

RatingsDirect®

Massachusetts Massachusetts Bay Transportation Authority; CP; Sales Tax

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Credit Profile		
US\$944.875 mil sr sales tax bnds (Massachusetts) ser 2024A due 07/01/2052		
<i>Long Term Rating</i>	AA+/Stable	New
US\$100.135 mil sr sales tax bnds (Massachusetts) ser 2024B due 07/01/2054		
<i>Long Term Rating</i>	AA+/Stable	New

Credit Highlights

- S&P Global Ratings assigned its 'AA+' rating to the Massachusetts Bay Transportation Authority's (MBTA) \$1.05 billion senior sales tax bonds, 2024 series A and 2024 series B (sustainability bonds).
- At the same time, S&P Global Ratings affirmed its 'AA+' long-term rating on the authority's parity senior sales tax debt outstanding; its 'AA+' rating on the authority's outstanding subordinate sales tax bonds, including its 'AA+/A-1+' dual rating on MBTA's variable-rate demand obligations (VRDOs); and its 'AA+' rating on MBTA's U.S. Department of Transportation Railroad Rehabilitation & Improvement Financing (RRIF) loan agreement for up to \$851.2 million for MBTA's commuter rail safety and resiliency program.
- We also affirmed our 'A-1+' short-term rating on the authority's commercial paper (CP) sales tax bond anticipation notes (BANs).
- The outlook on all long-term ratings is stable.

Security

The series 2024 series A and series B sales tax bonds and parity debt are secured by a gross pledge of the greater amount of either a statewide sales tax defined as a 1% statewide sales tax (which excludes sales tax on meals), plus \$160 million of additional state sales tax per year; or an inflation-adjusted sales tax revenue base amount distributed by the Commonwealth of Massachusetts. The senior sales tax pledge is subordinate to the prior closed-lien general transportation bond obligations outstanding issued before July 2000, to the extent that MBTA does not certify that its general revenue can cover these prior-lien obligations in its annual budget from general revenue. In addition, pledged to the senior sales tax bonds are surplus assessments on 176 cities and towns, after payment of debt service on separate MBTA assessment bonds that have a first lien on that revenue. We understand that neither the pledged dedicated sales tax amount nor the base amount need a legislative appropriation to be used to pay debt service.

The subordinate sales tax pledge securing the subordinated (second-lien) sales tax bonds consists of the same revenue pledged to the senior sales tax bonds, after payment of senior-lien sales tax bond debt service and senior-lien debt service reserve (DSR) replenishments, if any.

The RRIF loan will be secured by third-lien sales tax revenue after payment of the subordinate sales tax bonds. The

RRIF loan agreement also specifies that the loan's junior lien changes to parity with senior-lien bondholders if MBTA files for bankruptcy or starts bankruptcy-like actions; however, we believe that as a state agency MBTA is not permitted to file for bankruptcy under the federal bankruptcy code.

The long-term component of the dual rating on the VRDOs reflects MBTA's credit characteristics. The short-term component of the rating reflects our assessment of the standby bond purchase agreements associated with the variable-rate debt.

The CP is secured by MBTA's covenant to issue subordinated sales tax bonds to ultimately retire the principal of CP notes, as well as funds advanced from Barclays Bank credit lines, CP rollover proceeds, and other available funds of the authority, while amounts on deposit in the subordinated bonds' debt service fund, on parity with subordinated long-term bonds and subordinate to senior sales tax bonds, secure interest on the CP.

The 2024 series A bonds are being issued to fund a portion of the authority's capital investment plan (CIP) and to refund a portion of outstanding senior sales tax debt. The 2024 series B bonds are being issued to fund a portion of the authority's CIP and to refund its outstanding CP notes.

Credit overview

Our long-term rating on MBTA sales tax bond ratings is based on what we perceive to be the stronger pledge of the state-guaranteed base revenue amount or pledged MBTA sales tax revenue. Currently, we view the pledge of state-guaranteed base revenue amount as having stronger credit quality as it is backed by the commonwealth's guarantee to make payments without the risk of appropriation. The senior and subordinated sales tax bonds outstanding will continue to have an open lien permitting additional debt issuance using the same additional bonds test (ABT) coverage multiple; as a consequence, we expect debt service coverage (DSC) based on pledged revenue to remain strong and of similar magnitude in the near term for all liens.

