

## CREDIT OPINION

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# Maryland Trans. Auth. - Trans. Facilities

Update following revision of the outlook to negative from stable

## Summary

[Maryland Transportation Authority's](#) (MDTA, Aa2 negative) credit profile reflects the essentiality of the authority's road network, the fundamental strength of the service area and its history of strong financial and operational management and performance. Given MDTA's monopoly position in the Baltimore harbor crossings, we expect that the majority of Key Bridge's toll revenue, which represented only 7% of total toll revenue in 2023, will be diverted to the two tunnels owned and operated by MDTA in the service area (Fort McHenry and Baltimore Harbor tunnels). MDTA's credit profile also incorporates the authority's financial policies and history of conservative budgeting coupled with a track record of exceeding its forecasts. This strong financial policy with a proven track record is one of the main strengths of this credit that somewhat mitigates the projected metrics being lower than peers. Taken together, these factors support the authority's board-approved \$3.1 billion capital expenditure program spanning fiscal 2024 through fiscal 2029, with 68% of the program expected to be funded with pay-go funds and the rest expected to be financed with debt.

The continued declining liquidity coupled with the increasing leverage and debt service requirements, now joined by the uncertainty on the bridge replacement project, could place pressure on the authority's current credit profile should toll revenues not keep pace with growing debt service requirements through either traffic growth or toll rate increases. The credit profile incorporates our expectation of the authority's willingness to maintain strong financial metrics by increasing toll rates or making other adjustments to preserve its financial position.

On April 9, Moody's revised MDTA's outlook to negative from stable. The revision of the outlook to negative from stable reflects the uncertainty around the Francis Scott Key Bridge ("Key Bridge")'s replacement project's costs, including their funding, and timing. Any negative impact from the replacement project would be on top of financial metrics that were expected to narrow from capital investments prior to the loss of the bridge.

## Credit strengths

- » Strong financial profile supported by authority's financial policies and proven track record of conservative budgeting practices
- » Authority's willingness to maintain strong financial metrics by increasing toll rates or making other adjustments to preserve its financial position.

- » 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.

### Credit challenges

- » Uncertainty around the cost, funding, timing and design of the Francis Scott Key Bridge
- » Maintenance of strong financial metrics is highly reliant on toll revenue increases from traffic recovery and growth or from active management from the authority, by increasing toll rates or making other adjustments to preserve its financial position
- » Significant capital program (2024-2029) sized at \$3.1 billion with approximately \$1.0 billion of additional debt by 2029
- » Liquidity levels to decline to \$400 million which is lower than the historically strong level of about \$600 million over the past five years, as the large capital improvement program is funded with about 68% pay-go funds over the 2024-2029 period. Debt service reserves funded with surety policies further reduces liquidity.
- » The indenture allows for funds to flow out of the system to the Maryland Department of Transportation (MDOT) when authorized by the authority. However, the authority has not made payments since 2007.

### Rating outlook

The negative outlook reflects the uncertainty around the Key Bridge's replacement project's costs, including its funding, and timing coupled with financial metrics that were expected to narrow before bridge collapse, as MDTA moves forward with its capital improvement program.

### Factors that could lead to an upgrade

- » Continued significant and sustained higher-than-projected traffic levels
- » Successful completion of planned capital projects
- » Toll revenues that support adjusted debt to operating revenues of less than 3.0x while maintaining strong liquidity could exert upward pressure on the rating
- » Clearer path on Key Bridge's replacement project's costs, including their funding, and timing with minor impact to MDTA's credit profile could stabilize the outlook

### Factors that could lead to a downgrade

- » Prolonged uncertainty on bridge replacement project and/or replacement project resulting in further weakening of financial metrics without any mechanism to offset it
- » Lower traffic and revenue levels than assumed in the authority's base case forecast
- » Significantly higher debt financing of the capital program than currently envisioned
- » A sustained decline in the DSCR below 2.0x
- » A sustained increase in leverage resulting in adjusted debt to operating revenue above 4.5x
- » Liquidity below 400 days cash on hand
- » Transfers of funds out of the system to MDOT that put pressure on toll rates and/or on financial metrics

