

**MDTA Financial Forecast**  
**FY2024-2030**  
**Section 4-210 of Transportation Article**

**A Report to the Maryland General Assembly**

**January 2025**

Maryland Department of Transportation



Maryland  
Transportation  
Authority

**Wes Moore, Governor**  
Aruna Miller, Lt. Governor  
Paul J. Wiedefeld, Chairman

**Board Members:**

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William H. Cox, Jr.	Jeffrey S. Rosen
W. Lee Gaines, Jr.	Samuel D. Snead, MCP, MA
Mario J. Gangemi, P.E.	John F. von Paris

Bruce Gartner, Executive Director

January 21, 2025

The Honorable Bill Ferguson  
President  
Senate of Maryland  
State House, H-107  
Annapolis MD 21401-1991

The Honorable Adrienne Jones  
Speaker  
Maryland House of Delegates  
State House, H-101  
Annapolis MD 21401-1991

Dear President Ferguson and Speaker Jones:

Please find attached a copy of the Maryland Transportation Authority's (MDTA) financial forecast for FY 2025-2030 as required by Section 4-210 of the Transportation Article. The statute directs in part:

- (a) Each year, the Authority shall develop and adopt a 6-year financial forecast for the operations of the Authority.
- (b) In accordance with § 2-1257 of the State Government Article, the Authority shall submit to the General Assembly:
  - (1) A draft of the financial forecast on submission of the budget bill to the presiding officers of the General Assembly; and
  - (2) The financial forecast as approved by the Authority on or before September 1 of each year.

The financial forecast measures the agency's financial position through various financial coverage ratios, assuming currently projected revenues, debt service, and operating and capital expenses. In order to maintain compliance with legal loan covenants associated with minimum debt service coverage, the MDTA projects the need for a system wide toll increase during the six-year forecast period. Please note that the timing of toll rate adjustments on the Intercounty Connector and I-95

Express Toll Lanes depends primarily on managing congestion on those facilities and could be adjusted if and when conditions warrant.

Adherence to the rate covenant and policy goals are intended to comply with the legal obligations in the Trust Agreement and loan agreement to maintain the MDTA's favorable bond rating, assuring it the lowest cost access to capital markets. In 2024, Fitch Ratings and Standard & Poor's Global Ratings affirmed the MDTA's AA credit quality citing the MDTA's strong financial position and resilience resulting from a diverse, multi-asset system. Moody's Investors Service revised the MDTA's outlook to negative from stable. Moody's cited the uncertainty around the Francis Scott Key Bridge (Key Bridge) replacement project's costs, funding, and timing, coupled with financial metrics that were expected to narrow before the bridge collapse as the primary reasons for the revision of the outlook from stable to negative.

The financial forecast includes information related to the events surrounding the Key Bridge collapse and subsequent recovery efforts. At approximately 1:30 a.m. on March 26, 2024, a cargo ship leaving the Port of Baltimore struck the Key Bridge, causing a collapse of a substantial portion of the bridge. The recovery and rebuild efforts are ongoing. Key Bridge Replacement Costs, recovery through litigation against the cargo vessel's owner and operator, and the timing and amount of federal funding for the rebuilding effort remain subject to uncertainties. Figures for toll and traffic forecasts are subject to uncertainty given the ongoing impacts of the Key Bridge collapse and are based on estimates regarding the construction timeline.

If you have any questions or comments, please do not hesitate to contact Mr. Bruce Gartner Executive Director, MDTA, at 410-537-1001. Of course, you can always contact me directly as well.

Sincerely,

*Samantha Biddle*

Paul J. Wiedefeld  
Chairman  
Maryland Transportation Authority

Attachments

cc:

The Honorable Guy Guzzone, Chair, Senate Budget and Taxation Committee  
The Honorable Pamela Beidle, Chair Senate Finance Committee  
The Honorable Vanessa Atterbeary, Chair, House Ways and Means Committee  
The Honorable Benjamin Barnes, Chair, House Appropriations Committee  
Mr. Bruce Gartner, Executive Director, MDTA

Bcc:

Ms. Nora Corasaniti, Deputy Director, State Legislative Affairs, MDOT

Mr. Bradley Ryon, Government Relations Manager, MDTA

Ms. Mary O'Keeffe, Director of Government Relations, MDTA

Mr. Jeff Stockdale, Federal Legislative Officer, MDOT

Mr. Matt Mickler, Director, Office of Government Affairs, MDOT

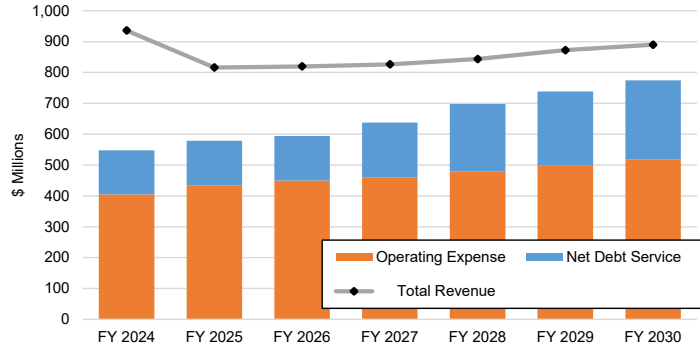
**MARYLAND TRANSPORTATION AUTHORITY**  
**CASH FLOW FORECAST**  
**FY 2024 - 2030**

