April 8, 2015



Back on Track: An Action Plan to Transform the MBTA

Submitted by the Governor's Special Panel to Review the MBTA





Commissioned by: Governor Charles D. Baker Commonwealth of Massachusetts

A Word of Thanks to the Men and Women of the MBTA

The members of the Governor's Special Panel offer their deep appreciation to the men and women of the MBTA and Keolis Commuter Services, and their families, for their extraordinary efforts during the blizzards of 2015.

For all that you did to try to keep the MBTA operating, and then for your work during the period of recovery, we thank you.

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Governor's Special Panel to Review the MBTA: Our Charge

Objectives

- To develop a fact base from available data and recently published reports to enable the MBTA and the Commonwealth to ground future plans and recommendations.
- To undertake a rapid diagnostic on the state of MBTA asset management and maintenance.
- To make recommendations to improve the MBTA's governance, structure, financials, and operations in both the short and long terms to enable the MBTA to plan, operate, and maintain a 21st-century public transportation system.

To fulfill its charge, the Panel:

- Met 18 times over six weeks.
- Reviewed dozens of past studies.
- Met with current and former MBTA staff, General Managers, and MassDOT Secretaries.
- Toured four MBTA maintenance and operations facilities.

The Panel's Diagnosis

Pervasive Structural Failure

We balance respect for what MBTA and Keolis employees do to deliver 1.3 million daily rides, using out-of-date equipment, with a recognition that the MBTA system:

- Is in severe financial distress and would be <u>insolvent</u> without significant and continually increasing funding from the Commonwealth each year.
- Lacks a viable maintenance and repair plan for vehicles, facilities, signals, track and power systems, even though these are core responsibilities of the agency.
- Lacks a culture of performance management and accountability.
- Is governed ineffectively, in part because funding and financial responsibilities are too distant from decision-makers and customers.

Some have called the winter of 2015 a 'stress-test' for the MBTA. While the MBTA 'survived' the test, short-term costs were significant in disruption, economic losses, and public and private hardship. The long-term costs are even more troubling: the loss of public confidence in our regional transit system.



The catastrophic winter breakdowns were symptomatic of <u>structural problems</u> that require fundamental change in virtually all aspects of the MBTA.

Action Plan: Urgent work is needed

Many past reports on the MBTA have attempted to quantify the financial needs of the agency. This report is different.

- It sheds light on the structural problems that prevent the MBTA from providing reliable, high-quality public transit service, every day, every rush hour, in all weather.
- It rejects the 'reform vs. revenue' debate because the MBTA needs <u>both</u>.
- It demonstrates the need for significant and immediate change so that the MBTA may execute a sustained campaign to transform its organization and rebuild its infrastructure.

- A well-functioning MBTA is fundamental to the civic and economic life of the Commonwealth. Demand for MBTA service appears to be at an all-time high and growing.
- The Panel urges Governor Baker and MassDOT and MBTA leadership to <u>immediately</u> use the full extent of their respective authorities to transform the MBTA.
- In addition, the Panel respectfully urges that the Legislature act expeditiously to enact the recommendations provided herein.
- This Plan of Action will be difficult and require collective effort, but the alternative is far worse: continued spiraling costs, unmet maintenance needs, and an increasingly unreliable MBTA.

Nothing short of bold and urgent action is needed. This report is a blueprint for that action.

The Panel's Key Findings

1. UNSUSTAINABLE OPERATING BUDGET

Due to a severe imbalance between costs and revenues, the MBTA would be insolvent if not for continuing and increasing Commonwealth subsidies.

2. CHRONIC CAPITAL UNDERINVESTMENT

While the MBTA will ultimately need additional state funding for capital spending, it has been unable to spend the capital funds already available to it, contributing to chronic underinvestment in fleet and infrastructure.

3. BOTTLENECKED PROJECT DELIVERY

The MBTA struggles to get projects of all types out the door.

4. INEFFECTIVE WORKPLACE PRACTICES

The MBTA is largely ineffective in managing its work due to weak workplace customs and practices.

5. SHORTSIGHTED EXPANSION PROGRAM

MassDOT and the MBTA lack a rigorous, long-range expansion strategy based on a clear-eyed understanding of the physical and financial capacity of the MBTA and the regional transit needs of the future.

6. ORGANIZATIONAL INSTABILITY

The MBTA has been hobbled by frequent changes of leadership, significant vacancies, looming attrition, and organizational insularity.

7. LACK OF CUSTOMER FOCUS

The MBTA is not organized to operate as the customer-oriented business it is.

8. FLAWED CONTRACTING PROCESSES

MBTA procurement and contract management is inefficient and decentralized.

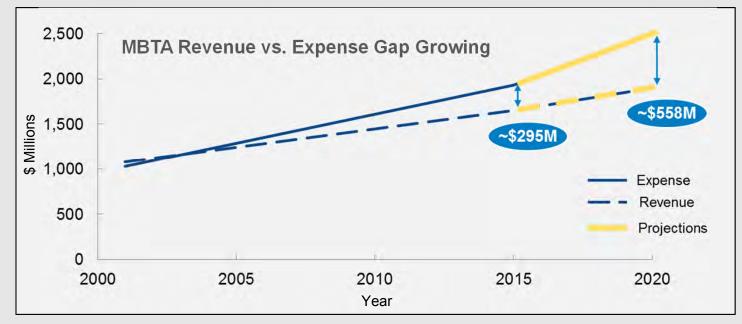
9. LACK OF ACCOUNTABILITY

The Commonwealth provides more than half of the MBTA operating budget and substantial additional funding for capital projects, but the MBTA is not directly accountable to either the Governor or the Legislature.

KEY FINDINGS AND RECOMMENDATIONS

1. Unsustainable Operating Budget

Due to a severe imbalance between costs and revenues, the MBTA would be insolvent if not for continuing and increasing Commonwealth subsidies.



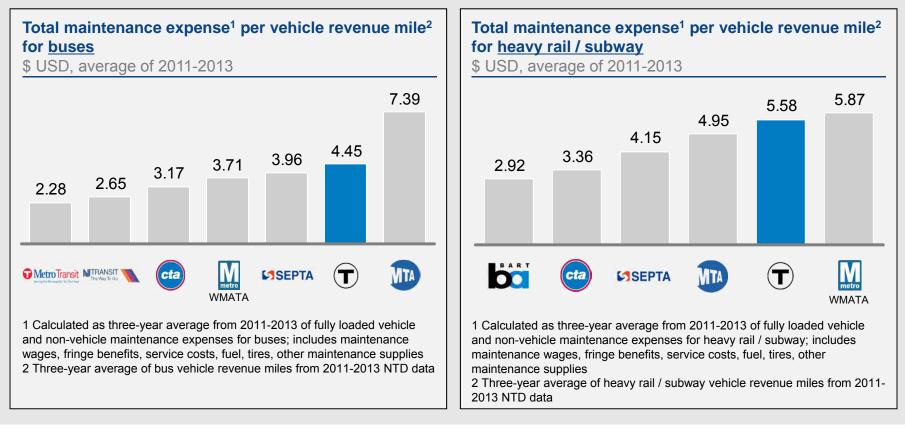
- Since 2013, the Commonwealth has implicitly assumed responsibility for funding MBTA operating deficits. This arrangement is not conducive to cost control and revenue generation.
- This is an unacceptable long-term situation for the Commonwealth, which faces growing and unpredictable funding requests from the MBTA (as it did prior to Forward Funding, which was designed to remedy this situation).

The panel recommends that the MBTA prepares 1- and 5-year operating plans that rely primarily on own-source revenue and cost containment to balance the agency's budget, with an identification of any un-met operating needs.

