



# Goal Provide Better Transportation Choices and Connections

Improve transportation connections to support alternative transportation options for the movement of people and goods

## OBJECTIVES:

- Enhance, through statewide, regional, and local coordination, transportation networks to improve mobility and accessibility
- Increase and enhance multimodal connections to improve movement of people and goods within and between activity centers
- Inform and educate customers on transportation options and benefits

A goal for MDOT is to provide infrastructure, programs, and policies to maximize residents' travel choices. Maryland invests strategically in multimodal transportation projects to improve connectivity, reliability, safety, and access to the transportation network. The continued construction of the Purple Line, a 16-mile light rail corridor, the upcoming completion of the Maryland State Freight and Rail Plans, and ongoing outreach through partners, as well as the Commuter Choice Maryland program are ensuring that Marylanders have a plethora of travel options and current information about how to use these services.

While transit ridership is still below pre-pandemic levels, MDOT and regional stakeholders have implemented innovative measures to improve the rider experience and entice people back onto public transit. Maryland prioritized incentives and flexible fare options that provide access to public transit and reward customers for taking alternatives to driving alone. For instance, MDOT expanded incenTrip, an application created in partnership with the University of Maryland, which leverages behavior change science to reduce peak period drive alone trips. This statewide program acts as a congestion mitigation measure. All commuters can download the incenTrip application and redeem points for financial rewards when they choose alternative modes of travel instead of driving alone during peak travel times. Additionally, recognizing changing travel patterns, MDOT MTA launched the CharmFlex pass in August 2021 to better accommodate workers and other travelers who want to continue to use transit, but whose schedules may have changed. CharmFlex passes are 3- and 10-day passes within the CharmPass app that can be used on non-consecutive days, on Local Bus, Light Rail, Metro Subway, Commuter Bus, and MARC Train.

In early 2022, the Washington Metropolitan Area Transit Authority (WMATA) began a redesign of its Metrobus network that offers bus service into Montgomery County and Prince George's County. This project will include a robust equity analysis to ensure bus service meets the needs of all users and has the potential to improve access to transit of residents in those two counties significantly.

With a focus on completing and improving sidewalks, and creating a safe bicycle network, Maryland is committed to be a more walk- and bike-friendly state. In 2022, Maryland was able to fund more than \$122 million for bicycle- and pedestrian-related projects. These included more than \$14.7 million for retrofitting sidewalks and awarded \$2.6 million to projects through the Kim Lamphier Bikeways Network program.

Increasing access to transit by offering more travel options and adapting services to customers' changing travel needs, as well as educating customers about available commuter benefits, is helping Marylanders integrate daily trip planning with available options. In MDOT's 2021 annual survey of Perceptions of Multimodal Connectivity, 86% of respondents replied that they are "very satisfied" or "satisfied" with the range of transportation options MDOT offers.

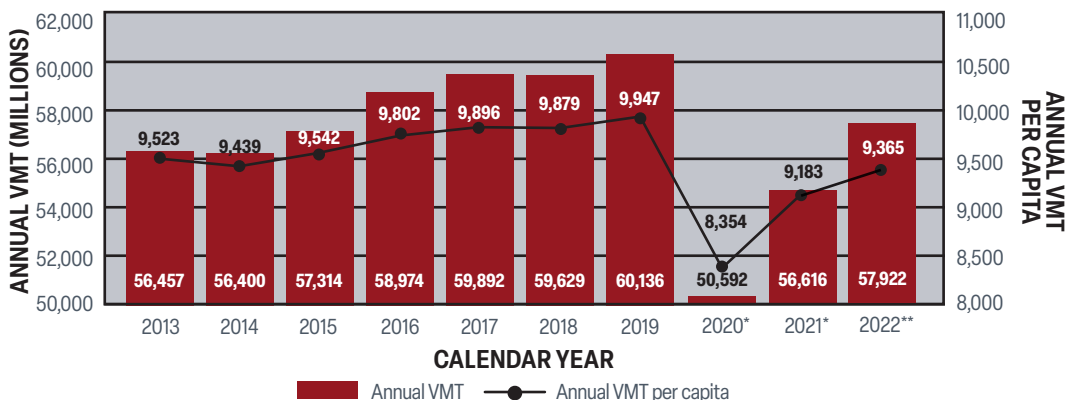


**OBJECTIVE:** Enhance, through statewide, regional, and local coordination, transportation networks to improve mobility and accessibility

