



STATE H GHWAY ADM N STRAT ON 2024

MARYLAND STATE HIGHWAY

MOBILITY REPORT SUPPLEMENT

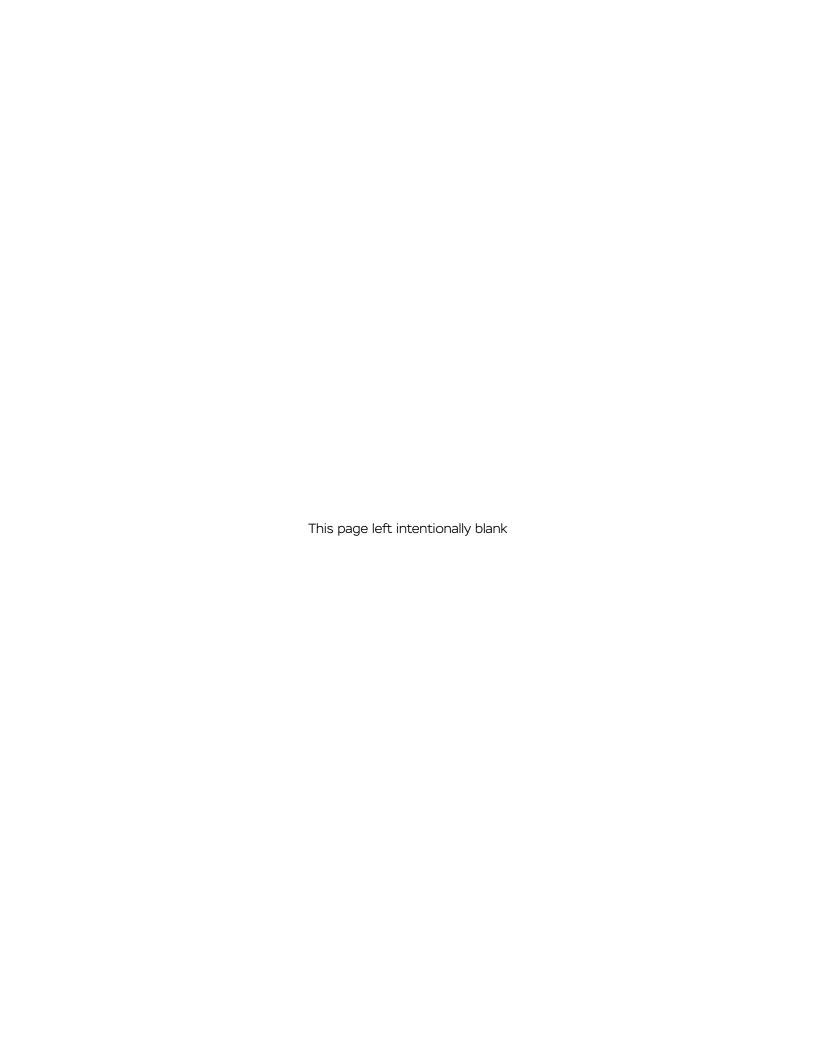


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2024

MARYLAND STATE HIGHWAY

MOBILITY REPORT SUPPLEMENT

INTRODUCTION

The Maryland Mobility Report and the Maryland Mobility Report Supplement provide an evaluation of multi-modal operations in 2023.

The Maryland Mobility Report provides a general overview of mobility within the state, including the results of mobility programs and policies. The Maryland Mobility Report Supplement provides a more in-depth evaluation of performance trends over the past year, including specifics on each freeway/expressway and major arterial corridor. This document furnishes data on various trends, changes, and improvements along Maryland's multi-modal network.

The Supplement includes data on:

- Traffic Volumes by County and Region
- Congestion Trends
- Freeway Operations
- Bottleneck Locations
- Arterial Corridor Operations
- Congestion Cost by Region
- Capital Projects Before and After Studies

To supplement data in the Maryland Mobility Report, mapping was included to identify locations of the various programs and projects such as:

- New Sidewalk Locations
- Park and Ride Lot Locations
- Reversible, HOV, and Express Toll Lanes and Managed Lane Facility Locations
- Public Truck Parking and Virtual Weigh Station Locations
- CHART Operations Center Locations
- Failing Intersection Level of Service Locations

For additional information, reference the 2024 Maryland Mobility Report.

TRAFFIC VOLUMES

Along Maryland roadways, traffic volumes vary from less than 500 vehicles per day to over 225,000 vehicles per day. These volumes change over time depending upon new developments being constructed, economic factors, capacity constraints, and the construction of roadway improvements which may increase volumes on one road while decreasing volumes on a parallel road. To understand the changes in traffic and truck patterns, SHA monitors volume data from a number of different sources. One method is through continuous count stations which are located on a variety of roadways across the state. These stations record volumes 24 hours per day, 365 days per year at approximately 60 active locations. The majority of traffic data is collected in a three-year cycle at thousands of locations for 48 hours. These counts are used to develop the average daily traffic on each section of roadway. The length of these sections is multiplied by the traffic volume to develop the total vehicle miles traveled (VMT). The VMT is developed on a statewide, countywide, and regionwide basis. Maryland is subdivided into five geographical regions: Baltimore Metropolitan, Washington Metropolitan, Southern Maryland, Eastern Shore, and Western Maryland (Figure 1).

The regional breakdown is listed with the SHA county abbreviation in parenthesis.

BALTIMORE METROPOLITAN REGION

- Anne Arundel (AA)
- Baltimore City (BC)
- Baltimore (BA)
- Carroll (CL)
- Harford (HA)
- Howard (HO)

WASHINGTON METROPOLITAN REGION (MARY-LAND COUNTIES)

- Frederick (FR)
- Montgomery (MO)
- Prince George's (PG)

SOUTHERN MARYLAND

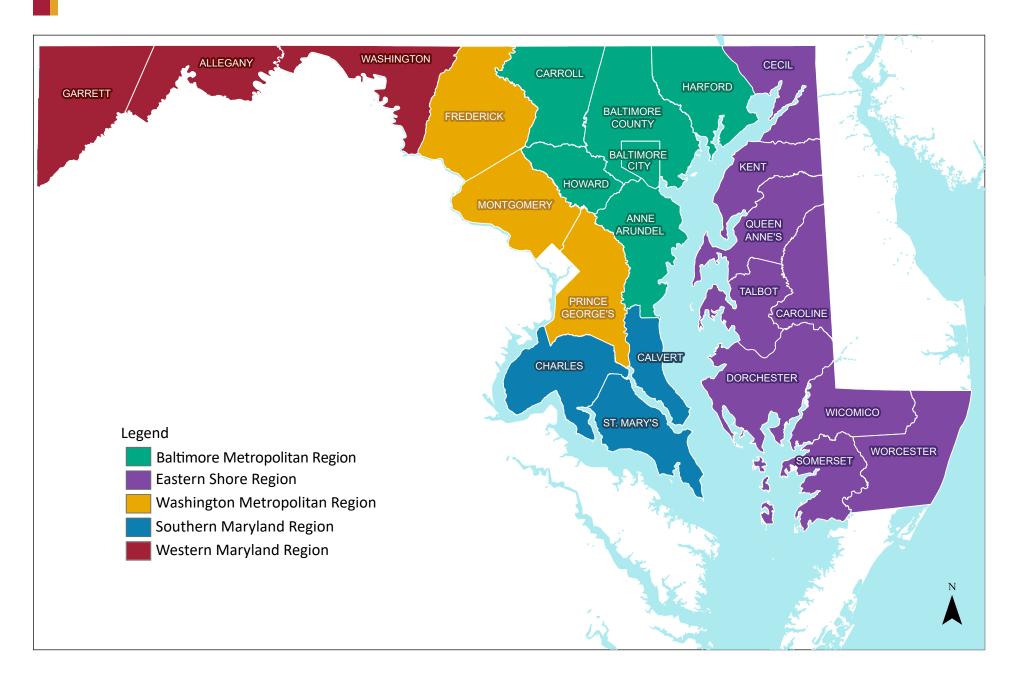
- Calvert (CA)
- Charles (CH)
- St. Mary's (SM)

EASTERN SHORE

- Caroline (CO)
- Cecil (CE)
- Dorchester (DO)
- Kent (KE)
- Queen Anne's (QA)
- Somerset (SO)
- Talbot (TA)
- Wicomico (WI)
- Worcester (WO)

WESTERN MARYLAND

- Allegany (AL)
- Garrett (GA)
- Washington (WA)



The statewide VMT grew by 1.3% from 2022 to 2023, an increase of approximately 760 million VMT. All five regions of the state experienced an increase in VMT, ranging from 90 million in the Western and Southern regions to 240 million in the Baltimore Region (**Table 1**).

Table 1

		VMT BY REGIO	ON (BILLIONS)		
AREA	2020	2021	2022	2023	CHANGE FROM 2022 TO 2023
Baltimore Region	22.45	25.00	25.16	25.40	+0.24
Washington Region	1/33 1000		19.32	19.52	+0.20
Southern Region	on 2.57 2.96		2.92	3.01	+0.09
Eastern Shore Region	5.28	6.10	6.01	6.15	+0.14
Western Region	2.96	3.36	3.37	3.46	+0.09
Total	50.59	56.62	56.78	57.54	+0.76



CONGESTION TRENDS

A. FREEWAY/EXPRESSWAY FACT SHEETS

Drivers expect the highest level of mobility along freeways/expressways. The primary purpose of these roadways is to serve long-distance travel and provide routes for freight and goods deliveries. Freeways/expressways are high-speed facilities that provide maximum mobility. Access along these roadways is limited to interchanges and these highways are termed controlled access facilities. Various metrics were evaluated along these roadways including:

- Travel time index (Congestion)
- Planning time index (Reliability)
- Daily variability
- Percentage of roadways in each direction in the peak hour that operates at uncongested, moderate, heavy, and severely congested levels
- Segments that experienced the largest increase or decrease in congestion from 2022

The freeways/expressways evaluated include:

- I-70 (Pennsylvania Border to US 40 in Frederick)
- I-70 (US 40 in Frederick to I-695)
- I-81
- I-83
- I-95 (Capital Beltway to I-695 North)
- I-95 (I-695 North to Delaware State Line)
- I-97
- I-270
- I-495 Capital Beltway
- I-695 Baltimore Beltway
- I-795
- I-895
- MD 32
- MD 100
- MD 200
- MD 295
- US 50 (Washington DC Line to William Preston Lane Bridge (Bay Bridge))

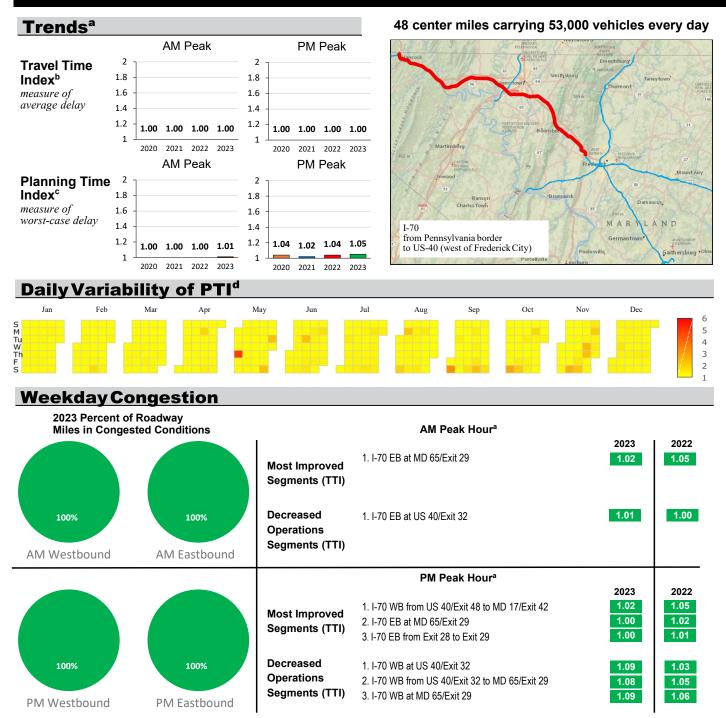
Seasonal traffic is a concern in several areas in the state. This is especially true during the summer on the Eastern Shore and along the I-95 corridor in Northeastern Maryland, where normally there is minimal congestion. The following two locations were evaluated:

- I-95 (Tydings Bridge to Delaware State Line)
- US 50 (William Preston Lane (Bay Bridge) to Easton)

For each freeway/expressway, the percentage of roadway miles that operate in uncongested, moderate congestion, heavy congestion, and severe congestion conditions are identified in **Table 2**.



I-70: Pennsylvania Border to US 40 Frederick



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

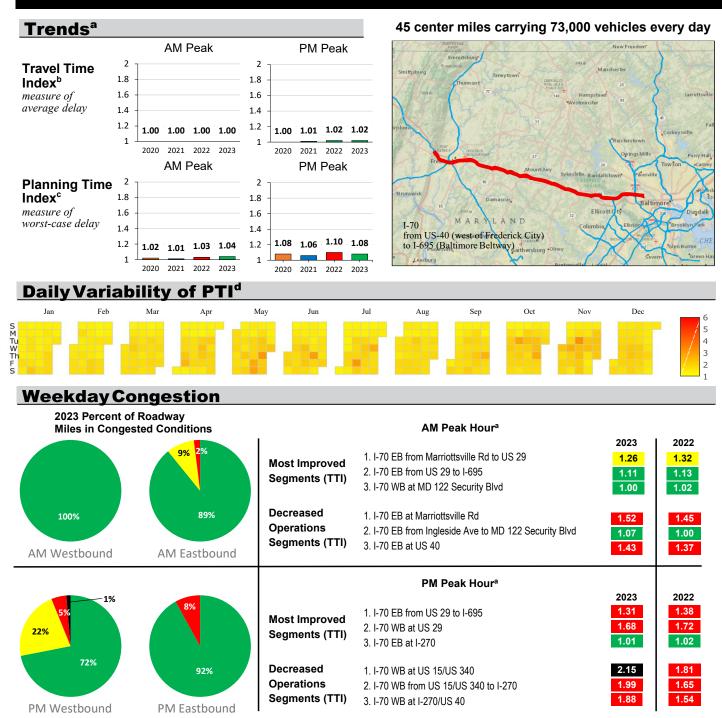
Notes

- a Peak Hours are considered as 8-9am and 5-6pm.
- b Travel Time Index (TTI) is the ratio of the average travel time during the peak hour to the time required under free flow.
- c Planning Time Index (PTI) is the ratio of the worst-case travel time (95th percentile) during peak hour to the free-flow time.
- d Variability of worst-case travel experience along facility for each day of year, shown as plot of PTI by day of week and month, showing seasonal and weekly trends.





I-70: US 40 Frederick to I-695



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

Notes

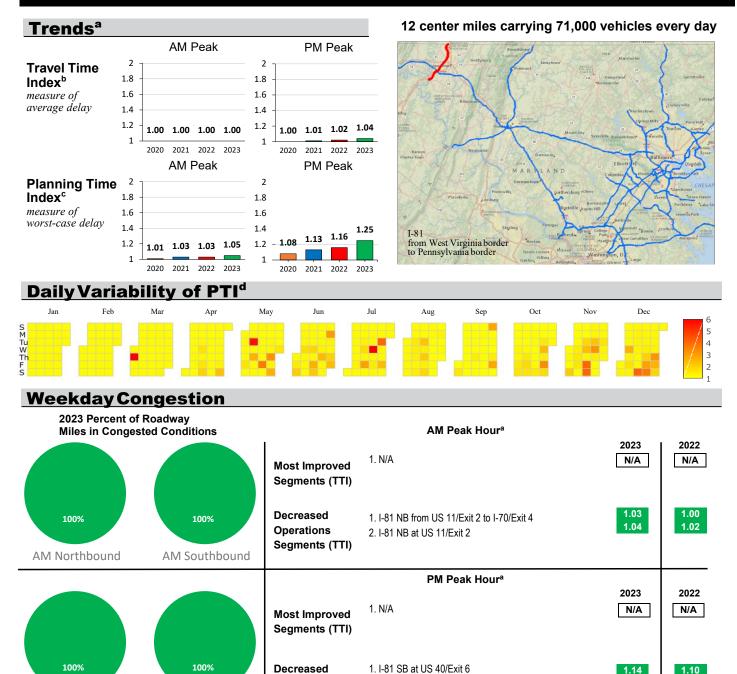
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STATE HIGHWAY



I-81



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

2. I-81 NB from Halfway Blvd/Exit 5 to US 40/Exit 6

3. I-81 SB from Salem Ave/Exit 7 to US 40/Exit 6

Notes

PM Northbound

a - Peak Hours are considered as 8-9am and 5-6pm.

PM Southbound

- b Travel Time Index (TTI) is the ratio of the average travel time during the peak hour to the time required under free flow.
- c Planning Time Index (PTI) is the ratio of the worst-case travel time (95th percentile) during peak hour to the free-flow time.

Operations

Segments (TTI)

d - Variability of worst-case travel experience along facility for each day of year, shown as plot of PTI by day of week and month, showing seasonal and weekly trends.

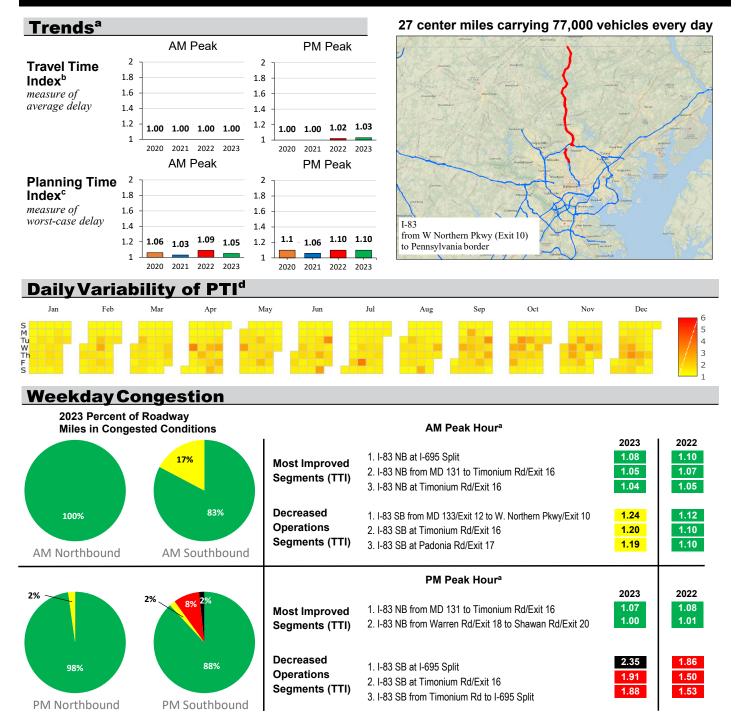


1.06

1.12



1-83



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

Notes

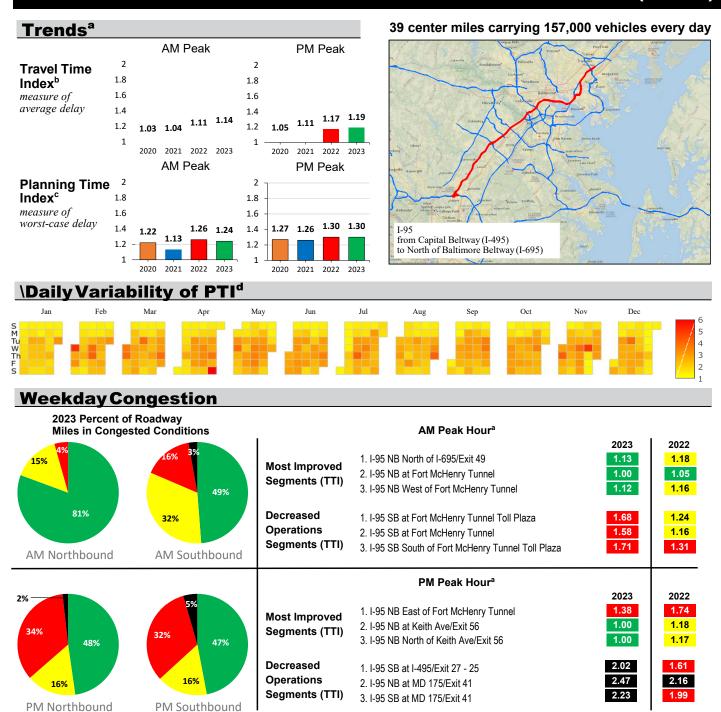
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STATE HIGHWAY



I-95: I-495 to I-695 (North)



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

Notes

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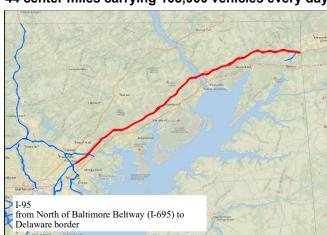




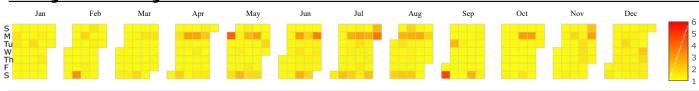
I-95: I-695 (North) to Delaware State Line

Trends^a AM Peak PM Peak 2 2 **Travel Time** 1.8 1.8 Indexb 1.6 measure of 1.6 average delay 1.4 1.4 1.2 1.2 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 2020 2021 2022 2023 2021 2022 2022 AM Peak PM Peak Planning Time ² 2 Indexc 1.8 1.8 measure of 1.6 1.6 worst-case delay 1.4 1.4 1.10 1.08 1.2 1.01 1.03 1.04 1.06 1.2 1.06 1.05 2020 2021 2022 2023 2020 2021 2022 2023

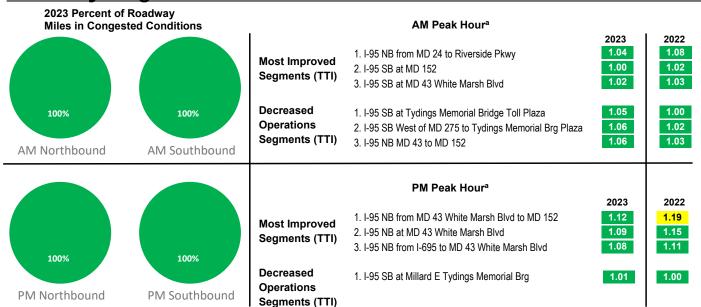
44 center miles carrying 103,000 vehicles every day



Daily Variability of PTId



Weekday Congestion



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

Notes

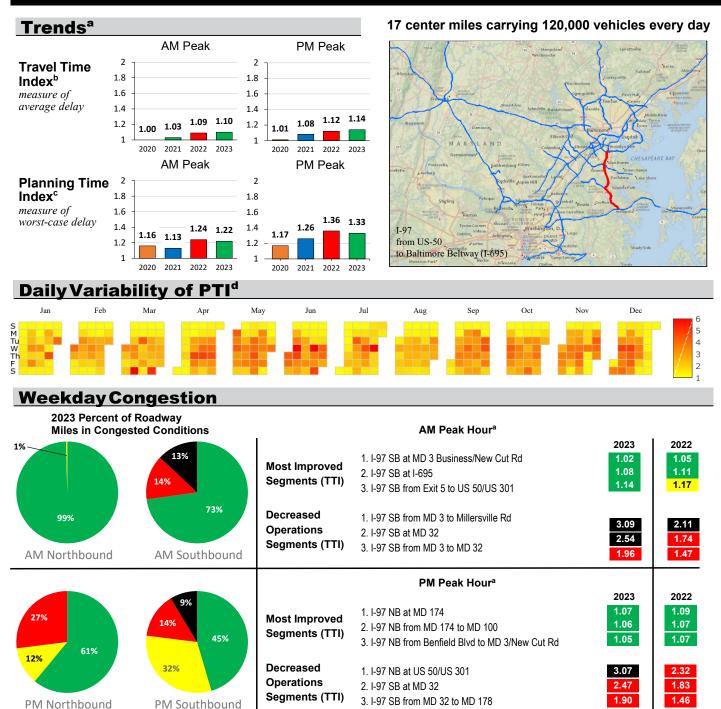
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Based on speed data from INRIX and volume data from State Highway Administration



I-97



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

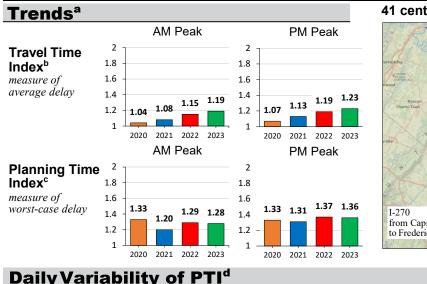
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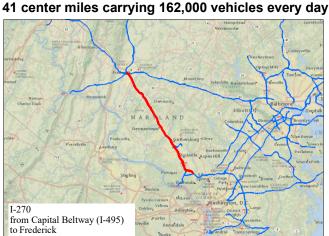
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MARYLAND DEPARTMENT OF TRANSPORTATION

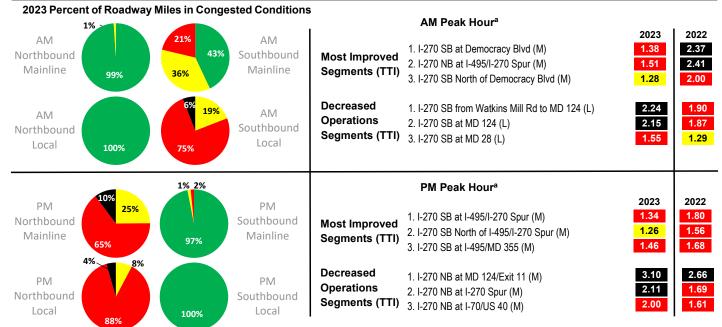


1-270





Weekday Congestion I-270 Mainline (M) / Local (L)



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

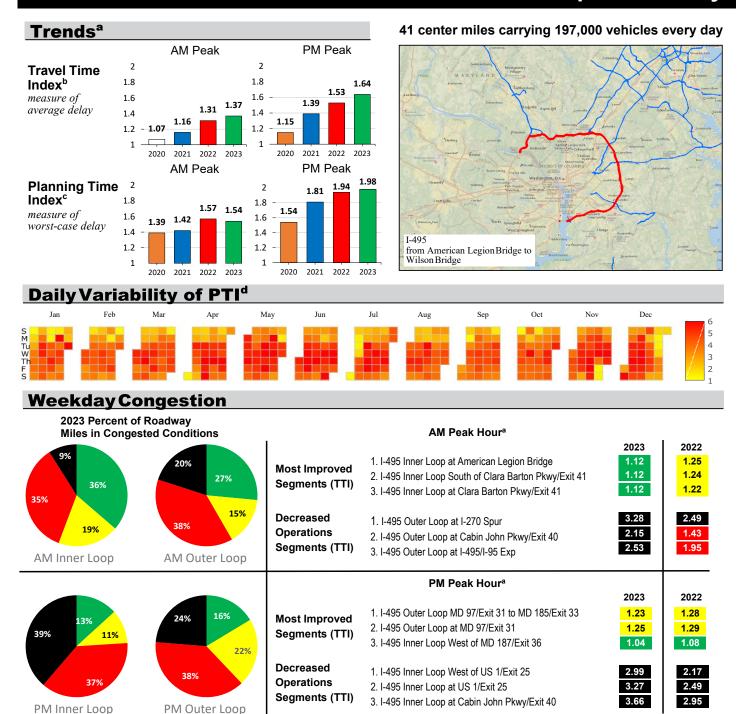
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I-495 Capital Beltway



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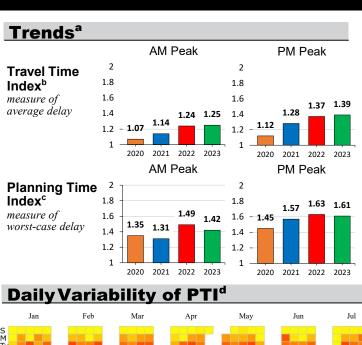
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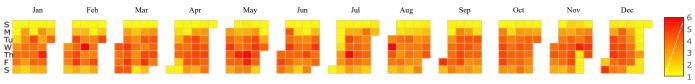


Baltimore Beltway



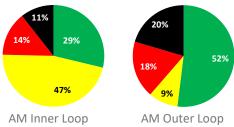
34 center miles carrying 152,000 vehicles every day





Weekday Congestion

2023 Percent of Roadway Miles in Congested Conditions



AM Peak Houra

PM Peak Hour^a

Most Improved Segments (TTI)	I. I-695 Inner Loop at US 40/Exit 15 I-695 Outer Loop South of US 1/Exit 32 I-695 Inner Loop South of I-70/Exit 16 to North of US 40/Exit 15	1.22 1.19 1.31
Decreased Operations	1. I-695 Outer Loop at I-70/Exit 16	2.21



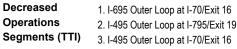
2022

2022

2.46

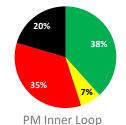
1.57

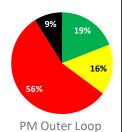
1.40





2023





Most Improved Segments (TTI) 1. I-695 Inner Loop at I-83/Exit 24

2. I-695 Inner Loop East of I-83 (South)/Exit 23 to I-83 (North)/Exit 24

Decreased 1. I-695 Inner Loop from I-95/Exit 11 to US 1/Exit 12 Operations 2. I-695 Inner Loop at US 1/Southwestern Blvd/Exit 12 Segments (TTI) 3. I-695 Inner Loop at I-95/Exit 11

2.22 1.45 1.32 3. I-695 Outer Loop at Cromwell Bridge Rd/Exit 29

> 3.40 4.33 2.82

2023

2.70 3.79 2.42

Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

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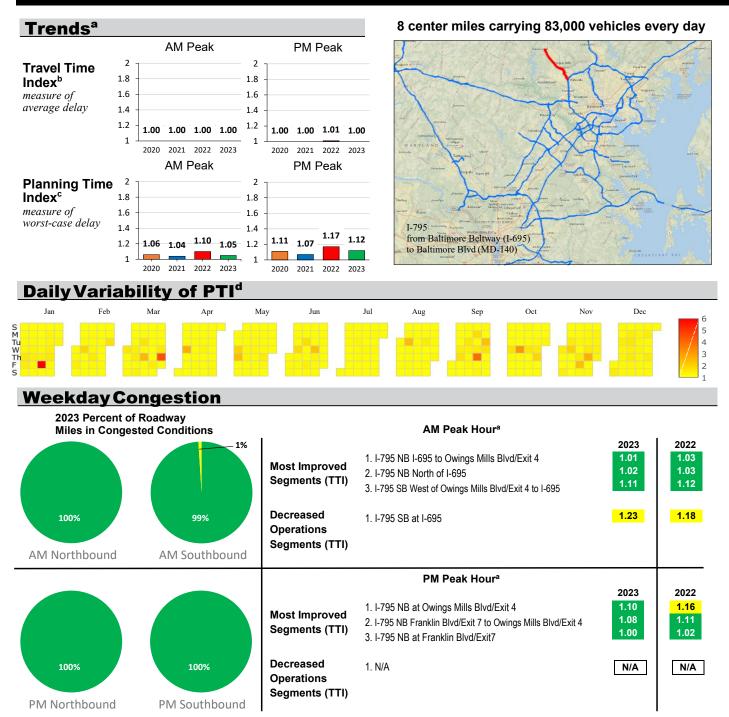
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YLAND DEPARTMENT

Based on speed data from INRIX and volume data from State Highway Administration



I-795



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

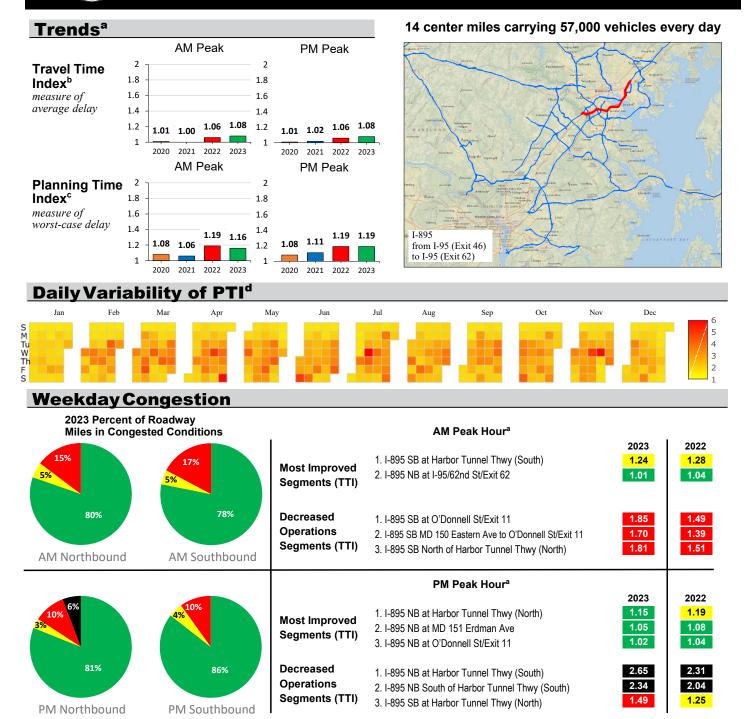
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1-895



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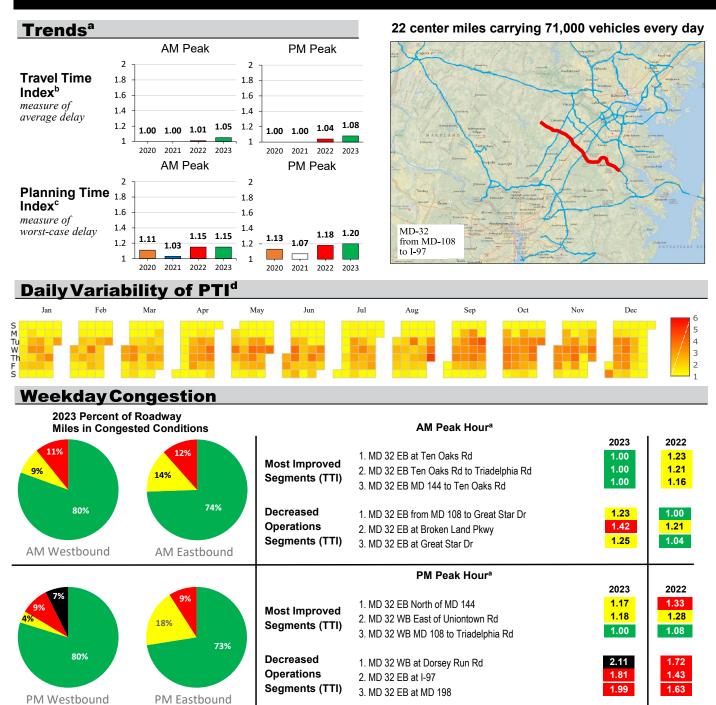
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ADMINISTRATION



MD 32



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

Notes

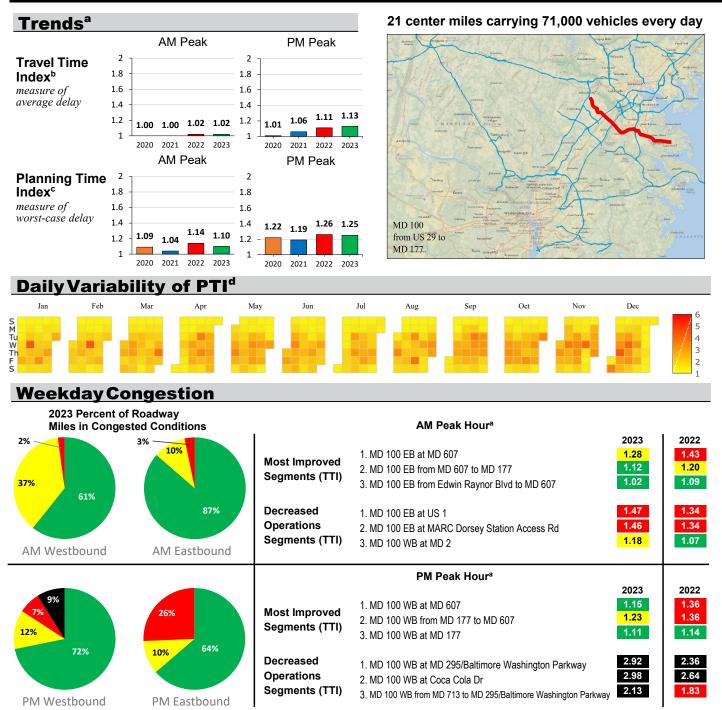
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STATE HIGHWAY



MD 100



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

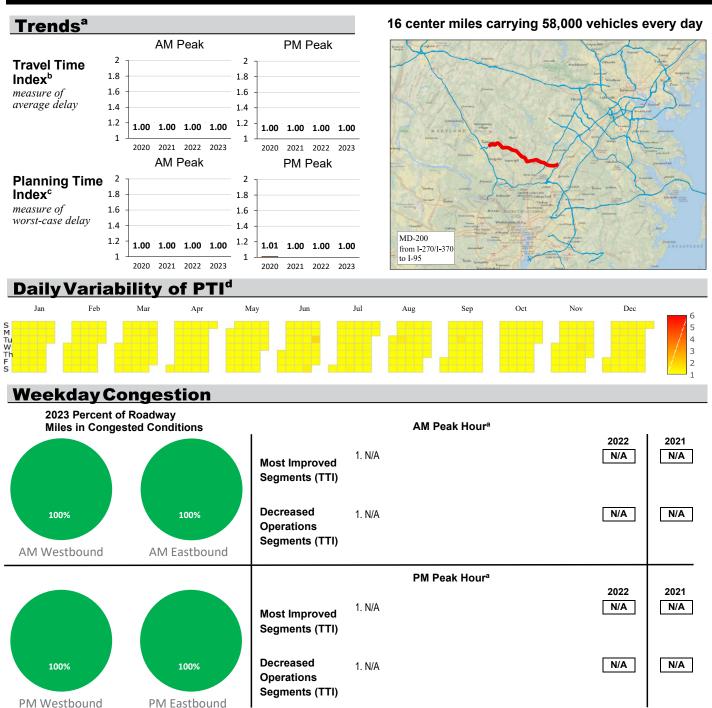
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MD 200



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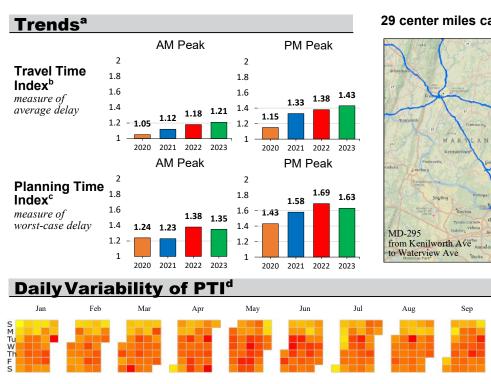
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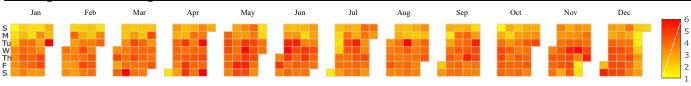


MD 295



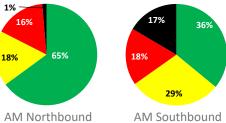
29 center miles carrying 103,000 vehicles every day





Weekday Congestion

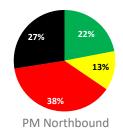
2023 Percent of Roadway **Miles in Congested Conditions**

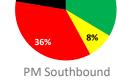


AM Peak Hour^a

1 MD 205 CB at Manakin St/Duscoll St

Most Improved	1. Mid 295 SB at Manokin St/Russell St	1.02	1.07
Segments (TTI)	2. MD 295 NB from I-895 to Waterview Ave	1.00	1.05
Segments (111)	3. MD 295 SB at Waterview Ave	1.00	1.05
Decreased	1. MD 295 SB US 50 to D.C. Line	3.13	2.53
Operations			
•	2. MD 295 SB at MD 197	2.65	2.12
Segments (TTI)	3. MD 295 SB at US 50	2.75	2.26
	PM Peak Hour ^a		
		2023	2022
Most Improved	1. MD 295 SB at Manokin St	1.03	1.11
Segments (TTI)	2. MD 295 SB from I-95 to Manokin St	1.03	1.11
Segments (111)	3. MD 295 SB from Manokin St to Waterview Ave	1.01	1.07
Decreased	1. MD 295 SB at MD 197	2.54	2.16
Operations	2. MD 295 NB at MD 410	2.41	2.04





34%

22%

Segments (TTI)

3. MD 295 SB at MD 32

2022

2023

Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

Notes

- a Peak Hours are considered as 8-9am and 5-6pm.
- b Travel Time Index (TTI) is the ratio of the average travel time during the peak hour to the time required under free flow.
- c Planning Time Index (PTI) is the ratio of the worst-case travel time (95th percentile) during peak hour to the free-flow time.
- d Variability of worst-case travel experience along facility for each day of year, shown as plot of PTI by day of week and month, showing seasonal and weekly trends.