In Millions \$	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Revenues</b>							
Toll Revenues	\$848.5	\$748.4	\$757.5	\$766.1	\$782.0	\$808.9	824.8
Concessions Revenue	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Investment Income & Other Revenue	45.5	22.1	16.6	12.8	12.8	12.8	12.8
MDOT Loan Repayment - Interest	0.2	0.2	0.2	0.2	0.2	0.1	0.1
BWI/Port Police Reimbursement	37.1	40.8	40.9	42.6	44.3	46.0	47.9
<b>Total Revenues</b>	<b>\$936.0</b>	<b>\$816.1</b>	<b>\$819.7</b>	<b>\$826.2</b>	<b>\$843.8</b>	<b>\$872.3</b>	<b>\$890.0</b>
<b>Operating Expenses</b>							
Operating Account Budget	404.8	434.1	450.0	460.4	478.8	497.9	517.9
Debt Service	142.9	144.5	144.5	177.3	219.1	240.8	256.5
<b>Total Operating Expenses</b>	<b>\$547.7</b>	<b>\$578.5</b>	<b>\$594.4</b>	<b>\$637.7</b>	<b>\$697.9</b>	<b>\$738.8</b>	<b>\$774.3</b>
<b>Operating Revenue Net of Expenses</b>	<b>\$388.3</b>	<b>\$237.5</b>	<b>\$225.3</b>	<b>\$188.4</b>	<b>\$145.8</b>	<b>\$133.6</b>	<b>\$115.7</b>
<b>Capital Expenses</b>							
2025-2030 Total CTP	407.4	765.5	1,058.9	1,143.6	989.2	761.3	430.3
<b>Total Expenses (Operating + Capital)</b>	<b>\$955.1</b>	<b>\$1,344.1</b>	<b>\$1,653.3</b>	<b>\$1,781.3</b>	<b>\$1,687.2</b>	<b>\$1,500.0</b>	<b>\$1,204.7</b>
<b>Capital Funding Source / (Uses) and Intergovernmental</b>							
Revenue Bonds	\$0.0	\$0.0	\$570.9	\$725.3	\$376.8	\$265.9	\$93.9
Surety Policy	(1.2)	-	(1.0)	(1.3)	(0.7)	(0.5)	(0.2)
MDOT Loan Repayment - Principal	1.5	1.5	1.5	1.5	1.6	1.6	1.6
I-895 Federal Grant	-	-	5.0	25.0	50.0	-	-
I-95 Interchange Partner Contribution	3.7	11.8	-	-	-	-	-
Key Bridge Property Insurance	-	350.0	-	-	-	-	-
Key Bridge Federal Grant	-	60.0	-	204.6	415.7	360.6	219.3
Accrual Accounting Reconciliation	21.6	-	-	-	-	-	-
<b>Total Current Year Sources (Uses) Available</b>	<b>25.6</b>	<b>423.3</b>	<b>576.4</b>	<b>955.2</b>	<b>843.4</b>	<b>627.7</b>	<b>314.6</b>
<b>Annual Cash Requirements</b>	<b>929.5</b>	<b>920.7</b>	<b>1,076.9</b>	<b>826.2</b>	<b>843.8</b>	<b>872.3</b>	<b>890.0</b>
<b>Annual Cash Surplus/Deficit</b>	<b>\$6.4</b>	<b>(\$104.7)</b>	<b>(\$257.1)</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
<b>Total Cash Balance</b>	<b>\$794.9</b>	<b>\$690.2</b>	<b>\$433.1</b>	<b>\$433.1</b>	<b>\$433.1</b>	<b>\$433.1</b>	<b>\$433.1</b>
<b>Bonds Outstanding</b>	<b>\$2,126.3</b>	<b>\$2,072.2</b>	<b>\$2,600.0</b>	<b>\$3,283.4</b>	<b>\$3,596.2</b>	<b>\$3,778.6</b>	<b>\$3,773.6</b>
<b>Financial Coverage Ratios</b>							
Unencumbered Cash (\$400M minimum)	<b>\$733.6</b>	<b>\$657.1</b>	<b>\$400.0</b>	<b>\$400.0</b>	<b>\$400.0</b>	<b>\$400.0</b>	<b>\$400.0</b>
Debt Service Coverage (≥2.0x)	<b>3.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.1</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>
Rate Covenant Compliance (Legal - 1.0x)	<b>2.6</b>	<b>2.0</b>	<b>2.0</b>	<b>1.6</b>	<b>1.3</b>	<b>1.2</b>	<b>1.1</b>

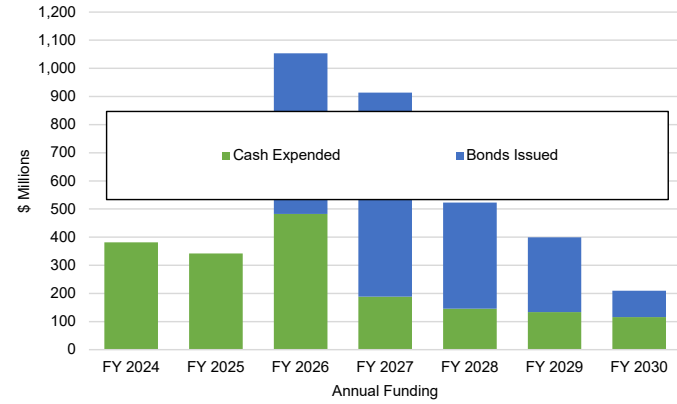
# Plan of Finance

Maryland Transportation Authority

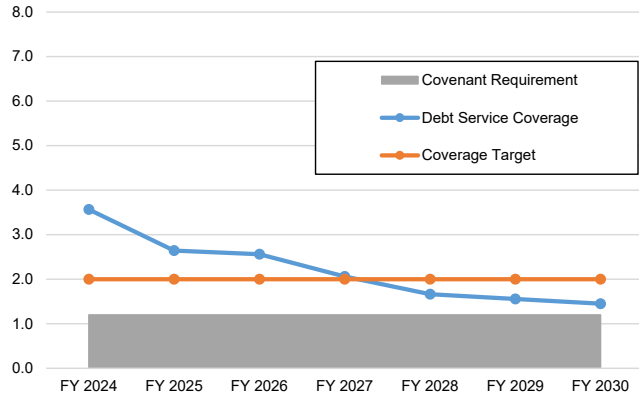
**Summary of Operations  
Toll Road System**



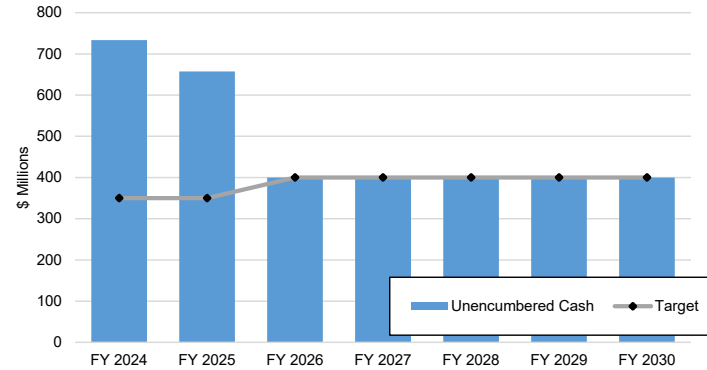
**Annual Capital Requirements**



**Debt Service Coverage including Planned Issues**

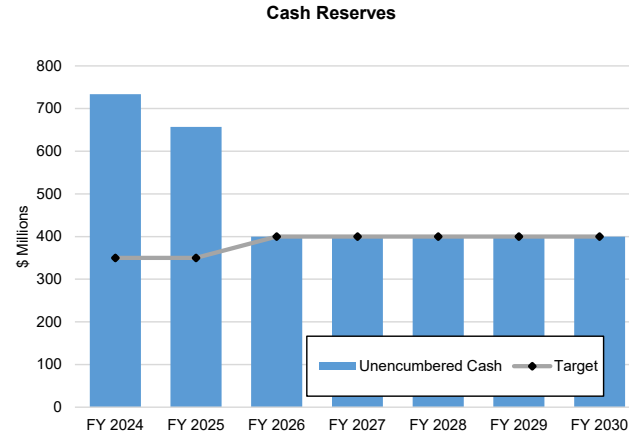
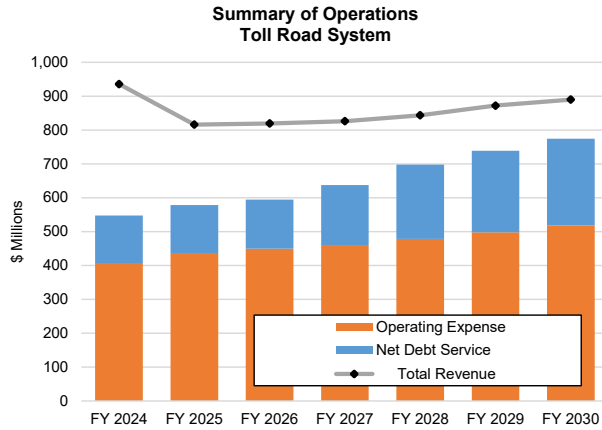


