

# 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:  
 2017 Annual Attainment Report on Transportation System Performance: <http://www.mdot.maryland.gov/AR>  
 MDOT Quarterly Performance Report, MDOT Excellerator: [www.mdot.maryland.gov/MDOTExcellerator](http://www.mdot.maryland.gov/MDOTExcellerator)

**Goal 1. Safety and Security: Reduce the number of lives lost and injuries sustained on Maryland's transportation system and provide secure transportation infrastructure, assets and operations for the safe movement of people and goods.**

- Obj. 1.1** Annually maintain the fatal collision rate and the injury collision rate reported by Maryland Transportation Authority (MDTA) Police at rates lower than the national fatality rate average of 1.14. Rates reported per 100 million vehicle miles traveled (VMT).
- Obj. 1.2** Reduce the five-year average number of young (16-20) driver-related fatalities on all roads in Maryland from 65 in 2009-2013 to 30 or fewer by December 31, 2020 (2016-2020 average) and reduce the five-year average number of young driver-related serious injuries on all roads in Maryland from 649 in 2009-2013 to 202 or fewer by December 31, 2020 (2016-2020 average).
- Obj. 1.3** Reduce the annual number of traffic-related fatalities on all roads in Maryland from 466 in 2013 to 387 or fewer by December 31, 2020 and reduce the annual number of traffic related serious injuries on all roads in Maryland from 2,957 in 2013 to 2,939 or fewer by December 31, 2020.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
Number of 16-20 year old driver's license holders	180,262	175,276	173,099	185,821	188,857	189,005	189,152
<sup>1</sup> Number of young (16-20) driver-related fatalities on all roads in Maryland	43	39	51	57	65	63	61
<sup>1</sup> Number of young (16-20) driver-related serious injuries on all roads in Maryland	427	414	413	481	621	596	571
<sup>2</sup> Number of vehicle miles driven (billions)	56.5	56.4	57.3	59.0	60.0	60.0	61.0
<sup>3</sup> Annual number of serious personal injuries on all roads in Maryland	2,961	3,053	2,595	3,163	3,294	3,171	3,053
<sup>3</sup> Annual number of traffic fatalities on all roads in Maryland	466	443	521	522	431	418	406
<sup>1, 3, 4</sup> Traffic fatality rate per 100 million VMT on all roads in Maryland	0.82	0.79	0.91	0.89	0.70	0.68	0.66

# Department of Transportation

- Obj. 1.4** Reduce the five-year average number of pedestrian fatalities on all roads in Maryland from 105 in 2009–2013 to 91 or fewer by December 31, 2020 (2016–2020 average) and reduce the five-year average number of pedestrian serious injuries on all roads in Maryland from 362 in 2009–2013 to 234 or fewer by December 31, 2020 (2016–2020 average).
- Obj. 1.5** Annually maintain the reported BWI Marshall Airport crime rate at or below 1.5 crimes against persons and/or property per 100,000 passengers.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
<sup>1</sup> Number of pedestrian fatalities on all roads in Maryland	110	102	99	107	85	83	81
<sup>1</sup> Number of serious pedestrian injuries on all roads in Maryland	344	361	320	419	322	312	303
<sup>2</sup> BWI Airport crime rate	0.84	0.79	0.67	0.60	1.50	1.50	1.50

**Goal 2. System Preservation: Preserve and maintain State-owned or supported roadways, bridges, public transit, rail, bicycle and pedestrian facilities, ports, airports and other facilities in a state-of-good-repair.**

- Obj. 2.1** Adequately fund system preservation needs in the Consolidated Transportation Program (CTP) at \$850 million in fiscal year 2017.
- Obj. 2.2** Manage an effective dredging program to maintain and improve the shipping channels for safe, unimpeded access to the Port by ensuring adequate placement capacity is available to meet dredging demand, removing access channel restrictions and improving the navigation system.
- Obj. 2.3** Maintain and evaluate annually all bridges along MDTA Network and State Highway Network, including any identified as weight restricted or structurally deficient, so that there is no adverse effect on their safe use by emergency vehicles, school buses, and vehicles servicing the economy of an area.
- Obj. 2.4** Annually maintain MDTA’s minimum debt service coverage of 2.5 for fiscal year 2016-2020 and 2.0 thereafter, have an unrestricted cash balance at the end of each fiscal year of \$350 million, and maintain the minimum legal coverage ratio of 1.0 .