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 1

### Key Indicators

#### Maryland Transportation Authority

	2019	2020	2021	2022	2023
Total Transactions ('000)	165,269	137,864	132,278	152,204	162,833
Total Transactions Annual Growth (%)	-0.0	-16.6	-4.1	0.2	0.1
Debt Outstanding (\$'000)	1,536,298	1,910,419	2,135,975	2,101,573	2,263,932
Adjusted Debt to Operating Revenues (x)	3.09	4.48	6.50	3.67	3.26
Days Cash on Hand	713	815	539	583	876
Total Debt Service Coverage By Net Revenues (x)	4.46	3.72	2.70	3.87	3.39

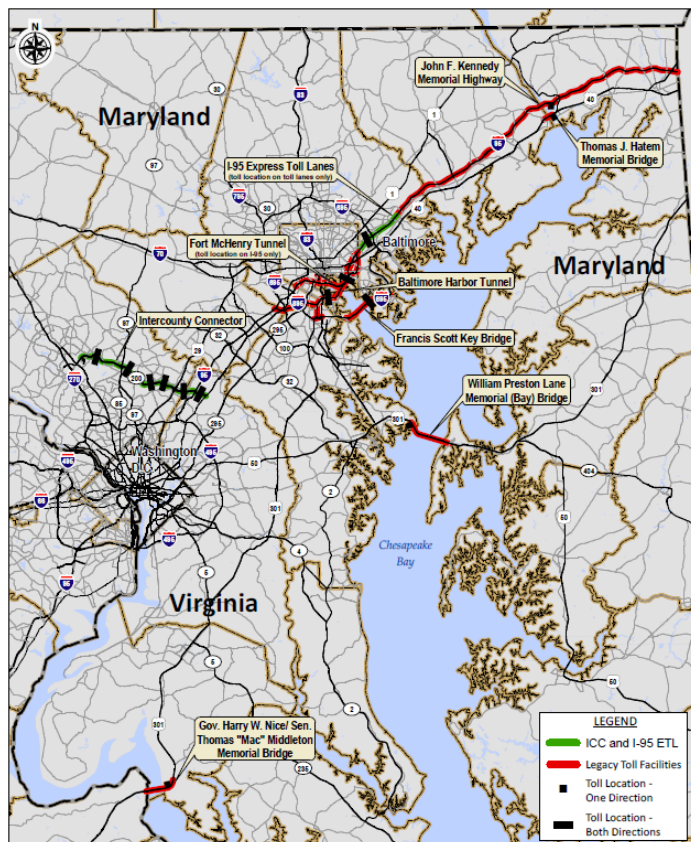
Source: Moody's Ratings

## Profile

The authority is an independent agency with autonomous rate-setting authority, however the Secretary of Maryland Department of Transportation (MDOT), also serves as chairman of the authority's 8-member board which is 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.

The authority owns and operates 8 facilities, of which revenues from 7 are deemed Transportation Facilities Projects: the John F. Kennedy Memorial Highway; the Fort McHenry Tunnel; the Baltimore Harbor Tunnel; the Francis Scott Key Bridge (that collapsed in March 2024 and will be replaced); 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.

Exhibit 2  
MDTA facilities map



Source: Maryland Transportation Authority and CDM Smith

## Detailed credit considerations

### Francis Scott Key Bridge Collapse

On March 26, the Francis Scott Key Bridge collapsed after a container ship collided with a support column. Reconstruction costs, which are unknown at this point, will be substantial in part because of elevated construction costs driven by high inflation in recent years and a tight labor market. While we believe there will be some level of federal financial support, the amount and timing are uncertain. Besides, there is uncertainty regarding the timing of the project given its complexity.

Toll revenue from the 1.6-mile Key Bridge, one of eight toll facilities owned and operated by MDTA, accounts for only about 7% of its total toll revenue, minimizing the adverse effects from lost collections. MDTA also has business interruption insurance that could cover part of the lost dollars.

The bridge has a monopoly role in harbor crossings along a section of the Interstate-95 corridor. As a significant share of traffic is diverted to the other MDTA facilities in the area, Fort McHenry Tunnel and Baltimore Harbor Tunnel, toll collections from the tunnels stand to offset lost toll revenue. The tunnels, however, have more limitations regarding commercial vehicles that can travel through them (ie trucks carrying hazardous materials and oversized trucks).