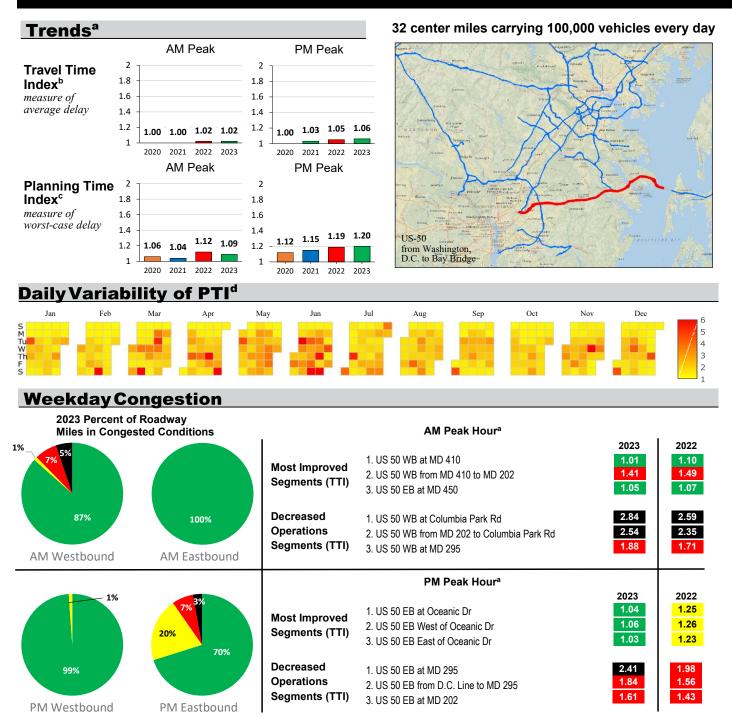


STATE HIGHWAY ADMINISTRATION

Based on speed data from INRIX and volume data from State Highway Administration



US 50



Green-uncongested (TTI<1.15); Yellow-moderate congestion (1.15<TTI<1.30); Red-heavy congestion (1.30<TTI<2.00); Black-severe congestion (TTI>2.00)

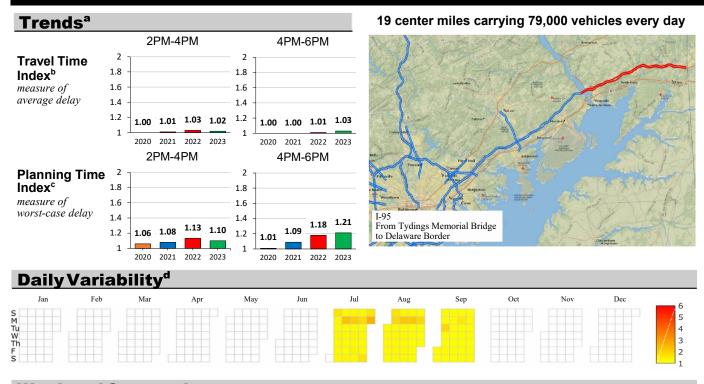
Notes

- a Peak Hours are considered as 8-9am and 5-6pm.
- b Travel Time Index (TTI) is the ratio of the average travel time during the peak hour to the time required under free flow.
- c Planning Time Index (PTI) is the ratio of the worst-case travel time (95th percentile) during peak hour to the free-flow time.
- d Variability of worst-case travel experience along facility for each day of year, shown as plot of PTI by day of week and month, showing seasonal and weekly trends.





I-95 (Tydings Memorial Bridge to Delaware Border) – Summer Weekends



Weekend Congestion

Weekend congestion comparisons were not determined for the seasonal analysis.

Notes

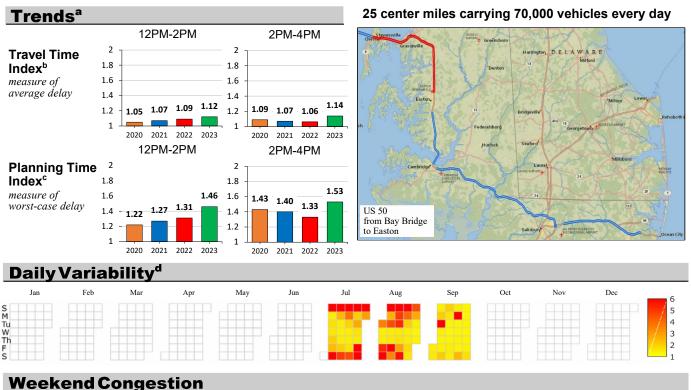
- a Travel Time Index (TTI) is the ratio of the average travel time during the peak hour to the time required under free flow.
- b Planning Time Index (PTI) is the ratio of the worst-case travel time (95th percentile) during peak hour to the free-flow time.
- c Variability of worst-case travel experience along facility for each day of year, shown as plot of PTI by day of week and month, showing seasonal and weekly trends.



Based on speed data from INRIX and volume data from State Highway Administration



US 50 (Bay Bridge to Easton) – Summer Weekends



weekend Congestion

Weekend congestion comparisons were not determined for the seasonal analysis.

Notes

- a Travel Time Index (TTI) is the ratio of the average travel time during the peak hour to the time required under free flow.
- b Planning Time Index (PTI) is the ratio of the *worst-case* travel time (95th percentile) during peak hour to the free-flow time.
- c Variability of worst-case travel experience along facility for each day of year, shown as plot of PTI by day of week and month, showing seasonal and weekly trends.



 Table 2

 Percentage of Roadway Miles Operating in Various Levels of Congestion

I-70 FROM PENNSYLVANIA	Un	congested	l %	Modera	te Conge	stion %	Heav	y Congest	ion %	Sever	e Congest	ion %
LINE TO US 40 (PART 1)	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Westbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Eastbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Westbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Eastbound	100	100	100	0	0	0	0	0	0	0	0	0
I-70 FROM US 40 TO	Un	congested	l %	Modera	te Conge	stion %	Heav	y Congest	ion %	Sever	e Congest	ion %
I-695 (PART 2)	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Westbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Eastbound	89	89	91	9	1	8	2	10	1	0	0	0
PM Westbound	72	80	89	22	14	6	5	6	5	1	0	0
PM Eastbound	92	92	93	0	0	7	8	8	0	0	0	0
I-81 WEST VIRGINIA LINE TO	Un	congested	l %	Modera	te Conge	stion %	Heav	y Congest	ion %	Sever	e Congest	ion %
PENNSYLVANIA LINE	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Southbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Southbound	100	100	100	0	0	0	0	0	0	0	0	0
I-83 FROM WEST	Un	congested	l %	Modera	te Conge	stion %	Heavy Congestion %			Severe Congestion %		
NORTHERN PARKWAY												
(EXIT 10) TO	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
PENNSYLVANIA LINE				-	-	-	_	_	_	_	-	-
AM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Southbound	83	88	99	17	11	0	0	1	1	0	0	0
PM Northbound	98	98	100	2	2	0	0	0	0	0	0	0
PM Southbound	88	91	94	2	0	4	8	9	2	2	0	0
I-95 (PART 1) FROM		congestec	l %		te Conge			y Congest	ion %		e Congest	
I-495 TO I-695	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	81	85	99	15	11	1	4	4	0	0	0	0
AM Southbound	48	69	94	33	17	3	16	14	3	3	0	0
PM Northbound	47	56	63	16	13	13	35	29	24	2	2	0
PM Southbound	47	47	65	17	22	18	32	31	17	4	0	0

Table 2 (Continued)

I-95 (Part 2) FROM I-695	Und	congested	d %	Modera	te Conge	stion %	Heavy	Congest	tion %	Sev	ere Cong	estion %
TO DELAWARE LINE	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Southbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Northbound	100	84	100	0	16	0	0	0	0	0	0	0
PM Southbound	100	100	100	0	0	0	0	0	0	0	0	0
I-97 FROM US 50 TO	Unc	congested	d %	Moderate Congestion % H		Heavy	Congest	tion %	Sev	ere Cong	estion %	
BALTIMORE BELTWAY (I-695)	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Southbound	73	45	83	0	32	8	14	20	9	13	3	0
PM Northbound	61	61	73	12	12	27	27	27	0	0	0	0
PM Southbound	45	50	83	32	35	8	14	15	9	9	0	0
I-270 MAINLINE FROM	Unc	congested	d %	Moderate Congestion % He		Heavy	Congest	tion %	Severe Congestion %			
CAPITAL BELTWAY (I-495) TO FREDERICK	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	99	99	100	1	1	0	0	0	0	0	0	0
AM Southbound	22	22	43	23	27	36	44	47	21	11	4	0
PM Northbound	0	3	6	25	26	52	65	68	40	10	3	2
PM Southbound	96	96	97	1	1	1	2	3	2	1	0	0
I-270 LOCAL		congested	d %	Modera	te Conge	stion %		Congest	tion %		ere Cong	estion %
	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Southbound	0	0	78	19	71	11	75	29	11	6	0	0
PM Northbound	0	0	4	8	15	51	88	80	45	4	5	0
PM Southbound	100	100	100	0	0	0	0	0	0	0	0	0
I-495 FROM AMERICAN	Unc	congested	d %	Modera	te Conge	stion %	Heavy	Congest	tion %	Seve	ere Cong	estion %
LEGION BRIDGE TO WILSON BRIDGE	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Inner Loop	37	37	64	19	23	23	35	35	13	9	5	0
AM Outer Loop	26	34	60	15	22	21	39	32	10	20	12	9
PM Inner Loop	13	17	22	11	10	19	37	41	47	39	32	12
PM Outer Loop	15	16	17	22	24	33	39	53	47	24	7	3

Table 2 (Continued)

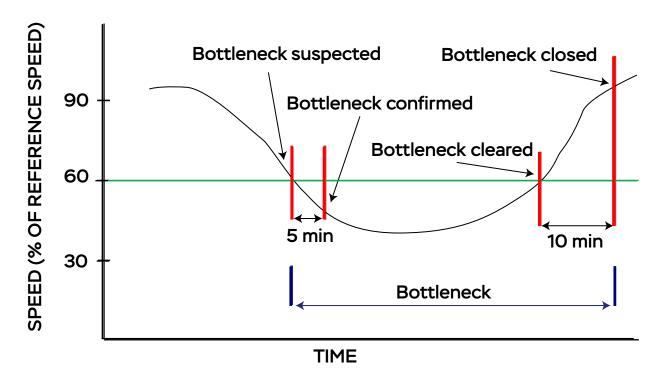
I-695 FROM I-95 TO	Un	congested	1 %	Modera	ite Conge:	stion %	Heavy	/ Congest	ion %	Sever	e Congest	ion %
MD-70	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Inner Loop	28	32	81	47	45	3	14	18	16	11	5	0
AM Outer Loop	52	52	57	10	11	8	18	24	29	20	13	6
PM Inner Loop	38	41	41	7	5	9	35	32	36	20	22	14
PM Outer Loop	19	19	20	16	23	28	56	54	52	9	4	0
I-795 FROM I-695 TO	Un	congested	1 %	Modera	te Conge	stion %	Heavy	/ Congest	ion %	Sever	e Congest	ion %
MD 140	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Southbound	99	100	100	1	0	0	0	0	0	0	0	0
PM Northbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Southbound	100	100	100	0	0	0	0	0	0	0	0	0
I-895 FROM I-95 (EXIT 46) TO	Un	congested	1 %	Modera	te Conge	stion %	Heavy	/ Congest	ion %	Sever	e Congest	ion %
I-95 (EXIT 62)	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	88	92	100	4	8	0	8	0	0	0	0	0
AM Southbound	70	73	100	6	6	0	24	21	0	0	0	0
PM Northbound	78	78	84	1	6	3	8	3	13	13	13	0
PM Southbound	80	83	92	6	9	8	14	8	0	0	0	0
MD 32 FROM MD 108	Un	congested	1 %	Moderate Congestion %		stion %	Heavy Congestion %			Severe Congestion %		
TO I-97	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Westbound	80	81	100	9	12	0	11	7	0	0	0	0
AM Eastbound	74	89	96	14	8	0	12	3	0	0	0	0
PM Westbound	80	84	88	4	3	0	9	8	7	7	5	0
PM Eastbound	73	79	93	18	14	0	9	7	0	0	0	0
MD 100 FROM	Un	congestec	1 %	Modera	ite Conge	stion %	Heavy	/ Congest	ion %	Sever	e Congest	ion %
US 29 TO MD 177	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Westbound	61	85	100	37	15	0	2	0	0	0	0	0
AM Eastbound	87	90	94	10	6	6	3	4	0	0	0	0
PM Westbound	72	75	82	12	9	5	7	9	13	9	7	0
PM Eastbound	63	60	70	11	15	24	26	25	6	0	0	0

Table 2 (Continued)

MD 200 FROM I-370	Un	congested	l %	Modera	te Conge	stion %	Heavy	/ Congest	ion %	Sever	e Congest	ion %
TO I-95	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Westbound	100	100	100	0	0	0	0	0	0	0	0	0
AM Eastbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Westbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Eastbound	100	100	100	0	0	0	0	0	0	0	0	0
MD 295 FROM KENILWORTH AVE	Un	congested	l %	Modera	te Conge	stion %	Heavy	/ Congest	ion %	Sever	e Congest	ion %
TO WATERVIEW AVE	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Northbound	65	68	78	18	15	22	16	16	0	1	1	0
AM Southbound	36	37	52	29	35	26	18	23	22	17	5	0
PM Northbound	22	24	27	13	17	15	38	37	44	27	22	14
PM Southbound	34	36	40	8	9	32	36	44	41	22	11	4
US 50 FROM WASHINGTON, DC	Un	congested	l %	Modera	ate Congestion %		Heavy Congestion %			Sever	e Congest	ion %
TO BAY BRIDGE	2023	2022	2021	2023	2022	2021	2023	2022	2021	2023	2022	2021
AM Westbound	87	88	87	1	0	4	7	7	9	5	5	0
AM Eastbound	100	100	100	0	0	0	0	0	0	0	0	0
PM Westbound	99	98	100	1	2	0	0	0	0	0	0	0
PM Eastbound	70	79	85	20	11	8	7	10	7	3	0	0

B. Freeway/Expressway Bottlenecks

The term bottleneck is often associated with the worst point of roadway congestion. The University of Maryland CATT Lab has developed a methodology to identify those locations through their Vehicle Probe Projection (VPP). A bottleneck occurs when "the speeds observed for a roadway segment drop below 60% of the free flow speed for a period greater than 5 minutes. Adjacent roadway segments meeting this condition are joined together to form a bottleneck queue. The duration of the bottleneck is calculated until the time speeds are greater than 60% for more than 10 minutes." This definition uses minute-to-minute speeds available across the system to determine congestion patterns. The graph below illustrates the definition.



The bottleneck locations are ranked by factors that take into account speed, congestion, and delay. A bottleneck develops when consecutive congested roadway segments form at a single point in time. Each occurrence of a bottleneck is assigned a set of attributes including date, time and congested segments. The base impact factor is the sum of the queue lengths over the duration of the bottleneck. Locations with the highest impact factor are determined to be the worst bottleneck locations and represent areas of recurring congestion or areas that experienced severe non-recurring events during the period analyzed. The top 30 bottlenecks statewide are identified in Figure 2 and Table 3. In addition, the highest ranked bottleneck locations for each freeway/expressway are shown on the following pages.



2023 TOP 30 BOTTLENECKS

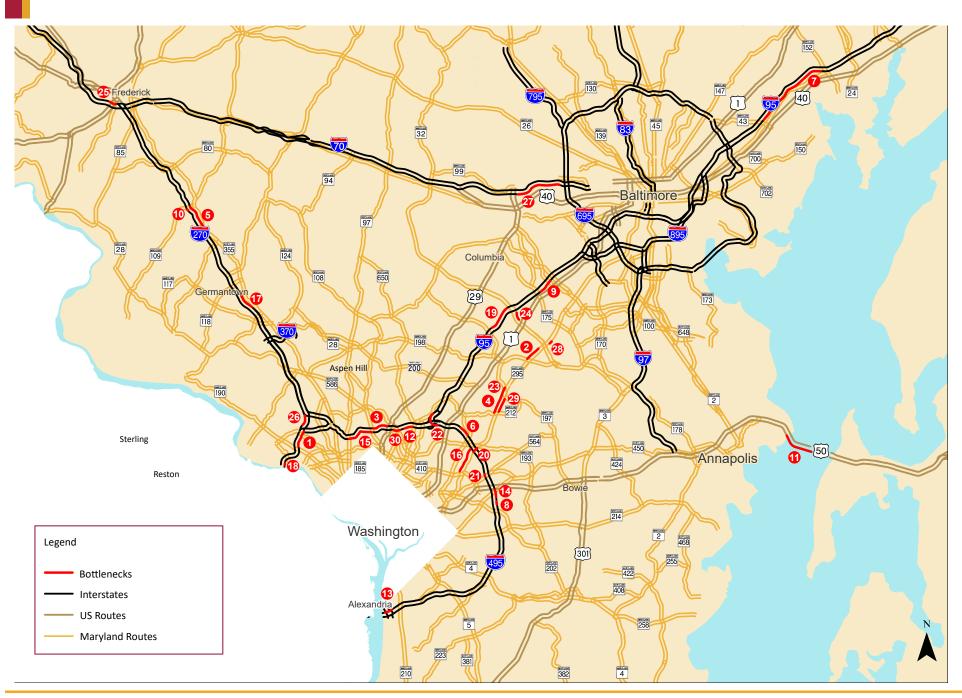
Table 3

Statewide				Duration	Length		Statewide		tewide
Rank 1	LOCATION	Road	Direction	(minute)	(mile)	Factor	Rank N/A		Rank N/A
2	I-495 IL @ I-270 Spur	I-495 MD 295	Inner Loop Southbound	120 292	7.0 3.0	3.1 2.9	1 1	Ψ '	- 1
3	MD 295 S @ MD 198 ¹ I-495 OL @ MD 97/GEORGIA AVE/EXIT 31 E. OF INTERCHANGE	I-495		292	3.0	2.9	3	•	0
4			Outer Loop		5.0				4
	MD 295 S @ POWDER MILL RD NORTH OF INTERCHANGE ¹	MD 295	Southbound	146		2.2	8	↑	
5 6	I-270 N @ MD 109/EXIT 22	1-270	Northbound	128 124	5.0 5.0	2.1 1.9	4 10		-1 4
	I-95/I-495 OL @ GREENBELT STATION RD/EXIT 24	•	Outer Loop					↑	
7	I-95 N @ MD 152/EXIT 74*	1-95	Northbound	67	7.0	1.7	5		-2
8	I-95/I-495 N @ MD 202 NORTH OF INTERCHANGE		Northbound	373	1.0	1.6	9	↑	1
9	I-95 N @ MD 100/EXIT 43 SOUTH OF INTERCHANGE	1-95	Northbound	128	4.0	1.6	N/A	Ψ '	N/A
10	I-270 S @ MD 109/EXIT 22	I-270	Southbound	120	4.0	1.5	7	Ψ Ψ	-3
11	US 50 E @ WILLIAM PRESTON LANE BRIDGE	US 50	Eastbound	101	4.0	1.3	6		-5
12	I-95/I-495 IL @ MD 650/EXIT 28 WEST OF INTERCHANGE	1-95/1-495	Inner Loop	79	5.0	1.3	N/A		N/A
13	I-95/I-495 IL @ I-295	1-95/1-495	Inner Loop	126	2.0	1.3	15	↑	2
14	I-95/I-495 OL @ US 50/EXIT 19	•	Outer Loop	164	2.0	1.2	17	↑	3
15	I-495 IL @ MD 97/GEORGIA AVE/EXIT 31 W. OF INTERCHANGE	I-495	Inner Loop	93	4.0	1.2	12		-3
16	MD 295 S @ MD 410 NORTH OF INTERCHANGE ¹	MD 295	Southbound	113	3.0	1.2	N/A		N/A
17	I-270 N @ MIDDLEBROOK RD/EXIT 13	I-270	Northbound	87	4.0	1.1	20	↑	3
18	I-495 IL @ CLARA BARTON PKWY/EXIT 41	I-495	Inner Loop	81	4.0	1.1	11	Ψ	-7
19	I-95 S @ MD 216/EXIT 35 NORTH OF INTERCHANGE	I-95	Southbound	67	5.0	1.0	N/A		N/A
20	MD 295 N @ I-495/I-95 ¹	MD 295	Northbound	76	4.0	1.0	19	Ψ	-1
21	I-95/I-495 IL @ MD 450/ANNAPOLIS RD/EXIT 20	I-95/I-495	Inner Loop	122	3.0	1.0	25	↑	4
22	I-95 S @ I-495/EXIT 27-25	I-95	Southbound	131	2.0	1.0	21	Ψ	-1
23	MD 295 S @ MD 197/EXIT 11 ¹	MD 295	Southbound	114	3.0	0.9	34	↑	-11
24	MD 32 W @ I-95 EAST OF INTERCHANGE	MD 32	Westbound	86	3.0	0.8	N/A		N/A
25	I-70 W @ US 15/US 340/EXIT 52	I-70	Westbound	115	2.0	8.0	N/A		N/A
26	I-270 SPUR S @ I-495	I-495	Southbound	246	1.0	0.8	22	Ψ.	-4
27	I-70 E @ I-695/EXIT 91 WEST OF INTERCHANGE	I-70	Eastbound	57	4.0	0.8	23	Ψ	-4
28	MD 295 N @ CANINE RD ¹	MD 295	Northbound	86	3.0	0.7	N/A	ı	N/A
29	MD 295 N @ MD 197/EXIT 11 SOUTH OF INTERCHANGE $^{ m 1}$	MD 295	Northbound	48	4.0	0.7	N/A	ı	N/A
30	I-495 IL @ MD 193/UNIVERSITY BLVD/EXIT 29	I-495	Inner Loop	60	4.0	0.7	37	1	7

¹ - Owned by National Park Service

^{* -} Under Construction

Figure 2 - Maryland's Top Bottlenecks: 2023



I-70 (Pennsylvania Line to US 40) Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decr Stat R	rease/ rease in rewide rank
105 126	I-70 W @ MD 17/EXIT 42 EAST OF INTERCHANGE I-70 E @ WASHINGTON-FREDERICK COUNTY BORDER	Westbound Eastbound	9	7 5	0.2	N/A 218	^	N/A 92
136	I-70 W @ MD 65/EXIT 29	Westbound	10	4	0.1	N/A	ı	N/A
139	I-70 E @ US 40 ALT/EXIT 48	Eastbound	4	7	0.1	168	^	29
148	I-70 E @ MD 17/EXIT 42	Eastbound	14	2	0.1	N/A	1	N/A
151	I-70 W @ MD 632/DOWNSVILLE PIKE/EXIT 28 EAST OF INTERCHANGE	Westbound	6	5	0.1	170	↑	19
185	I-70 W @ US 40/EXIT 9 EAST OF INTERCHANGE	Westbound	9	3	0.1	N/A	ı	N/A
205	I-70 W @ MD 66/EXIT 35	Westbound	10	2	0.1	N/A	1	N/A
224	I-70 W @ US 40/EXIT 32 EAST OF INTERCHANGE	Westbound	3	5	0.1	N/A	ı	N/A
226	I-70 E @ MD 63/EXIT 24 WEST OF INTERCHANGE	Eastbound	2	7	0.1	N/A	1	N/A

I-70 (US 40 Frederick to I-695) Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decre State	ease/ ease in ewide ank
25	I-70 W @ US 15/US 340/EXIT 52	Westbound	115	2	0.8	N/A	N	N/A
27	I-70 E @ I-695/EXIT 91 WEST OF INTERCHANGE	Eastbound	57	4	0.8	23	Ψ	-4
108	I-70 W @ US 29/EXIT 87	Westbound	50	2	0.2	N/A	N	N/A
112	I-70 E @ US 29/EXIT 87 WEST OF INTERCHANGE	Eastbound	13	4	0.2	N/A	١	N/A
158	I-70 E @ US 15/US 340/EXIT 52 WEST OF INTERCHANGE	Eastbound	9	3	0.1	N/A	N	N/A
170	I-70 E @ MARRIOTTSVILLE RD/EXIT 83	Eastbound	25	1	0.1	146	•	-24
212	I-70 W @ US 40 ALT/EXIT 49 EAST OF INTERCHANGE	Westbound	5	4	0.1	163	•	-49
237	I-70 W @ MARRIOTTSVILLE RD/EXIT 83 EAST OF INTERCHANGE	Westbound	3	5	0.1	158	Ψ	-59
245	I-70 E @ MD 32/EXIT 80 WEST OF INTERCHANGE	Eastbound	4	4	0.1	N/A	N	N/A
312	I-70 E @ MD 27/EXIT 68 WEST OF INTERCHANGE	Eastbound	1	5	0.0	N/A	١	N/A

I-81 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decr Stat	rease/ ease in ewide ank
137	I-81 S @ HALFWAY BLVD/EXIT 5 NORTH OF INTERCHANGE	Southbound	11	4	0.1	180	^	43
218	I-81 S @ US 40/EXIT 6	Southbound	11	2	0.1	N/A	ı	N/A
287	I-81 N @ HALFWAY BLVD/EXIT 5	Northbound	7	2	0.0	415	^	128
311	I-81 S @ US 11/EXIT 2	Southbound	2	4	0.0	N/A	ı	N/A
313	I-81 S @ MAUGANSVILLE RD/EXIT 8 NORTH OF INTERCHANGE	Southbound	3	3	0.0	N/A	ı	N/A
454	I-81 N @ US 40/EXIT 6	Northbound	1	4	0.0	343	Ψ	-111
493	I-81 S @ SHOWALTER RD/EXIT 10 NORTH OF INTERCHANGE	Southbound	1	2	0.0	417	Ψ	-76
499	I-81 N @ US 11/EXIT 2	Northbound	1	2	0.0	609	^	110
509	I-81 S @ I-70/EXIT 3	Southbound	2	1	0.0	596	1	87
562	I-81 N @ MAUGANS AVE/EXIT 9	Northbound	0	4	0.0	N/A	ı	N/A

I-83 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Deci Sta	rease/ rease in tewide Rank
38	I-83 S @ I-695	Southbound	106	2	0.6	N/A		N/A
154	I-83 N @ BELFAST RD/EXIT 24 SOUTH OF INTERCHANGE	Northbound	8	4	0.1	127	Ψ	-27
247	I-83 N @ MIDDLETOWN RD/EXIT 31 SOUTH OF INTERCHANGE	Northbound	4	3	0.1	N/A		N/A
257	I-83 S @ MD 137/MOUNT CARMEL RD/EXIT 27 NORTH OF INTERCHANGE	Southbound	4	3	0.1	N/A		N/A
273	I-83 S @ TIMONIUM RD/EXIT 16	Southbound	6	2	0.0	337	^	64
350	I-83 N @ SHAWAN RD/EXIT 20	Northbound	6	1	0.0	N/A		N/A
352	I-83 S @ BELFAST RD/EXIT 24	Southbound	3	2	0.0	374	^	22
355	I-83 S @ SHAWAN RD/EXIT 20 NORTH OF INTERCHANGE	Southbound	1	5	0.0	282	Ψ	-73
358	I-83 N @ MD 133/RUXTON RD	Northbound	2	3	0.0	329	Ψ	-29
403	I-83 N @ MD 137/MOUNT CARMEL RD/EXIT 27 SOUTH OF INTERCHANGE	Northbound	1	4	0.0	231	Ψ	-172

I-95 (I-495 to I-695 North) Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decr Stat	ease/ ease in ewide ank
9	I-95 N @ MD 100/EXIT 43 SOUTH OF INTERCHANGE	Northbound	128	4	1.6	N/A	ı	N/A
19	I-95 S @ MD 216/EXIT 35 NORTH OF INTERCHANGE	Southbound	67	5	1.0	N/A	ı	N/A
22	I-95 S @ I-495/EXIT 27-25	Southbound	131	2	1.0	21	Ψ	-1
78	I-95 N @ I-95 (EAST)	Northbound	47	2	0.3	57	Ψ	-21
87	I-95 S @ MD 100/EXIT 43	Southbound	22	4	0.3	83	Ψ	-4
90	I-95 N @ MD 175/EXIT 41	Northbound	29	3	0.3	85	Ψ	-5
98	I-95 S @ MD 32/EXIT 38	Southbound	31	3	0.2	117	^	19
106	I-95 N @ I-695/EXIT 49 SOUTH OF INTERCHANGE	Northbound	39	2	0.2	N/A	ı	N/A
122	I-95 S @ MD 34/EXIT 77	Southbound	11	5	0.2	N/A	ı	N/A
133	I-95 N @ PRINCE GEROGE'S/HOWARD COUNTY LINE	Northbound	19	2	0.1	190	^	57

I-95 (I-695 North to Delaware Line) Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Increase/ Decrease in Statewide Rank	
7	I-95 N @ MD 152/EXIT 74	Northbound	67	7	1.7	5	↓ -2	
45	I-95 N @ MD 24/EXIT 77	Northbound	46	3	0.5	28	↓ -17	
74	I-95 S @ MD 543/EXIT 80	Southbound	48	2	0.3	88	↑ 14	
77	I-95 S @ MD 43/WHITE MARSH BLVD/EXIT 67 N. OF INTERCHANGE	Southbound	11	9	0.3	N/A	N/A	
93	I-95 S @ MARYLAND HOUSE	Southbound	22	3	0.3	79	↓ -14	
119	I-95 S 2 MD 152/EXIT 74	Southbound	20	3	0.2	N/A	N/A	
122	I-95 S @ MD 24/EXIT 7	Southbound	11	5	0.2	N/A	N/A	
132	I-95 N @ MD 22/EXIT 85	Northbound	13	4	0.1	92	↓ -40	
150	I-95 N @ MD 279/EXIT 109 SOUTH OF INTERCHANGE	Northbound	3	9	0.1	97	↓ -53	
153	I-95 S @ MD 175/EXIT 41 NORTH OF INTERCHANGE	Southbound	10	3	0.1	N/A	N/A	

I-97 Top Bottlenecks

2023 Statewide			Average Duration	Average Length	Impact	2022 Statewide	Deci	rease/ rease in tewide
Rank	LOCATION	Direction	(minute)	(mile)	Factor	Rank	F	Rank
69	I-97 S @ US 50/US 301	Southbound	15	7	0.4	82	^	13
75	I-97 S @ MD 178/EXIT 5	Southbound	35	3	0.3	N/A		N/A
225	I-97 N @ MD 3/EXIT 7	Northbound	14	2	0.1	204	Ψ	-21
234	I-97 S @ MD 3/EXIT 7	Southbound	8	2	0.1	176	Ψ	-58
236	I-97 N @ BENFIELD BLVD/EXIT 10 SOUTH OF INTERCHANGE	Northbound	4	4	0.1	N/A		N/A
344	I-97 S @ I-695/EXIT 17	Southbound	16	0	0.0	348	1	4
357	I-97 N @ MD 178/EXIT 5	Northbound	2	3	0.0	377	Ψ	-20
364	I-97 S @ MD 3 BR/NEW CUT RD/EXIT 12	Southbound	5	1	0.0	430	^	66
411	i-95 S @ MD 100/EXIT 14	Southbound	4	1	0.0	487	^	76
414	I-97 N @ MD 3 BUS/NEW CUT RD	Northbound	2	3	0.0	N/A		N/A

-270 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decr Stat	rease/ rease in tewide Rank
5	I-270 N @ MD 109/EXIT 22	Northbound	128	5	2.1	4	Ψ	-1
10	I-270 S @ MD 109/EXIT 22	Southbound	120	4	1.5	7	Ψ	-5
17	I-270 N @ MIDDLEBROOK RD/EXIT 13	Northbound	87	4	1.1	20	1	3
26	I-270 SPUR S @ I-495	Southbound	246	1	0.8	22	Ψ	-4
43	I-270 N @ MD 80/EXIT 26	Northbound	54	4	0.6	61	^	18
51	i-270 S @ MD 121	Southbound	18	8	0.5	N/A	1	N/A
52	I-270 N @ MONTROSE RD/EXIT 4	Northbound	55	3	0.5	80	1	28
68	I-270 N @ MD-85/EXIT 31 SOUTH OF INTERCHANGE	Northbound	14	8	0.4	13	Ψ	-55
72	I-270 N @ I-70/US 40	Northbound	86	2	0.3	67	Ψ	-5
86	I-270 N @ I-270/WASHINGTON NATIONAL PIKE	Northbound	92	1	0.3	91	^	5

-495 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decre State	ease/ ease in ewide ank
1	I-495 IL @ I-270 SPUR EAST OF INTERCHANGE	Inner Loop	120	7	3.1	N/A	N	I/A
3	I-495 OL @ MD 97/GEORGIA AVE/EXIT 31	Outer Loop	225	3	2.7	3		0
6	I-95/I-495 OL @ GREENBELT STATION RD/EXIT 24	Outer Loop	124	5	1.9	10	^	4
8	I-95/I-495 N @ MD 202 NORTH OF INTERCHANGE	Northbound	373	1	1.6	9	^	1
12	I-495 IL @ MD 650/NEW HAMPSHIRE AVE/EXIT 28 WEST OF INTERCHANGE	Inner Loop	79	5	1.3	N/A	N	I/A
13	I-95/I-495 IL @ I-295	Inner Loop	126	2	1.3	15	1	2
14	I-95/I-495 OL @ US 50/EXIT 19	Outer Loop	164	2	1.2	17	^	3
15	I-495 IL @ MD 97/GEORGIA AVE/EXIT 31 WEST OF INTERCHANGE	Inner Loop	93	4	1.2	12	Ψ	-3
18	I-495 IL @ CLARA BARTON PKWY/EXIT 41 AT INTERCHANGE	Inner Loop	81	4	1.1	11	Ψ	-7
21	I-95/I-495 IL @ MD 450/ANNAPOLIS RD/EXIT 20 AT INTERCHANGE	Inner Loop	122	3	1.0	25	^	4

I-695 Top Bottlenecks

2023 Statew Ranl	ide	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decr Stat	ease/ ease in ewide ank
31	I-695 IL @ MD 372/WILKENS AVE/EXIT 12	Inner Loop	101	2	0.7	31		0
32	I-695 IL @ I-83/MD 25/EXIT 23	Inner Loop	70	3	0.7	N/A	١	N/A
37	I-695 OL @ PROVIDENCE RD//EXIT 28	Outer Loop	55	3	0.6	N/A	١	N/A
39	I-695 @ I-70/EXIT 16	Outer Loop	93	2	0.6	N/A	ľ	N/A
41	I-695 OL @ MD 26/EXIT 18	Outer Loop	80	2	0.6	24	Ψ	-17
48	I-695 IL @ EDMONDSON AVE/EXIT 14	Inner Loop	66	2	0.5	442	^	394
50	I-695 IL @ PROVIDENCE RD/EXIT 28	Inner Loop	52	3	0.5	43	•	-7
60	I-695 IL @ MD 542/LOCH RAVEN BLVD/EXIT 29	Inner Loop	36	4	0.4	66	^	6
63	I-695 IL @ MD 122/SECURITY BLVD/EXIT 17	Inner Loop	84	2	0.4	36	Ψ	-27
73	I-695 OL @ MD 567/CROMWELL BRIDGE RD/EXIT 29	Outer Loop	62	2	0.3	60	Ψ	-13

I-795 TopBottlenecks

2023 Statewide			Average Duration	Average Length	Impact	2022 Statewide	Decr	ease/ ease in ewide
Rank	LOCATION	Direction	(minute)	(mile)	Factor	Rank	R	ank
280	I-795 S @ I-695	Southbound	2	4	0.0	248	•	-32
349	I-795 N @ OWINGS MILLS BLVD/EXIT 4	Northbound	4	2	0.0	229	•	-120
496	I-795 N @ MD 30/MD 128/MD 140/EXIT 9	Northbound	0	3	0.0	492	Ψ	-4
498	I-795 S @ OWINGS MILLS BLVD/EXIT 4	Southbound	1	2	0.0	453	Ψ	-45
551	I-795 S @ FRANKLIN BLVD/EXIT 7	Southbound	1	1	0.0	529	Ψ	-22
975	I-795 N @ FRANKLIN BLVD/EXIT 7	Northbound	0	4	0.0	922	Ψ	-53

l-895 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	(mile)	Factor	2022 Statewide Rank	Deci Stat	rease/ rease in tewide tank
40	I-895 S @ HARBOR TUNNEL THWY (SOUTH) NORTH OF TUNNEL ENT.	Southbound	64	3	0.6	N/A		N/A
121	I-895 S @ HARBOR TUNNEL THWY (NORTH) AT TUNNEL ENTRANCE	Southbound	45	1	0.2	196	1	75
156	I-895 N @ HARBOR TUNNEL THWY (SOUTH) SOUTH OF TUNNEL ENT.	Northbound	28	1	0.1	169	↑	13
200	I-895 N @ HARBOR TUNNEL THWY (NORTH) NORTH OF TUNNEL EXIT	Northbound	19	1	0.1	186	Ψ	-14
211	I-895 N @ FRANKFURST AVE/SHELL RD/EXIT 8 SOUTH OF INTERCHANGE	Northbound	12	2	0.1	N/A		N/A
230	I-895 S @ HOLABIRD AVE/EXIT 10	Southbound	17	1	0.1	257	^	27
258	I-895 N @ CHILDS ST/EXIT 9 NORTH OF TOLL PLAZA	Northbound	36	0	0.0	205	Ψ	-53
314	I-895 S @ O'DONNELL ST/EXIT 11	Southbound	13	1	0.0	290	Ψ	-24
444	I-895 S @ US 40/PULASKI HWY/EXIT 13	Southbound	4	1	0.0	877	1	433
458	I-895 S @ MD 2/POTEE ST/EXIT 7	Southbound	2	2	0.0	394	Ψ	-64

