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Update

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Maryland Transportation Authority

Update: Moody's affirms Aa3 on Maryland Transportation Authority's Rev. Bonds, outlook revised to positive

Summary Rating Rationale

Moody's Investors Service revises the outlook on Maryland Transportation Authority's Revenue Bonds to positive from stable, affirms Aa3 rating. The Aa3 is based on the essentiality of the authority's road network; the fundamental strength of the service area, strong historical and projected debt service coverage ratios (DSCRs), demonstrated ability and willingness to raise tolls to support capital projects, and conservative financial practices and capital program management. The rating also considers better than expected elasticity of traffic demand to implemented toll increases which have produced traffic and revenue levels above projections. The rate increases from FY 2012-2014 continue to allow the maintenance of strong financial metrics despite increased debt service levels, and the toll rate reduction in FY 2016. The rating incorporates the successful completion of significant capital projects, increased revenues derived from the new facilities and prior toll increases and current adequate liquidity.

The rating takes in consideration the toll rate reductions and discounts which took effect in July of 2015 which, although it only offset a fraction of a 37% toll rate increase that took effect in July 2013. This reduction signified the state's departure from non-intervention in toll rate setting and we considered it to be credit negative. The rating also incorporates the aging nature of some of the assets leading to high cost of maintenance and replacement, lower projected liquidity levels due to pay-go capital improvement projects and little current additional debt capacity.

Credit Strengths

» Long history of strong demand for the authority's multiple, essential and established transportation facilities in a well-developed, affluent and slowly growing service area

» Consistently high DSCRs, ample financial margins, and limited future borrowings should keep financial metrics at the strong current levels

» Strong liquidity level of over 1000 days cash on hand (DCOH), though balances may decline to $350 million (just under one year) as the large capital improvement program is funded over the 2017-2022 period

» Stronger than forecasted traffic and revenue growth in FY 2016 and FY 2015 from growing transactions and prior toll rate increases

» Declining debt profile that could accommodate limited future planned issuances, with modest assumed average annual traffic growth of only 1% from 2017 to 2022

Credit Challenges

- » State's recent departure from non-intervention in toll rate setting in July 2015. At the request of the governor, who appoints all members to the board, the authority implemented toll reductions and discounts in July 2015, ultimately resulting in approximately $53.4 million lower revenues for FY 2016 or 8.5% of FY 2014 revenues, but still above original forecasted levels.
- » Significant remaining capital program, including a $769 million plan to replace the Harry W. Nice Memorial Bridge with approximately 50% of pay-go funds, is expected to reduce liquidity going forward.
- » The indenture allows for funds to flow out of the system when authorized by the authority. However, the authority has not made payments to the Maryland Department of Transportation (MDOT) since 2007.

Rating Outlook

The positive outlook reflects expectations of continued positive traffic and revenue growth based on traffic results year to date, minimal remaining ramp-up risk on new facilities, maintenance of strong financial metrics above 3.0 times and no further reductions in toll rates. The outlook also incorporates the uncertainty about the effects of changes in healthcare policy and military funding in the service region.

Factors that Could Lead to an Upgrade

- » Continued and sustainted traffic and revenue growth
- » Toll revenues that support DSCRs above 3.0 times while maintaining adequate levels of liquidity

Factors that Could Lead to a Downgrade

- » Lower traffic and revenue levels than assumed in the authority's base case forecast
- » Significantly higher debt financing of the capital improvement plan (CIP)
- » A sustained decline in the DSCR below the targeted 2.0 times due to toll rate decreases combined with other unfavorable developments

Key Indicators

Exhibit 1

Maryland Transportation Authority

	2011	2012	2013	2014	2015	2016
Total Transactions Annual Growth (%)	3.3%	6.3%	1.2%	3.6%	8.1%	9.4%
Debt Outstanding ($'000)	2,293,026	2,321,595	2,295,512	2,268,795	2,318,289	2,299,584
Debt to Operating Revenues (x)	6.8	5.5	4.7	3.5	3.4	3.3
Days Cash on Hand ('000)	1,088	965	1,065	912	1,104	1,150
Senior Lien Debt Service Coverage By Net Revenues (x)	4.92	2.74	2.38	3.41	4.11	3.50
Senior Debt Service Coverage By Bond Ordinance (x)	5.02	2.74	2.48	3.42	4.11	3.45