Source: MBTA Panel projections and analysis. Graph shows revenue with guaranteed funding from the sales tax and without contract assistance and additional assistance. Expenses include debt service. FY01 to FY15 data from MBTA. Projections assume 2.1% ridership growth; 5% fare increases in FY2017 and 2019; Local Assessment growth at 2.5%; Dedicated Sales Tax revenue at 2.2%; and Other Revenues growth at their historic averages. Operating Expense growth is shown at 5.25%.

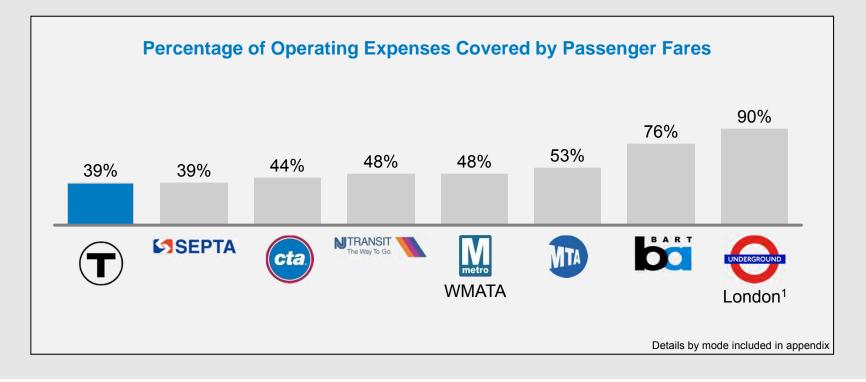
Mounting Operating Costs

- Operating expenses adjusted for service levels are growing at 5.25% per year. This is <u>twice</u> the rate of inflation.
- Operating costs at the MBTA are higher than most peer transit systems due to limited cost control, low labor productivity, and high maintenance costs.
- Average fleet age is the oldest of all peer transit systems across each mode of transportation and results in higher maintenance cost. The Red Line, for example, still operates vehicles built in 1969.
- Operating costs per vehicle revenue mile are the second highest of all peer agencies.

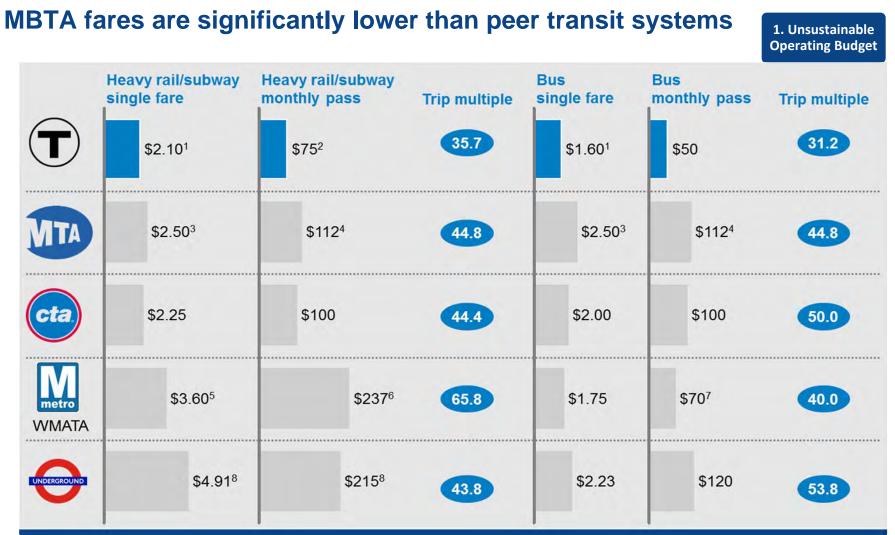


Stagnating Revenue

- Major sources of MBTA revenue (i.e. fares and local assessments) are capped by law.
- Between 2001-2015, revenue only grew 2.12% annually.
- The percentage of operating expenses excluding debt service covered by fare revenues is 39%, well below peer transit systems.
- Ridership, while increasing, is unevenly measured and receives insufficient emphasis as a means of increasing fare revenue.



1 Includes the underground / subway system only, not the entire Transport for London system Source: National Transit Database 2012 and 2013, MTR Annual Report 2012; TFL Annual Report 2011-2012



MBTA single fares are underpriced and monthly passes are <u>steeply</u> discounted compared to peer transit systems. This pricing is unsustainable for the MBTA given its current financial condition.

1 Core Charlie Card fare

4 30-day unlimited ride MetroCard

7 Based on purchasing 4 weekly passes

2 LinkPass provides unlimited travel on subway and local bus 5 Based on peak trip from Silver Spring and Metro Center

3 MetroCard fare 6 28-day SmarTrip fast pass 8 Converted from Pounds Sterling and based on pay as you go rate (Oyster card) for peak trip from Zone 1-3

The MBTA Should Urgently Pursue Revenue Opportunities

The MBTA should explore all avenues of new own-source and value-capture revenue.

Examples of these sources embraced by other transit organizations include:

- Increasing ridership as a means to increase revenue (ridership should be a key performance metric).
- Raising and restructuring fares and/or assessments (will require legislation).
- Reducing fare evasion through restructuring, technology, and/or campaigns.
- Creating innovative financial partnerships with universities, major developers, and municipalities that will contribute to transit funding.
- Increasing advertising and concessions in MBTA facilities.
- Maximizing federal reimbursement for paratransit operations.
- Actively seeking and applying for current/future grants for transit development projects.
- Selling or leasing MBTA and state-owned surplus land, including air-rights, for transit-oriented developments (TODs) would provide revenue for the MBTA as well as increase ridership from the people who live, work and engage in commerce, as well as increase state revenues through new jobs, housing, and economic development.
- Having new development projects located near MBTA transit stations financially support MBTA service as part of the developer mitigation process. While mitigation payments for roadway improvements are a routine and common practice in Massachusetts, the equivalent support for MBTA operations almost never occurs. Mitigation payments for MBTA improvements would become an established practice.
- Exploring the use of District Improvement Financing (DIF) for municipalities, and pledging a portion of incremental property tax collections to cover a portion of the costs for major MBTA capital projects, especially debt payments over time.

Comparative Sources of Non-Fare Revenue

Dollars of revenue per unlinked passenger trip

Parking¹ Advertising \$0.110 \$0.067 \$0.040 \$0.040 \$0.037 \$0.034 \$0.046 \$0.012 \$0.013 \$0.004 MBTA CTA SEPTA NJ **WMATA** MBTA SEPTA WMATA CTA NJ Transit Transit Concessions Existing sources of revenue at the MBTA \$0.021 are at or below parity with peer agencies. The panel observed an approach to \$0.005 revenue generation and revenue \$0.002 \$0 \$0 maximization which lacks creativity and is filled with lost opportunity. WMATA SEPTA CTA MBTA NJ Transit

1 Revenues earned from parking fees paid by passengers who drive to park-and-ride lots operated by the transit agency to utilize transit service Source: National Transit Database, 2013

1. Unsustainable Operating Budget

Debt and Other Future Liabilities

The MBTA currently holds \$5.5 billion in outstanding debt.

Legacy Debt: \$230 million

Debt service associated with debt incurred prior to the introduction of Forward Funding in 2000 (\$3.6 billion at its high in 2000).

Big Dig Debt: \$1.8 billion

Debt incurred to construct the Central Artery/Tunnel project transit mitigation commitments.

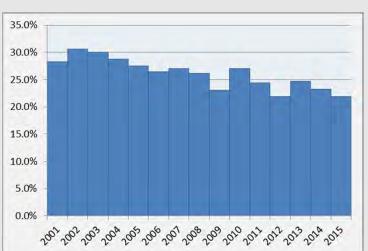
MBTA Debt: \$3.5 billion

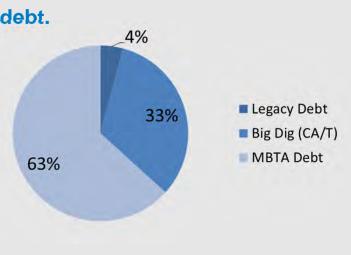
Debt issued by the MBTA since 2000 for its own capital needs.