**Cash Reserves**



## Summary of Operations

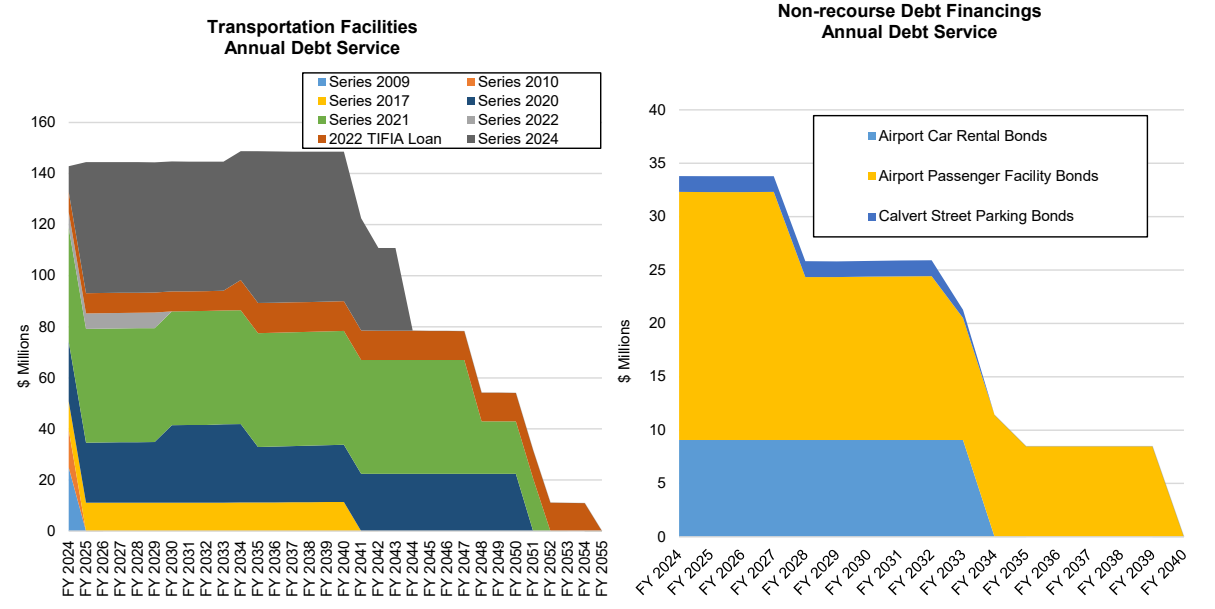
Maryland Transportation Authority



In Millions \$	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Revenue</b>							
Toll Revenue	\$849	\$748	\$757	\$766	\$782	\$809	\$825
Concession Revenue	\$5	\$5	\$5	\$5	\$5	\$5	\$5
Other Revenue	83	63	58	56	57	59	61
<b>Total Revenue</b>	<b>\$936</b>	<b>\$816</b>	<b>\$820</b>	<b>\$826</b>	<b>\$844</b>	<b>\$872</b>	<b>\$890</b>
<b>Expense</b>							
Operating Expense	\$405	\$434	\$450	\$460	\$479	\$498	\$518
MDOT Transfer	0	0	0	0	0	0	0
<b>Total Operating Expenses</b>	<b>\$405</b>	<b>\$434</b>	<b>\$450</b>	<b>\$460</b>	<b>\$479</b>	<b>\$498</b>	<b>\$518</b>
<b>Net Revenue</b>	<b>\$531</b>	<b>\$382</b>	<b>\$370</b>	<b>\$366</b>	<b>\$365</b>	<b>\$374</b>	<b>\$372</b>
Net Debt Service	143	144	144	177	219	241	256
Operating Revenue Net of Expense	\$388	\$238	\$225	\$188	\$146	\$134	\$116
Capital Expenditures (Cash)	382	342	482	188	146	134	116
Construction Fund Beginning Balance	0	0	0	0	0	0	0
<b>Change in Total Cash</b>	<b>\$6</b>	<b>-\$105</b>	<b>-\$257</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Total Cash Balance	\$795	\$690	\$433	\$433	\$433	\$433	\$433
<b>Ratio of Cash to Toll Revenue</b>	<b>94%</b>	<b>92%</b>	<b>57%</b>	<b>57%</b>	<b>55%</b>	<b>54%</b>	<b>53%</b>
<b>Debt Service Coverage</b>	<b>3.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.1</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>

# Outstanding Debt

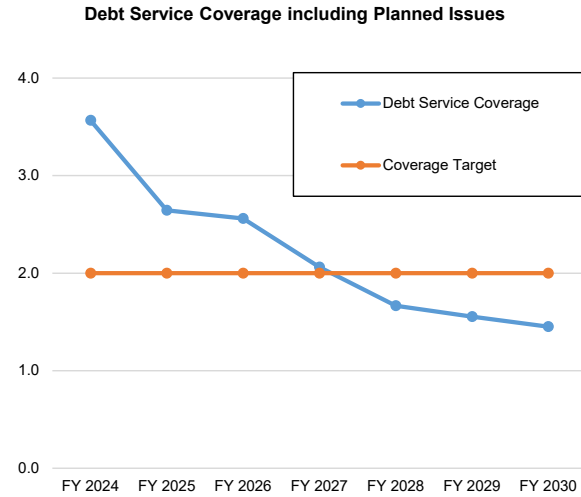
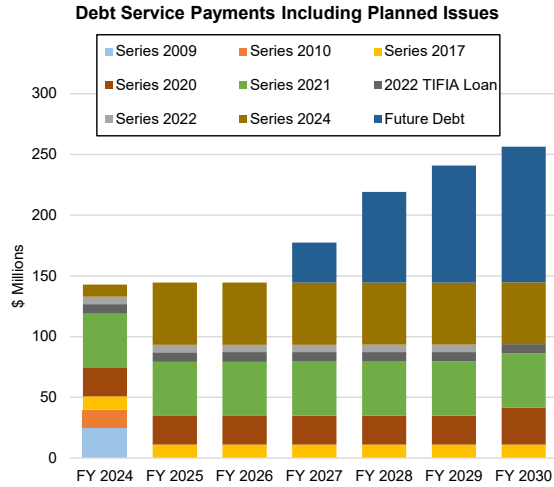
Maryland Transportation Authority



Bonds Outstanding - June 30, 2024			
(Millions)			
Transportation Facilities Bonds:		Non-Recourse Debt Financings:	
Series 2017	\$140.8	Airport Car Rental Facility Bonds:	
Series 2020	\$386.2	Series 2002	\$60.0
Series 2021	\$723.9	Airport PFC Bonds (5):	
Series 2022	\$34.0	Series 2012AB, 2014, 2019	\$165.8
2022 TIFIA Loan	\$202.4	Calvert Street Parking Bonds:	
Series 2024	\$622.8	Series 2015	\$11.2
<b>Total</b>	<b>\$2,110.1</b>	<b>Total</b>	<b>\$236.9</b>

