

Department of Transportation

MISSION

The Maryland Department of Transportation (MDOT) is a customer-driven leader that delivers safe, sustainable, intelligent, and exceptional transportation solutions in order to connect our customers to life's opportunities.

KEY GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

Additional Performance Measures, Key Initiatives, Performance Discussions and Strategies:
 2020 Annual Attainment Report on Transportation System Performance: <http://www.mdot.maryland.gov/AR>
 MDOT Quarterly Performance Report, MDOT Excellerator: www.mdot.maryland.gov/MDOTExcellerator

Goal 1. Ensure a Safe, Secure, and Resilient Transportation System – Enhance the safety and security of Maryland’s multimodal transportation system and provide a transportation system that is resilient to natural or man-made hazards.

- Obj. 1.1** Reduce the number of lives lost and injuries sustained on Maryland’s transportation system.
- Obj. 1.2** Provide for the secure movement of people, goods, and data.
- Obj. 1.3** Provide a resilient multimodal system by anticipating and planning for changing conditions, and hazards whether natural or man-made.
- Obj. 1.4** Improve roadway clearance times and facilitate efficient and coordinated responses to emergency and disaster events throughout the transportation system.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.	2022 Est.
Number of vehicle miles traveled (billions)	59.0	60.0	59.6	60.1	51.1	53.0	54.7
Annual number of serious injuries on all roads in Maryland	3,167	3,347	3,233	3,122	2,792	2,682	2,557
Annual number of traffic fatalities on all roads in Maryland (including MDTA-owned roads)	522	558	512	531	416	405	394
Traffic fatality rate per 100 million vehicle miles traveled (VMT) on all roads in Maryland	0.88	0.93	0.86	0.88	0.81	0.76	0.72
Number of pedestrian fatalities on all roads in Maryland	107	111	130	123	88	86	84
Number of pedestrian serious injuries on all roads in Maryland	421	477	468	426	322	314	306

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Goal 2. Maintain a High Standard and Modernize Maryland’s Multimodal Transportation System – Preserve, maintain, and modernize the State’s existing transportation infrastructure and assets.

Obj. 2.1 Preserve and maintain State-owned or funded roadways, bridges, public transit, rail, bicycle and pedestrian facilities, ports, airports and other facilities in a state of good repair.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Annual dredging to keep channels clear, with placement into Maryland Port Authority (MDOT MPA) managed sites (cubic yards) (millions)	3.0	1.3	0.3	3.4	3.5	3.4	3.3
Dredged material placement capacity remaining (cubic yards) (millions) for Poplar Island	9.8	7.4	7.4	10.8	8.0	29.9	27.5
Dredged material placement capacity remaining (cubic yards) (millions) for Harbor	16.0	13.2	12.2	11.5	10.8	9.8	9.0
^{1,2} Percentage of MDOT State Highway Administration (SHA) and Maryland Transportation Authority (MDTA) bridges identified as in Poor Condition	2.4%	2.4%	2.2%	1.8%	1.3%	1.3%	1.3%
² Number of MDOT SHA lane-miles maintained	17,132	17,143	17,210	17,286	17,303	17,340	17,378
MDOT SHA maintenance activity expenditures (millions)	62.9	64.2	65.5	59.9	65.1	56.0	56.0
MDOT SHA maintenance activity expenditures per lane mile	3,673	3,747	3,803	3,466	3,760	3,230	3,223

Obj. 2.2 Strategically modernize infrastructure through new and innovative technology, enhanced partnerships, design standards, and practices to facilitate the movement of people and goods.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Est.	2021 Est.	2022 Est.
Average truck turn-around time at Seagirt (minutes)	30.7	33.8	89.0	78.0	75.0	71.0	71.0

Obj. 2.3 Use asset management to optimize public investment and ensure the sustainability of the transportation infrastructure.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Overall acceptable pavement condition	94%	92%	92%	92%	91%	88%	86%

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Goal 3. Improve the Quality and Efficiency of the Transportation System to enhance the customer experience – Increase the use of technologies and operational improvements to enhance transportation services and communication to satisfy our customers.

