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CREDIT OPINION
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New Issue

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Massachusetts Bay Transportation Authority

New Issue – Moody's assigns Aa1 to MBTA's (MA) $122.7M Assessment Bonds 2016 Series A; outlook stable

Summary Rating Rationale

Moody's Investors Service has assigned a Aa1 rating to the Massachusetts Bay Transportation Authority's (MBTA) $122.7 million Assessment Bonds 2016 Series A. Concurrently, we maintain the Aa1 rating on approximately $720 million in outstanding assessment bonds. A competitive sale is scheduled for July 19.

The Aa1 rating reflects the evaluation of the underlying credit quality of the pool participants, the nature of their obligation to pay, and structural attributes of the financing.

Credit Strengths

- Strong credit quality of the 175 participating local governments
- Assessment bond coverage expected to remain strong
- Non-impairment covenant by the commonwealth
- Improved MBTA management practices and oversight of operations

Credit Challenges

- High long-term debt burden relative to similarly rated issuers
- Recent operating challenges that resulted from lower than forecast revenues and led to increasing commonwealth support and one-time actions such as debt restructurings and deficit financings to lower debt service costs for budget relief

Rating Outlook

The stable outlook reflects no anticipated changes to the legal structure and our belief that the overall credit quality of the pool is stable. While MBTA has experienced operating pressures, bondholders are protected by a prior claim on the pledged assessment revenues, the commonwealth-guaranteed floor on assessments, and a subordinate claim on sales tax revenues after debt service on MBTA's sales tax bonds.

Factor that Could Lead to an Upgrade

- Material improvement in the credit strength of the participants resulting in a lower weighted average probability of default

Factors that Could Lead to a Downgrade

» Overall deterioration of credit quality of the participants

» Changes in legal structure that weaken bondholder protection

» Further operating strain resolved by debt restructurings

Key Indicators

Exhibit 1
Massachusetts Bay Transportation Authority

Massachusetts Bay Transportation Authority	
Size of Portfolio (# of Borrowers)	175
% of Borrowers with less than 1% of the pool	90.9
Total Bonds Outstanding ($ Millions)	720
Additional Bonds test	1.2x
Debt Service Reserve Requirement	50% of the Three Prong Test

Source: Moody's Investors Service

Recent Developments

Recent developments are incorporated in the Detailed Rating Considerations.

Detailed Rating Considerations

Credit Quality of Pool Participants

MBTA's assessment bonds are secured by an absolute and unconditional general obligation of each participating community, and the weighted average probability of default of the participants is Aa1. The primary element of the approach to the pool methodology is an evaluation of the underlying credit quality of the pool participants, as measured by Moody's public ratings or unpublished credit estimates, and the nature of their obligation to repay their portion of the financing.

Assessments securing the bonds are apportioned based on population within the MBTA service area. The credit quality of the assessed communities, the majority of which are publicly rated by Moody's, is very high. Among the top 65 participants, which account for approximately 98% of the fiscal 2016 assessment revenue, all but four have ratings Aa3 or above. The largest assessment concentration is the City of Boston (Aaa stable), which accounts for approximately 51.0% of the fiscal 2016 assessment amount. Boston's assessment, however, represents about one-fifth of its state aid, a strong factor mitigating the concentration risk to this entity. Authority-related assessments have been collected by the commonwealth since the 1960s and have on two separate occasions been challenged and upheld by the state's highest court.

Finances

The enabling act includes a covenant by the Commonwealth of Massachusetts (Aa1 stable) for the benefit of bondholders that it will not divert the revenue streams or reduce them below the specified floor amount of $136 million. Bond counsel has opined that those covenants represent valid contractual pledges that are binding on future legislatures. In our view, the non-impairment covenant signifies the commonwealth's intention to insulate bondholders from the operating risks of the transit enterprise and the political risk that could arise from its own competing budgetary needs. However, we note that the commonwealth reduced state aid materially during a multiple-year period of fiscal strain in the early 1990s and delayed some aid payments in fiscal years 1989 and 1990.

The aggregate pledged assessments declined on a phased basis to $136 million in fiscal 2006 and thereafter have grown at the lesser of the previous year's inflation rate or 2.5%, as permitted by statute. Assessment revenues have consistently exceeded the base amount, growing from $136 million in fiscal 2006 to $160 million in fiscal 2015. Maximum annual debt service coverage in 2021 is projected at 1.92 times the floor amount, increasing to 2.3 times using fiscal 2016 assessment revenues.

LIQUIDITY

The pledged revenue stream provides timely and ample liquidity for the payment of debt service. For fiscal 2015, the authority had approximately 67 days cash on hand.

Legal Structure

Key bondholder protections, including the additional bonds test and debt service reserve requirement, are satisfactory. MBTA's issuance of assessment bonds is limited by an additional bonds test requiring at least 1.2x coverage of aggregate annual debt service by the minimum aggregate assessment amount of $136 million. The debt service reserve is currently required to be maintained in an amount equal to half of the least of a three part test for each series: 10% of bond proceeds, maximum annual debt service, or 125% of average annual debt service.

