



CMP Committee

March 4, 2025

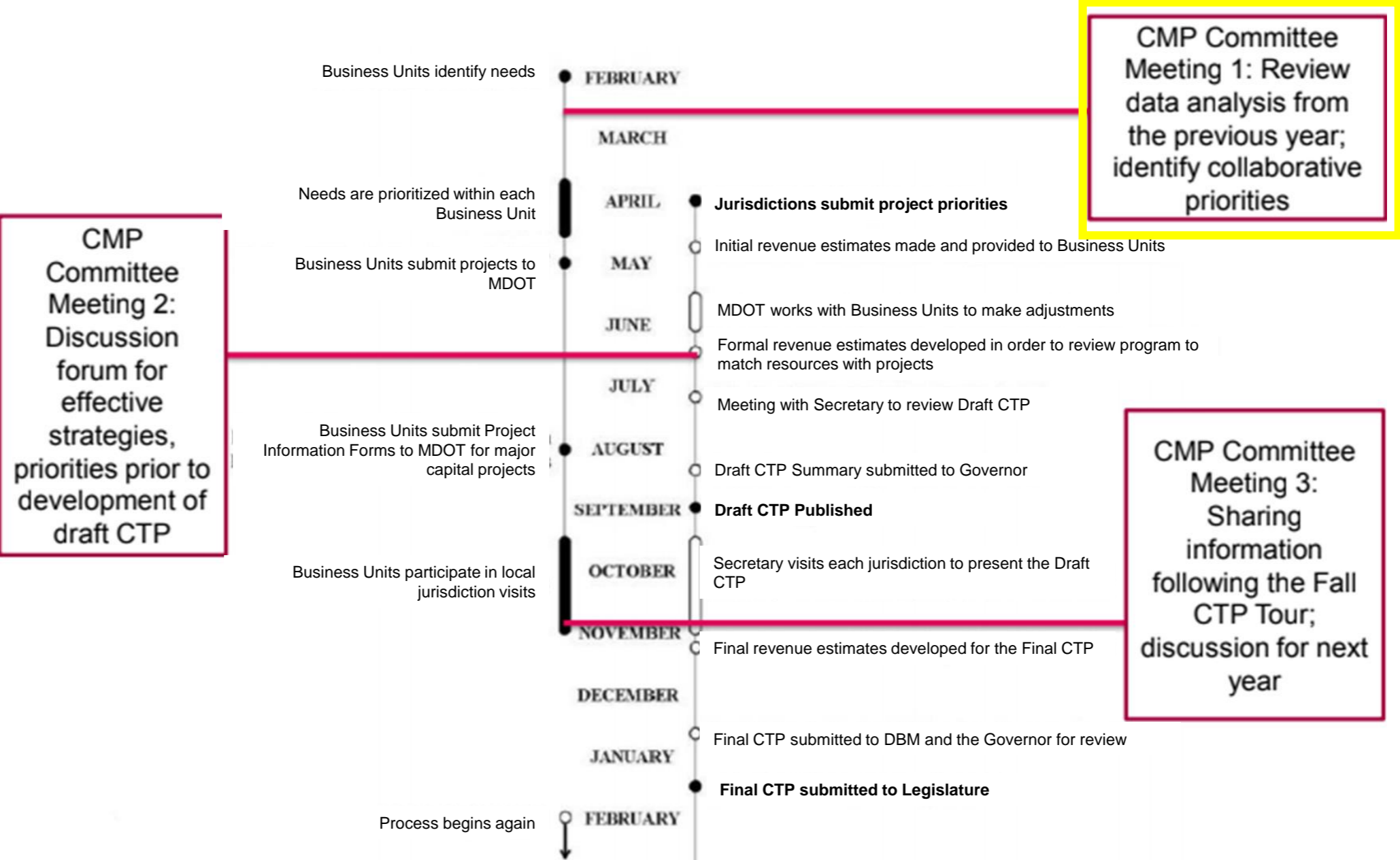


Agenda

1. **WELCOME AND INTRODUCTIONS** (5 min.)
2. **APPROVAL OF MINUTES FROM NOVEMBER 6, 2024 MEETING** (5 min.)
3. **HOWARD COUNTY TRANSPORTATION OPEN HOUSE** (15 min.)
Mr. David Cookson and Ms. Allison Calkins, Howard County Office of Transportation, will provide an overview of the Howard County Transportation Open House.
4. **SELECTING CMP STRATEGIES IN NEW TIP SOFTWARE** (10 min.)
Ms. Ndemazea Fonkem will show how CMP strategy selection has been added to the TIP project submission software.
5. **NEW RESOURCES TO IDENTIFY CONGESTION** (10 min.)
BMC staff will highlight resources that could be used to identify congestion.
6. **2025 PRIORITY LETTERS** (10 min.)
The group will discuss the development of priority letters for 2025.
7. **OTHER BUSINESS** (15 min.)
 - Future presentations of interest.

2025 Meetings – June 3, November 4

Reminder: CMP Committee Schedule



4. Selecting CMP Strategies in New TIP Software

CMP Strategies from CMP Strategy Guide

https://www.baltometro.org/sites/default/files/bmc_documents/general/transportation/cmp/cmp_strategy-guide.pdf

- Note: The Guide lists strategies by objective

Objective 2

Improve travel times and reduce traveler delay



Public Transportation

- Real-Time Transit Data
- Transit Trip Planner
- Bus Rapid Transit
- Transit Priority Treatments
- Ferry Boats

TSMO

- Incident Management
- Traffic Signal Coordination
- Adaptive Traffic Signals
- Adaptive Ramp Metering
- Active Traffic Management
- Reversible Commuter Lanes
- Access Management
- Moveable Median Barriers
- Electronic Toll Collection
- Hard Shoulder Running
- Restrict Intersection Movements
- Geometric Improvements
- One-Way/Two-Way Street Conversion
- Transit Signal Priority
- Traveler Information Systems
- Work Zone Management