## Planned Debt

Maryland Transportation Authority



In Millions \$	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Debt Issued</b>							
MDTA Bonds Issued <sup>(1)</sup>	\$0.0	\$0.0	\$570.9	\$725.3	\$376.8	\$265.9	\$93.9
<b>Debt Service</b>							
MDTA Debt Service	\$142.9	\$144.5	\$144.5	\$177.3	\$219.1	\$240.8	\$256.5
<b>Coverage</b>							
Net Revenue (Excluding Debt Service)	\$509.6	\$382.0	\$369.8	\$365.8	\$365.0	\$374.4	\$372.2
MDTA Debt Service	\$142.9	\$144.5	\$144.5	\$177.3	\$219.1	\$240.8	\$256.5
<b>Debt Service Coverage</b>	3.6	2.6	2.6	2.1	1.7	1.6	1.5

<sup>(1)</sup> Net bond issuance proceeds

**Maryland Transportation Authority  
November 2024**

In Millions \$	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Revenues &amp; Operating Expenses</b>							
Toll Revenues (Legacy and "Other")	\$ 760.6	\$ 660.5	\$ 664.1	\$ 670.2	\$ 677.8	\$ 697.6	\$ 710.7
ICC Revenue	73.4	70.8	72.1	73.7	75.5	76.8	78.3
Section 100 and 200 ETL Revenue	14.6	17.0	21.3	22.3	28.7	34.5	35.8
Concessions Revenue	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Investment Income & Other Revenue	45.5	22.1	16.6	12.8	12.8	12.8	12.8
Maryland Department of Transportation <sup>(1)</sup>	37.4	41.1	41.1	42.7	44.4	46.2	48.0
<b>Total Revenues</b>	<b>\$ 936.0</b>	<b>\$ 816.1</b>	<b>\$ 819.7</b>	<b>\$ 826.2</b>	<b>\$ 843.8</b>	<b>\$ 872.3</b>	<b>\$ 890.0</b>
LESS: Operating Budget	\$ 404.8	\$ 434.1	\$ 450.0	\$ 460.4	\$ 478.8	\$ 497.9	\$ 517.9
LESS: Debt Service <sup>(2)</sup>	142.9	144.5	144.5	177.3	219.1	240.8	256.5
<b>Net Cash Flow Before Capital</b>	<b>\$ 388.3</b>	<b>\$ 237.5</b>	<b>\$ 225.3</b>	<b>\$ 188.4</b>	<b>\$ 145.8</b>	<b>\$ 133.6</b>	<b>\$ 115.7</b>
<b>Capital Expenses</b>							
Revenue Bonds Issued <sup>(3)</sup>	\$ -	\$ -	\$ 570.9	\$ 725.3	\$ 376.8	\$ 265.9	\$ 93.9
Cash Required for Capital Projects	383.3	343.7	483.9	190.0	147.4	135.2	117.3
Key Bridge Replacement Costs	1.0	204.5	376.8	461.9	400.7	243.6	13.4
<b>Total Funding for Capital</b>	<b>\$ 384.3</b>	<b>\$ 548.2</b>	<b>\$ 1,431.7</b>	<b>\$ 1,377.1</b>	<b>\$ 924.9</b>	<b>\$ 644.8</b>	<b>\$ 224.7</b>
<b>Unspent Bond Proceeds</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>MDOT Loan / Principal Repayment</b>	<b>\$ 1.5</b>	<b>\$ 1.5</b>	<b>\$ 1.5</b>	<b>\$ 1.5</b>	<b>\$ 1.6</b>	<b>\$ 1.6</b>	<b>\$ 1.6</b>
<b>Cash Refunding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Annual Cash Surplus/Deficit</b>	<b>\$ 6.4</b>	<b>\$ (104.7)</b>	<b>\$ (257.1)</b>	<b>\$ (0.0)</b>	<b>\$ 0.0</b>	<b>\$ 0.0</b>	<b>\$ (0.0)</b>
Encumbered Cash	\$ 61.2	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1
Unencumbered Cash	733.6	657.1	400.0	400.0	400.0	400.0	400.0
<b>Total Cash Balance</b>	<b>\$ 794.9</b>	<b>\$ 690.2</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>
<b>Ratio of Cash to Total Toll Revenue</b>	<b>0.9</b>	<b>0.9</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>
<b>Debt Service Coverage</b>							
Debt Service Coverage ( $\geq 2.0x$ )	3.6	2.6	2.6	2.1	1.7	1.6	1.5
Rate Covenant Compliance (Legal - 1.0x)	2.6	2.0	2.0	1.6	1.3	1.2	1.1
Bonds Outstanding <sup>(4)</sup>	\$ 2,126.3	\$ 2,072.2	\$ 2,600.0	\$ 3,283.4	\$ 3,596.2	\$ 3,778.6	\$ 3,773.6
Bonds Outstanding Limit	\$ 4,000.0	\$ 4,000.0	\$ 4,000.0	\$ 4,000.0	\$ 4,000.0	\$ 4,000.0	\$ 4,000.0

<sup>(1)</sup> BWI/Port Police reimbursement and MDOT loan repayment interest

<sup>(2)</sup> Debt service payable on July 1 is treated as occurring in the preceding Fiscal Year.

<sup>(3)</sup> Net bond issuance proceeds

<sup>(4)</sup> As of June 30. Includes bonds retired and bonds to fund capitalized interest.

