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March 17, 2015

Brian McMorrow, CFO, Massport Aviation Division Katherine Lapp, Executive Vice President, Harvard University

Dear Mr. McMorrow and Ms. Lapp:

On behalf of ABC and its members, I am pleased to share our thoughts with you regarding the current crisis facing the MBTA, and by extension, the region's economy. I am honored to have the opportunity to join you for a discussion, but would also like to share some more extensive recommendations with you than our time together will permit. I thank you for your consideration and would be happy to answer any questions you might have about our research and recommendations. The comments below pertain to the entire scope of your commission's work, including operations, maintenance, governance and financial stability.

Context

When announcing your appointment, Governor Baker stated, "Public Transportation plays a major role in supporting and driving the region's economy..." We could not agree more. Indeed, the MBTA today serves 175 communities, with a combined population of almost 4.7 million people. Indeed, close to 70% of the entire Massachusetts population is served by some type of MBTA service. And, according to our analysis presented in *The Cost of Doing Nothing*, MBTA expenditures are directly responsible for more than 20,000 jobs annually. More broadly, though, the MBTA is the engine that helps power our economy and future growth, linking workers to jobs and creating new development all over the Commonwealth. Serving about 1.3 million riders on a typical weekday, the MBTA is also the fifth largest transit system in the United States. As this winter has made clear, whether you are an MBTA rider, or a driver who benefits from the congestion reduction provided by the MBTA, we all need a well-run transit system.

Lessons Learned

The MBTA should conduct a robust assessment of lessons learned during this winter season. A transparent process examining what went wrong, with the findings made public, will help the MBTA garner public support for improvement, and educate the public about the complexity of transit operations and the need for continued investment in the system. A priority for this analysis should be a fleet assessment, with particular focus on aging Red

² The Cost of Doing Nothing: http://www.tbf.org/~/media/TBFOrg/Files/Reports/CostofDoingNothing_rl.pdf

³MBTA Ridership and Service Statistics

http://www.mbta.com/uploadedfiles/documents/2014%20BLUEBOOK%2014th%20Edition.pdf

¹ Northeastern University: Blue Ribbon Panel on Financing the MBTA http://www.northeastern.edu/dukakiscenter/wp-content/uploads/2011/12/BlueRibbon_Background.pdf

and Orange Line cars, Commuter Rail locomotives, signal, traction and power systems, as well as the overall snow operations plan. As part of this initiative, the agency should also institute recurring simulations and drills to replicate the service issues that plagued the system this winter and allow employees throughout the management structure to practice and improve upon their responses.⁴

The economic engine of the MBTA has begun to falter under the weight of decades old cars and other equipment. This winter season made that clear, and the MBTA's own vehicle statistics are further evidence. As just one example, 70 Red Line Cars have been in service for 46 years, more than twenty years beyond what is typically recognized as the useful life of a transit vehicle⁵. Procurements are underway for both Red and Orange Line vehicles, but the best case estimate of time for delivery is 3 to 7 years from now. Given the complexity of these procurements, delays in the schedule should be expected. A rebuild program for the vehicles most in need of repairs should be initiated immediately to shore up the existing Red and Orange Line fleet in advance of the winter of 2016. A similar intervention took place during the 1990's Green Line car procurement.

Finally, the development of a Severe Storm/Snow Plan for Fiscal Year 2016 should begin immediately; procurement schedules require early decisions and it will take time to put contingency contractors into place.

State of Good Repair

Much attention has rightly been given to the sobering new State of Good Repair (SOGR) backlog number of \$6.7 billion that was recently announced by the MBTA. It is clear that our vehicles, signals and power systems and stations require a significant investment. According to the Massachusetts Taxpayers Foundation, the MBTA spends about \$650 million annually on SOGR capital projects, and would need to spend \$800 million annually to keep the backlog from growing. To eliminate the backlog completely over the next several years, close to \$1 billion in SOGR spending annually would be required. While the backlog will not be eliminated overnight, severe economic consequences have resulted from allowing the system to deteriorate to its current condition. Even in mild weather, the MBTA is frequently forced to take broken down vehicles out of service, or to send personnel to fill in for faulty signals. And, our transit system will only continue to face the challenges posed by severe weather events as they increase in both frequency and intensity. Maintaining our system in a State of Good Repair is essential, and adequate fleet and maintenance funding should be a priority of the MBTA's capital plan each

⁴ The Boston Globe: http://www.bostonglobe.com/business/2015/03/07/three-ideas-fixing-troubled-mbta/p6oriN5vh0cpnMGPh0qjXN/story.html

⁵ Conservation Law Foundation, http://www.t4ma.org/site/wp-content/uploads/MBTA-Caucus-Presentation-022415.pdf

⁶ Massachusetts Taxpayers Foundation: http://willbrownsberger.com/wp-content/uploads/2014/12/MJW-senate-presentation 12 4 14.pdf

year. As will be discussed below, the MBTA will also need to ensure it has the personnel capacity to effectively prioritize state of good repair projects and deliver projects on-time and on-budget. Completing a long-delayed asset management database and plan is also critical and should be prioritized.

System Capacity and Economic Growth

Transit Demand and Economic Potential

As important as it is to effectively maintain our current system, it is insufficient if we are to meet the economic needs of the Greater Boston region and the entire Commonwealth. About half of weekday trips into downtown Boston are made via transit. Beyond the direct jobs supported by MBTA expenditures, the transit system is a lifeline for current economic centers in Greater Boston such as Kendall Square, the South Boston Waterfront, the Longwood Medical Area, and Assembly Square. It also can help catalyze emerging growth areas such as Roxbury Crossing, the East Boston Waterfront, Beacon Yards and Sullivan Square. In light of the crisis currently facing the MBTA, some have called for a freeze or moratorium on so-called "expansion" projects. A Better City and its members strongly believe that these recommendations are misguided and would handicap the region's economic growth and job creation if heeded. It is true that every capital project should be subject to a rigorous cost-benefit analysis and our limited dollars should be prioritized. That does not mean, however, that simply repairing today's system is an acceptable option for the region and the Commonwealth.