## TOTAL VEHICLE MILES TRAVELED (VMT) AND VMT PER CAPITA



VMT refers to the total number of miles traveled on the roadways by passenger vehicles and freight vehicles. This figure is used to track and measure many important transportation metrics such as safety, incidents, congestion, mobility, and emissions. Maryland's population is growing steadily and, while population numbers fluctuate in some areas of the state, overall we can expect increased economic activity, changes in land use, and increased demand for existing transportation infrastructure. As the state's population grows, we can expect an increase in more trips and longer trips as well as more VMT. An increase in VMT usually leads to more congestion, emissions, and impacts on air quality. By addressing factors such as mobility, access to transportation, more frequent bus service, and improved bike facilities, MDOT can continue to work toward reducing VMT.



\*2020 and 2021 data have been revised from previous report.

\*\*2022 data are preliminary and subject to change.

### WHY DID PERFORMANCE CHANGE?

- Annual VMT increased by 2.3% and annual VMT per capita increased by 2% from 2021 to 2022 as Marylanders started to drive more toward the tail end of the COVID-19 pandemic

### WHAT ARE FUTURE PERFORMANCE STRATEGIES?

- Continue promoting Transportation Demand Management (TDM) programs, such as Commuter Choice Maryland and the incenTrip mobile application, to raise awareness of transportation options and help Marylanders take more trips via transit, biking, and walking

## NUMBER OF DIRECTIONAL MILES IMPROVED FOR BICYCLE ACCESS/LEVEL OF TRAFFIC STRESS (LTS) ON ROADWAY MILES IN MARYLAND



Last year, MDOT transitioned from using the Bicycle Level of Comfort (BLOC) to using the LTS for measuring the bike-ability of the roadway network. This transition is in coordination with the implementation of MDOT SHA's Context Driven Guide and other national and departmental initiatives. LTS is preferred over BLOC as LTS requires fewer variables to calculate, including presence and type of bicycle facility, speed limit, number of through lanes/traffic volume, and on-street parking presence. The chart below describes the LTS score in relation to the target bicycling audience and the corresponding bicycle facility on which it would travel.

LTS	TARGET AUDIENCE	BICYCLE FACILITY TYPES
0	All ages and abilities	A rail-trail, shared-use path
1	Almost everyone	Protected bikeways, sidepaths
2	Interested, but concerned	Bike lanes, bike boulevards
3	Enthusied and confident	Bike lanes, shared lanes, shoulders
4	Strong and fearless	No bike facility or on arterial road-ways
5	Bike Access Prohibited	Bicycle access is prohibited by managing roadway agency

As MDOT continues to develop an LTS baseline, LTS roadway goals will be developed in conjunction with the Context Driven Guide and the Pedestrian Safety Action Plan (PSAP).

### WHY DID PERFORMANCE CHANGE?

- MDOT transitioned from BLOC to LTS to reflect more accurately conditions experienced by people riding bicycles; with more accurate measures, MDOT can plan more inviting bicycle facilities that attract more riders
- Invested \$1.7 million in FY 2022 for design and construction of dedicated bicycle retrofit projects, including the construction of the US 1 Rhode Island Trolley Trail project in Hyattsville and design for bicycle and pedestrian improvements on MD 450 around the Naval Academy in Annapolis, Maryland
- Collaborated with stakeholders including bicycle and pedestrian advocacy organizations, local governments, and agencies to continue the implementation of MDOT SHA's Context Driver Guide

### WHAT ARE FUTURE PERFORMANCE STRATEGIES?

- Deliver bicycle infrastructure projects that reduce conflicts between bikes and vehicles, improve safety, and fill gaps in the bicycle network
- Disburse \$16.8 million in grants to municipalities for bicycle, trail, and pedestrian projects
- MDOT will continue to measure LTS and develop bicycle facility recommendations based on Context Driven solutions