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
System preservation funding levels in CTP (millions)	780	982	1,175	1,119	1,173	1,142	1,066
Annual dredging to keep channels clear, with placement into Maryland Port Authority (MPA) managed sites (cubic yards) (millions)	3.5	0.6	4.7	3.0	1.3	0.2	1.9
Poplar Island dredged material capacity remaining (cubic yards) (millions)	15.0	15.7	12.3	9.8	9.0	9.0	9.9
Harbor dredged material capacity remaining (cubic yards) (millions)	18.1	18.1	16.5	16.0	15.5	14.9	15.3
Percentage of State Highway Administration (SHA) and MDTA bridges identified as structurally deficient	3.1%	2.8%	2.4%	2.4%	2.5%	2.5%	2.5%
MDTA debt service coverage ratio	2.48	3.42	4.11	3.45	3.38	3.73	3.89
MDTA unrestricted cash balance at fiscal year-end (millions)	598	527	672	786	936	852	790
MDTA legal coverage ratio (Rate Covenant)	2.07	2.85	3.42	2.87	2.82	3.00	3.13

# Department of Transportation

**Obj. 2.5** Maintain annually at least 84 percent (calendar year 2002 conditions) of the MDOT State Highway Administration (SHA) and Maryland Transportation Authority (MDTA) pavements with acceptable ride quality per the International Roughness Index (IRI).

**Obj. 2.6** Increase transit ridership in Maryland

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
<sup>2</sup> Percent of roadway mileage with acceptable ride quality	86%	87%	87%	88%	89%	89%	89%
Transit ridership: Core Bus (thousands)	80,071	75,780	78,697	75,619	69,587	65,806	65,365
Metro	15,208	14,632	13,901	12,222	10,960	10,365	10,245
Light Rail	8,647	8,106	7,657	7,431	7,413	7,010	6,945
Mobility paratransit	1,651	1,781	1,893	1,981	2,048	1,937	1,871
Taxi Access	433	508	602	574	697	659	651
MARC	9,062	9,168	9,246	8,962	9,185	8,686	8,603
Contracted Commuter Bus to Baltimore and Washington	4,187	4,017	4,034	3,928	3,866	3,656	3,597
Total	119,260	113,992	116,030	110,718	103,756	98,119	98,089
Locally Operated Transit Systems (LOTS)	40,281	42,500	39,441	38,476	39,818	40,153	40,450

**Goal 3. Quality of Service: Increase the efficiency of transportation service delivery through the use of systems, processes, partnerships, technologies and improved service delivery methods; maintain and enhance customer satisfaction with transportation services across modes; seek to maintain or improve travel time reliability for key transportation corridors and services; and continue to apply enhanced technologies to improve the transportation system and to communicate with the traveling public.**

**Obj. 3.1** Manage discretionary spending by Maryland Port Authority (MPA) to maximize revenues and effectively manage expenditures.

**Obj. 3.2** MDTA will increase the percentage of E-ZPass toll transactions to 79 percent by 2018.

**Obj. 3.3** Annually, improve/maintain 84 percent of the State Highway Network in overall preferred maintenance condition.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
Percentage of MPA Operating Budget recovered by revenues	115%	105%	104%	106%	106%	104%	104%
The total number of toll transactions (in thousands)	134,715	133,987	144,806	158,050	163,400	168,931	174,649
Total Active E-ZPass® Accounts	678,039	738,967	854,545	947,201	1,054,922	1,174,893	1,308,507
The percentage of E-ZPass® toll transactions	68%	74%	75%	76%	78%	79%	81%
<sup>2</sup> Number of SHA lane-miles maintained	17,050	17,063	17,117	17,132	17,143	17,177	17,180
SHA maintenance activity expenditures (millions)	\$54.03	\$54.59	\$53.57	\$62.93	\$64.23	\$67.40	\$70.00
SHA maintenance activity expenditures per lane mile	\$3,169	\$3,199	\$3,130	\$3,673	\$3,747	\$3,924	\$4,075
Percentage of the SHA Highway Network in overall preferred maintenance condition	83.4%	83.4%	78.8%	78.6%	85.7%	84.0%	84.0%

# Department of Transportation

**Obj. 3.4** Maintain an annual customer satisfaction rating of 85 percent for BWI Marshall airport services and facilities.

**Obj. 3.5** Maintain average Motor Vehicle Administration (MVA) customer visit time of 40 minutes and an average wait time of 25 minutes or less by fiscal year 2017.

**Obj. 3.6** Continue to develop and promote use of alternative service delivery (ASD) options in order to achieve 58 percent or higher ASD usage of total MVA transactions by fiscal year 2017.