- Road/Weather Information Systems
- Traffic Management for Special Events
- Off-Hours Delivery Programs
- Freight Management

Pricing

- Value/Congestion Pricing
- Demand-Responsive Parking Pricing
- VMT Fees

Road Capacity

- Spot Improvements
- Intersection Improvements
- Safety Improvements
- Operational Improvements
- New HOV or HOT Lanes
- Removing Bottlenecks
- Adding Turn Lanes
- Grade Separated Intersections
- Closing Network Gaps
- Add Travel Lanes

CMP Strategies & TIP Projects

Project Information

Project Title*
Belair Road Complete Streets

Project Description*
Design and construction for street, sidewalk, bike improvements and greening at key nodes on Belair Road, including Frankford Avenue, Erdman Avenue, and Fleetwood Avenue. This project is a major implementation item from the Urban Land Institute Belair Road report and BCDOT traffic study, FY 2026 construction funds are for Phase II, which includes the intersection of Belair Road and Erdman Avenue. Phase I, which includes the intersection of Belair Road and Frankford Avenue, was completed in February 2021. The year of operation of 2029 reflects the completion of Phase II includes the intersection of Belair Road and Erdman Avenue node.
Was: Design and construction for street, sidewalk, bike improvements and greening at key nodes on Belair Road, including Frankford Avenue, Erdman Avenue, and Fleetwood Avenue. This project is a major implementation item from the Urban Land Institute Belair Road report and BCDOT traffic study, FY 2025 construction funds are for Phase II, which includes the intersection of Belair Road and Erdman Avenue. Phase I, which includes the intersection of Belair Road and Frankford Avenue, was completed in February 2021. The year of operation of 2028 reflects the completion of Phase II includes the intersection of Belair Road and Erdman Avenue node.