A significant portion of the annual operating budget is used to pay debt.

- In FY2015, 21.9% of the MBTA's operating budget will be used to pay for debt service.
- In order to save on operating costs, the MBTA has frequently restructured its debt, ensuring that its debt burden will continue into the future, constraining the MBTA's needed ability to borrow.
- Also as a result of the restructurings, the MBTA is now not making sufficient payments to allow it to meaningfully reduce its debt burden.
- Similarly, as of 2014, the MBTA had unfunded pension and compensation liabilities of \$835.5 million and retiree health care/OPEB liabilities of \$1.8 billion. (Active employees=5,726; Retirees receiving benefits=6,371)

1. Unsustainable Operating Budget

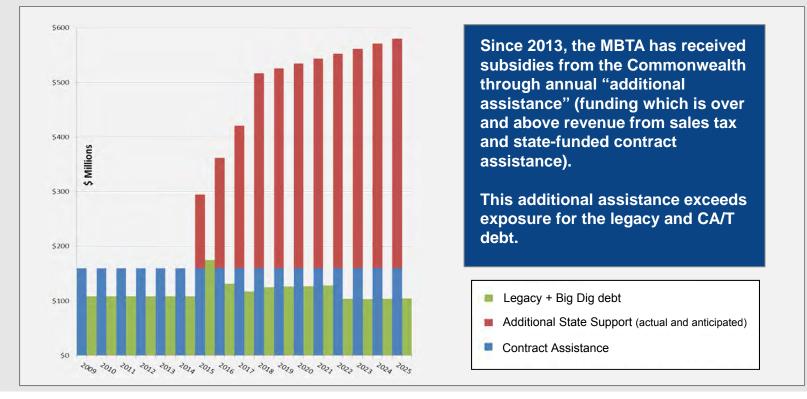




Dispelling a Debt Myth

Legacy and CA/T Mitigation Debt:

- Debt service especially debt related to the Central Artery/Tunnel transit mitigation projects ('*Big Dig Debt*') and the debt assumed by the MBTA in 2000 has been identified by many as the biggest financial challenge facing the MBTA.
- This debt certainly has had an impact on the MBTA operating budget over the past 15 years; however, it is declining, in both balance and importance, as it is paid off over time.
- Furthermore, the cost of the debt service for the legacy and Big Dig debt is significantly less than the MBTA Contract and Additional Assistance to which the Commonwealth is currently committed.



A Potential Solution

Link Future State Operating Assistance Directly to Debt Repayment

 The Commonwealth should consider replacing the current open-ended commitment to provide annual General Fund assistance to close the MBTA's operating deficit with an assumption of Commonwealth responsibility for the debt service payments associated with the remaining legacy and Central Artery/Tunnel transit mitigation debt.

Remaining Legacy Debt \$25.8 million annually until 2020, declining thereafter until 2030 Big Dig Debt \$108 million annually, until 2040

- For FY16, the MBTA will still require the proposed \$187 million in additional assistance in order to transition to this new structure.
- It is the Panel's belief that the MBTA can reasonably set a near-term target to balance its operating budget through a combination of support from the Commonwealth (declining over time), internal cost control, increases in own-source revenue, and new funding to transition employees from the capital to operating budgets.

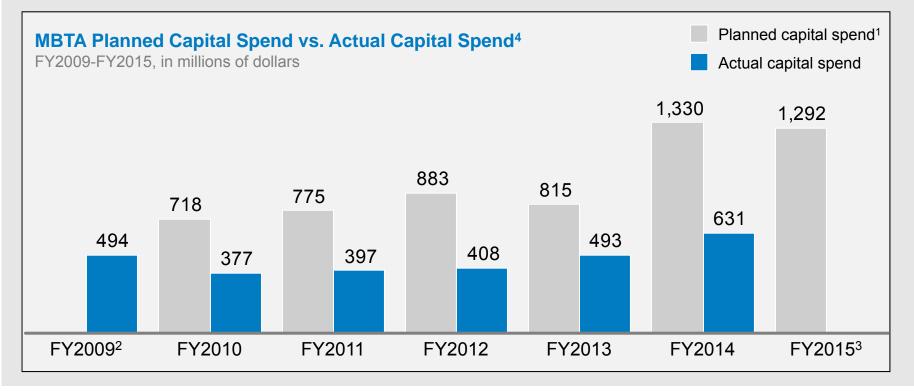
This action would allow the Commonwealth to continue to provide financial assistance to the MBTA, but in a way that will decline over time and is more predictable than the current arrangement.

2. Chronic Capital Underinvestment

While the MBTA will ultimately need additional state funding for capital spending, it has been unable to spend the capital funds already available to it, contributing to chronic underinvestment and an acute backlog in fleet, facilities, systems, and infrastructure.

Additional significant warning signs with respect to capital budgeting:

- The MBTA regularly uses funds intended for the capital program for operating expenses.
- In 2015, the MBTA will use \$66.5 million in capital dollars to fund 444 salaries.
- In the past five years, the MBTA spent only \$2.3 billion of the \$4.5 billion it had planned to spend on capital construction.



1 Based on CIP published at start of that fiscal year

2 Before 2010, planned capital spend was not broken down per year

3 Actual capital spend for 2015 is not recorded as year is still in progress Source: MBTA CIPs, MBTA Actual Capital Spend Model 4 Capital spend is defined as budget spent for long-term projects via CMS (Capital Management System) 17

Enormous and Growing Maintenance Backlog

The MBTA has announced an accumulation of \$6.7 billion in outstanding maintenance and modernization needs to reach a state of good repair (SGR), however the actual number is unquestionably higher.

- Information about Commuter Rail and other key assets has not been collected.
- Large gaps exist in the MBTA's data and capital asset management systems, and much work remains to be done to develop a comprehensive infrastructure inventory.

	Asset Category	# of Assets	Replacement Value	SGR Score	SGR Backlog Amount	% of Total Backlog
	Revenue Vehicles	20,262	\$6,807,342,488	2.83	\$2,634,418,286	39.4%
	Bridges	1,335	\$5,148,275,301	3.39	\$799,663,040	11.9%
	Signals	401	\$2,900,740,296	2.57	\$1,369,027,122	20.5%
	Stations	50,054	\$2,699,874,652	3.86	\$255,984,809	3.8%
MBTA	Facilities	2,855	\$1,527,289,845	3.19	\$477,930,928	7.1%
Reported:	Track/ROW	129	\$823,254,368	2.69	\$304,603,884	4.6%
Reported.	Power	3,047	\$793,073,100	2.18	\$462,319,775	6.9%
	Parking	47,215	\$228,188,855	2.12	\$172,050,515	2.6%
	Communications	15,334	\$172,916,740	4.25	\$3,195,090	0.0%
	Technology	1,092	\$138,231,180	1.39	\$131,592,980	2.0%
	Tunnels	67	\$132,750,000	3.10	\$24,000,000	0.4%
	Non-Revenue Vehicles	1,089	\$77,414,330	2.70	\$33,724,000	0.5%
	Fare Collection	2,982	\$64,152,548	3.79	\$425,000	0.0%
	Elevators and Escalators	338	\$49,370,000	2.94	\$22,950,000	0.3%
		146,200	\$21,562,873,703	3.05	\$6,691,885,429	100%
e: MBTA						

Source: MBTA

The SGR score is the average rating of all recorded assets within their respective category. A score of less than or equal to 2.5 notes an asset that is not in a state of good repair. The backlog is the current estimated cost to bring all recorded assets into a state of good repair.