**Maryland Transportation Authority  
November 2024  
Revenue and Expense Summary**

In Millions \$	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Revenues</b>							
Legacy In-Lane Revenue	\$ 681.0	\$ 605.7	\$ 612.5	\$ 618.1	\$ 625.1	\$ 644.4	\$ 656.2
Other Toll Revenue	79.5	54.8	51.6	52.0	52.7	53.2	54.5
Concessions Revenue	4.5	4.5	4.5	4.5	4.5	4.5	4.5
ICC Revenue	73.4	70.8	72.1	73.7	75.5	76.8	78.3
Section 100 and 200 ETL Revenue	14.6	17.0	21.3	22.3	28.7	34.5	35.8
MDOT Loan Repayment - Interest	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Other Revenue	-	-	-	-	-	-	-
Investment Income	45.5	22.1	16.6	12.8	12.8	12.8	12.8
Maryland Dept. of Transportation:							
BWI & Port Police	37.1	40.8	40.9	42.6	44.3	46.0	47.9
<b>Total Revenue</b>	<b>\$ 936.0</b>	<b>\$ 816.1</b>	<b>\$ 819.7</b>	<b>\$ 826.2</b>	<b>\$ 843.8</b>	<b>\$ 872.3</b>	<b>\$ 890.0</b>
<b>Expenses</b>							
Operations (Basic and M&O)	324.8	380.5	397.3	405.6	421.8	438.7	456.2
ICC Operations & Maintenance	12.1	12.7	11.8	12.2	12.7	13.2	13.7
BWI and Port Police	37.1	40.8	40.9	42.6	44.3	46.0	47.9
Other Expense	30.82	-	-	-	-	-	-
<b>Total Expense</b>	<b>\$ 404.8</b>	<b>\$ 434.1</b>	<b>\$ 450.0</b>	<b>\$ 460.4</b>	<b>\$ 478.8</b>	<b>\$ 497.9</b>	<b>\$ 517.9</b>
<b>Surplus</b>	<b>\$ 531.2</b>	<b>\$ 382.0</b>	<b>\$ 369.8</b>	<b>\$ 365.8</b>	<b>\$ 365.0</b>	<b>\$ 374.4</b>	<b>\$ 372.2</b>
Debt Service <sup>(1)</sup>	\$ 142.9	\$ 144.5	\$ 144.5	\$ 177.3	\$ 219.1	\$ 240.8	\$ 256.5
<b>Net Cash Flow Before Capital</b>	<b>\$ 388.3</b>	<b>\$ 237.5</b>	<b>\$ 225.3</b>	<b>\$ 188.4</b>	<b>\$ 145.8</b>	<b>\$ 133.6</b>	<b>\$ 115.7</b>
<b>Capital Projects</b>							
M&O Reserve Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CTP Projects (ex. Section 200 ETL, Nice/Middleton, Key Bridge)	228.8	379.0	529.7	586.6	549.6	500.1	416.9
ETL Northern Extension	149.5	173.9	141.9	95.1	38.9	17.5	-
Nice/Middleton Bridge	28.1	8.1	10.4	-	-	-	-
Key Bridge Replacement Costs	1.0	204.5	376.8	461.9	400.69	243.64	13.4
<b>Total Capital Projects</b>	<b>\$ 407.4</b>	<b>\$ 765.5</b>	<b>\$ 1,058.9</b>	<b>\$ 1,143.6</b>	<b>\$ 989.23</b>	<b>\$ 761.27</b>	<b>\$ 430.3</b>
Plus: Surety Policy Expense	1.2	-	1.0	1.3	0.7	0.5	0.2
Less: I-95 Interchange Partner Contribution	(3.7)	(11.8)	-	-	-	-	-
Less: I-895 Grant Revenue	-	-	(5.0)	(25.0)	(50.0)	-	-
Less: Key Bridge Property Insurance	-	(350.0)	-	-	-	-	-
Less: Key Bridge Federal Grant	-	(60.0)	-	(204.6)	(415.7)	(360.6)	(219.3)
Less: Revenue Bonds Issued <sup>(2)</sup>	-	-	(570.9)	(725.3)	(376.8)	(265.9)	(93.9)
Less: TIFIA Loans Issued	-	-	-	-	-	-	-
Less: Other Funding / Reconciling Item	(21.6)	-	-	-	-	-	-
Less: Construction Fund Beginning Balance	-	-	-	-	-	-	-
Cash Required for Capital	\$ 383.3	\$ 343.7	\$ 483.9	\$ 190.0	\$ 147.4	\$ 135.2	\$ 117.3
MDOT Loan / Principal Repayment	1.5	1.5	1.5	1.5	1.6	1.6	\$ 1.6
Other / Cash Refunding	-	-	-	-	-	-	-
Cash Required for Capital and Other Uses	\$ 381.9	\$ 342.2	\$ 482.4	\$ 188.4	\$ 145.8	\$ 133.6	\$ 115.7
<b>Ending Balance</b>	<b>\$ 794.9</b>	<b>\$ 690.2</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>	<b>\$ 433.1</b>
Encumbered Cash Balance	\$ 61.2	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1
Unencumbered Cash Balance (\$400m min)	\$ 733.6	\$ 657.1	\$ 400.0	\$ 400.0	\$ 400.0	\$ 400.0	\$ 400.0

<sup>(1)</sup> Debt service payable on July 1 is treated as occurring in the preceding Fiscal Year.

<sup>(2)</sup> Net bond issuance proceeds

**Maryland Transportation Authority**  
**November 2024**  
**Capital Spending & Debt Capacity**

In Millions \$	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b>Capital Projects</b>							
Maintenance & Operations Reserve Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CTP Projects & General	228.8	379.0	529.7	586.6	549.6	500.1	416.9
ETL Northern Extension	149.5	173.9	141.9	95.1	38.9	17.5	-
Nice/Middleton Bridge Funding Requirements	28.1	8.1	10.4	-	-	-	-
Key Bridge Replacement Costs	1.0	204.5	376.8	461.9	400.7	243.6	13.4
Plus: Surety Policy	1.2	-	1.0	1.3	0.7	0.5	0.2
Less: Revenue Bonds Issued	-	-	(570.9)	(725.3)	(376.8)	(265.9)	(93.9)
Less: TIFIA Loans Issued	-	-	-	-	-	-	-
Less: System Bonds Issued - Cap Int.	-	-	-	-	-	-	-
Less: VDOT Contribution	-	-	-	-	-	-	-
Less: I-95 Interchange Partner Contribution	(3.7)	(11.8)	-	-	-	-	-
Less: I-895 Grant Revenue	-	-	(5.0)	(25.0)	(50.0)	-	-
Less: Key Bridge Property Insurance	-	(350.0)	-	-	-	-	-
Less: Key Bridge Federal Grant	-	(60.0)	-	(204.6)	(415.7)	(360.6)	(219.3)
Less: Construction Fund Beginning Balance	-	-	-	-	-	-	-
Less: Other Funding/Reconciling Items	(21.6)	-	-	-	-	-	-
Net Requirements from Other Sources	\$ 383.3	\$ 343.7	\$ 483.9	\$ 190.0	\$ 147.4	\$ 135.2	\$ 117.3
Minimum Cash Funded Capital	25.0	25.5	26.0	26.5	27.0	27.6	27.8
Ending Total Cash	\$ 794.9	\$ 690.2	\$ 433.1	\$ 433.1	\$ 433.1	\$ 433.1	\$ 433.1
Revenue Bonds Issued <sup>(2)</sup>	\$ -	\$ -	\$ 570.9	\$ 725.3	\$ 376.8	\$ 265.9	\$ 93.9
<b>Debt Service <sup>(1)</sup></b>							
Existing Revenue Bonds	134.9	136.5	136.6	136.6	136.6	136.6	136.9
System Debt Service - Detail	-	-	-	-	-	-	-
System Debt Service - Cap. Int.	-	-	-	-	-	-	-
System Debt Service - Refunding Savings	-	-	-	-	-	-	-
Existing TIFIA <sup>(3)</sup>	7.9	7.9	7.9	7.9	7.9	7.8	7.8
Projected Revenue Bonds	-	-	-	32.9	74.7	96.4	111.7
Total Debt Service	\$ 142.9	\$ 144.5	\$ 144.5	\$ 177.3	\$ 219.1	\$ 240.8	\$ 256.5
<b>Debt Service Coverage</b>							
Toll Revenue, Concessions, MDOT Loan Interest Income, & Other Revenue	\$ 853.3	\$ 753.1	\$ 762.2	\$ 770.8	\$ 786.7	\$ 813.5	\$ 829.4
Eligible Investment Income	45.5	22.1	16.6	12.8	12.8	12.8	12.8
Less: Operating Expense	(367.7)	(393.2)	(409.0)	(417.8)	(434.5)	(451.9)	(470.0)
<b>Net Revenue Available for DS</b>	<b>\$ 509.6</b>	<b>\$ 382.0</b>	<b>\$ 369.8</b>	<b>\$ 365.8</b>	<b>\$ 365.0</b>	<b>\$ 374.4</b>	<b>\$ 372.2</b>
System Debt Service	142.9	144.5	144.5	177.3	219.1	240.8	256.5
<b>Total Debt Service Requirement</b>	<b>\$ 142.9</b>	<b>\$ 144.5</b>	<b>\$ 144.5</b>	<b>\$ 177.3</b>	<b>\$ 219.1</b>	<b>\$ 240.8</b>	<b>\$ 256.5</b>
Debt Service Coverage Ratio (2.0x)	<b>3.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.1</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>

<sup>(1)</sup> Debt service payable on July 1 is treated as occurring in the preceding Fiscal Year.