Project Type*	Lead Agency*	County	Municipality
Road resurfacing/rehabilitation (HP)	Baltimore City		
Location	Functional Classification	Conformity	Year Open to Service
Baltimore City	Other Principal Arterial	Exempt	2029 Was: 2028
Regionally Significant	NHS	Estimated Total Cost	Vulnerable Population
No	Yes	\$12,100,000	Elderly Population (age 75 and up), Hispanic or Latino Population, Households with No Car, Low-Income Population (below 200% of poverty level), Non-Hispanic Minority Population, Population with Disability, Population with Limited English Proficiency (LEP) Was: Empty

Project Benefits
Belair Road is a high-speed corridor with numerous pedestrian and vehicle collisions. Improvements will improve multi-modal access and safety on the corridor near major retail nodes.

Connection to Long-Range Transportation Planning Goals
1.E Improve System Safety -- Improve conditions for non-motorists to travel more safely, have safer interactions with other modes, and safe access to transit amenities, 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities., 3.A Improve Accessibility -- Increase transportation options and equity for all segments of the population, 5.A Implement Environmentally Responsible Transportation Solutions -- Coordinate to reduce delay & increase non-SOV through performance-based planning & programming

Congestion Management Process Goals
4a. Infrastructure addition (e.g., new bike lanes, streetscape elements, etc.), 4b. Infrastructure improvements (e.g., traffic calming, etc.)
Was: Empty

Project Changes

- Project sponsors are now prompted to align their projects alongside the LRTP goals
- Tracked internally, not currently showcased publicly
 - Looking for committee ideas/approval for how to use the data

