of the T’s total operating costs. The single biggest cost driver is labor (wages, payroll taxes, and benefits), which accounts for about one-half of total operating expenses. The next largest cost component, representing about one-third of all T operating expenses, is vendor contracts for commuter rail and the Ride.

### *A. Labor Costs Wages and Payroll Taxes*

Like many service providers, the T’s operations are labor intensive. Wages and payroll taxes account for nearly 40 percent of operating expenses. They increased from \$313 million in FY 2001 to \$467 million in FY 2014, an annual growth rate of 3.8 percent (Table 4). The overall \$154 million increase in wages accounted for 22 percent of the T’s \$686 million jump in expenses since FY 2001 (Table 5).

**Table 5 – Increased Expenses, FY 2001 to FY 2014**  
*in \$ millions*

	<b>Change \$</b>	<b>Change %</b>
Wages and Payroll Taxes	154	22%
Benefits	93	14%
Materials/Service	82	12%
Energy	32	5%
Commuter Rail	215	31%
The Ride	81	12%
Other	30	4%
<b>Total</b>	<b>686</b>	<b>100%</b>

Problematically, wage and payroll taxes are projected to climb from \$467 million in FY 2014 to \$655 million in FY 2019. This eight percent annual growth rate is more than double the average annual rate of increase between FY 2001 to FY 2014. It also will likely far outpace private sector wages increases and the rate of inflation over the same time period.

### *1. Wage Contracts and Binding Arbitration*<sup>12</sup>

Managing personnel costs is onerous for the MBTA largely because of the role of binding arbitration in labor negotiations. The T’s arbitration process is a system without any checks, the final decision lying solely in the hands of a single arbitrator.

The growth in wages during the past 13 years was driven largely by two binding arbitration awards to the Carmen’s Union covering wage contracts for FY 2006 through FY 2013. The combination of binding arbitration awards and additional staffing make it impossible for the MBTA to constrain wage growth to anywhere near the rate of revenue growth. More importantly, if the T has to accommodate future arbitration awards as generous as the past two and headcount continues to climb due to expansions, wage costs will escalate far higher than current projections.

This is a stark difference from municipal labor negotiations. Voters repealed binding arbitration for municipalities as part of Proposition 2½ in 1980. While arbitration rights were restored by the Legislature for police and firefighters a few years later, the law still requires that the local

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<sup>12</sup> The Boston Carmen’s Union reached a contract agreement with the T covering 2014 through 2017 that includes a total 10 percent pay raise over four years at a cost of \$95 million.

legislative body approve an arbitration decision. Municipalities have been judicious in overturning arbitration awards, but if a municipality believes an arbitration decision is unreasonable, this check provides a path to ensure that the final award is affordable.

There is no such system in place for the T. Instead, the arbitrator's decision is absolute. This is particularly problematic because the T's arbitration awards have historically favored union proposals, ignoring the T's tenuous finances.

After failing to reach agreements through collective bargaining and mediation, the Boston Carmen's Union Local 589, which represents approximately 60 percent of all T workers, requested binding arbitration in 2008 and again in 2013 and won substantially more generous contracts than settlements the T negotiated with several other unions.

In 2008, the arbitration award covered the Carmen's Union contract for FY 2007 through FY 2010. The union received three wage increases of three percent each on July 1, 2006, 2007, and 2008 with a four percent increase starting July 1, 2009. This resulted in a compounded 13.6 percent wage hike that added approximately \$150 million to the T's budget over the duration of the award.

The second arbitration award for the Carmen's Union was finalized in 2013 for FY 2010 through FY 2014. While the across-the-board wage increases were more modest than in 2008 – 10.4 percent over four years – the raises were higher than the seven percent the T negotiated with several other unions in 2010. The arbitrator's decision added roughly \$62 million in costs spread over four years, or \$25 million greater than what the costs would have been had Local 589 received the same wage and benefit terms accepted by other unions through collective bargaining, according to MBTA estimates. As a result, in FY 2013 the T had to use \$25 million in reserves to cover the additional costs.

In stark contrast, the state was able to negotiate significant concessions from its unionized employees during this same period, underscoring the constraints that binding arbitration places around the T's ability to manage its budget. In the midst of the worst fiscal crisis in decades, the state Human Resources Division bargained contracts and concessions with public employee unions to freeze wages in FY 2009 and provide a one percent raise in FY 2010, which saved roughly \$100 million in state spending in the first year alone. By contrast, the Carmen's Union

received the full three percent increase in FY 2009, awarded in the previous year, and a four percent retroactive increase for fiscal 2010, despite the T's obvious fiscal difficulties.

## *2. Staffing*

Expansions and contractions of T staffing largely mirror its fiscal condition.

The T's first staffing expansion was in the years leading up to Forward Funding, the result of the rapid expansion of commuter rail and Red and Orange Line services in the 1980s and 1990s.

Following that, the Blue Ribbon Committee urged the T to reduce staffing to help control soaring costs. The Committee recommended a short-term hiring freeze followed by capital investments to improve technology and productivity that would reduce staffing needs for the next five years. As shown in Figure 9, headcounts fell modestly during the first contraction of the 2000s.

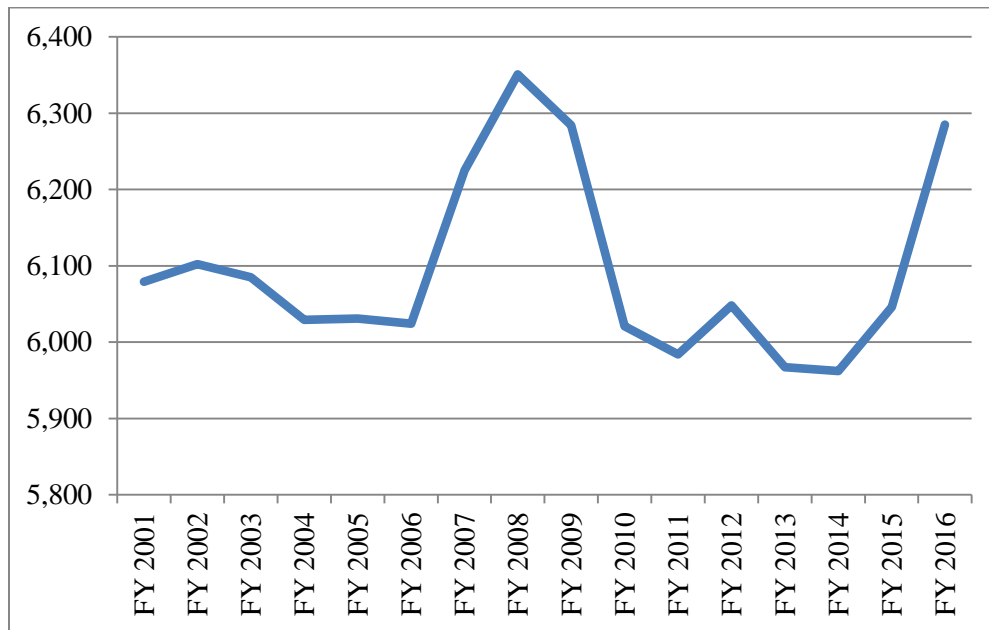
In FY 2007 and FY 2008, headcount again expanded – by 325 to 6,350 – because the hiring moratorium ended and the T expanded with new Silver Line and Greenbush Line services. Once again, a hiring freeze followed in 2008.<sup>13</sup> At the same time, the T implemented its automated fare collection system (Charlie Card). This fulfilled a critical recommendation of the Blue Ribbon Committee and resulted in roughly 180 fewer collectors than in the non-automated system.<sup>14</sup> By 2011, employment fell to roughly 6,000, where it plateaued until FY 2015.

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<sup>13</sup> Transportation Secretary Bernard Cohen: *Testimony Before Transportation Committee*, December 9, 2008

<sup>14</sup> *MBTA Efficiencies and Cost Savings*, June 13, 2011, p. 26.

**Figure 9 – MBTA Average Annual Headcount on the Operating Budget**



Also contributing to the reduction in headcount was the consolidation of redundant services within MassDOT and the MBTA that was part of the 2009 transportation reform act. Positions in the real estate, IT, human resources, finance, and procurement departments were eliminated as a result. The Patrick administration estimated that these consolidations saved several millions of dollars annually.

One nominal increase is actually a positive adjustment – the T’s ongoing plan to move approximately 180 of 780 employees from the capital to the operating budget, a prudent policy even though it will increase headcount and annual costs by approximately \$15 million. To help balance past budgets, the T shifted some personnel costs from the operating to the capital budget. Relying on capital borrowing to fund operating costs is considerably more expensive in the long term and reduces available funds for capital investments.

Now, following a decade or more of attention to headcounts and efforts to limit labor cost growth, the pendulum has swung the other way. Despite a sobering outlook for revenues in the coming years, headcounts are projected to increase substantially over the next several years to support expanded services.

The T’s FY 2015 pro forma anticipated adding 284 personnel due to extended “Night Owl” service on weekend nights (109), expanded off-peak bus services (24), better monitoring of the

commuter rail contract (32), additional staffing for vehicle maintenance (63), and approximately 60 personnel to cover regulatory needs, training operations, and IT development.<sup>15</sup> The draft FY 2016 budget suggests that approximately 80 of the 284 personnel were added in FY 2015 and that an additional 239 will be needed for bus and light rail transportation, increases in police, information technology services, and maintenance, bringing total operational staffing to 6,285.