MD 32 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Dec Sta	rease/ rease in tewide Rank
24	MD 32 W @ I-95 EAST OF INTERCHANGE	Westbound	86	3	0.8	N/A		N/A
62	MD 32 E @ MD 198/FORT MEADE RD	Eastbound	70	2	0.4	N/A		N/A
107	MD 32 W @ MD 175/ANNAPOLIS RD	Westbound	37	2	0.2	99	Ψ	-8
173	MD 32 W @ US 1	Westbound	15	2	0.1	129	Ψ	-44
188	MD 32 E @ HENKELS LN/DORSEY RUN RD	Eastbound	28	1	0.1	224	^	36
197	MD 32 W @ MD 198/FORT MEADE RD EAST OF INTERCHANGE	Westbound	6	4	0.1	N/A		N/A
209	MD 32 E @ GREAT STAR DR	Eastbound	12	2	0.1	359	^	150
221	MD 32 E @ MD 295 (LAUREL) WEST OF INTERCHANGE	Eastbound	10	2	0.1	246	1	25
227	MD 32 E @ I-95 WEST OF INTERCHANGE	Eastbound	11	2	0.1	N/A		N/A
322	MD 32 W @ HENKELS LN/DORSEY RUN RD	Westbound	10	1	0.0	306	Ψ	-16

MD 100 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Decre State	ease/ ease in ewide ank
115	MD 100 E @ MARC DORSEY STATION ACCESS RD/EXIT 7 WEST OF INT.	Eastbound	55	1	0.2	N/A	N	I/A
118	MD 100 W @ MARC DORSEY STATION ACCESS RD/EXIT 7	Westbound	31	2	0.2	N/A	Ν	I/A
190	MD 100 E @ MD 174/QUARTERFIELD RD	Eastbound	22	1	0.1	N/A	N	I/A
207	MD 100 W @ MD 713/RIDGE RD/EXIT 10 EAST OF INTERCHANGE	Westbound	9	3	0.1	N/A	N	I/A
208	MD 100 W @ MD 174/QUARTERFIELD RD EAST OF INTERCHANGE	Westbound	14	2	0.1	N/A	N	I/A
215	MD 100 E @ MD 2 WEST OF INTERCHANGE	Eastbound	8	3	0.1	404	1	189
217	MD 100 W @ US 29	Westbound	26	1	0.1	151	Ψ	-66
235	MD 100 W @ OAKWOOD RD	Westbound	14	1	0.1	385	1	150
251	MD 100 W @ MD 170/TELEGRAPH RD/EXIT 11	Westbound	9	2	0.1	336	↑	85
253	MD 100 E @ MD 713/RIDGE RD/EXIT 10	Eastbound	8	2	0.1	328	^	75

MD 200 Top Bottlenecks

2023 Statewide Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Statewide Rank	Increase/ Decrease in Statewide Rank
321	MD 200 E @ MD 97/GEORGIA AVE	Eastbound	1	5	0.0	144	↓ -177
372	MD 200 W @ I-370 EAST OF INTERCHANGE	Westbound	1	5	0.0	N/A	N/A
540	MD 200 W @ MD 182/LAYHILL RD EAST OF INTERCHANGE	Westbound	0	3	0.0	N/A	N/A
542	MD 200 E @ US 29/COLUMBIA PIKE	Eastbound	1	3	0.0	370	↓ -172
570	MD 200 E @ MD 650/NEW HAMPSHIRE AVE WEST OF INTERCHANGE	Eastbound	0	3	0.0	N/A	N/A
590	MD 200 W @ MD 650/NEW HAMPSHIRE AVE EAST OF INTERCHANGE	Westbound	0	3	0.0	N/A	N/A
599	MD 200 E @ I-95	Eastbound	1	2	0.0	554	↓ -45
653	MD 200 E @ MD 182/LAYHILL RD WEST OF INTERCHANGE	Eastbound	0	2	0.0	N/A	N/A
901	MD 200 W @ MD 97/GEORGIA AVE EAST OF INTERCHANGE	Westbound	0	2	0.0	N/A	N/A
966	MD 200 W @ US 29/COLUMBIA PIKE	Westbound	0	1	0.0	778	↓ -188

MD 295 Top Bottlenecks

2023 Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Rank	Increase/ Decrease in Statewide Rank
2	MD 295 S @ MD 198	Southbound	292	3	2.9	1	↓ -1
4	MD 295 S @ POWDER MILL RD NORTH OF INTERCHANGE	Southbound	146	5	2.2	8	↑ 4
16	MD 295 S @ RIVERDALE RD NORTH OF INTERCHANGE	Southbound	113	3	1.2	N/A	N/A
20	MD 295 N @ I-495/I-95	Northbound	76	4	1.0	19	Ψ -1
23	MD 295 S @ MD 197/EXIT 11	Southbound	114	3	0.9	34	↑ 11
28	MD 295 N CANINE RD	Northbound	88	3	0.7	N/A	N/A
29	MD 295 N @ MD 197/EXIT 11 SOUTH OF INTERCHANGE	Northbound	48	4	0.7	N/A	N/A
47	MD 295 S @ AA-PG COUNTY BORDER (LAUREL) (NORTH)	Southbound	35	4	0.5	39	↓ -8
55	MD 295 N @ MD 100	Northbound	92	2	0.5	56	↑ 1
59	MD 295 S @ CANINE RD NORTH OF INTERCHANGE	Southbound	44	3	0.4	48	↓ -11

US 50 TopBottlenecks

2023 Rank	LOCATION	Direction	Average Duration (minute)	Average Length (mile)	Impact Factor	2022 Rank	Dec Sta	crease/ crease in atewide Rank
11	US 50 E @ WILLIAM PRESTON LANE BRIDGE	Eastbound	101	4	1.3	6	Ψ	-5
36	US 50 E @ MD 202/LANDOVER RD	Eastbound	90	2	0.6	68	^	32
53	US 50 W @ WILLIAM PRESTON LANE BRIDGE	Westbound	46	3	0.5	N/A		N/A
67	US 50 E @ MD 295/BALTIMORE WASHINGTON PKWY	Eastbound	112	1	0.4	81	^	14
85	US 50 E @ I-97/EXIT 21	Eastbound	18	4	0.3	96	^	11
116	US 50 E @ BAY DALE DR/FERGUSON RD/EXIT 28	Eastbound	29	2	0.2	199	^	83
129	US 50 E @ WILLIAM PRESTON LANE BRIDGE TOLL PLAZA	Eastbound	65	1	0.2	237	^	108
134	US 50 E @ MD 648/BLATIMORE ANNAPOLIS BLVD	Eastbound	30	2	0.1	N/A		N/A
146	US 50 W @ MD 201/MD 295/KENILWORTH AVE	Westbound	14	3	0.1	123	Ψ	-23
174	US 50 W @ MD 648/BLATIMORE ANNAPOLIS BLVD EAST OF INT.	Westbound	11	3	0.1	N/A		N/A



C. ARTERIAL CORRIDOR FACT SHEETS

Roadway congestion is not limited to freeways/expressways. At signalized intersections, delays occur along the major road for cross traffic to access the mainline. The most significant of these delays happen along arterial roadways. Arterials provide the connection between the freeway/expressway system and the local roadways. These roadways normally have multiple lanes, traffic signals, and access points either from cross streets or driveways. Normally arterial roadways have the second highest volumes of traffic with only freeways/expressways outranking them.

Congestion along arterial roadways is based upon the volumes along those roadways, the number of signals and the duration of green time given to the main road, and the number of lanes. The SHA has identified the 35 most congested arterial corridors in the AM and PM peak hours based on observed traffic operations, traffic volumes, and regional significance. Summer weekend congestion locations, including US 50, MD 18, and MD 90 on the Eastern Shore, were also evaluated. Traffic analysis was performed to identify the most congested intersections and segments and the accompanying levels of service, TTI, and PTI on a segment basis. Various roadway characteristics such as the number of lanes, speed limits, signalized intersections, and traffic/transit ridership data were analyzed.

The following corridors were analyzed in 2023:

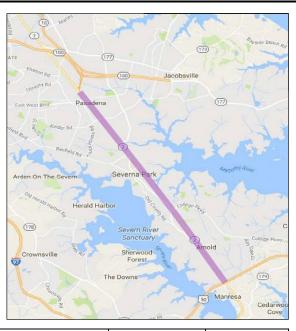
- MD 2 US 50/301 to MD 10 (Anne Arundel)
- MD 3 US 50/301 to I-97 (Anne Arundel)
- MD 4 Washington DC Line to Dower House Road (Prince George's)
- MD 4 MD 5 to MD 2 (St. Mary's)
- MD 5 US 301 to MD 223 (Prince George's)
- MD 18 MD 8 to Piney Road (summer weekend) (Queen Anne's)
- MD 24 US 40 to US 1 (Harford)
- MD 26 MD 32 to Baltimore City Line (Baltimore)
- MD 28 Riffle Ford Road to MD 97 (Montgomery)
- MD 30- MD 30 Business to MD 86 (Carroll)
- MD 32 MD 108 to MD 26 (Howard & Carroll)
- MD 43 I-695 to US 40 (Baltimore)
- MD 45 Baltimore City Line to Shawan Road (Baltimore)
- MD 85 English Muffin Way to I-70 (Frederick)

- MD 90 US 50 to MD 528 (summer weekend) (Worcester)
- MD 97 Washington DC Line to MD 108 (Montgomery)
- MD 124 MD 28 to MD 108 (Montgomery)
- MD 140 MD 97 to Baltimore City Line (Carroll & Baltimore)
- MD 152 US 40 to Carrs Mill Road (Harford)
- MD 175 MD 32 to US 29 (Anne Arundel and Howard)
- MD 185 Washington DC Line to MD 97 (Montgomery)
- MD 193 MD 201 to MD 650 (Prince George's)
- MD 201 MD 450 to MD 212 (Prince George's)
- MD 210 MD 228 to I-95 (Prince George's)
- MD 228 MD 210 to US 301 (Prince George's and Charles)
- MD 355 Washington DC Line to MD 27 (Montgomery)
- MD 410 MD 355 to US 29 (Montgomery)
- MD 410 MD 650 to Pennsy Drive (Prince George's)

- MD 450 MD 202 to MD 704 (Prince George's)
- MD 528 Delaware State Line to US 50 (summer weekend) (Worcester)
- MD 650 Washington DC Line to US 29 (Montgomery)
- US 1 MD 410 to MD 198 (Prince George's)
- US 1 Baltimore City Line to Honeygo Boulevard (Baltimore)
- US 29 MD 97 to MD 650 (Montgomery)
- US 29 Industrial Parkway to MD 198 (Montgomery)
- US 40 I-70 to Cleveland Ave (Washington)
- US 50 MD 213 to MD 528 (summer weekend) (Talbot, Dorchester, Wicomico & Worcester)
- US 301 Billingsley Rd to MD 5 North (Charles/ Prince George's)
- US 301 MD 4 to Leeland Rd (Prince George's)
- US 301 Middleton Bridge to MD 234(summer weekend) (Charles)

MD₂

Limits:	US 50/301	to MD 10					
Corridor Length:	8.4 m	niles					
Speed Limit:	50 N	IPH					
Travel Lanes:	2-3 (Northbound) 1-3 (Southbound)						
Signal Controlled Intersections:	12						
Grade Separated Interchanges:	1						
Major Cross Streets:	MD 10, MD 648, College Pkwy, Magothy Bridge Rd, East West Blvd / Pasadena Rd, US 50						
	Routes Avg. Daily Ridership						
Routes and Ridership	MTA LocalLink 70 1,217						
	MTA Commuter Bus 260	78					



		Peak Hour
2023 AADT	Trucks	Traffic
40,000 - 61,000 vpd	3% - 8%	7.5% - 8%

Segment Operations

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	4	4
LOS E	0	0
LOS F	0	0

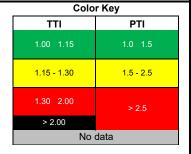
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	4.7 / 0.0	0.0 / 0.0
Moderate	0.9 / 1.6	0.0 / 4.2

2.8 / 6.8

LOS 'E' Intersections

* Available count data for the last four years. (33% of signalized intersections)

LOS F Intersections



		Length		Т	TI			P	TI	
Functional Class	Roadway Segment North to South		AM		PM		AM		Р	M
	North to oddin	(miles)	NB	SB	NB	SB	NB	SB	NB	SB
	MD 10 - Pasadena Rd/East West Blvd.	0.3								
	Pasadena Rd/East West Blvd E Earleigh Heights Rd/Magothy Bridge Rd.	0.9							W	W
Urban Other Principal	E Earleigh Heights Rd/Magothy Bridge Rd MD-648/Baltimore Annapolis Blvd.	1.1							W	
Arterial	MD-648/Baltimore Annapolis Blvd Robinson Rd.	0.5								
	Robinson Rd College PKWY	2.5			W					W
	College PKWY - US301	3.1								W

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

Limits:	US 50/301 to I-97			
Corridor Length:	8.8 miles			
Speed Limit:	45 - 50 MPH			
Travel Lanes:	(2 - 4) Northbound (2 - 4) Southbound			
Signal Controlled Intersections:	12			
Grade Separated Interchanges:	3	3		
Major Cross Streets:	I-97, MD 175, MD 424, Waugh Chapel Rd, Defense Hwy, MD 450, Belair Rd, US 50/301			
Routes and Ridership	Routes Avg. Daily Ridership N/A N/A			

Odenton	brills 3
Night Har Solf Cen	Millersville Ganda Hay
Defense Hwy	Crofton Park
Athletic Comme	Colorse Huy
John H	Peak Hour

Segment Operations

2023 AADT

68,000 - 82,000 vpd

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	5.4 / 1.3	8.3 / 0.0
Moderate	0.9 / 0.0	0.0 / 1.0
Heavy to Severe	2.5 / 7.5	0.5 / 7.8

Trucks

4% - 6%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	10	8
LOS E	2	2
LOS F	0	2

LOS 'E' Intersections

MD 3 (SB/L) at MD 175 (AM)

MD 3 at MD 424/Conway Rd (PM)

MD 3 (SB) at South Main Chapel Way/Directional Crossover (AM, PM)

LOS F Intersections

MD 3 (SB/L) at MD 175 (PM) MD 3 (NB) at Riedel Rd (PM)

TTI	PTI		
1.00 1.15	1.0 1.5		
1.15 - 1.30	1.5 - 2.5		
1.30 2.00	> 2.5		
> 2.00			
No data			

Color Key

Traffic

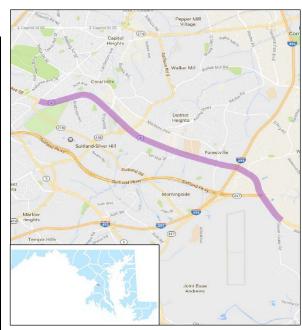
7.5% - 8%

* Available count data for the last four years. (100% of signalized intersections)

	Roadway Segment North to South			Т	TI			P	TI	-
Functional Class			AM		Р	М	Δ	AM		M
	North to could	(miles)	NB	SB	NB	SB	NB	SB	NB	SI
	Patuxent Fwy (MD-32) - Annapolis Rd (MD-175)/Millersville Rd	8.0				W				٧
	Annapolis Rd (MD-175)/Millersville Rd - St. Stephens Ch Rd	1.2				W	- 1		- 1	٧
	St. Stephens Church Rd - Waugh Chapel Rd/Riedel Rd	0.5	W		W		W		W	
	Waugh Chapel Rd/Riedel Rd - John Hopkins Rd	0.8			W		W		W	
Urban Other Principal	Johns Hopkins Rd - Conway Rd/Davidsonville Rd (MD-424)	0.9		W				W	W	
Arterial	CnwayRd/DvdsonvilleRd(MD-424)-CrawfordBlvd/CrnsnBlvd	0.7								٧
	Crawford Blvd/Cronson Blvd - Defense Hwy (MD-450)	1.3								ľ
	Defense Hwy (MD-450) - Annapolis Rd (MD-450)	0.5								
	Annapolis Rd (MD-450) - Belair Drive/Melford Blvd	1.6		W				ı	W	
	Belair Drive/Melford Blvd - US-50	0.5							W	٧

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	Washington DC Line to Dower House Rd					
Corridor Length:		6.6 m	niles			
Speed Limit:		35 - 55	MPH			
Travel Lanes:	(2 - 3)	Northbound	(2 - 3) Southb	ound		
Signal Controlled Intersections:	12					
Grade Separated Interchanges:	7					
Major Cross Streets:	MD 458, Forestville Rd, I-95, MD 337, MD 223, Dower House Rd					
	MTA Commuter Bus Routes	Avg. Daily Ridership	METRO Routes	Avg. Daily Ridership		
	Duo i toutos	aop	J12	774		
Routes and Ridership	810	51	K12	2,069		
Noutes and Nidership	820	270	1,377			
	830	196	The Bus	Avg. Daily		
	840	160	Routes	Ridership		
	850	44	20	N/A		



		Peak Hour
2023 AADT	Trucks	Traffic
21,000 - 62,000 vpd	2% - 9%	6.5% - 7.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	4	4
LOS E	0	0
LOS F	0	0

Segment Operations

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	1.6 / 4.8	4.5 / 3.0
Moderate	4.0 / 1.4	1.2 / 1.5
Heavy to Severe	1.0 / 0.4	0.9 / 2.1

LOS 'E' Intersections

LOS F Intersections

Color Key				
TTI	PTI			
1.00 1.15	1.0 1.5			
1.15 - 1.30	1.5 - 2.5			
1.30 2.00	> 2.5			
> 2.00				
No da	ata			

* Available count data for the last four years, (33% of signalized in	ntersections)

		1		Т	TI				PTI	
Functional Class	Roadway Segment North to South	Length (miles)	AM		P	M	AM		F	PM
	North to Count	(IIIIes)		SB	NB	SB	NB	SB	NB	SB
	Southern Ave - Alton St/ Shadyside Ave.	0.8								
Ī	Alton St/ Shadyside Ave Spaulding Ave./Quarter Ave.	0.5								
	Spaulding Ave./Quarter Ave Brooks Dr.	0.4								
Ī	Brooks Dr Silver Hill Rd. (MD-458)	0.7								
Urban Other Principal Arterial	Silver Hill Rd. (MD-458) - Parkland Dr.	0.3								
Ī	Parkland Dr Walters Ln.	0.8								
	Walters Ln Donnell Dr.	0.4								
Ī	Donnell Dr Forestville Rd.	0.6								W
Ī	Forestville Rd I95/I495	0.4								W
	195/1495 - Old Marlboro Pike/ Westphalia Rd.	0.3								
Urban Freeway Expressway	Old Marlboro Pike/ Westphalia Rd MD-337	0.6				ı		- 1	I	ı
ĺ	MD-337 - Dowerhouse Rd.	0.8					W	1		W

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

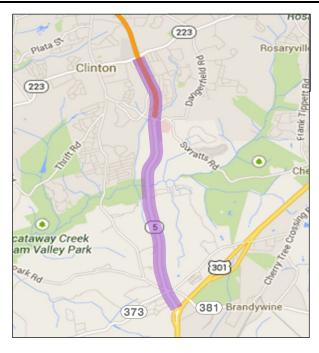
PTI: planning time index (95th percentile travel time / freeflow travel time)

MD 4 245 Limits: MD 5 to MD 2 HOLLYWOOD **Corridor Length:** 10 miles Speed Limit: 45 - 50 MPH **Travel Lanes:** (1 - 2) Northbound (1 - 2) Southbound River State Park LOOKOUT **Signal Controlled** 4 Intersections: **Grade Separated** 1 Interchanges: MD 5. Valley Lee Indian Bridge Rd, **Major Cross Streets:** FDR Blvd, MD 235, Patuxent Blvd, MD 2 **Peak Hour** Routes Avg. Daily Ridership 2023 AADT **Trucks** Traffic **Routes and Ridership** 3% - 6% N/A N/A 11,000 - 28,000 vpd 9% **Segment Operations** Intersection Operations Northbound Southbound AM / PM AM / PM **PM Peak Hour** Level of (Miles of (Miles of Signalized Intersections*: AM Peak Hour Congestion Roadway) Roadway) LOS D or Better 10.0 / 0.0 10.0 / 10.0 Uncongested LOS E Moderate 0.0 / 10.0 0.0 / 0.0 LOS F Heavy to Severe 0.0 / 0.0 0.0 / 0.0 LOS 'E' Intersections LOS F Intersections Color Key MD 4 at FDR Blvd (PM) TTI PTI MD 4 at FDR Blvd (AM) MD 4 at MD 235 (AM, PM) 1.15 - 1.30 1.5 - 2.5 1.30 2.00 > 2.00 * Available count data for the last four years. (75% of signalized intersections) No data

	Roadway Segment			Т	TI			Р	TI	
Functional Class			Functional Class Roadway Segment Le North to South (m		Α	M	Р	М	А	M
	Horar to oddin	(1111100)	NB	SB	NB	SB	NB	SB	NB	SB
Rural Freeway	MD2(Thomas Johnson Memorial Brdg.) - N Patuxent Beach Rd.	1.0								
Expressway/Rural Other	N Patuxent Beach Rd Patuxent Blvd.	2.2							W	
Principal Arterial	Patuxent Blvd MD235(Three Notch Rd.)	0.7								
Rural Minor Arterial	MD235(Three Notch Rd.) - F D Roosevelt Blvd.	0.3								
Rurai Minor Arteriai	F D Roosevelt Blvd MD5	5.8								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	US 301 to MD 223					
Corridor Length:	5.4 miles					
Speed Limit:	55 MPH					
Travel Lanes:	(2 - 3) Northbound (2 - 3) Southbound					
Signal Controlled Intersections:	2					
Grade Separated Interchanges:	2					
Major Cross Streets:	MD 223, Surratts Road MD 381, MD 373, US 301					
	Routes	Avg. Daily Ridership				
	MTA Commuter Bus 705	242				
Routes and Ridership	MTA Commuter Bus 715	214				
	MTA Commuter Bus 725	92				



	MTA Commuter Bus 705	242			
Routes and Ridership	MTA Commuter Bus 715	214			Peak Hour
	MTA Commuter Bus 725	92	2023 AADT	Trucks	Traffic
	MTA Commuter Bus 735	103	67,000 - 82,000 vpd	4% - 7%	6.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	1	1
LOS E	0	0
LOS F	0	0

Segment Operations				
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)		
Uncongested	1.3 / 5.4	3.8 / 0.0		
Moderate	0.0 / 0.0	1.6 / 0.0		
Heavy to Severe	4.1 / 0.0	0.0 / 5.4		

LOS 'E' Intersections

LOS F Intersections

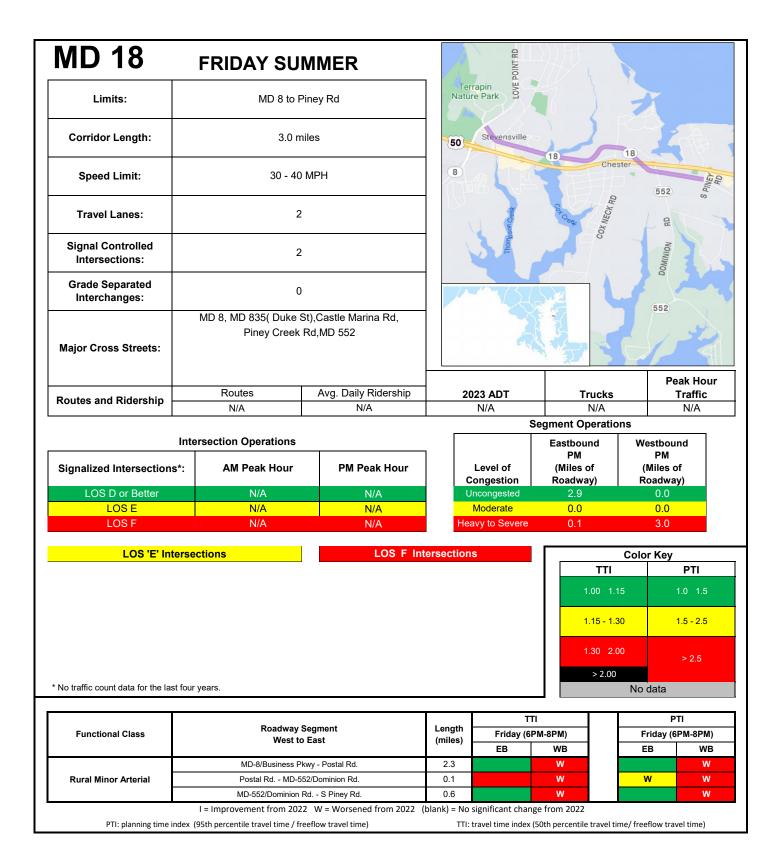
Color Key				
TTI	PTI			
1.00 1.15	1.0 1.5			
1.15 - 1.30	1.5 - 2.5			
1.30 2.00	> 2.5			
> 2.00				
No (data			

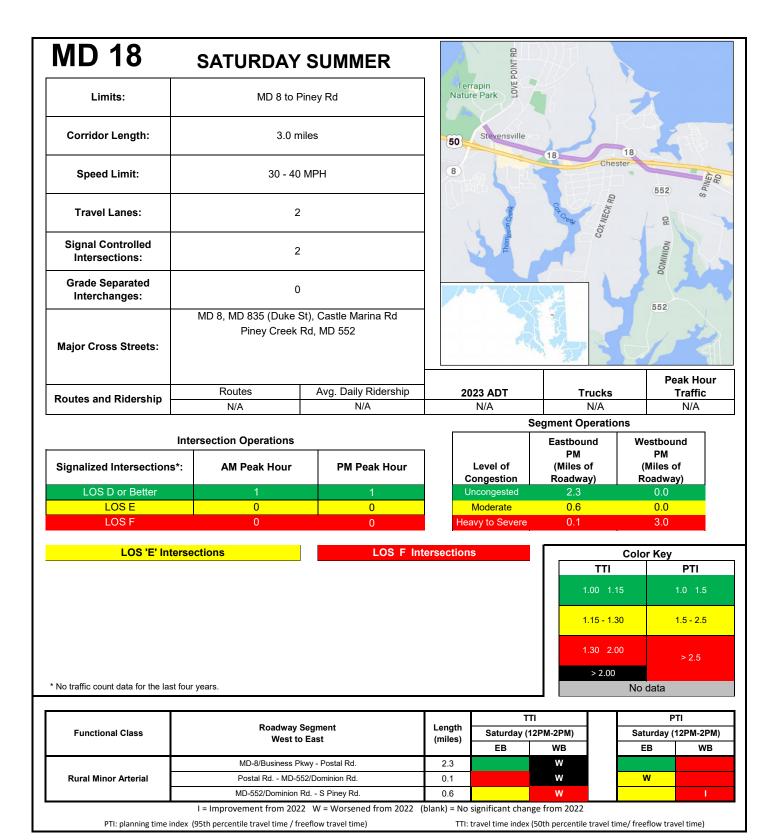
* Available count data for the last	four vears (50% o	of signalized intersections)

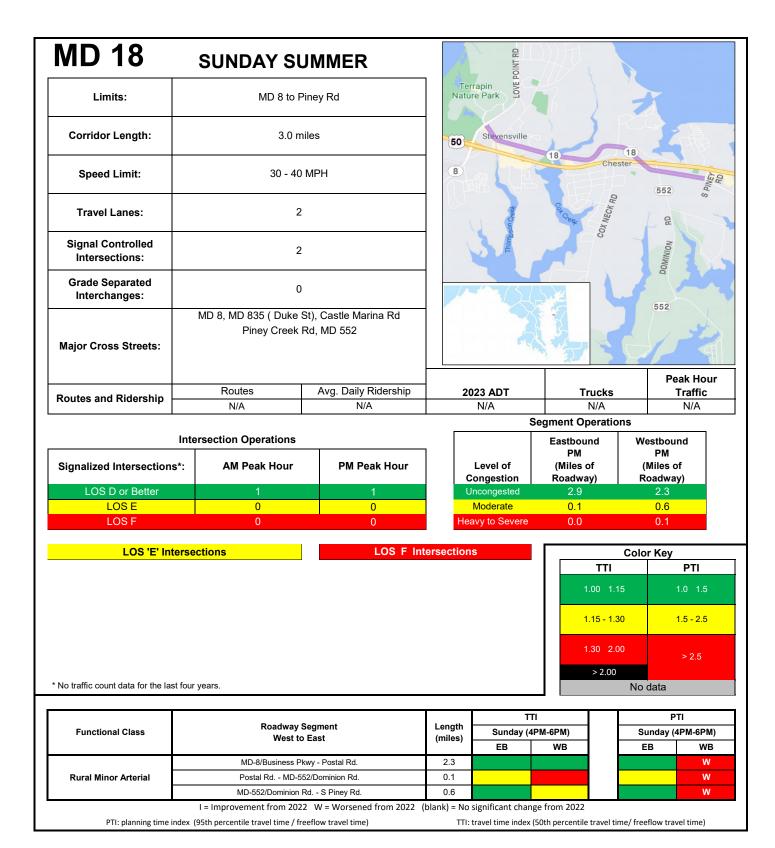
	Roadway Segment North to South			Т	TI			P	TI	
Functional Class			AM		PM		AM		PM	
	North to South	(miles)	NB	SB	NB	SB	NB	SB	NB	SB
	Woodyard Rd. (MD-223) - Surratts Rd.	1.3				W				W
Urban Freeway Expressway	Surratts Rd Burch Hill Rd/Earnshaw Dr.	1.6					W			
	Burch Hill Rd/Earnshaw DrBrandywine Rd./ Accpleel Rd (MD-373)	1.9	W							ı
Rural Other Princ. Arterial	Brandywine Rd./ Accokeek Rd (MD-373)-Crain Hwy. (US-301)	0.6								- 1

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

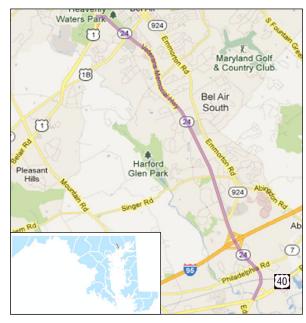
PTI: planning time index (95th percentile travel time / freeflow travel time)







Limits:	US 40 (Pulaski Highway) to US 1 (Bel Air Bypass)			
Corridor Length:	7.9 miles			
Speed Limit:	40 - 55 MPH			
Travel Lanes:	(2 - 3) Northbound (2 - 3) Southbound			
Signal Controlled Intersections:	15			
Grade Separated Interchanges:	3			
Major Cross Streets:	US 40, I-95 MD 7, MD 924, Singer Rd Bel Air South Pkwy, US 1 BUS., US 1			



	Bel Air South Pkwy	, US 1 BUS., US 1		<u></u>	
					Peak Hour
Routes and Ridership	Routes	Avg. Daily Ridership	2023 AADT	Trucks	Traffic
Routes and Ridership	MTA Commuter Bus 410	66	21 000 - 67 000 vpd	2% - 7%	8% - 9%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	10	9
LOS E	0	1
LOS F	0	0

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	6.2 / 1.7	5.7 / 1.9
Moderate	1.3 / 2.8	2.2 / 4.8
Heavy to Severe	0.4 / 3.4	0.0 / 1.2

Segment Operations

LOS 'E' Intersections

MD 24 at Ramps 4, 5 and 9 to and from I-95 (PM)

LOS F Intersections

Color Key					
TTI	PTI				
1.00 1.15	1.0 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 2.00	> 2.5				
> 2.00					
No data					

* Available count data for the last four years	i. (67% of signalized intersections)
--	--------------------------------------

	Roadway Segment North to South						Roadway Segment Le			Т	TI				PΤ	П	
Functional Class			Α	AM		М		AM		PM							
	North to Count	(miles)	NB	SB	NB	SB	N	3 S	В	NB	SB						
	Bel Air Bypass (US-1) - Baltimore Pike (Bus US-1)	0.5															
	Baltimore Pike (Bus US-1) - Ring Factory Rd.	1.3															
	Ring Factory Rd Plumtree Rd.	0.9															
	Plumtree Rd Bel Air Pkwy Bel Air Pkwy - Wheel Rd.																
Heban Francisco Fynnsaesissis	Wheel Rd Singer Rd.	1.0															
Urban Freeway Expressway	Singer Rd Tollgate Rd./Emmorton Rd (MD-924)	1.0															
	Tollgate Rd./Emmorton Rd (MD-924) - I-95	0.6															
	I-95 - Edgewood Rd.	0.4									W						
	Edgewood Rd Philadelphia Rd. (MD-7)	0.4								_							
	Philadelphia Rd. (MD-7) - Pulaski Hwy (US-40)	0.5															
	Pulaski Hwy (US-40) - Edgewood Rd. (MD-755)	0.6															

Limits:	MD 32 (Sykesville Road) to Baltimore City Line				
Corridor Length:	14.1 miles				
Speed Limit:	35 - 50 MPH				
Travel Lanes:	(1 - 2) Eastbound (1 - 3) Westbound				
Signal Controlled Intersections:	27				
Grade Separated Interchanges:	1				
Major Cross Streets:	MD 32, Mariottsville Rd, Old Court Rd, Courtleigh Dr, Rolling Rd, I-695				
	Routes	Avg. Daily Ridership			
Routes and Ridership	CityLink Lime Route	4,258			
Routes and Ridership	1471 111104				

	Parked	A STATE OF THE STA
	Liberty Reservoir	Owings Mills Garrison Steven
Eldersburg	26 Liberty Rd	Lyone Will Rd 140 P
kesville		Randallstown Pikesvill
Sixtes and Rd	VAL.	Milford Mill Lochear Windsor Mill
99	Woodstock	osco Valley
		(a) (695)
	The state of the s	Ellicott City Catonsville

| Routes and Ridership | CityLink Lime Route | 4,258 | MTA LocalLink 81 | 1,002 | 2023 AA | MTA LocalLink 37 | 1,680 | 9,000 - 46,000 | 1,680 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000

 2023 AADT
 Trucks
 Peak Hour Traffic

 9,000 - 46,000 vpd
 3% - 5%
 6.5% - 9%

Segment Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	15	15
LOS E	0	0
LOS F	0	0

Intersection Operations

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	10.8 / 7.9	9.7 / 5.2
Moderate	2.8 / 2.4	4.0 / 3.7
Heavy to Severe	0.5 / 3.8	0.4 / 5.2

LOS 'E' Intersections

LOS 'F' Intersections

Color Key						
TTI	PTI					
1.00 - 1.15	1.0 - 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 - 2.00	> 2.5					
> 2.00						
No data						

* Available count data for the last four years. (56% of signalized intersections)

				Т	TI				P	TI	
Functional Class	Roadway Segment West to East	Length (miles)	(miles) AM		PM		AM		M	PM	
		(66)	EB	WB	EB	WB		EB	WB	EB	WE
	Sykesville Rd. (MD-32) -Georgetown Blvd.	0.3									
Urban Other Principal Arterial	Georgetown Blvd Ridge Rd./ Oklahoma Rd	0.7									
Attoriui	Ridge Rd./ Oklahoma Rd Oakland Mills Rd.	2.0									
Rural Minor Arterial	Oakland Mills Rd Wards Chapel Rd.	1.7									
Rurai Minor Arteriai	Wards Chapel Rd Lyons Mill Rd.	1.2									
	Lyons Mill Rd Deer Park Rd.	1.3									
	Deer Park Rd Marriottsville Rd.	0.2									
	Marriottsville Rd Offutt Rd.	1.5									
	Offutt Rd Greens Ln/McDonogh Rd.	0.2									
	Greens Ln/McDonogh Rd Brenbrook Dr.	0.6									
	Brenbrook Dr Old Court Rd.	0.3									
Urban Other Principal Arterial	Old Court Rd Rolling Rd.	0.8									
Arterial	Rolling Rd Milford Mill Rd.	0.4									
	Milford Mill Rd Washington Ave.	0.5						ı			
	Washington Ave I-695	0.3									
	I-695 -St. Lukes Lane	1.0									
ļ	St. Lukes Lane - Patterson Ave.	0.3									
r	Patterson Ave Northern Parkway/Baltimore City	0.8									

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	Riffle Ford Rd to MD 97				
Corridor Length:	11.9 miles				
Speed Limit:	40 - 50 MPH				
Travel Lanes:	(1 - 3) Eastbound (1 - 3) Westbound				
Signal Controlled Intersections:	30				
Grade Separated Interchanges:	1				
Major Cross Streets:	MD 124, MD 119, Shady Grove Dr, Gude Dr, I-270, MD 189, MD 355, MD 115, MD 97				
	Routes	Avg. Daily Ridership			
	Ride On Route 43	N/A			
	Ride On Route 46	N/A			
	Ride On Route 48	N/A			
Routes and Ridership	Ride On Route 49	N/A			
Routes and Ridership	Ride On Route 52	N/A			
	Ride On Route 54	N/A			
	Ride On Route 56	N/A			
	Ride On Route 63	N/A			
	Ride On Route 76 N/A				



2023 AADT	Trucks	Peak Hour Traffic
21,000 - 45,000 vpd	2% - 5%	7.5% - 8.5%
	Segment Operations	

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	6	5
LOS E	0	1
LOS F	0	0

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	4.8 / 3.8	2.6 / 0.0
Moderate	4.8 / 3.3	5.1 / 8.1
Heavy to Severe	2.3 / 4.8	4.2 / 3.8

LOS 'E' Intersections

MD 28 at Baltimore Rd, West Leg (PM)

LOS 'F' Intersections

Color Key						
TTI	PTI					
1.00 - 1.15	1.0 - 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 - 2.00	> 2.5					
> 2.00						
No data						

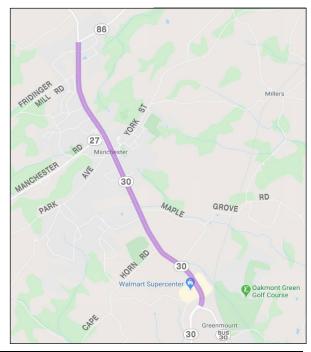
* Available count data for the last four	years. (20% of signalized intersections)
Available count data for the last rout	years. (20 % or signalized intersections)