Obj. 3.1 Increase the efficiency of transportation services through partnerships, advanced technologies, and operational enhancements to improve service delivery methods.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
MDOT MVA alternative service delivery transactions as percent of total transactions	57.0%	59.4%	65.9%	67.2%	69.4%	73.3%	75.2%
MDOT MVA walk-in transactions as percent of total transactions	34.2%	32.8%	27.4%	26.8%	24.4%	17.5%	12.5%
The total number of toll transactions (in thousands)	160,064	165,207	166,960	168,448	150,590	159,527	162,783
Percent of E-ZPass® toll transactions	77.6%	77.0%	78.8%	81.0%	81.0%	82.0%	83.0%

Obj. 3.2 Enhance customer satisfaction with transportation services across all modes of transportation.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Average MDOT MVA branch office customer wait time (minutes)	23.0	21.0	17.0	25.0	18.0	20.0	19.0
Average MDOT MVA branch office customer visit time (minutes, includes wait time)	33.1	31.1	26.8	35.4	28.4	30.6	30.7
² Percent of transit service provided on-time: Core Bus	85%	77%	68%	69%	72%	73%	75%
² Baltimore Metro	96%	96%	94%	94%	97%	95%	96%
² Light Rail	98%	96%	94%	95%	93%	95%	95%
² MARC	94%	91%	91%	87%	92%	91%	92%
² Mobility paratransit and Taxi Access	92%	93%	93%	86%	91%	90%	91%
Average Mobility paratransit phone hold time in minutes	0.55	1.20	1.02	1.52	1.11	1.10	1.10
^{2,3} Percent of vehicle miles travelled (VMT) in congested conditions on freeways/expressways in Maryland during the evening peak hour	26%	29%	29%	31%	14%	26%	27%
^{2,3} Percent of VMT in congested conditions on arterials in Maryland during the evening peak hour	13%	14%	13%	14%	9%	12%	12%

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Goal 4. Provide Better Transportation Choices and Connections – Improve transportation connections to support alternative transportation options for the movement of people and goods.

Obj. 4.1 Enhance, through statewide, regional and local coordination, transportation networks to improve mobility and accessibility.

Obj. 4.2 Increase and enhance multimodal connections to improve movement of people and goods within and between activity centers.

Obj. 4.3 Inform and educate customers on transportation options and benefits.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
² Transit ridership: Core Bus (thousands)	75,619	69,587	63,730	63,989	55,342	37,781	48,863
² Metro	12,222	10,960	8,738	7,275	5,706	1,427	3,650
² Light Rail	7,431	7,345	7,401	6,966	4,649	889	3,043
² Mobility paratransit	1,981	2,048	2,129	2,135	1,693	730	1,276
² Taxi Access	574	697	812	839	799	515	738
² MARC	8,962	9,185	9,322	9,191	6,677	969	1,437
² Contracted Commuter Bus to Baltimore and Washington	3,928	3,866	3,841	3,623	2,619	519	915
² Total	110,717	103,688	95,973	94,018	77,485	42,830	59,922
² Locally Operated Transit Systems (LOTS)	38,476	39,818	41,096	32,867	27,543	30,428	30,954
WMATA annual ridership (millions): Metrorail (linked trips)	191.348	176.972	175.817	175.255	132.562	83.102	83.102
Metrobus (unlinked trips)	127.432	121.732	119.681	124.854	96.254	66.284	66.284
MetroAccess (completed trips)	2.281	2.368	2.331	2.348	1.798	1.253	1.253
Total	321.060	301.072	297.829	302.457	230.614	150.639	150.639
WMATA annual ridership Maryland only (millions): Metrorail (linked trips)	68.251	63.124	62.712	62.511	47.283	29.340	29.340
Metrobus (unlinked trips)	41.960	40.083	39.408	41.111	30.434	19.913	19.913
MetroAccess (completed trips)	1.437	1.501	1.478	1.468	1.114	0.784	0.784
Total	111.648	104.707	103.598	105.090	78.831	50.037	50.037

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Goal 5. Facilitate Economic Opportunity and Reduce Congestion in Maryland through Strategic System Expansion - Invest in and pursue opportunities to promote system improvements that support economic development, reduce congestion, and improve the movement of people and goods.

Obj. 5.1 Pursue capital improvements to the transportation system that will improve access to jobs and tourism, and leverage economic growth opportunities.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
⁴ International cruises using the Port of Baltimore MPA terminal	94	86	94	94	69	N/A	N/A
⁴ Cruise Ships Ports of Call at the Port of Baltimore MPA terminal	8	10	12	1	5	N/A	N/A
⁴ Cruise passengers, embarking and debarking at the Port of Baltimore MPA's terminal	429,000	386,000	433,000	424,114	311,131	N/A	N/A
² Total passengers at BWI Marshall Airport (millions)	25.1	26.4	27.1	27.0	11.3	19.7	21.1
Annual BWI Marshall Airport passenger growth rate	5.45%	4.97%	2.94%	-0.57%	-57.95%	73.59%	7.04%