In addition, the T plans new services including the extension of the Silver Line to Chelsea and East Boston and seasonal passenger rail service to Cape Cod. The T also expects a launch for the Green Line Extension to Medford in 2018, for which fare revenues are projected to fall short of operating costs by roughly \$6 million in FY 2018 and \$7.5 million in FY 2019.

Furthermore, there will likely be demands for additional services over the next several years that are not accounted for in current projections. For example, the FY 2015 state budget authorized weekend commuter rail service on the Plymouth/Kingston Line, Saturday service on the Needham Line, and a study to expand weekend service on the Greenbush Line, all of which opened in December 2014. One can expect that lawmakers will seek even more transit services to support the commuting needs of their constituents in the years ahead.

As popular as these expansions are to transit advocates, riders, and lawmakers, they come with substantial budget consequences for the T and the state.

## *B. Benefits*

In addition to wages, fringe benefits comprise a large portion of labor costs, with health care and pension payments being the two largest components (nearly 95 percent). These two benefits – both of which have been historically very generous – increased at a rate of 7.2 percent annually from FY 2001 to FY 2014, more than double the 3 percent goal (Table 4 on page 21). They account for \$93 million in additional operating costs since FY 2001, representing 14 percent of the total increase in T expenses (Table 5 on page 22).

### *1. Health care*

The enormously generous health care benefits for T employees and retirees was one of the main cost drivers for the T in the decade following Forward Funding. Although the 2009 transportation reform legislation dramatically slowed the rate of growth of health care costs by

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<sup>15</sup> MBTA Advisory Board, *FY 15 MBTA Operating Budget Oversight Report*, April 8, 2014.

requiring T employees and retirees to move into the state's Group Insurance Commission (GIC), the burden of paying for the large unfunded retiree health care liability is a lasting effect of the generous benefits.

Before T employees were shifted into the GIC, health care costs doubled between FY 2001 and FY 2010, growing from \$60 million to nearly \$120 million, or roughly 11 percent annually. Those costs grew so dramatically that they jumped from the equivalent of 20 percent of wages in FY 2001 to 30 percent in FY 2010.

The reason for such explosive growth is clear: the T offered employees and retirees the most generous health care benefits in the state. More than 6,000 retirees received free health care, of whom at least 2,000 were under the age of 65 and not eligible for less expensive Medicare coverage; union employees contributed 15 percent of premiums; \$5 co-pays were the norm; and deductibles were substantially lower than plans managed by the GIC for state and other authority employees.<sup>16</sup>

Two factors helped to rein in health care costs. In 2008, an arbitrator's decision included modest changes to the health plan design such as an increase in co-pays for office visits from \$5 to \$15 and emergency room visits from \$25 to \$50.<sup>17</sup> It also included a requirement that pre-65 retirees contribute 10 percent of premiums for those retiring on or after July 7, 2008 – still one of the smallest retiree contribution levels in the state.

The 2009 transportation reform bill went much further, transferring all MBTA employees and retirees to the GIC as each union's contract expired. Non-union employees moved into the GIC in January 2010. Electrical workers, machinists, and inspectors joined in July 1, 2010, and members of building and construction trades, technical engineers, and others transferred as of July 1, 2011. In total, roughly 1,900 employees, and all retirees affiliated with those unions, joined the GIC during those transfers.

Although the implementation of the 2009 legislation took time, health care costs began to stabilize and then decline as more employees and retirees transferred to the GIC. Costs grew

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<sup>16</sup> Currently, state employees who were hired before July 1, 2003 contribute 20 percent towards premiums. Prior to the fiscal 2010 budget, all state employees contributed 15 percent towards premiums.

<sup>17</sup> Even with modest changes in health plan coverage, the arbitrator's decision overall heavily favored union proposals.

very modestly from \$120 million in FY 2010 to \$123 million in FY 2012 and declined to \$109 million in FY 2014 even though employees and retirees in the largest union, the Boston Carmen's Union, had not yet transferred into the GIC.

The Carmen's Union contract expired in 2009, but a 2010 law approved the use of "evergreen clauses" in public employee contracts that extend the terms of an agreement until a new contract is signed. This provision allowed the Carmen's Union to keep its expensive health insurance plans and not transfer to the GIC until a new contract was ratified four years later in 2013.

With approximately 3,600 members of the Carmen's Union joining the GIC in FY 2015, the T will finally achieve the full savings from the 2009 transportation reform legislation. These savings, however, are partly offset by the arbitrator's decision that required the MBTA to set up an independent health and welfare fund to provide additional benefits beyond what is offered in the GIC, including dental, vision, and life insurance coverage and reimbursing the costs of Medicare Part B (state employees and many local employees do not receive such reimbursements), at an estimated total cost of \$11 million in FY 2015.

The T projects that total health care cost growth will average only two percent annually over the next five years – 0.5 percent in FY 2015, 1.1 percent in FY 2016, 2.3 percent in FY 2017, and 3.1 percent in FY 2018 and FY 2019. Even though the T is now part of the GIC, reaching these targets would be a remarkable achievement, especially since the T plans to add 200 or more staff in FY 2018 and 2019.

Undercutting the T's management of its health care costs is its large obligation to provide lifetime health care coverage to more than 10,000 retirees and employees already eligible for coverage. As of June 2013, the most recent valuation date, the T's unfunded retiree health care liability was \$1.86 billion, double its unfunded pension liability and larger than those of all but a few Massachusetts municipalities.

The liability is so large in part because of the system's low age requirements for retirement eligibility, discussed in the following section (pensions). Thousands of employees are still eligible for retirement with just 23 years of service, which can entitle them to 20 years or more of expensive pre-Medicare health care coverage, largely paid for by the T. Because the recent changes in the retirement eligibility age apply only to new hires, it will be years before the T sees



the effect on its retiree health care costs – and even then, employees will receive as much as 10 years of pre-Medicare coverage.

The T has set aside nothing to address this unfunded liability and instead relies on a pay-as-you-go approach in which it funds only its share of health care premiums for that year's retirees.<sup>18</sup> This approach has consequences. With more retirees than active employees, the T already spends as much on retiree health care as it does on health care benefits for active employees: In fiscal 2014, retiree health care costs were \$58.8 million, more than half of the \$110 million in total health care expenses.<sup>19</sup> As the number of retirees increases, so will the costs, and while the T has made some important steps in controlling its health care costs, the legacy of retiree health care benefits will remain a burden for years to come.

## *2. Pensions*

The MBTA pension system poses yet another serious challenge to the T's long term fiscal stability. The system lacks a clear funding plan; provides benefits which are far more generous and expensive than state and municipal benefits, even after reforms; and has little public accountability.

Annual MBTA pension contributions have grown by nearly 13 percent a year, increasing from \$27 million in FY 2001, or approximately nine percent of wages, to \$71 million in FY 2014, or 16 percent of wages.<sup>20</sup>

Notably, this nearly three-fold growth would have been more extreme had the T not shortchanged its pension contributions over seven years. From FY 2007 through FY 2013, the T underfunded the required pension contribution by almost \$60 million (Table 6), providing operating budget flexibility in the short term but increasing the T's costs in the future.

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<sup>18</sup> Under such an approach, the T sets nothing aside for the costs of benefits that current employees will receive upon retirement. Instead, those obligations are pushed into the future and added to existing liabilities.

<sup>19</sup> MBTA, *Financial Statements*, KPMG, June 30, 2014, p.46

<sup>20</sup> The MBTA provides pension benefits through two defined benefit plans: the MBTA Retirement Fund, which covers all employees except the police, and the MBTA Police Association Retirement Plan.

**Table 6 – MBTA Underfunding of the Pension Fund, FY 2007 – FY 2013<sup>21</sup>**

<b>Fiscal Year</b>	<b>Annual Required Contribution (ARC)</b>	<b>MBTA Contributions</b>	<b>Shortfall</b>
2007	33,815,000	30,014,017	-3,800,983
2008	39,761,000	35,420,770	-4,340,230
2009	49,340,000	38,566,024	-10,773,976
2010	60,252,000	49,006,722	-11,245,278
2011	60,691,000	52,278,311	-8,412,689
2012	66,035,000	54,968,325	-11,066,675
2013	67,602,000	58,039,160	-9,562,840
<b>Total</b>			<b>-59,202,671</b>

By underfunding the amount it sets aside for pension benefits, the T foregoes potential investment returns and increases its costs over the long term. Furthermore, the cumulative level of underfunding – approximately \$60 million – is large enough that even a period of strong investment gains is not likely to cover the shortfall.

The T estimates spending on pensions will increase by 4.5 percent per year, from \$71 million in FY 2014 to roughly \$90 million in FY 2019. However, the T’s annual pension contribution is linked to annual wages – currently the T contributes 15.33 percent of total annual wages – so pension costs will jump if wages are higher than expected in any year, either because of increased staffing or greater than projected salary increases.

Pension costs are driven in large part by the richness of pension benefits. By any standard, even with recent reforms, the T’s pension system is extremely generous. The transportation reform legislation of 2009 eliminated the “23 and out” provision that allowed employees to retire after 23 years of service regardless of the person’s age but still allows employees with at least 25 years of service to retire at 55. Moreover, the reform will provide virtually no budget savings to the T for decades to come because changes apply only to those hired after December 6, 2012. The 6,275 retirees and 5,700 active employees employed before the deadline are still covered under the prior eligibility rules and benefits.

