MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Debt Issuance and Management Policy

July 1, 2018

1) Purpose for Policy and Debt; Use of Debt Proceeds

The purpose of this policy is to establish a framework for the issuance and effective management of debt of the Massachusetts Bay Transportation Authority ("MBTA" or the "Authority") consistent with the Enabling Act and other applicable law and the terms of relevant bond resolutions and trust agreements.

To the extent of any inconsistency between this policy and the Enabling Act and the terms of bond resolutions and trust agreements, the Enabling Act, bond resolutions and trust agreements shall govern. Furthermore, to the extent of any inconsistency between this policy and any matter approved by the Board of Directors and, while the Control Board is in existence, the Control Board, the matter approved by the Board of Directors or Control Board, as applicable, shall govern.

The MBTA was established in 1964 pursuant to Chapter 161A of Massachusetts General Laws, as amended (the "Enabling Act"), as a body corporate and politic and political subdivision of The Commonwealth of Massachusetts (the "Commonwealth") to finance and operate mass transportation facilities.

The MBTA serves 175 communities, providing transit alternatives to a population of almost 4.7 million people over an area of 3,200 square miles. The MBTA is the fifth largest mass transit system in the United States as measured by ridership. The MBTA serves a daily ridership of approximately 1.24 million passengers. To provide service the MBTA maintains over 182 bus routes, four rapid transit lines of heavy and light rail, five bus rapid transit line, four trackless trolley lines, 14 commuter rail lines, three ferry routes, and a flexible paratransit service.

Under the Enabling Act, the MBTA is required to meet all of its expenditures, both operating and capital, from a combination of revenues generated from operation of its transit system, federal assistance and a dedicated revenue stream (the "Dedicated Revenues") consisting of the "Dedicated Sales Tax" and "Assessments." The Dedicated Sales Tax is equal to the greater of a base revenue amount, determined in accordance with Section 35T of Chapter 10 of Massachusetts General Laws ("Section 35T"), and the amount raised by a 1% statewide sales tax. Assessments include amounts deducted from local aid payable to each of the 175 member communities as determined in accordance with the Enabling Act and Section 35T. Under the Enabling Act, the Dedicated Revenues are impressed with a trust for the benefit of MBTA bondholders. The Commonwealth covenants that while any MBTA debt secured by the Dedicated Revenues is outstanding and unpaid, the Dedicated Revenues shall not be diverted, and, so long as the Dedicated Revenues are necessary for the purpose for which they have been pledged, the rate of the sales tax shall not be reduced below the amount of the Dedicated Sales Tax and annual aggregate Assessments shall not be reduced below $136,026,868.

Under the Enabling Act, MBTA debt may be a general obligation or may be secured by a pledge or conveyance of all or a portion of revenues, receipts or other assets or funds of the MBTA. The MBTA has outstanding (i) Sales Tax Bonds, secured primarily by a gross lien on the Dedicated Sales Tax, and a program of commercial paper structured as Sales Tax Bond Anticipation Notes; (ii) Assessment Bonds secured primarily by a gross lien on Assessments; (iii) Senior Lien Parking Revenue Bonds issued on behalf of the MBTA by a special purpose corporation controlled by the Authority and secured by revenues received from the MBTA parking system; and (iv) so-called “Prior Obligations” which consist of certain bonds and other debt obligations issued or entered into prior to July 1, 2000 (and which are no longer authorized to be issued) which were guaranteed by or paid from funds from the Commonwealth. The MBTA has previously issued and is authorized to issue project revenue bonds secured primarily from revenues generated from a project and federal grant anticipation notes secured by grants received from the Federal Transit Administration.

