GOAL: *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.

OBJECTIVES:

- Pursue capital improvements to the transportation system that will improve access to jobs and tourism and leverage economic growth opportunities
- Improve the movement of goods within and through Maryland by investing in intermodal connections, capital projects, congestion reduction operational strategies, and freight traveler information to reduce freight bottlenecks
- Strategically invest in expansion and operational improvements to reduce congestion along the multimodal transportation system

Maryland's extensive transportation system strengthens economic growth. Freight trains, cargo planes, trucks, and giant post-Panamax cargo ships transport goods throughout Maryland. Those who work in, live in, and visit Maryland use the passenger rail, buses, and highways to get to their destinations and back home. These same links in the transportation network convey billions of dollars of goods and talent within Maryland.

The FY 2021-FY 2026 CTP outlines $3.0 billion in funds set aside to improve the movement of goods. MDOT is involved in several freight planning efforts, including a recently completed Statewide Truck Parking Study, and is working on updating the State Rail Plan and the State Freight Plan. Investing in freight related projects will help improve logistical transportation for over 82,000 freight industry businesses to continue to employ about 1.5 million people and contribute $123.4 billion annually to the State's economy.

These initiatives, projects, and funds address the rapid growth in freight activities, such as the 51% increase in air and marine cargo volume because of the pandemic and increased e-commerce during stay-at-home orders. MDOT MPA continues to facilitate its record-breaking growth by investing in facility enhancements, channel maintenance, and berth rehabilitation. While passenger traffic at BWI Marshall Airport significantly declined during the pandemic, air cargo continued to grow exceeding the previous year's volume by more than 36%. Prior to the pandemic, in October 2019, the new 200,000-square-foot Midfield Cargo Building H began operations. This new facility is primarily operated by Amazon and has brought in the range of 2,000 new jobs to the region. Highway construction projects were accelerated in Spring 2020 to leverage the decreased road congestion in keeping the network in a state of good repair.

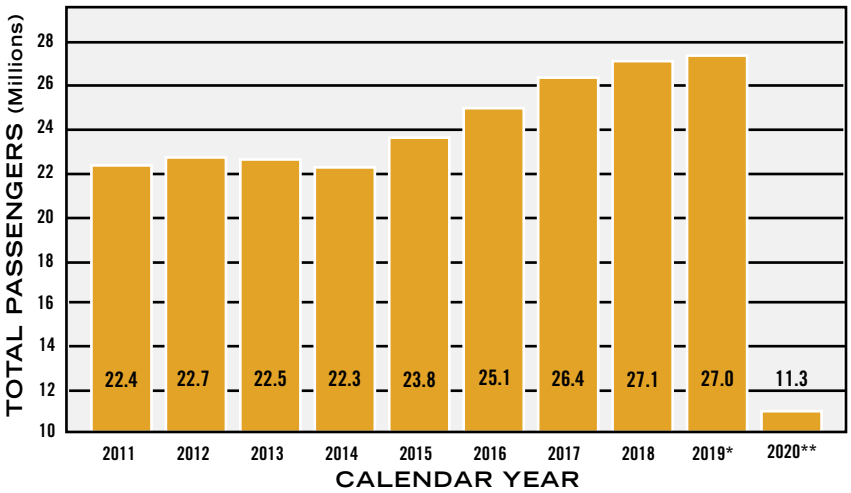
OBJECTIVE:

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

BWI MARSHALL AIRPORT TOTAL ANNUAL PASSENGERS

MAKING PROGRESS

BWI Marshall Airport is a crucial point of entry and export for cargo and people. This measure accounts for the number of annual passengers using the BWI Marshall Airport.



* 2019 data has been revised from previous report.

** 2020 data is preliminary and subject to change.

Why Did Performance Change?