Even the 55-year age requirement is more generous than the state system in which most employees must be at least 62 years old before they can retire.<sup>22</sup> Despite a more generous plan,

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<sup>21</sup> MBTA Retirement Fund, Annual Reports, 2012 and 2013.

MBTA employees pay just 5.5 percent of their pre-tax compensation into the system, half the 11 percent paid by teachers and most state and municipal employees.

In addition to the pension plan, T employees also participate in Social Security, which adds a 6.2 percent employer payroll tax on all wages up to \$118,500 (the wage base limit in 2015) at a cost of \$36 million in the FY 2015 budget. Neither state nor municipal employees are part of the Social Security system.<sup>23</sup>

Exacerbating these issues is the fact that there is such limited transparency on the details of the T's pension system. Information is relatively scarce and far more opaque than the state and municipal plans on which the Public Employee Retirement Administration Commission (PERAC) reports annually. The MBTA pension plan was established as a private entity in 1948 and thus not subject to the same reporting requirements as other public entities; both employee unions and plan administrators have staunchly fought requests for public disclosures. Legislation subjecting the MBTA pension system to public records laws has not resulted in full disclosure, making it difficult to assess the true financial condition of the T's pension system.

Furthermore, in recent years the T pension fund has shifted the assumptions it uses to calculate its costs and this makes year-to-year analysis difficult. For example, while many public pension plans, including the state's, have lowered their investment return assumption, in 2013 the T increased its expected rate of return from 7.5 percent to eight percent. While this had the effect of reducing the unfunded liability and lowering the annual required contribution, it is an unwise and risky change because achieving it may require a more aggressive investment strategy.

Similarly, some reports have asserted that the T's pension system uses an open schedule to fund its pension liability.<sup>24</sup> This means that the pension plan has no set date by which the unfunded liability is to be eliminated and instead uses a rolling 30-year time frame. The lack of transparency leaves it unclear as to whether this is the T's approach to funding, but if so, it is cause for concern because the T risks carrying an unfunded liability into perpetuity.

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<sup>22</sup> Statewide pension reform in 2011 increased the minimum retirement age to 62 for employees hired on or after April 2, 2012. Most employees hired before that date are eligible to retire at 55.

<sup>23</sup> In addition to the employer contribution, the 6.2 percent employee share is deducted from T employee salaries.

<sup>24</sup> Pioneer Institute, *Have the MBTA's Retirement Plans Gone Off the Rails?* Iliya Atanasov, November 2013, p. 6.

### *C. Materials/Services and Energy costs*

Spending on materials and services has increased at an alarming rate. Since FY 2001 these costs have risen by nearly 10 percent per year, more than doubling from \$66 million in FY 2001 to \$148 million in FY 2014 (Table 4 on page 21). Materials and services include energy as well as an assortment of expenses, ranging from maintenance, to information technology services, to uniforms, to public safety. Some services are outsourced and others, like maintenance, are performed in-house.

Maintenance and energy account for approximately two-thirds of total spending on materials and services. An aging fleet and an enormous backlog in SGR projects are driving up costs. The T anticipates maintenance and service costs will continue to grow by roughly 7.5 percent annually from FY 2015 through FY 2019, largely driven by efforts to maintain and repair power transit facilities and bus and rail operations. The T plans to increase funding specifically for maintenance by \$4.5 million in FY 2016, and plans to increase that amount each year.

These investments in maintenance are essential but in many ways they are too little, too late. All 194 Red and Orange Line vehicles are at least a decade beyond their useful life but must be kept in service until they can be replaced. The maintenance costs for these Red and Orange Line cars could run far higher than projected if the T falls behind schedule for the delivery of new vehicles in 2019. Meeting this deadline is complicated by the agreement to fabricate and assemble the cars in Massachusetts.

Underlying the critical need for maintenance is that the T has had difficulty managing large procurement contracts. For example, lack of oversight led to commuter rail cars being delivered more than two years late and in need of immediate repairs. More recently, 40 new commuter rail locomotives that were delivered in August 2014 required immediate maintenance before they could be placed into service.

On the other hand, the T has had some success in managing its energy costs. As the largest consumer of electricity in the state, the T employed several strategies to save on energy costs, including fuel hedges for diesel and natural gas, locked-in electricity contracts pegged to the price of natural gas, and natural gas tax credits to manage price volatility in fuel and energy markets. As a result, the T's energy bills have grown at an annual rate of 5.5 percent since FY

2001, representing five percent of total cost growth (Table 5 on page 22). The T expects energy cost growth to slow to 3.7 percent annually from FY 2015 through FY 2019.

The T has tried to curb some of the other service costs that account for the remaining one-third of spending in materials and services, but has been met with resistance. For example, to lower cleaning costs the T negotiated a new performance-based contract that would reduce the number of janitors by roughly 30 percent or 90 employees, saving approximately \$3 million per year. Due to considerable resistance from the unions, the Boston City Council, and members of the Legislature, the T renegotiated the contract to lessen the impact on employees, which will reduce total savings.

Similarly, there are reports that the T could save as much as \$40 million annually by outsourcing the maintenance of buses to private vendors. However, such a step would require the Legislature to change the state's Pacheco Law, a proposal that has met stiff resistance among lawmakers in the past.<sup>25</sup>

#### *D. Vendor Contracts*

The disparity in the costs to operate vendor-provided services versus traditional bus and rail service is remarkable. Vendor contracts for commuter rail service and the Ride account for one-third of the T's operating budget in FY 2015 yet provide only nine percent, or 37.2 million of the T's 403 million unlinked passenger trips. Bus and rail service account for the remaining 90 percent of passenger trips while consuming only two-thirds of the budget. These two vendor costs are projected to increase from \$506 million in FY 2015 to \$598 million in 2019 or 4.5 percent annually

##### *1. Commuter Rail Services*

Commuter rail has become a serious financial drain on the T. Commuter rail costs have grown at an annual rate of 9.6 percent, jumping from \$173 million in FY 2001 to \$388 million in FY 2014 (Table 4 on page 21), and accounting for 31 percent of the T's total growth in operating expenses (Table 5 on page 22) during that period.

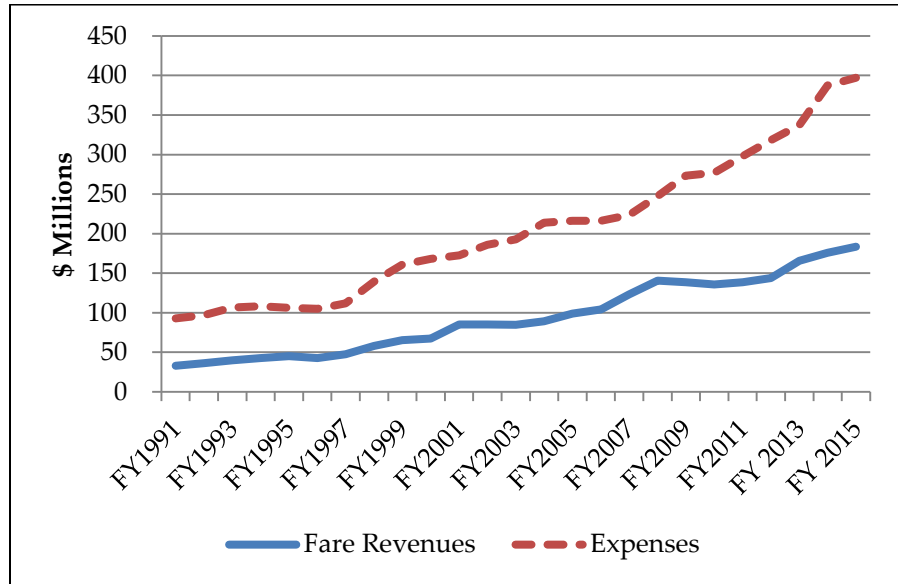
While costs escalated between FY 2012 and FY 2013, ridership declined by 4.3 million passenger trips or nearly 11 percent (from 39.6 million to 35.2 million ) during the same period,

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<sup>25</sup> Pioneer Institute, *MBTA's Out-of-Control Bus Maintenance Costs*, Gregory W. Sullivan, June 2013.

perhaps due in part to 2012 fare hikes.<sup>26</sup> Figure 10 shows the widening gap between commuter rail fare revenues and expenses from FY 1991 through FY 2015.

**Figure 10 – Commuter Rail Fare Revenues and Expenses**



The MBTA signed a five-year, fixed price agreement with Massachusetts Bay Commuter Rail (MBCR) in 2003 for \$1.05 billion, plus an extra \$7 million per year to cover operating costs of the Greenbush Line. The MBTA board extended the agreement with MBCR through FY 2014 before awarding an eight-year, \$2.6 billion contract to Keolis in January 2014 that took effect on July 1, 2014.

The T received cost concessions in the new contract with Keolis that will reduce commuter rail expenses from a projected \$397 million to \$384 million in FY 2015.<sup>27</sup> Not only is the base cost lower in FY 2015, the T also secured a slower rate of growth through FY 2019 than previously projected. The latest pro forma estimates commuter rail costs will increase at an average annual rate of 3.5 percent, significantly less than the 5.8 percent that had been projected before the contract was signed.