Obj. 5.2 Improve the movement of goods within and through Maryland by investing in intermodal connections and improvements to reduce freight bottlenecks.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
MDOT MPA Roll- On/Roll-Off tonnage (thousands)	740	684	772	886	765	575	591
MDOT MPA Auto tonnage (thousands)	1,099	1,054	1,110	1,196	943	800	825
MDOT MPA imported forest products tonnage (thousands)	709	736	676	586	495	570	645
Containers (Loaded TEUs) (thousands)	648	683	736	746	730	694	714

Obj. 5.3 Strategically invest in expansion and operational improvements to reduce congestion along the multimodal transportation system.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
² Passenger trips per revenue vehicle mile: Core Bus	3.8	3.7	3.1	3.0	2.6	2.8	2.8
² Metro	2.4	2.3	1.9	2.4	1.1	1.2	1.4
² Light Rail	2.4	2.3	2.5	2.3	2.3	2.0	2.1
² MARC	1.4	1.4	1.4	1.4	1.1	1.3	1.3
² Contracted Commuter Bus to Baltimore and Washington	0.6	0.7	0.6	0.6	0.5	0.5	0.5
² All Modes	2.6	2.6	1.5	1.5	1.2	1.3	1.4
WMATA revenue vehicle miles (millions): Metrorail	97.8	96.9	86.8	88.4	99.8	101.3	101.3
Metrobus	38.9	38.4	37.7	37.0	37.0	36.8	36.8
Total	136.6	135.3	124.5	125.4	136.8	138.1	138.1
WMATA passengers per revenue vehicle mile: Metrorail	2.0	1.8	2.0	2.0	1.3	0.8	0.8
Metrobus	3.3	3.2	3.2	3.4	2.6	1.8	1.8

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Goal 6. Ensure Environmental Protection and Sensitivity – Deliver sustainable transportation infrastructure improvements that protect and reduce impacts to Maryland’s natural, historic, and cultural resources.

- Obj. 6.1** Protect and enhance the natural, historic and cultural environment through avoidance, minimization and mitigation of adverse impacts related to transportation infrastructure, including support for broader efforts to improve the health of the Chesapeake Bay.
- Obj. 6.2** Employ resource protection and conservation practices in project development, construction, operations, and maintenance of transportation assets.
- Obj. 6.3** Implement initiatives to reduce fossil fuel consumption, mitigate greenhouse gases, and improve air quality.

MDOT’s Environmental Stewardship Performance Measures and Key Initiatives are detailed in the Environmental Stewardship Goal portion of the MDOT Annual Attainment Report on Transportation System Performance:

<http://www.mdot.maryland.gov/AR>

Goal 7. Promote Fiscal Responsibility – Ensure responsible investment and management of taxpayer resources to add value and deliver quality transportation improvements through performance based decision-making and innovative funding mechanisms and partnerships.

- Obj. 7.1** Accelerate project completion through improved and efficient use of alternative project delivery methods and strategic partnerships.
- Obj. 7.2** Provide transportation services and solutions that maximize value.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
⁵ Percent revenue over operating expenses	35%	42%	44%	40%	80%	-10%	19%
BWI Marshall Airport cost per enplaned passenger	\$9.51	\$9.34	\$9.33	\$9.33	\$12.55	\$14.60	\$13.03
Number of nonstop markets served	79	83	85	90	93	84	86
² Number of patrol hours logged	101,061	101,100	99,413	100,000	100,000	100,000	100,000
² Total user cost savings for the traveling public due to incident management (billions)	\$1.51	\$1.47	\$1.31	\$1.40	\$1.30	\$1.30	\$1.30
² Total reduction in incident congestion delay (million vehicle-hours)	43.6	38.6	32.8	32.6	33.0	33.0	33.0
² Operating cost per revenue vehicle mile: Core Bus	\$13.55	\$13.68	\$14.65	\$16.03	\$15.85	\$15.42	\$15.50
² Metro	\$10.56	\$10.67	\$13.78	\$17.80	\$16.30	\$16.10	\$16.40
² Light Rail	\$13.82	\$13.96	\$14.70	\$15.80	\$15.20	\$15.30	\$15.30
² Mobility Paratransit	\$4.57	\$4.98	\$5.48	\$5.40	\$5.71	\$5.86	\$5.93
² MARC	\$22.73	\$23.63	\$24.74	\$24.82	\$25.82	\$24.85	\$24.31
² Contracted Commuter Bus to Baltimore and Washington	\$8.91	\$9.00	\$9.96	\$9.79	\$9.65	\$9.70	\$9.76
² Taxi Access	\$4.95	\$4.54	\$6.01	\$8.00	\$9.31	\$7.80	\$7.90
² All Modes	\$10.92	\$11.13	\$12.06	\$12.95	\$13.10	\$13.14	\$13.07
WMATA operating cost per revenue vehicle mile: Metrorail	\$10.25	\$9.49	\$11.46	\$11.70	\$11.06	\$11.63	\$11.63
Metrobus	\$15.19	\$15.63	\$17.47	\$17.93	\$17.83	\$18.29	\$18.29