Exhibit 3

**MDTA's facilities in Baltimore harbor crossings****Traffic and revenue performance**

	2019	2020	2021	2022	2023
<b>FRANCIS SCOTT KEY BRIDGE</b>					
Transactions ('000)					
Passenger	11,764	10,966	10,115	10,581	11,124
Commercial	1,158	1,148	1,256	1,224	1,306
<b>Total</b>	<b>12,922</b>	<b>12,114</b>	<b>11,372</b>	<b>11,805</b>	<b>12,430</b>
Toll Revenues (\$'000)					
Passenger	29,873	27,552	30,266	31,370	31,842
Commercial	20,515	20,234	22,367	21,657	24,262
<b>Total</b>	<b>50,388</b>	<b>47,787</b>	<b>52,633</b>	<b>53,026</b>	<b>56,104</b>
<i>Total as a % of MDTA total toll revenues</i>	<i>7.5%</i>	<i>8.2%</i>	<i>8.1%</i>	<i>7.5%</i>	<i>7.4%</i>
<b>FORT MCHENRY TUNNEL</b>					
Transactions ('000)					
Passenger	44,315	38,545	35,018	37,064	38,375
Commercial	4,350	4,093	4,608	4,495	4,591
<b>Total</b>	<b>48,665</b>	<b>42,638</b>	<b>39,626</b>	<b>41,559</b>	<b>42,966</b>
Toll Revenues (\$'000)					
Passenger	134,535	115,633	116,438	123,893	126,439
Commercial	83,330	77,974	93,803	88,643	93,190
<b>Total</b>	<b>217,865</b>	<b>193,607</b>	<b>210,241</b>	<b>212,537</b>	<b>219,629</b>
<i>Total as a % of MDTA total toll revenues</i>	<i>32.3%</i>	<i>33.1%</i>	<i>32.5%</i>	<i>30.2%</i>	<i>29.1%</i>
<b>BALTIMORE HARBOR TUNNEL</b>					
Transactions ('000)					
Passenger	20,360	13,818	16,455	24,242	27,822
Commercial	589	461	617	741	938
<b>Total</b>	<b>20,949</b>	<b>14,279</b>	<b>17,072</b>	<b>24,982</b>	<b>28,760</b>
Toll Revenues (\$'000)					
Passenger	62,213	41,369	56,072	81,587	93,525
Commercial	7,726	6,005	9,143	9,683	13,734
<b>Total</b>	<b>69,940</b>	<b>47,374</b>	<b>65,214</b>	<b>91,269</b>	<b>107,259</b>
<i>Total as a % of MDTA total toll revenues</i>	<i>10.4%</i>	<i>8.1%</i>	<i>10.1%</i>	<i>13.0%</i>	<i>14.2%</i>

Source: Maryland Transportation Authority

Even with a complex project ahead given timing, design and size, we believe that MDTA will be successful in the implementation of this project given its strong track record of delivering construction projects. In October 2022, MDTA concluded the replacement of its Nice/Middleton Bridge about three months ahead of schedule following a 30-month construction period at a \$636 million cost. MDTA is already partnering with state, local and federal agencies to move forward with this new Key Bridge replacement project.

We expect that federal funds, insurance proceeds and potential legal claim awards to be available for the replacement project. Specifically referring to federal resources, at this point, the total amount of the funding/percentage of total costs to be funded is unclear as is the timing of the approval of final conditions of this funding. Following the declaration of State of Emergency by Governor Wes Moore on March 26, 2024, MDOT and MDTA sent a request to US Department of Transportation's Federal Highway Administration (FHWA) for a quick release of \$60 million emergency relief funds to finance initial costs such as mobilization, operations and debris recovery. Soon after the request, the FHWA approved and made available the requested amount as down payment toward initial costs. Initial works are moving forward with debris removal and, over the past days, alternate channels for smaller essential vessels to pass through were opened. Additional requests are expected to be filed as the team continues to assess the incident's impact and next steps.