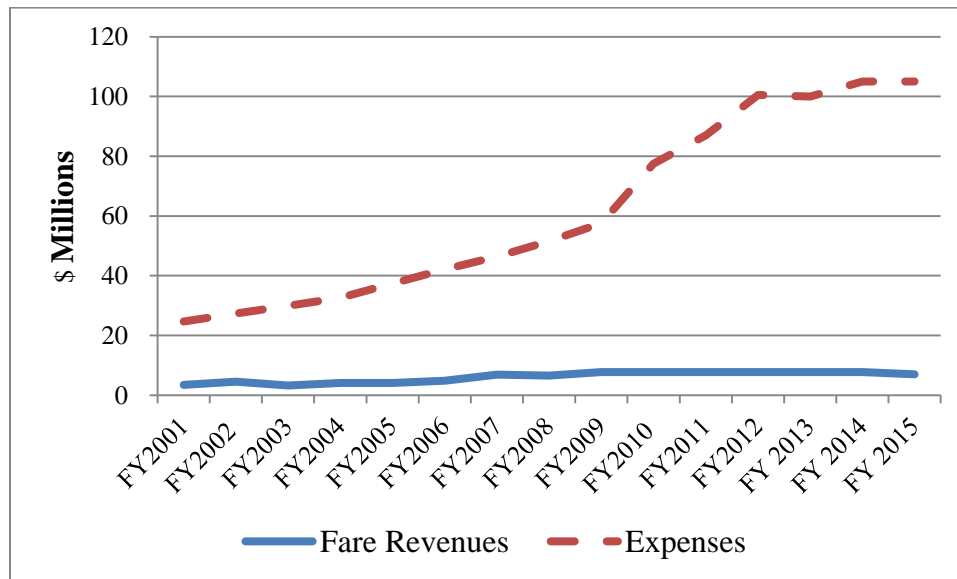
<sup>26</sup> MBTA Capital Investment Plans

<sup>27</sup> MassDOT's *The Way Forward* Pro Forma. One such concession is that Keolis agreed that it would take no profit in the first year of the contract. However, Keolis has already incurred significant fines for underperformance of contract terms.

## 2. The Ride

In 2000, the Blue Ribbon Committee cited the Ride, a federally mandated paratransit service, as one of the fastest growing cost centers. Their concerns were justified. Expenses for the Ride soared at a staggering annual rate of more than 20 percent from \$25 million in FY 2001 to \$105 million in FY 2014 (Figure 11). The \$80 million increase accounts for 12 percent of total operating cost growth since FY 2001 (Table 5 on page 22).

**Figure 11 – The Ride Fare Revenues and Expenses**



The Ride is mandated by the federal Americans with Disabilities Act (ADA) which requires public transit agencies to offer paratransit services to all ADA eligible people within  $\frac{3}{4}$  of a mile of a fixed-route bus or subway service (excluding commuter rail and commuter boat services) with the same hours of operation. The paratransit service cannot charge more than double the fixed rate fare for buses and subways per federal requirements. The T allows residents in areas beyond the  $\frac{3}{4}$  mile requirement to qualify for paratransit services, so it provides services to more people than required by the ADA.

Facing an enormous budget gap in 2011, the Governor issued Executive Order 530 setting up the Commission for the Reform of Community, Social Service and Paratransit Transportation Services in the Commonwealth. The Commission issued its report in July 2012 with a series of recommendations that included commingling trips with other state agencies such as the Council on Aging and the Human Service Transportation Office, exploring the use of taxis, increasing

fares for ADA-plus service outside the ¾ mile requirement, and collecting additional federal reimbursements for Medicaid eligible services.<sup>28</sup>

The T adopted some of the recommendations, modifying the Ride's eligibility requirements and mandating an in-person assessment with a mobility coordinator to qualify rather than simply providing a doctor's letter. The T also doubled the cost of fares from \$2 to \$4 and raised premium service fares to \$5 to control utilization and generate additional revenues. These changes reduced costs as ridership dropped and expenses fell from a projected \$110 million in FY 2013 to \$100 million in actual costs.

But after ridership declined by approximately 20 percent from 2.6 million unlinked passenger trips in FY 2012 to 2.1 million in FY 2013, the T concluded that the \$2 increase had placed an unfair hardship on some users and reduced fares from \$4 to \$3 in 2014, adding back an estimated \$3.5 million in annual costs.<sup>29</sup> That may be a reasonable decision, but it will exacerbate the T's deficit.

The T recently negotiated favorable contracts with the three vendors for the Ride that will lower costs from a projected \$118 million to \$105 million in FY 2015 while cutting the annual growth from 9.4 percent to 4.5 percent over the next five years.

#### *Expense Benchmarks: 2000 and 2013*

The T has missed the mark on two important measures the Legislature set for it with respect to fiscal discipline. The first goal, established a decade and a half ago by the Blue Ribbon Committee as part of Forward Funding, required that "the Commonwealth [sic] cease to have an open-ended liability for MBTA finances."<sup>30</sup>

Additionally, Forward Funding set the benchmark that MBTA costs should not grow any faster than the region's economy. The plan suggested that the best and simplest measure of the regional economy was the growth in sales tax revenues, which tracks both personal consumption and changes in the consumer price index. The Committee recommended that the T reduce its growth in operating expenses by two percent a year, from 4.6 percent annual growth to 2.6

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<sup>28</sup> Executive Order 530: *Community, Social Service, and Paratransit Transportation Commission, July 19, 2012.*

<sup>29</sup> MBTA Capital Investment Program, FY 14-18, p. 1 and MBTA Draft Capital Investment Program, FY 15 – 19, p.1.

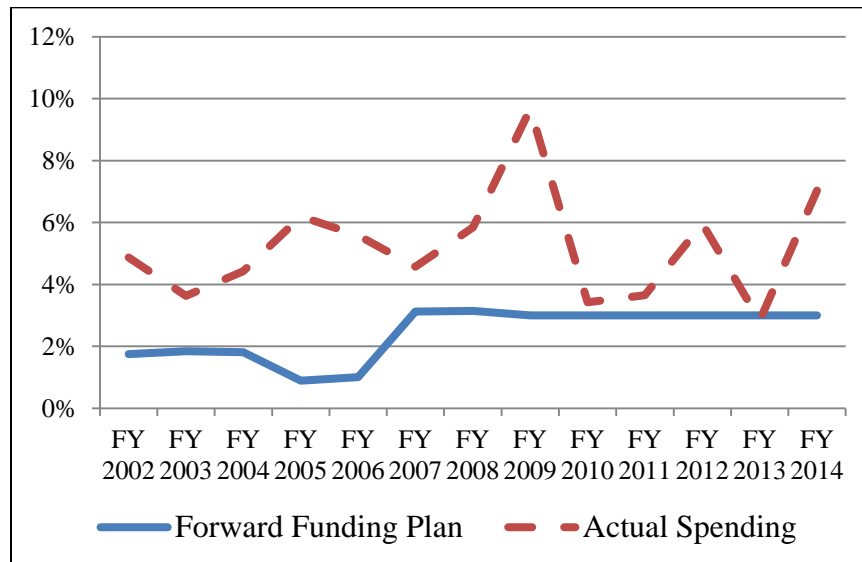
<sup>30</sup> *Taking the T to the Next Level*, the Blue Ribbon Committee, 2000, p.12.



percent, between FY 2002 and FY 2006. The Committee proposed that beginning in FY 2007 T expenses should increase by three percent per year, matching the projected growth rate in sales tax revenues. The Committee recognized that this was an ambitious goal, but it also wanted to emphasize the importance of cost containment in narrowing the T’s operating deficit.

The Committee suggested that the T control costs through a combination of strategies, including: imposing a five-year hiring moratorium; bringing wages and benefits in line with those of other transit systems; requiring retired personnel to make co-payments for health insurance; limiting overtime; reducing absenteeism; and pursuing a cap on tort liabilities.

**Figure 12 – Year-Over-Year Increases in Operating Expenses: Planned vs. Actual**



The T implemented some of these recommendations but even with such steps, the Committee’s key benchmark – that T operating costs grow no faster than the economy – unraveled immediately. The T’s growth in operating expenses exceeded three percent every year except FY 2013, averaging 7.2 percent annually or nearly 2.5 times the Committee’s recommendations (Figure 12).