- CY 2019 saw passenger counts at BWI Marshall Airport stay mainly flat; in March, the Boeing 737 MAX was grounded, and in early 2019, two carriers stopped flying to BWI Marshall Airport from Iceland
- Spirit Airlines increased its traffic 21% for the year to become the second-largest carrier at BWI Marshall Airport, and Frontier Airlines inaugurated service
- CY 2020 started well, and BWI Marshall Airport set a 12-month passenger record of 27.2 million in February 2020; however, March 2020 saw the onset of the COVID-19 pandemic; the low-point in April 2020 saw passenger traffic down 97% from April 2019, though leisure passenger travel steadily increased in the latter part of 2020

What Are Future Performance Strategies?

- General industry expectation is that it will be at least a two to three year recovery period to return to pre-COVID-19 airline activity levels
- MDOT MAA continues to work with regulators and airline partners on several initiatives aimed at restoring passenger confidence in travel safety, including expanded outreach and education, sanitization, technology, and touchless travel enhancements
- MDOT MAA continues to work with tenants and operators to provide customer service and amenities to the traveling public while promoting job retention and financial viability of our concessionaires

INTERNATIONAL CRUISES USING THE PORT OF BALTIMORE

MAKING PROGRESS

The Port of Baltimore is one of the busiest cruise ports on the eastern seaboard. This measure illustrates cruise-related business activity departing from the Port of Baltimore to foreign destinations.

FISCAL YEAR	2011	2012	2013	2014	2015	2016	2017	2018	2019*	2020**
Number of International Cruises using MDOT MPA's Terminal	111	100	93	99	75	94	86	94	94	69

Target: Maintain two year-round cruise line operations at the Port

* 2019 data has been revised from previous report.

** 2020 data is preliminary and subject to change.

What Are Future Performance Strategies?

- The recovery timeline of the cruise industry is an unknown, however when cruising resumes, both cruise lines have scheduled sailings from Baltimore through 2023

Why Did Performance Change?

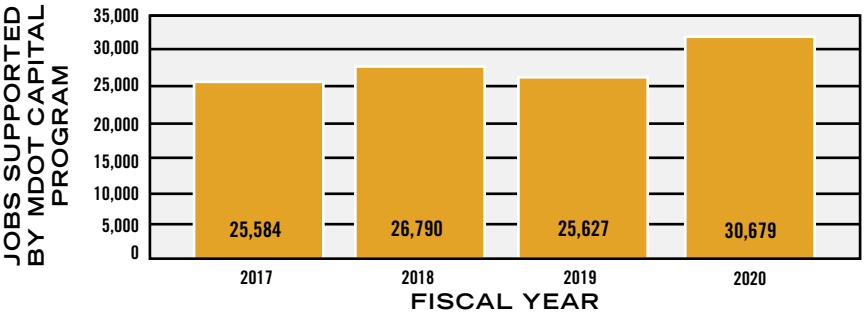
- The entire cruise industry was shut down in March due to COVID-19 and as a result, the Port only welcomed 69 home port cruises compared to 94 in FY 2019 and FY 2018
- Port of Baltimore homeport cruise lines, Carnival and Royal Caribbean, both had their last debark-only cruise in March 2020, and a date for the resumption of cruising is unknown at this time
- Prior to COVID-19, both cruise lines reported their ships sailing from Baltimore exceeded "fun capacity," meaning total passengers equaled more than two people per cabin

JOBS SUPPORTED BY MDOT CAPITAL PROGRAM*

MAKING PROGRESS

Annually, the CTP lists MDOT's planned investments by Transportation Business Unit (TBU). These investments drive the creation of direct construction jobs, bolster manufacturing jobs, and support businesses directly affected by the patronage of construction staff. Construction and maintenance projects support economic activity beyond the project location.

Economic return from transportation investment is based on the estimated number of jobs created as a result of MDOT investments in capital projects.



Why Did Performance Change?