In fact, while the MBTA has expanded service capacity and added new routes at a slower rate than many of its peers⁷, ridership and demand for reliable transit is only accelerating. The combined population of Boston, Cambridge, Quincy and Somerville has grown by more than 8% since 2000.⁸ According to the Urban Land Institute's 2012 report, *Hub and Spoke*, the MBTA is likely to need to serve up to an additional 367,000 riders each day by 2021. Already, segments of the Green, Orange, Red, and Silver Lines currently exceed their design capacity during peak portions of the average weekday.⁹ Simply replacing our existing fleet will not relieve the constraints that the system will face as ridership grows and demand for reliable transit continues to increase.

There are many examples of the capacity issues our transit system is confronting. Kendall Square alone has added well over 4 million square feet of development growth between 2000 and 2010, supported by a Red Line station that launches more than 15,000 trips

⁷Frontier Group: http://www.frontiergroup.org/blogs/blog/fg/pioneer-institute-says-mbta-fastest-growing-transit-agency-its-not

⁸ Conservation Law Foundation: http://www.t4ma.org/site/wp-content/uploads/MBTA-Caucus-Presentation-022415.pdf

⁹ Hub and Spoke, Urban Land Institute and Northeastern University, http://www.northeastern.edu/dukakiscenter/wp-content/uploads/Final-Hub-and-Spoke-Report.pdf

each weekday. ¹⁰ The City of Cambridge projects that an additional 8 million square feet could be developed by 2030, increasing the transit demand of the station by a minimum of 3,000 additional weekday riders just during the peak hour. Estimates place daily trips into the Longwood Medical Area at over 100,000, and close to half of those trips are on transit. ¹¹ The LMA continues to grow, and demand for robust service via both light rail and the Commuter Rail will only accelerate. In the South Boston Waterfront, the Silver Line has helped to generate 7,700 new jobs and develop 30 million square feet of new property since 1997. The waterfront is one of the fastest growing urban areas in the entire country, and by 2035, if we are able to adequately enhance the capacity of the transit system, an additional 17 million square feet of property could be developed and 23,000 new jobs generated there ¹². A tremendous opportunity for economic growth exists in Allston's Beacon Park Yards which will be constrained if additional transit connections are not incorporated into the realignment of the Allston Interchange.

All of this growth in transit demand and development activity generates new commerce and economic activity. For instance, the City of Somerville is expecting that its development in Assembly Square will generate about \$20 million in new tax revenue annually. Rebuilding the system of yesterday will not be adequate if we are to meet the demands and seize the opportunities of tomorrow. We recommend that the MBTA conduct a near, mid and long-term capacity assessment based on forecasted trip/transit demand. This initiative should be conducted in order to inform the pending Program for Mass Transportation plan. This analysis should consider the economic, population and job growth patterns related to the Commonwealth's future and also could incorporate the administration's goals regarding transit oriented development, job growth, housing production and the reduction of greenhouse gas emissions.

Transportation Systems Management

Some of the MBTA's capacity challenges can be addressed with strategic investments in efficiency and capacity enhancements that do not require the intensive construction associated with the addition of new routes or the extension of lines on the subway system. For instance, the capacity challenges facing the Red and Orange Line will be mitigated with the aforementioned procurement of new vehicles. To maximize their utility, however, a simultaneous investment in power and signal upgrades for the Red and Orange Lines is needed to ensure that the new vehicles are able to achieve their maximum potential

 $\underline{http://www.mbta.com/uploadedfiles/documents/2014\%20BLUEBOOK\%2014th\%20Edition.pdf}$

12 South Boston Waterfront Transportation Plan, http://sbwaterfrontmobility.org/documents/SBoston_Full_Report_PB.pdf

¹⁰ MBTA Ridership and Service Statistics

Hub and Spoke, Urban Land Institute and Northeastern University, http://www.northeastern.edu/dukakiscenter/wp-content/uploads/Final-Hub-and-Spoke-Report.pdf

The Boston Globe: http://www.bostonglobe.com/metro/regionals/north/2012/12/27/assembly-square-development-taking-shape/3JJ7eIrogFMCXpNj7wApCL/story.html

regarding both speed and headways (service frequency). Purchasing new vehicles while leaving signal and power systems unaddressed would be penny wise but pound foolish. Similarly, the Green Line would be able to run three car trains more frequently and alleviate many of the crowding problems the Green Line central subway system and the branches currently face.¹⁴

Another example of an important intervention to tackle capacity issues throughout the Massachusetts transit network is the proposed expansion of South Station. At present, South Station operates above its design capacity for efficient train operations and orderly passenger queuing. When it opened to the public in 1899, South Station had 28 tracks; that number is now 13, significantly constraining current and future rail mobility not only within Massachusetts but throughout New England. South Station also lacks comfortable, modern facilities for passenger queuing, leaving riders standing in the elements as they wait to board their trains. In addition, South Station lacks sufficient vehicle storage capacity, constraining operations today and limiting future growth. The proposed relocation of the postal service facility on Dorchester Avenue and the addition of new tracks would provide significant benefits to both MBTA and Amtrak service capacity and frequency.