MDTA has options to fund and/or bridge near-term reconstruction costs if needed. These include tapping its \$830 million in liquidity (unrestricted and discretionary reserves) as of March 26, 2024 as well as using funds from insurance. MDTA has \$350 million in

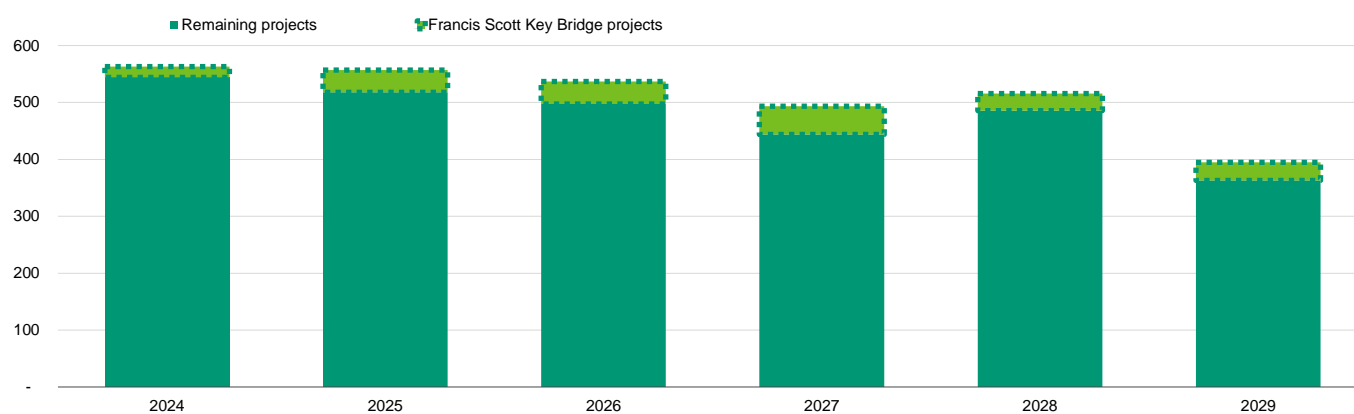
property and business interruption insurance, though timing of disbursement is uncertain. MDTA may also receive third-party insurance proceeds, including from the ship owner and manager that caused the crash. However we expect that any proceeds from these insurances would take a long time to be recovered (both ship owner and manager have filed claims seeking to limit their financial liability), so we do not consider them as available sources to fund the project in the short to medium term.

If MDTA needs to issue debt or deplete its liquidity to finance bridge replacement, it could place additional pressure to MDTA as it is in the midst of a \$3.1 billion capital expenditures program (2024-2029). This capital expenditures program contemplates the issuance of about \$1 billion in new debt to cover a portion of the costs. The remaining portion is expected to be funded with internally generated cash and liquidity balances, resulting in the depletion of MDTA's current strong level to close to the triggers for downgrade. Of note, MDTA has an internal policy to keep the minimum liquidity of \$400 million unrestricted cash balance and coverage above 2.0x.

About \$200 million of the \$3.1 billion capital expenditure program was allocated to Francis Scott Key Bridge projects, including approach roadways and bridges, so the final impact on debt or liquidity solely coming from this program will be slightly lower, if management does not revise this program. This can partially offset the possible final impact from the replacement project. In any case, in line with its track record, we expect MDTA to take action to maintain its strong financial profile by increasing toll rates or making other adjustments.

