

# MDTA FY2024 Forecast Update

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**CDM  
Smith**

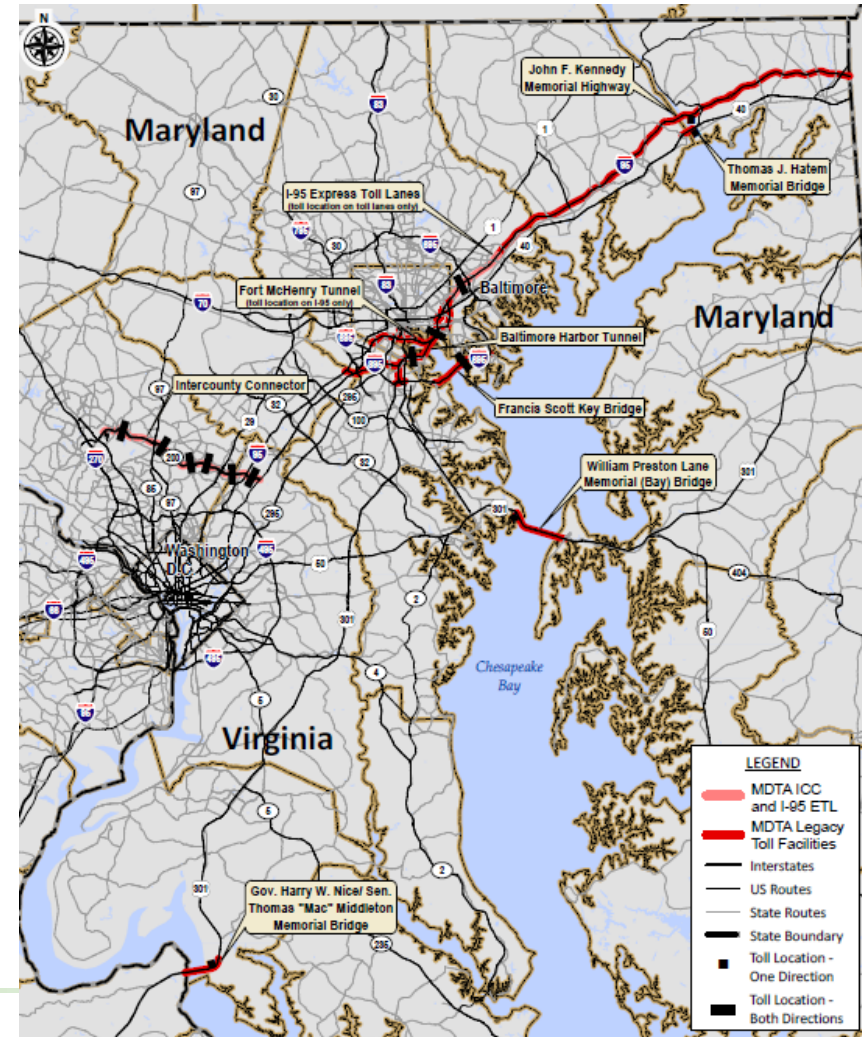
# MDTA Facilities

## ■ Legacy Facilities

- John F. Kennedy Memorial Highway (I-95)
- Thomas J. Hatem Memorial Bridge (US-40)
- Baltimore Harbor Tunnel (I-895)
- Fort McHenry Tunnel (I-95)
- Francis Scott Key Bridge (I-695)
- William Preston Lane Memorial (Bay) Bridge (US-50)
- Gov. Harry W. Nice/Sen. Thomas “Mac” Middleton Memorial Bridge (US-301)

## ■ New Facilities

- Intercounty Connector (MD 200)
- I-95 Express Toll Lanes (ETLs)