Sighting West Station in the Beacon Yards area is another good example of an important investment that would maximize existing rail access and multimodal opportunities associated with the realignment of the Allston Interchange. The station, in conjunction with the expansion of South Station, would allow for potential DMU (Diesel Multiple Unit) service between locations such as Allston and South Station. Relatively low-cost service enhancements like these, on existing tracks, would offer more direct connections and mitigate congestion at the MBTA's downtown Boston locations which many riders currently must use to make transfers between lines.

Finally, Bus Rapid Transit service has the potential to increase the capacity and service levels offered by the MBTA at a much lower cost than fixed rail. By enhancing bus service to allow for dedicated lanes of operation, off-board fare collection and signal priority at traffic intersections, travel times and congestion can be reduced significantly. Existing bus service should also continue to be enhanced through and expanded Key Bus Routes program.

Commuter Rail

While the performance of the entire MBTA system during recent weather events has been costly to both customers and economy, the service provided by the Commuter Rail and contractor Keolis has been both disappointing and unacceptable. According to *The Boston*

¹⁴ MBTA Program for Mass Transportation: http://www.ctps.org/Drupal/mbta_pmt

¹⁵ MassDOT Office of Transportation Planning:

Herald, on-time performance for the Commuter Rail service ran as low as 35 percent during periods in late January and early February¹⁶. While it is true that Keolis is not entirely responsible for equipment failures, it is clear that the company did not have a sufficient winter plan in place and that they failed to communicate effectively with riders about both schedule changes and the restoration of service. Additionally, basic operational preparations for severe weather were not made, including the snow sheltering of a Rhode Island inspectional facility, pre-publication of snow schedules, and ensuring the functionality of all on and off-vehicle communications equipment. These steps, and the establishment of a comprehensive communications plan for customer communications, would have better prepared the Commuter Rail Service for this series of storms and enabled the system to recover at a faster pace. In the seven months before this series of severe winter storms, the MBTA fined Keolis over \$2.4 million for a variety of performance issues.¹⁷

The MBTA's contract with Keolis states that the current eight year agreement can be terminated if the agency determines that doing so is in its best interest¹⁸. Based on the unreliable and poor performance of the Commuter Rail this winter, and a significant number of performance and systems issues that pre-dated recent events, we recommend that the agency be given one year to improve its performance and that it be required to meet a set of clear benchmarks to demonstrate progress to riders, stakeholders and the general public. If Keolis does not improve its operations of the Commuter Rail significantly within the next year, we recommend that MassDOT and the MBTA rebid the contract. If exercised, the termination of the existing contract with Keolis should be timed to allow for the implementation of a strong procurement process that would allow for a long-term agreement to responsibly ensure the viability of the system going forward and encourage private investment in the system's capital assets.

Four years ago, A Better City recommended that, given the age of the Commuter Rail fleet and the need for capitalization of the system, the MBTA enter into a long-term agreement with a private operator, on the order of 20-plus years. A long-term contract would provide incentives for a private partner to help recapitalize the system. One often cited model of such a contract can be found in Denver, Colorado. There, the Regional Transportation District (RTD) recently entered into a 30-year agreement with Denver Transit Partners (DTP) to design, build, operate, maintain, and finance their commuter rail Eagle P3 Project. It is the first true public-private partnership for commuter rail in the United States

http://www.bostonherald.com/news_opinion/local_coverage/2015/03/keolis_fined_max_434g_for_dismal_rail_record

¹⁸ MBTA Commuter Rail Operating Agreement, Schedule 12.3 ("Events of Default and Termination Events")

¹⁶ The Boston Herald:

¹⁷ The Boston Globe: http://www.bostonglobe.com/metro/2015/01/23/fines-commuter-rail-operator-million-for-late-and-dirty-trains-nov-and-dec/1d5seD5WoqWGvb4Q2PQ9AL/story.html

to include design, build, financing and long-term operations. The first complement of vehicles for this project was delivered late last year, with service expected to be phased in beginning in 2016.¹⁹

It should be noted that the Denver contract involved building and operating a new commuter rail system, rather than operating and maintaining an aging one. Nevertheless, the capital and maintenance needs of the MBTA system are so significant that a longer-term approach that brings private investment to the table should be considered carefully. The rest of the world has been using public-private partnerships for some time to finance, build and operate transportation projects. Examples of long-term contracts in other countries include the following²⁰:

- Manchester's Metrolink (light-rail tramway), Phase 1 & 2 are under 15- and 17-year DBFO (design, build, finance, and operate) concessions, respectively.
- Nottingham Express Transit (light-rail transit), a 27-year DBFO concession.
- London's Croydon Tramlink (light-rail tramway), a 99-year DBFO concession.
- Singapore's North-East Line (rapid transit), a 30-year operating license

Management, the Workforce and Employee Benefits

Managing the daily operations of the country's oldest transit system is complex and requires detailed familiarity with system fail points and necessary interventions. At times of greater management stability at the MBTA, and at MassDOT generally, a strong cadre of middle management was nurtured with training and education opportunities provided all the way down to the foreman level. Robust internship programs with local universities fed the talent pool to bring new thinking to planning and resource allocation. This environment of opportunity and career growth provided incentives for performance all the way down to entry-level part time operators. Today, such support systems appear to be lacking. A recent audit conducted by the firm Ernst and Young found that the MBTA is struggling to fill vacant positions and also identified a number of issues regarding agency operations and culture²¹. As the MBTA seeks a permanent General Manager, a key criterion should be proven expertise in employee development and human resource management. Modest investments in formal training opportunities have large returns in terms of employee motivation and morale. Additionally, a compensation review should be conducted to ensure that the agency is well-positioned to attract and retain talent, particularly at the manager and supervisor level. Within the context of the recently enacted hiring freeze, MassDOT and the Baker administration should work collaboratively

¹⁹ RTD FasTracks, http://www.rtd-fastracks.com/ep3 2

²⁰ A Better City: On the Right Track? http://abettercity.org/docs/11.30.2011%20-%20Index/20Commuter%20On%20the%20Rail%20(2).pdf

²¹ The Boston Globe: http://www.bostonglobe.com/metro/2015/03/14/mbta-subway-and-commuter-rail-ridership-increased/Jg3Y09wsxa3zd5YDeazuLN/story.html

to expedite the hiring process for essential positions. A particular focus of this effort should be positions pertaining to the design and construction process.