Exhibit 4

#### Fiscal 2024-2029 Capital Expenditures Program



Source: Maryland Transportation Authority

#### Revenue Generating Base

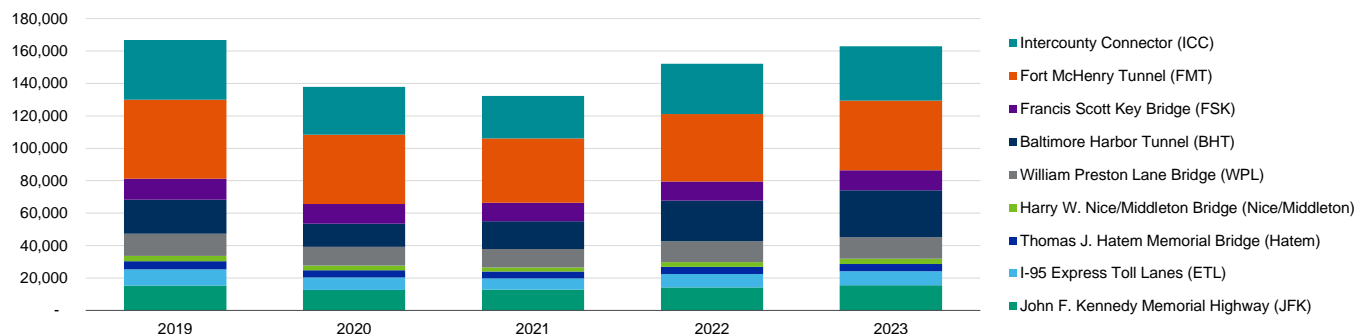
Key MDTA's assets are located in the Baltimore area and according to Moody's Analytics, as of January 2024, Baltimore-Columbia-Towson found another gear in the last months of 2023. Annual job growth is above the Northeast pace for the first time since the onset of the pandemic. Healthcare employment is advancing at a rapid clip, while professional/business services have recouped job losses from 2022, putting employment near all-time highs. Despite progress in the job market, the labor force remains stuck in the doldrums, advancing modestly in recent months but still far below its pre-pandemic size. Finally, house price appreciation is slowing at a quicker rate than that of the nation, and single-family permit issuance is increasing slowly. Baltimore-Columbia-Towson will settle into a slower pace of growth and move in step with the U.S. in the year ahead. Logistics will lend less support in the near term, and the public sector faces headwinds. Longer term, weakening demographics will undermine advantages such as the port and proximity to the nation's capital, keeping Baltimore-Columbia-Towson an underperformer. The remaining assets are spread out in the State of Maryland and according to Moody's Analytics, as of January 2024, Maryland will slow in step with the U.S. this year and early next. Healthcare will make only slow progress and the federal government will hold back growth amid shutdown risks. Persistent out-migration will relegate MD to a below-average performer in the long run.

The bridge collapse threatens to disrupt aspects of the [State of Maryland](#) (Aaa stable) and [City of Baltimore](#) (Aa2 stable) economies. The suspension of shipping traffic to the Port of Baltimore will likely divert cargo to other East Coast ports, which may affect jobs and tax revenue. The accident also has the potential to hurt the transportation and warehousing sector, though that accounts for a small share of state GDP.

### Financial Operations and Position

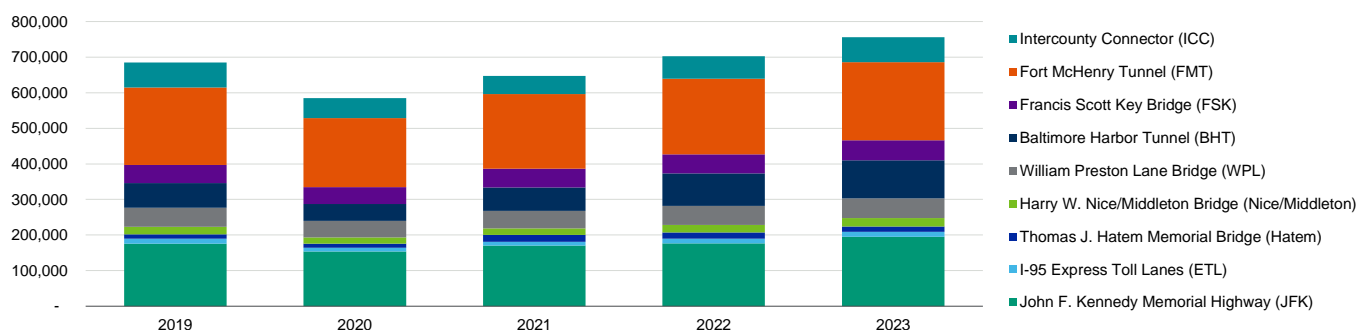
Moody's debt service coverage ratio (DSCR) remained strong - above 3.0x in fiscal 2023. Even with toll revenue increasing 7.5% in fiscal 2023, the DSCR dropped to 3.39x from 3.87x in fiscal 2022 mainly given higher debt service. Moving forward, we expect the authority's DSCR to continue to decline due to the expected increase in leverage over the next few years as part of the authority's capital expenditure program. We expect the negative impact from the Francis Scott Key Bridge's collapse to be limited given the diversion to the other two MDTA tunnels (Fort McHenry Tunnel and Baltimore Harbor Tunnel) in the Baltimore harbor service area.