			TTI Length		TI	I		PTI		
Functional Class	Roadway Segment West to East		AM		PM			AM		M
	11001.10 _ 2001	(miles)	EB	WB	EB	WB	EB	WB	EB	WB
	Riffle Ford Rd Quince Orchard Rd (MD-124)	0.5								
	Quince Orchard Rd (MD-124) - Muddy Branch Rd.	2.1								
	Muddy Branch Rd Great Seneca Hwy (MD-119)	0.8								
	Great Seneca Hwy (MD-119) - Shady Grove Rd.	0.9								
	Shady Grove Rd Fallsgrove Dr/ Gude St.	0.4								
	Fallsgrove Dr/ Gude St Darnestown Rd.	0.5								
	Darnestown Rd I-270	0.7								
Urban Other Principal Arterial	I-270 - Great Falls Rd. / Van Buren St.	0.9								
Artona	Great Falls Rd. / Van Buren St Rockville Pike (MD-355)	0.6								
	Rockville Pike (MD-355)-Veirs Mill Rd (MD-586)/1stSt(MD-911)	0.4								
	Veirs Mill Rd (MD-586)/ 1st St (MD-911) - Gude Dr.	0.9								
	Gude Dr Baltimore Rd.	1.0			W				W	
	Baltimore Rd Bel Pre Rd.	0.7								
	Bel Pre Rd Muncaster Mill Rd. (MD-115)	1.3								
	Muncaster Mill Rd. (MD-115)- Georgia Ave. (MD-97)	0.2								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

Limits:	MD 30 Business to MD 86				
Corridor Length:	3.7 miles				
Speed Limit:	40 MPH				
Travel Lanes:	(1 - 2) Northbound (1 - 2) Southbound				
Signal Controlled Intersections:	6				
Grade Separated Interchanges:	C)			
Major Cross Streets:	MD 30 Business, Broadbeck Rd/Eagle Ridge Ct Cape Horn Rd, Maple Grove Rd, Park Ave/York St, MD 27				
	Fridinger Mill Rd, MD 86				
Routes and Ridership	Routes	Avg. Daily Ridership			
Routes and Ridership	N/A	N/A			



2023 AADT	Trucks	Peak Hour Traffic
19,000 vpd	6%	8.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	2	2
LOS E	0	0
LOS F	0	0

Segment Operations								
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)						
Uncongested	1.2 / 1.2	0.0 / 0.0						
Moderate	2.5 / 0.0	2.5 / 3.7						
Heavy to Severe	0.0 / 2.5	1.2 / 0.0						

LOS 'E' Intersections	LOS F Intersections
*	· ·

TTI DTI				
TTI	PTI			
1.00 1.15	1.0 1.5			
1.15 - 1.30	1.5 - 2.5			
1.30 2.00	> 2.5			
> 2.00				
No	data			

* Available count data for the last four years	(33% of signalized intersections)

			TTI					PTI			
Functional Class	Roadway Segment North to South	Length (miles)	AM		Р	М	-	AM		М	
	Notal to count	(IIIIIC3)	NB	SB	NB	SB	NB	SB	NB	SB	
Arterial	MD86/(Lineboro Rd.) - Hallie Ave.	0.1									
	Hallie Ave MD27/(Manchester Rd.)	1.1									
	MD27/(Manchester Rd.) - Westminster St./(York St.)	0.2									
	Westminster St./(York St.) - Maple Grove Rd.	0.8									
	Maple Grove Rd Eagle Ridge Ct./(Brodbeck Rd.)	1.2							'		
	Eagle Ridge Ct./(Brodbeck Rd.) - MD30 Bus(Hanover Pike/Hampstead Bypass)	0.3									

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	MD 108 (Clarksville Pike) to MD 26 (Liberty Road)				
Corridor Length:	16.3 miles				
Speed Limit:	40 - 50 MPH				
Travel Lanes:	(1 - 2) Northbound (1 - 2) Southbound				
Signal Controlled Intersections:	11				
Grade Separated Interchanges:	3				
Major Cross Streets:	MD 108, Burntwoods Rd, MD 144, I-70, MD 99, MD 26				
Routes and Ridership	Routes Avg. Daily Ridership N/A N/A				

Weshington Ro	Eldersburg	26 4	perty Rd Lyone Nill R
oodbine 8	Sykesville 32		Randa
Frederick R	West	Woo (40) 70	dstock Patapsco Valley State Park
(a)	Friendship.	Kiwanis Wallas Park	40 Ellicon
	Dayton	108 Ile	28 All Columbia
			Peak Hour

2023 AADT Traffic Trucks 23,000 - 36,000 vpd 7% - 10% 8.5% - 9%

Segment Operations

Level of Congestion	Northbound AM / PM (Miles of Roadway)
Uncongested	13.9 / 14.8
Moderate	1.7 / 1.5
Heavy to Severe	0.7 / 0.0

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	4	3
LOS E	0	1
LOS F	0	0

LOS 'E' Intersections

MD 32 at MD 144A (Frederick Rd) (PM)

LOS F Intersections

Color Key					
TTI PTI					
1.00 1.15	1.0 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 2.00	> 2.5				
> 2.00					
No	data				

Southbound AM / PM (Miles of Roadway) 16.3 / 7.1 0.0 / 2.9 0.0 / 6.3

* Available count data for the	e last four years.	(36% of signalized inters	ections)
--------------------------------	--------------------	---------------------------	----------

		TTI				PTI				
	Length	AM PN		M	,		AM		М	
North to South	(IIIIIes)	NB	SB	NB	SB		NB	SB	NB	SB
Liberty Rd. (MD-26) - Springfield Ave. (MD-851)	2.2									
Springfield Ave. (MD-851) - Sandosky Rd./Raincliffe Rd.	0.7									
Sandosky Rd./Raincliffe Rd Friendship Rd. (MD-851)	0.8				W					
Friendship Rd. (MD-851) - River Rd.	1.7		İ	İ						W
River Rd Old Frederick Rd. (MD-99)	1.3									
Old Frederick Rd. (MD-99) - I-70/US-40	0.8									
I-70/US-40 - Frederick Rd. (MD-144)	0.4									
Frederick Rd. (MD-144) - Burntwoods Rd./ Andrea Dr.	3.0									
Burntwoods Rd./ Andrea Dr Clarksville Pike (MD-108)	5.4									1
	Springfield Ave. (MD-851) - Sandosky Rd./Raincliffe Rd. Sandosky Rd./Raincliffe Rd Friendship Rd. (MD-851) Friendship Rd. (MD-851) - River Rd. River Rd Old Frederick Rd. (MD-99) Old Frederick Rd. (MD-99) - I-70/US-40 I-70/US-40 - Frederick Rd. (MD-144) Frederick Rd. (MD-144) - Burntwoods Rd./ Andrea Dr.	Liberty Rd. (MD-26) - Springfield Ave. (MD-851) 2.2	North to South	Roadway Segment North to South NB SB	Length (miles)	Roadway Segment North to South Length (miles) AM PM Liberty Rd. (MD-26) - Springfield Ave. (MD-851) 2.2 NB NB SB Springfield Ave. (MD-851) - Sandosky Rd./Raincliffe Rd. 0.7 W W Sandosky Rd./Raincliffe Rd Friendship Rd. (MD-851) 0.8 W Friendship Rd. (MD-851) - River Rd. 1.7 W River Rd Old Frederick Rd. (MD-99) 1.3 W Old Frederick Rd. (MD-99) - I-70/US-40 0.8 W I-70/US-40 - Frederick Rd. (MD-144) 0.4 W Frederick Rd. (MD-144) - Burntwoods Rd./ Andrea Dr. 3.0 I	Length (miles)	Roadway Segment North to South Length (miles) AM PM AI Liberty Rd. (MD-26) - Springfield Ave. (MD-851) 2.2 Springfield Ave. (MD-851) - Sandosky Rd./Raincliffe Rd. 0.7 W W Sandosky Rd./Raincliffe Rd Friendship Rd. (MD-851) 0.8 W W Friendship Rd. (MD-851) - River Rd. 1.7 W W River Rd Old Frederick Rd. (MD-99) 1.3 W W Old Frederick Rd. (MD-99) - I-70/US-40 0.8 W I I-70/US-40 - Frederick Rd. (MD-144) 0.4 I I Frederick Rd. (MD-144) - Burntwoods Rd./ Andrea Dr. 3.0 I I	Roadway Segment North to South Length (miles) AM PM AM Liberty Rd. (MD-26) - Springfield Ave. (MD-851) 2.2 Springfield Ave. (MD-851) - Sandosky Rd./Raincliffe Rd. 0.7 W W Sandosky Rd./Raincliffe Rd Friendship Rd. (MD-851) 0.8 W W Friendship Rd. (MD-851) - River Rd. 1.7 W W River Rd Old Frederick Rd. (MD-99) 1.3 W W Old Frederick Rd. (MD-99) - I-70/US-40 0.8 W I I-70/US-40 - Frederick Rd. (MD-144) 0.4 I I Frederick Rd. (MD-144) - Burntwoods Rd./ Andrea Dr. 3.0 I I I	Roadway Segment North to South Length (miles) AM PM AM P Liberty Rd. (MD-26) - Springfield Ave. (MD-851) 2.2 NB SB NB SB NB NB SB NB NB <t< td=""></t<>

Limits:	I-695 to US 40				
Corridor Length:	6.0 n	niles			
Speed Limit:	45 - 50) MPH			
Travel Lanes:	2-3 Eastbound 2-3 Westbound				
Signal Controlled Intersections:	8				
Grade Separated Interchanges:	5				
Major Cross Streets:	I-695, US 1, Perry Hall Blvd, Honeygo Blvd, I-95, MD 7, US 40				
Routes and Ridership	Routes Avg. Daily Ridership CityLink Brown Route 4,698				
	MTA LocalLink 120	176			



Peak Hour 2023 AADT 25,000 - 61,000 vpd **Trucks** Traffic 2% - 9% 8% - 8.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	1	1
LOS E	0	0
LOS F	0	0

Segment Operations						
Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)				
Uncongested	5.2 / 2.7	3.4 / 2.2				
Moderate	0.8 / 2.5	2.0 / 1.9				
Heavy to Severe	0.0 / 0.8	0.6 / 1.9				

LOS 'E' Intersections

LOS F Intersections

Color Key				
TTI	PTI			
1.00 1.15	1.0 1.5			
1.15 - 1.30	1.5 - 2.5			
1.30 2.00	> 2.5			
> 2.00				
No	data			

* Available count data for the last four years. (13% of signalized intersections)

			TTI				РТІ				
Functional Class	Roadway Segment West to East	Length (miles)	Α	M	Р	M		Α	M	Р	M
	West to East	(IIIIes)	EB	WB	EB	WB	_	EB	WB	EB	WB
	I-695 - Walther Blvd	0.6								W	
	Walther Blvd - Belair Rd (US-1) SB	0.4								W	
	Belair Rd (US-1) SB - Belair Rd (US-1) NB	0.6									
	Belair Rd (US-1) NB - Perry Hall Blvd	1.8									
Urban Freeway Expressway	Perry Hall Blvd - Honeygo Blvd	0.7									
	Honeygo Blvd - I-95	0.9							1		W
	I-95 - Philadelphia Rd	0.6								W	
	Philadelphia Rd - Pulaski Hwy (US-40)	0.4									

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

Limits:	Baltimore City Line to Shawan Road			
Corridor Length:	9.3 miles			
Speed Limit:	35 - 40	MPH		
Travel Lanes:	(1 – 2) Northbound	(1 – 2) Southbound		
Signal Controlled Intersections:	3	1		
Grade Separated Interchanges:	1			
	Stevenson Ln, Towsor	ntown Blvd, Joppa Rd,		
Major Cross Streets:	Fairmount Ave, I-695, MD 131, Timonium Rd,			
	Padonia Rd, Warren Rd, Shawan Rd			
	Routes	Avg. Daily Ridership		
	Light RailLink Hunt Valley	4,135		
	Light RailLink Pepper Rd 647			
	Light RailLink McCormick Rd	1,376		
	Light RailLink Gilroy Rd	1,479		
	Light RailLink Warren Rd	1,066		
Routes and Ridership	Light RailLink Timonium Rd	1,249		
	Light RailLink Timonium BP	2,628		
	Light RailLink Lutherville	3,054		
	CityLink Red Route	8,642		
	MTA LocalLink 52	188		
	MTA LocalLink 53	2,916		
	MTA LocalLink 93	977		



Trucks 17,000 - 38,000 vpd 1% - 4% 7.5% - 8.5% **Segment Operations**

Intersection Operations					
Signalized Intersections*: AM Peak Hour PM Peak Hour					
LOS D or Better	8	8			
LOS E	0	0			
LOS F	0	0			

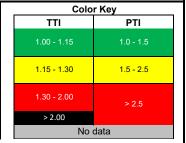
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	3.9 / 0.0	4.3 / 0.0
Moderate	4.3 / 1.1	3.3 / 2.6
Heavy to Severe	1.1 / 8.2	1.7 / 6.7

TTI: travel time index (50th percentile travel time/ freeflow travel time)

LOS 'E' Intersections

LOS F' Intersections

2023 AADT



Traffic

* Available count data for the last four years. (26% of signalized intersections)

PTI: planning time index (95th percentile travel time / freeflow travel time)

	nctional Class Roadway Segment North to South		TTI				PTI				
Functional Class		Length (miles)	AM		PM		,	AM	Р	PM	
		(66)	NB	SB	NB	SB	NB	SB	NB	S	
	Shawan Rd Paper Mill Rd. (MD-145)	0.3									
	Paper Mill Rd. (MD-145) - Warren Rd. (MD-483)	1.2									
	Warren Rd. (MD-483) - Cranbrook Rd.	0.8								Т	
	Cranbrook Rd Padonia Rd.	0.5									
	Padonia Rd Timonium Rd.	1.1									
Urban Other Principal Arterial	Timonium Rd Ridgely Rd	0.8									
	Ridgely Rd Bellona Ave./Margate Rd.	0.5									
	Bellona Ave./Margate Rd Seminary Ave. (MD-131)	0.2								Т	
	Seminary Ave. (MD-131) - I-695	0.5									
	I-695 - Fairmount Ave	0.3									
	Fairmount Ave Bosley Ave.	0.2									
Urban Minor Arterial	Bosley Ave Dulaney Valley Rd. (MD-146)/ Joppa Rd.	0.4									
	Dulaney Valley Rd. (MD-146)/ Joppa Rd Towsontown Blvd.	0.3									
	Towsontown Blvd Burke Ave.	0.2									
Urban Other Principal Arterial	Burke Ave Stevenson Ln.	0.8							- 1		
Aitonai	Stevenson Ln Regester Ave.	0.4									
	Regester Ave Lake Ave.	0.8									

Limits:	English Muffin Way to I-70				
Corridor Length:	3.5 miles				
Speed Limit:	40 MPH				
Travel Lanes:	(1 – 3) Northbound (1 – 3) Southbound				
Signal Controlled Intersections:	13				
Grade Separated Interchanges:	2				
	Executiv	ve Way,			
	Crestwood Blvd	/ Shockley Way,			
Major Cross Streets:	I-270, Spectrum Dr,				
	Francis Scott Key Dr,				
	MD 355, I-70				
Routes and Ridership	Routes	Avg. Daily Ridership			
Routes and Ridership	N/A	N/A			



2023 AADT	Trucks	Traffic
17,000 - 49,000 vpd	3% - 17%	7.5% - 8.5%

Segment Operations

Intersection Operations						
Signalized Intersections*:	AM Peak Hour	PM Peak Hour				
LOS D or Better	4	4				
LOS E	0	0				
LOS F	1	1				

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	3.5 / 1.9	1.6 / 1.9
Moderate	0.0 / 1.6	1.9 / 1.6
Heavy to Severe	0.0 / 0.0	0.0 / 0.0

LOS 'E' Intersections

LOS F Intersections

ND 85 at Ramp 8 from I-270 SB (AM, PM)

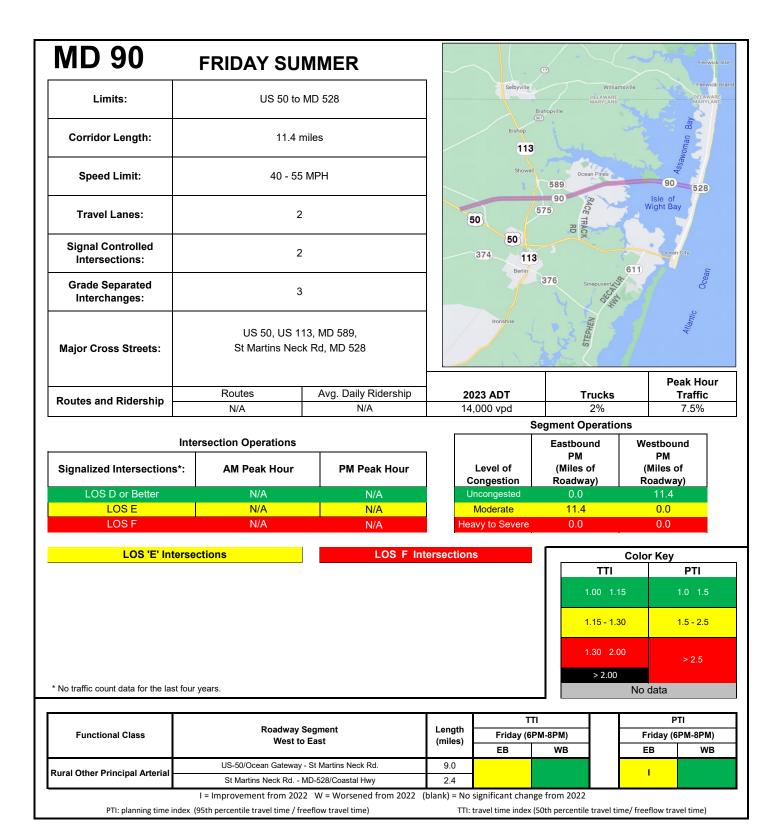
Color Key						
TTI	PTI					
1.00 1.15	1.0 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 2.00	> 2.5					
> 2.00						
No	No data					

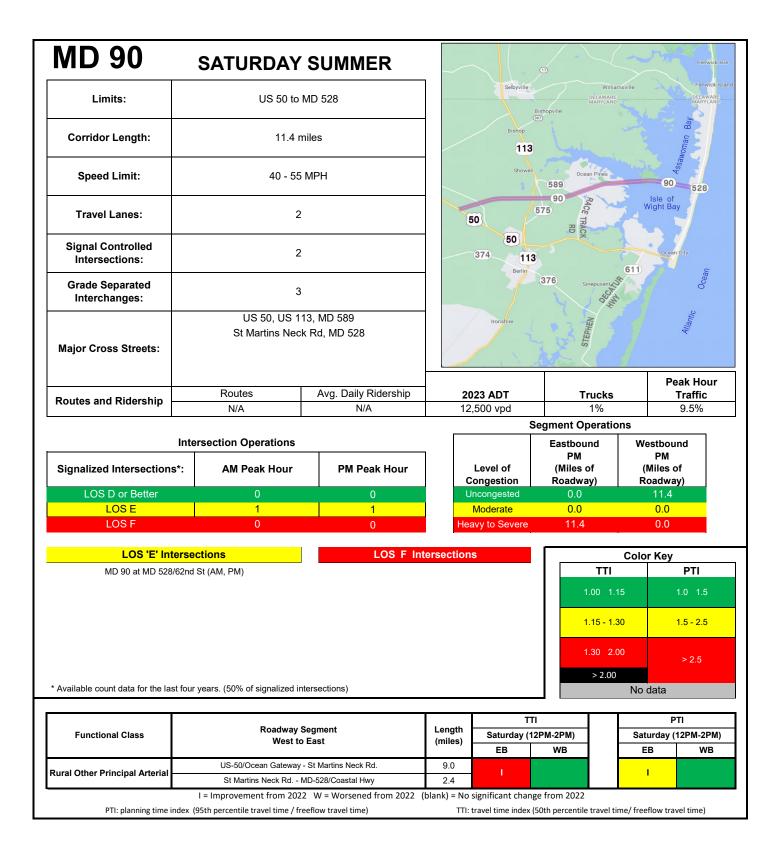
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* Available count data for the last four	years. (38% of signalized intersections)

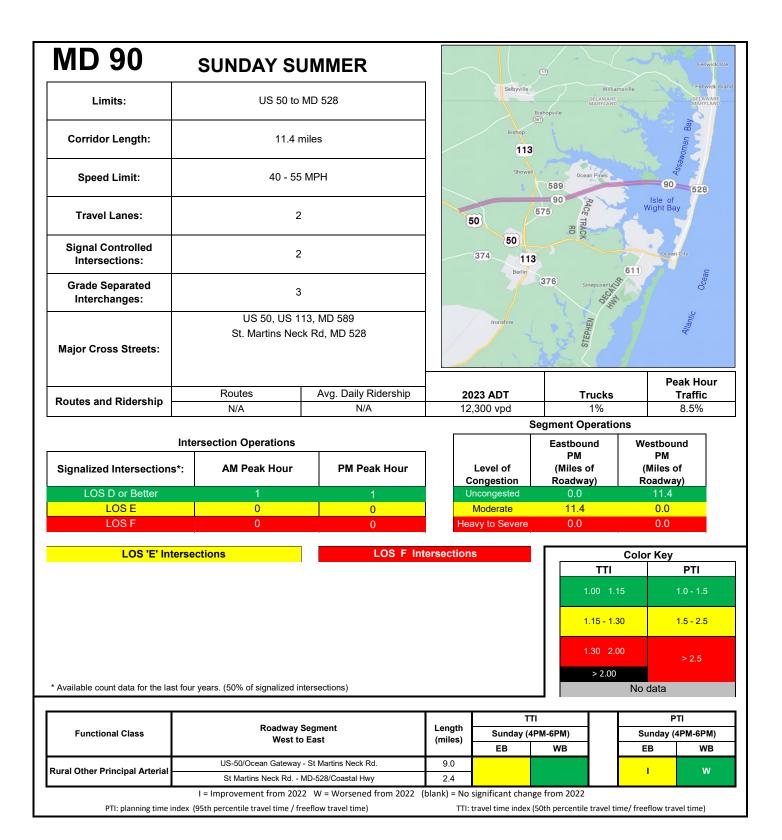
		тті					PTI			
Functional Class	Roadway Segment West to East	Length (miles)	AM		Р	М		AM		M
	West to East	(mics)	NB	SB	NB	SB	NB	SB	NB	SB
	I-70 - MD-355	0.4								
	MD-355 - Guilford Rd.	0.3								
	Guilford Rd Grove Rd.	0.3								
Urban Other Principal	Grove Rd Spectrum Dr.	0.3								
Arterial	Spectrum Dr I-270	0.3								
	I-270 - Crestwood Blv.	0.4								
	Crestwood Blv Executive Way	0.5								
	Executive Way / Shockley Dr English Muffin Way	1.0								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

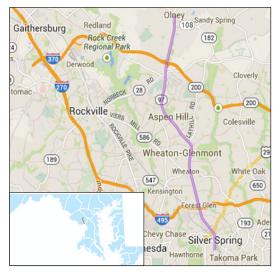
PTI: planning time index (95th percentile travel time / freeflow travel time)







Limits:	Wa	Washington DC Line to MD 108					
Corridor Length:		12.7 r	niles				
Speed Limit:		30 - 45	MPH				
Travel Lanes:	(3 - 4)	Northbound	(3 - 4) Southb	ound			
Signal Controlled Intersections:		48	3				
Grade Separated Interchanges:	2						
Major Cross Streets:	US 29, I-495, MD 586, Randolph Rd, MD 193, MD 182, MD 28, MD 200, MD 108						
	METRO Routes Avg. Daily Ride						
	METRO Q1/Q2/Q4 2,868						
	METRO Y	/2/Y7/Y8	5,5	591			
	Ride On Routes	Avg. Daily Ridership	Ride On Routes	Avg. Daily Ridership			
Routes and Ridership	8	N/A	39	N/A			
	9	N/A	41	N/A			
	10	N/A	49	N/A			
	26	N/A	51	N/A			
	31	N/A	52	N/A			
	33	N/A	53	N/A			



2023 AADT	Trucks	Peak Hour Traffic
27,000 - 68,000 vpd	2% - 4%	6.5% - 8.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	19	20
LOS E	1	0
LOS F	0	0

Segment Operations

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	4.5 / 1.8	3.3 / 1.6
Moderate	7.7 / 1.8	3.1 / 3.7
Heavy to Severe	0.5 / 9.1	6.3 / 7.4

LOS 'E' Intersections

LOS F Intersections

MD 97 at Seminary Rd/Columbia Blvd (AM)

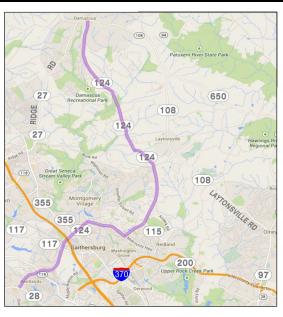
Color Key					
TTI	PTI				
1.00 - 1.15	1.0 - 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 - 2.00	> 2.5				
> 2.00					
1	No data				

* Available count data for the last four years. (42% of signalized intersections)

		l		Т	ГІ		PTI												
Functional Class	Roadway Segment North to South	Length (miles)	AM		AM	А	AM		АМ		AM		AM		М		AM	F	M
	North to could	(iiiico)	NB	SB	NB	SB	NB	SB	NB	S									
	Olney Sandy Spring/ Laytonsville Rd. (MD-108)-Emroy Lane	1.9																	
	Emroy Lane - Norbeck Rd. (MD-28)	1.2							W										
	Norbeck Rd. (MD-28) - Rossmoor Blvd.	0.5																	
	Rossmoor Blvd Bel Pre Rd.	0.6																	
	Bel Pre Rd Connecticut Ave. (MD-185)	0.7																	
	Connecticut Ave. (MD-185) - Hewitt Ave.	0.6																	
	Hewitt Ave May St./Rippling Brook Dr.	0.5																	
	May St./Rippling Brook Dr Layhill Rd.(MD-182)	1.1																	
	Layhill Rd.(MD-182) - Randolph Rd.	0.2						1											
	Randolph Rd Shorefield Rd.	0.4																	
Urban Other Principal Arterial	Shorefield Rd Arcola Ave.	0.4								Г									
Arterial	Arcola Ave University Blvd. (MD-193)	0.4																	
	University Blvd. (MD-193)- Veirs Mill Rd. (MD-586)	0.4																	
	Veirs Mill Rd. (MD-586) - Dennis Ave.	8.0		111						,									
	Dennis Ave I-495	0.8		W															
	I-495 - 16th St. (MD-390)	0.5								-									
	16th St. (MD-390) - Spring St	0.6																	
	Spring St Colesville Rd (US-29)	0.3																	
	Colesville Rd (US-29) - Silgo Ave.	0.4																	
	Silgo Ave East-West Hwy/Philadelphia Ave. (MD-410)	0.2																	
	East-West Hwy/Philadelphia Ave(MD-410) - Eastern Ave./ DC Line	0.2																	

PTI: planning time index (95th percentile travel time / freeflow travel time)

Limits:	MD 28 to MD 108					
Corridor Length:	16.7 miles					
Speed Limit:	30 - 50) MPH				
Travel Lanes:	(1 - 4) Northbound (1 - 4) Southbound					
Signal Controlled Intersections:	31					
Grade Separated Interchanges:	1					
Major Cross Streets:	MD 28, MD 119, MD 117, I-270, MD 355, MD 115, MD 108					
	Routes	Avg. Daily Ridership				
	MTA Commuter Bus 201	N/A				
	Ride On 56 N/A					
Routes and Ridership	Ride On 57 N/A					
Routes and Ridership	Ride On 58	N/A				
	Ride On 59	N/A				
	Ride On 65 Express Service	N/A				
	Ride On 90	N/A				



		Peak Hour
2023 AADT	Trucks	Traffic
12,000 - 59,000 vpd	1% - 5%	8% - 8.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	5	5
LOS E	0	0
LOS F	0	0

Segment Operations

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	11.1 / 8.8	8.2 / 11.7
Moderate	5.6 / 4.5	7.2 / 4.3
Heavy to Severe	0.0 / 3.4	1.3 / 0.7

TTI: travel time index (50th percentile travel time/ freeflow travel time)

LOS 'E' Intersections

LOS F' Intersections

Colo	r Key					
TTI	PTI					
1.00 - 1.15	1.0 - 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 - 2.00	> 2.5					
> 2.00						
No	No data					

* Available count data for the last four years. (16% of signalized intersections)

PTI: planning time index (95th percentile travel time / freeflow travel time)

				Т	TI		PTI			
Functional Class	Roadway Segment North to South	Length (miles)	Α	M	Р	М	-	M	Р	M
	North to Count	(IIIII63)	NB	SB	NB	SB	NB	SB	NB	S
	Main St. (MD-108) - Hawkins Creamery Rd.	1.0								
	Hawkins Creamery Rd Log House Rd/ Low Meadow Dr.	1.2								
	Log House Rd/ Low Meadow Dr Rocky Rd.	2.4								
	Rocky Rd Brink Rd.	1.4								
Urban Minor Arterial	Brink Rd Warfield Rd.	1.3								
	Warfield Rd Fieldcrest Rd./ Hadley Farms Dr.	0.7							W	
	Fieldcrest Rd./ Hadley Farms Dr Airpark Rd.	1.1								
	Airpark Rd Snouffer School Rd./Muncaster Mill Rd (MD-115)	0.7								
	SnoufferSchlRd/MncterMillRd(MD115) - MdctyHwy/WoodfieldRd.	0.9								
	Midcounty Hwy./Woodfield Rd Goshen Rd.	1.1								
	Goshen Rd Montgomery Village Dr /Midcounty Hwy	0.6								
	MontgomeryVillage/MidcountyHwy - Frederick Rd/Ave(MD-355)	0.7							W	Г
Urban Other Principal Arterial	Frederick Rd/Ave (MD-355) - I-270	0.4								
Atterial	I-270 - Clopper Rd. /Diamond Av (MD-117)	0.5								
	Clopper Rd./Diamond Av(MD-117) - Gt Seneca Hwy(MD-119)	1.5								
	Great Seneca Hwy. (MD-119) - Darnestown Rd. (MD-28)	1.2								

Routes and Ridership

	·				
Limits:	MD 97 to Baltin	more City Line			
Corridor Length:	20.4 1	miles			
Speed Limit:	30 - 55	5 MPH			
Travel Lanes:	(1 - 3) Northbound	(1 - 2) Southbound			
Signal Controlled Intersections:	5	1			
Grade Separated Interchanges:	3	3			
Major Cross Streets:	MD 97, MD MD 30, MD 940, MD 130, I-695,	Painters Mill Rd			
	Routes	Avg. Daily Ridership			



MTA LocalLink 89

Intersection Operations

MTA LocalLink 83

MTA LocalLink 87

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	22	21
LOS E	0	1
LOS F	0	0

	egineni Operano	115
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	13.7 / 10.9	12.0 / 10.9
Moderate	5.7 / 3.3	6.8 / 3.3
Heavy to Severe	1.0 / 6.2	1.6 / 6.2

Trucks

1% - 9%

LOS 'E' Intersections

MD 140 at Center St (PM)

LOS F Intersections

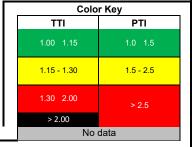
2023 AADT

15,000 - 52,000 vpd

2,287

1,128

1,154



Peak Hour

Traffic

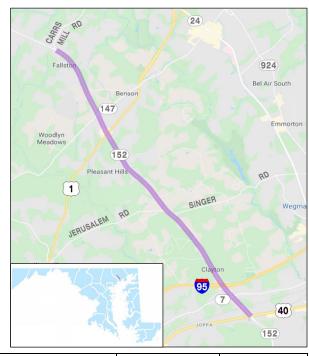
7.5% - 8%

* Available count data for the last four years. (43% of signalized intersections)

				Т	TI			F	PTI	
Functional Class	Roadway Segment North to South	Length (miles)	Α	M	Р	M		AM	PM	
	North to could	(IIIIIes)	NB	SB	NB	SB	NB	SB	NB	
	New Washington Rd (MD-97) Malcom Dr Reese Rd.	2.5								
Urban Other Principal Arterial	Reese Rd Green Mill Rd./Suffolk Rd.	2.2						W		
Aiteriai	Green Mill Rd./Suffolk Rd Emroy/Gamber Rd (MD-91)	1.9								
Urban/Rural Other P. Arterial	Emroy/Gamber Rd (MD-91) - Butler Rd. (MD-795)	3.4								
	Butler Rd. (MD-795) - Hanover Rd. (MD-30)	0.4								
	Hanover Rd. (MD-30) - Glyndon Dr/ Glyndon Trace Dr.	0.7								
	Glyndon Dr/ Glyndon Trace Dr Berrymans Ln.	0.4								Г
	Berrymans Ln Franklin Blvd./Cherry Hill Rd.	0.7								Г
	Franklin Blvd./Cherry Hill Rd Dolfield Blvd/ Richmar Rd.	1.2								Г
	Dolfield Blvd/ Richmar Rd Pleasant Hill Rd.	0.5								Г
	Pleasant Hill Rd Owings Mills Blvd. (MD-940)	1.0								
Urban Other Principal Arterial	Owings Mills Blvd. (MD-940) - Painters Mill Rd.	0.4				1				Т
Aiteriai	Painters Mill Rd Greenspring Valley Rd (MD-130)	1.2								Г
	Greenspring Valley Rd (MD-130) - McDonogh Rd./ Craddock Ln.	0.6								П
	McDonogh Rd./ Craddock Ln I-695	1.2							W	Г
	I-695 - Old Court Rd.	0.6								Г
	Old Court Rd Sudbrook Ln	0.4								Г
	Sudbrook Ln Slade Ave/ Milford Mill Rd.	0.5								Г
	Slade Ave/ Milford Mill Rd Baltimore City Line/ Fallstaff Rd	0.6			I			1	- 1	

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits: US 40 to Carrs Mill Rd Corridor Length: 7.6 miles Speed Limit: 50 MPH Travel Lanes: (1 - 2) Northbound (1 - 2) Southbound Signal Controlled Intersections: 9 Grade Separated Interchanges: 1 Wajor Cross Streets: US 40, MD 7, I-95, Jerusalem Rd/Singer Rd, US 1, MD 147, Carrs Mill Rd Routes and Ridership Routes						
Speed Limit: 50 MPH Travel Lanes: (1 - 2) Northbound (1 - 2) Southbound Signal Controlled Intersections: 9 Grade Separated Interchanges: 1 Major Cross Streets: US 40, MD 7, I-95, Jerusalem Rd/Singer Rd, US 1, MD 147, Carrs Mill Rd Routes and Ridership Routes Avg. Daily Ridership	Limits:	US 40 to Ca	arrs Mill Rd			
Travel Lanes: (1 - 2) Northbound (1 - 2) Southbound Signal Controlled Intersections: Grade Separated Interchanges: Major Cross Streets: US 40, MD 7, I-95, Jerusalem Rd/Singer Rd, US 1, MD 147, Carrs Mill Rd Routes and Ridership Routes Avg. Daily Ridership	Corridor Length:	7.6 n	niles			
Signal Controlled Intersections: Grade Separated Interchanges: Major Cross Streets: US 40, MD 7, I-95, Jerusalem Rd/Singer Rd, US 1, MD 147, Carrs Mill Rd Routes and Ridership Routes Avg. Daily Ridership	Speed Limit:	50 N	1PH			
Intersections: Grade Separated Interchanges: US 40, MD 7, I-95, Jerusalem Rd/Singer Rd, US 1, MD 147, Carrs Mill Rd Routes and Ridership	Travel Lanes:	(1 - 2) Northbound (1 - 2) Southbound				
Interchanges: US 40, MD 7, I-95, Jerusalem Rd/Singer Rd, US 1, MD 147, Carrs Mill Rd Routes and Ridership Routes Avg. Daily Ridership		9)			
Major Cross Streets: Jerusalem Rd/Singer Rd, US 1, MD 147, Carrs Mill Rd Routes and Ridership Routes Avg. Daily Ridership	-	1				
Routes and Ridership Routes Avg. Daily Ridership	Major Cross Streets:	Jerusalem Rd/Singer Rd,				
Routes and Ridership						
	Routes and Ridership	Routes Commuter Bus 411	Avg. Daily Ridership 73			



 2023 AADT
 Trucks
 Traffic

 21,000 - 27,000
 7% - 8%
 8%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	N/A	N/A
LOS E	N/A	N/A
LOS F	N/A	N/A

Segment Operations						
Level of	Northbound AM / PM (Miles of	Southbound AM / PM (Miles of				
Congestion	Roadway)	Roadway)				
Uncongested	3.9 / 0.6	2.5 / 4.3				
Moderate	3.3 / 1.9	5.1 / 2.9				
Heavy to Severe	0.4 / 5.1	0.0 / 0.4				

LOS 'E' Intersections

LOS F Intersections

Colo	Color Key				
TTI	PTI				
1.00 1.15	1.0 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 2.00	> 2.5				
> 2.00					
No	No data				

*	No traffic	count	data	for the	last	four	vears.