<sup>(2)</sup> Net bond issuance proceeds

<sup>(3)</sup> Nice/Middleton Bridge TIFIA

**Maryland Transportation Authority**  
**November 2024**  
**Traffic and Revenue Assumptions - Legacy Facilities**

In Millions \$	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
<b><u>Average Toll Per Vehicle</u></b>							
Beginning	\$ 6.11	\$ 5.50	\$ 5.73	\$ 5.75	\$ 5.78	\$ 5.86	\$ 5.38
Change in Traffic Mix / Adopted Toll Changes	(0.61)	0.24	0.02	0.03	0.08	(0.48)	(0.01)
Toll Adjustment	-	-	-	-	-	-	-
Ending Average Toll	\$ 5.50	\$ 5.73	\$ 5.75	\$ 5.78	\$ 5.86	\$ 5.38	\$ 5.38
 Toll Adjustment as % of Beginning Toll Revenue	-	-	-	-	-	-	-
<b><u>Traffic</u></b>							
Growth	-1.54%	-3.23%	0.69%	0.86%	1.11%	3.93%	2.10%
Adjusted Forecast (transactions)	115.10	111.39	112.16	113.12	114.38	118.87	121.36
<b><u>Toll Revenue</u></b>							
Average Toll Per Vehicle	\$ 5.50	\$ 5.73	\$ 5.75	\$ 5.78	\$ 5.86	\$ 5.38	\$ 5.38
Traffic	115.10	111.39	112.16	113.12	114.38	118.87	121.36
<b>Toll Revenue</b>	<b>\$ 681.04</b>	<b>\$ 605.71</b>	<b>\$ 612.47</b>	<b>\$ 618.12</b>	<b>625.14</b>	<b>644.41</b>	<b>656.17</b>

**Maryland Transportation Authority  
November 2024  
General Assumptions**

	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>
<b><u>Revenues</u></b>							
Concessions	0.8%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Revenue	-100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MDOT - BWI/Port Police	7.9%	10.1%	0.2%	4.0%	4.0%	4.0%	4.0%
<b><u>Expenses</u></b>							
Operations (Basic and M&O)	4.0%	21.7%	4.4%	4.0%	4.0%	4.0%	4.0%
BWI and Port Police	7.9%	10.1%	0.2%	4.0%	4.0%	4.0%	4.0%
<b><u>Encumbered Cash</u></b>							
Operating Account	\$ 61.2	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1	\$ 33.1
Unspent Bond Proceeds	-	-	-	-	-	-	-
TRB Debt Service Reserve Fund	-	-	-	-	-	-	-
<b>Total Encumbered Cash</b>	<b>\$ 61.2</b>	<b>\$ 33.1</b>	<b>\$ 33.1</b>	<b>\$ 33.1</b>	<b>\$ 33.1</b>	<b>\$ 33.1</b>	<b>\$ 33.1</b>
<b><u>ETL Traffic and Revenue</u></b>							
Section 100 & 200 ETL Revenue (\$ Millions)	\$ 14.6	\$ 17.0	\$ 21.3	\$ 22.3	\$ 28.7	\$ 34.5	\$ 35.8
Section 100 & 200 ETL Traffic	9.1	9.9	11.0	11.52	13.9	16.1	16.7
Section 100 & 200 ETL Average Toll	\$ 1.60	\$ 1.71	\$ 1.93	\$ 1.93	\$ 2.07	\$ 2.14	\$ 2.15
<b><u>ICC Revenue and Expenses</u></b>							
ICC Revenue (\$ Millions)	\$ 73.4	\$ 70.8	\$ 72.1	\$ 73.7	\$ 75.5	\$ 76.8	\$ 78.3
ICC Traffic	34.0	35.3	36.1	36.9	37.8	38.4	39.2
Average Toll	\$ 2.16	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
ICC O&M Expenses	\$ 12.1	\$ 12.7	\$ 11.8	\$ 12.2	\$ 12.7	\$ 13.2	\$ 13.7

**Maryland Transportation Authority**  
**November 2024**  
**Pro-Forma Planned Debt Issuance Summary**

<b>\$ in Millions</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>FY 2030</b>
<b>Planned Debt Issuance</b>							
Revenue Bonds <sup>(1)</sup>	\$ -	\$ -	\$ 570.9	\$ 725.3	\$ 376.8	\$ 265.9	\$ 93.9
TIFIA	-	-	-	-	-	-	-
<b>Total Planned Debt</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 570.9</b>	<b>\$ 725.3</b>	<b>\$ 376.8</b>	<b>\$ 265.9</b>	<b>\$ 93.9</b>

<sup>(1)</sup> Net bond issuance proceeds

**Maryland Transportation Authority**  
**November 2024**  
**Existing and Projected Debt Amortization Schedule**

	Series 2009			Series 2010			Series 2017			Series 2020		
	Par Amt at Issuance 549.39			Par Amt at Issuance 326.44			Par Amt at Issuance 169.67			Par Amt at Issuance 400.00		
	TIC 3.80%			TIC 3.66%			TIC 3.06%			TIC 2.69%		
Total	23.46	105.41	128.87	43.73	63.92	107.65	155.59	68.18	223.77	400.00	318.27	718.27
	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service
2019	11.99	21.00	32.98	5.26	11.77	17.03	4.57	6.59	11.16	-	-	-
2020	-	17.72	17.72	5.52	11.49	17.01	4.78	6.36	11.14	-	-	-
2021	-	17.75	17.75	8.37	11.24	19.60	-	-	-	-	18.22	18.22
2022	-	17.75	17.75	8.67	10.95	19.62	-	-	-	6.74	17.92	24.66
2023	-	17.75	17.75	8.99	10.64	19.63	5.47	5.61	11.08	7.08	17.58	24.66
2024	11.47	13.44	24.91	6.94	7.82	14.76	5.78	5.33	11.11	6.20	17.23	23.42
2025	-	-	-	-	-	-	6.09	5.04	11.13	6.54	16.92	23.45
2026	-	-	-	-	-	-	6.41	4.74	11.15	6.94	16.59	23.53
2027	-	-	-	-	-	-	6.74	4.42	11.16	7.36	16.25	23.60
2028	-	-	-	-	-	-	7.06	4.08	11.14	7.80	15.88	23.68
2029	-	-	-	-	-	-	7.42	3.73	11.15	8.28	15.49	23.76
2030	-	-	-	-	-	-	7.66	3.51	11.16	15.23	15.07	30.30
2031	-	-	-	-	-	-	8.01	3.12	11.13	16.08	14.31	30.39
2032	-	-	-	-	-	-	8.22	2.88	11.10	16.98	13.51	30.48
2033	-	-	-	-	-	-	8.50	2.64	11.14	17.98	12.66	30.64
2034	-	-	-	-	-	-	8.79	2.38	11.17	18.96	11.76	30.72
2035	-	-	-	-	-	-	9.09	2.12	11.20	10.94	10.81	21.75
2036	-	-	-	-	-	-	9.41	1.84	11.25	11.61	10.27	21.88
2037	-	-	-	-	-	-	9.76	1.53	11.28	12.33	9.69	22.01
2038	-	-	-	-	-	-	10.19	1.14	11.33	12.95	9.19	22.14
2039	-	-	-	-	-	-	10.64	0.73	11.37	13.74	8.55	22.28
2040	-	-	-	-	-	-	11.03	0.39	11.42	14.43	8.00	22.43
2041	-	-	-	-	-	-	-	-	-	15.15	7.28	22.43
2042	-	-	-	-	-	-	-	-	-	15.76	6.67	22.42
2043	-	-	-	-	-	-	-	-	-	16.39	6.04	22.42
2044	-	-	-	-	-	-	-	-	-	17.04	5.38	22.42
2045	-	-	-	-	-	-	-	-	-	17.73	4.70	22.43
2046	-	-	-	-	-	-	-	-	-	18.44	3.99	22.43
2047	-	-	-	-	-	-	-	-	-	19.17	3.26	22.43
2048	-	-	-	-	-	-	-	-	-	19.94	2.49	22.42
2049	-	-	-	-	-	-	-	-	-	20.74	1.69	22.43
2050	-	-	-	-	-	-	-	-	-	21.57	0.86	22.43
2051	-	-	-	-	-	-	-	-	-	-	-	-
2052	-	-	-	-	-	-	-	-	-	-	-	-
2053	-	-	-	-	-	-	-	-	-	-	-	-
2054	-	-	-	-	-	-	-	-	-	-	-	-
2055	-	-	-	-	-	-	-	-	-	-	-	-
2056	-	-	-	-	-	-	-	-	-	-	-	-
2057	-	-	-	-	-	-	-	-	-	-	-	-
2058	-	-	-	-	-	-	-	-	-	-	-	-
2059	-	-	-	-	-	-	-	-	-	-	-	-
2060	-	-	-	-	-	-	-	-	-	-	-	-