- Number of jobs increased in 2020 due to a mild winter, allowing MDOT to expedite projects like the Bay Bridge
- Construction of the Purple Line and Nice/Middleton Bridge began, providing additional jobs

OBJECTIVE:

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

IMPROVING GOODS MOVEMENT: FREIGHT ORIGINATING AND TERMINATING IN MARYLAND

FREIGHT ORIGINATING AND TERMINATING IN MARYLAND*

METHOD FOR MOVING FREIGHT	TOTAL VALUE (MILLIONS)	TOTAL TONNAGE (THOUSANDS) SATISFIED
Air	$7,433	103
Other**	$60,162	6,405
Pipeline	$8,005	26,553
Rail	$13,662	35,503
Truck	$304,289	203,652
Water	$1,580	7,019
All Freight	$395,132	279,235

* Source: U.S. Department of Transportation Freight Analysis Framework (FAF4) Version 4.5.1. that was refactored using 2019 data. To report 2019 data, a 3% annual growth rate was applied. FAF generates estimates based on a base year of data. Therefore, tonnage and values represented are estimates, not exact amounts. The water tonnage data based is for 2019, based on U.S. Army Corps of Engineers reporting.

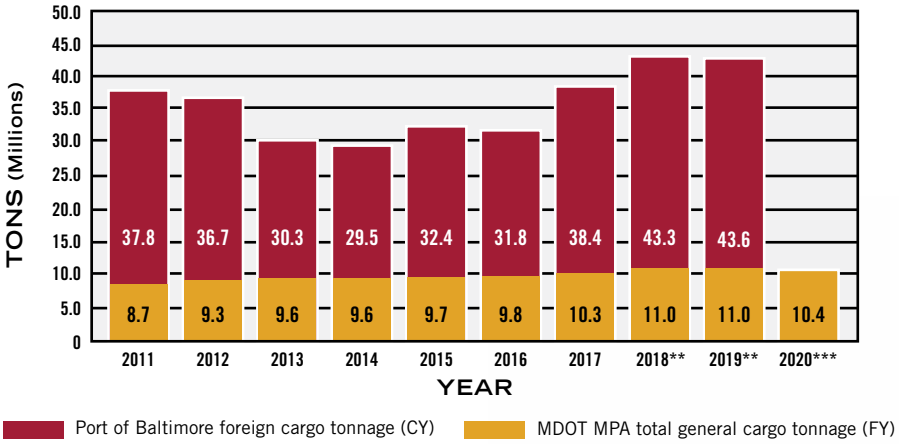
** Category "Other" includes multiple modes, mail, and other and unknown categories from data from the Freight Analysis Framework Version 4.5.1.

Maryland's location in the mid-Atlantic makes it a crucial node of goods, services, and people linking it to the rest of the nation. Maryland serves as a crossroad for key freight corridors with the I-95, I-81, and I-83 intermodal facilities. The BWI Marshall Airport is one of the nation's top cargo bearing airports with immediate access to major freight corridors, and the Port of Baltimore is one of the closest ports to mid-America markets. The State's main commodities are mining, agriculture, pharmaceuticals, manufacturing, retail trade, and health care, and Maryland's freight network supports their supply chains and those of many other commodities for the eastern seaboard and mid-western states. Facilitating efficient and safe freight movement is one of MDOT's priorities. This was important during the COVID-19 pandemic, when demand for personal protective equipment and health supplies outsized supply and e-commerce sales from quarantined consumers jumped 42% year-over-year in August, reaching $63.0 billion. In order to maintain the supply chain network to meet demand, the State cooperates with select freight partners to inform its planning and strategic investment efforts. MDOT is in compliance with the requirements of the Fixing America's Surface Transportation (FAST) Act, enabling MDOT to use federal Freight Formula Funds and apply for funding derived from the FAST Act, including Infrastructure for Rebuilding America (INFRA) and Better Utilizing Investments to Leverage Development (BUILD) grants. MDOT has sought, and will continue to seek, opportunities to apply for funding from these sources. Recently, MDOT MPA was awarded a $10.0 million BUILD Grant to provide critical flood mitigation improvements at the Dundalk Marine Terminal.

PORT OF BALTIMORE FOREIGN CARGO AND MDOT MPA GENERAL CARGO TONNAGE*

ON TRACK

Measures the amount of foreign and general cargo moving through the Port of Baltimore.*



* MDOT MPA cargo data is provided by fiscal year, but The Port information is reported using the latest full calendar year because The Port statistics combine data for public and private marine terminals that use different fiscal year reporting timeframes. Therefore, 2020 data cannot be reported until early 2021.