## MDOT MTA AND WMATA RIDERSHIP

Ridership is a key indicator of transit usage and health. Ridership is not only helpful to measure at a systemwide level, but also by transit mode and routes. Ridership is one primary indicator transit agencies have for productivity of their service. MDOT MTA provides service across greater Baltimore with some regional services connecting to Washington, D.C. WMATA provides transit service within the Washington, D.C. region, and into Maryland and Virginia. These agencies provide many types of transit service: paratransit, bus, commuter bus, streetcar, light rail, metro subway, and commuter rail.

After a significant drop in transit ridership during the COVID-19 pandemic, ridership started to rebound slowly. In 2022, unlinked passenger trips (UPT)<sup>1</sup> across all MDOT MTA services—direct—operated and contracted services and lots—increased as compared to 2021. WMATA and MDOT MTA are working hard to adjust to new travel patterns, offer incentives to entice riders back on transit, and maintain a safe rider experience. In 2022, WMATA began a Bus Network Redesign project to adjust service and increase more equitable access to its Metrobus service. This project has the potential to have a positive effect on bus reliability and access to transit for Maryland residents in for Maryland residents in Montgomery County and Prince George's County.

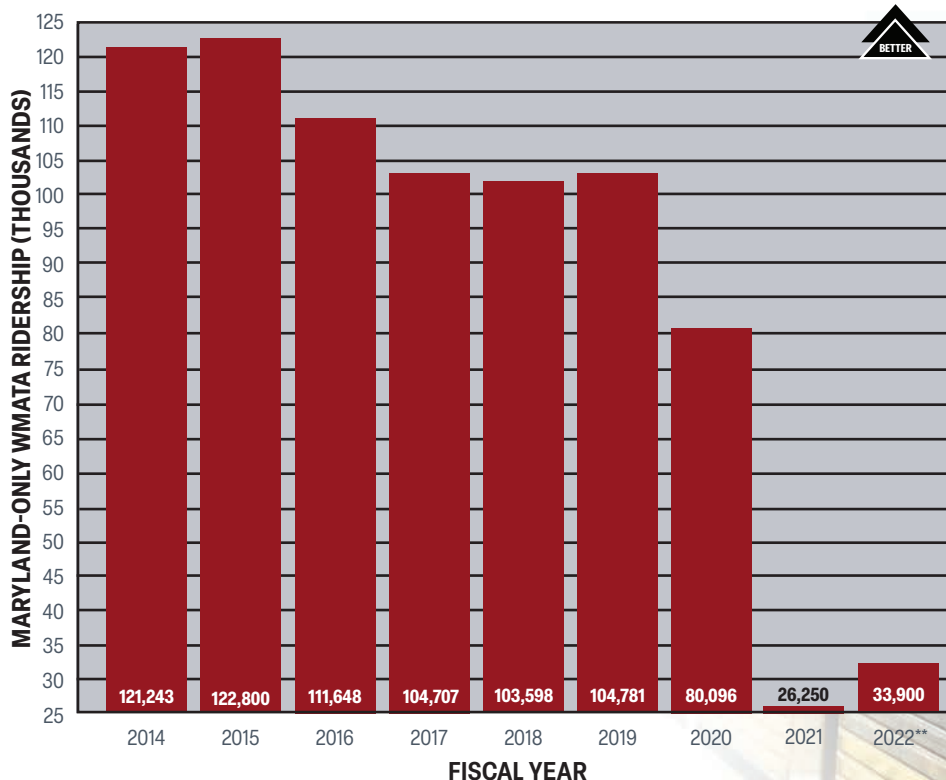
FISCAL YEAR	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022**
<b>TRANSIT RIDERSHIP—MDOT MTA DIRECT-OPERATED SERVICES (THOUSANDS)</b>										
<b>Local Bus</b>	80,071	75,780	78,697	75,619	69,587	63,730	63,989	55,439	35,370	40,163
<b>Baltimore Metro</b>	15,208	14,632	13,901	12,222	10,960	8,738	7,275	5,864	1,616*	2,252
<b>Light Rail</b>	8,647	8,106	7,657	7,431	7,414	7,401	6,966	4,682	2,454*	2,910
<b>TRANSIT RIDERSHIP—CONTRACTED SERVICES AND LOTS (THOUSANDS)</b>										
<b>MARC</b>	9,062	9,168	9,246	8,962	9,185	9,322	9,191	6,677	846*	2,271
<b>Contracted Commuter Bus</b>	4,187	4,017	4,034	3,928	3,866	3,841	3,623	2,619	431*	809
<b>Mobility Paratransit &amp; Taxi Access</b>	2,084	2,289	2,495	2,555*	2,745*	2,941	2,974	2,492	1,576*	1,831
<b>Local Operating Transit System (LOTS)</b>	40,281	42,500	39,441	38,476	39,818	41,096	32,866*	25,412	14,977*	16,538