Source: Moody's Investors Service

Recent Developments

After the implementation of toll rate discounts and E-Z Pass fee elimination in July 2015, traffic transactions were up 9.4% in FY2016 (June 30 year-end), with improved five year compounded annual growth rate (CAGR) to 4.9%. Growth from legacy facilities was 2.9% in FY 2016. Toll revenue declined by $5.1 million to $644.6 million in FY2016 versus $649.8 million in the prior year as expected, or

0.8%, reflecting the reduction in toll rates. Transaction growth as of February 2017 year to date versus the same period in the prior year has remained strong at 5.3% and revenue growth was 5.4% for the same period respectively.

A bill approved by the state General Assembly setting aside approximately $75 million per year in funding for the replacement of the Harry W. Nice Memorial Bridge was vetoed by the governor in May of 2016. The authority subsequently developed an alternative plan of financing that includes bond issuance (18%), TIFIA loan(33%), and pay-go cash financing (49%) for an estimated total cost of $765 million including construction of the new bridge and demolition of the existing one. The authority is planning to begin construction in 2020 with completion by 2023 and is currently in the early design phase.

Bond ordinance debt service coverage ratio remained strong at 3.45 times in FY 2016 versus 4.11 times at FY 2015. The decrease is primarily due to the lower revenues stemming from the toll rate cut as well as a step-up in debt service of approximately $19 million in FY 2016.

In FY 2016, both the I-95 Express Toll Lanes and the Intercounty Connector (ICC) completed the first full fiscal year of operations, with the I-95 Express Toll Lanes first opening in December 2014 and the ICC fully opening in November 2014. With the completion of I-95 Express Toll Lanes and the ICC, the construction and financing risk of the capital program has been substantially reduced. The Authority has limited plans for additional debt issuances over the next 6 years.

In 2015, legislation was passed that increased the authority's debt service coverage requirement from 2.0x times to 2.5 times, temporarily reduced a statutory ceiling for toll-revenue backed debt to $2.325 billion from $3 billion until 2020, and established minimum annual operating and capital budgets of $275 million each year through FY 2020. The authority's current debt outstanding is close to the existing statutory debt limit however given minimal planned debt issuances through 2022 and the increase of the ceiling back to $3 billion by then, we don't anticipate this to be a constraint for the authority.

Detailed Rating Considerations

Revenue Generating Base

The authority's assets are mainly focused in the Baltimore area, which remains in expansion, with strong but slowly growing employment and output. Gross Metro Product grew 1.6% in 2016 and unemployment declined to 4.6% in 2016 vs. 5.4% in 2015. Housing is expected to pick up as job gains broaden and foreclosure inventories clear. The service area has become a major healthcare hub that draws patients from all over the country (Johns Hopkins and University of Maryland Medical System). The area also became a cybersecurity hub where high-tech related employment represents 5.9% of total, well above the 4.8% national average. We expect that growth in the area's economy will help support the traffic levels and revenue growth for the authority's assets. The authority has a long dated stable base of toll revenues.

There is some uncertainty however with respect to the new administration's policies as it relates to federal spending and healthcare, and the impact in the region. Increased military spending on defense contractors and military bases would create more federal government jobs. However, any changes for US Cyber Command at Fort Meade are uncertain.

The Port of Baltimore (BAL), among the most productive ports in the US, stands to benefit from the larger cargo loads now coming through the expanded Panama Canal, however there is uncertainty surrounding trade policies which could negatively impact traffic at the port.

Financial Operations and Position

Revenue on the recently opened projects, the ICC and I-95 Express Toll Lanes, grew by 5.9% and 85.3% respectively in FY2016, as ramp-up continued. Revenue on the legacy facilities declined by $13.7 million, or 2.3% from FY 2015, with the largest portion of that decline attributable to lower revenues from the Bay Bridge where the largest toll rate reduction took place. Combining both effects, total toll revenues in FY2016 declined by $5.1 million, or 0.8% from the prior year.