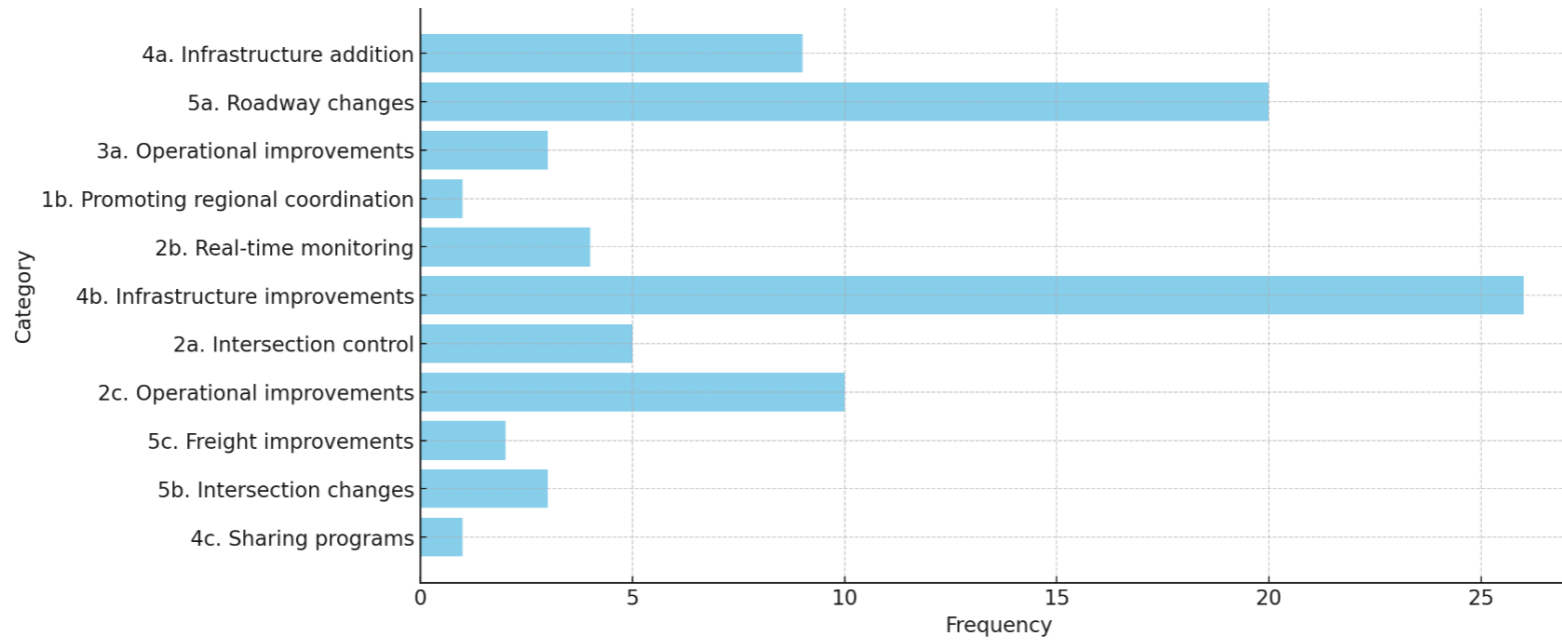
Preliminary Count of 2026-2029 Projects

- As of March 4, there are 191 projects submitted to the TIP.
 - Not all projects have selected a CMP strategy
 - Projects are allowed to identify with up to 3 strategies

Strategy Code	Count
1b. Promoting regional coordination (e.g., intra-jurisdictional projects/strategies)	2
2a. Intersection control (e.g., traffic signal coordination, ramp metering, transit signal priority, etc.)	9
2b. Real-time monitoring (e.g., active traffic management, real time parking information, traveler information systems, road weather information systems)	7
2c. Operational improvements (e.g., movable barriers, reversible commuter lanes, geometric improvement, shoulder lane use, etc.)	12
3a. Operational improvements (e.g., transit signal priority, optimizing transit service, etc.)	4
3b. New infrastructure (e.g., bus rapid transit, network expansion, etc.)	1
4a. Infrastructure addition (e.g., new bike lanes, streetscape elements, etc.)	17
4b. Infrastructure improvements (e.g., traffic calming, etc.)	42
4c. Sharing programs (e.g., bikeshare programs, micromobility, etc.)	2
5a. Roadway changes (e.g., new lanes, spot improvements, etc.)	45
5b. Intersection changes (e.g., grade separated intersections, intersection improvements, etc.)	5
5c. Freight improvements (e.g., address freight bottlenecks, rail/port access, truck parking, etc.)	3

Caveats & Next Steps

- Caveats to the data presented
 - Initial project submissions were due March 3 and projects are still in review by BMC staff
 - 5a. Roadway changes: this can include projects like resurfacing that do not add new lanes
- Next steps
 - Conformity modeling and air quality analysis Spring 2025
 - Draft 2026-2029 TIP slated for release and public input in late May 2025
- What can data inform? What would committee like to see moving forward?



5. Additional Congestion Resources

- Maryland 2025 Annual Attainment Report on Transportation System Performance
 - <https://www.mdot.maryland.gov/OPCP/ARReport.pdf>
- Some measures correspond with regional CMP performance measures https://www.baltometro.org/sites/default/files/bmc_documents/general/transportation/cmp/cmp_performance-measures.pdf

No.	Recommended Performance Metric
Objective 1: Enhance access to jobs and	
1.	Number of jobs accessible within a 30-minute drive
2.	Number of jobs accessible within a 45-minute transit trip
Objective 2: Improve travel times and	
1.	Travel time index (ratio of peak-period to off-peak travel time)
2.	Duration of congested conditions (e.g., on typical weekdays, weekends)
3.	Person hours of peak hour excessive delay
4.	Average bus speeds
5.	Anticipated growth in V/C ratio in peak period (base year to 2045)
Objective 3: Improve travel time reliab	
1.	Level of Travel Time Reliability (LOTTR)

No.	Recommended Performance Metric
2.	Transit on-time performance <ul style="list-style-type: none"> - Bus - Rail
Objective 4: Improve freight reliability	
1.	Truck Travel Time Reliability (TTTR) Index
Objective 5: Enhance travel choices, in SOV modes	
1.	Non-SOV mode share
2a.	Transit network extent and frequency
2b.	Access to frequent transit (secondary)
3.	Bicycle network extent
4.	Bicycle Level of Traffic Stress (LTS)
5.	Park and ride utilization
Objective 6: Reduce traffic incidents th	
1.	Number of crashes
2.	Number of pedestrian/bicycle crashes