Need New Discipline in the Capital Program

Panel Recommendations:

- Implement a 'firewall' between the operating and capital budgets.
- Transfer employees funded with capital monies to the operating budget.
 - \$66.5 million in FY2015
 - This will require new operating support from the Commonwealth in FY17 and beyond.

• For FY2016, the MBTA should:

- Prepare an assessment of its most urgent capital and rolling stock needs.
- Identify clear funding needs.
- Spend its entire FY16 capital allotment.
- The MBTA should also prepare 5- and 20-year capital plans, laying out a phased program for the complete restoration of the physical assets of the MBTA, a plan to address the failings within the existing capital program, and clear recommendations for funding needs.
 - Based on the 5- and 20-year capital plans, the Legislature should create a new, protected capital fund dedicated to system rehabilitation and modernization.
 - This will require a Legislative commitment of new capital funding for the MBTA.

3. Bottlenecked Project Delivery

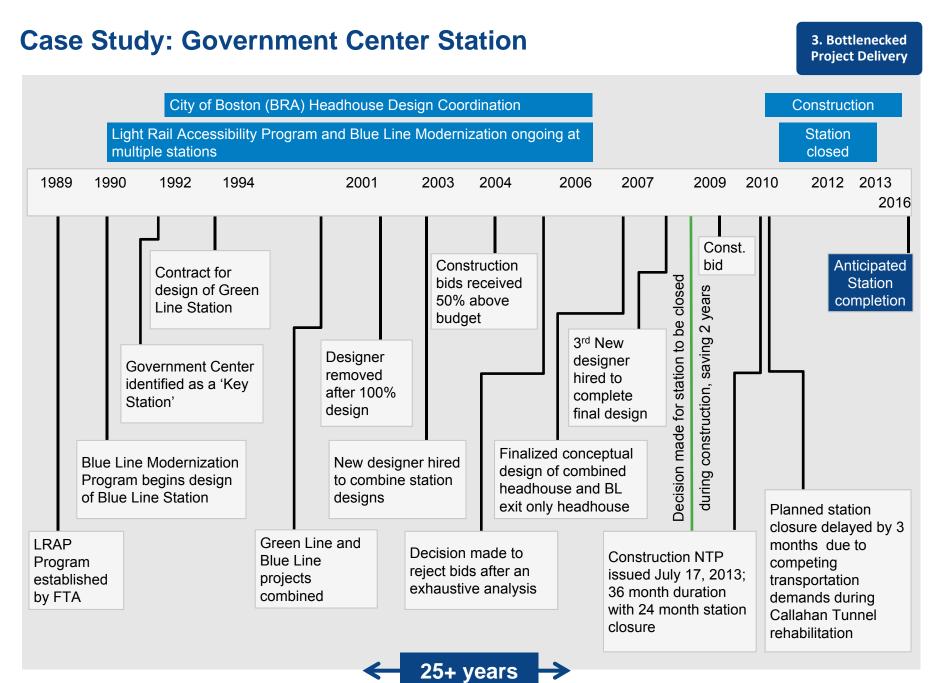
The MBTA struggles to get projects of all types out the door. (Examples on following slides)

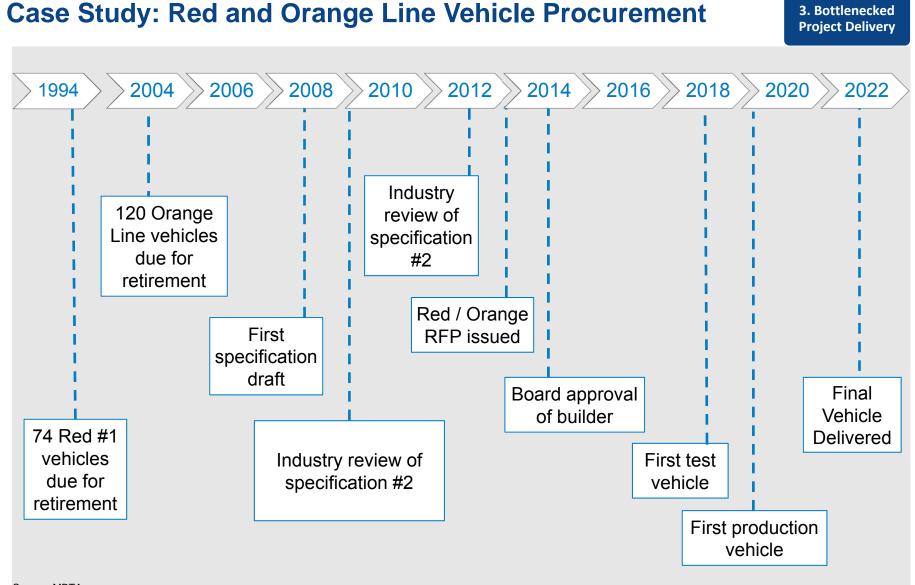
- In the past five years, the MBTA spent only \$2.3 billion of the \$4.5 billion it had planned to spend on capital construction.
- With an enormous backlog of deteriorating infrastructure, the MBTA needs to dramatically accelerate and improve the way it delivers capital maintenance and improvement projects.

Source: MBTA

Panel Recommendations:

- The Legislature should permit the MBTA to use project delivery methods used by other state agencies.
 - The MBTA should be permitted to make use of the Design-Build procurement method to reduce project timelines and increase efficiency.
 - The MBTA should be permitted to make use of the Construction Management at Risk procurement method to better manage costs.
 - The MBTA needs an exemption to privatization and contracting restrictions to make an impact in the severe backlog of projects.
- The MBTA should reduce barriers to public-private partnerships and pursue them to the greatest extent possible and prudent.
 - For example, the MBTA should be permitted to seek and consider partnerships that would allow them to address long term-costs associated with track and rolling stock. An example would include a re-structuring of the bus network to allow greater reliance on lower-costs vans, jitneys, and flexible pricing.





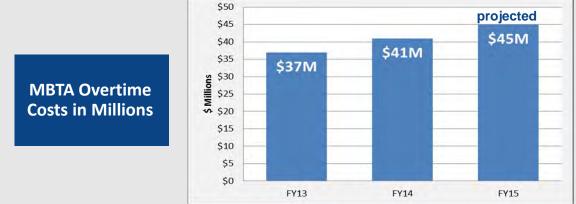
Source: MBTA

25+ years between scheduled retirement and actual replacement; practices need reform

4. Ineffective Workplace Practices

The MBTA is largely ineffective in managing its work as a result of weak customs and practices.

- The present dynamic and culture do not allow for the achievement of individual potential and inhibits productive partnerships between management and labor/key contractors.
- There is a lack of performance metrics, which directly impacts customers.
- Inefficient work practices and low productivity appear to contribute to substantial annual overtime costs:



One example of inefficient work practices can be observed in how the MBTA responded to Late Night Service with respect to its train maintenance program. As the service day lengthened, the night maintenance shift was reduced to only four hours each night – and fewer hours on weekends. Given set up and tear down time, the mechanics now only spend 1-3 hours per day actually working on the trains, yet the MBTA pays them for a full 8 hour shift.

A thorough review should begin promptly of personnel policies, hiring practices, and management training.

Collective Bargaining

- The current collective bargaining process creates inefficiencies and has delayed recent legislative reforms.
 - Many existing labor contracts are automatically extended until a new agreement is reached ('evergreen provisions'), exposing the MBTA to large retroactive wage increases.
 - Bargaining typically ends with binding arbitration.
 - The MBTA has the only public union in the Commonwealth with binding arbitration settlements which are not subject to approval (i.e. legislative, board, or municipality).
 - This process disincents collaboration between the MBTA and its employees to address shortterm issues and long-term structural concerns.