Exhibit 5  
Transactions by Facility  
In thousands



Source: Maryland Transportation Authority

Exhibit 6  
Revenues by Facility  
\$'000



Source: Maryland Transportation Authority

Total traffic increased by 7.0% in 2023, including a 6.8%, 7.5% and 7.8% increase in toll transactions on the MDTA's legacy facilities, Intercounty Connector (ICC), I-95 Express Toll Lanes (ETL), respectively. The systemwide increase in traffic is mainly driven by an increase in commercial vehicle traffic and the return of passenger vehicle traffic to pre-pandemic levels.

### LIQUIDITY

Liquidity increased to 876 days cash on hand (DCOH) in fiscal 2023 from 583 DCOH in fiscal 2022. Going forward cash is expected to decline as the authority funds a large portion of its capital program with internally generated funds. To ensure adequate liquidity, the authority revised its financial policy in 2023 that now requires it to maintain an unrestricted cash balance of at least \$400 million (up from \$350 million), however we note that the increasing operating expenses level also pressures the liquidity profile of the issuer. The current liquidity level is below its historical average of about \$700 million, translating into just above 1,000 DCOH from 2015 through 2019. Depending on the Key Bridge's replacement project's funding sources and timing, liquidity could be negatively impacted if MDTA needs to tap into its balance to finance part of the replacement.

## Debt and Other Liabilities

The authority's total debt outstanding increased by 8% to \$2.26 billion in fiscal 2023 compared to fiscal 2022 due to the issuance of \$200 million TIFIA loan.

In March 2024, the authority issued \$623 million Series 2024 bonds to refinance its Series 2009B and 2010B bonds for net present value savings with no significant changes to the debt service profile.

The Series 2022 TIFIA Loan's use of proceeds was to fund a portion of the acquisition, construction, improvement, and equipping of the Potomac River (Harry W. Nice/Thomas "Mac" Middleton) Bridge Replacement. The new bridge, that doubles capacity, improves safety and enhances emergency and maintenance activities, was opened to the public in October 2022. The TIFIA loan was initially set to be drawn in early 2024, however the draw took place earlier than expected given market conditions in 2023.

MDTA's capital expenditure program through the next six year period (2024-2029) is expected to be approximately \$3.1 billion. The authority anticipates cash funding (pay-go) approximately 68% of capital expenditure expenses from fiscal 2024 to fiscal 2029 and funding the remaining portion through the various debt financings - Series 2026, Series 2027, Series 2028 and Series 2029. The authority's capital expenditure program incorporates high system preservation costs, about 61% of total costs, given the age of some of the system's assets. The authority will also continue several significant projects as part of the capital expenditure program including the extension of the northbound I-95 Express Toll Lanes projected to cost approximately \$1.05 billion. Given the recent bridge collapse, some portion of the approximately \$200 million of the capital preservation program allocated to fund Francis Scott Key Bridge and approach roadways/bridges related projects will shift to reconstruction.

