Maine Turnpike Authority

Credit Update

Summary
Maine Turnpike Authority's (MTA or the authority: Aa3 stable) credit profile reflects the turnpike's continued solid financial operations, active financial management and limited plans for additional debt issuance in the medium term. The credit profile considers the continuous traffic increase for five years in a row, providing revenue growth and stability, maintenance of strong debt service coverage ratios (DSCRs) and liquidity, despite no rate increases since 2012 and no additional rate increases in the foreseeable future.

The special obligation bonds, rated A2, are subordinate to the senior revenue bonds and lack a dedicated debt service reserve account. Mitigating this lack of a reserve is the manageable level of annual debt service for the special obligation bonds and the fact that payment is treated as a credit towards the required annual transfers to the Maine Department of Transportation (DOT).

Credit strengths
» Traffic and revenue growth for five years in a row 2014-2018, continuing in the Q1 of 2019 at 3.99%.

» Stable financial operations with sound historical and projected total DSCRs around 2.00x on a net revenue basis in the medium term.

» Established system with a long stable history of steady growth in traffic and revenues; record high total transactions, above 88 million, in fiscal year 2018.
» Last toll increase in fiscal 2012 and steady period of traffic and revenue growth since 2014 are expected to be sufficient to support both operations and a large portion of capital program in the medium term without further increases. Competitive toll rates provide room for future increases if needed

» Manageable capital improvement plan with no planned additional debt until 2025

**Credit challenges**

» Significant seasonality in traffic patterns reflects reliance on discretionary tourist traffic, which has displayed mild volatility in economic downturns

» State economy is weaker in comparison to other Northeastern states. Weak demographics, aging population, a tepid housing market as well as job and income growth that are expected to continue to lag the Northeast and nation will impact transaction volume and revenue growth in the long run

» Less than twelve months’ debt service reserve on the revenue bonds and no debt service reserve for the special obligation bonds

**Rating outlook**
The stable outlook reflects the expectation of steady traffic and revenue growth during the year, and maintenance of strong credit metrics

**Factors that could lead to an upgrade**

» A significant and continuing increase in traffic and revenue that translates into sustainable higher than historical DSCRs and increased liquidity levels

» The continuation of the authority’s sound financial record and capital planning

**Factors that could lead to a downgrade**

» Declines in traffic and revenue, such that total net revenue DSCR falls below 1.75x on a sustained basis

» A drop in days cash on hand (inclusive of the reserve maintenance fund) below one year

» Significant increase in leverage without a commensurate increase in revenue flows

**Key indicators**

Exhibit 2
Historical performance 2014-2018 shows continued transaction growth with stable and strong credit metrics

<table>
<thead>
<tr>
<th>Maine Turnpike Authority</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Transactions</td>
<td>75,270</td>
<td>79,223</td>
<td>83,330</td>
<td>85,797</td>
<td>88,158</td>
</tr>
<tr>
<td>Total Transactions Annual Growth (%)</td>
<td>3.43</td>
<td>5.25</td>
<td>5.18</td>
<td>2.96</td>
<td>2.75</td>
</tr>
<tr>
<td>Debt Outstanding ($'000)</td>
<td>428,820</td>
<td>404,155</td>
<td>385,455</td>
<td>365,625</td>
<td>494,985</td>
</tr>
<tr>
<td>Adjusted Debt to Operating Revenues (x)</td>
<td>3.32</td>
<td>3.38</td>
<td>3.25</td>
<td>3.05</td>
<td>3.71</td>
</tr>
<tr>
<td>Days Cash on Hand</td>
<td>336</td>
<td>266</td>
<td>302</td>
<td>296</td>
<td>398</td>
</tr>
<tr>
<td>Senior Lien Debt Service Coverage by Net Revenues (x)</td>
<td>2.11</td>
<td>2.42</td>
<td>2.55</td>
<td>2.52</td>
<td>2.43</td>
</tr>
<tr>
<td>Total Debt Service Coverage By Net Revenues (x)</td>
<td>1.97</td>
<td>2.18</td>
<td>2.29</td>
<td>2.27</td>
<td>2.20</td>
</tr>
</tbody>
</table>

Source: Moody’s Investors Service, Maine Turnpike Authority

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.
Profile
The authority is a 110-mile roadway that runs from the New Hampshire border to Augusta, ME, the state capital, through many of the state's largest cities; it is the primary highway link between Maine and the rest of the United States. The 45-mile section between the New Hampshire (Aa1, General Obligation rating, stable) border and Portland, ME (Aa1, General Obligation Rating, stable) - the most populated and wealthiest region of the state - has very limited competition from local Route 1. However, the turnpike does face competition from I-295 which provides a limited-access, non-tolled alternative to the turnpike between Portland and Augusta. While I-295 bypasses Auburn, ME (Aa3, General Obligation rating, negative) and Lewiston, ME (Aa2, General Obligation rating), it provides better access to popular tourist destinations along the coast between Bath and Penobscot Bay. As a result, during fiscal 2018, the Authority earned about 40% of its toll revenue from the York toll, the first toll barrier past the New Hampshire border.