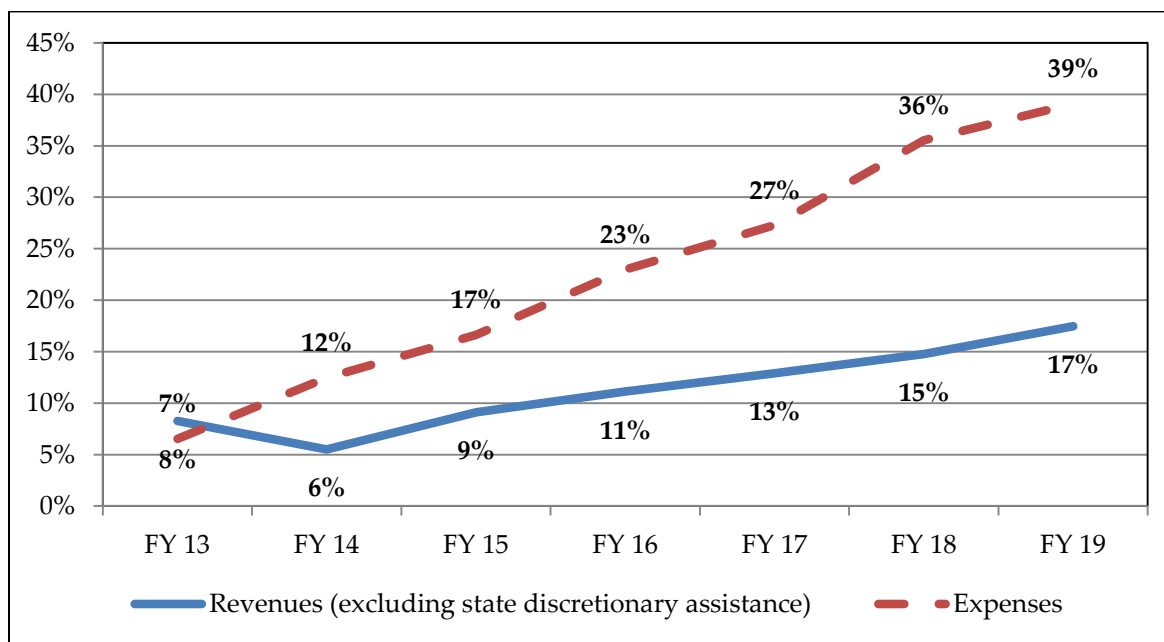
The Transportation Finance Act of 2013 set forth a second important benchmark for the T. In another attempt to instill fiscal restraint, those reforms require that revenues derived by the T from fares and other sources reach set targets as a percent of the overall operating budget. Given the statutorily-imposed constraints on revenue growth, achieving that goal would necessitate cutting expenses. For example, if the T were to comply with the established benchmark in FY

2018, they would have to cut the projected \$2.25 billion budget by \$120 million, or five percent. While greater efficiencies and cost measures are possible, budget cuts of that scale translate into a substantial reduction in services at an enormous cost not just to the T, but to the people and economy of the Commonwealth. It also highlights how difficult the task of balancing the operational budget has become for the T.

### *The Path Forward for the Operating Budget*

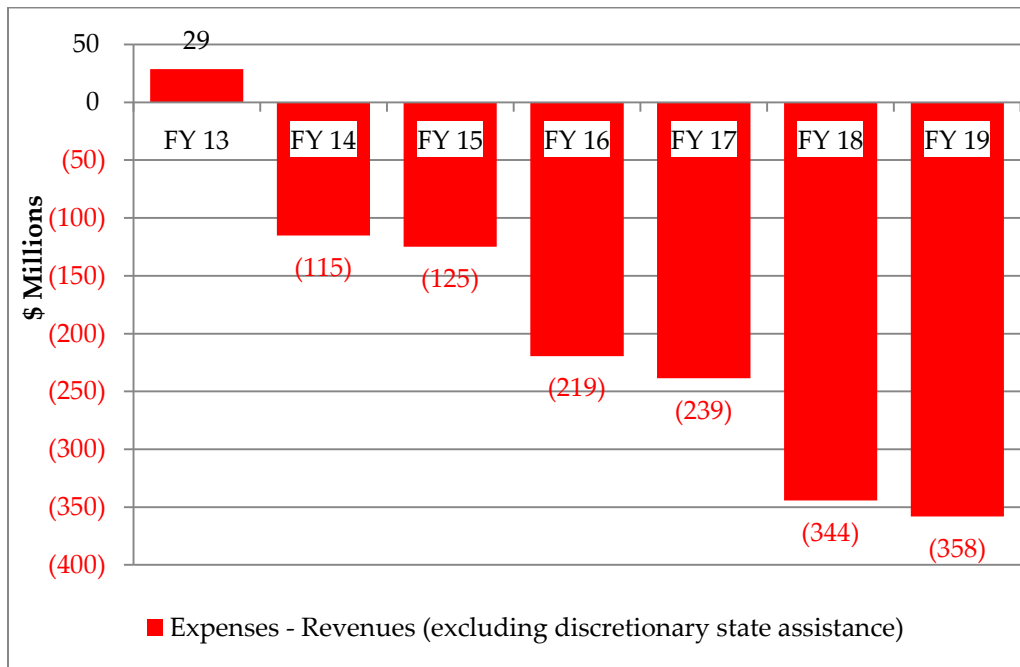
With its primary sources of revenue statutorily capped and attempts at meaningful cost reduction unsuccessful, the T's only option is to rely on ever increasing state aid. Unfortunately, this trend is anticipated to continue for the foreseeable future because the T projects total expenses to rise nearly 40 percent from FY 2012 to FY 2019 while revenues are projected to increase by only 17 percent during that same period. As shown in Figure 13, this will create ever widening budget gaps.

**Figure 13 – Year-over-Year Growth in MBTA Expenses and Revenues (FY 2012 Base)**



As a result of this disparity, the structural shortfall will triple from \$115 million in FY 2014 to \$358 million in FY 2019, according to the T's most recent financial plan (Figure 14). Should the current revenue and expense trends persist, the gap will grow to approximately \$800 million by FY 2024 – and the T will turn to the state to balance its nearly \$3 billion operating budget.

**Figure 14 – MBTA Structural Budget Shortfalls, FY 2014 – FY 2019<sup>31</sup>**



Relying on the state to write ever-larger checks to balance the T’s budget each year not only ends Forward Funding, offering little incentive to limit cost growth, but it is also fiscally unsustainable. Given the state’s significant fiscal challenges in FY 2015 and FY 2016, at some point in the near future the state will be unable to close the T’s gaping shortfall without decimating other budgetary needs.

<sup>31</sup> MBTA FY 2015 – FY 2019 Pro Forma, MBTA Draft FY 2016 Budget

## **PART 2. THE CAPITAL BUDGET**

### **SECTION I: DEBT SERVICE**

#### *Debt Service and Restructuring*

The MBTA is one of the most indebted transit systems in the United States, with \$5.45 billion in outstanding debt – a figure that rises to \$8.8 billion inclusive of interest.<sup>32</sup> While the MBTA indisputably carries a higher debt burden than other public transit systems and more than it should, it is a capital intensive operation for which debt is often the preferred way to fund major investments. Used properly, debt would allow the MBTA to spread the costs of major purchases, like rail cars, over the useful life of the purchase rather than paying the large expense up front. However, the T's exceptionally high debt burden – and how the system has reached that point – is beyond reasonable levels.

Debt service costs, the annual payment of interest and principle for money the T has borrowed, soared by an average of nine percent each year in the decade before Forward Funding, from \$170 million in 1991 to over \$300 million 10 years later. During the 1980s and 1990s, the T invested in a number of large expansions, such as extending Red Line service to Alewife and Braintree; extending Orange Line service to Oak Grove and along the Southwest Corridor to Forest Hills; and extending commuter rail lines north to Newburyport and west to Worcester. As a result, the T's total debt skyrocketed ten-fold from \$340 million in 1980 to \$3.3 billion in 2000.<sup>33</sup>

In the years before Forward Funding, the T's debt was guaranteed by the Commonwealth and the state subsidized approximately 90 percent of the T's annual debt service costs.<sup>34</sup> However, Forward Funding transferred \$3.3 billion in debt obligations and responsibility for paying debt service to the T: \$1.65 billion from expenditures made on transit projects before 2000 such as the Red and Orange Line expansions noted above and \$1.67 billion in “legal commitments” for projects to reduce vehicle emissions that the state entered into in return for federal funding for the Central Artery. Those projects include 1,000 additional garage parking slots, improvements to the Fairmount Commuter Rail line, and design of the Red Line-Blue Line connector. This

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<sup>32</sup> MBTA FY 2015 Operating Budget Staff Summary (April 2, 2014).

<sup>33</sup> MBTA, *State of Good Repair Report*, 2006 Edition.

<sup>34</sup> *Policy Report: Restructuring the MBTA*, Executive Offices of Administration and Finance and Transportation and Construction, October 1999, p. 11.

transfer increased the annual costs to the T so that debt service consumed 31 percent of total expenses, more than many other large transit agencies in the U.S.

The Forward Funding plan recognized that the T's budget must accommodate enormous debt service costs and urged the T to reduce its annual growth in operating spending, including debt service, by two percent to 2.6 percent for the first five years (FY 2001 to FY 2006) and then sustain annual growth of three percent thereafter.

The plan also called for the use of excess revenues to fund pay-as-you-go (paygo) capital investments for maintenance and repairs. This would reduce the need for capital borrowing and the T's debt service costs and, therefore, make it easier for the T to reduce its large, existing debt burden. The vision was that the T's long-term principal obligations would peak at approximately \$4.5 billion in FY 2005 before declining over time as the T paid down its debt. The financial plan projected that the T would have operating surpluses of \$100 million in FY 2004, \$200 million in FY 2009, and \$400 million in FY 2015 that could be used for paygo investments.<sup>35</sup> Unfortunately, the T's operating costs soared and none of these surpluses materialized, leaving widening budget gaps and no excess funds for paygo capital spending.

Instead, for the MBTA, the expense that could most easily be controlled without immediately visible effects on riders was debt service. Because it chose not to implement substantial fare increases or service cuts; had a limited ability to control its revenues; and struggled to rein in non-debt operating costs, the MBTA sought largely temporary reductions to its growing debt service through a series of debt restructurings as it struggled to achieve balanced budgets.