Source: MBTA

Recommendation:

The Legislature should review the collective bargaining process, including binding arbitration and 'evergreen' contract terms, to best promote a positive collaborative relationship between management and labor.

High Absenteeism

- A prominent example of weak MBTA management is excessive absenteeism.
 - 15% of all MBTA employees took at least one day of paid leave during the 2015 winter storm recovery.
 - Tens of thousands of bus trips are cancelled each year due to unplanned absences.
 - A practice of the MBTA to not require overtime (overtime work is currently <u>voluntary</u>) results in a shortage of workers, dropped trips, and poor customer service.
 - Absenteeism causes substantial overtime costs for the MBTA.
 - 30% of the workforce (65% of heavy rail operators) is certified to take unscheduled, intermittent Family and Medical Leave. This is disruptive to productivity.

Source: MBTA

Recommendation:

The MBTA should develop a plan to substantially reduce absenteeism.

 The MBTA must fight abuses of FMLA, worker's compensation, and other types of leave. As other private and public-sector employers frequently do, the MBTA should seek third-party assistance to manage this liability.

Absenteeism Data

MBTA Absence Rate FY2014¹

Position	FY2014 Absence rate	
Part-time Motorpersons/Train Attendants	19%	
Office/Clerical	17%	
Full-time Surface Operators	16%	
Full-time Motorpersons/Train Attendants	15%	
Customer Service Agents	15%	
Professionals	14%	
Steel and Construction Trades	12%	
All others	5-11%	

Comparatively,

The Bureau of Labor Statistics reports absenteeism in the transportation industry of approximately 3%

Peer agencies have reported absence rates of 5-6%



MBTA Average across all positions

Including vacation days, MBTA employees miss an average of <u>57</u> working days per year

This is equivalent to:

- 11-12 weeks
- Nearly 3 months
- Working only 4 days a week

For some groups of employees, the average is as high as 74 days per year (equivalent to nearly 15 weeks of missed work)

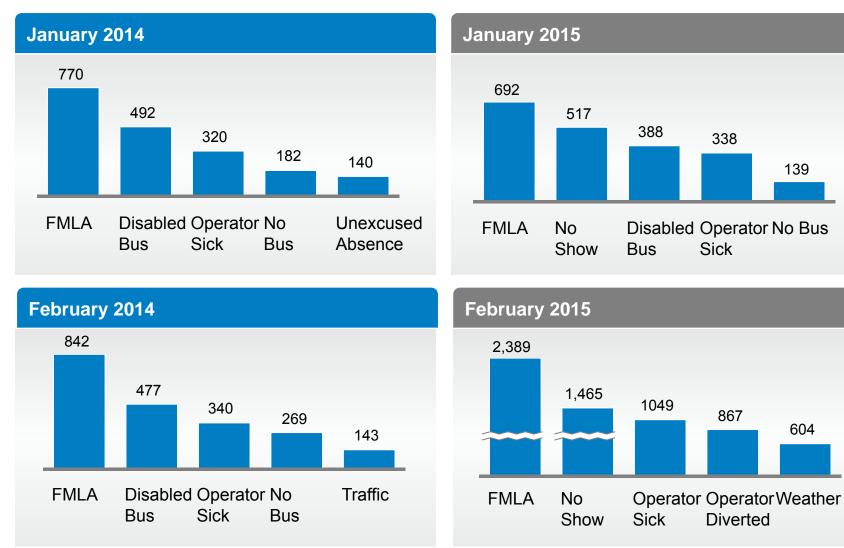
1 Percentage of days taken off the following leave categories: Union Business, Compensatory, Bereavement, Court-ordered, Jury Duty, Military, Other Protected, Sick Paid Protected, Sick, Reported Injury, Worker's Comp, SNLA, ADA, FMLA, Parental, AWOL, Non-Authorized, Unexcused, Miss, Red Miss, Suspended, Disqualified, Excused No Pay, Inactive, Leave of Absence Waived out of work days not including contractual time off 2 Does not include Commuter Rail employees Source: MBTA Employee Availability reports, FY2014

4. Ineffective Workplace Practices

Leading Causes of Weekday Dropped Bus Trips

Number of weekday bus trips dropped per month

4. Ineffective Workplace Practices



In January/February of 2015, more than <u>6,400</u> bus trips were cancelled due to unplanned absenteeism.

5. Shortsighted Expansion Program

MassDOT and the MBTA lack a rigorous, long-range system expansion strategy based on a clear-eyed understanding of the physical and financial capacity of the MBTA and the regional transit needs of the future.

- Over time, the MBTA and the Commonwealth have spent billions of dollars on expansion projects, without a sound understanding of immediate State of Good Repair needs¹.
- Since 2012, the MBTA has used a decision support tool to prioritize SGR projects for inclusion in the Capital Investment Program, yet it is not clear that more effective and efficient prioritization has actually resulted ². The tool is not currently used to prioritize proposed expansion projects.

To prioritize spending of limited dollars on immediate needs, MassDOT and the MBTA should impose a temporary moratorium on construction spending for system expansion, except for federally funded projects, until the 5 and 20 year capital plans are put in place.

- System expansion' is the construction of projects that provide new transit service.
- It does not include projects to modernize or increase capacity of the current system.
- A modest portion of the capital budget should be devoted to planning and design work for potential system expansion projects, so that such projects can be evaluated and prioritized.
- Federally or privately funded projects should be exempt from the moratorium, including:
 - The Green Line Extension project: Funded by the federal New Starts program.
 - Assembly Square and Boston Landing: Substantial federal or private funding is available for construction and/or longterm maintenance, thus to stretch every dollar, the MBTA should continue to pursue similar projects.

¹ The MBTA uses a State of Good Repair database (Slide 19) to track assets, but it is not fully complete and likely underestimates the backlog.

² An ongoing Project Advisory Committee will help prioritize future investments, but better tools and more rigorous process are needed. The decision support tool appears to not be based on industry best practices or take into account longer-term impact. For instance, some decision criteria weight, such as only 4% for revenue impact without joint combined consideration of cost, may not best support system sustainability or fiscally responsible expansion projects.

6. Organizational Instability

- The MBTA has been hobbled by frequent changes of leadership, significant vacancies, looming attrition, and overall instability.
 - Leadership: Since the position was created in 1981, the MBTA has had nine General Managers (GM). Six of those, including three Interim GMs, have served in the last ten years.
 - Vacancies: 10% or more of senior positions in the T are vacant or filled by interim staff.
 - Attrition: 45% of MBTA employees will be eligible to retire in the next five years.
 - Instability: The Winter of 2015 revealed significant breakdowns and gaps in the MBTA's use of Standard Operating Procedures and emergency preparedness.

- Future General Managers should be hired by and report to the Secretary of Transportation. GMs should be provided with contract terms, a leadership team, and support that encourages him/her to remain with the MBTA for a minimum of five years. With new leadership, the MBTA should:
 - Perform a thorough evaluation of its staffing needs and fill critical positions.
 - Implement employee recruitment, retention, and training plans.
- The MBTA should undertake a comprehensive risk assessment agency-wide to identify organizational, management, and operational risks. Most immediately the MBTA should review best practices and implement updated Standard Operating Procedures and emergency preparedness plans including appropriate training and communication.

7. Lack of Customer Focus

The MBTA is not organized to operate as the customer-oriented business it is.