<sup>1</sup> Unlinked Passenger Trips (UPT): The number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

\*Data have been revised from previous report.

\*\*2022 data are preliminary and subject to change.

### MARYLAND-ONLY WMATA ANNUAL RIDERSHIP (THOUSANDS)\*

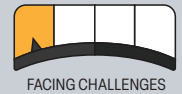


\*2019, 2020 and 2021 data have been revised from previous report.

\*\*2022 data is preliminary and subject to change.

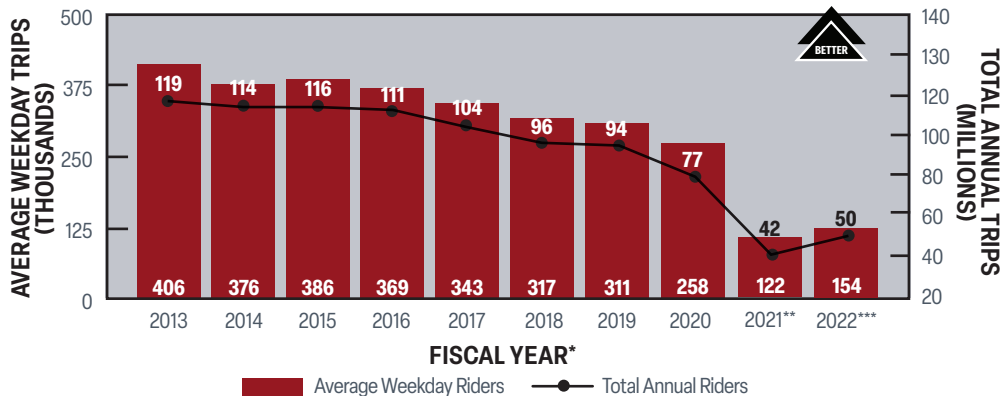


## MDOT MTA TRANSIT RIDERSHIP



Weekday transit usage demonstrates progress toward better mobility for our customers and contributes to statewide goals.

### AVERAGE WEEKDAY TRANSIT TRIPS (THOUSANDS) AND TOTAL ANNUAL TRANSIT TRIPS (MILLIONS)



\*To maintain the integrity of historical comparisons of bus ridership, MDOT MTA used ridership estimate differences between the new Automated Passenger Counter (APC) system and previous systems to adjust previous bus ridership estimates and allow for comparable data for fiscal years.

\*\*2021 data have been revised from previous report.

\*\*\*2022 data are preliminary and subject to change.

### WHY DID PERFORMANCE CHANGE?

- Real-time bus crowding information has been added to Transit App for all LocalLink, CityLink, Light Rail, MARC, and Express BusLink services to give riders transparency and choice in the trip-planning process
- MDOT MTA launched the CharmFlex pass in August 2021 to better accommodate workers and other travelers who want to continue to use transit, but whose schedules may have changed

### WHAT ARE FUTURE PERFORMANCE STRATEGIES?

- MDOT MTA was awarded more than \$7 million through the USDOT competitive All Stations Accessibility Program (ASAP) to develop plans for the future renovation of the Martin Airport station on its Penn commuter rail line to make it safer and fully accessible
- Completing and rolling out the Future Fare System project to make paying for transit easier and more convenient for customers in Baltimore and the surrounding areas