# Historical Trends

# Vehicle Miles Traveled (VMT)

Calendar Year	United States <sup>(1)</sup>					Maryland				
	Interstate			Total		Interstate			Total	
	VMT (Millions)	Percent Change	Percent of Total	VMT (Millions)	Percent Change	VMT (Millions)	Percent Change	Percent of Total	VMT (Millions)	Percent Change
2007	745,457	-	24.4	3,049,027	-	17,015	-	30.1	56,503	-
2008	725,078	(2.7)	24.2	2,992,705	(1.8)	16,710	(1.8)	30.4	55,023	(2.6)
2009	722,655	(0.3)	24.3	2,975,804	(0.6)	16,965	1.5	30.7	55,293	0.5
2010	729,015	0.9	24.4	2,985,854	0.3	17,040	0.4	30.4	56,126	1.5
2011	725,787	(0.4)	24.4	2,968,990	(0.6)	16,964	(0.4)	30.2	56,221	0.2
2012	735,915	1.4	24.6	2,988,021	0.6	17,054	0.5	30.2	56,475	0.5
2013	745,106	1.2	24.8	3,006,911	0.6	17,064	0.1	30.1	56,688	0.4
2014	756,374	1.5	24.9	3,040,220	1.1	17,057	(0.0)	30.2	56,432	(0.5)
2015	782,111	3.4	25.1	3,109,937	2.3	17,102	0.3	29.7	57,516	1.9
2016	810,264	3.6	25.4	3,188,972	2.5	17,584	2.8	29.7	59,137	2.8
2017	824,910	1.8	25.6	3,227,358	1.2	17,937	2.0	29.9	59,892	1.3
2018	833,803	1.1	25.6	3,255,347	0.9	17,932	(0.0)	30.1	59,629	(0.4)
2019	842,604	1.1	25.7	3,276,482	0.6	18,059	0.7	30.0	60,136	0.9
2020	732,078	(13.1)	25.1	2,917,383	(11.0)	14,604	(19.1)	28.9	50,592	(15.9)
2021	815,183	11.4	25.9	3,146,281	7.8	16,545	13.3	29.2	56,601	11.9
<b>Average Annual Percent Change</b>										
2007 to 2009		(1.5)			(1.2)		(0.1)			(1.1)
2009 to 2019		1.5			1.0		0.6			0.8
2019 to 2021		(1.6)			(2.0)		(4.3)			(3.0)
2007-2020 VMT Data source: Table VM-2, Highway Statistics 1994-2020, USDOT FHWA Office of Policy Information.										
2021 VMT Data source: Monthly Travel Volume Trends Reports, USDOT FHWA Office of Policy Information. 2022 data not available.										
<sup>(1)</sup> Includes Puerto Rico.										

- VMT data taken from FHWA Highway Statistics online reports
- Used to compare overall trends in MD versus nationwide

# MDTA Toll Transactions

Fiscal Year	Hatem Bridge		Kennedy Highway		Harbor Tunnel		Fort McHenry Tunnel		Key Bridge		Bay Bridge		Nice/Middleton Bridge		ICC <sup>(1)</sup>		I-95 ETL	
	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change
<b>Total Transactions (in millions)</b>																		
2007	5.561	-	14.840	-	25.740	-	44.854	-	12.203	-	13.494	-	3.418	-	-	-	-	-
2008	5.556	(0.1)	14.652	(1.3)	25.771	0.1	44.829	(0.1)	12.343	1.1	13.370	(0.9)	3.391	(0.8)	-	-	-	-
2009	5.040	(9.3)	14.642	(0.1)	25.534	(0.9)	43.446	(3.1)	11.688	(5.3)	12.752	(4.6)	3.347	(1.3)	-	-	-	-
2010	4.993	(0.9)	14.750	0.7	25.226	(1.2)	44.063	1.4	10.959	(6.2)	12.994	1.9	3.354	0.2	-	-	-	-
2011	5.070	1.5	15.375	4.2	26.117	3.5	46.294	5.1	11.647	6.3	13.558	4.3	3.401	1.4	-	-	-	-
2012	5.034	(0.7)	14.824	(3.6)	25.750	(1.4)	44.523	(3.8)	11.048	(5.1)	13.666	0.8	3.290	(3.3)	11.562	-	-	-
2013	4.563	(9.4)	14.582	(1.6)	23.973	(6.9)	43.576	(2.1)	10.922	(1.1)	12.736	(6.8)	3.261	(0.9)	17.198	48.7	-	-
2014	4.948	8.4	14.377	(1.4)	24.893	3.8	41.875	(3.9)	10.419	(4.6)	12.759	0.2	3.243	(0.6)	20.476	19.1	-	-
2015	5.246	6.0	14.690	2.2	27.098	8.9	41.847	(0.1)	10.627	2.0	12.856	0.8	3.305	1.9	24.118	17.8	3.483	-
2016	5.090	(3.0)	15.163	3.2	28.287	4.4	42.639	1.9	11.195	5.3	13.272	3.2	3.381	2.3	29.975	24.3	8.048	131.0
2017	5.102	0.2	15.548	2.5	27.612	(2.4)	45.380	6.4	11.311	1.0	13.587	2.4	3.419	1.1	32.634	8.9	9.014	12.0
2018	5.086	(0.3)	15.451	(0.6)	28.012	1.4	44.720	(1.5)	11.425	1.0	13.518	(0.5)	3.325	(2.8)	34.401	5.4	9.393	4.2
2019	5.089	0.1	15.205	(1.6)	20.839	(25.6)	48.247	7.9	12.827	12.3	13.593	0.5	3.315	(0.3)	36.287	5.5	9.868	5.1
2020	4.394	(13.6)	12.499	(17.8)	14.168	(32.0)	42.297	(12.3)	11.935	(6.9)	11.547	(15.1)	2.753	(16.9)	32.946	(9.2)	7.789	(21.1)
2021	3.052	(30.5)	8.829	(29.4)	11.931	(15.8)	29.037	(31.3)	8.437	(29.3)	8.456	(26.8)	1.714	(37.8)	11.325	(65.6)	5.202	(33.2)
2022	4.475	46.6	15.648	77.2	25.858	116.7	43.074	48.3	11.990	42.1	14.508	71.6	3.301	92.6	41.461	266.1	9.000	73.0
2023	4.468	(0.2)	15.210	(2.8)	27.955	8.1	42.406	(1.6)	12.453	3.9	13.859	(4.5)	3.157	(4.4)	34.124	(17.7)	8.988	(0.1)