**Obj. 3.7** Average cost per MVA transaction will be \$16 by fiscal year 2017.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
Percent of excellent/good BWI passenger rating	93%	92%	91%	90%	92%	88%	88%
<sup>5</sup> Number of MVA transactions (millions)	10.315	10.756	11.117	11.105	11.212	11.436	11.665
<sup>5</sup> Number of MVA walk-in transactions (millions)	4.083	4.164	3.938	3.795	3.703	2.981	2.801
Average MVA branch office customer wait time (minutes)	25.2	28.1	21.6	24.0	22.0	15.0	14.0
Average MVA branch office customer visit time (minutes)	32.7	35.8	30.3	33.1	31.1	24.4	23.8
MVA number of alternative service delivery transactions	4,068,605	4,365,068	4,978,695	5,127,962	5,343,664	6,135,596	6,381,502
<sup>5</sup> MVA alternative service delivery transactions as percent of total transactions	49.7%	51.2%	55.8%	57.5%	59.1%	67.3%	69.5%
MVA operating expenditures (millions)	\$162.77	\$173.54	\$182.50	\$187.35	\$188.98	\$191.17	\$194.99
<sup>5</sup> Average cost per MVA transaction	\$15.78	\$16.13	\$16.42	\$16.87	\$16.85	\$16.09	\$16.72

**Obj. 3.8** Provide high on-time performance, with on-time goals in fiscal year 2015 of: 1) 85 percent for Core Bus, 2) 95 percent for Metro, 3) 95 percent for Light Rail, 4) 93 percent for MARC, 5) 92 percent for Mobility paratransit.

**Obj. 3.9** Achieve an average telephone hold time of 3 minutes or less for at least 95 percent of total calls for persons scheduling a Mobility paratransit reservation during fiscal year 2017.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
Percent of service provided on-time: Core Bus	82%	81%	81%	85%	77%	82%	84%
Baltimore Metro	97%	96%	95%	96%	96%	96%	96%
Light Rail	97%	96%	97%	98%	96%	98%	98%
MARC	93%	92%	92%	94%	91%	95%	95%
Mobility paratransit and Taxi Access	89%	91%	88%	92%	93%	92%	92%
Average Mobility paratransit phone hold time in minutes	3.13	4.04	4.71	0.55	1.20	1.00	1.00

# Department of Transportation

**Obj 3.10** Minimize increases in operating cost per passenger.

**Obj 3.11** Maximize passenger trips per revenue mile.

**Obj 3.12** Optimize a farebox recovery ratio for Bus, Light Rail, Metro and MARC (Maryland Transportation Article §7-208).

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
Operating cost per revenue vehicle mile: Core Bus	\$11.85	\$13.30	\$13.64	\$13.55	\$13.68	\$13.82	\$13.96
Metro	\$10.12	\$11.18	\$11.25	\$10.56	\$10.67	\$10.78	\$10.89
Light Rail	\$11.60	\$12.98	\$15.11	\$13.82	\$13.96	\$14.10	\$14.24
Mobility Paratransit	\$6.06	\$5.14	\$5.16	\$4.57	\$4.98	\$5.42	\$5.47
MARC	\$17.56	\$22.30	\$22.70	\$22.73	\$23.63	\$24.56	\$24.81
Contracted Commuter Bus to Baltimore and Washington	\$9.95	\$10.02	\$9.32	\$8.91	\$9.00	\$9.08	\$9.17
Taxi Access	\$5.37	\$5.27	\$6.05	\$4.95	\$4.54	\$4.16	\$4.20
All Modes	\$10.57	\$11.37	\$11.45	\$10.92	\$11.13	\$11.35	\$11.46
Operating cost per passenger trip: Core Bus	\$3.48	\$3.52	\$3.48	\$3.61	\$3.67	\$3.78	\$3.82
Metro	\$3.40	\$3.86	\$4.06	\$4.33	\$4.56	\$4.97	\$5.02
Light Rail	\$4.37	\$5.32	\$5.85	\$5.86	\$6.20	\$6.66	\$6.73
Mobility Paratransit	\$51.10	\$42.57	\$42.61	\$39.63	\$40.94	\$43.17	\$43.61
MARC	\$13.42	\$15.57	\$15.39	\$16.19	\$16.63	\$17.13	\$17.30
Contracted Commuter Bus to Baltimore and Washington	\$12.76	\$13.49	\$13.65	\$14.25	\$12.76	\$12.86	\$12.99
Taxi Access	\$22.88	\$21.25	\$24.65	\$20.36	\$20.27	\$19.63	\$19.83
Passenger trips per revenue vehicle mile: Core Bus	3.40	3.80	3.92	3.80	3.73	3.65	3.80
Metro	3.00	2.90	2.77	2.44	2.34	2.17	2.40
Light Rail	2.66	2.44	2.59	2.37	2.25	2.12	2.3
MARC	1.30	1.43	1.47	1.4	1.42	1.43	1.4
Contracted Commuter Bus to Baltimore and Washington	0.80	0.70	0.68	0.62	0.71	0.71	0.68
All Modes	2.60	2.78	2.82	2.60	2.62	2.56	2.60
Farebox recovery ratio: Core Bus & Contracted Commuter Bus	30%	28%	28%	30%	27%	27%	28%
Metro	26%	24%	21%	23%	21%	20%	21%
Light Rail	16%	16%	16%	18%	17%	16%	17%
Baltimore area services (without Mobility paratransit)	27%	28%	25%	27%	25%	24%	25%
Washington Contracted Commuter Bus	25%	33%	30%	34%	37%	37%	35%
MARC	55%	50%	44%	44%	47%	47%	45%