Binding Arbitration

An improved environment for employee growth and career advancement could be helpful in shifting the balance between labor and management to one of cooperation rather than adversarial negotiations over wage and benefit concessions. In that context, the binding arbitration currently in place at the MBTA to establish key contract terms is an extreme remedy to forestall work stoppages and lockouts. It protects the traveling public from transport disruptions, but also leaves budget makers with no real recourse against onerous contract terms. The result can be an expensive peace. Indeed, wages at the MBTA were up about 6.8% in the last fiscal year over projections due to back pay wage accruals as a result of arbitration, costing the transit agency an additional \$29 million²², and the decision's impact will be felt heavily in future years as well. It is worth considering other models used by peer transit agencies around the country.

In San Francisco, Presidential intervention was needed to suspend a walk out in 2013; BART workers launched a strike and received significant public support. BART has issued a postmortem on the negotiations and is looking at alternatives to avoid a repeat in 2017. In New York a state commission plays a role similar to that of the MBTA's arbitrator, appointing a panel that can establish wages and other basic contract terms. In Philadelphia SEPTA rejected arbitration in 2014 and risked a strike, frankly stating that they could reach a better agreement through negotiations.

The MBTA's structure sidesteps these choices and avoids confrontation. As a result, a major portion of the MBTA's budget (the 2009 D'Alessandro report identified wages and pensions as one of the MBTA's four principal expense categories) is essentially on automatic pilot. Abandoning binding arbitration and risking a strike would be a radical departure from that pattern. Public and political support for change would be severely tested by any job action affecting service, but the risk may be an acceptable alternative to the disruptions that will become more common as the MBTA's ability to "make do" loses ground to its SOGR backlog. MassDOT should commission a thorough review of labor alternatives in other transit systems, looking at both process and outcomes. A range of potential options for consideration are also outlined below:

• Eliminate the interest arbitration process altogether and replace it with the dispute resolution mechanisms that are generally applicable for most public sector employees. Specifically, Chapter 150E, Section 9 outlines a process to resolve collective bargaining disputes that starts with mediation, followed by fact-finding.

²² Keeping on Track: Transportation for Massachusetts http://www.t4ma.org/site/wp-content/uploads/Keeping-on-Track-Feb-2015.pdf

The fact-finding is intended to place pressure on the collective bargaining process, with the theory that public findings will force compromise at the bargaining table. Once the fact-finding has concluded, with no resolution, employers are able to implement unilateral changes based upon their last offer. The downside is that the process takes a long time, and can be cumbersome. If this were an option to explore, we recommend streamlining the process to allow the MBTA to reach a point of implementation earlier.

- Adopt the Joint Labor Management Committee process that applies to police and fire disputes. This is an interest arbitration process that can carry the frustrations of the current process, but funding the economic components of any award is optional. The lack of guarantee that an award will be funded theoretically places pressure on the parties to be reasonable. Any item not funded would essentially continue for the life of the new agreement with no increase.
- Reform the current process and limit arbitrability. In other words, build in statutory requirements that limit the ability to trigger arbitration by forcing parties to gravitate toward reasonable last-best offers. For example, the right to arbitrate economic issues cannot be triggered unless the party petitioning for arbitration limits the economic proposals to no more than a 1% increase in the average cost to the MBTA over the prior 3-year period (typical life of a collective bargaining agreement). If neither party seeks arbitration within a 30-day period following mediation (the current statutory precursor to arbitration), the MBTA gets to implement its last best offer.
- Reform the process to limit the arbitrator's authority in issuing economic awards. This is similar to the prior suggestion, but the change involves capping the economic component of any award to some number or percentage increase over, for example, the prior 3-year average costs to the MBTA.

The Pacheco Law

The Pacheco law was passed in 1993 when privatization was first proposed by Governor Weld. Since then public-private partnerships (P3s) have been widely accepted and adopted around the country. Here in Massachusetts, a partnership with New Balance is funding the construction of the Boston Landing Commuter Rail station and there is the strong possibility that other partnership arrangements will help fund the construction of West Station, in conjunction with the Allston Turnpike Realignment project. There is no reason why such partnerships should not be welcomed as a helpful tool for tackling some of the MBTA's capital problems. Just as P3s are being recognized, as a way to secure needed investment in transportation, transit alternatives developed by transportation management associations (TMAs) and the private sector (i.e.: Bridj, Uber/Lyft) could be useful in

meeting particular needs such as complementing late-night service and adding new service to developed areas with limited transit options. Indeed, the MBTA already contracts out such functions as paratransit, advertising, real estate and cleaning services. The MBTA's financial condition gives it an overwhelming interest in finding the best bargain; it does not need the Pacheco law as an incentive to achieve savings and good contract outcomes. The statute should be modified to allow MassDOT and the Governor's office to explore opportunities to pilot projects and work functions that are exempt from the Pacheco law and instead require post-contract reviews in which promised savings can be measured against established criteria. The results of the pilots can be used when contemplating the law's future in the months and years ahead.