- The focus of the agency appears too often to be internal and not on the needs of its customers.
- The MBTA is not organized by its modes of business, making accountability diffuse.
- The MBTA does not appear to have or follow a written annual multi-year business plan.
- The MBTA does not emphasize customer-centered performance management in its operations.
- The MBTA should reorganize its internal structure along modal business lines.
 - The modal business lines should report directly to the General Manager.
 - The MBTA should implement a system of clear accountability for modal operational performance.
 - MassDOT and the MBTA, together, should create strong, consolidated support departments.
- The MBTA should implement a rigorous, customer-oriented performance management system.
 - Years of unreliable service, inadequate facilities, poor communication, and lack of written customeroriented protocols have broken the bond of trust between the MBTA and its riders.
 - Using the example of other transit agencies and common best practices, the MBTA operating divisions should employ a daily program of rigorous performance management to identify and drive out problems. Senior MBTA management should lead this effort.
 - The MBTA should develop public scorecards to track performance with customer-oriented metrics¹.
- The MBTA should strengthen its customer communications capabilities, using both traditional and innovative ways of information sharing, and regularly survey customers.

¹ Some metrics and performance indicators exist within the organization, but they are not used to drive decision making. Specific dashboards were developed in the snow-recovery period, but standard scorecards or dashboards with more customer metrics are needed.

8. Flawed Contracting Processes

MBTA procurement and contract management is inefficient and decentralized.

- MBTA staff report excessive and redundant internal processes to advance even small projects.
- Project procurements are often delayed, may include legal challenges, and can end in suboptimal products. See case study on the Red and Orange Line procurements.
- MBTA is inhibited by the Pacheco Law from procuring private, cost-effective services, and is strictly limited by state law in its use of many procurement processes (e.g., CM at-Risk and Design/Build).
- Key service contracts require stronger hands-on management. For example, the Commuter Rail contract a service fundamental to the MBTA is managed well below the General Manager level.

MassDOT should centralize agency procurement and contracting with a new professional office for both MassDOT and the MBTA.

- The MBTA should create a separate function dedicated solely to fleet procurement.
- The MBTA should re-engineer its internal processes to implement industry best practices, to be nimble and flexible, and to greatly reduce inefficiency and delay.
- The MBTA should emphasize the use of 'best value' for bid evaluation and contract awards.
- The Legislature should free the MBTA from the constraint of the Pacheco Law, and other limits placed on its use of modern procurement, where beneficial and cost-effective.
- Service contracts should foster collaboration between the MBTA and its vendors.
 - The MBTA should commit high-level attention to the management of the Commuter Rail contract, and should emphasize collaboration and be focused on customer service and operational concerns.

9. Lack of Accountability

- The Commonwealth provides over half of the MBTA operating budget and substantial additional funding for capital projects, but the MBTA is not directly accountable to either the Governor or the Legislature.
 - The current governance structure does not foster productive oversight of the troubled MBTA.
- In order to immediately begin the crucial work of reforming the MBTA, the Governor should request that current Board members resign and appoint new members.
- The Legislature should establish an MBTA Fiscal & Management Control Board to manage all aspects of the MBTA and to function as the MBTA Board for an estimated 3 year period.
 - The FMCB should select and hire a Chief Administrator, who will run MBTA daily operations.
 - The FMCB should be empowered to address the full range of issues hobbling the MBTA related to governance, finance, agency structure, and operations. *See Slide 35 for details.*
 - The FMCB term may be extended in one-year increments for an additional two years, upon agreement of Secretary of Transportation and the Secretary of Administration and Finance.
- The Legislature should reconstitute the MassDOT Board to make it more effective and representative¹. Reconstitution should:
 - Increase the number of members.
 - Change the terms so that the majority of members serve co-terminus with the Governor by whom they are appointed.
 - Appoint the Secretary of Transportation as the Chair.

¹ During the period of the FMCB, the FMCB will serve in place of the MBTA Board and oversee the MBTA, while the reconstituted MassDOT Board will oversee MassDOT. The knowledge and perspective gained during the period of the FMCB should inform the formation of the ultimate governance structure for the MBTA.

RECOMMENDATIONS

Range of Scenarios Considered for Reform of the MBTA

Scenario 1: Modify Existing Governance Structure

- T is responsible for its own transformation with no new oversight
- Board is modified to provide greater accountability and control

Scenario 2: Fiscal and Management Control Board

- New oversight and management support
- Collaboration with Legislature, MBTA staff, unions, stakeholders
- Duration based on progress toward established goals
- Estimate of 3-5 years

Scenario 3: Receivership

- Unilateral oversight and management
- Power to reopen collective bargaining agreements to the full extent permitted by the Constitution
- Scenario 4: Abolition of MBTA and Creation of Successor Agency
 - New MassDOT Transit Division
 - MBTA employees transition to become Commonwealth employees

Fiscal & Management Control Board

Goals and Responsibilities

Governance

- Embrace transparency and accountability
- Develop organizational stability
- Earn public trust

Finance

- Manage and control revenues and costs aggressively
- Assume responsibility for the MBTA bond covenants
- Enforce firewall between capital and operating budgets
- Develop 1, 5, and 20 year capital and operating plans
- Create a dedicated state-funded capital program to modernize vehicles and infrastructure

Agency Structure

- Reorganize MBTA along modal business lines
- Establish clear performance accountability by mode
- Consolidate and strengthen support departments
- Conduct comprehensive risk assessment
- Reinvent the labor-management and contract relationships
 Operations
- Create customer-oriented performance management
- Strengthen customer communications overall
- Invest heavily in system and fleet modernization
- Strengthen emergency response capabilities
- Rationalize and reform system routes, particularly bus routes

Structure

Composition

- Three members appointed by the Governor
- One member recommended by the Senate President and appointed by the Governor
- One member recommended by the Speaker of the House and appointed by the Governor

Accountability

- Reports to the Secretary of Transportation
- Replaces the MassDOT Board for oversight of the MBTA for its duration

Duration

Anticipated to be 3-5 years

A strong Fiscal & Management Control Board is vital to the MBTA's future.

Recommended Executive Actions

By June 30, 2015

In order to:

- Take full responsibility, the Governor requests that current Board members resign and appoints new members to oversee MassDOT and the MBTA. Once established, the Fiscal & Management Control Board will oversee the MBTA.
- Address the full extent of the systematic failures, the Governor submits legislation establishing the Fiscal & Management Control Board (FMCB) effective July 1, 2015.
- Provide a dedicated executive, the Governor appoints a Chief Administrative Officer¹. The Chief Administrative Officer will report initially to the Secretary of Transportation and ultimately to the FMCB once established.
- Prioritize and understand immediate capital needs, the Governor directs the Secretary of Transportation and Chief Administrator to assess MBTA's most urgent capital and rolling stock needs for the next 5 years, recommend priorities, and submit a procurement and implementation plan.

- Practice sound fiscal management, and prevent the comingling of funds, the Governor directs the MBTA to implement a 'firewall' between the operating and capital budgets.
- Capture future revenue opportunities, the Governor directs the Secretary and Chief Administrator to develop a pro-active plan to significantly increase its own-source revenue through fares, advertising, concessions, parking, and real estate, as well as through grants and federal programs².
- Focus on immediate and short-term capital needs, or the State of Good Repair, the Governor directs MassDOT and the MBTA to impose a moratorium on all construction spending for system expansion, except for federally funded projects³.
- Tackle procurement inefficiencies and cultivate expertise, the Governor directs the Secretary to centralize agency procurement and contracting under a new professional office for both the MBTA and MassDOT.
- Prevent another widespread system failure, the Governor directs the MBTA to revisit its full preparedness process and planning, and the MBTA adopts an Incident Command System.

¹Chief Administrative Officer will assume responsibilities of the General Manager

² For example, the MBTA should look into federal financial participation (FFP) for the Ride.

³ The Green Line Expansion should be exempt. The MBTA should continue to pursue projects, such as at Assembly Square and Boston Landing, for which substantial federal or private funding is available for construction and/or long-term maintenance.