Detailed credit considerations
Revenue Generating Base
The authority is heavily reliant on discretionary tourism-related traffic that peaks during the summer months. In fiscal 2018, transactions during the month of August, the busiest month for the turnpike, were 76% greater than February, the slowest month. Despite the typical sensitivity to tourism-related traffic to economic conditions, traffic has demonstrated stability during previous downturns, in part because much of Maine's tourism comes from nearby wealthy New England states, which makes it less sensitive to economic fluctuations. Additionally, according to Moody's Economy.com (MEDC), Maine's tourism industry is expected to grow in the near-term.

Over the past 30 years, the authority has experienced few traffic or revenue declines. In fiscal 2018, transactions increased for the fifth year in a row, reaching 88.5 million. The increase in transactions is primarily due to continued low prices of gasoline as well as general economic recovery. The 5-year compound annual growth rate (CAGR) in transactions from 2014-2018 was 3.20% per year.

In fiscal 2018, electronic tolling accounted for 77.1% of collected toll revenue transactions versus 59% in fiscal 2010. Electronic tolling through E-ZPass was first implemented in 2005. In efforts to increase electronic toll collections, the authority provides significantly reduced transponder prices at $10 a piece, and a volume based monthly discount that provides E-ZPass account holders with a 25% discount for 30-39 trips per month and 50% discount for 40 or more trips per month. Discounts are applied automatically at the end of each month and the program is open to all in-state E-ZPass users.

Based on the toll revenue study completed by CDM Smith in 2017, transactions on the turnpike are expected to grow at an average of 1.6% until 2050. Starting in 2026, transaction growth rates are expected to oscillate around 1.7% and then gradually decline to 1.3% in 2036 before stabilizing there until 2047. Fiscal 2018 transactions of 88.2 were higher than projected transactions of 87.7 million, and fiscal 2019 transactions are expected to be 89.6 million. Total transactions in Q1 2019 grew by 3.99% relative to the same quarter in the prior year.

Maine has generally lagged behind the nation in employment growth over the past decade, but demonstrated less volatility than other states during the recession. As of January 2019, the state’s unemployment rate remained below the national average at 3.5%, and has hovered between 3.7% and 3.2% since September 2016. However, these low levels of unemployment are offset by a fairly stagnant labor force. MEDC expects that a wave of retirements in the coming year will put downward pressure on private service providers and factory payrolls. Maine's economic expansion is currently sustained by job gains in key manufacturing and health-care. Despite these gains, the public sector is downsizing, health-care job growth is decelerating, and, in the long run, renewed population loss and a low-skilled labor force will keep the state behind the Northeast and the nation.

Financial and Operating Position
Toll revenues increased by 1.74% to $138.4 million in fiscal year 2018 over fiscal 2017, mainly driven by transaction growth of 2.75% for the year. This stable trend is expected to continue in FY 2019.

Senior and total DSCR for fiscal 2018 were 2.93x and 2.66x on a bond ordinance basis. On a Moody’s calculated net revenue basis, which deducts maintenance perennial expenses from net revenues, senior DSCR was 2.43x and total DSCR (senior + subordinate) was 2.20x for fiscal 2018, respectively. Both senior and total DSCR declined in FY 2018 from FY 2017 levels due to increased debt service and leverage from the $150 million Series 2018 bond issuance.
Debt to operating revenues increased somewhat in FY 2018 to 3.37x in fiscal 2018 versus 2.54x in fiscal 2017 while debt plus adjusted net pension liability (ANPL) to operating revenues was 3.71x in fiscal 2018 versus 3.05x in fiscal 2017. The increase was a result of the previously mentioned bond issuance in early 2018.

The last toll increase was in 2012 and the authority has no plans to increase toll rates until 2031 in order to meet its capital program and maintain stable metrics, in particular given the continued traffic growth over the past five years. The authority has no plans to issue debt until 2025.

**LIQUIDITY**

The authority had 398 days cash in FY 2018 relative to the 296 days cash in FY 2017. The increase is primarily due to an increase in the authority’s discretionary reserves after issuing revenue bonds for general turnpike purposes. Days cash on hand is below the sector’s Aa3 median of 812 days for 2017.

The authority also has a $20 million letter of credit with the Bangor Savings Bank which expires on December 31, 2019. The letter of credit is secured solely by the Authority’s revenues on a subordinated basis to outstanding bond and additional bonds to be issued on a series basis. There was no outstanding balance as of December 31, 2018.

The authority’s debt service reserve requirements are fully cash funded. As of December 31, 2018, the cash funded reserve fund balance was $19.94 million. In addition, the authority has outstanding sureties with Assured Guaranty Municipal Corp, (A2 Stable) equal to $1.78 million which will terminate on the earlier of the date on which no Series 2004 are outstanding and July 1, 2030. Moody’s views the current one-half of MADS reserve requirement to be relatively weaker than that of comparable toll facilities with 12-month reserves. This less than standard level of DSRF is partially mitigated by the requirement for the DSRF to be increased to the maximum annual debt service in the event debt service coverage for the two preceding fiscal years is less than 2.0x.