The most recent revenue and expenses forecast provided by MDTA in Jan 2017 was revised upwards from 2016 based on current revenue growth and incorporates the new plan of finance for the Harry W. Nice Memorial Bridge. The forecast assumes modest revenue growth going forward (0.8% on average for the next 9 years) and about 4% annual growth in expenses which is considered to be conservative based on historical expense growth. Forecasted DSCRs for the 2017-2022 period are expected to remain above 3.0

times, even with such modest revenue growth assumptions. Debt to operating revenues should not fluctuate significantly from the current 3.3 times level (before adjusted net pension liability) given minimal debt issuances planned over the same period.

The authority has continuously outperformed the revenue forecasts provided at the time of its new money debt issuance in FY 2012. Although the toll rate decrease and discounts implemented in FY 2016 are expected to have a negative impact on revenues going forward, the authority's financial position remains strong as a result of stronger than anticipated transaction and revenue growth as well as robust toll rate increases in prior years. Toll rates were raised November 1, 2011 and January 1, 2012 and further adjusted July 1, 2013, approximately by 19%, 11% and 37% respectively. The average toll rate was lowered by 9.3% starting on July 1, 2015.

LIQUIDITY

To ensure adequate liquidity, the authority's financial policies require it to maintain an unrestricted cash balance of at least $350 million. Unrestricted cash has risen from $786 million at FYE 2016, or over a thousand days cash, to $877 million as of 2/28/17. Although toll revenues in FY 2016 were substantially less than they would have been without the FY 2016 toll rate and fee decrease, the year-over-year decline in toll revenues was modest (from $694.1 million in FY 2015 to $686.5 million in FY 2016.). Over time cash is expected to decline as the authority pays for some of its capital improvement program with cash, however we expect days cash on hand to remain around one year given the authority's policy to retain at least $350 million in liquidity.

DEBT STRUCTURE

The authority currently has $1.77 billion outstanding in Transportation Facilities Projects Revenue bonds, and $529.5 million in a Transportation Infrastructure Finance And Innovation Act (TIFIA) loan, for a total of $2.29Bn debt outstanding as of FY 2016. All obligations are parity.

RATED DEBT

Series 2007 - $295.61 million

Series 2008 - $535.57 million

Series 2009 - $549.39 million

Series 2010 - $321.90 million

Series 2012 - $67.61 million

Total Rated Debt - $1.77 billion

TIFIA Loan - $529.52 million

DEBT-RELATED DERIVATIVES

None

PENSIONS AND OPEB

The authority's long-term benefit pension is not a major factor in our assessment of its credit profile. Moody's adjusted net pension liability (ANPL) in FY 2016 was about $551.5 million, compared to its reported net pension liability of $222.7 million. Moody's adjusts the reported pension liabilities of entities that report under governmental accounting standards, to enhance comparability across rated issuers. 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

Established by the Maryland General Assembly on July 1, 1971, the Authority is an independent State agency that acts on behalf of but is separate from the Maryland Department of Transportation (MDOT). The authority is a non-budgeted agency that relies solely on revenues generated from its transportation facilities. The authority's board is a group of eight citizens who are appointed by the governor (and confirmed by the senate) and the secretary of transportation serves as chairman. Members serve four-year terms and may not serve more than three consecutive terms. The authority cannot take action without the concurrence of the chairman.

MDTA board has independent rate-setting powers. The authority does not require approval from any other agency or legislative body to adjust MDTA toll rates and fees. At the request of the governor, rates and fees were reduced effective July 1, 2015 which signifies the state's departure from the non-intervention in toll rate setting.

CAPITAL IMPROVEMENT PROGRAM

Revenues from all facilities are pooled together to fund operations, capital projects, and debt service on revenue bonds issued by the MDTA to help fund its CIP. The annual capital budget is developed as part of a six year capital program. The MDTA's six year capital program of 2017-2022 includes a $2.4 billion investment in the MDTA's facilities, with much of that funding dedicated to system preservation.