# Department of Transportation

**Goal 4. Community Vitality: Coordinate transportation investments and land use planning to support the environmental, social and economic sustainability of Maryland's existing communities and planned growth areas; enhance transportation networks and choices to improve mobility and accessibility, and to better integrate with land use; and increase and enhance transportation connections to move people and goods within and between activity centers.**

**Obj. 4.1** Provide grants to operate the Washington Metropolitan Area Transit Authority's (WMATA) Metrobus and Metrorail systems in Maryland.

<b>Performance Measures</b>	<b>2013 Act.</b>	<b>2014 Act.</b>	<b>2015 Act.</b>	<b>2016 Act.</b>	<b>2017 Act.</b>	<b>2018 Est.</b>	<b>2019 Est.</b>
<sup>5</sup> WMATA revenue vehicle miles (millions): Metrorail	75.885	74.079	88.594	97.766	96.889	86.780	86.780
<sup>5</sup> Metrobus	39.177	39.159	39.617	38.877	38.407	37.675	37.675
Total	115.062	113.238	128.211	136.643	135.296	124.455	124.455
WMATA passengers per revenue vehicle mile: Metrorail	2.800	2.800	2.330	1.957	1.827	2.057	2.078
Metrobus	3.400	3.400	3.355	3.280	3.170	3.105	3.136
WMATA annual ridership (millions): Metrorail (linked trips)	208.969	204.067	206.396	191.348	176.972	178.505	180.290
Metrobus (unlinked trips)	132.065	134.408	132.902	127.432	121.732	116.968	118.137
MetroAccess (completed trips)	2.033	2.126	2.238	2.281	2.368	2.400	2.472
Total	343.067	340.601	341.500	321.060	301.072	297.873	300.899
WMATA annual ridership Maryland only (millions): Metrorail (linked trips)	77.444	75.619	76.482	68.251	63.124	63.670	64.307
Metrobus (unlinked trips)	44.625	44.354	44.911	41.960	40.083	38.514	38.899
MetroAccess (completed trips)	1.208	1.270	1.360	1.437	1.501	1.521	1.566
Total	123.277	121.243	122.800	111.648	104.707	103.706	104.773
<sup>2</sup> WMATA operating cost per revenue vehicle mile: Metrorail	\$11.98	\$12.86	\$11.11	\$10.25	\$9.49	\$11.33	\$12.41
<sup>2</sup> Metrobus	\$14.09	\$14.46	\$15.69	\$15.19	\$15.63	\$18.31	\$18.95
<sup>2</sup> WMATA farebox recovery ratio: Metrorail	67%	62%	64%	57%	57%	55%	50%
<sup>2</sup> Metrobus	25%	25%	23%	24%	21%	21%	21%
<sup>2</sup> MetroAccess	8%	7%	8%	8%	8%	8%	8%
<sup>2</sup> WMATA systemwide	48%	46%	46%	42%	40%	39%	37%
<sup>2</sup> WMATA operating cost per passenger trip: Metrorail	\$4.35	\$4.67	\$4.77	\$5.24	\$5.19	\$5.51	\$5.97
<sup>2</sup> Metrobus	\$4.18	\$4.21	\$4.68	\$4.64	\$4.93	\$5.90	\$6.04
<sup>2</sup> MetroAccess	\$50.78	\$49.61	\$50.34	\$50.94	\$52.59	\$50.22	\$51.18

# Department of Transportation

**Goal 5. Environmental Stewardship:** Limit the impacts of transportation on Maryland’s natural environment through avoidance, minimization and mitigation; employ resource protection and conservation practices in project development, construction, operations, and maintenance of transportation assets; implement transportation initiatives to mitigate the impacts of climate change and improve air quality; and support broader efforts to improve the health of the Chesapeake Bay, protect wildlife, conserve energy, and address the impacts of climate change.