- Toll transactions historically were a stable measure of system growth, but recent business rule changes post COVID and AET implementation impacted collection trends in 2020 - 2022

# MDTA In-Lane Data

Fiscal Year	Hatem Bridge		Kennedy Highway		Harbor Tunnel		Fort McHenry Tunnel		Key Bridge		Bay Bridge		Nice/Middleton Bridge		ICC <sup>(1)</sup>		I-95 ETL <sup>(1)</sup>	
	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change
<b>In-Lane Passenger Car Traffic (in millions)</b>																		
2019	4.898	-	13.530	-	20.908	-	44.617	-	11.866	-	12.747	-	3.147	-	104.334	-	9.349	-
2020	4.450	(9.1)	11.367	(16.0)	15.189	(27.3)	40.757	(8.7)	11.821	(0.4)	11.703	(8.2)	2.803	(10.9)	89.920	(13.8)	7.709	(17.5)
2021	4.137	(7.0)	11.472	0.9	17.964	18.3	37.951	(6.9)	10.654	(9.9)	11.510	(1.6)	2.652	(5.4)	77.548	(13.8)	6.100	(20.9)
2022	4.535	9.6	13.445	17.2	26.441	47.2	38.986	2.7	10.936	2.6	12.443	8.1	3.076	16.0	96.283	24.2	8.199	34.4
2023	4.494	(0.9)	13.547	0.8	28.052	6.1	38.502	(1.2)	10.974	0.4	12.674	1.9	3.093	0.6	103.577	7.6	8.263	0.8
<b>In-Lane Commercial Vehicle Traffic (in millions)</b>																		
2019	0.228	-	1.995	-	0.794	-	4.535	-	1.209	-	0.915	-	0.215	-	3.595	-	0.558	-
2020	0.228	(0.3)	2.022	1.4	0.652	(17.8)	4.496	(0.8)	1.247	3.2	0.923	0.9	0.202	(6.4)	3.528	(1.9)	0.490	(12.1)
2021	0.249	9.4	2.210	9.3	0.681	4.5	4.907	9.1	1.305	4.6	0.943	2.2	0.215	6.4	3.588	1.7	0.478	(2.6)
2022	0.270	8.4	2.349	6.3	0.921	35.2	5.156	5.1	1.402	7.4	0.946	0.3	0.265	23.3	3.758	4.7	0.678	41.9
2023	0.259	(4.1)	2.360	0.4	1.051	14.1	5.042	(2.2)	1.447	3.2	0.924	(2.4)	0.247	(6.8)	3.791	0.9	0.700	3.3
<b>Total In-Lane Traffic (in millions)</b>																		
2019	5.126	-	15.525	-	21.702	-	49.151	-	13.075	-	13.662	-	3.363	-	107.930	-	9.907	-
2020	4.677	(8.8)	13.389	(13.8)	15.842	(27.0)	45.253	(7.9)	13.068	(0.1)	12.626	(7.6)	3.004	(10.7)	93.448	(13.4)	8.200	(17.2)
2021	4.386	(6.2)	13.682	2.2	18.646	17.7	42.858	(5.3)	11.959	(8.5)	12.453	(1.4)	2.866	(4.6)	81.136	(13.2)	6.578	(19.8)
2022	4.805	9.6	15.795	15.4	27.362	46.7	44.141	3.0	12.338	3.2	13.390	7.5	3.340	16.6	100.041	23.3	8.877	34.9
2023	4.753	(1.1)	15.907	0.7	29.103	6.4	43.544	(1.4)	12.421	0.7	13.598	1.6	3.340	(0.0)	107.368	7.3	8.963	1.0