**Debt and Other Liabilities**

**DEBT STRUCTURE**

As of December 31, 2018 the authority had $467.43 million in revenue bonds outstanding comprised of the Series 2004, 2008, 2009, 2012, 2014, 2015 and 2018 revenue bonds, all rated Aa3. Additionally, MTA has $27.56 million outstanding in Series 2014 special obligation bonds rated A2, with Series 2008 having been fully repaid in 2018. The authority’s ability to issue revenue and subordinated debt is capped at $636 million, with a remaining availability of $168.57 million as of fiscal 2018.

**DEBT-RELATED DERIVATIVES**

The authority does not have any debt related derivatives

**PENSIONS AND OPEB**

The authority’s long-term defined benefit pension and health care liabilities are not a major factor in our assessment of its credit profile. Moody’s adjusted net pension liability (ANPL) in fiscal 2018 was about $52.2 million, compared to the authority’s reported net pension liability of $10.6 million. Moody’s adjusts the reported pension liabilities of entities that report under governmental accounting standards to enhance comparability across rated issuers. Unfunded pension liabilities have only a nominal impact on the authority’s financial metrics given its total debt outstanding of approximately $495 million.

Under governmental pension accounting, liabilities are discounted using an assumed rate of investment return on plan assets. Under our adjustments, we value liabilities using a market based discount rate for high quality taxable bonds, a proxy for the risk of pension benefits.

**Management and Governance**

MTA’s 5-year capital improvement plan through 2022 focuses on bridge and pavement rehabilitation, bridge replacement and the mainline widening project. Upcoming projects include the replacement of the Warren Avenue Overpass (both northbound and southbound) and the Exit 45 Interchange reconstruction, which are expected to be completed in 2020 and 2022, respectively. Construction on the York Toll Plaza replacement began in November 2018, with Reed & Reed of Woolwich, ME serving as the contractor; construction is expected to last three years. The Authority is also expected to begin construction on the new West Gardiner Toll Plaza in 2019, the last toll plaza to be updated to open road tolling (ORT), which is expected to be completed in 2022.
The authority completed the Portland Area Mainline feasibility study and received board approval for the mainline widening in September 2018. The project will add one lane in each direction to the mainline and is expected to be bid on in 2020 with permits currently pending. The estimated cost for construction is $29 million with completion scheduled for 2022.

The fiscal 2018 operations and maintenance report by HNTB, the engineer consultant, reported that the turnpike continues to be operated in an efficient and effective manner and has been maintained in good condition. All of its 183 bridges and 18 spans were assessed to be in need of some repairs or minor repairs, but their structural safety is not jeopardized at present. The report recommended that the authority deposit $14.1 million into the Capital Improvement Fund for 2019 projects.

The authority also maintains a reserve maintenance fund in the amount of $93.3 million as of year-end 2018, in order to pay for ongoing repair and rehabilitation projects, maintenance, turnpike rehabilitation, insurance, emergency repairs, remediation of deficiencies and other perennial costs and selected capital projects, as well as a source of funds in case of an unanticipated loss of revenues. Moody’s views this as a credit positive as it allows the Authority to better manage its cash flows throughout the year.

**Rating methodology and scorecard factors**

The grid is a reference tool that can be used to approximate credit profiles in the toll road sector in most cases. However, the grid is a summary that does not include every rating consideration. Please see our Publicly Managed toll roads and Parking Facilities Rating Methodology for information about the limitations inherent to grids. The Aa3 rating assigned is the same as the scorecard indicated outcome.

**Exhibit 3**

**Publicly Managed Toll Roads and parking Facilities Scorecard**

<table>
<thead>
<tr>
<th>FY 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>Market Position Asset Type</td>
</tr>
<tr>
<td>Competitive position and environment</td>
</tr>
<tr>
<td>Economic Strength and Diversity of Service Area</td>
</tr>
<tr>
<td>Performance Trends Annual Revenue</td>
</tr>
<tr>
<td>Operating Track Record and Revenue Stability</td>
</tr>
<tr>
<td>Ability and Willingness to increase rates</td>
</tr>
<tr>
<td>Leverage and Coverage Debt Service Coverage Ratio</td>
</tr>
<tr>
<td>(Debt+ANPL) to Operating Revenues</td>
</tr>
<tr>
<td>Notching Considerations</td>
</tr>
<tr>
<td>1. Debt Service Reserve Fund (DSRF)</td>
</tr>
<tr>
<td>2. Open Flow of Funds</td>
</tr>
<tr>
<td>3. Days Cash on Hand</td>
</tr>
<tr>
<td>4. Asset Ownership and Financing Structure</td>
</tr>
<tr>
<td>5. Leverage Outlook</td>
</tr>
<tr>
<td>Scorecard Indicated Outlook</td>
</tr>
</tbody>
</table>

Source: Moody’s Investors Service
© 2019 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATING. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan K.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1169538