Massachusetts' 'AA+' general obligation (GO) rating reflects strong economic metrics, with very high per capita income levels compared to the nation, partly the result of the strong presence of high-technology companies in the Boston metropolitan statistical area (MSA). The rating further reflects some historical cyclicity in financial results due to volatile revenue sources, although recent strong growth in tax collections and federal aid has led to large operating surpluses and reserves, as well as high debt, pension, and other postemployment benefit (OPEB) liabilities, with a history of funding less than full annual actuarial recommendations to its pension and OPEB funds.

Factors supporting the 'AA+' GO rating include what we view as Massachusetts':

- Deep and diverse economy;
- High income levels, with per capita income at 128% of the nation in 2023;
- History of timely monitoring of revenue and expenditures, and swift action when needed to make adjustments;
- Strong financial, debt, and budget management policies, including annualized formal debt affordability statements and multiyear capital investment planning;
- Strong budget stabilization fund balance, equal to about 12.8% of expenditures and other uses on a budgetary basis at fiscal year-end 2023; and

- High debt, pension, and OPEB liabilities.

Combined sales tax revenue coverage from all liens of senior and subordinate bonds is very strong. However, we believe the ABT for the pledged revenues weakens our view of future coverage in light of the authority's large CIP and plans for additional borrowing. Given the reliance on pledged revenue for MBTA operations, we do not expect the authority to dilute coverage below strong levels on the senior and subordinated liens.

For more information on the Commonwealth, please refer to our most recent summary analysis on Massachusetts, published May 21, 2024, on RatingsDirect.

Environmental, social, and governance

In our view, environmental, social, and governance (ESG) factors reflect those of the Commonwealth of Massachusetts as they pertain to the pledged revenue. We consider Massachusetts' physical risks moderately negative in our credit rating analysis because of its coastal exposure to rising sea levels, with about two-thirds of its population in the Boston MSA and substantial property value in the combined Boston and Cape Cod area, exposing the state to significant economic disruption following a high-impact event. However, we also note that the commonwealth has been addressing environmental risks since 2004 through its Climate Protection Plan and has historically maintained a stable management and policy framework to respond to developing risks. We view social and governance risks as neutral in our credit rating analysis.

Outlook

The stable outlook reflects our view that Massachusetts' underlying economy and currently very strong reserves support its rating, despite its economically sensitive revenue and the potential for a nationwide economic slowdown.

Downside scenario

We could lower our rating if we believe Massachusetts will fail to make necessary budget adjustments to maintain structural balance or maintain strong reserves if its revenue weakens. Other factors that could lead to a downgrade include significant increases in debt or other fixed costs, or a significant decline in pension-funded levels due to the commonwealth falling significantly behind required pension funding contribution levels.

Upside scenario

If Massachusetts significantly reduces its pension and debt obligation while demonstrating continued commitment to strong budgetary policies and pension funding discipline, especially during periods of economic contraction, we could raise our rating.

Credit Opinion

Sales tax pledge

The senior and subordinated sales tax bonds have been backed by a lien on the 1% statewide sales tax (which excludes sales tax on meals) plus \$160 million per year of commonwealth's sales tax, subordinate to the prior-lien bonds issued before 2000, to the extent that MBTA does not certify that its general revenue can cover these prior-lien

obligations in its annual budget from general revenue, with excess sales tax revenue funding subordinate debt service and MBTA general operations.

We view the volatility on the pledged revenue as low given its relative stability. The 1% pledged sales tax, plus \$160 million per year, is part of the commonwealth's overall 6.25% sales tax rate. Sales tax revenue has shown considerable growth in recent years despite declines during the Great Recession, with an average growth of 7.3% in fiscal years 2018-2023. Additionally, we view the guaranteed base amount of pledged sales tax revenue should pledged sales tax revenue decline, or not increase as fast as inflation provides more stability to the pledged revenues in the event of a decline.