Proceeds of MBTA debt are used to finance or refinance projects in the MBTA’s rolling five-year Capital Investment Plan. Such projects are selected through an ongoing prioritization process that strives to balance capital needs across the entire range of MBTA transit services. Given the MBTA’s financial limitations, its vast array of infrastructure, and the need for prudent expansion, the capital needs identified each year usually exceeds the MBTA’s capacity to provide capital funds. Therefore, the MBTA engages in an annual prioritization and selection process to select the highest priority needs for funding and inclusion in the Capital Investment Plan. One of the highest priorities for the MBTA, following projects required to be completed under federal and state law, is the pursuit of a “State of Good Repair.” To measure the need for capital expenditures devoted to maintaining and replacing existing infrastructure, transit systems often use the State of Good Repair standard, wherein all capital assets are functioning at their ideal capacity within their design life. While few transit systems are likely to achieve this ideal, the standard does identify a level of ongoing capital needs that must be addressed over the long-term for the existing infrastructure to continue to provide reliable service.

The MBTA has over $5 billion principal amount of debt outstanding. This Policy provides guidelines for effective debt management within the MBTA’s limited resources in order to preserve debt capacity to fund capital needs while meeting all other financial obligations.

2) Internal Debt Management

The Authority is governed and its corporate powers exercised by the board of directors (the "Board") of the Massachusetts Department of Transportation. In response to widespread system failures experienced by the MBTA during the unusually severe 2015 winter weather in Massachusetts, the Governor appointed a special panel to review the management and financial condition of the MBTA, which resulted in the establishment as of July 1, 2015 of a Fiscal and Management Control Board (the "Control Board"). The term of the FMCB will end on June 30, 2020. The Control Board is within the Massachusetts Department of Transportation and reports to the Secretary of Transportation. The Control Board is afforded all powers, responsibilities and obligations relative to the MBTA that are vested in the Board, with certain limited exceptions.

Based on a recommendation of the Control Board, the Board may amend any borrowing authorization or finance or refinance any debt of the authority in accordance with the law; provided, however, that the Board shall not delegate this authority and the Control Board must seek and obtain the approval of the Massachusetts DOT Board for any financings.

The Chief Administrative Officer and the General Manager of the MBTA will have overall responsibility for the day-to-day operations and management of the Authority, including with respect to debt. The Chief Administrative Officer and the Chief Financial Officer will have primary responsibility for debt management, supported by the Treasurer-Controller, the Director of Financial Planning, the Director of Reporting and Compliance, the Manager of Finance and other MBTA staff, who collectively have broad experience in the issuance of tax-exempt debt and related compliance issues. The Chief Administrative Officer, Chief Financial Officer and staff members will read appropriate periodicals and other subject materials, and engage industry professionals, to maintain and increase education, skills and knowledge necessary to effectively manage the debt program.

3) Legal Authorization and Debt Limits

As described above, MBTA debt may be a general obligation or may be secured by a pledge or conveyance of all or a portion of revenues, receipts or other assets or funds of the MBTA. The MBTA is not subject to a statutory debt limit, nor are there any constitutional limits on the amount of MBTA debt that may be issued.

The MBTA is no longer authorized to issue Prior Obligations supported by a Commonwealth guaranty or other support.

The Enabling Act limits the term of any bonds to not exceed 40 years from issuance.

The trust agreements for each of the Sales Tax Bonds, the Assessment Bonds and the Parking Revenue Bonds contain financial covenants, including debt service coverage ratios, which limit the amount of additional parity bonds that may be issued. MBTA staff will carefully monitor compliance with such covenants. In order to maintain the high ratings on its bonds, the MBTA will exceed such ratios, consistent with the rating agencies' guidelines. Given the financial constraints of the MBTA and the fact that the Dedicated Revenues are applied first to pay debt service, the MBTA will ensure that coverage is high enough to provide sufficient Dedicated Revenues, following the payment of debt service on Sales Tax Bonds and Assessment Bonds, to meet the other financial obligations of the MBTA not paid from other revenue sources.

4) Debt Issuance Practices

Through competitive selection processes described in Section 5, the MBTA will engage external professional resources as needed to assist in the issuance of debt.