2025 Annual Attainment Report Measures



Enhance Safety and Security: Protect the Safety and Security of All Residents, Workers and Visitors

Annual Number of Fatalities on All Maryland Public Roads & Annual Number of Serious Injuries on All Maryland Public Roads _____

Annual Number of Bicycle and Pedestrian Fatalities and Serious Injuries on All Maryland Public Roads ____

Annual Number of Transit Passenger Fatalities _____

Annual Number of At-Grade Railroad Crossing Incidents Resulting in Injury or Fatality _____

Annual Number of Fatalities and Serious Injuries on Maryland Public Roads in Transportation Disadvantaged Communities _____

Preventable Incidents Per 100,000 Vehicle Miles on Transit _____

Miles of New SHA Sidewalks Added in Maryland _____

Percent of Sidewalks That Meet Americans With Disabilities Act (ADA) Compliance _____

Miles of Lower Level of Traffic Stress (LTS) Score _____

Incident (Coordinated Highways Action Response Team, or CHART) Response and Clearance Times _____

Average Time To Restore Normal Operations After a Weather Event (Roadway Clearance Times for Weather Events) _____

2025 Annual Attainment Report Measures

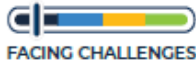


Deliver System Quality: Deliver a Reliable, High-Quality, Integrated Transportation System

- Percentage of Lane-Miles/Fixed Guideway Transit-Miles Susceptible To Flooding and Storm Surge _____
- Unfunded State of Good Repair Backlog _____
- Percentage of the Maryland State Highway Network in Overall Preferred Maintenance Condition _____
- Overall Acceptable Pavement Condition _____
- Number of All Maryland Bridges That Are in Poor Condition _____
- Percent of All MDOT Transit Service Provided on Time _____
- Annual Person Hours of Delay and Travel Time Reliability on Maryland Public Roads _____
- Truck Hours of Delay and Truck Reliability on Maryland Public Roads _____
- Annual Cost of Congestion (Billions) on the Maryland Public Roadway Network _____
- User Cost Savings for the Traveling Public Due to Incident Management _____
- Percent of CTP Program That Is Funded With Federal Dollars _____
- Percent of Projects Delivered on Time Across MDOT _____
- Percent of Projects Delivered on Budget Across MDOT _____
- Percent of MDTA Tolling Transactions Collected Via *E-ZPass*® vs. Video Tolls vs. Pay-By-Plate _____
- MVA Alternative Service Delivery (ASD) Transactions as a Percent of Total Transactions _____
- MVA Average Cost Per Transaction _____

Performance Measure Example

ANNUAL PERSON HOURS OF DELAY AND TRAVEL TIME RELIABILITY ON MARYLAND PUBLIC ROADS



TARGET: 2030: 202 MILLION HOURS; 2050: 201 MILLION HOURS
 *Data have been revised from previous report.
 **2024 data are projected and subject to change.

What Is the Trend?

- Gradual increases in person hours of delay seem to correlate with the post-pandemic increase of Vehicle Miles Traveled (VMT) starting in CY 2021. However, it is estimated that delay will continue to increase at a slower rate due to more travel outside of peak hours and VMT increasing more slowly.

What Are Future Strategies?

- MDOT is working on the Transportation Systems Management and Operations (TSMO) project on I-695 (Baltimore Beltway) from I-70 to MD 43 (White Marsh Boulevard) in Baltimore County to reduce congestion and delay and increase reliability of travel within the project area.
- MDOT is deploying Intelligent Transportation System (ITS) technology where deemed appropriate, such as the US 50 corridor from the Bay Bridge to the Eastern Shore to increase travel reliability.
- The 2022 State Freight Plan identified projects for initial National Highway Freight Program funding to improve freight movement in the State.