The ABT requires either 1.0x coverage of combined prior general transportation bonds and combined senior and subordinated sales tax bond maximum annual debt service (MADS) by the base revenue amount, or 2.0x coverage of senior and 1.5x coverage of combined senior and subordinated sales tax bond debt service by historical sales tax revenue, net of prior general transportation bond debt service. Because the ABT allows the authority to issue additional sales tax bonds if MADS at least equals the base revenue amount, in our view, this could weaken coverage and weakens our view of the provisions. The third-lien sales tax revenue pledge is closed but the authority is able to issue senior lien debt.

Although current DSC is strong, we believe coverage could potentially weaken, in light of the large CIP, and the potential for cost overruns or expanded borrowing. However, given the reliance on pledged revenue for MBTA operations, we do not expect the authority to dilute coverage below strong levels on the senior and subordinated liens. On the issuance of the 2024 senior sales tax bonds, MBTA will receive bondholder consent to convert the senior sales tax bond debt service requirement into an aggregate amount, instead of a per series requirement, by voting new bond issues in favor of the amendment. The consent will also allow the authority to choose not to fund a DSR on future issuances of senior bonds. The 2024 senior sales tax bonds will not have a DSR.

Combined MADS coverage from all liens on general transportation revenue bonds and senior and subordinated sales tax bonds is very strong, in our opinion, at what we calculate as 2.8x by historical fiscal 2023 pledged actual sales tax revenue, and 2.3x by the 2023 certified state-guaranteed base revenue amount. MBTA anticipates about \$4.4 billion in additional debt in its current CIP through 2029. We believe the lack of a DSR on the bonds is mitigated by strong DSC levels.

Base revenue amount

The commonwealth created a formula for a guaranteed base amount of pledged sales tax revenue should the latter decline or not increase as fast as inflation. This base amount was raised by an extra \$160.0 million in fiscal 2015, and subsequently increases annually by the rate of the Boston Consumer Price Index (CPI) up to 3% per year, or lower to the extent that the rate the CPI increases is less than 3% but more than the sales tax rate increase (in which case the base amount increase is the rate of increase in sales tax). If neither the CPI nor the sales tax rise in a given year, the base amount is held flat for that year. The base amount has increased to \$1.16 billion, due in fiscal 2024, compared with \$799 million in 2014. MBTA also receives other commonwealth money and federal revenue that are not pledged to the sales tax bonds.

Variable-rate debt and swaps

The authority has \$95 million of unhedged subordinated sales tax VRDOs and authorization for up to \$400 million of subordinated CP BANs, all secured by sales tax revenue.

MBTA has approximately \$88 million of variable-rate sales tax-secured prior obligation bonds which are associated with an interest rate swap agreement associated with a notional amount of \$79.7 million. The authority is not required to begin posting collateral for any of its swap agreements in the event of negative swap valuations until the sales tax rating on MBTA falls below 'A'. Immediate swap termination events with notice do not go into effect unless the rating on either MBTA or Massachusetts falls below 'BBB-', although certain swap termination events with notice can occur if the sales tax rating falls below 'A-'. Any swap termination payments would be subordinate to payment of sales tax bond debt service. We believe that termination events are unlikely at current rating levels.

MBTA operations

MBTA runs the oldest and fifth-largest transit system in the country, operating subway, bus, and commuter rail service throughout eastern Massachusetts. Prior to the COVID-19 pandemic, it was responsible for an estimated 1.3 million passenger trips each business day and operates more than 38 miles of rapid-transit rail routes and 26 miles of additional light rail. In addition, MBTA provides a broad range of other passenger services, including commuter boats. Its territorial area has increased to 176 cities primarily in the greater Boston MSA, extending north to the New Hampshire border, west to the city of Worcester, and south into Providence, R.I., with a total service area population of about 4.8 million.

The COVID-19 pandemic severely affected MBTA's operations, with an almost 80% reduction in fares. The authority has received substantial federal stimulus funding related to the pandemic, including approximately \$827 million from the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act, approximately \$301 million from the Coronavirus Response and Relief Supplemental Appropriations Act of 2021, and approximately \$860 million from the American Rescue Plan Act of 2021. The federal aid is expected to be used through fiscal 2024 to pay operating costs to maintain service and to make up for lost revenue due to the COVID-19.

In fiscal 2022, the last audited year, MBTA operating expenses less depreciation were \$1.79 billion; this does not include debt service, which is deducted from sales tax before being credited to operating funds. Like most transit systems, MBTA relies heavily on intergovernmental operating subsidies to pay for operations. The 2021 Transportation Bond bill was enacted by the legislature to provide nearly \$5.1 billion in capital support for the authority.