The assessment revenue process is codified in state statute, with the state treasurer notifying local assessors and treasurers annually by August 20 of the charges and assessment payments that will be due. The state treasurer deducts those amounts, along with assessment payments for other programs, from each participant's state aid distribution. In the event that the assessment payment is greater than the state aid amount or if state aid is eliminated, each community is still responsible for the assessment, which would be paid pursuant to a schedule established by the Secretary of Administration and Finance.

DEBT STRUCTURE

As of June 1, 2016, MBTA had approximately $5.2 billion in outstanding debt, including $4 billion of sales tax, $720 million assessment, $206.5 million GTS, and $304.6 million parking bonds. Of the total debt outstanding $4.6 billion or 88.3% of MBTA's debt is fixed-rate, with $609.9 million in variable, including $61.8 million of commercial paper.

The MBTA has two liquidity facilities outstanding for its VRDO debt: Series 2008A-1 and 2008A-2 bonds are supported by J.P. Morgan Chase Bank, N.A. (counterparty risk assessment Aa2 (cr)/P-1(cr)), with the facility expiring in March 2017. The authority's Series 2000A-1 GTS bonds are supported by Barclays Bank PLC (A1(cr)/P-1(cr)) and its Series 2001A-2 GTS bonds are supported by the Bank of Toyko-Mitsubishi UFJ, Ltd (A1(cr)/P-1(cr)), with both facilities expiring in September 2018.

The $100 million Series A commercial paper is supported by US Bank, N.A. (Aa2(cr)/P-1(cr)); the $100 million Series B commercial paper is supported by Sumitomo Mitsui Banking Corporation (A1(cr)/P-1(cr)); and the $50 million Series C commercial paper is supported by the TD Bank, N.A. (Aa2(cr)/P-1(cr)). All commercial paper liquidity facilities are set to expire on December 10, 2018.

DEBT-RELATED DERIVATIVES

In May 2016 the board voted to terminate a portion of its outstanding swap portfolio, reducing the outstanding notional amount from $603.8 million to $166.4 million. All of the remaining interest rate derivatives require the authority to pay a fixed interest rate and receive a variable interest rate. The MBTA would be subject to termination payments on the swaps although the rating level for termination, which is A3, is well below the current rating.

PENSIONS AND OPEB

MBTA has four defined benefit public employee retirement plans: the MBTA Retirement Plan, the MBTA Police Association Plan, the MBTA Deferred Compensation Plan, and the MBTA Qualified Deferred Compensation Plan. As of the most recent valuation date, the aggregated funded ratio for all plans was 63.3% and the Unfunded Actuarial Accrued Liability (UAAL) totaled $962.1 million. MBTA's 2015 pension contribution was $78.7 million, a manageable 4.7% of its operating budget. MBTA's other post-employment benefits (OPEB) contribution in 2015 was $49.8 million, or 3.0% of its operating budget.

Management and Governance

After severe weather led to system-wide failures in the winter of 2015, the governor appointed a special panel to review the management and financial condition of the MBTA, which resulted in the establishment of a Fiscal and Management Control Board (FMCB). The five-member FMCB has been delegated authority over the system through at least June 30, 2018 but not beyond June 30, 2020. In addition to delegating most powers and authority to the FMCB, the authorizing legislation also mandated that the rights of MBTA bondholders shall not be altered or impaired by the board. Upon dissolution, oversight of the authority will revert back to the eleven member MassDOT board, which includes three members of the FMCB.

Legal Security

The bonds are secured by assessments imposed by state law on 175 cities and towns located in the authority's service area. The assessments constitute unconditional general obligations of each community and are paid by them on a monthly basis via automatic deductions of a portion of each community's quarterly local aid payments by the Commonwealth of Massachusetts. Pursuant to a Memorandum of Understanding, each quarter assessment revenue is first deposited into a special trust fund held by the state treasurer and then transferred to the bond trustee. The assessment revenue stream is not available to the MBTA to be used for other purposes until assessment bond debt service has been paid. The trustee applies required amounts to the debt service fund, followed by any necessary replenishment of the debt service reserve fund. Revenue is next available for transfer to the sales tax bond trustee, if necessary, to cure any deficiency in required amounts held by such trustee. Remaining amounts are then transferred to the authority to fund operations. Likewise, the sales tax revenues are available to pay special assessment debt service deficiencies on a subordinate basis.

Use of Proceeds

Proceeds will be used to refund existing debt for expected net present value savings.

Obligor Profile

The MBTA is the oldest and fifth largest transit system in the country, providing transportation service through subway, trackless trolley, trolley, bus and commuter rail service throughout the eastern portion of Massachusetts. There are approximately 1.3 million passenger trips on average per business day and MBTA operates over 38 miles of rapid transit rail routes. Service is also provided by streetcars and light rail vehicles on 26 miles of additional rail routes.

Methodology

The principal methodology used in this rating was U.S. Municipal Pool Program Debt published in March 2013. Please see the Ratings Methodologies page on www.moodys.com for a copy of this methodology.

Ratings

Exhibit 2

Massachusetts Bay Transportation Authority

Issue	Rating
Assessment Bonds 2016 Series A	Aa1
Rating Type	Underlying LT
Sale Amount	$122,675,000
Expected Sale Date	08/03/2016
Rating Description	Special Assessment

Source: Moody's Investors Service

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