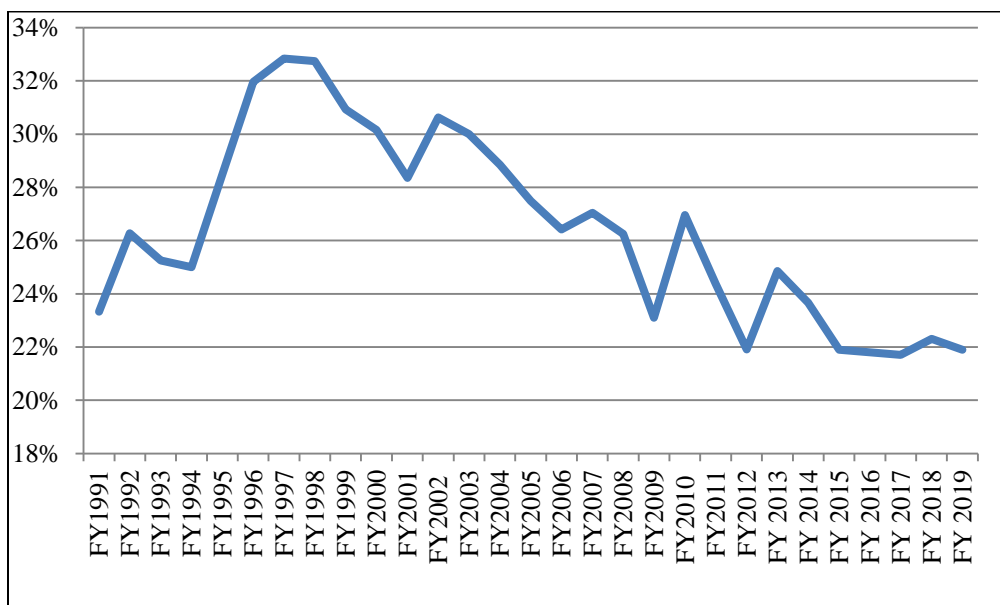
As a result, debt service appears to be the slowest growing of all components of the operating budget, increasing by approximately three percent per year from \$306 million in FY 2000 to \$440 million in FY 2014.<sup>36</sup> Debt service costs grew at half the rate of other operating expenses, and, as a percent of total spending, declined from a peak of 33 percent in FY 1997 to 22 percent in FY 2015 where it is projected to remain through FY 2019 (Figure 15).

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<sup>35</sup> MBTA, *Forward Funding Finance Plan*, May 2000.

<sup>36</sup> Debt service costs dropped by \$15 million in FY 2001 from FY 2000 due to a large reduction in principal payments before jumping to \$343 million in FY 2002

**Figure 15 – Debt Service Expenditures as a Percent of Budget – FY 1991 to 2014**



However, underlying the reduction in debt service spending are a series of costly actions, most of which imperil the long-term viability of the T. The T used three debt management tools to reduce its debt service costs: debt refinancing, debt restructuring, and securitizing revenues. Given the low interest rate environment in the years since Forward Funding, refinancing debt at lower interest rates makes fiscal sense as a way to lower debt service costs – just like refinancing a home mortgage.

Debt restructuring, on the other hand, is the issuing of new debt to pay down existing debt and brings with it longer payment schedules and greater costs. While it may offer a short term reduction in debt service costs, issuing new debt to pay down old shifts debt payments to the future. Rather than eliminating costs, it postpones them and adds to the total cost because of greater interest costs.

For example, in 2005, the T issued a bond for more than \$750 million to restructure old debt, much of it from the late 1990s. Since 2005, the T has paid almost no principle on that bond.<sup>37</sup> As a result, the T has made hundreds of millions in interest payments, but the principle remains at \$735.45 million. The T will not make a principle payment on these bonds until 2020 and only after paying nearly \$200 million in additional interest costs. By structuring the bond in this

<sup>37</sup> The T refunded approximately \$45 million of these bonds in 2006 and 2010.

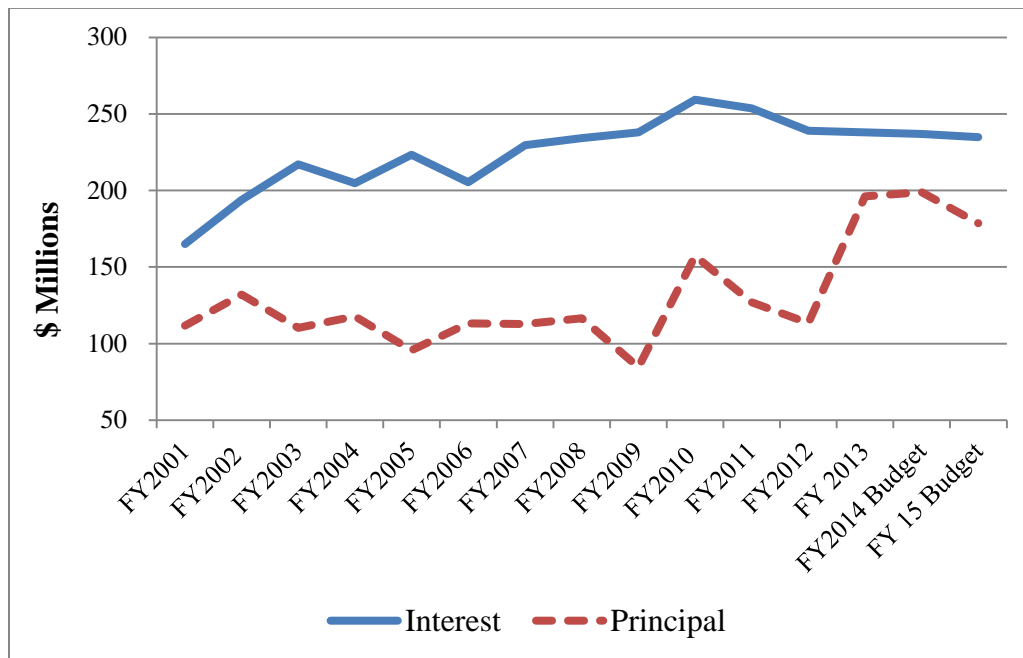
manner, any advantage the T may have achieved from a marginally better interest rate on the refunded bonds becomes irrelevant.

This practice has continued. Under fiscal duress to balance its budget and unable to manage the growth in operating costs, the T restructured roughly \$240 million of debt in FY 2007 to FY 2009 and another \$100 million in FY 2011 and 2012.

As another tool to control its near-term debt service costs, the T sold bonds in 2011 to securitize its parking lot revenues, postponing \$265 million in principal payments that should have been paid from FY 2012 through 2016. With no principal payments on the bonds due until FY 2022, the T shifted \$350 million in debt to FY 2022 through FY 2041, while adding another \$400 million in interest costs – more than the principal – for the T.

The cumulative effect of these changes is apparent in the breakdown of principal and interest payments made on the T's debt. Using these debt management tools, the T lowered its principal payments from roughly \$110 million in FY 2001 to just \$85 million in FY 2009. During the same time, interest payments rose from \$194 million to \$238 million. Additional restructurings in FY 2011 and 2012 again lowered principal payments by \$45 million from FY 2010 (Figure 16), but outstanding debt continued to rise.

**Figure 16 – Principal and Interest Payments, FY 2001 – FY 2015**



With the exception of debt refinancing, these debt moves that reduced the T’s contributions towards debt principal did nothing to reduce the T’s enormous total debt obligations. To the contrary, they significantly increased its amount of outstanding debt and the future cost of debt service.

The MBTA’s management was aware that these were not optimal policies, but viewed these as necessary to balance budgets. As noted in a 2006 report, debt restructuring “is an expensive financial option, and it also increases the Authority’s overall debt burden, without contributing at all towards generating funds for additional investment in its system.”<sup>38</sup> With \$5.5 billion in outstanding debt going into FY 2015 – a full \$1 billion more than the T was supposed to have in FY 2005 under the Forward Funding plan – the MBTA has endangered the long-term viability of both its operating budget from which future debt service payments must be allocated *and* its capital program because this outstanding debt imperils the T’s ability to borrow for critical system maintenance projects.

<sup>38</sup> MBTA *Efficiencies and Cost Savings*, June 2011, p. 34.



## SECTION II: THE CAPITAL BUDGET

Like its operating budget, the MBTA's capital budget is in an unsustainable state. A capital budget details spending on so-called capital projects and the sources of funding to pay for that spending over a period of five or ten years or, in some cases, even longer.<sup>39</sup> Capital spending is largely on traditional infrastructure like rolling stock, tracks, and signals, but it may also include large-scale technology implementation, project planning and design, and other similar items.

The T has enormous capital needs, including an astonishing maintenance backlog that MassDOT and the MBTA cannot quantify fully because of inoperative asset management systems.

However, as discussed in the debt service section, the T has virtually no capacity to borrow in order to pay for those needs. This leaves the T dependent on the state, which in turn faces the prospect of having to cannibalize spending on other capital projects so it may fund much, if not most, of the T's capital plan.

### *MBTA "State of Good Repair" continues to deteriorate*

Over the past decade, the state assumed financial responsibility for major capital investments at the T that include purchases of new subway vehicles and buses, construction of the federally mandated Green Line Extension, and transit expansions across the state including South Coast Rail. But the remainder of system maintenance costs – the investments needed to bring the MBTA into what is known as a "State of Good Repair" (SGR) – are the MBTA's responsibility.