One of the major planned capital projects is the construction of the replacement of the Harry W. Nice Memorial Bridge. The new bridge will have two lanes in each direction and is not structurally complex. It is planned to be located about 100 yards north of the existing structure. The construction of the replacement bridge and the demolition of the old bridge is projected to cost $765 million. The authority is planning to begin construction in 2020 and complete it by 2023. Currently the authority is working on procurement and intends to put an RFP out next year. The current plan of finance includes a combination of cash, bonds, and a potential TIFIA loan. Early phases of the project will be funded with cash on hand. A small bond issuance of $20 million is planned in 2021, a TIFIA loan of $250 million is expected in 2022, and two additional bond financings of $150-$200 million in total are planned in FY 2023-FY 2024 respectively. In FY 2016, revenue generated on the Harry W. Nice Memorial Bridge comprised only 3% of the overall toll revenue.

Legal Security

Bonds are secured by a pledge of net revenues from seven of the authority's eight toll facilities. The bonds are also secured by a cash-funded debt service reserve sized at the lesser of maximum debt service, 125% of average debt service or 10% of the principal amount of the bonds being issued. The authority's rate covenant requires net revenues to be at least the sum of 1.2 times annual debt service and 100% of the amount required to be deposited in the maintenance and operations reserve account. The additional bonds test requires the rate covenant to be met on a 5-year prospective basis. The authority had a statutory debt limit of $3 billion.

In 2015, legislature was passed that increased the Authority's debt service coverage requirement from 2.0 times to 2.5 times, temporarily reduced a statutory ceiling for toll-revenue backed debt to $2.325 billion from $3 billion until 2020, and established minimum annual operating and capital budgets of $275 million each year through FY 2020. Debt outstanding as of FYE2016 was $2.299 billion.

Exhibit 2

Government Owned Toll Roads Methodology Scorecard

Maryland Transportation Authority

Factor	Subfactor	Score	Metric
1. Market Position	a) Asset Type	Aa	
	b) Operating History	Aaa	
	c) Competition	Aaa	
	d) Service Area Characteristics	Aaa	
2. Performance Trends	a) Annual Traffic Transactions	Aa	147,679,000
	b) Traffic Profile	Aa	93.9%
	c) Five Year Traffic CAGR	Aa	4.9%
	d) Ability and Willingness to Increase Toll Rates	A	
3. Financial Metrics	a) Debt Service Coverage Ratio	Aaa	3.50x
	b) Debt to Operating Revenue	Aa	3.30x
4. Capacity, Capital Plan and Leverage	a) Asset Condition/Capital Needs	A	
	b) Limitations to Growth/Operational Restrictions	Aa	
Notching Considerations		**Notch**	
	1 - Debt Service Reserve Fund level	0	
	2 - Open/Closed Flow of Funds	-0.5	
	3 - Days Cash on Hand	1	
	4 - Other Financial, Operating and Debt Factors	0	
Scorecard Indicated Rating:		**Aa1**	

Source: Moody's Investors Service

The published rating assigned is two notches lower than the grid indicated rating as the published rating incorporates on a prospective basis, the view that liquidity will decline as a result of cash-funded capital projects, as well as the uncertainty related to policy changes from the new federal administration (healthcare, trade, military spending) and potential economic impacts to the region.

Obligor Profile

The authority is an independent agency with autonomous rate-setting authority, however the secretary of the state department of transportation, MDOT, also serves as chairman of the authority's 8-member board who are appointed by the governor (and confirmed by the Senate). The two agencies work together to address state-wide transportation needs and this high level of coordination benefits the authority as it undertakes capital projects. Up until 2007 the authority made annual payments of $43 million to MDOT for mass transit projects, which it is permitted to do per its bond indenture. The authority has no plans to reinstate the transfers at this time.

The authority owns and operates 8 facilities, of which revenues from 7, are deemed Transportation Facilities Projects, and the revenues are pledged to the bonds: the John F. Kennedy Memorial Highway; the Fort McHenry Tunnel; the Baltimore Harbor Tunnel; the Francis Scott Key Bridge (formerly the Baltimore Harbor Outer Bridge); the Governor Harry W. Nice Memorial Bridge (formerly the Potomac River Bridge); the Chesapeake Bay Bridge; and the ICC. The last facility is the Thomas J. Hatem Memorial Bridge (formerly the Susquehanna River Bridge), which the authority operates as a General Account Project.

Methodology

The principal methodology used in this rating was Government Owned Toll Roads published in November 2016. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

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