**Maryland Transportation Authority**  
**November 2024**  
**Existing and Projected Debt Amortization Schedule**

	Series 2021 New Money			Series 2021 Refunding			Nice/Middleton Bridge TIFIA 2022			Series 2022		
	Par Amt at Issuance 315.75			Par Amt at Issuance 430.26			Par Amt at Issuance 200.00			Par Amt at Issuance 39.20		
	TIC 2.95%			TIC 2.24%			TIC 2.89%			TIC 2.19%		
Total	315.75	298.27	614.02	430.26	195.17	625.43	202.35	115.94	318.30	39.20	3.43	42.63
	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Principal (1)	Interest	Total Debt Service	Principal	Interest	Total Debt Service
2019	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	18.92	18.92	6.63	17.43	24.05	-	-	-	-	-	-
2023	5.18	15.34	20.52	10.26	13.80	24.05	-	-	-	5.16	0.93	6.09
2024	5.44	15.08	20.52	10.79	13.29	24.07	2.15	5.80	7.95	5.39	0.70	6.09
2025	5.71	14.81	20.52	11.29	12.75	24.04	2.17	5.74	7.91	5.50	0.59	6.09
2026	6.00	14.52	20.52	11.87	12.18	24.05	2.23	5.68	7.90	5.61	0.48	6.09
2027	6.30	14.22	20.52	12.47	11.59	24.05	2.25	5.62	7.87	5.73	0.36	6.09
2028	6.61	13.91	20.52	13.11	10.97	24.07	2.30	5.55	7.85	5.84	0.24	6.09
2029	6.94	13.58	20.52	13.73	10.31	24.04	2.35	5.49	7.84	5.97	0.12	6.09
2030	7.29	13.23	20.52	14.43	9.62	24.05	2.39	5.42	7.82	-	-	-
2031	7.66	12.87	20.52	15.15	8.90	24.05	2.43	5.36	7.79	-	-	-
2032	8.04	12.48	20.52	15.92	8.15	24.07	2.49	5.29	7.78	-	-	-
2033	8.44	12.08	20.52	16.38	7.67	24.04	2.55	5.22	7.77	-	-	-
2034	8.86	11.66	20.52	16.88	7.18	24.06	6.70	5.15	11.85	-	-	-
2035	9.30	11.22	20.52	17.22	6.84	24.05	6.84	4.95	11.79	-	-	-
2036	9.77	10.75	20.52	17.57	6.49	24.06	7.00	4.75	11.74	-	-	-
2037	10.26	10.26	20.52	17.93	6.12	24.05	7.14	4.54	11.68	-	-	-
2038	10.67	9.85	20.52	18.47	5.58	24.05	7.32	4.33	11.65	-	-	-
2039	11.10	9.43	20.52	19.03	5.03	24.05	7.49	4.12	11.61	-	-	-
2040	11.65	8.87	20.52	19.46	4.60	24.06	7.68	3.90	11.58	-	-	-
2041	12.12	8.41	20.52	20.03	4.02	24.05	7.86	3.69	11.54	-	-	-
2042	12.60	7.92	20.52	20.52	3.54	24.06	8.05	3.46	11.51	-	-	-
2043	13.23	7.29	20.52	21.07	2.99	24.05	8.24	3.23	11.47	-	-	-
2044	13.89	6.63	20.52	21.64	2.42	24.06	8.44	2.99	11.43	-	-	-
2045	14.59	5.94	20.52	22.22	1.84	24.05	8.64	2.75	11.39	-	-	-
2046	15.32	5.21	20.52	22.82	1.24	24.06	8.84	2.51	11.35	-	-	-
2047	16.08	4.44	20.52	23.43	0.63	24.06	9.05	2.25	11.31	-	-	-
2048	16.88	3.64	20.52	-	-	-	9.27	1.99	11.27	-	-	-
2049	17.73	2.79	20.52	-	-	-	9.49	1.73	11.22	-	-	-
2050	18.61	1.91	20.52	-	-	-	9.72	1.46	11.18	-	-	-
2051	19.55	0.98	20.52	-	-	-	9.95	1.18	11.13	-	-	-
2052	-	-	-	-	-	-	10.19	0.90	11.09	-	-	-
2053	-	-	-	-	-	-	10.43	0.60	11.04	-	-	-
2054	-	-	-	-	-	-	10.68	0.31	10.99	-	-	-
2055	-	-	-	-	-	-	-	-	-	-	-	-
2056	-	-	-	-	-	-	-	-	-	-	-	-
2057	-	-	-	-	-	-	-	-	-	-	-	-
2058	-	-	-	-	-	-	-	-	-	-	-	-
2059	-	-	-	-	-	-	-	-	-	-	-	-

<sup>(1)</sup> Principal Amount of Nice/Middleton Bridge TIFIA Issuance Includes Deferred Interest Amounts