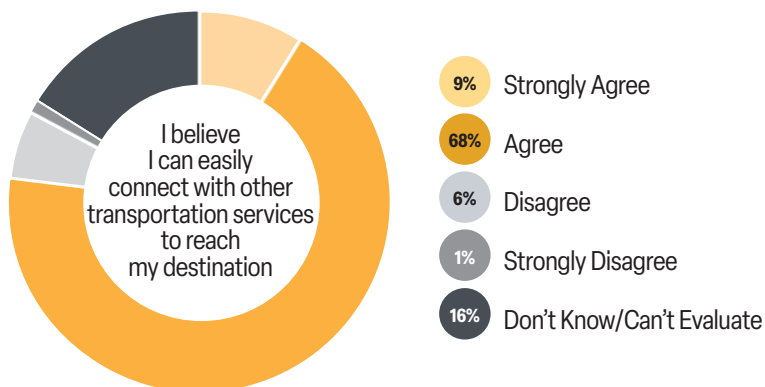
**OBJECTIVE:** Increase and enhance multimodal connections to improve movement of people and goods within and between activity centers

## MDOT SURVEY—PERCEPTIONS OF MULTIMODAL CONNECTIVITY\*



This MDOT survey measures the public's perception of connectivity, highlighting where MDOT and the TBUs have succeeded and where improvements are needed either in infrastructure or outreach. MDOT customers are surveyed annually by the University of Baltimore, to rate their satisfaction with the range of options they have such as roads, buses, trains, and other facilities and services. More than 75% of respondents agreed or strongly agreed with the statement "I believe I can easily connect with other transportation services to reach my destination," and 86% were either satisfied or very satisfied with the transportation options.

### MDOT SURVEY QUESTION:



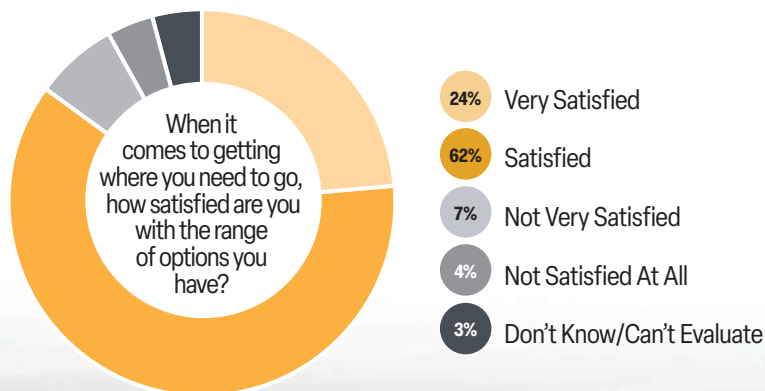
### WHY DID PERFORMANCE CHANGE?

- ✓ Leveraged "Beyond the Bus Stop" federal grant funds to provide real-time digital signage pilot at three major transit hubs
- ✓ Real-time data allows riders to view live stations locations and arrival predictions on Transit App and Google Maps