Employee Pensions

Turnpike workers were moved to the state system several years ago, but MBTA employees were not. The Gordian knot of pension benefits may be too massive to cut by a change applicable to all employees and too complex to untangle by placing new employees on the state pension/ but the relationship is too central to ignore. If more key MBTA functions are to be turned over to MassDOT, this issue could impede efforts at organizational integration. MassDOT and the MBTA should secure an outside opinion of counsel to determine potential options in this regard.

Operational and Governance Improvements

The Ride

While a study of the paratransit system was undertaken during the last Administration, the results were modest. Recipients of Medicaid and Medicare are major beneficiaries of the MBTA's paratransit service. However, the MBTA has not succeeded with ideas such as serving Medicaid recipients through free fixed route passes and pursuing Medicaid reimbursement for Medicaid trips. The MBTA also continues to offer paratransit service that is far more extensive than FTA requires. Alternatives that could reduce the needs now being met by the Ride include travel training to encourage fixed route use and expanded community based travel options. In the Fall of 2014, MassDOT and the MBTA launched a Non-ADA Paratransit Pilot Program that aims to reduce response times by providing customers with debit cards (with set limits for MBTA contribution to fare) to use with pre-approved taxi vendors that provides offer customers individualized service, reduces response times, while reducing strain on the existing ADA system. Working with ANF, MassDOT, the state's human service agencies, and the Executive Office of Elder Affairs should determine and appropriately allocate responsibility for the overall budget impact of such strategies.

ABC is currently conducting research on the potential role that dynamic ridesharing concepts and technologies might play in the future delivery of paratransit services in order to reduce costs and improve overall customer satisfaction, while creating efficiencies within

the MBTA's para-transit system. Throughout this project ABC has met with MassDOT, MBTA, and EOHHS staff to gather feedback and guide our research. Upon completion of the study ABC looks forward to sharing our findings and working with MassDOT and the MBTA to implement recommendations.

Procurement

According to *The Boston Globe*, 40 brand new Commuter Rail locomotives were all sidelined after faulty bearings were discovered on many of these vehicles. First rate procurement practices can help to prevent these types of incidents. The MBTA's procurement system generally complies with state and Federal requirements, but it is reactive, slow, and not calculated to help management make good plans for what to buy when. Just as supermarkets link consumption to inventory controls and purchasing, the MBTA's procurement system should be part of a loop of information that includes the end user and the budget source. Key issues and a timetable for major purchases should be established and linked to the asset management system. The MBTA General Manager should commission a state of the art procurement review that will involve both the MBTA departments that are procurement customers and those (ex: budget, legal, civil rights) that are part of the procurement process. The MBTA should also consider contracting with a third party consultant to serve as a "clerk of procurement" who would ensure that procurements are actively monitored and examine opportunities for potential savings.

Cost Estimates and Capital Planning

The MBTA relies on cost estimates that are useful as a relative measure of size, but not as a budget tool. The planning level estimates that are used when a project is first being developed are often quite low – useful for programming the STIP, but not for forecasting a construction budget. Early engineering estimates tend to have very large contingencies built in to cover unknown risks, inflation, soft costs, and an array of other items. The contingencies (which can double the estimated construction cost) make it hard to determine (and control) the true cost of the project. The actual cost (and the reasons for it) may not be known until the project is almost "ready to go". Working with experts from other states and the private sector, MassDOT/MBTA design and construction, planning, and budget staff should be encouraged to develop better ways to estimate and control project costs, ensure quality control and adhere to project schedules.

The triage process that the MBTA must use for its capital planning is rational, but it does not consistently link to a "Plan B" for the unfunded projects. The sponsoring department and the CFO should concur on a Plan B, including timeframe and costs, and work the solution into the asset management process. These discussions would be part of the annual

²³ The Boston Globe: http://www.bostonglobe.com/metro/2015/01/21/new-commuter-rail-locomotives-sidelined-due-faulty-bearings/3iLcseNHv0gEPSd1WnwNlM/story.html

CIP process. The GM and the CFO should extend the capital planning and asset management reviews to include a fallback strategy for each department to implement and report on in the next CIP deliberations.

The CIP should be based on clear and transparent project selection criteria. The first priority in these metrics should be safety, reliability and customer service. Next, capacity enhancements should be prioritized and should be evaluated based on ridership growth and travel demands, cost-benefit analysis and equity. The annual CIP document should also discuss, in detail, which projects were unable to be funded and provide realistic cost estimates for each.

Contract Management

Too often contract management at the MBTA requires project managers to work with a steep learning curve and to apply limited time/resources monitoring contract performance. Even if it means consultants monitoring consultants until a longer term staffing remedy can be developed, the MBTA should prioritize good contract management so that it can rely on the knowledge, experience, and attention of its project managers – not just the professional integrity of contractors and suppliers. MassDOT and the MBTA should work with Federal agencies and other states to identify and adopt best practices for project management and contract monitoring, including staffing requirements and clear lines of authority and allocations of responsibility to all relevant departments.

Bus Routes

The MBTA regularly reviews its bus routes, but not from the standpoint of zero-based route planning. Given the importance of bus service, a zero-based review should not be viewed as likely to reduce hours or miles of service, but as an exercise to make sure that the routes are as effective as they can be. This would also give the MBTA a fresh opportunity to assess the size of the bus fleet and the location of maintenance facilities. Funding and local support should be available so that the MBTA can conduct systematic zero-based reviews of all bus routes according to a published schedule over time, with particular attention paid to growth patterns, connections to other modes, and travel options. We recommend that the MBTA engage in a zero-based bus route review every five years.