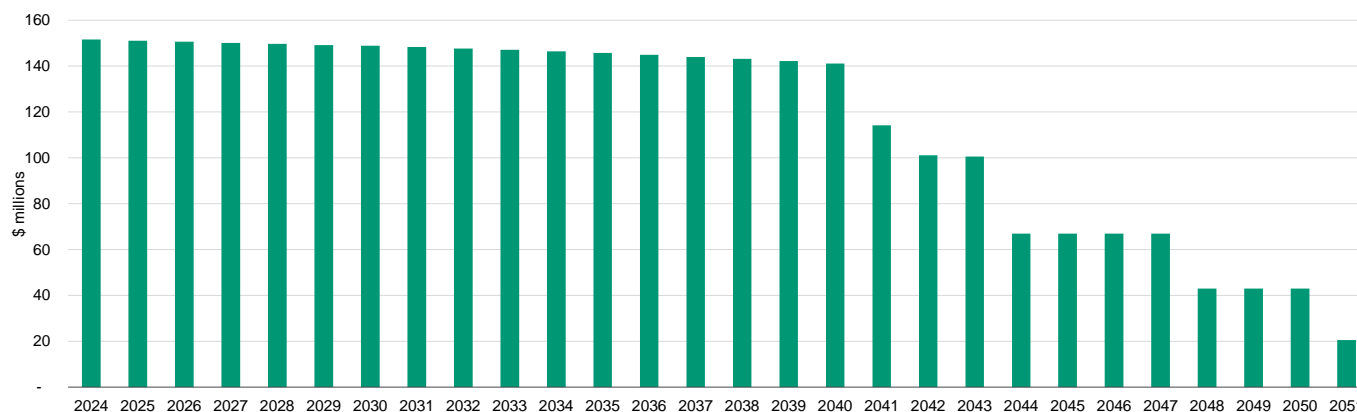
The implementation of the 2024-2029 capital expenditure program and its funding through debt and liquidity result in narrower financial metrics going forward and they could be further pressured depending on how the Key Bridge's replacement project is funded, adding risk to future performance.

## DEBT STRUCTURE

As shown in the exhibit below, the debt service schedule of the authority remains relatively flat before declining in 2041. Going forward, the authority expects to significantly increase leverage through approximately \$1.0 billion of debt financing for its capital expenditure program, which will further increase the debt service profile.

Exhibit 7

### Current debt service profile



Source: Maryland Transportation Authority

## DEBT-RELATED DERIVATIVES

None.

## PENSIONS AND OPEB

MDTA reported a net pension liability of \$241 million in fiscal 2023, compared to Moody's adjusted net pension liability (ANPL) of about \$579 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.

**LEGAL SECURITY**

The authority's outstanding revenue bonds are secured by a pledge of revenues from the Transportation Facility Projects and from the General Account Project, which is subject to reallocation at the option of the MDTA. The authority's rate covenant requires net revenues of the Transportation Facility Projects to be at least the sum of 1.2x 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.

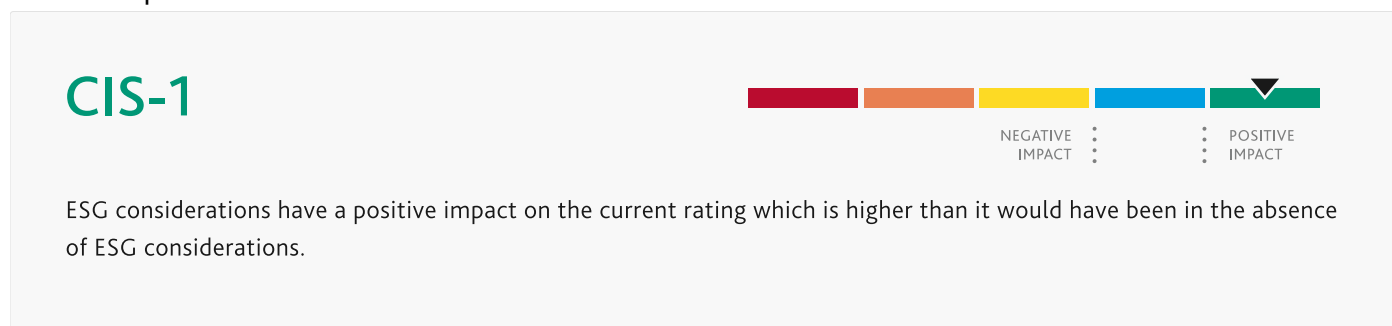
The outstanding municipal bonds are also secured by surety policy funded debt service reserve subaccounts sized at the lesser of maximum annual debt service, 125% of average annual debt service or 10% of the proceeds of the principal amount of the bonds funded with surety policies. Series 2022 TIFIA Loan does not have a debt service reserve subaccount at this point.