Borrowing needs will be determined based on the necessary funding of the Capital Improvement Program, as described above, within the MBTA's financial constraints. Once such needs are identified, the Chief Administrative Officer, the Chief Financial Officer, treasury and finance staff will review detailed financial projections and *pro formas* to assess the impact on the operating budget, short- and long-term debt capacity and compliance with applicable financial covenants.

MBTA staff will monitor the debt portfolio to identify and evaluate possible refunding opportunities. Advance and current refundings will be considered when aggregate present value debt service savings of the refunding bonds as compared to the debt service on refunded bonds are at least 3% and annual debt service savings is at least 2%. Refundings may involve the issuance of tax-exempt or taxable refunding bonds. Refundings may also be blended with a new money issue to achieve a lower cost of capital to fund new projects. In addition to such criteria, MBTA also will consider the refunding efficiency of each refunded maturity, the value of the call option being forfeited based on the potential to refund bonds for greater savings in the future and the opportunity cost of refunding the bonds. Refunding efficiency of a refunded bond is defined as the present value savings for that refunded bond divided by the sum of the present value savings and the negative arbitrage associated with that refunded bond. A refunding could also be considered in order to modify legal provisions or to provide cash flow relief. The refunding criteria may be applied to a specific series of bonds, or, if part of a larger plan of financing, to the aggregate of all series that are part of such plan.

MBTA bonds will be sold (i) on a competitive basis or (ii) on a negotiated basis with an underwriting team selected by competitive process, in either case, depending on market conditions, debt-structuring issues and other factors. For each bond sale, MBTA staff will provide a memorandum to the Board of Directors, and while the Control Board is in existence, to the Control Board, setting forth the factors that justify the method of sale. The same underwriting firm may not serve as senior booking running manager for more than one successive negotiated bond sale.

The Board will authorize the issuance of bonds, including a not to exceed principal amount. The Board will delegate to MBTA officers the authority to execute and deliver documents required for the debt issue. While the Control Board is in existence, such issuance will be upon the recommendation of the Control Board to the Board.

5) Selection Process for Professional Services

In accordance with its procurement procedures, including procedures that promote transparency and comply with applicable public records laws, the MBTA periodically issues Requests for Qualification/Proposal/Response or otherwise engages professional services including for bond counsel, financial advisor, rebate compliance, external financial auditors, investment advisor, swap advisor, underwriter, liquidity provider, remarketing agent and LOC provider, etc. The financial advisor shall be a registered independent municipal advisor and shall serve for a term not to exceed three years before contract is reviewed, extended or terminated.

6) Debt Affordability/Borrowing Capacity

Under the Enabling Act, the MBTA is required to meet all of its expenditures, both operating and capital, from a combination of revenues generated from operation of its transportation system, federal assistance and the Dedicated Revenues. In addition to complying with its financial covenants for the outstanding Assessment and Sales Tax Bonds and the Parking Revenue Bonds, the MBTA will manage its debt to ensure sufficient Dedicated Revenues and other revenues to meet its other financial obligations. MBTA staff, led by the Chief Administrative Officer and the Chief Financial Officer, will monitor debt capacity and analyze the incurrence of additional debt with a view to the short- and long-term impact on debt capacity.

7) Risk Controls/Monitoring

The MBTA will monitor its outstanding debt in respect of risks, including without limitation exposure to variable rates, liquidity and credit providers and remarketing agents, investments and investment providers.

The MBTA will institute such controls as recommended by its independent auditor and other best practices deemed appropriate by the Chief Administrative Officer and the Chief Financial Officer, including on advice from the financial advisor, investment advisor and bond counsel.

8) Debt Structure

MBTA debt is outstanding as of July 1, 2018 in the aggregate principal amount of over $5 billion, amortizing through June 30, 2046. However, the MBTA continues to issue new money bonds periodically to fund a portion of the capital investment plan.