Review of Recent Contracts

The Patrick Administration made no secret of the fact that there were certain contracts that it wanted to award before the new Governor took over. Most – probably all - of these contracts are for assets/services that the MBTA desperately needs. Undoing a major contract would probably mean a delay of 1-2 years, which is time that the MBTA can ill afford. Even when the prices in the awarded contracts are high (such as the order for Green Line cars) there may be no viable alternative that could be implemented within a reasonable time. However, the new Administration will be responsible for execution of

these contracts and for other major procurements that are still pending (e.g.: DMUs). It makes sense for the new Administration to scrutinize recently awarded major contracts and large pending procurements (a) to make sure that they have a good understanding of the parties' rights/responsibilities and (b) to prepare to monitor performance under the contract and track the larger market in case alternatives are needed. This process should not require a freeze of the contract and should be viewed as an effort to understand/master the project/contract rather than second-guess the selection. MassDOT should review all major contracts awarded within past year (as well as any large pending procurements) and work with MBTA so that performance is monitored and the contract has a point person who can make sure that the MBTA's expectations are met and the contract's risks understood.

MassDOT Board

For both reasons of accountability and efficiency, the Secretary and CEO of MassDOT should be given more direct authority to govern both the overall department as well as the MBTA specifically. While board can members provide state transportation officials with valuable expertise and bring the perspectives of many different stakeholders to the table, it is our recommendation that MassDOT's enabling legislation is modified to limit the board's responsibility for contracts and issues pertaining to day to day management of the department. To the extent permitted by the Massachusetts General Laws and considering the need for a management body to be responsible for debt, the direct governing responsibilities of the MassDOT board should be limited to the following core functions:

- 1. Charge and collect tolls, and setting toll rates
- 2. Set MBTA fare rates and policy
- 3. Develop a long-term state-wide transportation plan for the Commonwealth
- 4. Approve the annual operating and capital budget for the Department and recommend annual appropriations to the Governor and the legislature
- 5. To authorize the execution of public-private partnerships
- 6. To approve an annual five-year capital plan for the Department
- 7. To authorize the issuance, refunding and/or reissuance of debt instruments

In light of the current crisis facing the MBTA, we also recommend that the legislature modify MassDOT's statute to grant the Governor immediate authority to reappoint the full MassDOT board, proceeding with member terms that are co-terminus with that of the Governor going forward. This change will allow the Governor and the department to continue to benefit from the best minds and outside expertise available, while giving the executive of the Commonwealth the ability to have greater direct influence over its policies and management.

Communications and Marketing

Customer Service and Information Communications

Other than transporting riders safely every day, one of the most important functions that the MBTA performs is customer communication. Before, during, and after the recent weather events, the MBTA and Keolis failed to communicate in a timely and effective way with riders, often leaving them confused and stranded. For example, the MBTA's T-Alert System, which is supposed to provide instant alerts via text message to riders, was regularly delivering delay and cancelation messages 20-30 minutes after the initial delay; the MBTA radio updates at commuter rail stations reportedly announced information from several days prior; and verbal announcements onboard trains were spotty at best. During typical days with a full service schedule, and especially during times with reduced or suspended service, the agency must develop, implement, and ensure communications plans that will keep riders informed about service changes and what they can expect. MBTA employees also need to receive accurate and timely communications so they can relay updated information to customers. During this winter, many MBTA employees were just as in the dark as riders, but had to bear the brunt of customer complaints. The MBTA and the operator of its commuter rail system should set a system wide standard for communications and regular updates. MassDOT should also invest in new equipment that will enable more precise tracking of commuter rail trains by customers.

Data and Transparency

An expanded role should be considered for MassDOT's Office of Performance and Innovation, which could work to make publicly available as much data from the MBTA as is feasible. Potential partners in this endeavor might include organizations such as the Massachusetts Technology Collaborative, The Volpe Center, and academic institutions that conduct research pertaining to transportation policy. Data can be a resource for performance management and measurement, improved customer service and building public confidence and trust. While the MBTA does release performance and ridership reports on a limited basis, the release of robust data sets on operational and employee performance to the general public would allow external stakeholders to conduct their own performance assessments and to partner with the Baker administration and MassDOT to make needed improvements. The MBTA should publish comprehensive performance reports twice a year that are tied to consistent, useful and understandable metrics and targets that pertain to all aspects of the agency, including the customer experience, project management and workforce performance.

Marketing, Building, and Growing a Customer/Ridership Base
Based on our conversations with the MBTA's Corporate Pass contractor, participating
employers and customers purchasing their monthly fare media through the MBTA's
Corporate Pass Program provide the MBTA with consistent and stable funding totaling
more than \$150 million annually and represent about 1/3 of the MBTA's annual fare

revenues. Unfortunately, it was these dedicated customers that were most adversely impacted by delays and schedule changes this winter. Moving forward and as general practice, the MBTA most dedicate more effort to ensuring that these employers and tens of thousands of riders they represent are receiving the greatest value for their patronage. In addition, the MBTA should rededicate itself to growing the number of employers within the Corporate Pass Program to further increase the percent of predictable revenues from fare media. This will help lessen the impact of revenue loss caused by overcrowded trains – preventing the easy passage of conductors for fare collection. ABC recently conducted research on best practices for corporate pass programs and has recommended outsourcing of marketing and management of the MBTA's program as the most desirable option.

The MBTA should also work with the colleges and universities in MBTA communities to establish voluntary contributions in the form of pre-purchased monthly passes for their entire student body at a pre-negotiated rate. This would help grow additional dedicated revenue and grow the customer base of the agency. The MBTA is currently engaged in preliminary discussions with several universities to pilot this voluntary program and those efforts should continue and be expanded. Additionally, The MBTA should be in the business of creatively advertising its services to build upon its customer base and grow the constituency for high-quality public transit. The American Public Transportation Association recognizes innovative campaigns to encourage transit ridership each year in all forms of media, and the MBTA should work to be at the front of the pack. Finally, the agency should conduct more frequent and consistent ridership surveys to track customer satisfaction and incorporate public input more regularly into its operations and policy decisions. These efforts are particularly important now, so that the agency can recruit back disgruntled customers that have abandoned the system in light of its recent difficulties.