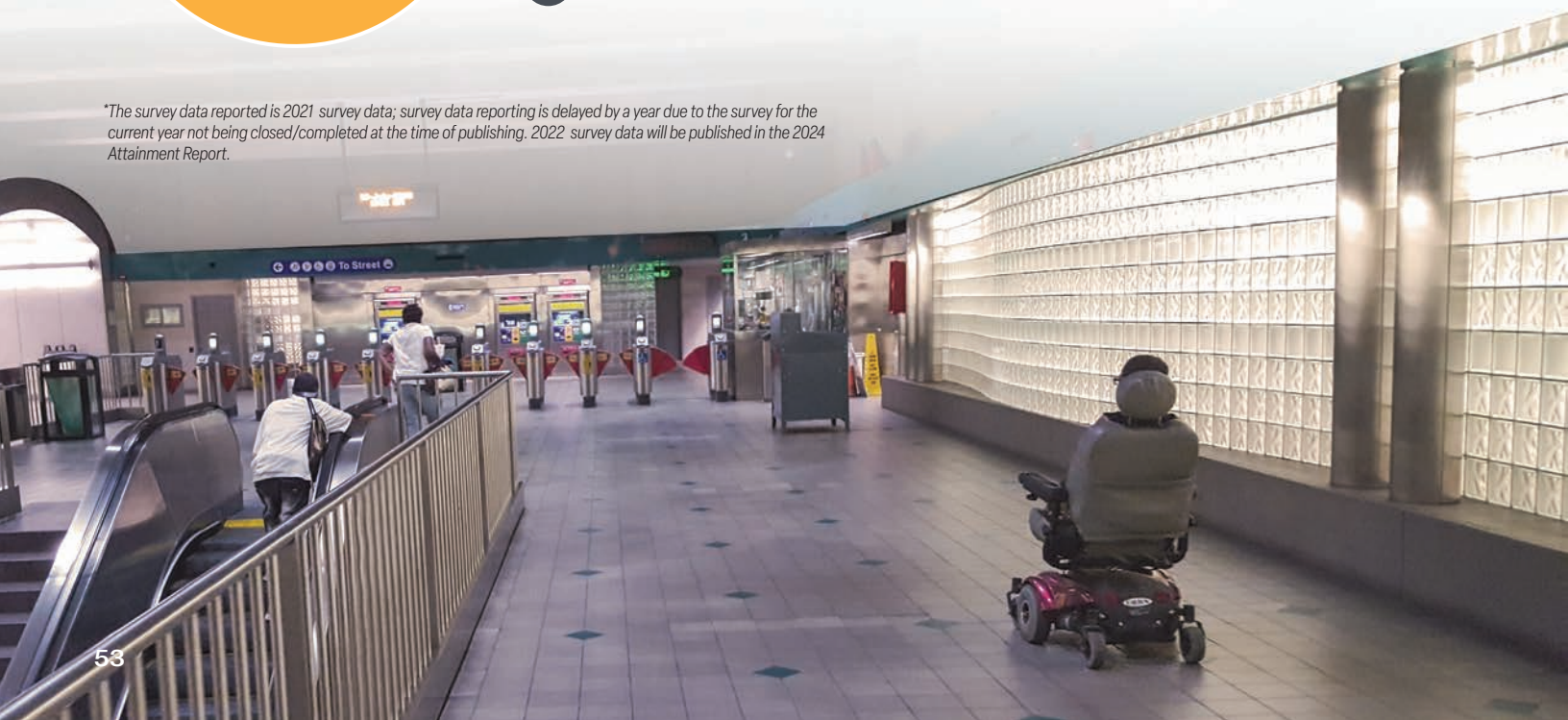
### WHAT ARE FUTURE PERFORMANCE STRATEGIES?

- ✓ Implementing MDOT MTA's Statewide Transit Plan to create a better-connected transit system, improve access to transit, and advance equitable and innovative mobility
- ✓ Continue soliciting feedback from the public and identifying areas for improvement

### MDOT SURVEY QUESTION:



\*The survey data reported is 2021 survey data; survey data reporting is delayed by a year due to the survey for the current year not being closed/completed at the time of publishing. 2022 survey data will be published in the 2024 Attainment Report.