**Maryland Transportation Authority**  
**November 2024**  
**Existing and Projected Debt Amortization Schedule**

	Series 2024			2025			2026			2027		
	Par Amt at Issuance 622.77			Par Amt at Issuance -			Par Amt at Issuance 585.35			Par Amt at Issuance 743.61		
	TIC 3.35%			TIC 3.85%			TIC 3.85%			TIC 3.85%		
Total	622.77	359.00	981.76	-	-	-	585.35	401.64	986.99	743.61	510.23	1,253.83
	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service
2019	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	10.03	10.03	-	-	-	-	-	-	-	-	-
2025	20.17	31.14	51.30	-	-	-	-	-	-	-	-	-
2026	21.11	30.13	51.24	-	-	-	-	-	-	-	-	-
2027	22.08	29.07	51.15	-	-	-	10.57	22.33	32.90	-	-	-
2028	23.13	27.97	51.10	-	-	-	10.98	21.92	32.90	13.43	28.37	41.80
2029	24.19	26.81	51.00	-	-	-	11.42	21.49	32.90	13.95	27.84	41.79
2030	25.27	25.60	50.87	-	-	-	11.86	21.04	32.90	14.50	27.30	41.80
2031	26.47	24.34	50.81	-	-	-	12.33	20.57	32.90	15.07	26.73	41.80
2032	27.73	23.02	50.75	-	-	-	12.81	20.09	32.90	15.66	26.13	41.79
2033	28.94	21.63	50.57	-	-	-	13.32	19.59	32.90	16.28	25.52	41.80
2034	30.27	20.19	50.45	-	-	-	13.84	19.06	32.90	16.92	24.88	41.80
2035	40.72	18.67	59.39	-	-	-	14.38	18.52	32.90	17.58	24.22	41.79
2036	42.60	16.64	59.23	-	-	-	14.95	17.96	32.90	18.27	23.53	41.79
2037	44.56	14.51	59.06	-	-	-	15.53	17.37	32.90	18.99	22.81	41.80
2038	46.62	12.28	58.89	-	-	-	16.14	16.76	32.90	19.73	22.07	41.80
2039	48.77	9.95	58.71	-	-	-	16.78	16.13	32.90	20.51	21.29	41.80
2040	51.02	7.51	58.53	-	-	-	17.43	15.47	32.90	21.31	20.49	41.80
2041	39.01	4.96	43.96	-	-	-	18.12	14.78	32.90	22.15	19.65	41.79
2042	29.35	3.01	32.36	-	-	-	18.83	14.07	32.90	23.02	18.78	41.79
2043	30.81	1.54	32.35	-	-	-	19.57	13.33	32.90	23.92	17.88	41.80
2044	-	-	-	-	-	-	20.34	12.56	32.90	24.86	16.94	41.79
2045	-	-	-	-	-	-	21.14	11.77	32.90	25.84	15.96	41.80
2046	-	-	-	-	-	-	21.97	10.94	32.90	26.85	14.95	41.79
2047	-	-	-	-	-	-	22.83	10.07	32.90	27.90	13.89	41.79
2048	-	-	-	-	-	-	23.72	9.18	32.90	29.00	12.80	41.79
2049	-	-	-	-	-	-	24.65	8.25	32.90	30.14	11.66	41.80
2050	-	-	-	-	-	-	25.62	7.28	32.90	31.32	10.48	41.80
2051	-	-	-	-	-	-	26.63	6.27	32.90	32.55	9.25	41.79
2052	-	-	-	-	-	-	27.67	5.23	32.90	33.83	7.97	41.80
2053	-	-	-	-	-	-	28.76	4.14	32.90	35.15	6.64	41.79
2054	-	-	-	-	-	-	29.89	3.01	32.90	36.53	5.26	41.79
2055	-	-	-	-	-	-	31.06	1.84	32.90	37.97	3.83	41.79
2056	-	-	-	-	-	-	32.28	0.62	32.90	39.46	2.34	41.79
2057	-	-	-	-	-	-	-	-	-	41.01	0.79	41.79
2058	-	-	-	-	-	-	-	-	-	-	-	-
2059	-	-	-	-	-	-	-	-	-	-	-	-

**Maryland Transportation Authority**  
**November 2024**  
**Existing and Projected Debt Amortization Schedule**

	2028			2029			2030		
	Par Amt at Issuance 386.31			Par Amt at Issuance 272.67			Par Amt at Issuance 96.27		
	TIC 3.85%			TIC 3.85%			TIC 3.85%		
	386.31	265.07	651.38	272.67	187.09	459.76	96.27	66.06	162.32
	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service	Principal	Interest	Total Debt Service
2019	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-
2029	6.98	14.74	21.71	-	-	-	-	-	-
2030	7.25	14.46	21.71	4.93	10.40	15.33	-	-	-
2031	7.53	14.18	21.71	5.12	10.21	15.32	1.74	3.67	5.41
2032	7.83	13.88	21.71	5.32	10.01	15.32	1.81	3.60	5.41
2033	8.14	13.58	21.71	5.53	9.80	15.33	1.88	3.53	5.41
2034	8.46	13.26	21.71	5.74	9.58	15.32	1.95	3.46	5.41
2035	8.79	12.93	21.71	5.97	9.36	15.32	2.03	3.38	5.41
2036	9.13	12.58	21.71	6.20	9.12	15.32	2.11	3.30	5.41
2037	9.49	12.22	21.71	6.45	8.88	15.33	2.19	3.22	5.41
2038	9.86	11.85	21.71	6.70	8.63	15.33	2.28	3.14	5.41
2039	10.25	11.46	21.71	6.96	8.36	15.32	2.37	3.05	5.41
2040	10.65	11.06	21.71	7.24	8.09	15.33	2.46	2.95	5.41
2041	11.07	10.64	21.71	7.52	7.81	15.33	2.56	2.86	5.41
2042	11.51	10.21	21.71	7.82	7.51	15.33	2.66	2.76	5.41
2043	11.96	9.76	21.71	8.12	7.21	15.33	2.76	2.65	5.41
2044	12.43	9.29	21.71	8.44	6.89	15.33	2.87	2.54	5.41
2045	12.92	8.80	21.71	8.77	6.56	15.33	2.98	2.43	5.41
2046	13.42	8.29	21.71	9.12	6.21	15.33	3.10	2.31	5.41
2047	13.95	7.77	21.71	9.47	5.85	15.32	3.22	2.19	5.41
2048	14.50	7.22	21.71	9.85	5.48	15.33	3.35	2.07	5.41
2049	15.07	6.65	21.71	10.23	5.09	15.32	3.48	1.94	5.41
2050	15.66	6.06	21.71	10.63	4.69	15.32	3.61	1.80	5.41
2051	16.27	5.44	21.71	11.05	4.28	15.33	3.76	1.66	5.41
2052	16.91	4.80	21.71	11.49	3.84	15.33	3.90	1.51	5.41
2053	17.57	4.14	21.71	11.94	3.39	15.33	4.06	1.36	5.41
2054	18.26	3.45	21.71	12.41	2.92	15.33	4.22	1.20	5.41
2055	18.98	2.73	21.71	12.89	2.44	15.33	4.38	1.03	5.41
2056	19.73	1.99	21.71	13.40	1.93	15.32	4.55	0.86	5.41
2057	20.50	1.21	21.71	13.92	1.40	15.32	4.73	0.68	5.41
2058	21.31	0.41	21.72	14.47	0.86	15.33	4.92	0.50	5.41
2059				15.04	0.29	15.32	5.11	0.30	5.41
2060							5.31	0.10	5.41