		Length	TTI					PTI			
Functional Class	Roadway Segment North to South		Α	AM		M		Α	М	Р	М
			NB	SB	NB	SB		NB	SB	NB	SB
	Carrs Mill Rd./(Old Fallston Rd.) - Watervale Rd.	0.5									
	Watervale Rd MD147/(Harford Rd.)	1.3								'	
Rural Other Principal Arterial	MD147/(Harford Rd.) - US1/(Belair Rd.)	0.5									
	US1/(Belair Rd.) - Old Joppa Rd.	1.4									
	Old Joppa Rd Singer Rd.	1.0								W	
Rural Minor Arterial	Singer Rd I-95/(John F. Kennedy Hwy)	1.9					1				
Burel Other Bringing Arterial	I-95/(John F. Kennedy Hwy) - MD7/(Philadelphia Rd.)	0.4		ı				W	ı		
Rural Other Principal Arterial —	MD7/(Philadelphia Rd.) - Pulaski Hwy (US40)	0.6									

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	MD 32 (Patuxe US 29 (Colu	• /				
Corridor Length:	12.2 miles					
Speed Limit:	35 - 50 MPH					
Travel Lanes:	(1 - 3) Northbound (1 - 4) Southbound					
Signal Controlled Intersections:	19					
Grade Separated Interchanges:	5					
Major Cross Streets:	MD 32, MD 174, MD 713, MD 295, US 1, I-95, Snowden River Pkwy, US 29					
Doutes and Diderahin	Routes Avg. Daily Ridership					

175	(103)	Elkridge
Columbia	100	Likildge
32	175	Hanover Baltimore/Washingto International Thurgood
[29] Savage	Jessup	295
North Laurel	Annapolis Junction	Severn 174
	198	Fort Meade 170 Odenton

	Routes	Avg. Daily Ridership			Peak Hour
Routes and Ridership	MTA Commuter Bus 310	N/A	2023 AADT	Trucks	Traffic
	MTA Commuter Bus 320	N/A	19,000 - 66,000	2% - 12%	8% - 9%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	9	9
LOS E	0	0
LOS F	0	0

Segment Operations								
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)						
Uncongested	7.5 / 1.3	8.2 / 2.8						
Moderate	3.6 / 7.3	4.0 / 5.4						
Heavy to Severe	1.1 / 3.6	0.0 / 4.0						

LOS	'E'	Interse	ctions

LOS F Intersections

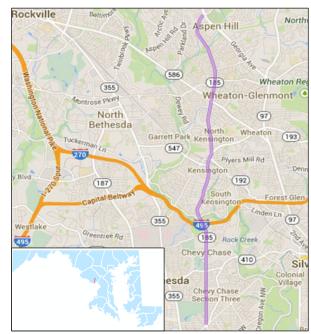
Color Key							
TTI	PTI						
1.00 1.15	1.0 1.5						
1.15 - 1.30	1.5 - 2.5						
1.30 2.00	> 2.5						
> 2.00							
No	data						

* Available count data for the last four	years. (47% of signalized intersections)
Available count data for the last lour	years. (47 % or signanzed intersections)

		Length	TTI				PTI			ТІ	
Functional Class	Roadway Segment North to South		AM		PM		AM		PM		
			NB	SB	NB	SB	NB	SB	NB	SE	
	Columbia Pike (US-29) - Thunder Hill Rd.	0.6									
	Thunder Hill Rd Tamar Dr	1.1									
	Tamar Dr - Dobbin Rd.	0.9									
Urban Freeway Expressway	Dobbin Rd - Snowden River Pkwy	0.6									
	Snowden River Pkwy - Waterloo Rd (MD-108)	0.8									
	Waterloo Rd (MD-108)- I-95	0.7									
	I-95 - Washington Blvd (US-1)	0.5									
	Washington Blvd (US-1) - Dorsey Run Rd.	1.3									
	Dorsey Run Rd MD-295	1.6									
I luban Minan Antonial	MD-295 - Ridge Rd/Rockenbach Rd (MD-713)	1.1									
Urban Minor Arterial —	Ridge Rd/Rockenbach Rd. (MD-713) - Reece Rd	1.3									
	Reece Rd - Charter Oaks Blvd.	0.6									
	Charter Oaks Blvd MD-32	1.1									

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	Washington DC Line to MD 97					
Corridor Length:	8.3 miles					
Speed Limit:	30 - 45 MPH					
Travel Lanes:	(3 - 4) Northbound (3 - 4) Southbound					
Signal Controlled Intersections:	26					
Grade Separated Interchanges:	1					
Major Cross Streets:	MD 410, I-495, MD 547, MD 193, MD 586, Randolph Rd, MD 97					
	Routes	Avg. Daily Ridership				
	METRO L8	1,420				
	Ride On Route 1	N/A				
	Ride On Route 4	N/A				
Davids a and Didambin	Ride On Route 5	N/A				
Routes and Ridership	Ride On Route 11	N/A				
	Ride On Route 26	N/A				
	Ride On Route 33	N/A				
	Ride On Route 34	N/A				
	Ride On Route 41	N/A				



		Peak Hour
2023 AADT	Trucks	Traffic
33,000 - 69,000 vpd	2% - 4%	7.5% - 9%

Segment Operations

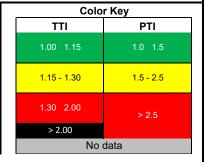
Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	13	11
LOS E	0	2
LOS F	0	0

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	5.7 / 0.9	0.0 / 2.1
Moderate	2.6 / 3.5	3.3 / 3.8
Heavy to Severe	0.0 / 3.9	5.0 / 2.4

LOS 'E' Intersections

MD 185 at MD 191/Bradley Ln (PM) MD 185 at MD 410 (PM) LOS F Intersections



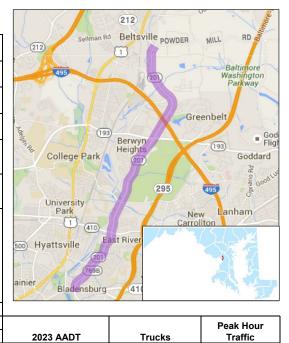
* Available count data for the last four	years. (50% of signalized intersections)
Available count data for the last lour	years. (50% or signalized intersections)

				Т	TI			Р	TI	
Functional Class	Roadway Segment North to South	Length (miles)	Α	М	Р	М	A	M	Р	M
	North to South	(IIIIes)	NB	SB	NB	SB	NB	SB	NB	S
	Georgia Ave. (MD-97) - Aspen Hill Rd.	0.3						W		
	Aspen Hill Rd Randolph Rd.	0.4								
	Randolph Rd Veirs Mill Rd. (MD-586)	1.7								
	Veirs Mill Rd. (MD-586) - University Blvd. (MD-193)	1.4								
Urban Other Principal	University Blvd (MD-193) - Saul Rd.	1.2								
Arterial	Saul Rd I-495	0.6		W				W		
	I-495-Jones Bridge Rd.	0.5		W		W		W		,
	Jones Bridge Rd East West Hwy (MD-410)	0.8			W			ı	W	Г
	East West Hwy (MD-410) - Bradley Ln. (MD-191)	0.8								Г
	Bradley Ln. (MD-191) -Western Ave/ DC Line	0.6							-	

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

MD 193 Beltsville Limits: MD 201 to MD 650 (201) **Corridor Length:** 5.5 miles Speed Limit: 35 - 45 MPH Travel Lanes: (2 - 3) Eastbound (2 - 3) Westbound Signal Controlled 20 Intersections: **Grade Separated** 2 Interchanges: MD 201, 63rd Ave, 62nd Ave, Cherrywood Ln / 60th Ave, **Major Cross Streets:** Rhode Island Ave, US 1, Metzerott Rd / Paint Branch Dr, Adelphi Rd, Riggs Rd, MD 650 Routes Avg. Daily Ridership METRO C2 4,164 METRO C4 5,662 METRO F6 1,523 Routes and Ridership METRO F8 1,054 **Peak Hour** METRO G14 2,074 2023 AADT Traffic **Trucks** METRO R2 3,146 33,000 - 40,000 vpd 2% - 3% 7.5% The Bus Route 18 N/A **Segment Operations Intersection Operations** Westbound Eastbound AM / PM AM / PM (Miles of **AM Peak Hour** Level of (Miles of Signalized Intersections*: **PM Peak Hour** Congestion Roadway) Roadway) **Color Key** TTI PTI * Available count data for the last four years. (30% of signalized intersections) Roadway Segment Length **Functional Class** West to East (miles) New Hampshire Ave. (MD-650) - Riggs Rd. (MD-212) 0.6 Riggs Rd. (MD-212) - Adelphi Rd. 1.3 Adelphi Rd. - Metzerott Rd. 1.3 **Urban Other Principal** Arterial Metzerott Rd. - Greenbelt Rd. 1.0 Greenbelt Rd. - Cherrywood Ln. /60th Ave 0.6 Cherrywood Ln. /60th Ave. - MD-201 0.7 I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022 PTI: planning time index (95th percentile travel time / freeflow travel time) TTI: travel time index (50th percentile travel time/ freeflow travel time)

Limits:	MD 450 to MD 212				
Corridor Length:	7.4 miles				
Speed Limit:	40 - 50	MPH			
Travel Lanes:	(1 - 3) Northbound ((1 - 3) Southbound			
Signal Controlled Intersections:	19				
Grade Separated Interchanges:	3				
Major Cross Streets:	MD 450, Decatur St, MD 769B, Riverdale Rd, MD 410, Paint Branch Pkwy, Good Luck Rd, MD 193, I-95 / I-495, Cherrywood Ln, Sunnyside Ave, Beaver Dam Rd, MD 212				
	Routes	Avg. Daily Ridership			
Routes and Ridership	METRO R12	1,128			
Routes and Ridership	METRO F6	1,523			



Intersection Operations

The Bus Route 14

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	8	8
LOS E	0	0
LOS F	0	0

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	2.1 / 0.5	4.0 / 2.1
Moderate	5.3 / 1.9	1.9 / 2.9
Heavy to Severe	0.0 / 5.0	1.5/ 2.4

TTI: travel time index (50th percentile travel time/ freeflow travel time)

5% - 10% Segment Operations

LOS 'E' Intersections

LOS 'F' Intersections

16,000 - 44,000 vpd

N/A

Color Key				
TTI	PTI			
1.00 - 1.15	1.0 - 1.5			
1.15 - 1.30	1.5 - 2.5			
1.30 - 2.00	> 2.5			
> 2.00				
No	data			

7% - 7.5%

* Available count data for the last four years. (42% of signalized intersections)

PTI: planning time index (95th percentile travel time / freeflow travel time)

				Т	TI				P.	TI	
Functional Class	Roadway Segment North to South	Length (miles)	А	M	Р	М		ΑN	1	Р	М
		(NB	SB	NB	SB	N	3	SB	NB	SB
	MD212 - SunnySide Ave.	0.6							-1		I
	SunnySide Ave Cherrywood Ln.	0.9								- 1	
Urban Minor Arterial	Cherrywood Ln Ivy Ln.	0.3									
	Ivy Ln Crescent Rd.	0.2	1								
	Crescent Rd I-495/ I-95	0.5	1								
Jrban Other Freeways and	I-495/I-95 - MD193	0.5									
Expressways	MD193 - Paint Branch Ave./Good Luck Rd.	1.6									
	Paint Branch Ave./Good Luck Rd Sarvis Ave.	0.2									
	Sarvis Ave River Rd.	0.2							w	w	w
	River Rd Rittenhouse St.	0.3	1			'			vv	VV	VV
	Rittenhouse St MD410	0.2	1								
	MD410 - Riverdale Rd.	0.2									
Urban Other Principal Arterial	Riverdale Rd Jefferson St.	0.2	1								
Arterial	Jefferson St Edmonston Rd.	0.3									
	Edmonston Rd Decatur St.	0.4									
	Decatur St Buchanan St.	0.2									
	Buchanan St Upshur St./Tilden Rd.	0.3									
	Upshur St./Tilden Rd MD450	0.3									

Limits:	MD 228 to I-95				
Corridor Length:	10.3 r	niles			
Speed Limit:	40 - 45	MPH			
Travel Lanes:	(2 - 3) Northbound	(2 - 4) Southbound			
Signal Controlled Intersections:	10				
Grade Separated Interchanges:	2				
Major Cross Streets:	I-95, Livingston Rd, MD 373, MD 228				
	Routes	Avg. Daily Ridership			
	METRO D14	1,710			
	MTA Commuter Bus 610	275			
Poutos and Bidarahin	MTA Commuter Bus 620 297				
Routes and Ridership	MTA Commuter Bus 630 94				
	MTA Commuter Bus 640 158				
	MTA Commuter Bus 650	260			
	The Bus Route 37	N/A			



 2023 AADT
 Trucks
 Peak Hour Traffic

 24,000 - 81,000 vpd
 2% - 4%
 7% - 7.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	6	6
LOS E	2	3
LOS F	1	0

Segment Operations						
Level of	Northbound AM / PM (Miles of	Southbound AM / PM (Miles of				
Congestion	Roadway)	Roadway)				
Uncongested	7.6 / 6.8	8.4 / 2.1				
Moderate	0.0 / 1.5	1.1 / 2.2				
Heavy to Severe	2.7 / 2.0	0.8 / 6.0				

LOS 'E' Intersections

MD 210 at MD 373/Livingston Rd (AM)
MD 210 at Livingston Rd/Palmer Rd (PM)
MD 210 at Swan Creek Rd/Livingston Rd (PM)
MD 210 at Old Fort Rd (North Leg) (AM, PM)

LOS F Intersections

MD 210 at Livingston Rd/Palmer Rd (AM)

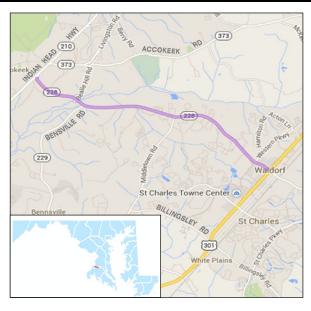
TTI	PTI				
1.00 1.15	1.0 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 2.00	> 2.5				
> 2.00					
No data					

Available count da	ata for the last four	vears (90% of sign	nalized intersections)

			TTI				PTI				
Functional Class	Roadway Segment North to South	Length (miles)	AM		Р	M	M AM		I PM		
	North to South	(IIIIIC3)	NB	SB	NB	SB	NB	SB	NB	SB	
	I-495/I-95 - Livingston Rd./Kerby Hill Rd.	1.8				W		1		W	
	Livingston Rd./Kerby Hill Rd Palmer Rd.	1.0				W					
	Palmer Rd Old Fort Rd.	0.7	W				W			- 1	
	Old Fort Rd Fort Washington Rd.	0.9	W							- 1	
Urban Freeway Expressway	Fort Washington Rd Livingston Rd./Swan Creek Rd.	1.1	W				W				
	Livingston Rd./Swan Creek Rd Washington Ln.	0.8					W				
	Washington Ln Farmington Rd.	2.1									
	Farmington Rd Livingston Rd. (MD-373)	1.4									
	Livingston Rd. (MD-373) - Berry Rd. (MD-228)	0.5									

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	MD 210 to US 301				
Corridor Length:	6.8 miles				
Speed Limit:	35 - 50 MPH				
Travel Lanes:	(2 - 3) Eastbound 2 Westbound				
Signal Controlled Intersections:	11				
Grade Separated Interchanges:	0				
Major Cross Streets:	MD 210, MD 229, US 301				
	Routes	Avg. Daily Ridership			
	MTA Commuter Bus 610	275			
Routes and Ridership	MTA Commuter Bus 620	297			
Routes and Ridership	MTA Commuter Bus 630	94			
	MTA Commuter Bus 640	158			
1	MTA Commuter Bus 650	260			



Routes and Ridership	MTA Commuter Bus 620	297			
Routes and Ridership	MTA Commuter Bus 630	94			Peak Hour
	MTA Commuter Bus 640	158	2023 AADT	Trucks	Traffic
	MTA Commuter Bus 650	260	35,000 - 39,000 vpd	2%	N/A

LOS F Intersections

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	8	7
LOS E	0	1
LOS F	0	0

	• .	
Level of	Eastbound AM / PM (Miles of	Westbound AM / PM (Miles of
Congestion	Roadway)	Roadway)
Uncongested	5.3 / 0.0	6.8 / 5.3
Moderate	1.5 / 5.3	0.0 / 1.5
Heavy to Severe	0.0 / 1.5	0.0 / 0.0

Segment Operations

LOS 'E' Intersections

MD 228 at MD 229 (PM)

Color Key

TTI PTI

1.00 1.15 1.0 1.5

1.15 - 1.30 1.5 - 2.5

1.30 2.00 > 2.5

> 2.00

No data

* Available count data for the last four years.	. (73% of signalized intersections)

					ТΠ				PTI				
Functional Class	Roadway Segment West to East	Length (miles)	AM		S I AM I PM		vi PM			Α	M	Р	M
	Troot to East	(1111100)	EB	WB	EB	WB		EB	WB	EB	WB		
	Indian Head Hwy (MD-210) - Manning Rd	0.5			w				w	w			
	Manning Rd - Bensville Rd (MD-229)	1.0			vv				VV	vv			
Urban Other Principal	Bensville Rd (MD-229) - Bunker Hill Rd.	1.3											
Arterial	Bunker Hill Rd Middletown Rd./Ironwood Dr.	1.0											
	Middletown Rd./Ironwood Dr Western Pkwy	2.6											
	Western Pkwy - Crain Highway (US-301)	0.4											

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

Limits:	Washington DC Line to MD 27						
Corridor Length:		19.7	miles				
Speed Limit:		25 - 4	5 MPH				
Travel Lanes:	(2 - 4) Northbound (2 - 4) Southbound						
Signal Controlled Intersections:	80						
Grade Separated Interchanges:	3						
	MD 27, MD 118, Middlebrook Rd, MD 124, MD 117						
Major Cross Streets:	I-370, Shady Grove Rd, MD 28, Montrose Pkwy,						
•	ME	7, MD 410, MD 191					
	Ride On	Avg. Daily	Ride On	Avg. Daily			
	Routes	Ridership	Routes	Ridership			
	5	N/A	83	N/A			
	26	N/A	101 Extra	N/A			
	30	N/A	METRO	Avg. Daily			
	34	N/A	Routes	Ridership			
	37	N/A	J1/J2	4,906			
	38	N/A	Q2/Q4/Q5/Q6	5,461			
	42	N/A	Q2/Q4/Q3/Q0	0,401			
Routes and Ridership	45	N/A	Red Line	Avg. Daily			
	46	N/A	Routes	Ridership			
	55	N/A	Shady Grove	5,397			
	59	N/A	Rockville	2,293			
	61	N/A	Twinbrook	2,257			
	67	N/A	White Flint	1,893			
	70	N/A	Grosvenor	2,171			
	73	N/A	Strathmore	2,171			
	75	N/A	Medical Center	2.874			



Peak Hour **2023 AADT** 27,000 - 54,000 vpd Trucks Traffic

Segment Operations

NOTE: The Red Line ridership data represents boardings

Intersection Operations

N/A

81

Bethesda

4,588

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	22	22
LOS E	0	1
LOS F	1	0

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	9.5 / 1.0	11.3 / 1.7
Moderate	8.2 / 6.9	3.0 / 5.7
Heavy to Severe	2.0 / 11.8	3.4 / 12.3

LOS 'E' Intersections

MD 355 at MD 911/Wootton Pkwy (PM)

LOS 'F' Intersections MD 355 at MD 911/Wootton Pkwy (AM)

111	PII
1.00 1.15	1.0 1.5
1.15 - 1.30	1.5 - 2.5
1.30 2.00	> 2.5

No data

Color Key

* Available count data for the last four years. (29% of signalized intersections)

	Roadway Segment North to South			T.	TI	PTI				
Functional Class		Length (miles)	AM		PM		AM		PM	
	Horar to South	(miles)	NB	SB	NB	SB	NB	SB	NB	S
	Ridge Rd. (MD-27) - Germantown Rd. (MD-118)	0.9								
	Germantown Rd. (MD-118) - Middlebrook Rd.	0.8		W		W		W	-	١
	Middlebrook Rd Christopher Ave.	2.3								
	Christopher Ave Montgomery Village Ave. (MD-124)	0.3								
	Montgomery Village Ave. (MD-124) - Odendhal Ave.	0.4								
	Odendhal Ave Summit Ave.	1.0							Т	
	Summit Ave Shady Grove Rd./ I-370	1.2								
	Shady Grove Rd./ I-370 - Redland Blvd.	1.0								
	Redland Blvd Gude Dr.	0.8								
	Gude Dr Washington St.	1.0								
Urban Other Principal	Washington St Veirs Mills Rd./ Jefferson St. (MD-28)	0.9								
Arterial	Veirs Mills Rd./ Jefferson St. (MD-28) - Wootton Pkwy. (MD-911)	0.4							- 1	
	Wootton Pkwy. (MD-911) - Montrose Pkwy.	2.1								
	Montrose Pkwy Strathmore Ave. (MD-547)	1.3								
	Strathmore Ave. (MD-547) - Grosvenor Lane	0.9								
	Grosvenor Lane - I-495	0.3			W			ı	W	
	I-495 - Cedar Lane	0.9		W				W		
	Cedar Lane - Jones Bridge Rd.	0.6		W	W				W	١
	Jones Bridge Rd Montgomery Ave (MD-410)	0.9							W	
	Montgomery Ave (MD-410) - Bradley Blvd/ Lane (MD-191)	0.5								
	Bradley Blvd/ Lane (MD-191) - Dorset Ave.	0.7								
	Dorset Ave DC Line	0.5								

TTI: travel time index (50th percentile travel time/ freeflow travel time) PTI: planning time index (95th percentile travel time / freeflow travel time)

Limits:	MD 355 to US 29				
Corridor Length:	3.8 n	niles			
Speed Limit:	25 - 35 MPH				
Travel Lanes:	(1 - 2) Eastbound (1 - 2) Westbound				
Signal Controlled Intersections:	19	9			
Grade Separated Interchanges:	0				
	MD 355, Montgomery Ave, MD 185,				
Major Cross Streets:	MD 186, Beach Dr / Jones Mill Dr,				
major Gross Greets.	Grubb Rd,				
	MD 390, MD 384, US 29				
	Routes	Avg. Daily Ridership			
	METRO J1	409			
	METRO J2	4,497			
Routes and Ridership	Ride On Route 1	N/A			
Routes and Ridership	Ride On Route 2	N/A			
	Ride On Route 11	N/A			
	Ride On Route 18	N/A			
	Ride On Route 28	N/A			

(355)	Chase View	FOREST GLEN CAPITALIBE
355	Temple - The Church	Linden Ln
Jones Birk	aval Support strivity Bethesda	4 S S S S S S S S S S S S S S S S S S S
MISCONSIN	Chevy Chase WEST	410 HW DOWNTOWN SILVER SPRING
Bethesda	Sept 5	16th St NW
100	radley Ln nase Club ®	
Somerset Friend Villa	Chevy Chase Village	

 2023 AADT
 Trucks
 Traffic

 11,000 - 27,000 vpd
 3% - 4%
 9% - 11.5%

 Segment Operations

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	6	6
LOS E	0	0
LOS F	0	0

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	2.6 / 0.2	1.0 / 1.0
Moderate	1.2 / 1.5	1.2 / 2.8
Heavy to Severe	0.0 / 2.1	1.6 / 0.0

LOS 'E' Intersections

LOS F Intersections

Colo	Color Key				
TTI	PTI				
1.00 1.15	1.0 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 2.00	> 2.5				
> 2.00					
No	No data				

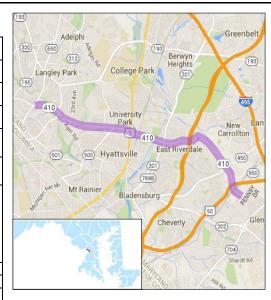
* Available count data for the last four years. (32% of signalized intersections)

Functional Class	Roadway Segment West to East		TTI					TI	1	
		Length (miles)	AM		PM		AM		PM	
	1100110 =001	(55)	EB	WB	EB	WB	EB	WB	EB	WE
	Montgomery Ave MD185	0.5						1		
	MD185 - Beach Dr.	0.9								
	Beach Dr Meadowbrook Ln.	0.2								
	Meadowbrook Ln Grubb Rd.	0.5								
	Grubb Rd Washington Ave.	0.4								
Urban Other Principal Arterial	Washington Ave Rosemary Hill Dr.	0.4								
Arterial	Rosemary Hill Dr MD390	0.2								
	MD390 - Colesville Rd.	0.2								
	Colesville Rd Shopping Center	0.1								
	Shopping Center - Blair Mill Rd.	0.2								
	Blair Mill Rd US29	0.2								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

 ${\it PTI: planning time index \ (95th \ percentile \ travel \ time \ / \ freeflow \ travel \ time)}$

Limits:	MD 650 to P	ennsy Drive
Corridor Length:	7.7 n	niles
Speed Limit:	30 - 45	MPH
Travel Lanes:	(1 - 3) Eastbound ((2 - 3) Westbound
Signal Controlled Intersections:	20	0
Grade Separated Interchanges:	2	!
Major Cross Streets:	MD 650, MD 2 Belcrest Rd, M MD 201, MD 299 MD 450, US 5	MD 500, US 1, 5, Riverdale Rd,
	Routes	Avg. Daily Ridership
	METRO C4	5,662
	METRO F4	7,612
	METRO F6	1,523
Routes and Ridership	METRO 86	1,724
	The Bus Route 13A	N/A
	The Bus Route 14	N/A
	The Bus Route 18	N/A
	The Bus Route 19	N/A



		Peak Hour
2023 AADT	Trucks	Traffic
18,000 - 42,000 vpd	2% - 5%	7% - 7.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	6	6
LOS E	0	0
LOS F	0	0

Segment Operations

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	2.7 / 0.3	2.0 / 2.4
Moderate	5.0 / 3.3	4.0 / 5.0
Heavy to Severe	0.0 / 4.1	1.7 / 0.3

LOS 'E' Intersections

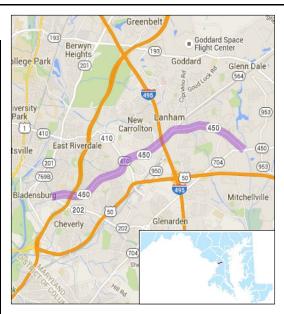
LOS F' Intersections



* Available count data for the last four years. (30% of signalized intersections)

				Т	TI			P	TI	
Functional Class	Roadway Segment West to East	Length (miles)	Α	M	Р	М	-	AM.	P	M
		(55)	EB	WB	EB	WB	EB	WB	EB	١
	MD650 - MD212	0.9								
	MD212 - Ager Rd.	0.2								Г
	Ager Rd 23rd Ave.	0.3								
	23rd Ave Toledo Terrace	0.5								
	Toledo Terrace - Editors Park Dr.	0.1								
	Editors Park Dr Pr. George's Plaza	0.1								
	Pr. George's Plaza - Belcrest Rd.	0.3								
	Belcrest Rd MD500/Adelphi Rd.	0.4							- 1	
	MD500/Adelphi Rd US1/Baltimore Ave.	0.5							- 1	
Urban Other Principal Arterial	US1/Baltimore Ave Taylord Rd.	0.5							w	
Arterial	Taylord Rd Kenilworth Ave./MD201	0.5	1						VV	
	Kenilworth Ave./MD201 - Mustang Dr.	0.5								
	Mustang Dr 64th Ave.	0.2							- 1	
	64th Ave Baltimore-Washington Pkwy.	0.1	1							
	Baltimore-Washington PkwyVeterans Pkwy.	0.3			- 1				- 1	
	Veterans Pkwy Annapolis Rd./MD450	1.1			W				w	
	Annapolis Rd./MD450 - Ellin Rd.	0.5					w		w	
	Ellin Rd US50/John Hanson Hwy.	0.4		'		'	VV	'	vv	
	US50/John Hanson Hwy Pennsy Dr.	0.3								

Limits:	MD 202 to	MD 704		
Corridor Length:	6.3 n	niles		
Speed Limit:	35 - 40	MPH		
Travel Lanes:	(2 - 4) Eastbound ((2 - 4) Westbound		
Signal Controlled Intersections:	2	1		
Grade Separated Interchanges:	2 MD 202 MD 205			
Major Cross Streets:	MD 202, MD 295, Ardwick Ardmore Rd / Surrey Ln MD 410, Riverdale Rd, 85th Ave, I-95 / I-495, MD 564, Whitfield Chapel Rd, Forbes Blvd, MD 704			
Routes and Ridership	Routes METRO B24 METRO B27 METRO F4 METRO F13	Avg. Daily Ridership 801 204 7,612 523		
	METRO G12/G14 METRO T18	3,100 5,872		
	The Bus Route 16	N/A		



		Peak Hour
2023 AADT	Trucks	Traffic
33.000 - 61.000 vpd	2% - 4%	7.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	4	4
LOS E	0	0
LOSF	0	0

	Segment Operation	ons
Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	5.7 / 0.0	5.5 / 1.1
Moderate	0.6 / 4.6	0.8 / 4.1
Heavy to Severe	0.0 / 1.7	0.0 / 1.1

LOS 'E' Intersections

LOS 'F' Intersections

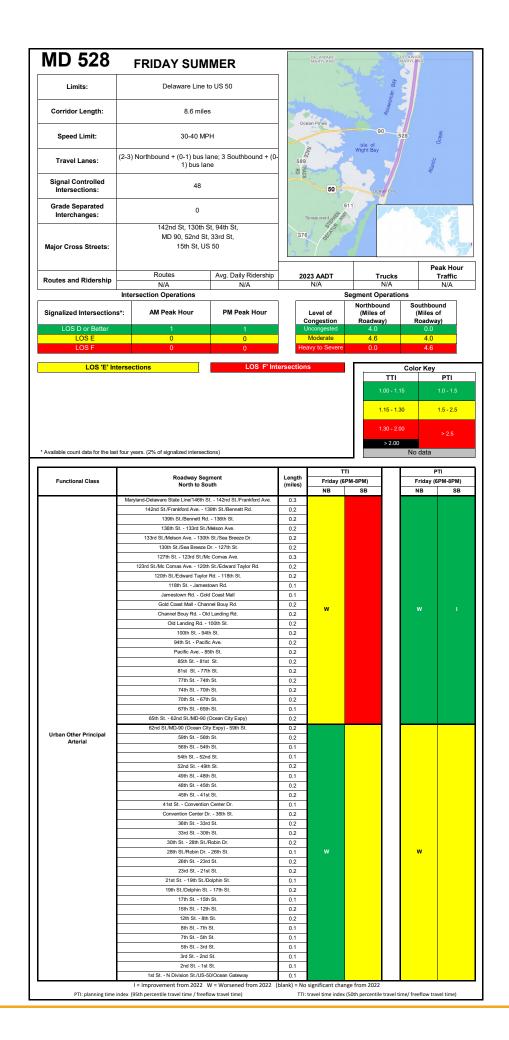
Colo	Color Key					
TTI	PTI					
1.00 - 1.15 1.0 - 1.5						
1.15 - 1.30	1.5 - 2.5					
1.30 - 2.00	> 2.5					
> 2.00						
No	data					

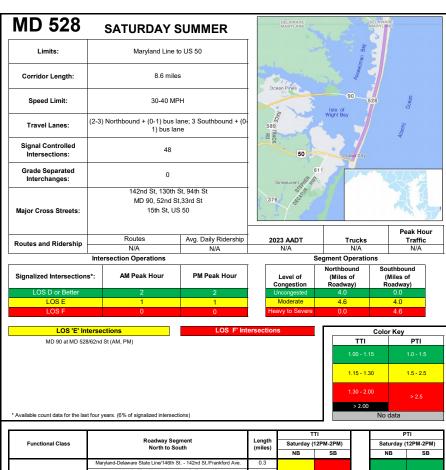
* Available count data for the last four years. (19% of signalized intersections)

	December 2			T	TI			P	TI	
Functional Class	Roadway Segment West to East	Length (miles)	Α	M	P	M		AM	P	M
	((iiiiics)	EB	WB	EB	WB	EB	WB	EB	V
	MD202 - 56th Ave.	0.2								
	56th Ave 57th Ave.	0.2								
	57th Ave MD295 (Balt/Wash Pkwy)	0.4								
	MD295 - 65th Ave.	0.2								
	65th Ave Cooper Ln.	0.3								
	Cooper Ln 68th Ave.	0.2								
	68th Ave 71st Ave.	0.4								
	71st Ave Ardwick-Ardmore Rd.	0.3								
	Ardwick-Ardmore Rd Gallatin Rd.	0.2								
Urban Minor Arterial	Gallatin Rd MD410 (Veterans Pkwy)	0.1								
	MD410 (Veterans Pkwy) - Harkins Rd./Finns Ln.	0.4								
	Harkins Rd./Finns Ln Riverdale Rd.	0.4								
	Riverdale Rd 85th Ave.	0.2								
	85th Ave I-495	0.1								
	I-495 - Princess Garden Pkwy	0.3								
	Princess Garden Pkwy - Whitfield Chapel Rd.	0.4								
	Whitfield Chapel Rd Carter Ave.	0.6								
	Carter Ave Forbes Blvd.	0.7						T_		
Ī	Forbes Blvd MD 704	0.7								

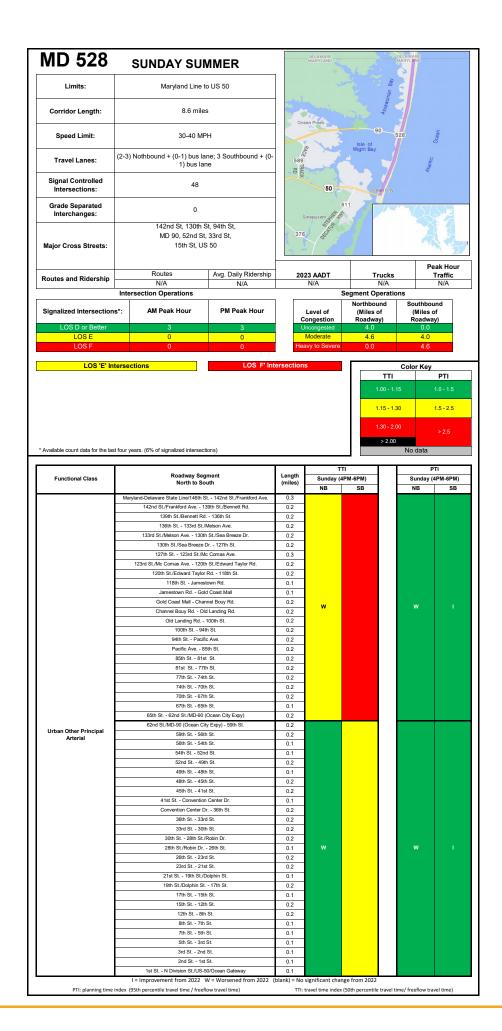
I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

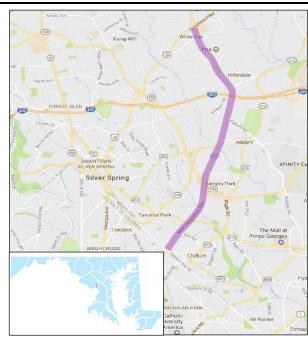




Functional Class	Roadway Segment	Length	T Saturday (PTI
Functional Class	North to South	(miles)	Saturday (1	SB	Saturday NB	(12PM-2
	Maryland-Delaware State Line/146th St 142nd St./Frankford Ave.	0.3	ND	0.0	NB	_
	142nd St./Frankford Ave 139th St./Bennett Rd.	0.2				
	139th St./Bennett Rd 136th St.	0.2				
	136th St 133rd St./Melson Ave.	0.2				
	133rd St./Melson Ave 130th St./Sea Breeze Dr.	0.2				
-	130th St./Sea Breeze Dr 127th St.	0.2				
	127th St 123rd St./Mc Comas Ave.	0.3				
	123rd St./Mc Comas Ave 120th St./Edward Taylor Rd.	0.2				
	120th St./Edward Taylor Rd 118th St.	0.2				
 	118th St Jamestown Rd.	0.1				
 	Jamestown Rd Gold Coast Mall	0.1				
F	Gold Coast Mall - Channel Bouy Rd.	0.2				
F	Channel Bouy Rd Old Landing Rd.	0.2	W		w	
F	Old Landing Rd 100th St.	0.2				
F	100th St 94th St.	0.2				
-	94th St Pacific Ave.	0.2				
	Pacific Ave 85th St.	0.2				
	85th St 81st St.	0.2				
F	81st St 77th St.	0.2				
	77th St 74th St.	0.2				
	74th St 70th St.	0.2				
	70th St 67th St.	0.2				
	67th St 65th St.	0.1				
	65th St 62nd St./MD-90 (Ocean City Expy)	0.2				
Urban Other Principal - Arterial -	62nd St./MD-90 (Ocean City Expy) - 59th St.	0.2				
	59th St 56th St.	0.2				
	56th St 54th St.	0.1				
	54th St 52nd St.	0.1				
	52nd St 49th St.	0.2				
	49th St 48th St.	0.1				
L	48th St 45th St.	0.2				
L	45th St 41st St.	0.2				
L	41st St Convention Center Dr.	0.1				
L	Convention Center Dr 36th St.	0.2				
L	36th St 33rd St.	0.2				
L	33rd St 30th St.	0.2				
L	30th St 28th St./Robin Dr.	0.2				
	28th St./Robin Dr 26th St.	0.1	W		w	
	26th St 23rd St.	0.2				
- - - - - -	23rd St 21st St.	0.2				
	21st St 19th St./Dolphin St.	0.1				
	19th St./Dolphin St 17th St.	0.2				
	17th St 15th St.	0.1				
	15th St 12th St.	0.2				
	12th St 8th St. 8th St 7th St.	0.2				
	7th St 7th St.	0.1				
 	7th St 3th St. 5th St 3rd St.	0.1				
 	3rd St 2nd St.	0.1				
 	2nd St 2nd St.	0.1				
 	1st St N Division St./US-50/Ocean Gateway	0.1				
	I = Improvement from 2022 W = Worsened from 2022					



Limits:	Washington DC Line to US 20			
	Washington DC Line to US 29 6.0 miles			
Corridor Length:				
Speed Limit:	35 - 40) MPH		
Travel Lanes:	(3 - 4) Northbound	(2 - 3) Southbound		
Signal Controlled Intersections:	31	0		
Grade Separated Interchanges:	2			
	Eastern Ave, MI	O 410, MD 193,		
Major Cross Streets:	Piney Branch Rd, MD 320, Adelphi Rd,			
	Powder Mill Rd, US 29			
	Routes	Avg. Daily Ridership		
	METRO C8	2,112		
	METRO K6	7,004		
	METRO K9	775		
	METRO Z2	309		
	MTA Commuter Bus 204	58		
Routes and Ridership	Ride On Route 10	N/A		
	Ride On Route 16	N/A		
	Ride On Route 18	N/A		
	Ride On Route 20	N/A		
	Ride On Route 22	N/A		
	Ride On Route 24	N/A		
	Ride On Route 25	N/A		



		Peak Hour
2023 AADT	Trucks	Traffic
35,000 - 72,000 vpd	2% - 6%	7% - 8%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	9	9
LOS E	0	0
LOS F	0	0

Segment Operations					
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)			
Uncongested	3.5 / 1.5	0.0 / 0.8			
Moderate	1.7 / 0.3	2.5 / 1.0			
Heavy to Severe	0.8 / 4.2	3.5 / 4.2			

LOS 'E' Intersections

LOS 'F' Intersections

Color Key			
TTI	PTI		
1.00 1.15	1.0 1.5		
1.15 - 1.30	1.5 - 2.5		
1.30 2.00	> 2.5		
> 2.00			
No	No data		

* Available count da	ita for the last four vears	 (30% of signalized intersections)
Available count da	ila ioi liie iasi ioui veais	s. (30% of Signalized intersections)

				Т	TI			P	TI	
Functional Class			Length (miles)		PM		AM		PM	
	North to obtain	(IIIIIC3)	NB	SB	NB	SB	NB	SB	NB	SB
	US 29 - Lockwood Dr.	0.3								
	Lockwood Dr Powder Mill Rd.	1.5								
	Powder Mill Rd I-495	0.4								I
<u></u>	I-495 - Adelphi Rd.	0.4								
Urban Other Principal Arterial	Adelphi Rd Metzerott Rd.	0.5							W	
Aitenai	Metzerott Rd MD-320	0.2								
	MD-320 - MD-193	0.9								
	MD-193 - MD-410	1.0							W	
	MD-410 - Eastern Ave./DC line	0.8						W		

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

US₁

Limits:	MD 410 to MD 198		
Corridor Length:	10.7 miles		
Speed Limit:	35 - 50 MF	PH	
Travel Lanes:	(2 - 4) Northbound (2 -	4) Southbound	
Signal Controlled Intersections:	40		
Grade Separated Interchanges:	3		
	MD 410, MD 193, I-495, F	Rhode Island Ave,	
	MD 212, Muirk	irk Rd,	
	Contee Rd, Cherry L	ane, MD 198	
	Routes	Avg. Daily Ridership	
	METRO 83	1,571	
	METRO 86	1,724	
Routes and Ridership	METRO 89M	789	
	Green Line Greenbelt	2,739	
	Green Line College Park	1,887	
	The Bus Route 17	N/A	

200	West Laurel 198 L	aurel Russett
esville Fairland (650) Calverto White Oak Suffice	(F)	th Laurel BOWLE Patur
Hillandale 495	Beltsville	197 Bowie
ng Exposity College Park		REENBELT RD ddard Glenn Dale
heast (410) Hyattsville	Gree Land	am was