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Obj. 7.2 Provide transportation services and solutions that maximize value.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
MDOT MVA operating expenditures (millions)	\$187.35	\$188.98	\$185.11	\$190.43	\$196.18	\$195.25	\$186.18
MDOT MVA average cost per transaction	\$16.87	\$16.94	\$16.97	\$16.86	\$20.65	\$18.77	\$18.25
System preservation funding levels in Consolidated Transportation Program (millions)	\$1,119.0	\$1,151.8	\$1,094.2	\$1,025.8	\$1,153.9	\$960.3	\$763.6
MDTA debt service coverage ratio	3.45	3.38	3.54	4.78	4.16	2.88	3.84
MDTA unrestricted cash balance at fiscal year-end (millions)	786	936	377	503	596	353	355
MDTA legal coverage ratio (Rate Covenant)	2.87	2.82	2.95	3.99	3.16	2.27	3.10

Obj. 7.3 Ensure a consistent revenue stream and ample financing opportunities.

Performance Measures	2016 Act.	2017 Act.	2018 Act.	2019 Act.	2020 Act.	2021 Est.	2022 Est.
Percent of MDOT MPA Operating Budget recovered by revenues	106%	106%	113%	116%	116%	92%	95%
2 Farebox recovery ratio: Core Bus & Contracted Commuter Bus	30%	27%	19%	16%	14%	17%	19%
2 Metro	23%	21%	18%	13%	11%	12%	13%
2 Light Rail	18%	17%	16%	13%	11%	12%	12%
2 Baltimore area services (without Mobility paratransit)	27%	25%	24%	29%	25%	26%	26%
2 Washington Contracted Commuter Bus	34%	37%	33%	30%	26%	29%	30%
2 MARC	44%	47%	33%	30%	28%	30%	30%
WMATA farebox recovery ratio: Metrorail	57%	57%	54%	52%	36%	21%	21%
Metrobus	24%	21%	21%	19%	13%	4%	4%
MetroAccess	8%	8%	7%	5%	4%	2%	2%
WMATA systemwide	42%	40%	38%	36%	25%	14%	14%
WMATA operating cost per passenger trip: Metrorail	\$5.24	\$5.19	\$5.66	\$5.90	\$8.32	\$14.18	\$14.18
Metrobus	\$4.64	\$4.93	\$5.50	\$5.31	\$6.86	\$10.16	\$10.16
MetroAccess	\$50.94	\$52.59	\$59.15	\$71.66	\$91.42	\$153.20	\$153.20

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NOTES

¹ The number of bridges decrease in 2020 due to a change in the definition of bridges.

² 2020 data is estimated.

³ COVID-19 has resulted in significant decrease in traffic volumes on Maryland highways. In Spring of 2020, traffic volumes were down by as much as 50 percent compared to 2019 volumes. In Summer of 2020, traffic volumes are down by about 20 percent compared to 2019 Summer traffic. These huge reductions in travel demand have resulted in fewer vehicles in peak hours; thereby reducing the peak hour congested VMT metrics. With the current trends and uncertainties related to recovery, the remainder of 2020 and 2021 are likely to experience low traffic volumes and lesser congestion.

⁴ Due to COVID-19, all cruise business was paused indefinitely in March 2020. Because of the uncertainty surrounding the cruise business, no estimates for future years can be provided.

⁵ In fiscal year 2020, MAA received \$87 million in Federal CARES Funding. \$75 million of this funding was allocated to MAA operating expenses and \$12 million was allocated to capital. In fiscal years 2021-2024, MAA uses the conservative L-Curve economic recovery model which results in low forecasted revenues in fiscal year 2021 and a slow return to normal from fiscal years 2022-2024 and beyond. Specifically the L-Curve results in a reduction of revenue in fiscal year 2021 of -24 percent and an increase in revenue in both fiscal year 2022 & 2023 of 28 percent & 14 percent, respectively.