The T is simply unable to fulfill that basic maintenance responsibility, so more system deterioration is unavoidable. That deterioration can appear immediately, such as through snow storm paralysis that inconveniences countless riders and disrupts the economy. It also becomes apparent through long-term, systemic decline.

The system's SGR problem has percolated for years, and the winter breakdowns in 2015 underscored the seriousness of the problem. In a 2006 report, the MBTA said it faced a backlog of \$2.7 billion in deferred projects and would need to invest \$470 million a year just to keep the system from deteriorating even further. At that point in time, it would have required a total of

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<sup>39</sup> Capital budgets are part of broader capital plans. Capital plans lay out and prioritize capital needs over a long period of time.

\$620 million a year to eliminate the existing SGR backlog over 20 years.<sup>40</sup> “Even with unlimited funds,” the report notes, “it would take nearly seven years to complete these backlogged projects, *during which time an additional \$2.1 billion in needs would be generated* (emphasis added).”<sup>41</sup>

Three years later an independent group, working with the T, increased the SGR backlog estimate to \$3 billion from \$2.7 billion but more importantly increased to \$694 million the estimate of what is needed to maintain the current backlog which is \$225 million more each year than the T’s \$470 million estimate.

Following the release of the report, the T continued to underinvest in maintenance, spending approximately \$500 million annually on SGR projects between FY 2009 and FY 2014, a total of approximately \$1 billion less than recommended by the independent report. Thus, it should be no surprise if the SGR backlog increased during that time.

In fact, since 2009 the SGR backlog and the cost to resolve it have soared. A 2011 MBTA report acknowledged that the total cost to eliminate the SGR backlog had climbed to \$4.5 billion.<sup>42</sup>

Then, during discussions of the 2013 transportation finance legislation, Patrick administration officials raised that estimate to more than \$6 billion. In March 2015, the T raised the SGR backlog estimate to \$6.7 billion noting that the figure would increase because the asset database does not yet contain a comprehensive inventory of all MBTA assets.<sup>43</sup>

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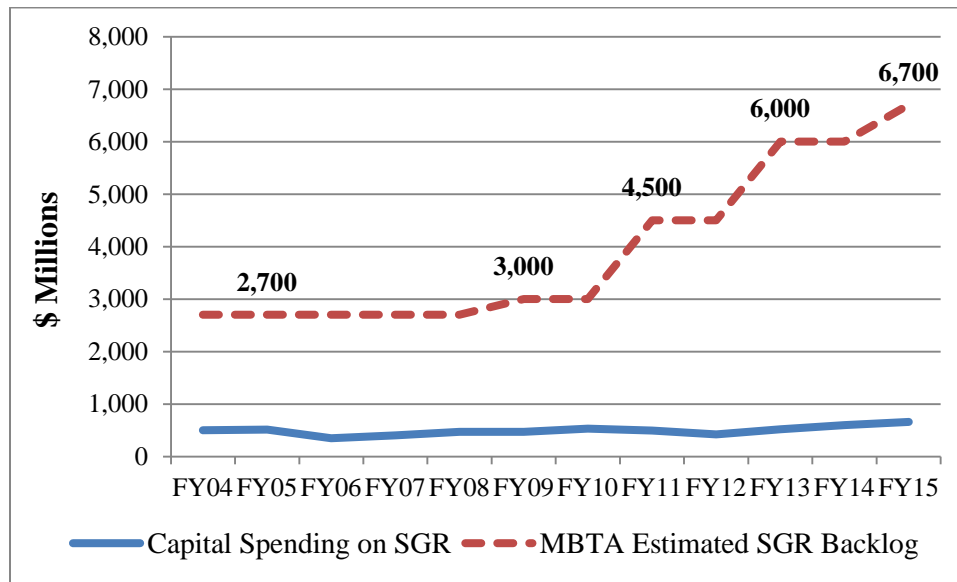
<sup>40</sup> *MBTA State of Good Repair Report, Key Infrastructure and Capital Spending Issues, 2006, p.9.*

<sup>41</sup> *Ibid.* p. 8.

<sup>42</sup> *MBTA Capital Investment Plan FY 12-FY 16, p.5.*

<sup>43</sup> A T spokesman informed the MBTA Standing Committee on Finance and Audit at a March 3 public meeting that some transit mode asset data had not yet been collected, mostly from the commuter rail system. The T is unable to estimate the proportion of assets not yet added to the database or the timeframe when the asset management system would be fully populated.

**Figure 17 – MBTA State of Good Repair Backlog, FY 2004 - 2015**

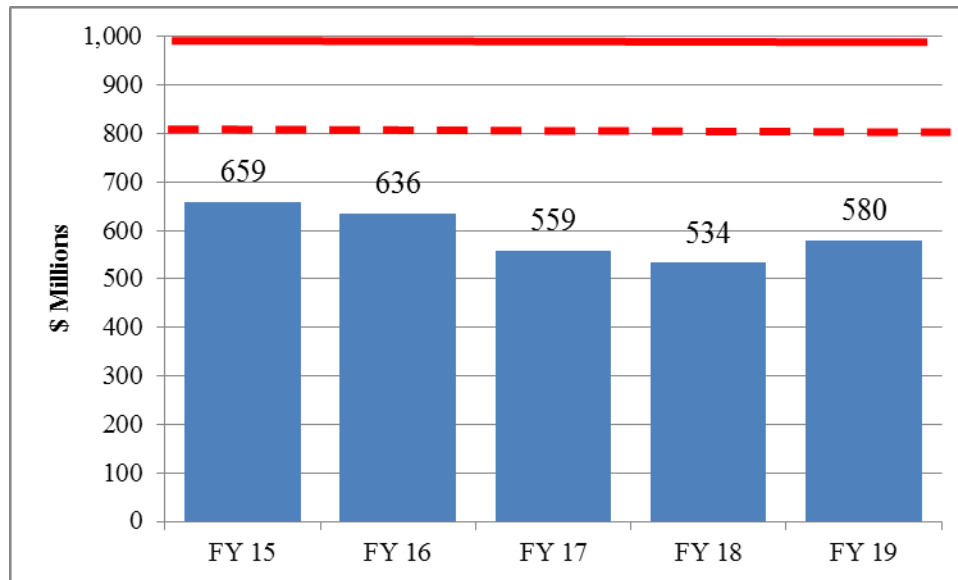


What is remarkable, though, is that between FY 2009 and FY 2015 the SGR backlog jumped by \$3.7 billion – an average increase of \$600 million per year – despite spending \$500 million on SGR maintenance projects annually (Figure 17). The T’s silence on the doubling of the SGR backlog raises serious doubts about the management of the T’s asset database system, the criteria used to prioritize maintenance projects, the maintenance procedures employed, the T’s capacity to complete \$500 million of SGR projects annually, and the lack of urgency to rectify these problems.

To make matters worse, the backlog will continue to climb and the T’s infrastructure will deteriorate even further. Although the T does not yet know how much capital investment is needed to keep the \$6.7 billion backlog from growing, it can afford to increase SGR spending by only \$100 million to an annual average of \$600 million between FY 2015 and FY 2019, which is \$100 million less than what was needed in 2009 when the backlog was a more manageable \$3 billion.

In fact, as Figure 18 shows, it is likely that the T would need to invest at least \$800 million a year to maintain the system and \$1 billion to begin to chip away at the \$6.7 billion backlog, far more than what the T plans to spend. And even these amounts may not suffice if the T fails to overhaul its project selection criteria and maintenance procedures.

**Figure 18 – MBTA CIP FY 2015–2019; Planned Spending on State of Good Repair Projects**



In a 2011 report, the T acknowledged the dangers of continuing to invest far less than necessary on maintenance and repairs due to budget shortfalls. “Without debt relief or a more extensive pay-as-you-go capital funding program, the Authority will not be able to afford to invest funds in many of the projects in its Capital Investment Program, including the backlog of state of good repair projects,” the report said. “Further, if current conditions persist, the MBTA will continue to face further increases to its backlog of state of good repair projects, and, potentially, an unacceptable deterioration of its infrastructure.”<sup>44</sup>

Four years later, and despite the efforts in 2013 to strengthen the T’s finances, the MBTA transit system continues to deteriorate at an alarming rate that may jeopardize the region’s economy.

*The state’s commitment to the T grows, but the state lacks funding capacity*

Without any capacity to invest in much needed maintenance and capital projects, the T is dependent on the state to meet its capital needs. However, the state is already contributing to the T and has limited flexibility as it faces its own serious demands for capital funding.

MassDOT released in 2013 its 10-year statewide capital plan for all modes of transportation entitled *The Way Forward: A 21st-Century Transportation Plan*. MassDOT included \$8.4 billion in transit investments that can be divided into two basic components: investments in the

<sup>44</sup> *MBTA Efficiencies and Cost Savings*, June 30, 2011, p. 33-34.

T’s SGR projects and expansions, including the federally mandated Green Line Extension. Unfortunately, the MassDOT plan does not include the revenues needed to pay for these investments and the state lacks sufficient funds to cover most of it.

*The Way Forward* proposed approximately \$3.2 billion of state investments for the purchase of Red, Orange, and Green Line subway vehicles and MBTA buses along with improvements to tracks, power, and signals (Table 7).