NOTE: The Green Line ridership data represents boardings

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	33	33
LOS E	0	0
LOS F	0	0

Segment Operations

Trucks

2% - 6%

oeginent operations					
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)			
Uncongested	10.7 / 0.0	5.3 / 0.0			
Moderate	0.0 / 8.1	5.4 / 7.0			
Heavy to Severe	0.0 / 2.6	0.0 / 3.7			

LOS 'E' Intersections

LOS F Intersections

2023 AADT 18,000 - 46,000 vpd

Color Key			
TTI	PTI		
1.00 1.15	1.0 1.5		
1.15 - 1.30	1.5 - 2.5		
1.30 2.00	> 2.5		
> 2.00			
No	No data		

Peak Hour

Traffic

7% - 8%

* Available count data for the last four years. (83% of signalized intersections)

				Т	TI		PTI				
Functional Class	Roadway Segment North to South	Length (miles)	AM		Р	М	Δ	M	/I P		
	North to count	(IIIIIC3)	NB	SB	NB	SB	NB	SB	NB	SB	
	Gorman Ave (MD-198) - Cherry Ln.	0.6									
	Cherry Ln Cypress St.	0.7									
	Cypress St Contee Rd.	0.5									
	Contee Rd Muirkirk Rd.	1.3									
	Muirkirk Rd Ritz Way	0.4									
	Ritz Way - Powder Mill Rd. (MD-212)	1.8									
Urban Other Principal Arterial	Powder Mill Rd. (MD-212) - Rhode Island Ave.	0.6									
Arterial	Rhode Island Ave I-495/I-95	1.0									
	I-495/I-95 - Cherry Hill Rd.	0.3									
	Cherry Hill Rd Greenbelt Rd./ Metzerott Rd.	1.1									
	Greenbelt Rd./ Metzerott Rd Campus Dr./ Painted Branch Pkwy	0.7						W			
	Campus Dr./ Painted Branch Pkwy - Guilford Rd/Dr	0.8							w		
	Guilford Rd/Dr - East West Hwy (MD-410)	0.9							VV		

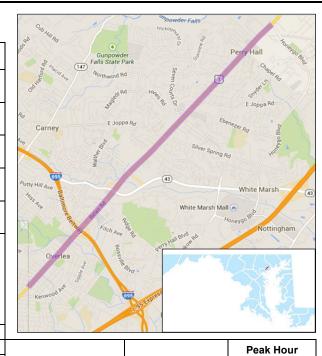
I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time) TTI: travel time in

US₁

Routes and Ridership

Limits: Baltimore City Line to Honeygo Blvd Corridor Length: 5.6 miles Speed Limit: 35 - 40 MPH Travel Lanes: (2 - 3) Northbound (2 - 3) Southbound Signal Controlled Intersections: 23 Grade Separated Interchanges: 2 Major Cross Streets: Taylor Ave, Fullerton Ave, I-695, Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd, E. Joppa Rd / Ebenezer Rd, Honeygo Blvd Routes Avg. Daily Ridership								
Speed Limit: 35 - 40 MPH Travel Lanes: (2 - 3) Northbound (2 - 3) Southbound Signal Controlled Intersections: 23 Grade Separated Interchanges: 2 Taylor Ave, Fullerton Ave, I-695, Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd, E. Joppa Rd / Ebenezer Rd, Honeygo Blvd	Limits:	Baltimore City Line to Honeygo Blvd						
Travel Lanes: (2 - 3) Northbound (2 - 3) Southbound Signal Controlled Intersections: Grade Separated Interchanges: Taylor Ave, Fullerton Ave, I-695, Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd, E. Joppa Rd / Ebenezer Rd, Honeygo Blvd	Corridor Length:	5.6 miles						
Signal Controlled Intersections: Grade Separated Interchanges: Taylor Ave, Fullerton Ave, I-695, Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd, E. Joppa Rd / Ebenezer Rd, Honeygo Blvd	Speed Limit:	35 - 40 MP	PH					
Intersections: Grade Separated 2 Interchanges: Taylor Ave, Fullerton Ave, I-695, Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd, E. Joppa Rd / Ebenezer Rd, Honeygo Blvd	Travel Lanes:	(2 - 3) Northbound (2 - 3) Southbound						
Interchanges: Taylor Ave, Fullerton Ave, I-695, Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd, E. Joppa Rd / Ebenezer Rd, Honeygo Blvd	_	23						
Major Cross Streets: Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd, E. Joppa Rd / Ebenezer Rd, Honeygo Blvd	-	2						
Routes Avg. Daily Ridership	Major Cross Streets:	Rossville Blvd, Putty Hill Ave / Ridge Rd, MD 43, Silver Spring Rd,						
		Routes Avg. Daily Ride						



Intersection Operations

CityLink Brown Route

MTA LocalLink 33

MTA LocalLink 36

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	10	10
LOS E	0	0
LOS F	0	0

Segment Operations					
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)			
Uncongested	2.1 / 0.0	2.4 / 0.0			
Moderate	2.9 / 1.3	2.5 / 3.5			
Heavy to Severe	0.6 / 4.3	0.7 / 2.1			

Trucks

2% - 3%

LOS 'E' Intersections

LOS 'F' Intersections

2023 AADT

23,000 - 45,000 vpd

4,698

733

1,941

TTI	PTI		
1.00 1.15	1.0 1.5		
1.15 - 1.30	1.5 - 2.5		
1.30 2.00	> 2.5		
> 2.00			
No data			

Traffic

7.5% - 8%

			TTI				PTI			
Functional Class	Roadway Segment North to South	Length (miles)	AM		PM		AM		PM	
	North to South		NB	SB	NB	SB	NB	SB	NB	SB
	Chapel Rd Joppa Rd.	1.3								
	Joppa Rd Silver Spring Rd.	0.6							W	
	Silver Spring Rd Whitemarsh Blvd. (MD-43)/Dunfield Rd.	1.2								
Urban Other Principal Arterial	Whitemarsh Blvd. (MD-43)/Dunfield Rd Rossville Blvd.	0.8								
Arterial	Rossville Blvd I-695	0.4								
	I-695 - Fullerton Ave.	0.7								
	Fullerton Ave Fleetwood Ave.	0.6								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

	T			1			
Limits:	MD 97 to MD 650						
Corridor Length:		3.8 miles					
Speed Limit:		35 - 45	MPH				
Travel Lanes:	(3 - 4)	Northbound	(2 - 4) Southb	ound			
Signal Controlled Intersections:		13	3				
Grade Separated Interchanges:		2					
Major Cross Streets:	MD 97, Spring St / Cedar St, Dale Dr, Sligo Creek Pkwy / St Andrews Way, I-495, MD 193, Lockwood Dr, MD 650						
	Ride On Routes	Avg. Daily Ridership	METRO Routes	Avg. Daily Ridership			
	8	N/A	Z2	309			
	9	N/A	Z6	2,301			
	12	N/A	Z7	291			
	13	N/A	Z8	2,767			
Routes and Ridership	14	N/A	MTA				
Routes and Ridership	16	N/A	Commuter	Avg. Daily			
	17	N/A	Bus Routes	Ridership			
	20	N/A					
	21	N/A	201	206			
	22	N/A	305	154			
	Flash Route Blue	N/A	315	100			
	Flash Route Orange	N/A	325	54			

Arcola Ale Kers	HAd Lamberton Dr. Lamberton St.	Pople Grove Rd 650 Calumb	
University	Kemp Mill	White Oak	US Food &
國國	Belton Rd	Sching	100
Denni _g	Dailas Ave	Branch Anacostia	Hillandal
t Glen Capital Be ^{ttu} ay	495	Capital Beltway Capital	Deshire Ave
97) Pild Ale Index	Oale Q	7/- 7/2	
410 spings	wante Ave		

2023 AADT	Trucks	Peak Hour Traffic
25,000 - 70,000 vpd	1% - 5%	7%

Intersection Operations

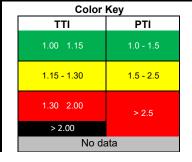
Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	4	4
LOS E	0	0
LOSE	0	0

Segment Operations

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	2.8 / 0.0	0.0 / 0.3
Moderate	0.7 / 2.0	0.0 / 0.5
Heavy to Severe	0.3 / 1.8	3.8 / 3.0

LOS 'E' Intersections

LOS F Intersections



*	Available count da	ta for the la	st four years	(31% of signalize	ed intersections)

			AM PM				P	IT		
Functional Class	Roadway Segment North to South	Length (miles)			PM		AM		PM	М
	North to Couli	(IIIIes)	NB	SB	NB	SB	NB	SB	NB	SB
Urban Other Principal Arterial	New Hampshire Ave. (MD-650) - Lockwood Dr.	0.9		w						
	Lockwood Dr University Blvd. (MD-193)	1.1		VV						
	University Blvd. (MD-193) - I-495	0.3								
	I-495 - Franklin Ave.	0.5		W				- 1		
Arterial	Franklin Ave Dale Dr.	0.3			W					
	Dale Dr Cedar St./Spring St.	0.5							10/	
	Cedar St./Spring St Georgia Ave. (MD-97)	0.2	W						w	

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

 $\label{eq:pti} {\it PTI: planning time index \ (95th percentile travel time / freeflow travel time)}$

Limits:	Industrial Pkwy to MD 198				
Corridor Length:	4.5 miles				
Speed Limit:	50 - 55 MPH				
Travel Lanes:	(2 - 4) Northbound (2 - 4) Southbound				
Signal Controlled Intersections:	6				
Grade Separated Interchanges:	4				
Major Cross Streets:	Industrial Parkway, Tech Rd E Randolph Rd / Cherry Hill Rd Musgrove Rd, Fairland Rd, MD 200, Briggs Chaney Rd, Blackburn Rd, MD 198				
	Routes METRO Z6 METRO Z7	Avg. Daily Ridership 2,301 291			
Routes and Ridership	METRO Z8 Ride On Routes	2,767 Avg. Daily Ridership			
	Ride On Route 10	N/A			
	Flash Route Blue	N/A			
	Flash Route Orange	N/A			

Spencerville Cloverly Briggs Chaney Ro		Burtonsville	West Laure
sville (Panado) No Ro	Fairland 29	Gencaste Rd	35 200
1-71-51	Males Ala	Calverton	

2023 AADT	Trucks	Peak Hour Traffic
48,000 - 59,000 vpd	2%	8% - 8.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	2	1
LOS E	0	1
LOS F	0	0

Segment	Operations
---------	------------

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	3.0 / 0.0	1.8 / 3.0
Moderate	1.5 / 2.0	1.2 / 1.5
Heavy to Severe	0.0 / 2.5	1.5 / 0.0

LOS 'E' Intersections

US 29 at Greencastle Rd (PM)

LOS F Intersections

Color Key						
TTI	PTI					
1.00 1.15	1.0 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 2.00	> 2.5					
> 2.00						
No	data					

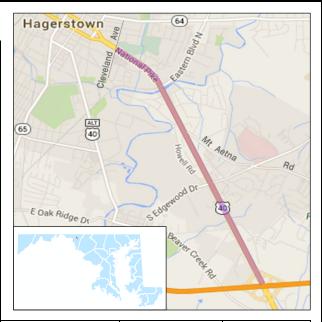
* Available count data for the last four years.	(33% of signalized intersections)
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			TTI			P			PTI			
Functional Class	Roadway Segment North to South					М		Α	AM		PM	
	North to Count	(IIIIIC3)	NB	SB	NB	SB		NB	SB	NB	SB	
	MD198 - GreenCastle Rd.	1.2								W		
	GreenCastle Rd Fairland Rd.	1.8								- 1		
Urban Freeway Expressway	Fairland Rd Musgrove Rd.	0.5										
	Musgrove Rd E Randolph Rd./Cherry Hill Rd.	0.3										
	E Randolph Rd./Cherry Hill Rd Tech Rd Industrial Pkwy.	0.7		W					W			

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

 ${\it PTI: planning time index \ (95th percentile travel time / freeflow travel time)}$

Limits:	I-70 to Clevela	nd Ave						
Corridor Length:	3.4 miles							
Speed Limit:	35 - 45 MPH							
Travel Lanes:	(2 - 3) Eastbound (2 - 3) Westbound							
Signal Controlled Intersections:	6							
Grade Separated Interchanges:	1							
	I-70,							
	Edgewood	Dr,						
Major Cross Streets:	Mt. Aetna F	₹d,						
	Eastern Blvd,							
	Cleveland Ave							
Routes and Ridership	Routes	Avg. Daily Ridership						
Noutes and Nidership	N/A	N/A						



		Peak Hour
2023 AADT	Trucks	Traffic
33,000 vpd	3%	8%

Segment Operations

Intersection Operations					
Signalized Intersections*:	AM Peak Hour	PM Peak Hour			
LOS D or Better	N/A	N/A			
LOS E	N/A	N/A			
LOS F	N/A	N/A			

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	2.3 / 2.3	1.6 / 2.0
Moderate	1.1 / 1.1	1.8 / 1.4
Heavy to Severe	0.0 / 0.0	0.0 / 0.0

LOS 'E' Intersections

LOS F Intersections

Color Key					
TTI	PTI				
1.00 1.15	1.0 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 2.00	> 2.5				
> 2.00					
No	data				

*	No traffic	count da	ata for th	e last fou	ır vears.

							TTI		PTI			TI	
Functional Class Roadway Segment West to East		Length (miles)	AM PM			AM		PM					
	West to East		EB	WB	EB	WB		ЕВ	WB	EB	WB		
	Cannon Ave (MD-64) - Cleveland Ave.	0.3											
Urban Other Principal Arterial	Cleveland Ave Eastern Blvd.	0.6											
	Eastern Blvd Mt. Aetna Rd./ Birch Knoll Rd.	0.5											
	Mt. Aetna Rd./ Birch Knoll Rd - Edgewood Dr.	0.7											
	Edgewood Dr I-70	1.3											

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

US 50 FRIDAY SUMMER MD 213 to MD 528 Limits: Corridor Length: 93 miles Speed Limit: 35 - 55 MPH Travel Lanes: (2 - 3) Eastbound (2 - 3) Westbound Signal Controlled 36 Intersections: **Grade Separated** 7 Interchanges: MD 213, MD 404, MD 309

Single Secretary

	Northwood Dr, US 13	, US 50 BUS,	Million		Newark
	MD 90, US 113, MD	589, MD 528			Peak Hour
Routes and Ridership	Routes	Avg. Daily Ridership	2023 ADT	Trucks	Traffic
Routes and Ridership	N/A	N/A	41,000 - 44,000 vpd	N/A	7.5%
	Intersection Operations		Se	gment Operations	

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	2	2
LOS E	0	0
100 E	0	0

* Available count data for the last four years. (6% of signalized intersections)

PTI: planning time index (95th percentile travel time / freeflow travel time)

Major Cross Streets:

	oeginent operation	7113
Level of Congestion	Eastbound (Miles of Roadway)	Westbound (Miles of Roadway)
Uncongested	67.5	82.3
Moderate	5.1	9.4
Heavy to Severe	20.4	1.4

TTI: travel time index (50th percentile travel time/ freeflow travel time)

LOS 'E' Intersections	LOS F' Intersections

MD 322, MD 328, Mt. Holly Rd,

MD 331, MD 313, Naylor Mill Rd,

Color Key					
TTI	PTI				
1.00 - 1.15	1.0 - 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 - 2.00	> 2.5				
> 2.00					
No	data				

Functional Class	Roadway Segment	Length	T			TI
	West to East	(miles)	Friday (6	PM-8PM)	Friday (6PM-8F	
	11001 10 2401	(EB	WB	EB	WB
	Del Rhodes Ave - MD 213	3.7	W		1	
Other Principal Arterial	MD 213 - MD 404(Queen Ann Hwy)	1.5			I	W
	MD 404(Queen Ann Hwy) -Black Dog Alley/Airport Rd	8.7	187			147
	Black Dog Alley/Airport Rd - Easton Pkwy	0.9	W			W
	Easton Pkwy - Chapel Rd	0.4			I	
	Chapel Rd - MD 328 (Goldsborough St/Matthewstown Rd)	1.1				
	MD 328 - MD 331 (Dover Rd)	0.3				
	MD 331 (Dover Rd)- Dutchmans Ln	0.9				
	Dutchmans Ln - Easton Pkwy	1.7				
	Easton Pkwy - Old Trappe Rd/Landing Neck Rd	0.7				
	Old Trappe Rd/Landing Neck Rd - Barber Rd	5.2				W
	Barber Rd - Maryland Ave	6.4				
	Maryland Ave - E Cedar St/Meteor Ave	0.3				
	E Cedar St/Meteor Ave - Crusader Rd	0.2				
	Crusader Rd - Woods Rd	0.3				
	Woods Rd- MD 16/Gypsy Hill Rd/Church Creek Rd	0.5				
	MD 16/Gypsy Hill Rd/Church Creek Rd - Old Rt 50/Bucktown Rd	0.4			W	
	Old Rt 50/Bucktown Rd - MD 313/MD 54 (Delmar Rd)/Main St	19.0				
	MD 313/MD 54 (Delmar Rd)/Main St - US 13/Salisbury Bypass/Ocean Hwy	12.6				
	US 13/Salisbury Bypass/Ocean Hwy - Hobbs Rd	3.0			w	
Expressways	Hobbs Rd - Walston Switch Rd	1.5				
	Walston Switch Rd - MD 452/Friendship Rd/Seahawk Rd	17.8				
	MD 452/Friendship Rd/Seahawk Rd - MD 589/Racetrack Rd	1.3				
Other Principal Arterial Other Freeways and Expressways Other Principal Arterial	MD 589/Racetrack Rd - Samuel Bowen Blvd/Riddle Ln/Holly Grove Rd	8.0				
	Samuel Bowen Blvd/Riddle Ln - Jerry Mack Rd/Man O War Ln	1.2				
Other Dalmain of Autorial	Jerry Mack Rd/Man O War Ln - Old Ocean City Rd/MD 707/Old Bridge Rd	0.4			w	w
Other Principal Arterial	Old Ocean City Rd/MD 707/Old Bridge Rd - Keyser Point Rd	0.5				
	Keyser Point Rd - MD 611/Stephen Decatur Hwy	0.3				
	MD 611/Stephen Decatur Hwy - Golf Course Rd	0.4				
	Golf Course Rd - Inlet Isle Ln	0.2			1.0	w
	Inlet Isle Ln - MD 528/Philadelphia Ave	0.8				

A-76

US 50 **SATURDAY SUMMER**

Limits:	MD 213 to MD 528	
Corridor Length:	93 miles	
Speed Limit:	35 - 55 MPH	
Travel Lanes:	(2 - 3) Eastbound (2 - 3) Westbound	
Signal Controlled Intersections:	36	
Grade Separated Interchanges:	7	
	MD 213, MD 404, MD 309	
	MD 322, MD 328, Mt. Holly Rd,	
Major Cross Streets:	MD 331, MD 313, Naylor Mill Rd,	
	Northwood Dr, US 13, US 50 BUS,	
l		



•	Northwood Dr, US 13	, US 50 BUS,	opersville 2 Nanticoke Whitehav	en TI	Namark
	MD 90, US 113, MD	589, MD 528			Peak Hour
Routes and Ridership	Routes	Avg. Daily Ridership	2023 ADT	Trucks	Traffic
Routes and Ridership	N/A	N/A	41,000 - 43,000 vpd	N/A	7.5% - 8%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	2	2
LOS E	0	0
LOS F	0	0

	Segment Operation	ons
Level of Congestion	Eastbound (Miles of Roadway)	Westbound (Miles of Roadway)
Uncongested	70.0	78.8
Moderate	2.9	12.7
Heavy to Severe	20.1	1.5

LOS 'E' Intersections

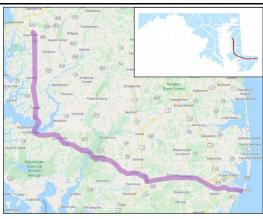
Color Key		
TTI	PTI	
1.00 - 1.15	1.0 - 1.5	
1.15 - 1.30	1.5 - 2.5	
1.30 - 2.00	> 2.5	
> 2.00		
No	data	

 * Available count data for the last four years. (6% of signalized intersections)

					PTI Saturday (12PM-2PI	
Functional Class						
	11001.10 2001	(EB	WB	EB	WE
	Del Rhodes Ave - MD 213	3.7	W			
	MD 213 - MD 404(Queen Ann Hwy)	1.5			ı	- 1
	MD 404(Queen Ann Hwy) -Black Dog Alley/Airport Rd	8.7	187	10/	w	w
	Black Dog Alley/Airport Rd - Easton Pkwy	0.9	vv	VV	VV	٧٧
	Easton Pkwy - Chapel Rd	0.4			I	
	Chapel Rd - MD 328 (Goldsborough St/Matthewstown Rd)	1.1		I		1
	MD 328 - MD 331 (Dover Rd)	0.3				
	MD 331 (Dover Rd)- Dutchmans Ln	0.9				
Other Britania I Astrola	Dutchmans Ln - Easton Pkwy	1.7				
Other Principal Arterial	Easton Pkwy - Old Trappe Rd/Landing Neck Rd	0.7				
	Old Trappe Rd/Landing Neck Rd - Barber Rd	5.2				
	Barber Rd - Maryland Ave	6.4				
	Maryland Ave - E Cedar St/Meteor Ave	0.3				
	E Cedar St/Meteor Ave - Crusader Rd	0.2				
	Crusader Rd - Woods Rd	0.3				
	Woods Rd- MD 16/Gypsy Hill Rd/Church Creek Rd	0.5				
	MD 16/Gypsy Hill Rd/Church Creek Rd - Old Rt 50/Bucktown Rd	0.4				
	Old Rt 50/Bucktown Rd - MD 313/MD 54 (Delmar Rd)/Main St	19.0				
	MD 313/MD 54 (Delmar Rd)/Main St - US 13/Salisbury Bypass/Ocean Hwy	12.6				
•	US 13/Salisbury Bypass/Ocean Hwy - Hobbs Rd	3.0				
Punctional Class Roadway Segment West to East Eength (miles) Saturday (12PM-2PM)						
	Walston Switch Rd - MD 452/Friendship Rd/Seahawk Rd	17.8				
	MD 452/Friendship Rd/Seahawk Rd - MD 589/Racetrack Rd	1.3				
	MD 589/Racetrack Rd - Samuel Bowen Blvd/Riddle Ln/Holly Grove Rd	0.8				
	Samuel Bowen Blvd/Riddle Ln - Jerry Mack Rd/Man O War Ln	1.2				
Other Drivelnel Artests	Jerry Mack Rd/Man O War Ln - Old Ocean City Rd/MD 707/Old Bridge Rd	0.4			1	
Otner Principal Arterial	Old Ocean City Rd/MD 707/Old Bridge Rd - Keyser Point Rd	0.5				
	Keyser Point Rd - MD 611/Stephen Decatur Hwy	0.3				
	MD 611/Stephen Decatur Hwy - Golf Course Rd	0.4				
	Golf Course Rd - Inlet Isle Ln	0.2	W		1.0	
	Inlet Isle Ln - MD 528/Philadelphia Ave	0.8				

US 50 **SUNDAY SUMMER**

Limits:	MD 213 to MD 528			
Corridor Length:	93 miles			
Speed Limit:	35 - 55 MPH			
Travel Lanes:	(2 - 3) Eastbound (2 - 3) Westbound			
Signal Controlled Intersections:	36			
Grade Separated Interchanges:	7			
Major Cross Streets:	MD 213, MD 404, MD 309 MD 322, MD 328, Mt. Holly Rd, MD 331, MD 313, Naylor Mill Rd, Northwood Dr, US 13, US 50 BUS,			



	MD 90, US 113, MD 589, MD 528				Peak Hour	
Routes and Ridership	Routes	Avg. Daily Ridership	2023 ADT	Trucks	Traffic	
Routes and Ridership	N/A	N/A	36,000 - 39,000 vpd	N/A	8%	
	Intersection Operations		Se	gment Operations	•	

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	2	4
LOS E	2	0
LOS F	0	0

Level of Congestion	Eastbound (Miles of Roadway)	Westbound (Miles of Roadway)
Uncongested	76.7	70.4
Moderate	14.5	6.4
Heavy to Severe	1.8	16.2

LOS 'E' Intersections

US 50 at MD 213 (AM) US 50 at MD 404 (AM)

Colo	Color Key			
TTI	PTI			
1.00 - 1.15	1.0 - 1.5			
1.15 - 1.30	1.5 - 2.5			
1.30 - 2.00	> 2.5			
> 2.00				
No	data			

* Available count data for the last four years. (11% of signalized intersections)

			Length (miles) Sunday (2PM-4PM)		PTI Sunday (2PM-4PM	
Functional Class	Roadway Segment West to East					
	West to East	(mics)	EB	WB	EB	WE
	Del Rhodes Ave - MD 213	3.7		W	w	W
	MD 213 - MD 404(Queen Ann Hwy)	1.5				1
	MD 404(Queen Ann Hwy) -Black Dog Alley/Airport Rd	8.7	w	W	w	
	Black Dog Alley/Airport Rd - Easton Pkwy	0.9	VV	VV	vv	
	Easton Pkwy - Chapel Rd	0.4				
	Chapel Rd - MD 328 (Goldsborough St/Matthewstown Rd)	1.1				W
	MD 328 - MD 331 (Dover Rd)	0.3				
	MD 331 (Dover Rd)- Dutchmans Ln	0.9				
Other Bringing Arterial	Dutchmans Ln - Easton Pkwy	1.7				
Other Principal Arterial	Easton Pkwy - Old Trappe Rd/Landing Neck Rd	0.7				
	Old Trappe Rd/Landing Neck Rd - Barber Rd	5.2				w
	Barber Rd - Maryland Ave	6.4				
	Maryland Ave - E Cedar St/Meteor Ave	0.3				
	E Cedar St/Meteor Ave - Crusader Rd	0.2				
	Crusader Rd - Woods Rd	0.3				
	Woods Rd- MD 16/Gypsy Hill Rd/Church Creek Rd	0.5				
	MD 16/Gypsy Hill Rd/Church Creek Rd - Old Rt 50/Bucktown Rd	0.4				- 1
	Old Rt 50/Bucktown Rd - MD 313/MD 54 (Delmar Rd)/Main St	19.0				
	MD 313/MD 54 (Delmar Rd)/Main St - US 13/Salisbury Bypass/Ocean Hwy	12.6				
•	US 13/Salisbury Bypass/Ocean Hwy - Hobbs Rd	3.0				
Other Freeways and Expressways	Hobbs Rd - Walston Switch Rd	1.5				
	Walston Switch Rd - MD 452/Friendship Rd/Seahawk Rd	17.8				
	MD 452/Friendship Rd/Seahawk Rd - MD 589/Racetrack Rd	1.3				
	MD 589/Racetrack Rd - Samuel Bowen Blvd/Riddle Ln/Holly Grove Rd	0.8				
	Samuel Bowen Blvd/Riddle Ln - Jerry Mack Rd/Man O War Ln	1.2				
Other Bulgaria at Autorial	Jerry Mack Rd/Man O War Ln - Old Ocean City Rd/MD 707/Old Bridge Rd	0.4			1	
Otner Principal Arterial	Old Ocean City Rd/MD 707/Old Bridge Rd - Keyser Point Rd	0.5				
	Keyser Point Rd - MD 611/Stephen Decatur Hwy	0.3				
	MD 611/Stephen Decatur Hwy - Golf Course Rd	0.4				
	Golf Course Rd - Inlet Isle Ln	0.2			1	
	Inlet Isle Ln - MD 528/Philadelphia Ave	0.8				

Limits:	Billingsley Rd to MD 5			
Corridor Length:	7.8 miles			
Speed Limit:	45 - 55 MPH			
Travel Lanes:	(2 - 4) Northbound (2 -	4) Southbound		
Signal Controlled Intersections:	17			
Grade Separated Interchanges:	2			
Major Cross Streets:	Billingsley Rd, Smallwood Dr, MD 228, Acton Ln, MD 5, Cedarville Rd/McKendree Rd Chadds Ford Dr.			
	Routes	Avg. Daily Ridership		
	MTA Commuter Bus 705	242		
Routes and Ridership	p MTA Commuter Bus 715 214			

Stre	am valley Park		and e
Floral	Park Rd	5	Orened Lie
			5
Danville Re			Brandywine
AR DO	nville	30	Timosy, Banch
(373)	4	6%	W. S.
		Talles	Limo /
	- 6		
	(=	. (5)	
		· /	10
		0	Cedarville State
228	Acton in	301	N X III Z YES
PH	wilton V	// Ca	P
RHUMAN	Me Acron to		- de
(1) 2		(5)	5
La 160	Waldorf		St Degree Bed
Charles Towne Center			
- W //			
Billingsley Rd			
YRd .	185 PKWY		
	S Charles Privary		
White Plains	MARCO		
		1	

•			Peak Hour		
	2023 AADT	Trucks	Traffic		
	54,000 - 76,000 vpd	4% - 6%	7%		
	Segment Operations				

MTA Commuter Bus 735 **Intersection Operations**

MTA Commuter Bus 725

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	5	4
LOS E	0	1
LOS F	0	0

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	5.9 / 3.1	1.7 / 1.7
Moderate	1.9 / 3.4	6.1 / 4.2
Heavy to Severe	0.0 / 1.3	0.0 / 1.9

LOS 'E' Intersections

US 301 at MD 5BU/MD 228 (PM)

LOS F Intersections

92

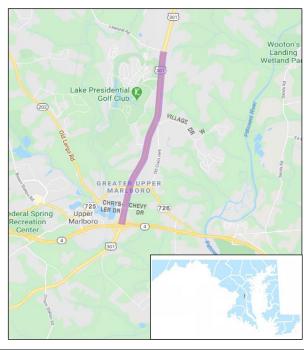
103

Color Key		
TTI	PTI	
1.00 1.15	1.0 1.5	
1.15 - 1.30	1.5 - 2.5	
1.30 2.00	> 2.5	
> 2.00		
No	data	

* Available count data for the last four years	s. (29% of signalized intersections)
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						Т	TI			P.	TI	
Functional Class	Roadway Segment North to South	Length (miles)	AM		PM		AM		PM			
	North to South	(iiiies)	NB	SB	NB	SB	NB	SB	NB	SE		
	Branch Ave. (MD-5) - Timothy Branch/Chadds Ford Dr.	1.1										
Rural Other Principal Arterial	TimothyBranch/ChaddsFordDr-CedarvilleRd/McKendreeRd	8.0								'		
	CedarvilleRd./McKendree RdMattawmnBeantownRd(MD-5)	0.5								- 1		
	Mattawoman Beantown Rd. (MD-5) - Sub-Station Rd.	0.4										
	Sub-Station Rd Acton Ln.	1.3										
Urban Other Principal	Acton Ln Berry Rd. (MD-228)/Leonardtown Rd. (Bus-5)	1.2										
Arterial	Berry Rd. (MD-228)/Leonardtown Rd. (Bus-5)-St Patricks Dr.	0.7										
	St Patricks Dr Smallwood Dr.	0.6										
Ĭ	Smallwood Dr Billingsley Rd.	1.2										

Limits:	Leeland Rd to MD 4			
Corridor Length:	3.4 miles			
Speed Limit:	55 MPH			
Travel Lanes:	(2 - 3) Northbound (2 - 3) Southbound			
Signal Controlled Intersections:	5			
Grade Separated Interchanges:	1			
Major Cross Streets:	MD 4, Chrysler Dr/Chevy Dr, MD 725, Village Dr W Leeland Rd to MD 4			
Routes and Ridership	Routes Avg. Daily Ridersh N/A N/A			



Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	2	2
LOS E	0	0
LOS F	0	0

Segment Operations					
Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)			
Uncongested	0.0 / 0.0	0.0 / 0.0			
Moderate	3.4 / 3.4	0.0 / 0.0			
Heavy to Severe	0.0 / 0.0	3.4 / 3.4			

LOS 'E' Intersections

LOS F Intersections

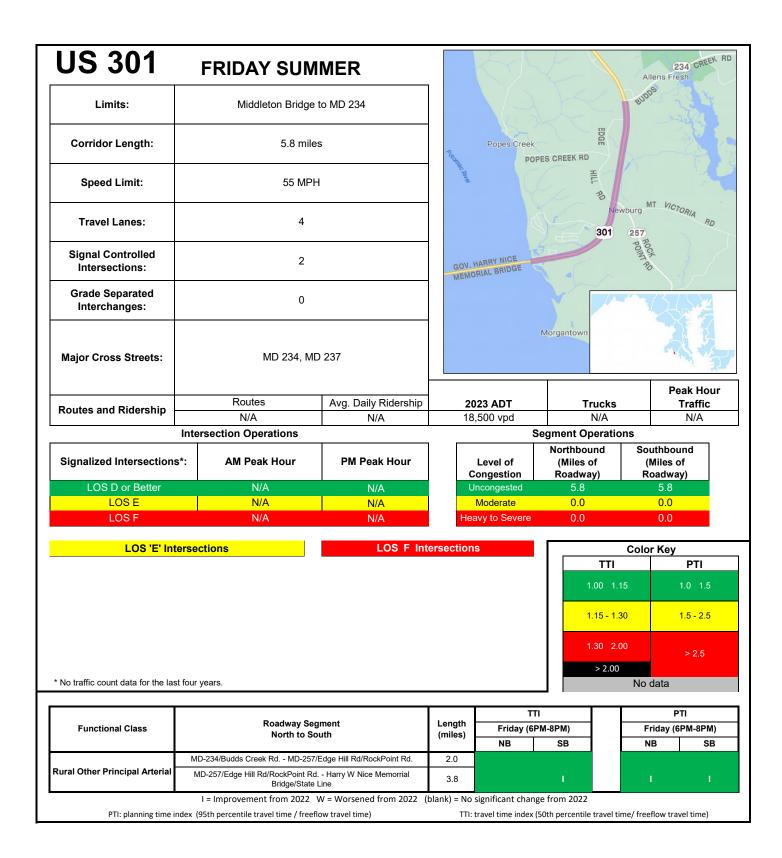
Color Key		
TTI	PTI	
1.00 1.15	1.0 1.5	
1.15 - 1.30	1.5 - 2.5	
1.30 2.00	> 2.5	
> 2.00		
No	data	

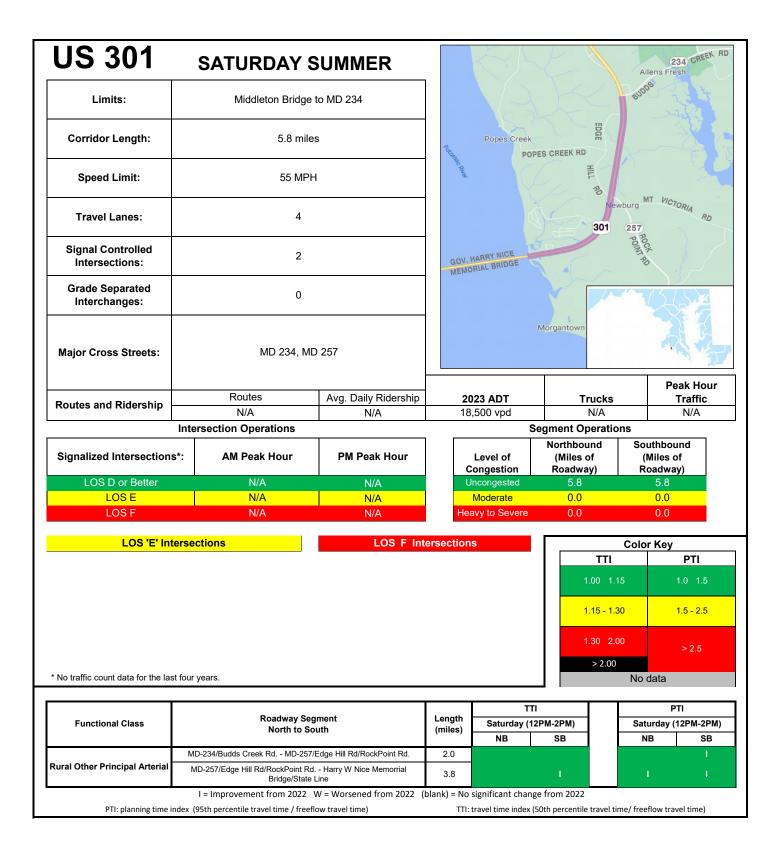
* Available count data for the last four years. (40% of signalized intersections)

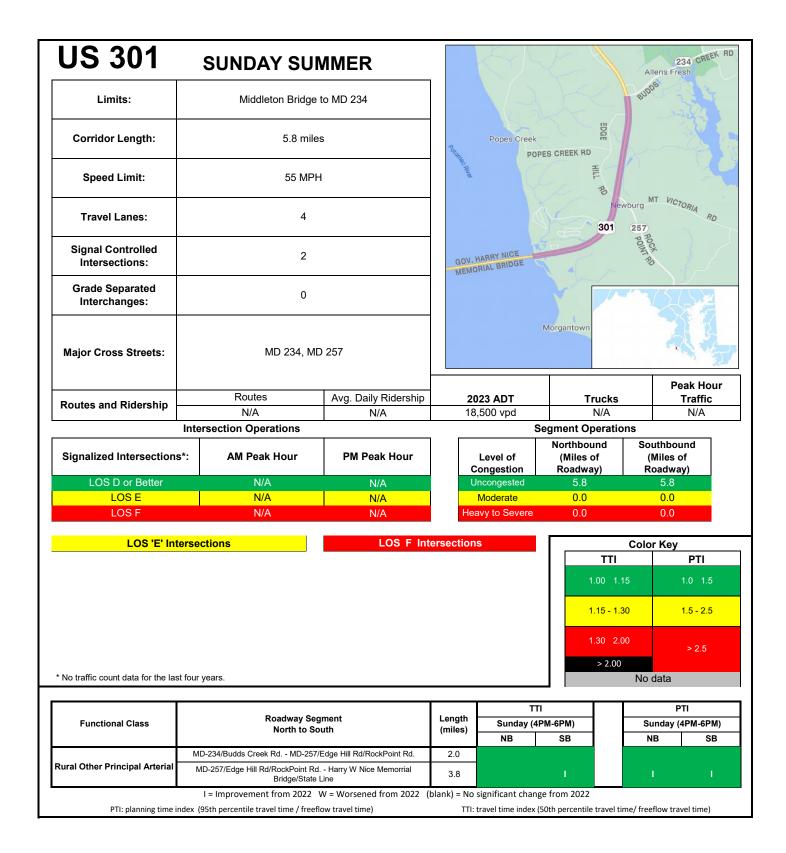
				Т	TI				Р	TI					
Functional Class	unctional Class Roadway Segment Length (miles)		AM		PM		PM		AM PM		AM		M	PM	
110		(65)	NB	SB	NB	SB		NB	SB	NB	SB				
	Leeland Rd Swanson Rd./Beech Tree Pkwy	0.5													
	Swanson Rd./Beech Tree Pkwy - Village Dr W	0.8													
Rural Other Principal Arterial	Village Dr W - Marlboro Pike(MD725)	1.3													
	Marlboro Pike(MD725) - Chrysler Dr/Chevy Dr.	0.5													
	Chrysler Dr/Chevy Dr Pennsylvania Ave(MD-4)	0.3													

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)







The loss of the connection of I-695 across the Patapsco River rerouted traffic. The level of these changes can be evaluated through the use of vehicle probe data. Nine new corridors were identified to determine the shifts in operations that occurred in addition to corridors such as I-695, I-895 and I-95 which are already analyzed. Base data was collected for 2023 to compare to 2024 when the loss of the I-695 connection happened. The corridors included eight arterials and one expressway. The locations analyzed in 2023 are:

- MD 2 I-695 to Lombard St. (Anne Arundel, Baltimore County and Baltimore City)
- MD 151 I-695 to I-895 (Baltimore City and County)
- MD 170 MD 648 to MD 2 (Anne Arundel)
- MD 295 I-695 to I-95 (Anne Arundel, Baltimore County and Baltimore City)
- MD 648 I-95 to MD 295 (Anne Arundel, Baltimore Country and Baltimore City)
- US 1 Alt I-95 to I-695 (Baltimore City and County)
- US 40 I-695 (East) to I-695 (West) (Baltimore City and County)
- Eastern Ave I-695 to President St (Baltimore City and County)
- Shell Rd I-895 to E Patapsco Ave (Baltimore City)

Limits: I-695 to Lombard St Corridor Length: 6.0 miles Speed Limit: 25 - 35 MPH Travel Lanes: 1-5 (Northbound) 1-6 (Southbound) Signal Controlled Intersections: 33 Grade Separated Interchanges: 2



 W Conway St, Pratt St, Lombard St
 Peak Hour Traffic

 MTA Routes
 Avg. Daily Ridership
 2023 AADT
 Trucks
 Traffic

 MTA LocalLink 70
 1,217
 4,000 - 52,000 vpd
 1% - 8%
 8% - 12%

Intersection Operations

Major Cross Streets:

Routes and Ridership

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	1	1
LOS E	0	0
LOS F	0	0

Segment Operations

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	2.9 / 2.3	5.5 / 3.6
Moderate	2.6 / 1.6	0.0 / 1.3
Heavy to Severe	0.6 / 2.2	0.6 / 1.2

LOS 'E' Intersections LOS 'F' Intersections

I-95, I-895, Cedar Hill Ln, Hammonds Ln, E 11th Ave, Belle Grove Rd/S Hanover St,

E Patapsco Ave, Frankfurst Ave,

E Cromwell St, W Wells St, McComas St, W Hamburg St, E Montgomery St, Key Hwy,

Color Key						
TTI PTI						
1.00 1.15	1.0 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 2.00	> 2.5					
> 2.00						
No	data					

 * Available count data for the last four years. (3% of signalized intersections)

		I		Т	TI			ı	PTI	
Functional Class	Roadway Segment West to East	Length (miles)	AM		PM			AM	F	M
	West to East	(IIIIICS)	EB	WB	EB	WB	EE	WB	EB	٧
	E Lombard St - E Pratt St	0.1								
	E Pratt St - E Conway St	0.2								
	E Conway St - Lee St	0.2								
	Lee St - Key Hwy	0.1								
	Key Hwy - Light St	0.1								
	Light St - Charles St	0.1								
	Charles St - W Montgomery St	0.1						1		
	W Montgomery St - W Hamburg St	0.1								
	W Hamburg St - W Ostend St	0.2								
	W Ostend St - W Fort Ave	0.1								
	W Fort Ave - W Heath St	0.1								
	W Heath St - W Wells St	0.1								
Urban Other Principal	W Wells St - I-95/McComas St	0.1								
Arterial	I-95/McComas St - Cromwell St	0.4								
	Cromwell St - Waterview Ave	0.6	1				1	1	- 1	
	Waterview Ave - Cherry Hill Rd	0.1								
	Cherry Hill Rd - Reedbird Ave	0.3								
	Reedbird Ave - Frankfurst Ave/S Hanover St	0.5								
	Frankfurst Ave/S Hanover St - I-895/W Patapsco Ave	0.4								
	I-895/W Patapsco Ave - Belle Grove Rd/Hanover St	0.3								
Ī	Belle Grove Rd/Hanover St - 11th Ave	0.7								
Ī	11th Ave - 16th Ave	0.3								
Ī	16th Ave - MD-171/Church St	0.1				W				1
Ī	MD-171/Church St - Hammonds Ln/Walton Ave	0.2								
	Hammonds Ln/Walton Ave - Cedar Hill Blvd	0.3								
	Cedar Hill Blvd - I-695	0.3								

A-85

Limits:	I-695 to I-8	95					
Corridor Length:	3.1 miles	•					
Speed Limit:	50 MPH						
Travel Lanes:	2-3 (Eastbound) 2-3 (Westbound)						
Signal Controlled Intersections:	10						
Grade Separated Interchanges:	4						
Major Cross Streets:	I-95, I-695, I-895, Kane St/Rolling Mills Rd, Baltimore St, Eastern Ave, Merritt Blvd						
Routes and Ridership	Routes	Avg. Daily Ridership					
	N/A	N/A					



2023 AADT	Trucks	Peak Hour Traffic
24,000 - 31,000 vpd	3% - 9%	8% - 8.5%

Segment Operations

Intersection Operations							
Signalized Intersections*: AM Peak Hour PM Peak Hou							
LOS D or Better	N/A	N/A					
LOS E	N/A	N/A					
LOS F	N/A	N/A					

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	1.7 / 1.7	1.7 / 1.1
Moderate	1.4 / 1.4	1.4 / 1.5
Heavy to Severe	0.0 / 0.0	0.0 / 0.5

LOS 'E' Intersections

* No traffic count data for the last four years.