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 6. Economic Prosperity:** Improve the movement of freight and support growth in the flow of goods within and through Maryland; and facilitate opportunities for growth in jobs and business across the State.

**Obj. 6.1** Total BWI Marshall Airport revenue will exceed total expenses.

**Obj. 6.2** BWI Marshall Airport's annual airline cost per enplaned passenger (CPE) will be below the CPE for comparable airports.

**Obj. 6.3** Maintain average number of domestic and international nonstop markets served at or above 70 per year.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
Percent revenue over operating expenses	44.50%	20.68%	32.12%	35.08%	42.30%	36.94%	37.86%
<sup>5</sup> Comparable airports CPE mean amount	17.38	16.86	16.99	16.1	18.04	18.02	18.03
BWI Marshall Airport CPE	9.5	9.82	9.86	9.51	9.34	9.27	9.09
<sup>2</sup> Number of nonstop markets served	73	74	77	79	83	83	83
<sup>2</sup> Total passengers at BWI Marshall Airport (millions)	22.498	22.313	23.824	25.123	25.939	26.499	27.064
<sup>2</sup> Annual BWI Marshall Airport passenger growth rate	-0.80%	-0.80%	6.77%	5.45%	3.25%	2.16%	2.13%

# Department of Transportation

**Obj. 6.4** Grow Roll-On/Roll-Off volumes to maintain standing as the largest East Coast port.

**Obj. 6.5** Grow automobile volumes to maintain standing as the largest East Coast port.

**Obj. 6.6** Maintain standing as the largest imported forest products port on the East Coast.

**Obj. 6.7** Grow container volume at an average annual rate greater than 3 percent per year.

**Obj. 6.8** Maintain the number of international cruises and port-calls to and from the Cruise Maryland Terminal.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
MPA RoRo tonnage (thousands)	950	880	828	740	684	700	720
MPA Auto tonnage (thousands)	1,027	1,135	1,130	1,099	1,054	1,080	1,100
MPA imported forest products tonnage (thousands)	915	904	672	709	736	675	675
Containers (Loaded TEUs) (thousands)	553	568	609	648	683	725	750
Average truck turn-around time per Box at Seagirt	29.5	28.9	28.4	30.7	33.8	30.0	30.0
International cruises using MPA's terminal	93	99	75	94	86	95	97
Ports of Call	7	5	8	8	10	13	6
Cruise passengers, embarking and debarking MPA's terminal	454,529	452,522	349,961	429,000	386,000	420,000	429,000

**Obj. 6.9** Reduce incident congestion delay to achieve a user cost savings of at least \$1 billion annually.

Performance Measures	2013 Act.	2014 Act.	2015 Act.	2016 Act.	2017 Act.	2018 Est.	2019 Est.
<sup>2</sup> Number of patrol hours logged	71,472	90,873	97,023	101,061	101,100	101,100	101,100
<sup>2</sup> Total user cost savings for the traveling public including commercial traffic due to incident management (billions)	\$1.16	\$1.26	\$1.40	\$1.50	\$1.50	\$1.50	\$1.50
<sup>2</sup> Total reduction in incident congestion delay (million vehicle-hours)	32.7	36.3	39.2	43.6	44.0	44.0	44.0
<sup>2</sup> Percent of vehicle miles travelled (VMT) in congested conditions on freeways/expressways in Maryland during the evening peak hour	22%	24%	27%	26%	27%	27%	27%
<sup>2</sup> Percent of VMT in congested conditions on arterials in Maryland during the evening peak hour	16%	15%	16%	16%	16%	16%	16%

**NOTES**

<sup>1</sup> 2016 is preliminary and subject to change. 2017 is not an actual number nor an estimate. "Estimates" are derived from the Strategic Highway Safety Plan (SHSP) and are not estimations/projections but rather targets set using an exponential trend line for an overall reduction by 2020 with yearly interim targets based on five-year rolling averages.

<sup>2</sup> 2017 data is estimated because it is reported on a calendar year basis.

<sup>3</sup> 2016 is preliminary and subject to change and 2017 data are estimated. Targets (2017-2019 data) are set using Toward Zero Deaths methodology set forth in the 2016-2020 SHSP.



# Department of Transportation

## NOTES

---

<sup>4</sup> Data is calculated from a variety of sources in the SHSP and not just the data points presented in the Managing for Results Strategic Plan.

<sup>5</sup> 2017 data is estimated at this time.