Maturities of new money debt generally will be based on the useful life of the assets being financed. Principal will be amortized to take into account short and long-term needs and debt capacity. The use of capitalized interest (the payment of interest from bond proceeds during construction period) will be limited. Call features will be evaluated by considering the relative value of future financing flexibility and the market's perception of any premium associated with a call.

Credit enhancement, insurance or liquidity will only be used when the present value of anticipated savings (i.e., reduced interest expense) exceeds the cost of the enhancement.

The relative amount of unhedged variable rate, hedged variable rate and fixed rate debt will be monitored consistent with the risk control strategies described herein. Unhedged variable rate debt (i) will be limited to the extent of offsetting natural hedges in the MBTA's financial profile and, in no event, more than 20% of the total outstanding MBTA bonds or (ii) mitigated by other means that manage interest rate and other risks associated with unhedged variable rate debt, such as by conservative budgeting, elimination of put risk or other factors.

9) Credit Rating Agency Management and Communication

The MBTA will manage its debt portfolio and financial position to obtain and maintain the highest credit ratings possible. While high credit ratings generally reduce the MBTA's cost of debt and increase market access, these rating considerations must be balanced with maintaining flexibility to meet operational and capital needs.

10) Investor Relations Management

The MBTA's most recent Official Statement and audited financials will be posted on its website (www.mbta.com). The MBTA also will submit annual filings to the Electronic Municipal Market Access ("EMMA") system operated by the Municipal Securities Rulemaking Board (http://emma.msrb.org).

Prior to each bond issue with assistance from its financial advisor and underwriters, as applicable, a marketing plan will be developed and outreach made to targeted investors (both existing and potential new investors). If necessary and/or desirable, in the view of MBTA staff, its financial advisor and its underwriters, the MBTA will conduct an investor call in connection with a bond sale.

MBTA staff, with ultimate oversight by the Chief Administrative Officer and the Chief Financial Officer, will engage in ongoing communication with investors and will respond to requests from investors and potential investors as appropriate and in a manner consistent with applicable securities laws.

11) Use of Derivatives

The MBTA will maintain a Derivatives policy. Use of derivatives in connection with debt must comply with the terms of such policy then in effect. Bond counsel and the swap advisor will be consulted in the event the MBTA is considering entering into any swap or other derivative in connection with tax-exempt debt.

12) Post-sale Monitoring, Management, Compliance

The Authority will maintain an adequate system of internal controls to provide compliance with applicable laws, rules, regulations, and covenants associated with outstanding debt, including post-issuance compliance. Annual calendars will be maintained identifying due dates for key financial activities including, but not limited to, schedules for debt service payments; certifications of revenue sufficiency and maintenance of insurance; arbitrage calculations; and continuing disclosure commitments.

Investments of bond proceeds and other funds held under trust agreement or bond resolution will only be invested in accordance with the terms of such trust agreement or bond resolution. Where possible, the MBTA will seek to limit negative arbitrage.

13) Continuing Disclosure and Other Debt-Related Reporting Requirements

The MBTA will comply with the requirements of all of its “undertakings” by filing annually its disclosure statement and audited financial statements with the Electronic Municipal Market Access (“EMMA”).

The Authority will comply with the terms of its bond resolutions and trust agreements relating to the submission of annual budgets, audited financials, etc. to the applicable trustee or fiscal agent.

The Authority will comply with the terms of the Enabling Act and other applicable law in respect of the delivery of reports, budgets, certificates and other items to the legislature, the administration, the MBTA Advisory Board or the State Finance and Governance Board, as applicable.

14) Review and Revision of the Policy

This policy will be reviewed by MBTA staff and reauthorized, as amended, by the Board of Directors every two years or as required and, during the period of the Control Board, only upon the recommendation of the Control Board.

15) Availability of Policy to Public

A copy of this policy will be posted on the MBTA’s website (www.mbta.com) and will be made available to any members of the public upon reasonable request for review.