** 2018 and 2019 data has been revised from previous report.

*** MDOT MPA general cargo includes both foreign and domestic waterborne cargo, whereas, Port-wide data includes only foreign waterborne cargo. Port-wide data for calendar year 2020 is an estimate; fiscal year date for 2020 is not yet available.

Why Did Performance Change?

- MDOT MPA terminals handled 10.4 million tons of general cargo in FY 2020, a decrease of 5.2% from the previous year; prior to the onset of the COVID-19 outbreak, MDOT MPA terminals were on pace to match or beat last year's general cargo numbers
- In 2019, MDOT applied for and secured an INFRA grant, and committed additional MDOT funds, to address the clearance issues associated with CSX's Howard Street Tunnel which currently cannot handle double stack trains
- The Port of Baltimore remains the largest auto and roll-on/roll-off port in the U.S.

What Are Future Performance Strategies?

- Design and engineering for the Howard Street Tunnel expansion is currently underway to allow CSX and MDOT MPA to begin construction in FY 2022; the project will add double-stacked container shipping capability to and from the Port of Baltimore, which is expected to increase container volumes at the Port by 100,000 annually and create thousands of additional jobs
- Ports America Chesapeake (PAC) continues to make investments at the Seagirt Marine Terminal ensuring that the MDOT MPA can handle the large container ships; design and engineering are currently underway; the project will allow the Port to simultaneously handle two ultra large container vessels (ULCV) at Seagirt
- Design and engineering has begun on a second 50-foot berth at Seagirt Marine Terminal, and the MDOT MPA is working with the U.S. Army Corps of Engineers, Baltimore District on a feasibility study for the expansion of the Seagirt Loop Channel

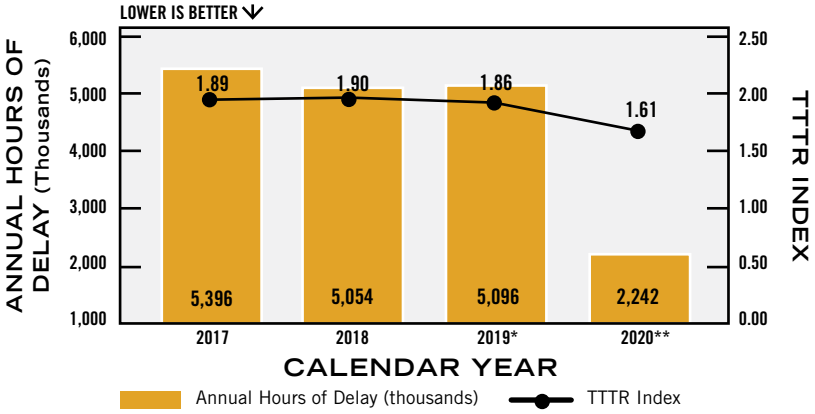
ANNUAL HOURS OF DELAY FOR TRUCKS AND TRUCK TRAVEL TIME RELIABILITY INDEX

ON TRACK

Delay and reliability can affect many things in a supply chain beyond just the truck transporting the goods. An efficient and reliable system translates to improved goods movement, which supports Maryland's businesses and economic growth positively. MDOT has been a leader in measuring freight mobility following industry tested and supported methods. Maryland's annual Mobility Report allows MDOT to see how well freight moves and to identify freight bottlenecks and track them over time. Additionally, MDOT continues to build new resources using truck probe data to understand freight mobility dynamics and the impact of delay on key Maryland supply chains.

In addition to MDOT's tracking of freight mobility, MDOT responds to the federal Moving Ahead for Progress in the 21st Century (MAP-21) and FAST Act performance measure requirements for the Truck Travel Time Reliability (TTTR) index.

The following graph shows the annual TTTR in relation to the annual hours of delay.



Target: 6,070 ($6.1 million) Thousand Hours Of Truck Delay In 2021, TTTR of 1.88 in 2021

* 2019 data has been revised from previous report.