TRUCK HOURS OF DELAY AND TRUCK RELIABILITY ON MARYLAND PUBLIC ROADS



TARGET: 2030: 5.3 MILLION HOURS; 2050: 5.3 MILLION HOURS

2025 Annual Attainment Report Measures



Serve Communities and Support the Economy: Expand Transportation Options To Allow Maryland's Diverse Communities To Access Opportunities and To Support the Movement of Goods

Percentage of MVA Customers With a Wait Time Under 10 Minutes _____

Overall Satisfaction With MDOT _____

Access to Transit (Within ½ Mile of a Transit Station/Stop) by People Who Live in Overburdened and Underserved Areas As Defined by the Climate Solutions Now Act (CSNA) _____

Relative Percentage of CTP Investment That Is in Overburdened and Underserved Communities _____

Commute Mode Share (CY 2023) _____

Multimodal MTA Transit Access to Essential Services/Destinations _____

Annual Transit Ridership (Thousands) _____

MTA Average Weekday Transit Ridership _____

Population Within ½ Mile of a Transit Station/Stop _____

Number of Jobs Within ½ Mile of a Transit Station/Stop _____

Fixed-Route Ridership by Seniors and People With Disabilities _____

Annual Revenue Vehicle Miles of MTA Service Provided _____

Port of Baltimore Foreign Cargo Tonnage and MPA General Cargo Tonnage _____

Percentage of MPA Operating Budget Recovered by Revenues _____

BWI Marshall Airport Total Annual Passengers _____

Comparative Airline Cost Per Enplaned Passenger (CPE) _____

Freight Originating and Terminating in Maryland by Mode— Total Tonnage and Total Value _____

Number of Nonstop Airline Markets Served _____

2025 Annual Attainment Report

Measures



Promote Environmental Stewardship: Minimize and Mitigate the Environmental Effects of Transportation

Diversion Rate and Cost of Disposing Construction, Demolition and Maintenance Materials in Landfills and Incinerators _____

Recycled/Reused Materials From Maintenance Activities and Construction/Demolition Projects _____

Annual Dredged Material Capacity Remaining For Harbor and Bay Material (Million Cubic Yards) _____

Increase the Beneficial Use and Innovative Reuse of Dredged Materials _____

Vehicle Miles Traveled (VMT)/VMT Per Capita _____

Number of Employee Partners in Statewide TDM Programs _____

GHG Emissions From Light-Duty Vehicles (LDV) VMT and Medium/Heavy-Duty Vehicles (MHDV) VMT _____

Statewide Vehicle Emissions Inspection Program (VEIP) Testing Compliance Rate _____

Percentage of MDOT Fleet Comprised of EVs _____

Percent of Total Registered Vehicles That Are EVs _____

Level 2 and Direct Current Fast Charging (DCFC) Ports Per 1,000 Residents _____

ATRI National Truck Bottlenecks

Congestion Ranking	Rank Change 2023-2024	Congestion Description	State	Average Speed	Peak Average Speed	Non-Peak Average Speed	Peak Average Speed Percent Change 2023-2024
94	40	Baltimore, MD: I-95 at I-395	MD	45.8	37.3	49.3	-17.4%
★ 64	33	Baltimore, MD: I-695 at I-70	MD	45.4	40.3	47.4	-7.5%
87	14	Baltimore, MD: I-695 at I-83	MD	47.7	40.5	50.5	-4.4%
90	13	Baltimore, MD: I-95 at I-695 (South)	MD	48.1	39.6	51.6	-10.0%

<https://truckingresearch.org/2025/02/top-100-truck-bottlenecks-2025/>

Notes:

- Locations are not directional.
- ★ Ranked 97 last year

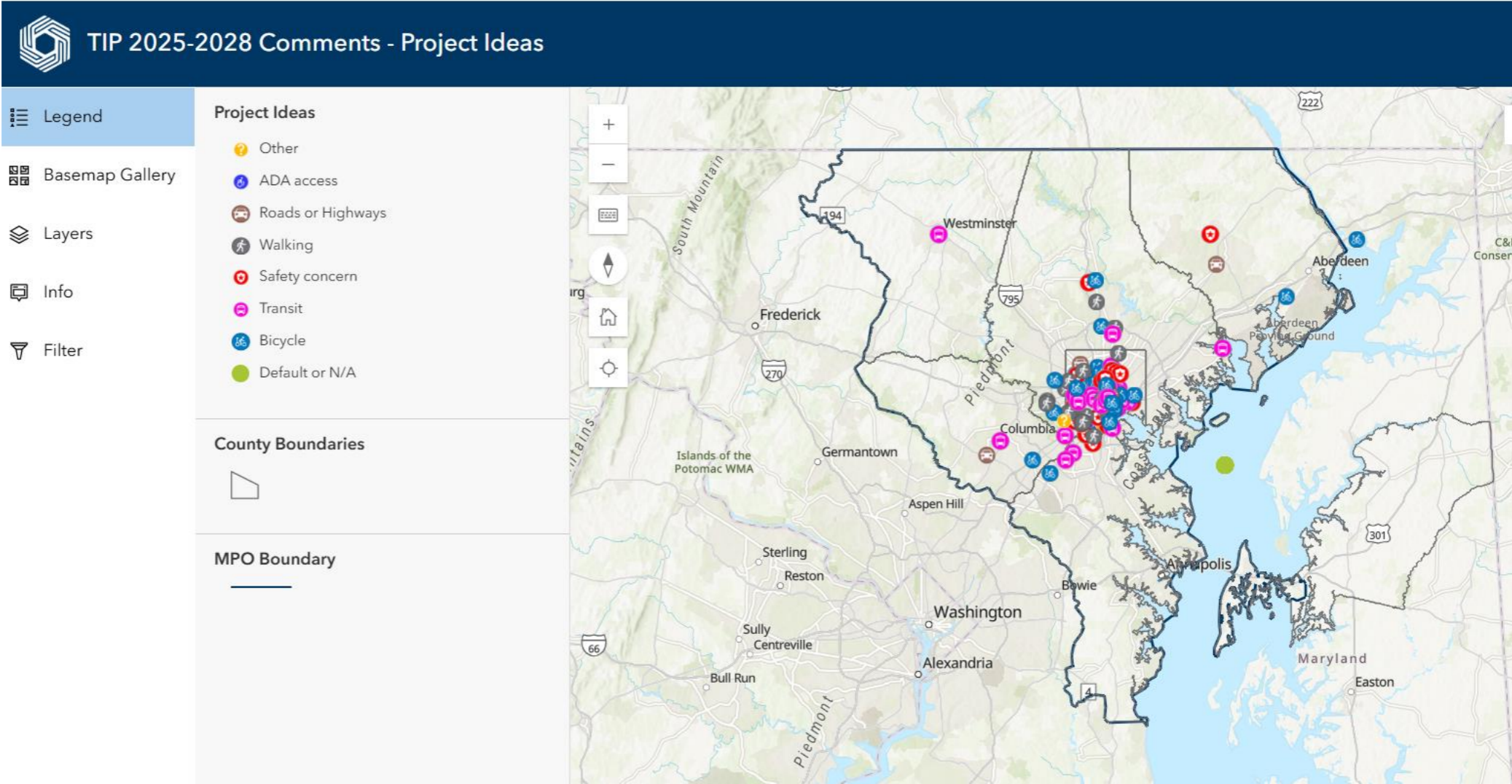
Top 2024 Regional Bottlenecks

2024													ATRI National Rank	2024 Locations
Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2024 Rank		
		10	1	1	1	2	2	2	2	1	1	1		I-95 N @ FORT MCHENRY TUNNEL
8	8	8	3	2	5	1	1	1	1	2	3	2		I-695 IL @ SECURITY BLVD/EXIT 17
9	1	1	7	3	2	3	3			17		3		I-95 N @ MD-152/EXIT 74
2	2	2	4		7	8	6	7	4	8	7	4	87	I-695 IL @ I-83/MD-25/EXIT 23
	18	4	2	4	4	5	7	5	3			5		I-895 N @ HARBOR TUNNEL THWY (NORTH)
3	7		9	6	6	6	5	3	7	7	9	6		MD-295 S @ MD-198
5	3	3	6	5	8	7			5	3	4	7		I-95 N @ MD-100/EXIT 43
13	10		15	7	3	4	4		6	6	8	8		US-50 E @ BAY BRIDGE
4	6	5	10	8	9	13	14	10	9	4	5	9		I-95 S @ MD-216/EXIT 35
			5		12	11	8	6	10	12	17	10		I-95 S @ FORT MCHENRY TUNNEL
1		9	11	14			10	18		14		11		I-95 N @ MD-32/EXIT 38
						16	6	4	8	9		12		I-695 IL @ PENINSULA EXPY/EXIT 43
15				16	11	12	19	19	14	13	14	13		I-95 S @ MD-175/EXIT 41
		12		13				9			6	14		I-95 S @ MD-43/WHITEMARSH BLVD/EXIT 67
20			17	18	19			11	13	15	16	15		I-695 OL @ I-795/EXIT 19
		18	14	19	15	17	16	16	18	16	20	16		I-695 OL @ MD-26/EXIT 18
								12				17	87	I-695 OL @ I-83/MD-25/EXIT 23
			18					17	16			18		I-695 IL @ MD-542/LOCH RAVEN BLVD/EXIT 29
16	17				18		13		19			19	87	I-83 S @ I-695
19									20			20	64	I-70 E @ I-695/EXIT 91

Conclusions/Observations: The December 2024 Monthly Average Vehicle Miles Traveled AVMT is down compared to December 2023 by -0.5%. The Cumulative Year to Date AVMT change through December 2024 AVMT is down compared to last year 2023 by -0.61%. I-95 N at the Fort McHenry Tunnel was the region's top bottleneck for the 4th Quarter and finished number 1 for calendar year 2024 as well.

Inner Loop (IL)
Outer Loop (OL)