- In-lane data records vehicles at the lane prior to any leakage related to collections (leakage = unbillable transactions)
- Provides the best data for traffic growth on MDTA system post 2019

# Traffic on Other Highways

- Select locations in each region of the Legacy facilities
- Used as a check of non-MDTA facility highway growth

Calendar Year	Northern		Central						Southern					
	US 1 E of Cedar Church Rd.		I-95 N of MD 100		I-97 N of MD 176		I-695 E of MD 146		MD 295 N of MD 100		US 301 S of MD 234		I-95 (Virginia) N of Courthouse Rd	
	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change	Value	Change
2007	11,600	-	191,900	-	102,600	-	155,300	-	91,600	-	22,500	-	137,000	-
2008	11,100	(4.3)	188,000	(2.0)	100,600	(1.9)	152,200	(2.0)	88,900	(2.9)	21,400	(4.9)	133,000	(2.9)
2009	11,300	1.8	192,100	2.2	105,100	4.5	153,700	1.0	88,900	-	21,800	1.9	136,000	2.3
2010	10,100	(10.6)	192,900	0.4	105,500	0.4	150,900	(1.8)	89,400	0.6	22,500	3.2	136,000	-
2011	9,900	(2.0)	193,100	0.1	105,600	0.1	151,000	0.1	93,400	4.5	22,100	(1.8)	135,000	(0.7)
2012	9,900	-	191,300	(0.9)	106,200	0.6	151,800	0.5	92,600	(0.9)	22,100	-	135,000	-
2013	9,300	(6.1)	193,000	0.9	107,200	0.9	149,500	(1.5)	92,800	0.2	20,800	(5.9)	132,000	(2.2)
2014	9,300	-	192,800	(0.1)	107,100	(0.1)	149,300	(0.1)	107,700	16.1	20,800	-	131,000	(0.8)
2015	10,100	8.6	207,300	7.5	111,800	4.4	160,500	7.5	108,500	0.7	22,600	8.7	134,000	2.3
2016	11,500	13.9	201,600	(2.7)	108,700	(2.8)	150,200	(6.4)	103,300	(4.8)	21,900	(3.1)	136,000	1.5
2017	11,800	2.6	206,400	2.4	111,300	2.4	153,800	2.4	105,400	2.0	22,400	2.3	137,000	0.7
2018	11,700	(0.8)	205,200	(0.6)	121,100	8.8	152,900	(0.6)	104,500	(0.9)	22,200	(0.9)	136,000	(0.7)
2019	12,600	7.7	180,200	(12.2)	122,000	0.7	161,300	5.5	104,500	-	21,800	(1.8)	137,000	0.7
2020	10,971	(12.9)	145,051	(19.5)	98,182	(19.5)	129,811	(19.5)	87,223	(16.5)	18,031	(17.3)	127,000	(7.3)
2021	13,032	18.8	164,052	13.1	104,800	6.7	146,822	13.1	93,880	7.6	21,422	18.8	141,000	11.0
2022	12,713	(2.4)	165,533	0.9	105,741	0.9	148,143	0.9	94,441	0.6	20,893	(2.5)	N/A	N/A
<b>Average Annual Percent Change</b>														
2007 to 2009		(1.3)		0.1		1.2		(0.5)		(1.5)		(1.6)		(0.4)
2009 to 2019		1.1		(0.6)		1.5		0.5		1.6		-		0.1
2019 to 2022 <sup>(1)</sup>		0.3		(2.8)		(4.7)		(2.8)		(3.3)		(1.4)		1.4

Source: MSHA and VDOT AADT Reports.

<sup>(1)</sup> Value shown for I-95 (Virginia) is for the period 2019 to 2021 due to data availability.