MBTA was created in 1964 and was put under the control of a state oversight board following various operational issues in the winter of 2015. The oversight board expired June 30, 2021. Following dissolution of the control board, MBTA governance devolved onto the Massachusetts Department of Transportation (MassDOT), although MBTA exists as a separate legal entity within the department. However, subject to the enabling act amendment in 2021, the authority has a separate seven-member governing board, five of whom are appointed by the governor. The enabling act does not provide for MBTA to be a debtor under the federal bankruptcy code.

It estimates a five-year 2025-2029 MBTA CIP of \$9.6 billion. The CIP includes a portion of the funding of the authority's \$2.1 billion Green Line rail extension, which will also receive funding from federal and local sources. MBTA

expects approximately \$4.4 billion of its current five-year CIP will be funded with its own sources, \$1.4 billion from state rail enhancement bonds, and \$3.9 billion from federal assistance.

Commercial paper

We base our CP rating on the ability of MBTA to refund the CP with subordinated sales tax bonds, and not solely on Barclays Bank's liquidity support, due to various provisions allowing the expiration of the bank lines on certain credit events.

The current standby liquidity agreement for series A-TX and B-TX is scheduled to expire June 26, 2024. This will now be substituted with a new agreement with TD Bank NA that will expire June 24, 2029. The liquidity facility substitutions for the new credit lines are scheduled to go into effect June 24, 2024. The CP issuances must mature the earlier of 265 days for taxable CP, 270 days for tax-exempt CP, or one business day preceding the termination date of the applicable liquidity facility.

The new extended credit line covers each series' aggregate principal amount of CP authorized, plus 270 days of interest at the maximum permitted rate of 9.0%. The credit lines can be terminated in advance of their expiration dates on the occurrence of certain events, including failure of MBTA to pay any amount when due with respect to the principal of, or interest on, any CP or parity obligations; if one of three rating agencies lowers the subordinated sales tax bond parity rating below investment grade or suspends a rating; if MBTA starts a case of bankruptcy; or if MBTA or the commonwealth imposes a debt moratorium, among other events. Loan amounts under the facility agreement are subject to acceleration in the event of nonpayment of subordinate bond principal or interest, and if the agreement is suspended due to events other than nonpayment of principal and interest, are repayable with a three-year term-out on a parity basis with the outstanding subordinated sales tax bonds at a stepped-up interest rate of 4.0% above a base rate.

Related Research

- Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of June 18, 2024)		
Massachusetts Bay Transportation Authority, Massachusetts		
Massachusetts		
Massachusetts Bay Transportation Authority, Massachusetts		
Massachusetts Bay Transp Auth sales tax		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Massachusetts		
Massachusetts		
Massachusetts Bay Transportation Authority, Massachusetts		
Massachusetts Bay Transp Auth sales tax		
<i>Long Term Rating</i>	AA+/Stable	Affirmed

Ratings Detail (As Of June 18, 2024) (cont.)

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth sales tax

Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth CP

Short Term Rating A-1+ Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth CP

Short Term Rating A-1+ Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth CP

Short Term Rating A-1+ Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth CP

Short Term Rating A-1+ Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth CP

Short Term Rating A-1+ Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth CP

Short Term Rating A-1+ Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts Bay Transp Auth (Massachusetts) sales tax

Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts

Ratings Detail (As Of June 18, 2024) (cont.)

Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax
Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax
Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax
Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax
Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax
Long Term Rating AA+/A-1+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax
Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax
Long Term Rating AA+/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts
 Massachusetts Bay Transp Auth (Massachusetts) sales tax (AGM) (MBIA)
Unenhanced Rating AA+(SPUR)/Stable Affirmed

Massachusetts Bay Transportation Authority, Massachusetts

Massachusetts
 Massachusetts Bay Transportation Authority, Massachusetts

Ratings Detail (As Of June 18, 2024) (cont.)

Massachusetts Bay Transp Auth (Massachusetts) sales tax (MBIA) (National)

Unenhanced Rating

AA+(SPUR)/Stable

Affirmed

Many issues are enhanced by bond insurance.

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