** 2020 data is preliminary and subject to change.

Why Did Performance Change?

- In 2020, the COVID-19 pandemic resulted in significant decrease in traffic volumes on Maryland highways; in Spring of 2020, traffic volumes were down by 50% and in Summer of 2020, traffic volumes are down by about 20%, compared to 2019 volumes
- In 2020, also due to COVID-19, the annual cost of congestion decreased 50% from 2019 to 2020
- Truck vehicle miles traveled (VMT) has been down by 20% compared to 2019 conditions, these huge reductions in travel demand have resulted in fewer vehicles and less congestion compared to prior years
- In June 2020, MDOT cut the ribbon on the new I-270/Watkins Mills Interchange in Montgomery County, MD 2/4 widening in Calvert County, and in August 2020 MDOT cut the ribbon on the MD 180 widening/bridge project in Frederick County

What Are Future Performance Strategies?

- Continue active monitoring of transportation system, incident detection, and clearance and deploy road weather management strategies to restore capacity on Maryland highways
- Modernize transportation infrastructure by incorporating Intelligent Transportation System (ITS) technology and Transportation Systems Management and Operations (TSMO) strategies, including in the I-695 from I-70 to MD 43 TSMO project which aims to reduce congestion along the west and north sides of the Baltimore Beltway

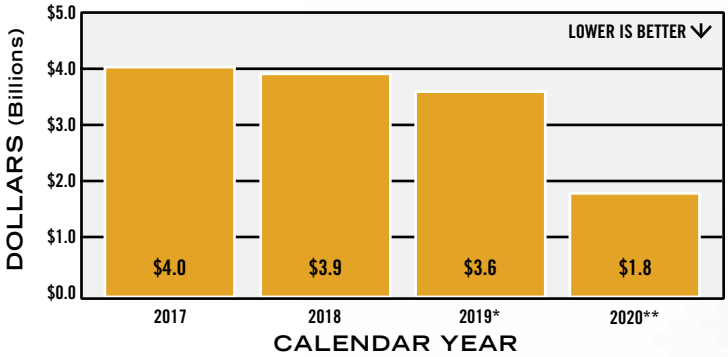
OBJECTIVE:

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

ANNUAL COST OF CONGESTION (BILLIONS) ON THE MDOT HIGHWAY NETWORK

ON TRACK

A reliable and efficient multimodal transportation system goes beyond convenience. Efficiency and reliability are important parts of economic growth, development, and quality of life. Quantifying the cost of congestion helps MDOT measure the impact of congestion beyond the federal requirement.