# T&R Forecast



# Forecast Inputs/Assumptions

- Growth Forecast – Internal economist performed econometric modeling update in 2022
  - Full details of the analysis provided in the FY 2023 Traffic and Revenue Forecast Update report
  - Regression analysis performed to identify equations for each facility using variables such as GDP, population, Retail Sales (commercial vehicles), etc.
- Construction Impacts
  - BHT AET conversion, various FSK related projects
- Unpaid transactions from pre-Customer Assistance Plan
  - Unpaid transactions sent to motor vehicle hold/suspension assumed to be paid in FY 2024, but no further backlog transaction collections assumed in the forecast
  - Result of Customer Assistance Plan implemented post-AET conversion and amidst pandemic, which gave customers more time to pay transactions that were invoiced after the pause of invoicing in 2020
- Does not assume further recovery from COVID-19 pandemic on commuting trends
  - Benchmarking to latest actuals accounted for shifts from discounted E-ZPass (Hattem Plan, Shopper/Commuter Plans) to In-state E-Zpass rates based on commuting changes

# Legacy System Forecasted Transactions

- Transactions forecasted to decline next two years as backlog transactions taper
- Overall forecast growth is around 0.6% - 0.7% per year, excluding construction impacts

Fiscal Year	Transactions (Millions) <sup>(1)</sup>			Year-over-Year Change
	PC	CV	Total	
2023 <sup>(2)</sup>	106.4	10.5	<b>116.9</b>	
2024	104.9	10.1	<b>115.0</b>	-1.6%
2025	104.5	10.3	<b>114.9</b>	-0.1%
2026	106.3	10.4	<b>116.7</b>	1.6%
2027	106.4	10.5	<b>116.9</b>	0.2%
2028	105.0	10.5	<b>115.6</b>	-1.1%
2029	109.0	10.6	<b>119.6</b>	3.5%
2030	109.7	10.6	<b>120.3</b>	0.6%
2031	110.4	10.7	<b>121.1</b>	0.6%
2032	111.2	10.7	<b>121.9</b>	0.7%
2033	112.0	10.8	<b>122.8</b>	0.7%

<sup>(1)</sup> Includes impacts due to leakage, including unpaid transactions.

<sup>(2)</sup> Represents actual data.

# Legacy System Forecasted Transactions by Facility

- Trends vary by facility largely due to planned construction projects
  - BHT AET conversion FY2027-2028 is the largest project
- Growth rates for passenger cars range from 0.25% to 1.0% per year depending on facility
- Growth rates for commercial vehicles are slightly negative in FY 2024 to account for unusually high growth during the pandemic that is not sustainable
  - Beyond FY 2024, commercial vehicle growth ranges from 0.3% to 0.6% per year

Fiscal Year <sup>(1)</sup>	Transactions (Millions) <sup>(4)</sup>							Total <sup>(2)</sup>
	JFK	Hatem	BHT	FMT	FSK	Bay	Nice	
2019	15.2	5.1	20.8	48.2	12.8	13.6	3.3	<b>119.1</b>
2020 <sup>(3)</sup>	12.5	4.4	14.2	42.3	11.9	11.5	2.8	<b>99.6</b>
2021	8.8	3.1	11.9	29.0	8.4	8.5	1.7	<b>71.5</b>
2022	15.7	4.5	26.0	43.4	12.2	14.8	3.4	<b>120.0</b>
2023	15.1	4.5	27.4	41.5	12.1	13.3	3.1	<b>116.9</b>
2024 <sup>(3)</sup>	14.8	4.6	27.6	41.1	11.5	12.3	3.0	<b>115.0</b>
2025	15.1	4.6	27.3	41.6	11.2	12.1	3.0	<b>114.9</b>
2026	15.3	4.6	26.5	43.1	11.6	12.6	3.1	<b>116.7</b>
2027	15.3	4.6	23.7	44.6	12.6	12.9	3.1	<b>116.9</b>
2028 <sup>(3)</sup>	15.4	4.6	17.7	47.1	14.6	12.9	3.1	<b>115.6</b>
2029	15.5	4.6	28.4	42.8	12.2	13.0	3.2	<b>119.6</b>
2030	15.6	4.6	29.7	42.8	11.4	13.0	3.2	<b>120.3</b>
2031	15.7	4.6	30.3	43.2	10.9	13.0	3.2	<b>121.1</b>
2032	15.7	4.7	30.6	43.5	11.0	13.1	3.2	<b>121.9</b>
2033	15.8	4.7	30.5	43.7	11.7	13.1	3.3	<b>122.8</b>

<sup>(1)</sup> Actual data presented for FY 2019 through FY 2023.

<sup>(2)</sup> Summations may not equal total due to rounding.

<sup>(3)</sup> Leap Year

<sup>(4)</sup> Includes impacts due to leakage, including unpaid transactions.

# Contact Information

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