Debt Burden

In 2000, the MBTA funding model was shifted towards a "forward funding" mechanism with the goal of allocating dedicated revenue to the MBTA and ensuring that the agency would be financially self-sufficient. However, revenue from the MBTA's dedicated portion of the state sales tax never met its projected targets. According to the Conservation Law Foundation, since 2000, there has been about a \$1 billion difference between what the sales tax was projected to raise and what the MBTA actually received²⁴. Moreover, agency expenses such as health care and energy costs have risen at a much high rate than the funding model anticipated. At the same time, debt from statutorily obligated transit projects and other sources was shifted onto the MBTA's books. This has left the MBTA in an increasingly precarious financial situation. In FY 2015, 22% of the MBTA's operating budget will be spent on debt service, and the MBTA's total debt burden now stands at \$5.5

²⁴ Conservation Law Foundation: http://www.t4ma.org/site/wp-content/uploads/MBTA-Caucus-Presentation-022415.pdf

billion.²⁵ For some context, the percentage of the MBTA's budget that is spent on debt payments is significantly higher than many peer systems including San Francisco, New York, Chicago, Philadelphia and Washington, D.C.

We recommend that the Commonwealth of Massachusetts re-assume a portion of this debt burden, particularly the \$1.3 billion in prior obligation debt that existed previous to Forward Funding, as well as the \$1.7 billion associated with mitigation projects for the Central Artery/Tunnel Project. This adjustment to the agency's debt burden should not come at the expense of either sales tax revenue or discretionary revenue the agency receives from the Commonwealth's General Fund, as the agency's current fiscal situation directly relates to unrealized revenue projections and fixed expenses that have grown by an average of 7.2% annually since the implementation of Forward Funding, which assumed that expenses would decrease by 2% for the first several years of implementation ²⁶. With some of its debt burden reallocated, at least some of the \$424 million allocated to debt service could be allocated to capital investment in the transit system. If necessary, a greater share of the Commonwealth's current \$2.25 billion annual administrative bond cap can be dedicated to transportation in order to accommodate this shift. A determination should also be made as to whether increasing the bond cap is a viable means of accommodating this transfer.

It should also be noted that the pro forma used by the legislature in the development of the Transportation Finance Act of 2013 assumed that the MBTA would receive \$202 million from the Commonwealth's General Fund in FY 2016, while the Governor's current budget proposal only allocates only \$187 million. In addition to the debt relief we propose, the agency should receive state funding at the levels indicated in the 2013 legislation. Moreover, the MBTA should take steps to assess whether its capital budget is supporting the costs of any employees more properly categorized as performing operating functions. If any such practices are identified, the agency should work with MassDOT and the Baker administration to plan a transition of these costs to the operating budget of the MBTA.

Revenue Options

The business community has consistently been supportive of generating more efficiencies and savings through governance and operations reforms. Ensuring that taxpayers' dollars are spent in an effective and prudent manner is essential. However, it cannot be denied that the MBTA's problems cannot be solved through reforms alone. According to the Massachusetts Taxpayers Foundation, the MBTA's expenses are projected to grow twice as fast as revenues and the agency will have a structural annual operating deficit of over \$300 million by FY 18. Many of the agency's revenue sources, including fares and local

²⁶ David D'Alessandro MBTA Review: http://mbtareview.com/MBTA_Review_2009.pdf

²⁵ MBTA Budget Documents: http://www.mbta.com/about_the_mbta/financials/?id=1054

assessments, are statutorily capped and will not grow by nearly enough to allow the agency to address its \$6.7 billion State of Good Repair backlog and make the investments in capacity enhancement that are clearly needed.²⁷ In order to effectively manage the financial challenges facing the MBTA and the entire transportation network, creative and flexible approaches to the use of revenue will be required. Some potential revenue options for your consideration are outlined below.

In addition to our recommendations pertaining to the generation of new revenue, we encourage MassDOT and the MBTA to maximize the revenues that can be generated through both advertising and the disposition of non-essential real estate parcels. The MBTA should also conduct an energy audit and explore ways to both procure energy at lower rates and to advance sustainability initiatives that lower the agency's demand for electricity and fuel. We also strongly encourage the MBTA to take additional steps to ensure that the collection of existing fares is enforced consistently, particularly on the Commuter Rail.

Additionally, ABC is currently finalizing research and a comprehensive report on, Unified Transportation Payment Media. The report recommends a transition from our current complex transportation payment media to an open payment system that streamlines payment methods within the MBTA and across agencies and transportation providers. With large transit systems in the US moving to open payment – Chicago, Salt Lake City currently; Philadelphia, Washington DC next year – and Transportation for London's recent successful deployment on subway, bus and rail, there are successful models for Massachusetts to learn from. We recommend that MassDOT to prioritize this transition, which will provide numerous benefits including cost reduction, improved customer service, increased ridership and revenue, improved service and operations, reduced maintenance costs, improved equity for lower income users, and positive environmental benefits. To proceed, the MBTA should implement a more in-depth feasibility study to look at the necessary planning, engineering, and budget for the transition.

Most of the estimates below are provided from research conducted in 2013 as part of a collaborative effort between A Better City, The Conservation Law Foundation and Northeastern University.