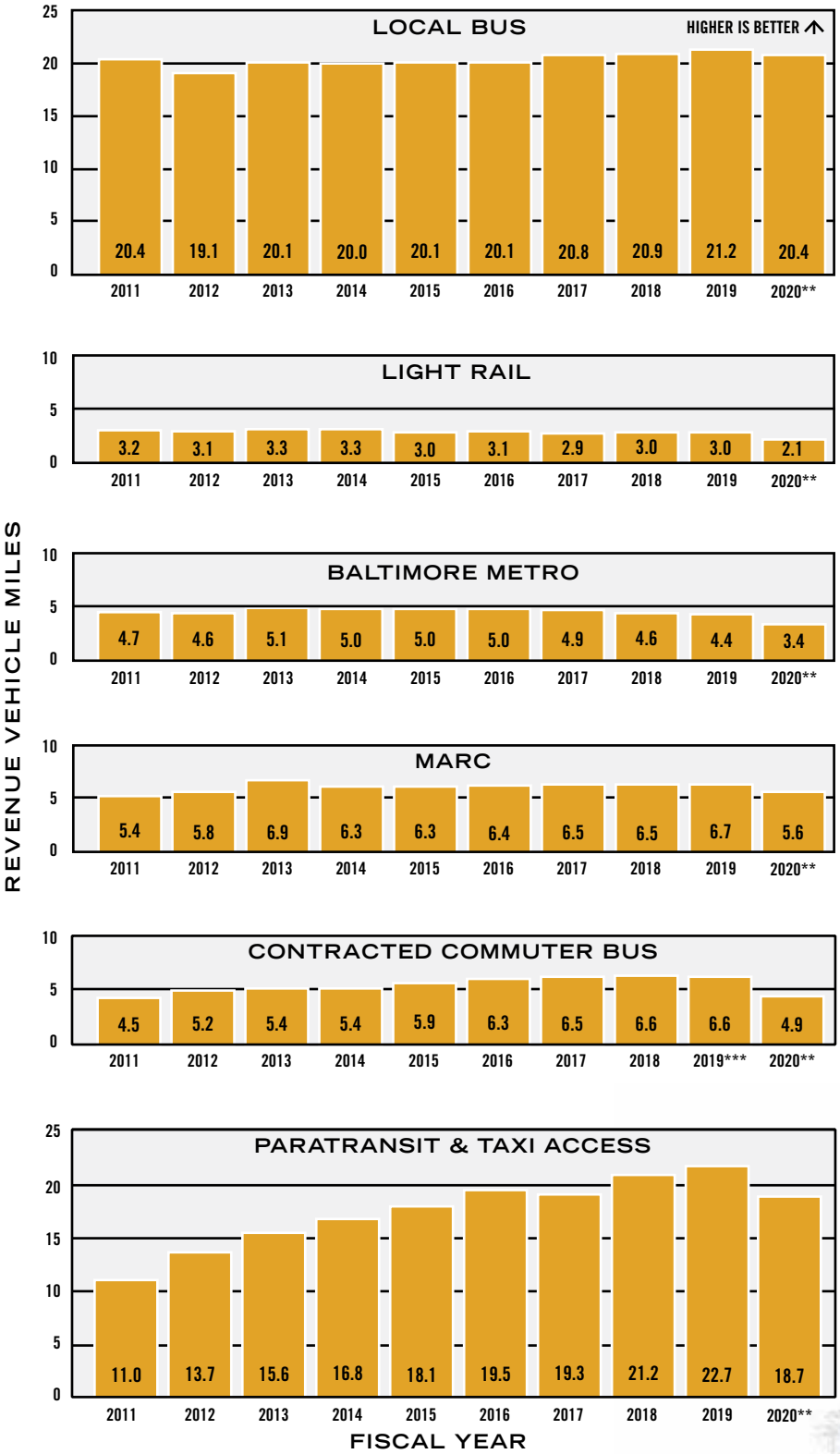
Target: $4.1 billion in 2023

* 2019 data has been revised from previous report.

** 2020 data is preliminary and subject to change.

ANNUAL REVENUE VEHICLE MILES OF TRANSIT SERVICE PROVIDED*

Revenue vehicle miles measure each mile for which a transit vehicle is in service and accepting customers. This measure indicates transit's level of service.



* All units are revenue miles (millions). Excludes Locally Operated Transit Systems (LOTS) and WMATA.

** 2020 data is preliminary, subject to change, and impacted by COVID-19.

*** 2019 data has been revised from previous report.

Why Did Performance Change?

- In FY 2020, as a result of the COVID-19 pandemic, MDOT MTA experienced a reduction in revenue vehicle miles as service was reduced
- Supplemental bus service to select Baltimore City Public Schools was established in Fall 2019, increasing service and vehicle revenue miles
- Baltimore Metro SubwayLink continued to perform scheduled track repair and maintenance, having an impact on the revenue miles but little impact on the riding public
- The second week of April, during the peak of the stay-at-home order, travel was down at an all-time low while the first week of September shows the latest return trends: MARC - was down 97% vs. 91% down in September; Contracted Commuter Bus - was down 95% vs. 88% down in September; Local Bus - was down 61% vs. 51% down in September
- During the pandemic, MDOT MTA continued to operate Core Bus and MobilityLink service and to prioritize transit service for riders, especially transit dependent households and essential workers; Core Bus saw less decline than other transit modes

What Are Future Performance Strategies?

- Throughout the COVID-19 pandemic, MDOT MTA focused on cleaning, awareness, and overall safety of employees and the public, and is repositioning services to focus on the core mission