Recommended Executive Actions

By March 31, 2016

In order to:

- Provide better alignment between service and its customers, the MBTA reorganizes its internal structure along modal business lines.
- Instill appropriate budget discipline and good business practice, the MBTA prepares 1 and 5 year operating plans that rely primarily on own-source revenue and cost containment to balance the agency's budget.
- Assure the longer term sustainability of the transit system, the MBTA prepares a 20 year capital plan for the complete restoration of the physical assets of the MBTA.
- Prioritize the importance of customer service and communication, the MBTA initiates a rigorous, customer-oriented performance management program.
- Ensure a safe and effective workplace, the MBTA reviews best practices and implements updated Standard Operating Procedures and emergency preparedness plans including appropriate training and communication.

- Significantly improve productivity, the MBTA identifies and implements best practices supporting workforce productivity and engagement, focusing on key performance metrics, role distribution, appropriate ongoing training, and overall morale.
- Increase employee attendance and reduce overtime costs, the Governor directs the Secretary of Transportation and the MBTA to develop a plan to substantially reduce absenteeism ¹.
- Simultaneously improve service and lower costs, the MBTA reviews other transit systems' public-private partnerships, reduces barriers to partnerships, and prudently pursues them to the greatest extent possible.
- Leverage alternative funding sources, the MBTA creates innovative financial partnerships with universities, major developers, and municipalities that will contribute to transit funding.
- Utilize real estate assets strategically in order to maximize non-fare revenue to support the system and ensure future financial health.

¹ The plan should include proactive management of sick time, FMLA use, and worker's compensation.

Recommended Legislative Actions

By June 30, 2015

New legislation:

- Establish an MBTA Fiscal & Management Control Board (see description) to manage all aspects of the MBTA and to function as the MBTA Board for 3-5 years.
- Eliminate existing fare restrictions and allow the FMCB to review and adjust fares.
- Limit future General Fund operating assistance by purpose to cover (1) debt service payments (2) employee costs for staff moving off of the capital budget¹.
- Require a comprehensive annual report from the FMCB by December 15 each year to the Legislature and Governor.
- Commission an independent audit of unfunded pension and other post-employment benefit liabilities.

Longer term:

Create a new, protected capital fund dedicated to system rehabilitation and modernization based on the 5- and 20-year capital plans.

Amend existing law to:

- Permit the use of project delivery methods used by other state agencies.
- Free the MBTA from the constraints of the Pacheco Law, and other limits placed on its use of modern procurement, where beneficial and cost-effective.
- Review the process of collective bargaining and consider limiting provisions (i.e. eliminate evergreen clauses, limit scope of issues subject to binding arbitration, and require board approval of agreements), as needed to establish cost-effective operations and to better promote a collaborative relationship between management and labor.
- Reconstitute the MassDOT Board to make it more effective and representative. Reconstitution should include: increasing the number of members; changing the terms so that the majority of members serve coterminus with the Governor by whom they are appointed; appointing the Secretary of Transportation as the Chair. Further changes to the structure of the MassDOT Board should be informed by the experience of the FMCB period².

¹ Limit future General Fund operating assistance by purpose to (1) debt service payments associated with the remaining legacy and Central Artery/Tunnel transit mitigation debt and (2) the costs of transferring the salaries of MBTA employees from the capital to operating budgets, just as was done for MassDOT. Currently there is an open-ended commitment to provide annual General Fund assistance to close the MBTA's operating deficit, but this should not occur going forward.

About the Panel

MBTA Special Panel Members

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<u>Staff Support:</u> Kate Fichter, Adam Weikel, Molly Bode, Joel Barrera, and Patrick Moore

Key References & Reports

Taking the T to the Next Level of Progress (2000)MBTA Blue Ribbon Committee on Forward Funding

MBTA Capital Spending: Derailed by Expansion? (2002) Massachusetts Taxpayers Foundation/Pioneer Institute

Transportation Finance in Massachusetts: An Unsustainable System (2007)

Massachusetts Transportation Finance Commission

T Approaching Dire Financial Straits (2008) Massachusetts Taxpayers Foundation

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MBTA Review (2009) David D'Alessandro

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Maxed Out (2011) Transportation for Massachusetts

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Fare Hikes, Service Cuts and MBTA Mismanagement (2012) Pioneer Institute

Hub and Spoke Report (2012) Urban Land Institute/Northeastern University Dukakis Center

Staying on Track (2012) Northeastern University Dukakis Center

The MBTA's Out-of-Control Bus Maintenance Costs (2013) *Pioneer Institute*

Keeping on Track, Progress Reports (2014, 2015) Transportation for Massachusetts

The End of Its Line (2015) Massachusetts Taxpayers Foundation

*Co-Chairs

About the Panel

Outreach

Panel members met with or received input from the following organizations

495/MetroWest Partnership **A Better City Alternatives for Community & Environment** American Council of Engineering Companies of **Massachusetts Associated Industries of Massachusetts Associated Subcontractors of Massachusetts Boston Harbor Association Boston Carmen's Union - Local 589** Bridj **Conservation Law Foundation Construction Industries of Massachusetts Edwards Wildman Public Policy Group Future Boston Alliance Greater Boston Chamber of Commerce Great Boston Real Estate Board Local Initiatives Support Coalition** Massachusetts Association of Health Plans Massachusetts Association of Realtors

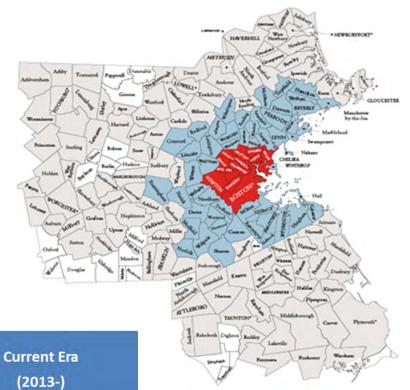
Massachusetts Business Roundtable **Massachusetts Hospital Association** MassDOT Board of Directors MassINC MassPIRG **Massachusetts Smart Growth Alliance Massachusetts Taxpayers Foundation MBTA Advisory Board MBTA Rider Oversight Committee MBTA Transit Police Association** Medical Academic and Scientific Community Organization **Metro Mayors Coalition Metropolitan Area Planning Council NAIOP Massachusetts National Federation of Independent Business New England Legal Foundation Newton Board of Alderman Rappaport Institute** The Research Bureau **Transportation for Massachusetts**

APPENDIX

Service Area

The MBTA...

- serves 175 cities and towns
- covers a 3,200 square mile area
- reaches 4.7 million residents
- makes 1.3 million trips each weekday
- had more than 400 million boardings in 2014
- continues a history of expanding service



(MBTA 101 Presentation, February 26, 2015)

Federal Funding Era (1964 - 1989)

- Red Line Braintree Extension
- Orange Line Haymarket North
- Red Line Northwest Extension
- Orange Line Southwest Corridor
- Numerous cutbacks in CR service

Big Dig Era (1990-2013)

- Worcester CR
- Newburyport CR
- Old Colony CR
- Providence CR
- Silver Line Waterfront
- Silver Line Washington St
- Greenbush CR
- Wickford Jct CR
- Fairmount Improvements

(2013-)

- CapeFlyer
- Assembly Station
- Green Line Extension
- Wachusett Extension
- Silver Line to Chelsea
- South Coast Rail*
- Boston Landing West Station
- Urban Rail Service

Modes

The MBTA is the fifth-largest mass-transit system in the U.S. by ridership....

and operates a greater number of transportation modes compared to other systems

Transit system	Annual un- linked trips (millions)
MTA (New York)	3467.0
CTA (Chicago)	529.2
LACMTA (Los Angeles)	476.3
WMATA (Washington DC)	413.6
MBTA (Boston)	395.3
SEPTA (Philadelphia)	358.4
NJ Transit (New Jersey)	264.4
BART (San Francisco)	126.5
MTA Bus (New York)	125.0
RTD (Denver)	101.4
Metro North (New York)	83.8
METRA (Chicago)	73.6
GCRTA (Cleveland)	49.2