Use of Tolling Revenue

While MassDOT has broad authority to toll existing roads, the department's enabling legislation currently restricts the use of toll revenue to "(i) the payment of existing debt service on such tolled roads; and (ii) the cost of owning, maintaining, repairing,

²⁷ Massachusetts Taxpayers Foundation: http://www.bostonglobe.com/business/2015/03/07/three-ideas-fixing-troubled-mbta/p6oriN5vh0cpnMGPh0qjXN/story.html

reconstructing, improving, rehabilitating, policing, using, administering, controlling and operating such tolled roads." We consider this to be unnecessarily restrictive. Particularly as the implementation of All-Electronic Tolling progresses, MassDOT will have greater flexibility to adjust tolling rates throughout the Massachusetts Turnpike and the Metropolitan Highway System, and congestion pricing schemes similar to what is currently deployed in London should be considered. While our roads must be adequately maintained, so must our transit system. MassDOT should have the flexibility to use tolling revenue for investment in transit, which in turn would reduce roadway congestion, providing a benefit for drivers using the tolled asset as well as MBTA riders.

Using toll revenue for transit is not uncommon. For example, toll receipts from San Francisco's Golden Gate Bridge are used, in part, to fund passenger ferry service²⁹ and New York's Metropolitan Transportation Authority receives about 12% of its funding from toll revenue³⁰. It is certainly true, though, that the highway system is no less needy than the MBTA and there could be a perception (and perhaps a reality) that the transfer would move resources from the rest of the state to the Boston area. MassDOT and ANF should discuss how a transfer would impact the state highway system and whether a (pilot) multimodal corridor program is warranted. The Route 3 Add-A-Lane proposal, the 3rd Cape Cod Canal Bridge, and the Ted Williams Tunnel are all potential candidates.

Registry Fees

MassDOT recently increased registry fees for non-commercial vehicles. The biennial rate was increased from \$50 to \$60 to help the agency meet its "Own-Source" targets. Still, when annualized to compare us to other states, our \$30 annual cost is still lower than the \$35 rates in ME and CT. Close to \$11 million in new revenue is generated from each \$2 increase in the biennial fee.

Weight Based Registry Fees

Apply a new additional, weight based fee. Several states use weight based fees, including New Hampshire, Rhode Island and New York. Adopting a fee structure similar to that of Washington State could generate an additional \$55 million in revenue.

Inspection Fees

The fees for vehicle inspection fees were increased recently to \$35, up from \$29. Close to \$5.5 million is generated by every \$1 increase in the fee.

https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter6C/Section13

²⁸ Massachusetts General Laws:

²⁹Golden Gate Bridge Transportation District: http://goldengatebridge.org/visitors/directions.php

³⁰ Tri-State Transportation Campaign: http://www.tstc.org/101/mta.php

Parking Fees

A \$1/day/space parking fee in Boston would generate at least \$25 million, more if the fee were extended to other parts of the state.

Sales Tax from Internet Purchases

Sales tax revenue from across the country has been adversely impacted by both the Great Recession as well as the inability of states to collect sales tax on internet purchases. While online retailers are required to collect sales tax on purchases in states where they have a physical presence, the world of online commerce has blurred these definitions considerably and a significant amount of online retail activity currently escapes sales tax levies. Ironically, this leakage is one of the reasons funding for the MBTA from the sales tax has fallen short of projections. The Baker administration should work with the Massachusetts Congressional delegation to forcefully advocate for the passage of the Marketplace Fairness Act, which would allow Massachusetts to compel online and catalog retailers to collect sales tax at the time of a transaction. In the meantime, Massachusetts should aggressively work towards full compliance with the Streamlined Sales and Use Tax Agreement, an agreement between 44 states to simplify the collection process for sales tax across state lines.³¹ It is estimated the collection of sales tax on all remote purchases in Massachusetts could generate as much as \$77 million in additional annual revenue for the MBTA. It is important to note that this proposal is not a tax increase, but rather a move to increase fairness in the tax system and protect small businesses.

Applying Sales Tax to Gasoline

If the current state sales tax of 6.25% was applied to the retail purchase of gasoline, an additional \$707 million in revenue would be generated. To ease concerns about gas price increases, a cap on the cents/gallon associated with the tax could be enacted as part of a statute revision. Vermont imposes a 2% sales tax on retail gasoline purchases and various counties and municipalities in New York impose sales taxes at varying levels.

Sales Tax Exemptions

The sales tax for motor vehicle sales is now allocated to transportation. However, purchases made with vehicle trade-ins do not have the sales tax applied to the entire value of the new vehicle. Estimates have varied, but the most recent Tax Expenditure Budget placed the annual value of this exemption at over \$127 million.³² Other states that apply sales tax on the full cost of new vehicles for trade-ins are California, Hawaii, Maryland, Kentucky, Michigan and Virginia, in addition to Washington, DC.³³

http://www.mass.gov/bb/h1/fy16h1/tax 16/items/htax3606.htm

³¹ Marketplace Fairness: http://marketplacefairness.org/what-is-the-marketplace-fairness-act/

³² Governor Baker's FY 2016 Budget Proposal:

³³ Chron: http://smallbusiness.chron.com/sales-tax-work-tradeins-58914.html

Conclusion

Thank you for your consideration of the above suggestions and recommendations. Should you have any questions regarding any of these proposals, or if you would like any additional information, please feel free to contact me or Justin Backal Balik, ABC's Manager of Public Policy and Government Affairs. He can be reached at (617) 502-6244 or justinb@abettercity.org. Thank you again for the opportunity to speak with you and share our thoughts regarding the improvements needed to deliver a truly world class transit system for Greater Boston and the Commonwealth of Massachusetts.

Sincerely

Rick Dimino

President and CEO

CC: Governor Charles Baker
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