LOS F Intersections

Color Key						
TTI	PTI					
1.00 1.15	1.0 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 2.00	> 2.5					
> 2.00						
No	data					

				Т	TI			P	TI	
Functional Class	Roadway Segment West to East	Length (miles)	Α	M	Р	М	А	M	Р	M
West to East		(IIIIICO)	EB	WB	EB	WB	EB	WB	EB	WB
	I-895 - North Pont Rd	0.6								
	North Pont Rd - Quad Ave	0.1								
Urban Other Principal	Quad Ave - I-95/Rolling Mill Rd	0.4								
Arterial	I-95/Rolling Mill Rd - Baltimore St	0.4								
	Baltimore St - MD150/Eastern Ave	0.5								
	MD150/Eastern Ave - Merritt Blvd - I-695 (Dundalk)	1.1								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	MD 648 to M	ID 2						
Corridor Length:	2.4 miles							
Speed Limit:	30 MPH							
Travel Lanes:	1-2 (Northbound) 1-2 (Southbound)							
Signal Controlled Intersections:	2							
Grade Separated Interchanges:	0							
Major Cross Streets:	MD 2, MD 648, 10th Ave							
Routes and Ridership	Routes N/A	Avg. Daily Ridership N/A						

(295) (648) (295) (648)	W PATAPSCO AVE
NURSERY RD SELE 170	170
695 & 648 Humo	E W 8 TOTAL
BOMMANOE RO	

		Peak Hour	
2023 AADT	Trucks	Traffic	
7,000 - 12,000 vpd	5%	7.5% - 8.5%	

Segment Operations

Intersection Operations Signalized Intersections*: AM Peak Hour PM Peak Hour LOS D or Better N/A N/A LOS E N/A N/A LOS F N/A N/A

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	2.4 / 2.4	2.4 / 2.4
Moderate	0.0 / 0.0	0.0 / 0.0
Heavy to Severe	0.0 / 0.0	0.0 / 0.0

LOS 'E' Intersections

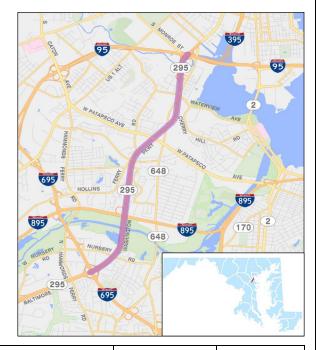
LOS F Intersections

Color Key									
TTI	TTI PTI								
1.00 1.15	1.0 1.5								
1.15 - 1.30	1.5 - 2.5								
1.30 2.00	> 2.5								
> 2.00									
No	data								

	Roadway Segment West to East		TTI			PTI				
Functional Class			ength niles)		PM		AM		PM	
			EB	WB	EB	WB	EB	WB	EB	W
Urban Minor Arterial	MD-2/Potee St/Ritchie Hwy - 10th Ave	1.3								
Orban Minor Arterial	10th Ave - MD-648/Baltimore Annapolis Blvd	1.1								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

_								
Limits:	I-695 to I-95							
Corridor Length:	4.4 miles							
Speed Limit:	45 - 55 MPH							
Travel Lanes:	2-3 (Northbound) 2-3 (Southbound)							
Signal Controlled Intersections:	0							
Grade Separated Interchanges:	5							
Major Cross Streets:	I-95, I-695, I-895, MD 648 Waterview Ave, W Patapsco Ave							
Routes and Ridership	Routes N/A	Avg. Daily Ridership N/A						



		Peak Hour
2023 AADT	Trucks	Traffic
77,000 - 94,000 vpd	2% - 5%	8%

Segment Operations

Intersection Operations								
Signalized Intersections*: AM Peak Hour PM Peak Hour								
LOS D or Better	N/A	N/A						
LOS E	N/A	N/A						
LOS F	N/A	N/A						

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	3.5 / 3.5	4.5 / 3.3
Moderate	0.0 / 1.0	0.0 / 0.0
Heavy to Severe	1.0 / 0.0	0.0 / 1.2

LOS 'E' Intersections

* No traffic count data for the last four years.

OS F Intersections

Color Key										
TTI	TTI PTI									
1.00 1.15 1.0 1.5										
1.15 - 1.30	1.5 - 2.5									
1.30 2.00	> 2.5									
> 2.00										
No	data									

Functional Class	Roadway Segment West to East		TTI				PTI			
			AM		PM		AM		P	М
	West to East	(miles)	EB	WB	EB	WB	EB	WB	EB	WE
Urban Other Freeway and Expressway	I-95 - Manokin St Waterview Ave/Annapolis Rd (MD648)	1.0					- 1			
	Waterview Ave/Annapolis Rd (MD-648)-W Patapsco Ave	0.9								
	W Patapsco Ave - I-895 (Harbor Tunnel Thruway)	1.4								
	I-895 (Harbor Tunnel Thruway) - Nursery Rd (MD168) - I-695	1.2				W				W

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

Limits:	I-695 to MD 295			
Corridor Length:	4.0 miles			
Speed Limit:	30 - 40 MPH			
Travel Lanes:	1-3 (Northbound) 1-2 (Southbound)			
Signal Controlled Intersections:	12			
Grade Separated Interchanges:	2			
Major Cross Streets:	I-95, I-695, I-895, MD 170, MD 295, W Patapsco Ave, Daisy Ave/Rose Ave, Virginia Ave, N Camp Meade Rd/Belle Grove Rd Nursery Rd, Hammonds Ln			
Routes and Ridership	Routes N/A	Avg. Daily Ridership N/A		



			Peak Hour
ily Ridership	2023 AADT	Trucks	Traffic
N/A	8.000 - 15.000 vpd	3% - 6%	8% - 8.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	1	1
LOS E	0	0
LOS F	0	0

Segment Operations					
Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)			
Uncongested	2.7 / 2.7	2.7 / 0.7			
Moderate	1.4 / 0.7	1.2 / 2.9			
Heavy to Severe	0.0 / 0.7	0.2 / 0.5			

LOS 'E' Intersections

LOS F Intersections

Color Key				
TTI	PTI			
1.00 1.15	1.0 1.5			
1.15 - 1.30	1.5 - 2.5			
1.30 2.00	> 2.5			
> 2.00				
No	data			

* Available count data for the last for	our years (8% of sign	nalized intersections)

		Length		T	TI			Р	TI	
Functional Class	Roadway Segment West to East		Δ	M	P	M	Α	M	Р	М
	Noon to East	(miles)	EB	WB	EB	WB	EB	WB	EB	WB
	Waterview Ave - MD295/Baltimore-Washington Pkwy	0.2	- 1	W		- 1		W		
	MD295/Baltimore-Washington Pkwy - W Patapsco Ave	0.7					W			W
	W Patapsco Ave - Daisy Ave/Rose Ave	0.3								
	Daisy Ave/Rose Ave - Virginia Ave	0.7								
Urban Minor Arterial	Virginia Ave - I-895	0.3								
	I-895 - Nursery Rd	0.7								
	Nursery Rd - MD170/N Camp Meade Rd/Belle Grove Rd	0.5								
	MD170/N Camp Meade Rd/Belle Grove Rd-Grove Ridge Ct/Hammonds Ln	0.4								
	Grove Ridge Ct/Hammonds Ln-Lynvue Rd-I-695/Baltimore Annapolis Blvd	0.3								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

US 1 Alt

Limits:	I-95 to I-695			
Corridor Length:	1.9 miles			
Speed Limit:	35 - 40 MPH			
Travel Lanes:	2-3 (Northbound) 2-3 (Southbound)			
Signal Controlled Intersections:	10			
Grade Separated Interchanges:	2			
Major Cross Streets:	I-95, I-695, Commerce Dr, Robert A. Young Way, S. Caton Ave, Hammonds Ferry Rd, W. Patapsco Ave, Twin Springs Rd, Landsdowne Rd			
Routes and Ridership	Routes N/A	Avg. Daily Ridership N/A		
L				

An selfendarie Dakies I	Activities Activities Activities Activities Activities
Hoper Aye	
11 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Order Chillips
butus Manha Rd 695 695	Form Walnum E William Sun L L Elizabeth
	Victory Dr. Who go be Lawrence Lawrence Who go be Lawrence Lawrence Who go be Lawrence Lawrence Who go be Lawrence Lawrence Lawrence June 100 100 100 100 100 100 100 100 100 10
3.32	United States of the Ave

			Peak Hour	
hip	2023 AADT	Trucks	Traffic	
	22,000 - 30,000 vpd	3%	8%	

Segment Operations

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	0.5 / 0.5	0.8 / 0.0
Moderate	1.4 / 0.3	0.0 / 1.9
Heavy to Severe	0.0 / 1.1	1.1 / 0.0

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	5	4
LOS E	0	1
LOS F	0	0

LOS 'E' Intersections

US 1AL @ Ramps 2&8 to and from I-695 NB (PM)

LOS F Intersections

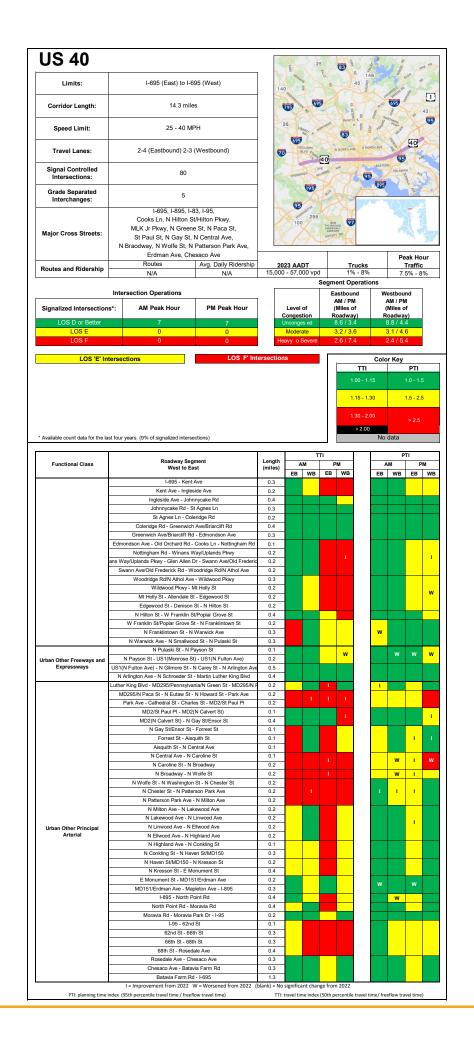
Color Key						
TTI	PTI					
1.00 1.15	1.0 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 2.00	> 2.5					
> 2.00						
No	data					

* Available count data for the last four years	. (50% of signalized intersections)
--	-------------------------------------

				Т	TI			P.	TI	
Functional Class	Roadway Segment West to East	Length (miles)	AM		PM		AM		Р	М
	()		EB	WB	EB	WB	EB	WB	EB	WB
	I-95 - Georgetown Rd/Joh Ave	0.5								
	Georgetown Rd/Joh Ave - James St/W Patapsco Ave	0.2								
	James St/W Patapsco Ave - US1 ALT/Washington Blvd	0.1								
Urban Other Principal	US1 ALT/Washington Blvd - Lansdowne Rd/Twin Springs Rd	0.4								
Arterial	Lansdowne Rd/Twin Springs Rd - Robert A Young Way	0.2								
	Robert A Young Way - Commerce Dr	0.2								
	Commerce Dr - Victory Dr	0.1								
	Victory Dr - I-695/Baltimore Beltway	0.2								

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)



Eastern Ave

_						
Limits:	I-695 to President St					
Corridor Length:	5.6 miles					
Speed Limit:	25 - 35 MF	PH				
Travel Lanes:	1-2 (Eastbound) 1-3 (Westbound)					
Signal Controlled Intersections:	45					
Grade Separated Interchanges:	3					
	I-895, I-95, I-	-695				
	President St, S Broadw	ay, S Wolfe St,				
Maine Connec Otomortos	S Chester St, Boston St, S I	Patterson Park Ave,				
Major Cross Streets:	S Linwood Ave, S Elwood Ave, S Clinton St,					
	S Conkling St, S Haven St, Ponca St,					
	Bayview Blvd, Dundall	Ave, Kane St				
Routes and Ridership	Routes	Avg. Daily Ridership				
Noutes and Ridership	N/A	N/A				



 2023 AADT
 Trucks
 Traffic

 18,000 - 27,000 vpd
 2% - 9%
 7.5% - 8%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	N/A	N/A
LOS E	N/A	N/A
LOS F	N/A	N/A

LOS 'E' Intersections

LOS F Intersections

Color Key					
TTI	PTI				
1.00 - 1.15	1.0 - 1.5				
1.15 - 1.30	1.5 - 2.5				
1.30 - 2.00	> 2.5				
> 2.00					
No	No data				

* No traffic count data for the last four years.

	Roadway Segment	Length			TI				TI	
Functional Class	West to East	(miles)	AM		_	M		AM .		N
			EB	WB	EB	WB	EB	WB	EB	Ļ
	President St - Albemarle St - S Central Ave	0.2								l
	S Central Ave - S Caroline St - S Bond St	0.2								l
	S Bond St - S Broadway - S Ann St	0.2			1					l
	S Ann St - S Wolfe St - S Washington St	0.2								l
	S Washington St - S Chester St	0.1								
	S Chester St - S Collington Ave - S Patterson Park Ave	0.2								l
	S Patterson Park Ave - S Luzerne Ave	0.2								l
	S Luzerne Ave - S Kenwood Ave	0.2								l
	S Kenwood Ave - S Linwood Ave	0.1								l
	S Linwood Ave - S Ellwood Ave	0.2								l
	S Ellwood Ave - S East Ave - S Clinton St - S Highland Ave	0.2								l
	S Highland Ave - S Conkling St	0.1								l
	S Conkling St - S Eaton St	0.1								l
	S Eaton St - Grundy St - S Haven St	0.2								l
Urban Other Principal Arterial	S Haven St - S Macon St	0.3								
Arterial	S Macon St - Oldham St - Ponca St/MD150	0.1								
	a St/MD150 - Quail St/I-895 (Harbor Tunnel Thwy) - Casell Dr/Sava	0.2								
	Casell Dr/Savage St - Bayview Blvd/MD150	0.2								L
	Bayview Blvd/MD150 - Anglesea St	0.1		- 1						l
	Anglesea St - Bonsal St - Dundalk Ave	0.2								l
	Dundalk Ave - Gusryan St	0.2								L
	Gusryan St - Kane St	0.2		1	- 1	'				L
	Kane St - I-95 - Quinton St/I-95	0.3						- 1		ı
	Quinton St/I-95 - Pembrooke Blvd/48th St	0.3								ı
	Pembrooke Blvd/48th St - Ashby Ave - Southern Ave	0.4								l
	Southern Ave - North Point Blvd/MD151	0.4								Ĺ
	North Point Blvd/MD151 - 54th St	0.2								
	54th St - Rolling Mill Rd	0.1								
	Rolling Mill Rd - I-695 (Baltimore Beltway)	0.4								Ī

Shell Rd

Limits:	I-895 to E Patapsco Ave					
Corridor Length:	0.8 miles					
Speed Limit:	25 MPH					
Travel Lanes:	2 (Northbound) 2 (Southbound)					
Signal Controlled Intersections:	1					
Grade Separated Interchanges:	1					
Major Cross Streets:	I-895, Frankfurst Ave Chesapeake Ave E Patapsco Ave					
Routes and Ridership	Routes Avg. Daily Ride					
	N/A	N/A				

FRANKFURST		991160	895
71/2	895	FRANKFURST AVE	
		CHESAPEAKE	AVE
	QIII. IS		
E PATAPSCO		E p	ATAPSCO AVE
A PE	CURTIS PENNINGTON AVE		
AYE	WE		

2023 AADT	Trucks	Peak Hour Traffic
4,000 vpd	16%	7.5%

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	N/A	N/A
LOS E	N/A	N/A
LOS F	N/A	N/A

Level of Congestion	Eastbound AM / PM (Miles of Roadway)	Westbound AM / PM (Miles of Roadway)
Uncongested	0.8 / 0.8	0.8 / 0.8
Moderate	0.0 / 0.0	0.0 / 0.0

0.0 / 0.0

Segment Operations

LOS 'E' Intersections

* No traffic count data for the last four years.

LOS F Intersections

Heavy to Severe

Color Key						
TTI PTI						
1.00 1.15	1.0 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 2.00	> 2.5					
> 2.00						
No	data					

AM

PTI

EB WB EB WB

0.0 / 0.0

				Т	TI	
Functional Class	Roadway Segment West to East	Length (miles)	AM		PM	
	West to East	(IIIIIC3)	EB	WB	EB	WB
Urban Minor Arterial	I-895/Frankfurst Ave - Chesapeake Ave	0.3				
Orban Willor Arterial	Chananaska Ava E Datanasa Ava	0.5				

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

Limits:	US 50/301 to MD 10					
Corridor Length:	8.4 miles					
Speed Limit:	50 MPH					
Travel Lanes:	2-3 (Northbound) 1-3 (Southbound)					
Signal Controlled Intersections:	12					
Grade Separated Interchanges:	1					
Major Cross Streets:	MD 10, MD 648, College Pkwy, Magothy Bridge Rd, East West Blvd / Pasadena Rd, US 50					
Routes and Ridership	Routes MTA LocalLink 70	Avg. Daily Ridership 1,217				
	MTA Commuter Bus 260	78				

TO AMPEN		a _b side Beach s
d Object Rd	(w) Jaco	bsville
	adena	7
Priest day	O O O O O O O O O O O O O O O O O O O	
Arden On The Severn	Severna Park	Angolfty River
Old Horald Harbor Re	ld Harbor	slege ami
178	Severn River Sanctuary	2 g College Pkwy
Crownsville 3/9	Sherwood Forest	Amold
	The Downs	179
Crowne No.	A A	Manresa —Cedarwii Cove

		Peak Hour
2023 AADT	Trucks	Traffic
40,000 - 61,000 vpd	3% - 8%	7.5% - 8%

Segment Operations

Intersection Operations

Signalized Intersections*:	AM Peak Hour	PM Peak Hour
LOS D or Better	4	4
LOS E	0	0
LOS F	0	0

Level of Congestion	Northbound AM / PM (Miles of Roadway)	Southbound AM / PM (Miles of Roadway)
Uncongested	4.7 / 0.0	0.0 / 0.0
Moderate	0.9 / 1.6	0.0 / 4.2

2.8 / 6.8

LOS 'E' Intersections

LOS F Intersections

Heavy to Severe

Color Key						
TTI	PTI					
1.00 1.15	1.0 1.5					
1.15 - 1.30	1.5 - 2.5					
1.30 2.00	> 2.5					
> 2.00						
No	data					

8.4 / 4.2

* Available count data for the last four v	ears. (33% of signalized intersections)

	Roadway Segment North to South		TTI				PTI					
Functional Class			h s) AM		PM		PM		AM		PM	
			NB	SB	NB	SB	NB	SB	NB	SB		
	MD 10 - Pasadena Rd/East West Blvd.	0.3										
	Pasadena Rd/East West Blvd E Earleigh Heights Rd/Magothy Bridge Rd.	0.9							W	W		
Urban Other Principal	E Earleigh Heights Rd/Magothy Bridge Rd MD-648/Baltimore Annapolis Blvd.	1.1							W			
Arterial	MD-648/Baltimore Annapolis Blvd Robinson Rd.	0.5										
	Robinson Rd College PKWY	2.5			W					W		
	College PKWY - US301	3.1								W		

I = Improvement from 2022 W = Worsened from 2022 (blank) = No significant change from 2022

PTI: planning time index (95th percentile travel time / freeflow travel time)

TTI: travel

D. CONGESTION COSTS

Congestion increases travel time for motorists, transit operators and truck drivers. These longer trips could cause a flight to be missed or a delivery to be delayed and there is a cost associated with this. The value of time associated with these events varies based on the purpose of the trip. The calculation of costs includes auto delays, truck delays, wasted fuel, and the cost associated with additional emissions by region. Congestion cost from 2022 to 2023 increased by approximately 1% statewide. The Baltimore and Washington regions account for an approximately equal amount of the overall statewide congestion costs. This amounts to \$4.76 billion or 89% of the statewide congestion cost. The percentage increase in congestion costs was highest in the Washington region, climbing by 4.6%. The congestion costs combined for the Eastern Shore, Southern, and Western regions is about \$583 million, which is an decrease of \$7 million from 2022 (**Table 4**). These costs are developed based on the Maryland Reporting Performance Tool (MRPT).

Table 4

TOTAL COST OF CONGESTION BY REGION (MILLIONS)								
REGION	2021	2021 2022 2023						
Statewide	\$4,481	\$5,286	\$5,346	+\$60				
Baltimore Region	\$2,030	\$2,377 \$2,337		-\$40				
Washington Region	\$1,930	\$2,319	\$2,426	+ \$107				
Eastern Shore Region	\$231	\$260	\$251	-\$9				
Southern Region	\$177	\$202	\$209	+ \$7				
Western Region	\$113	\$128	\$123	-\$5				



I-70 EB RAMP TO I-695 NB



CAPITAL PROJECTS BEFORE AND AFTER STUDIES

In 2023, seven capital improvement projects were completed (**Table 5 and Figure 3**). These projects include intersection improvements such as turning lane additions, channelization, and the construction of auxiliary lanes along freeways/expressways. Capital projects are developed to mitigate congestion, improve safety, and provide multi-modal connections. These projects are identified through a data driven process and reviewed from a practical design standpoint to ensure the proposed project is addressing the defined purpose and need. These improvements were analyzed to determine the annual user benefits to the traveling public. The benefits are related to the reduction in delays incurred by motorists and commercial vehicles, fuel savings, the safety benefit resulting from the improvements, and the benefit provided by the increased reliability of the system. An analysis describing the improvement, construction cost, and the benefits that the mobility projects provided as part of the benefit cost analysis are detailed in the following pages.

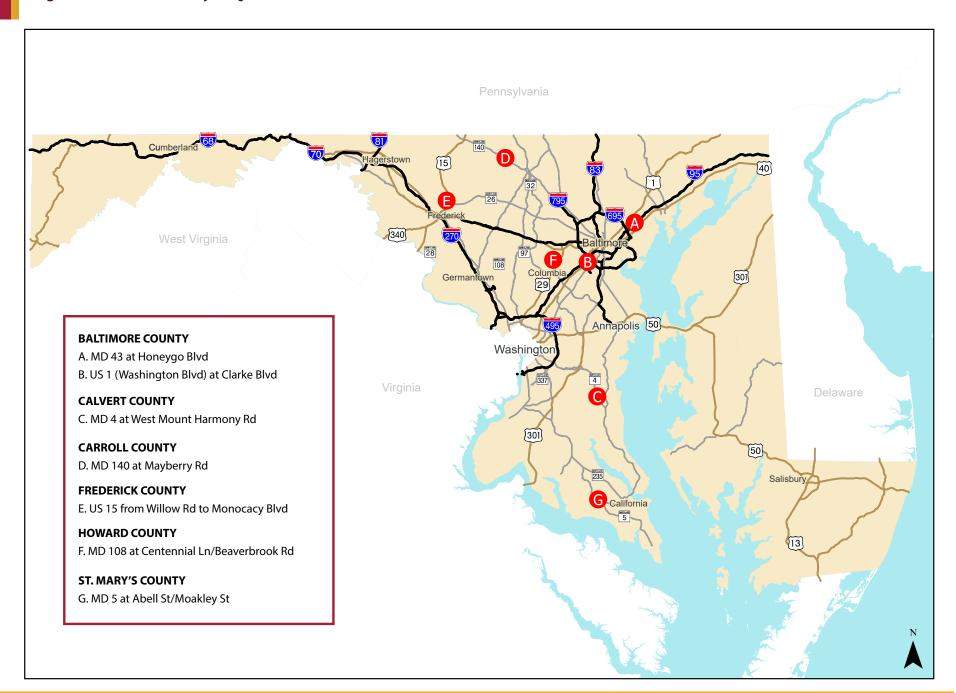
Table 5

CAPITAL IMPROVEMENT PROJECTS OPENING YEAR BENEFITS									
COUNTY	ROUTE	LIMITS	CONGESTION & FUEL	SAFETY SAVINGS	ANNUAL COST SAVINGS				
			SAVINGS	\$ (Tho	usands)				
Baltimore	MD 43	Honeygo Blvd	\$113	\$624	\$737				
Baltimore	US 1	Clarke Blvd	\$246	\$1,360	\$1,606				
Calvert	MD 4	W Harmony Rd	\$102	\$100	\$202				
Carroll	MD 140	Mayberry Rd	\$19	\$143	\$162				
Frederick	US 15	Willow Rd to Monocacy Blvd	\$52	\$5	\$57				
Howard	MD 108	Centennial Lane	\$62	\$199	\$261				
St Mary's	MD 5	Abell St/Moakley St	\$88	\$578	\$666				
Total			\$682	\$3,009	\$3,691				



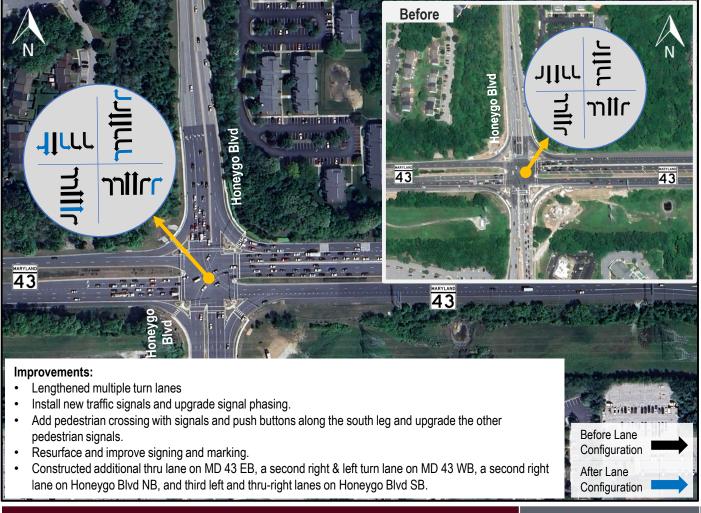
Mobility projects provide approximately \$3.7 million in annual user cost savings in the opening year, or over \$500,000 per project on average.

Figure 3 – 2023 Mobility Projects



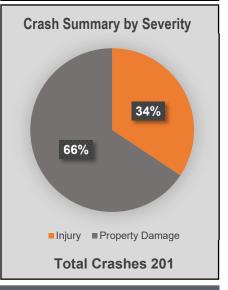
MD 43 at Honeygo Boulevard

LOCATION: WHITE MARSH, BALTIMORE COUNTY





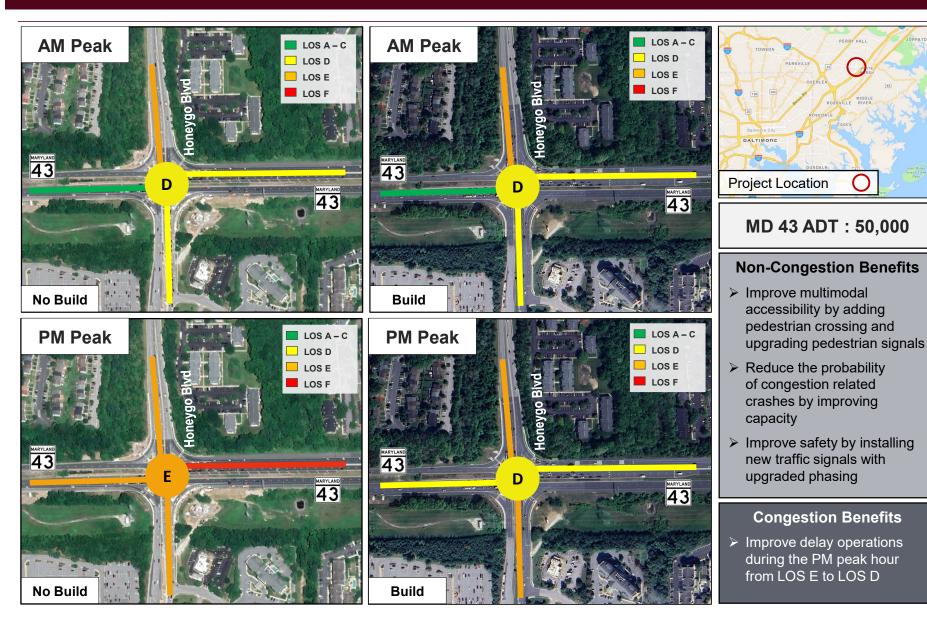
MD 43 ADT: 50,000



Average Annual Savings (Thousands)			Ducinet Coat Fatiments	Donasit/Coot
Delay	Fuel Consumption	Safety	Project Cost Estimate (Millions)	Benefit/Cost (20 Years)
\$111.1	\$1.4	\$624.0	\$4.4	2.9

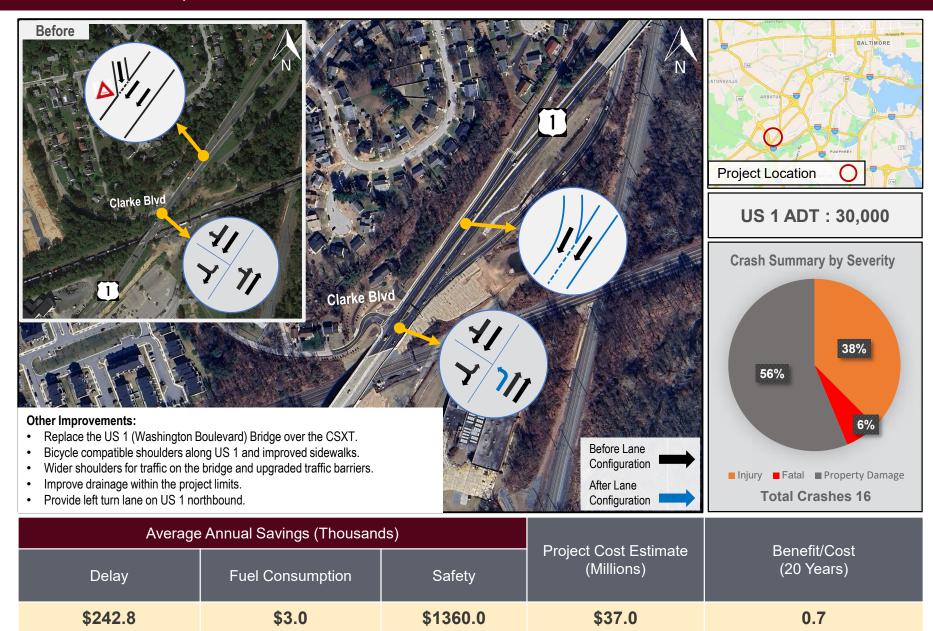
MD 43 at Honeygo Boulevard

LOCATION: WHITE MARSH, BALTIMORE COUNTY



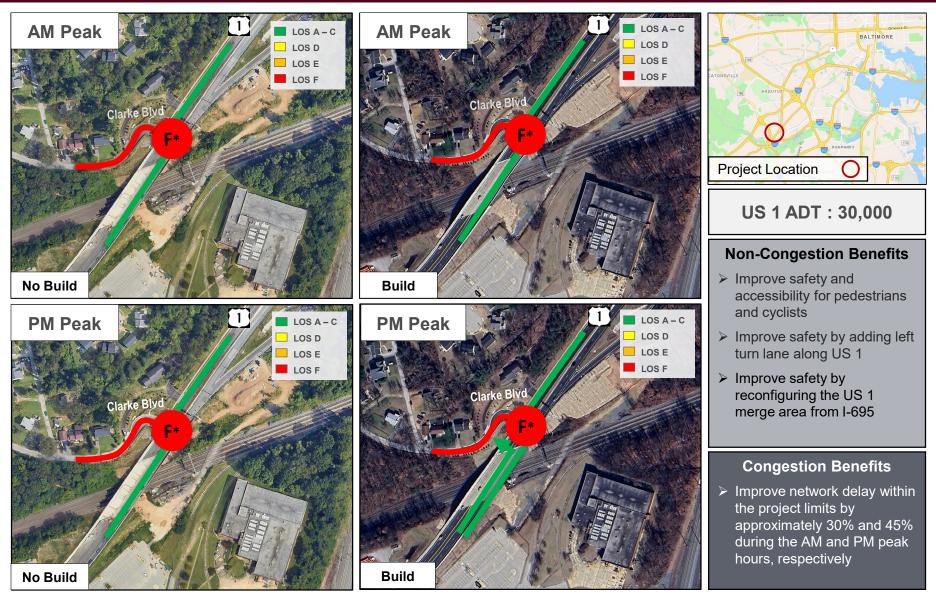
US 1 at CSX Bridge Clarke Boulevard

LOCATION: ARBUTUS, BALTIMORE COUNTY



US 1 at CSX Bridge Clarke Boulevard

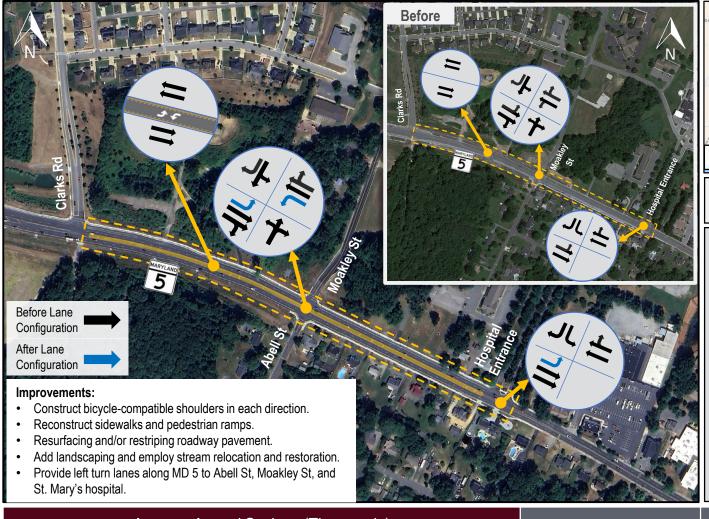
LOCATION: ARBUTUS, BALTIMORE COUNTY



^{*}The LOS reported is the stop-controlled approach's LOS.