## ACCESS TO TRANSIT AND BICYCLE ACCESS TO TRANSIT\*



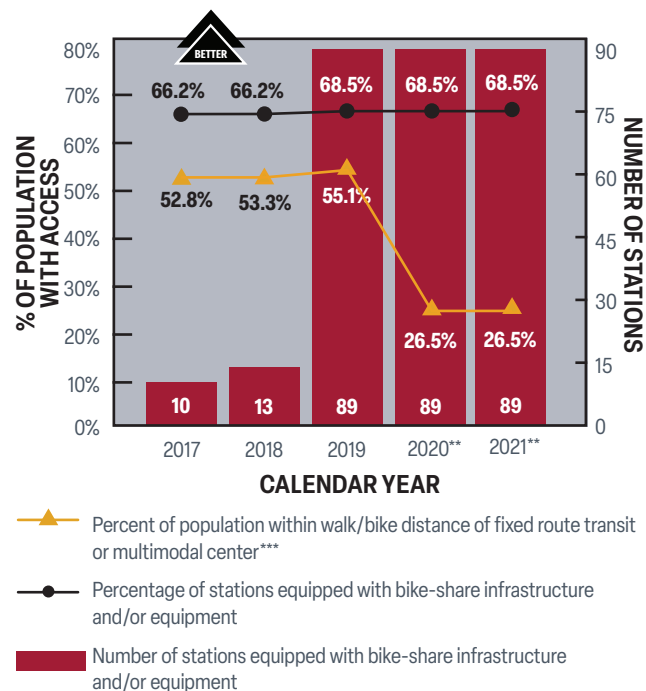
Access to transit measures how many Maryland customers are within a quarter mile of a fixed-route transit station, which is an estimate of how many people can walk or bike to a fixed-route transit or multimodal transit center. Bicycle access to transit measures how many Maryland customers can bike to a fixed-route transit (such as Light Rail or MARC) or a multimodal transit center.

## WHY DID PERFORMANCE CHANGE?

- Increasing access to transit remains an important measure and progress is slow as it takes time to add new bicycle facilities and sidewalks
- As of July 1, 2022, commuter benefit offerings expanded to include telework, carpool, active transportation, and multimodal commuter last mile connections to make access to transit easier for Marylanders
- In 2022, MDOT MTA secured a \$6 million Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant for multimodal transit station access improvements at Baltimore Penn Station including dedicated bus lanes on Charles Street, curb extensions on Charles and St. Paul streets, and bicycle and pedestrian improvements

## WHAT ARE FUTURE PERFORMANCE STRATEGIES?

- The continued construction on the 16-mile Purple Line light rail corridor to connect Montgomery and Prince George's counties will improve access and connectivity to transit
- Implement MDOT SHA's Context Driven Guidelines to ensure that bicycle facilities are safe and support multimodal needs



\*Methodology for this measure changed in 2019 to include any stations with bike racks, bike storage, and other bike-sharing facilities.

\*\*2021 data are preliminary and subject to change.

\*\*\*Data have been revised from previous reports.

**OBJECTIVE:** Inform and educate customers on transportation options and benefits

## TRANSPORTATION DEMAND MANAGEMENT (TDM) AND COMMUTE MODE SHARE



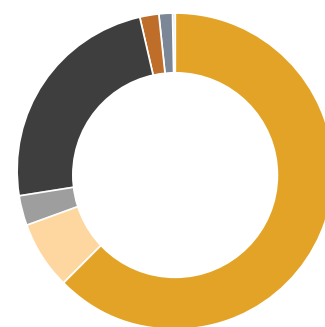
TDM strategies and policies are an impactful and cost-effective way to offset vehicle congestion and reduce VMTs by promoting alternatives to driving alone such as taking transit, carpool, vanpool, walking, biking, teleworking, Maryland Commuter Tax Credit, and Guaranteed Ride Home. Commuter Choice Maryland is MDOT's TDM program and provides options to maximize travel choices and deliver solutions that can reduce congestion, conserve energy, facilitate economic opportunity, and enhance the life of all Marylanders. In 2020, Maryland saw a significant increase in working from home as more people started to telework during the height of the COVID-19 pandemic. In 2021, working from home grew to an unprecedented 24.1% as more employers across Maryland continued offering telework policies and more employees settled into established telework routines. Commuter Choice Maryland also continues to provide resources, tips, and tools to facilitate teleworking and other TDM strategies in 2021. Visit [www.commuterchoicemaryland.com](http://www.commuterchoicemaryland.com) for more information.