**Table 7 – *The Way Forward*: Planned State Spending on State-of-Good Repair Projects in \$ millions**

<b>FY 15 - 24</b>	
<b>State-of-Good Repair</b>	
Red & Orange Line Vehicles and Track	1,500
Red Line Car #3 Overhaul	200
Green Line Vehicles	732
MBTA Buses	450
Power & Signals	300
<b>Total</b>	<b>3,182</b>

MassDOT’s plan also proposes spending an additional \$5.2 billion on expanded transit services across the state (Table 8).

**Table 8 – *The Way Forward*: Planned State Spending on Expanded Transit Services in \$ millions**

<b>FY 15 - 24</b>	
South Coast Rail *	2,300
Green Line Extension (state share)	1,300
South Station Expansion	850
Inland Route	362
Berkshires to NYC	114
Rail to Cape Cod	21
Silver Line Extension and DMU Service	252
<b>Total</b>	<b>5,199</b>

\* Cost estimate has increased by \$500 million since publication

*Other capital funding obstacles*

There is already a near \$3 billion shortfall between MassDOT's five-year plan for capital spending and the available funding for these projects, but that difference is likely even larger because of higher than expected project costs and multiple risks to revenues.

The state has historically been unable to complete large infrastructure projects on budget and on time, and *The Way Forward* uses predictably unrealistic cost estimates. For example, estimated costs for South Coast Rail and the Green Line Extension have grown by a combined 50 percent in just over a year, from \$3.1 billion when *The Way Forward* was released in 2013 to \$4.6 billion in 2014.

As costs climb, revenues are likely to fall short of projections. The voters' repeal of gas tax indexing means a loss of \$1 billion in anticipated revenues. Another revenue source, tolls on the western Massachusetts Turnpike, is set to expire in early 2017. Unless the tolls are extended by the Legislature, MassDOT will see a \$130 million decrease in annual toll revenues. Yet another risk is the reluctance of the federal government to raise revenues for its share of state transportation projects.

The existing disconnect between statewide capital aspirations and available revenues means that there will inevitably be projects that are eliminated or postponed. Therefore, the T cannot expect the state to assist in the majority of its capital needs that are not accounted for in the plan, nor can it readily transfer debt to the state.

For all its good intentions, however, *The Way Forward* is deeply flawed by faulty revenue projections, outdated cost estimates, and investments skewed toward new services that will cause further deterioration of the T's infrastructure. Even if funds were available, diverting sparse dollars away from badly needed maintenance of the existing system all but guarantees that the system's core infrastructure will continue to fail.

*Past warnings ignored*

Not only does the state lack sufficient revenues to fund its many projects, it also lacks the resources to maintain an expanded T system. The state's plan ignores a history of stark warnings to fix the core system before funding expansions, including this guidance from the Blue Ribbon Committee in 2000:

The Committee recommends a moratorium on all capital projects except those that meet critical maintenance needs, result in measurable increases in productivity or revenues, or are determined to be legally required...Expansion projects, except those already underway, cannot be implemented at the expense of maintaining the existing system. Above all else, the MBTA must live up to its fiduciary responsibility to maintain the \$7 billion in public assets that are under the MBTA's control.<sup>45</sup>

The Foundation issued similar warnings in its 2002 report:

The T is at a critical junction. If the Authority proceeds with expansion plans at the expense of maintaining and modernizing the existing system, lets its debt burden continue to mount, fails to get a grip on operating costs, and misses opportunities to generate more of its own revenue, the consequence will be a financially weak agency unable to cover operating costs or maintain the system without additional support from the Commonwealth.<sup>46</sup>

Many of the T's current problems stem from over-expansion, as demonstrated by the enormous – and growing – subsidization of the commuter rail. While there may be public support for T expansions, the sobering reality is that they actually jeopardize service by siphoning away critical funds that should be invested to maintain the core system.

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<sup>45</sup> The Blue Ribbon Committee, *Taking the T to the Next Level of Progress*, April 2000, p.37. Recent estimates place total MBTA assets at approximately \$13 billion.

<sup>46</sup> *MBTA Capital Spending: Derailed by Expansion?*, Massachusetts Taxpayers Foundation, February 2002, p. 6.

### **PART 3. CONCLUSION**

While the focus of this report is the MBTA's finances, the problems confronting the T encompass all aspects of its operations. Management processes, lack of oversight, and political considerations have contributed to the T's problems and any viable solution must include changes to each if the T is to be sustainable. The MBTA faces significant challenges on all fronts, as this report demonstrates:

- Revenue sources are insufficient and are statutorily capped at rates that all but ensure that the operating deficit will increase over time.
- Expenses are significantly higher than Forward Funding assumed and far outpace inflation and growth in projected revenue. While some reforms have been made to health insurance coverage, retirement eligibility, and other benefits, much more must be done to bring the T's costs in line with its revenues.
- Due to the high amount of debt the T carries and the growing costs of paying for that debt, the MBTA is incapable of making the capital investments necessary to maintain the system at adequate levels. Eliminating the SGR backlog has become increasingly difficult and investment in expansions is simply unaffordable and imprudent given the additional burdens it will place on the operating budget in future years.
- The MBTA lacks the management tools (functional asset management system, updated comprehensive SGR backlog list, etc.) to quantify the extent of its capital needs properly.
- Interested stakeholders need to take a more realistic and holistic approach to what future MBTA service looks like if we want the MBTA to be able to deliver reliable, safe service to its ridership.

The role of the Massachusetts Taxpayers Foundation is not necessarily to provide solutions, and in this case it would be difficult to do so given the size and scope of the problem. There are, however, some critical next steps that the decision makers can and must take in the near term.



## NEXT STEPS

The T's dire state is indisputable, and all agree that the T must be fixed to serve the people and economy of the Commonwealth. As enticing as a quick fix may be, first and foremost the state must determine the full size and scope of the system's challenges and needs. To do this, the Foundation recommends that the state prioritize the following nine steps to inform a more detailed analysis so that it may develop a plan for rescuing the T:

▶ **Tie FY 2016 state contract assistance to the release of up-to-date SGR backlog data**

The MBTA's asset management system, which quantifies the SGR backlog and helps to prioritize maintenance projects, has been inoperative for several years and full implementation of a new Federal Transit Administration (FTA)-funded system is several years away. This is an enormous management failing and the state should withhold additional assistance until the T can produce a comprehensive SGR backlog project list that clearly and accurately states both the size of total maintenance shortfall and the cost to keep the system from deteriorating further.

▶ **Conduct a detailed audit of the MBTA's maintenance protocols**

The state should insist on an independent assessment of the T's maintenance protocols, project selection criteria, and capital spending to determine whether the T has the capacity to bring its infrastructure into a state-of-good repair.

▶ **Require an independent fiscal audit of the T**

The Governor should request an independent, third-party, in-depth analysis of the T's finances. The T's long history of using financial maneuvers such as debt restructurings and securitizing long-term revenue streams have complicated its debt obligations, and the T provides minimal information on unfunded pension and retiree health care liabilities. All pose substantial hurdles to the T's ability to continue as a going concern. Full analysis and disclosure of the T's financial exposures is necessary before solutions can be found.

▶ **Halt expansion contracts for the remainder of 2015**

Before the MBTA undertakes any further expansion, it must get its current fiscal house in order. The state and the T must perform more analysis of the impact that expansions will have on the operating budget and maintenance expenditures and must identify revenue

streams to cover the ongoing costs of expansions before any additional outlays are made. A brief delay will afford an opportunity to re-examine both the way in which projects are being carried through and the sustainability of each expansion as a part of the T system as a whole.

▶ **Reform the procurement process including a two-year moratorium of the Pacheco Law with a report on savings**

Just as its maintenance systems require a careful review, so too do the T's procurement practices. A series of problems with T procurement practices and other policies have further eroded public confidence in the T. The size and uniqueness of the T's capital purchases warrant a centralized procurement process with in-house experts overseeing contracts to ensure purchases are delivered on time, on budget, and fully operative.

▶ **Reexamine the MBTA's governance structure**

The T's long-term problems cannot be addressed effectively unless the Authority's own leadership is fully committed to the reform effort. Currently, the T's Board is independent and not accountable to the Secretary of Transportation, the Governor, or the Legislature and management has too often been resistant to external examination and proposals for change. The Administration should have control over the MBTA board in the short-term to ensure compliance, accountability, and full transparency. The Administration should also have the authority to select the next general manager and work with the Legislature to determine the most suitable governance structure to develop and execute a rescue plan for the T.

▶ **Eliminate Social Security eligibility to align with the state pension system**

The unique dual pension eligibility of T employees, dating back to the state takeover of private operators, makes no sense decades later, and it imposes significant unnecessary costs on a financially stressed system.

▶ **Eliminate binding arbitration**

Binding arbitration stands in the way of the responsible cost-conscious management the T requires. It was eliminated for most public employees a generation ago.

▶ **Require full disclosure of the pension system finances**

Despite efforts by the Legislature, the T has not released details regarding its pension system and assets because it asserts that the pension system is a private entity. However, the T would

have no hope of meeting its annual pension obligations without the annual infusion of hundreds of millions of dollars in tax revenues. At a minimum, the T pension system should release the details on its investments and cash flows and provide actuarial valuations.

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