	Bus	Heavy rail	Light rail	Commuter rai
MBTA (Boston) ¹	\checkmark	~	~	~
SEPTA (Philadelphia)	\checkmark	~		~
MTA (New York)	\checkmark	~		
MTA Bus (New York)	\checkmark			
Metro North (New York)				\checkmark
NJ Transit (New Jersey)	\checkmark		\checkmark	\checkmark
CTA (Chicago)	\checkmark	~		
METRA (Chicago)				~
WMATA (Washington DC)	~	\checkmark		
LACMTA (Los Angeles)	~	~	\checkmark	
RTD (Denver)	\checkmark		\checkmark	
GCRTA (Cleveland)	~	~	~	
BART (San Francisco)		~		

1 MBTA also operates a ferry transit system Source: National Transit Database

National Transit Database, reporting year 2013

System Complexities



Green Line 66 Stops 206 cars 219,000 weekday boardings



Mattapan Trolley 8 stations 10 cars 4,500 weekday boardings



Red Line 22 stations 218 cars 284,000 weekday boardings



Orange Line 20 stations 120 cars 212.000 weekday boardings

Blue Line

12 stations

112 cars

67,000 weekday

boardings



Ferry

7 terminals

boardings

Commuter Rail

137 stations 1

80 locomotives

31,000 weekday

boardings

Expansive system

- Many modes with a wide range of maintenance challenges
- Aged infrastructure
- Increasing ridership
- Continual expansion
- Significant maintenance needs



Bus 8.000+ stops 1.055 vehicles boardings



385,000 weekday



The Ride 819 vehicles 3 cotractors 6.900 weekday boardings

(MBTA 101 Presentation, February 26, 2015)

Rail fleet age and useful life

- An aging fleet continues to fuel maintenance costs, is increasingly susceptible to the elements, and contributes to service disruptions.
- Many trains are at or past their useful life with new trains still years away from being put into service.

	Line/Mode	Fleet	Qty.	Service Date	Age (years)	Useful life
Heavy rail	Red	No.1 Fleet	74	1969	46	25
		No.2 Fleet	58	1987	28	25
		No.3 Fleet	86	1994	21	25
	Blue	No.5 Fleet	94	2007	8	25
	Orange	No.12 Fleet	120	1981	34	25
		Total Number of Heavy Rail Cars	432			
Light Rail	Mattapan Tro	olley	10	1946	69	25
	Green	No. 7 Fleet	94	1987-88	28-27	25
	_	No.7 Fleet	20	1997	18	25
		No. 8 Fleet	95	1999-2007	8-16	25
		Total Number of Light Rail Cars	219			

Note: Bus data reflects directly operated buses only (does not include purchased transit) Source: National Transit Database 2013

Pension Snapshot

Employee pension contribution rates

- MBTA Retirement Fund: 5.79%
- MBTA Police Fund: 8.51%

Age benefits at retirement for MBTA Retirement Fund

- Normal retirement: age 65
- Early normal retirement: 23 years of service (no age requirement) (now grandfathered)
- Early normal retirement (new hires post 12/6/12): 25 years of service and age 55

Age benefits at retirement for MBTA Police Fund

- Normal retirement: age 65
- Early normal retirement: 23 years of service and age 52

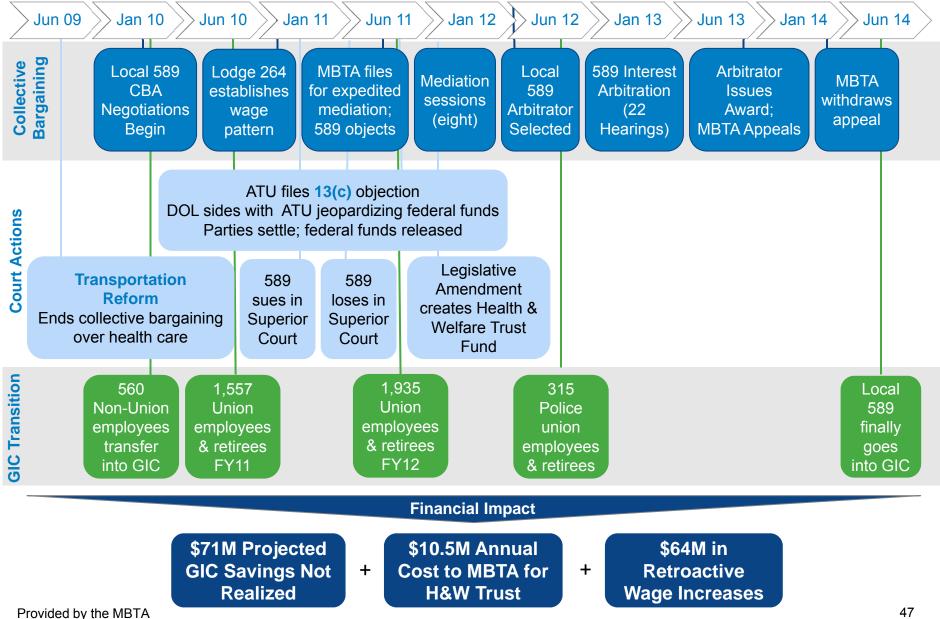
Actuarial liability

- Unfunded accrued liability for MBTA Retirement Fund as of 12/31/13: \$757,448,781
- Unfunded accrued liability of MBTA Police Fund as of 12/31/13: \$21,263,291

Other Plans

- Unfunded liability for the Deferred Compensation Plan: \$56,816,000
- Deferred Compensation Savings Plan (401B)
 - Employee contribution 5.79%
 - Employer contribution 8.00%

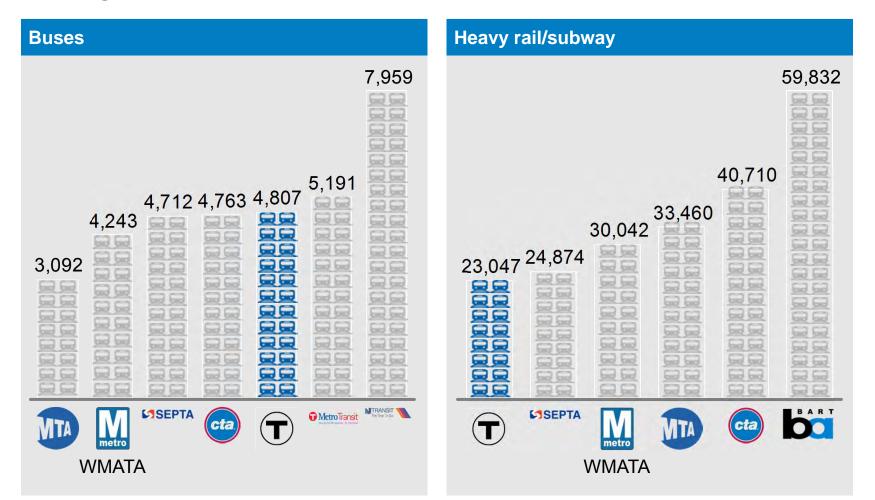
Information provided by the MBTA, however the Panel has no way to confirm its accuracy. The Retirement Fund's continued refusal to submit to an independent audit strongly suggests that these figures are understated.



Case Study: Collective Bargaining - Wage Increases and GIC costs

Vehicle Revenue Miles per Full-Time Operator

Miles, average of 2011-2013



MBTA vehicle operators are less productive compared to other peer transit systems; productivity needs improvement

Source: National Transit Database 2011-2013

Percent of operating expense covered by passenger fares