Public Project Ideas from TIP 2025-2028 Outreach



<https://bmc.maps.arcgis.com/apps/instant/sidebar/index.html?appid=f7431534f4284e8fb1c9718c708a8d1b>

6. 2025 Priority Letters

Full Regional Text	Partial Regional Text	Regional Text Not Included
<u>2022</u> Anne Arundel Co Carroll Co Howard Co Queen Anne's Co	<u>2022</u> Baltimore Co	<u>2022</u> Baltimore City Harford Co
<u>2023</u> Carroll Co Harford Co Howard Co Queen Anne's Co	<u>2023</u>	<u>2023</u> Anne Arundel Co Baltimore City Baltimore Co
<u>2024</u> Carroll Co Harford Co Howard Co Queen Anne's Co	<u>2024</u> Baltimore Co	<u>2024</u> Anne Arundel Co Baltimore City

7. Other Business

Ideas for future presentations

- I-95 HOT Lanes
 - Is MDTA doing before-and-after studies
- I-695 TSMO Project Update
 - operational 2027
- Maryland 2025 Annual Attainment Report On Transportation System Performance
 - More details on process
- North Jersey Transportation Planning Authority [Accessibility and Mobility Strategy Synthesis: Equity Assessment](#)

North Jersey Transportation Planning Authority Accessibility and Mobility Strategy Synthesis

A series of technical reports provide more detailed information related to each step of the study process :

1. **Establish Objectives and Performance Measures**
2. **Identify Needs**
3. **Conduct Equity Assessment**
4. **Identify and Prioritize Strategies**

Equity Assessment Table of Contents



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6] Appendix: Maps of Population Demographics and Accessibility Measures
7] Appendix: Open Responses to Questions

7. Other Business

- Upcoming UPWP consultant project “Adapting to the new MDOT Prioritization Process”
 - Interest in assisting with preparing RFP?
- New federal priorities
- 2025 Meetings – June 3, November 4