	2013	2014	2015	2016	2017	2018	2019	2020*	2021**
DRIVE ALONE	73.5%	73.6%	73.6%	73.7%	73.7%	73.9%	73.9%	72.1%	62.2%
CARPOOL	10.0%	9.8%	9.8%	9.3%	9.5%	9.0%	8.9%	8.6%	7.0%
TRANSIT	8.9%	8.9%	8.9%	8.9%	9.0%	8.6%	8.4%	7.4%	3.0%
WORK AT HOME	4.2%	4.2%	4.2%	4.4%	4.2%	4.7%	5.0%	8.1%	24.0%
WALK	2.4%	2.3%	2.3%	2.4%	2.4%	2.3%	2.3%	2.1%	1.8%
OTHER***	0.8%	0.9%	0.9%	1.0%	0.9%	1.1%	1.2%	1.3%	1.8%
BICYCLE	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%

\*2020 data in previous report was unavailable due to the pandemic.

\*\*2021 American Communities Survey (ACS, U.S. Census) uses ACS 1-year tables and should not be compared with other ACS data (5-year).

\*\*\*Other includes motorcycle, taxicab, and "other" in the ACS data.





## ESTIMATED ANNUAL REGIONAL VMT REDUCTION THROUGH TERMS\*



PROGRAM	PROGRAM DESCRIPTION	DAILY REDUCTION IN VEHICLE TRIPS*	DAILY REDUCTION IN VMT*
<b>Commuter Connections Transportation Emissions Reduction Measures (TERMS)**</b>			
Guaranteed Ride Home	Provides transit users or carpoolers up to four rides home per year in a taxi or rental car in the event of an unexpected personal or family emergency	5,200	147,371
Employer Outreach	Supports marketing efforts to increase employee awareness and use of alternatives to driving alone to work every day	85,845	1,489,165
Integrated Rideshare	Promotes other alternative transportation services to employers and to the general public. Commuter information system documentation is provided with comprehensive commute information, to include regional TDM software updates, transit, telework, Park-and-Ride, and interactive mapping	1,363	40,541
Commuter Operations and Ridesharing Center	Updates and maintains the Commuter Connections database for ride-matching services and provides information on carpooling, vanpooling, telecommuting, bicycling, and walking for the Baltimore-Washington Metropolitan Region	16,281	375,135
Telework Assistance	Provides information to employers in Maryland on the benefits of telecommuting and assists in setting up new or expanded telework programs for employers	13,636	308,001
Mass Marketing	Promotes and communicates the benefits of alternative commute methods to single-occupant vehicle commuters through the media and other wide-reach communications	14,031	277,511
<b>MDOT MTA Transportation Emission Reduction Measures (TERMS)</b>			
MDOT MTA College Pass	Offers a subsidized monthly transit pass to full- or part-time students enrolled in Greater Baltimore Metropolitan Area colleges or universities	1,247	9,847
Transit Store in Baltimore	Provides customer access to transit information and for purchases of transit passes. Some 15%-20% of total transit pass sales occur through this outlet	3,376	56,959
MDOT MTA and SHA Park-and-Ride***	Supports carpooling and transit ridership by providing commuter parking lots as alternatives to driving alone to daily destinations	51,845	874,629

\*The impacts shown reflect the current definitions and most recent data available for each of the measures.

\*\*The Commuter Connections program is run through the Metropolitan Washington Council of Governments. The reduction in trips and VMT for Commuter Connections reflect reductions for all of the Metro Washington region, including Maryland, District of Columbia, and Virginia.

\*\*\*MDOT MTA data is collected every five years (last updated in 2019 AR).

### WHY DID PERFORMANCE CHANGE?

- Employees' interest in telework increased substantially in the last two years, and continues to impact the population's transportation patterns
- Continued to provide information about commuter options and employ marketing strategies to restore confidence in transit and ridesharing
- Expanded incenTrip and the Maryland Commuter Tax Credit for employers to provide additional incentives to commuters and businesses; more information at [mdot.maryland.gov/incenTrip](http://mdot.maryland.gov/incenTrip)

### WHAT ARE FUTURE PERFORMANCE STRATEGIES?

- Support Maryland employers' efforts to implement commuter benefits through the Employer Partner Program and expansion of the Maryland Commuter Tax Credit; more information is available at [www.commuterchoicemaryland.com](http://www.commuterchoicemaryland.com)
- Respond to changing travel patterns by connecting Marylanders to transportation options during off-peak hours as well to meet travel demand