**ESG considerations**

**Maryland Trans. Auth. - Trans. Facilities' ESG credit impact score is CIS-1**

Exhibit 8

**ESG credit impact score**

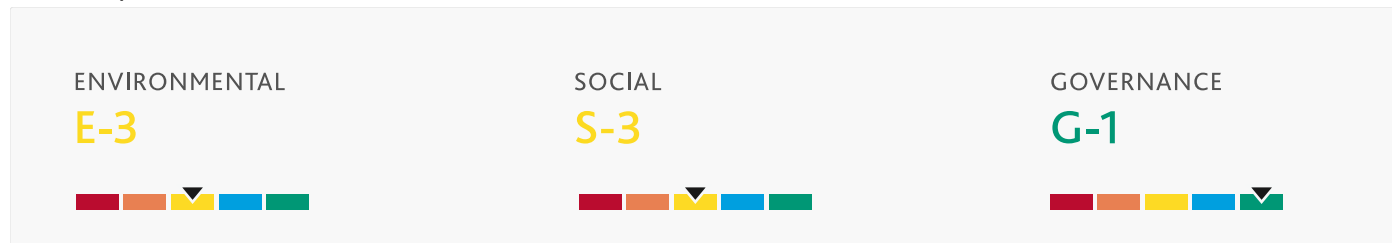


Source: Moody's Ratings

Maryland Transportation Authority – Transportation Facilities (MDTA)'s **CIS-1** indicates that ESG considerations have a positive impact on the rating. The score reflects MDTA's positive exposure to governance risk and moderately negative exposure to environmental and social risks.

Exhibit 9

**ESG issuer profile scores**



Source: Moody's Ratings

**Environmental**

MDTA's **E-3** issuer profile score reflects its negative exposure to physical climate risk. As a system with several tunnels and bridges, MDTA faces physical climate risk from its location with exposure to extreme weather events, such as hurricanes. The increasing use of electric or hybrid vehicles still require the use of the roadways, limiting exposure to carbon transition risks impacts on traffic and revenue. While roadway materials are carbon intensive (i.e., concrete and asphalt), wide use of sustainable alternatives have yet

to become widely and affordably available and there has yet to be a rise in political or social pressure to decarbonize construction materials to date.

### Social

MDTA's **S-3** issuer profile score reflects negative exposure from demographic and societal trends. Local demographic and societal trends in the region have had a moderately negative impact on traffic whereby more professionals are working from home after the pandemic and population growth is lower than average.

### Governance

MDTA's **G-1** issuer profile score reflects positive exposure from financial strategy and risk management. MDTA benefits from its track record of strong financial performance, its financial policies and history of conservative budgeting coupled with track record of exceeding its forecasts. 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, the secretary of the state department of transportation, MDOT.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

### Rating methodology and scorecard factors

The actual rating of Aa2 matches with the scorecard indicated outcome of Aa2. The scorecard is a reference tool that can be used to approximate credit profiles for Publicly Managed Toll Roads in most cases. Please see the Publicly Managed Toll Roads and Parking Facilities Methodology published in May 2023 for more information about the limitations inherent to grid.

Exhibit 10

#### Publicly Managed Toll Roads and Parking Facilities Rating Methodology Maryland Transportation Authority

Factor	Subfactor	Score	Metric
1. Market Position	a) Asset Type	Aa	
	b) Competitive Position and Environment	Aaa	
	c) Economic Strength and Diversity of Service Area	Aaa	
2. Performance Trends	a) Annual Revenue	Aaa	\$871.0
	b) Operating Track Record and Revenue Stability	Aa	
	c) Ability and Willingness to Increase Toll Rates	A	
3. Financial Metrics	a) Debt Service Coverage Ratio	Aaa	3.39x
	b) (Debt + ANPL) to Operating Revenue	Aa	3.26x
<b>Notching Considerations</b>		<b>Notch</b>	
	1 - Debt Service Reserve Fund level	0.0	
	2 - Open/Closed Flow of Funds	-0.5	
	3 - Days Cash on Hand	1.0	876
	4 - Asset Ownership and Financing Structure	0.0	
	5 - Leverage Outlook	-0.5	
<b>Scorecard Indicated Outcome:</b>		<b>Aa2</b>	

Source: Moody's Ratings

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