MD 5 at Abell Moakley St

LOCATION: LEONARDTOWN, ST. MARY'S COUNTY





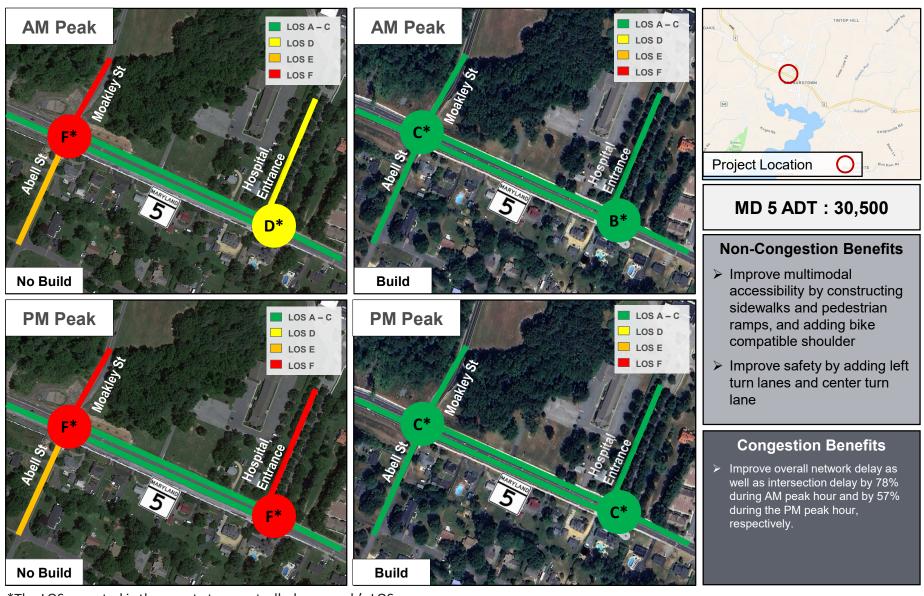
MD 5 ADT: 30,500



Average Annual Savings (Thousands)			Duning of Cont Folians	D
Delay	Fuel Consumption	Safety	Project Cost Estimate (Millions)	Benefit/Cost (20 Years)
\$87.2	\$1.1	\$577.5	\$12.0	0.9

MD 5 at Abell Moakley St

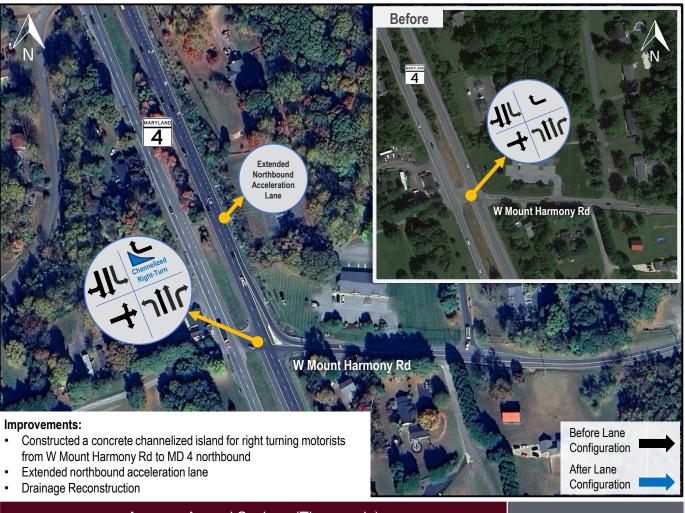
LOCATION: LEONARDTOWN, ST. MARY'S COUNTY

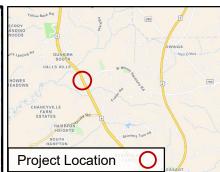


^{*}The LOS reported is the worst stop-controlled approach's LOS.

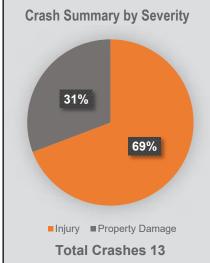
MD 4 at West Harmony Rd

LOCATION: OWINGS, CALVERT COUNTY





MD 4 ADT: 41,500



Average Annual Savings (Thousands)			Due in at Oard Fating at	D 54/O 4
Delay	Fuel Consumption	Safety	Project Cost Estimate (Millions)	Benefit/Cost (20 Years)
\$100.4	\$1.3	\$100.3	\$2.0	2.2

MD 4 at West Harmony Rd

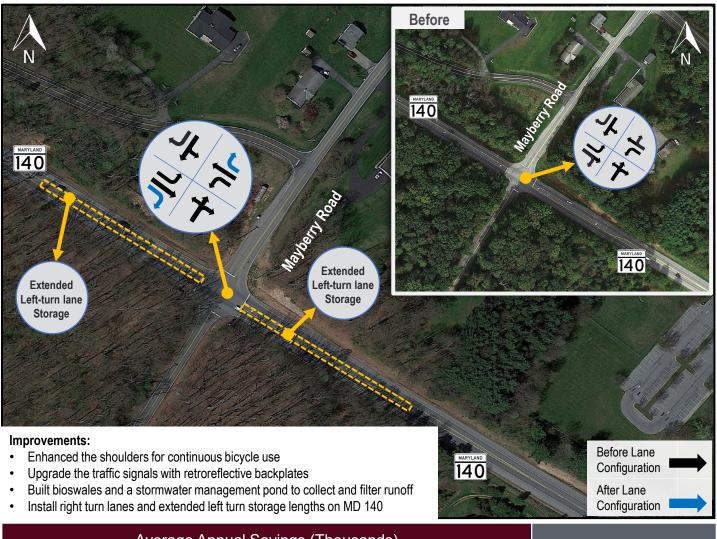
LOCATION: OWINGS, CALVERT COUNTY



^{*}The LOS reported is for the minor street approach's LOS.

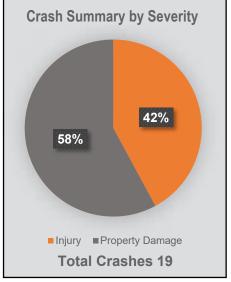
MD 140 at Mayberry Rd

LOCATION: WESTMINSTER, CARROLL COUNTY





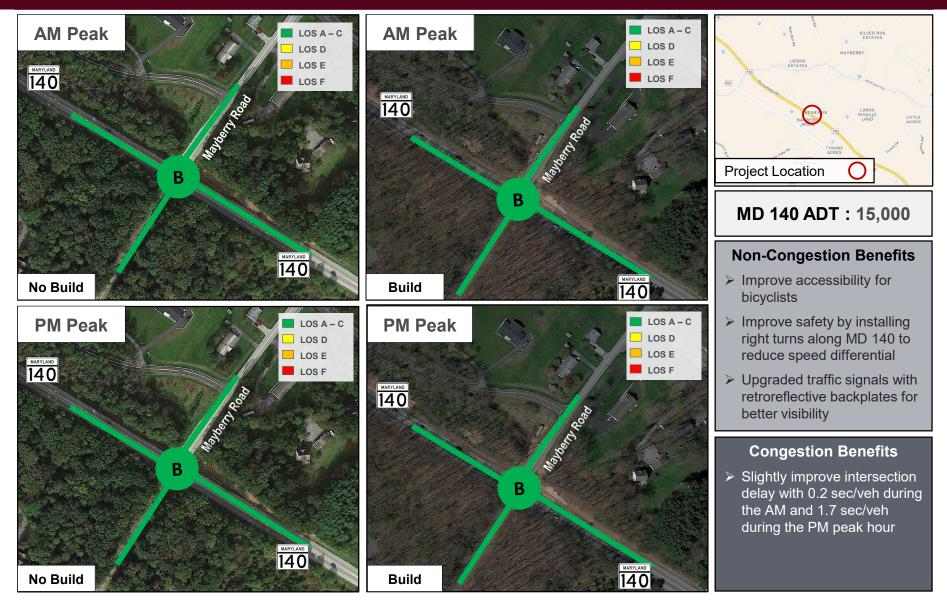
MD 140 ADT: 15,000



Average Annual Savings (Thousands)			Ducie et Coet Fetimente	Dan Stil Cart
Delay	Fuel Consumption	Safety	Project Cost Estimate (Millions)	Benefit/Cost (20 Years)
\$18.4	\$0.2	\$142.5	\$4.9	0.6

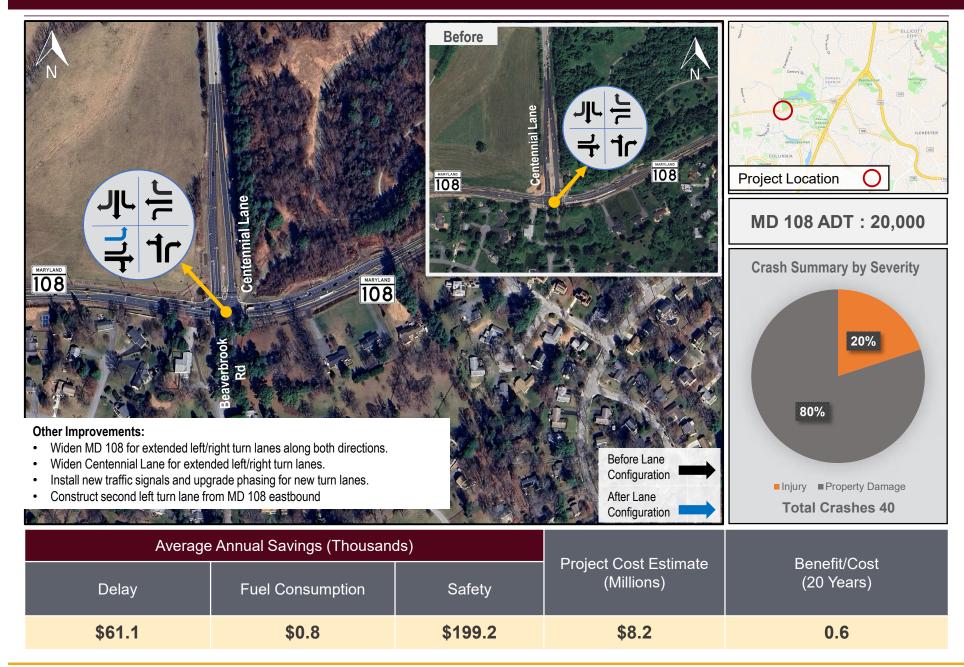
MD 140 at Mayberry Rd

LOCATION: WESTMINSTER, CARROLL COUNTY



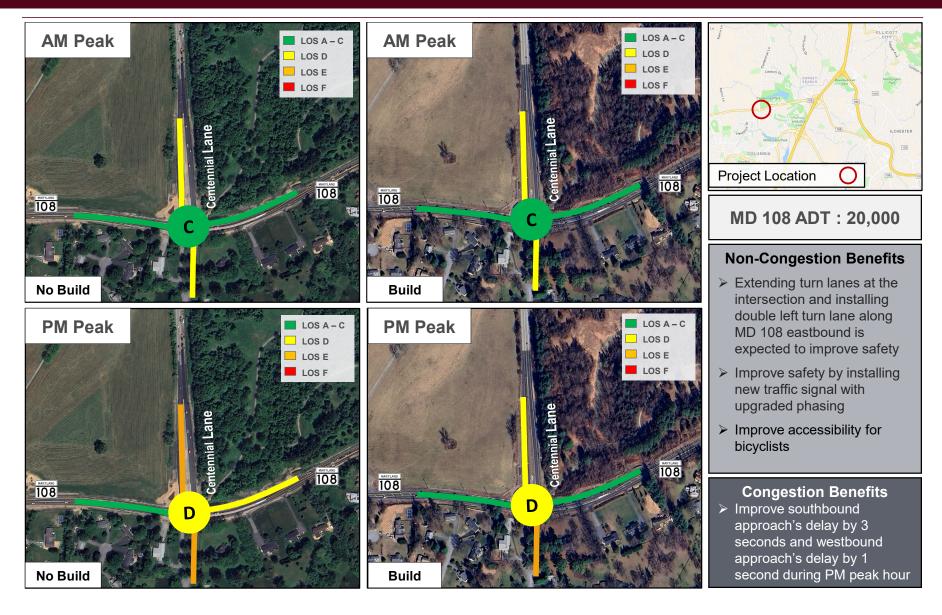
MD 108 at Centennial Lane Beaverbrook Rd

LOCATION: COLUMBIA, HOWARD COUNTY



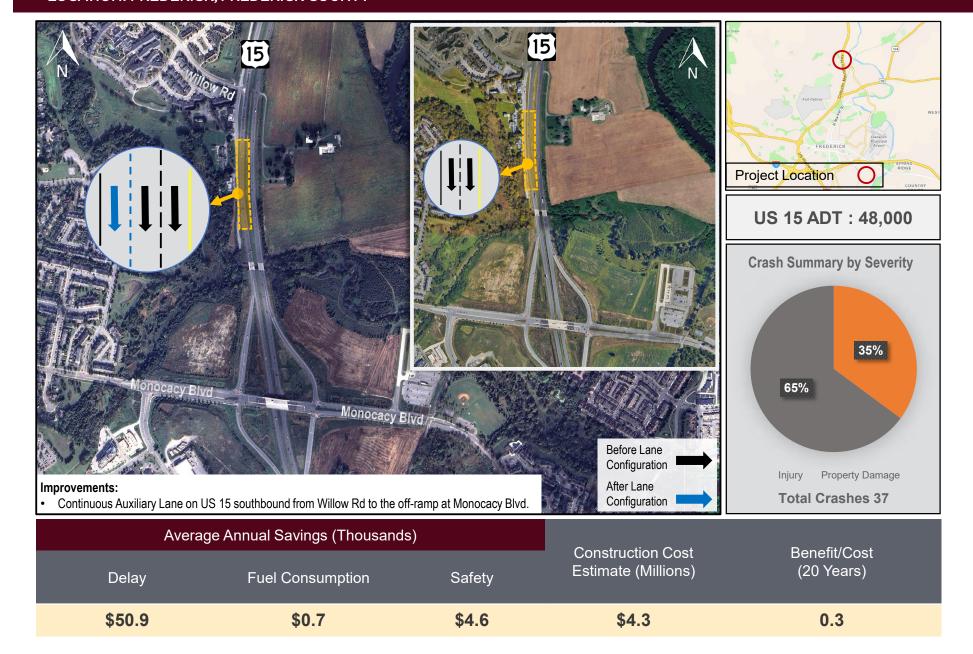
MD 108 at Centennial Lane Beaverbrook Rd

LOCATION: COLUMBIA, HOWARD COUNTY



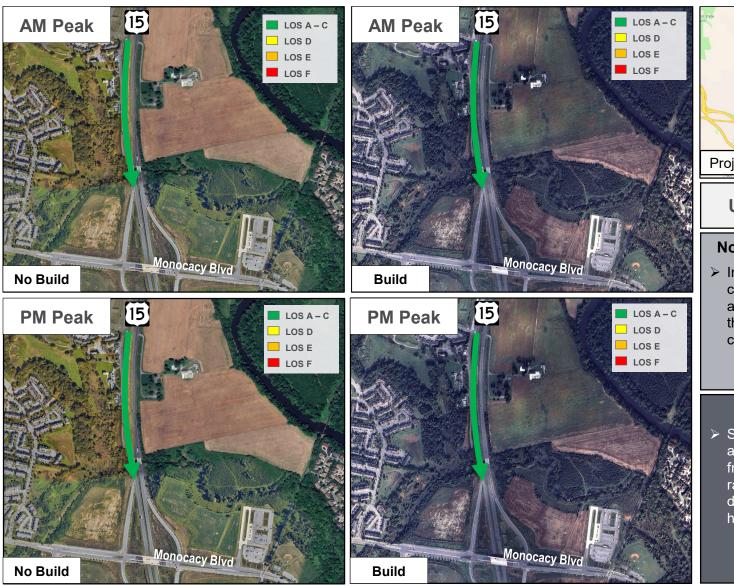
US 15 at Willow Rd to Monocacy Blvd

LOCATION: FREDERICK, FREDERICK COUNTY



US 15 at Willow Rd to Monocacy Blvd

LOCATION: FREDERICK, FREDERICK COUNTY





US 15 ADT: 48,000

Non-Congestion Benefits

Improve safety by constructing the continuous auxiliary lane that reduces the number of weaving conflicts

Congestion Benefits

➤ Slightly improve travel time along US 15 southbound from Willow Rd to the off ramp at Monocacy Blvd during AM and PM peak hours

LOCATION MAPPING

SHA implements many policies, programs, and projects to improve mobility. These efforts follow a multi-modal approach to improve transportation equity while providing safe and efficient movement of freight. The improvements can range from constructing new managed lanes along I-95 in Baltimore and Harford County to providing a new sidewalk along MD 5 in St Mary's County. The location of these improvements/facilities are shown in the maps on the following pages.

NEW SIDEWALKS I A network of sidewalks encourages active transportation, provides safer conditions for vulnerable roadway users, and provides health benefits to the public. SHA has developed a Complete Streets Policy for all projects to incorporate into a more pedestrian friendly environment. Improvements could involve upgrading existing sidewalks that are in poor condition, filling in gaps in the network, providing new sidewalks, creating trails and multiuse paths, and constructing curb ramps to meet PROWAG and ADA standards and guidelines. This approach helps to improve transportation equity. New sidewalks were constructed by SHA in 11 counties throughout the state in 2023 (**Figures 4-6**).

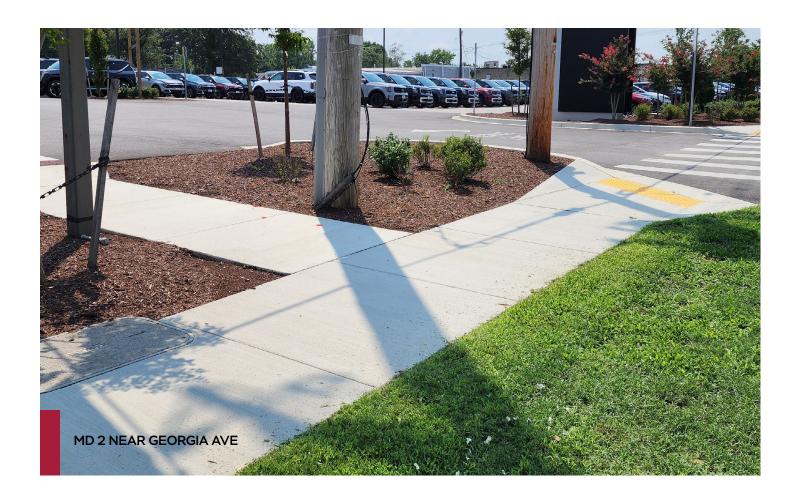
PARK AND RIDE LOTS I There are 105 park and ride lots in 21 of Maryland's counties (**Figure 7**). These lots, which are operated by SHA and MDTA, provide over 14,000 spaces to commuters to assist in reducing the number of single vehicle trips and provide free parking to connect with transit. The number of lots is lower than in the previous year due to certain lots being permanently closed, taken out of service, or closed temporarily due to other construction projects.

REVERSIBLE, HOV, MANAGED LANE FACILITIES I The ability to make the best use of facilities is constantly taken into account by MDOT. This means employing different strategies that increase person throughput or better manage operations. The strategies that Maryland uses include reversible lanes, high occupancy vehicle (HOV) lanes, and managed facilities or lanes. Reversible lanes are utilized where traffic volumes are very high in one direction and much lower in the other direction at certain times. This allows one or more lanes to change direction during the peak flow of the roadway. HOV lanes provide motorists with a travel time advantage versus the other general use lanes due to the lower volumes and therefore higher speeds. The use of HOV lanes requires a minimum of two occupants in their vehicle. Electric vehicles, transit vehicles, and motorcycles are also able to use these lanes. A managed facility allows for a lane(s) or a facility to be dedicated to a certain type of vehicle or charge a toll for use of the facility based on time of day. In Maryland, the managed lanes include express toll lanes (ETLs) where motorists have the option of paying a toll to drive in free flow conditions or utilize the adjacent free lanes (I-95 north of Baltimore City), or where the roadway is exclusively for all-electronic tolling (MD 200). Also, there are two ETL projects under construction, including the expansion of the I-95 ETLs from north of MD 43 to north of MD 24 and I-695 from I-70 to MD 43. These three strategies are employed on eight roadways with a ninth under construction that are operated by SHA and MDTA (Figure 8).

CHART'S TRAFFIC OPERATIONS CENTERS I Providing information to drivers allows them to make better decisions. Through the Coordinated Highway Action Response Team (CHART), SHA provides a variety of services to keep motorists informed while addressing non-recurring congestion due to crashes, broken down vehicles, or other events. A major component of CHART's efforts is to provide incident management of these events to minimize delays and reduce the potential for secondary crashes. This is accomplished through monitoring traffic at its operations centers. The SHA Statewide Operations Center is located in Hanover near BWI International Airport, with three supporting regional operations centers (Figure 9).

SIGNAL SYSTEMS UPGRADES I Traffic signals can provide both assist motorists in motorists in passing through an intersection but drivers can also be delayed and make more stops which increases the potential for crashes. One of the most cost-effective methods to improve mobility is through the use of improving signal timing and progression. Each year, SHA selects several corridors to review and upgrade signal timing plans. The reviews involve gathering new traffic, pedestrian, and bicycle data and developing computer simulation models to implement new timings. The signals are retimed as needed to provide better progression to motorists or reduce side street delays. In 2023, eleven systems were upgraded (**Figure 10**). In addition, there are 20 high tech, SMART signal systems statewide that provide for real-time signal timing adjustments (**Figure 11**).

FAILING INTERSECTIONS I As part of traffic data collection, analysis is conducted for each intersection that is counted. This assists in identifying the most congested intersections in the state. The worst performing intersections based on traffic counts performed in the last four years are concentrated in Montgomery and Prince George's Counties (**Figure 12 and 13**).



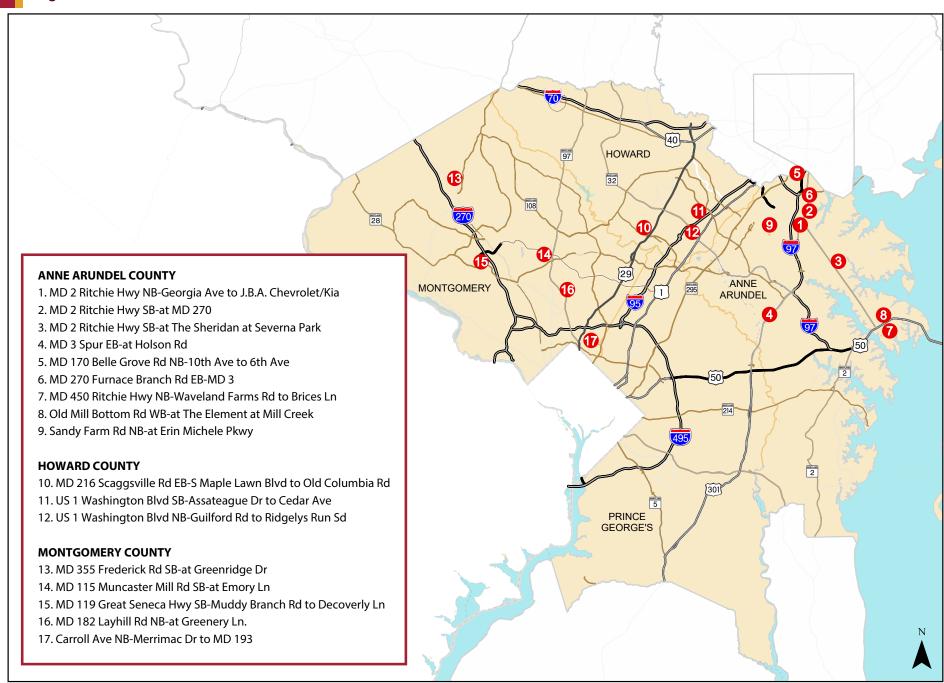


Figure 5 - 2023 New Sidewalk Locations

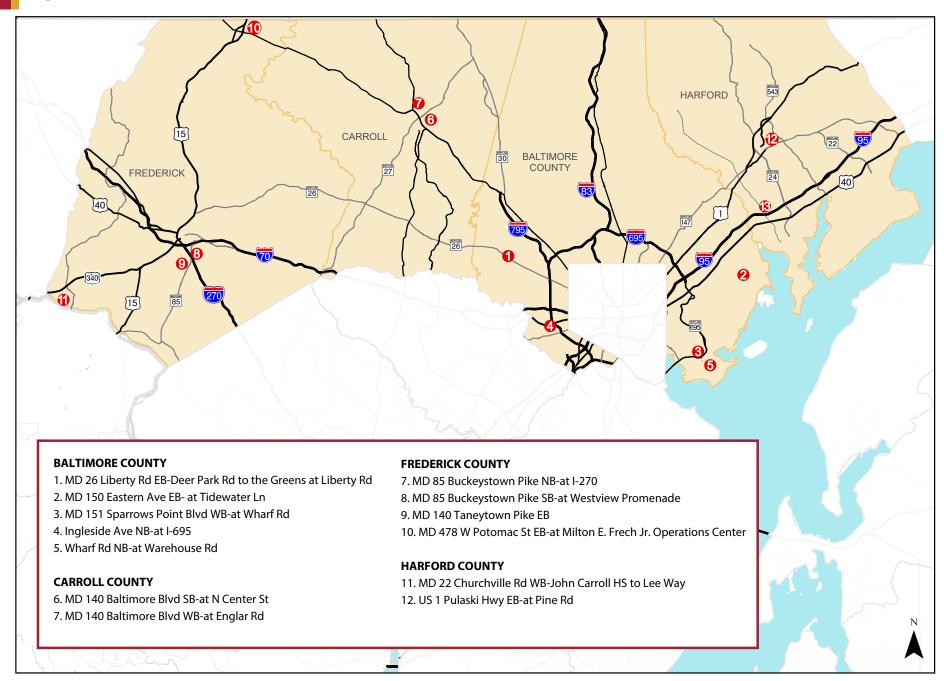


Figure 6 - 2023 New Sidewalk Locations

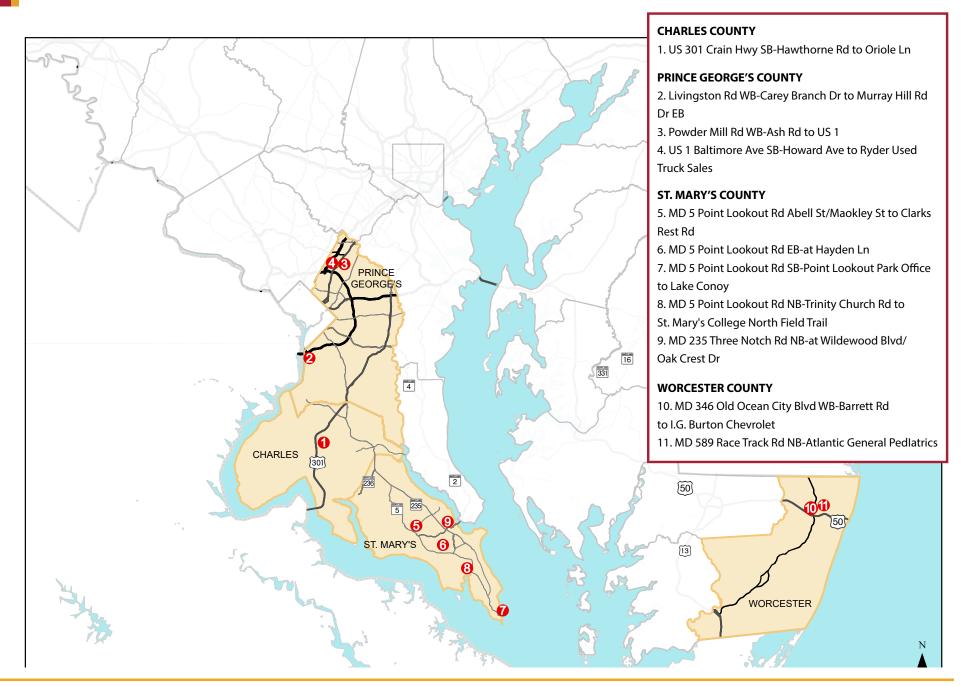


Figure 7 - 2023 Park and Ride Locations

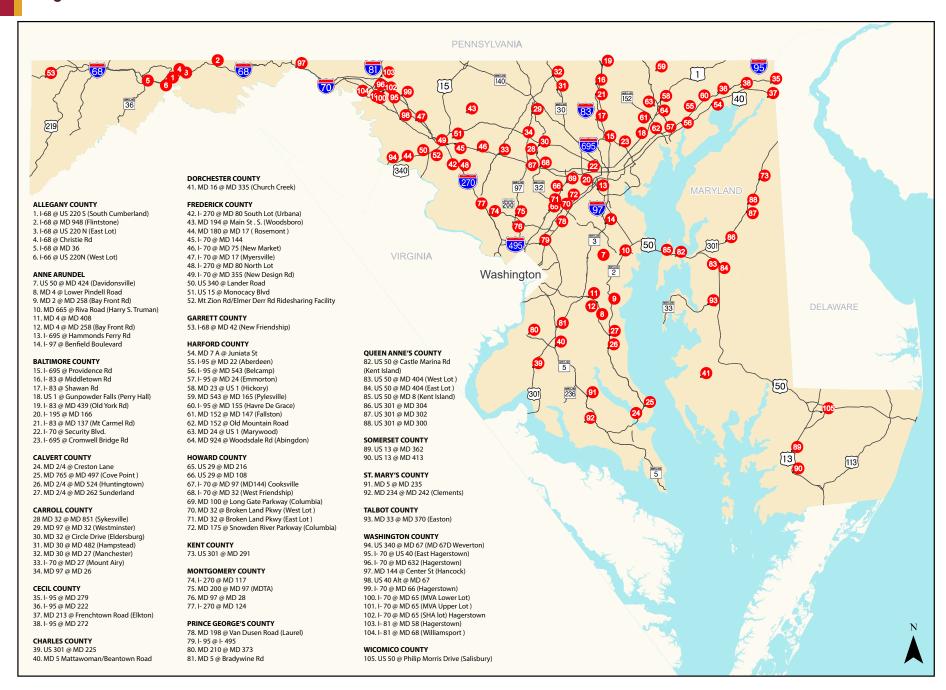


Figure 8 - HOV, Reversible, and Managed Lane Locations

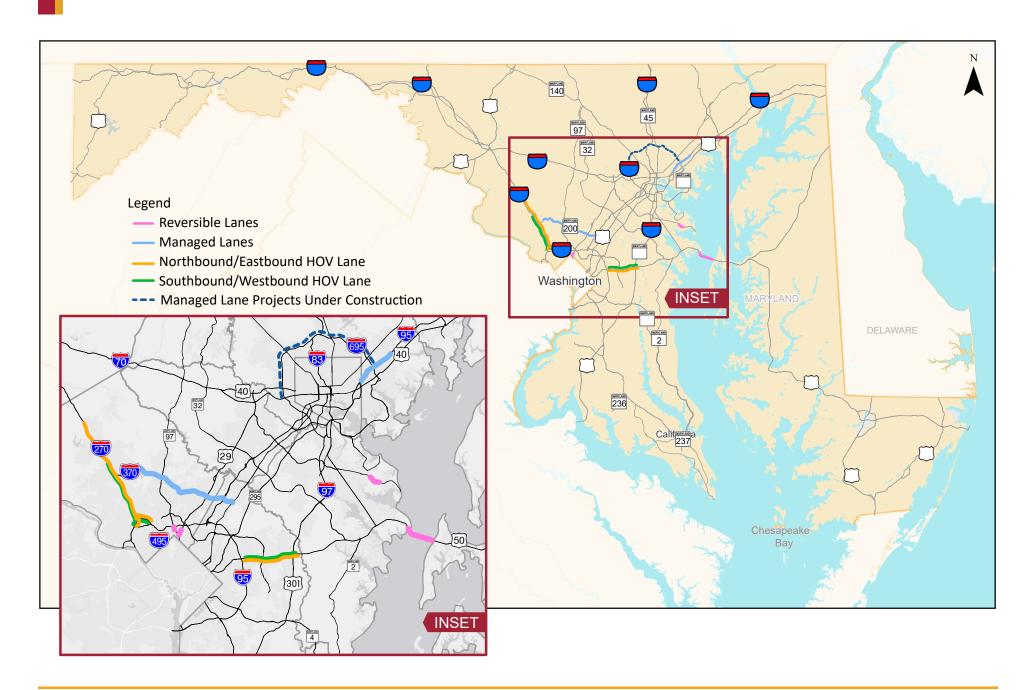


Figure 9 – Statewide and Regional Traffic Operations Centers

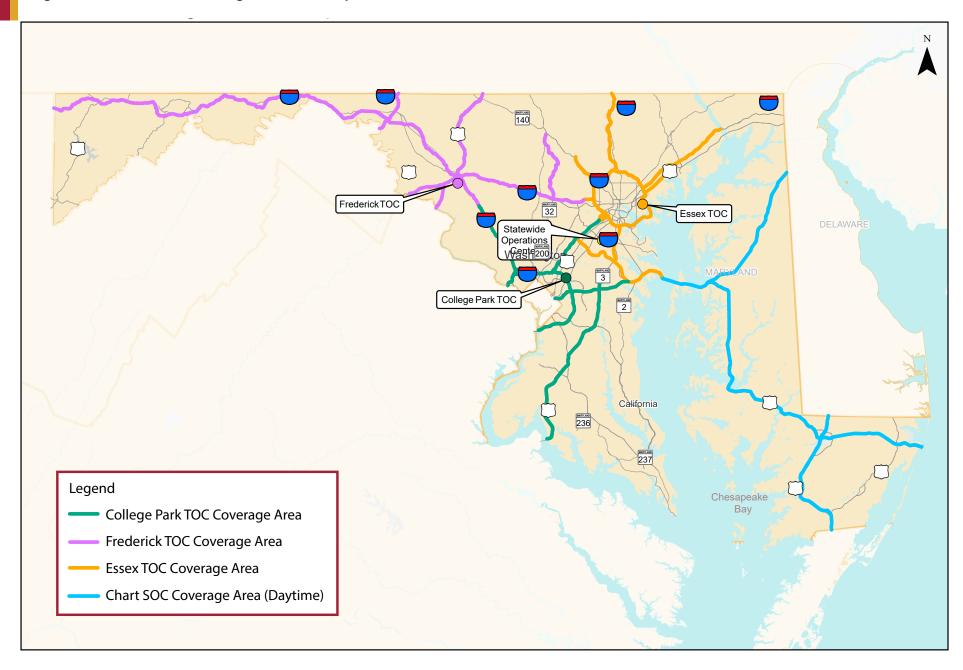
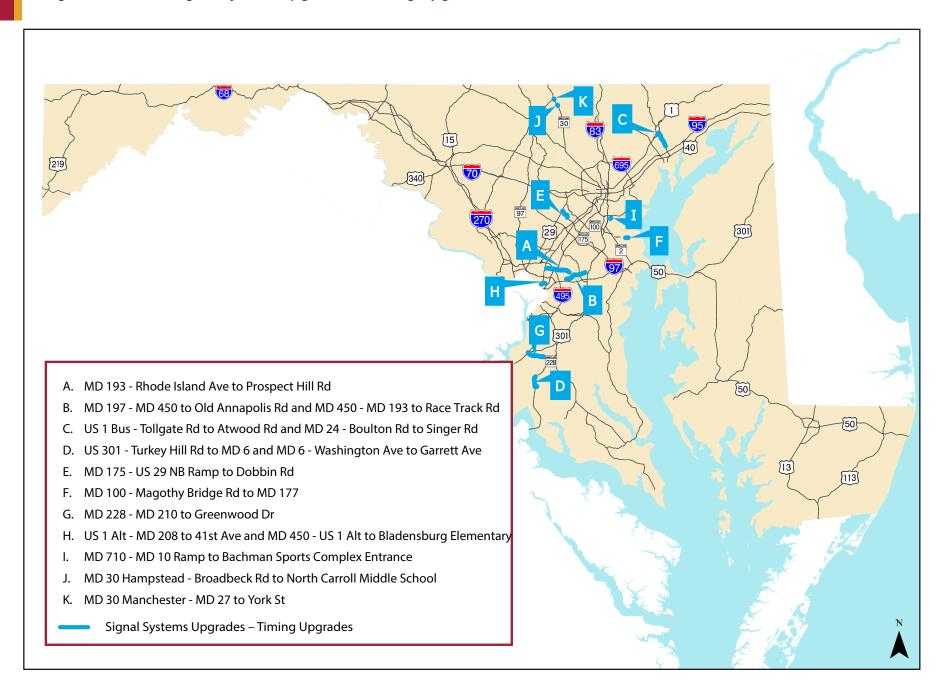


Figure 10 - 2023 Signal System Upgrades - Timing Upgrades



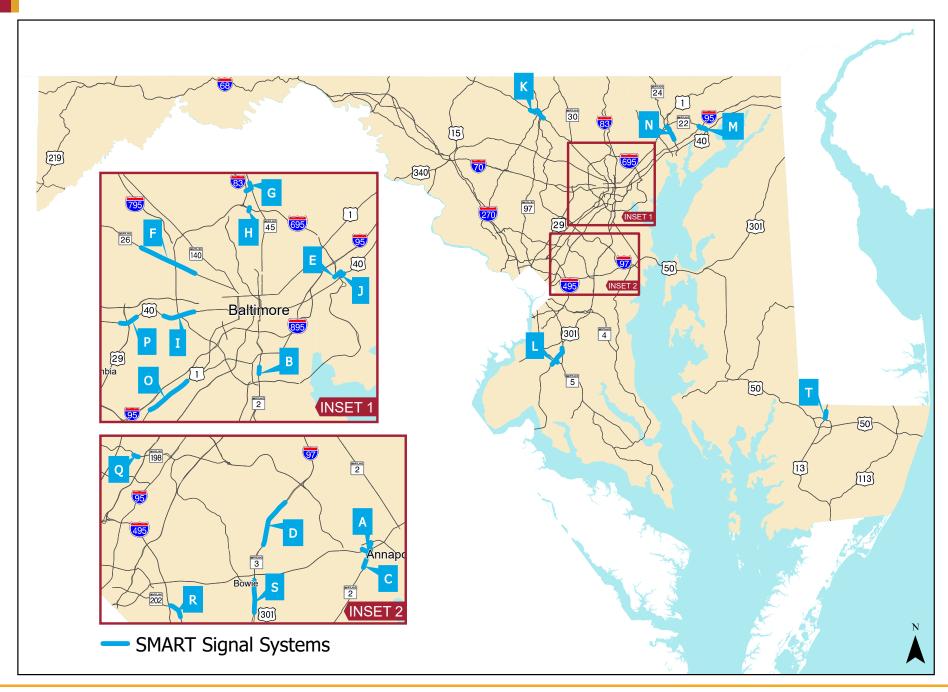
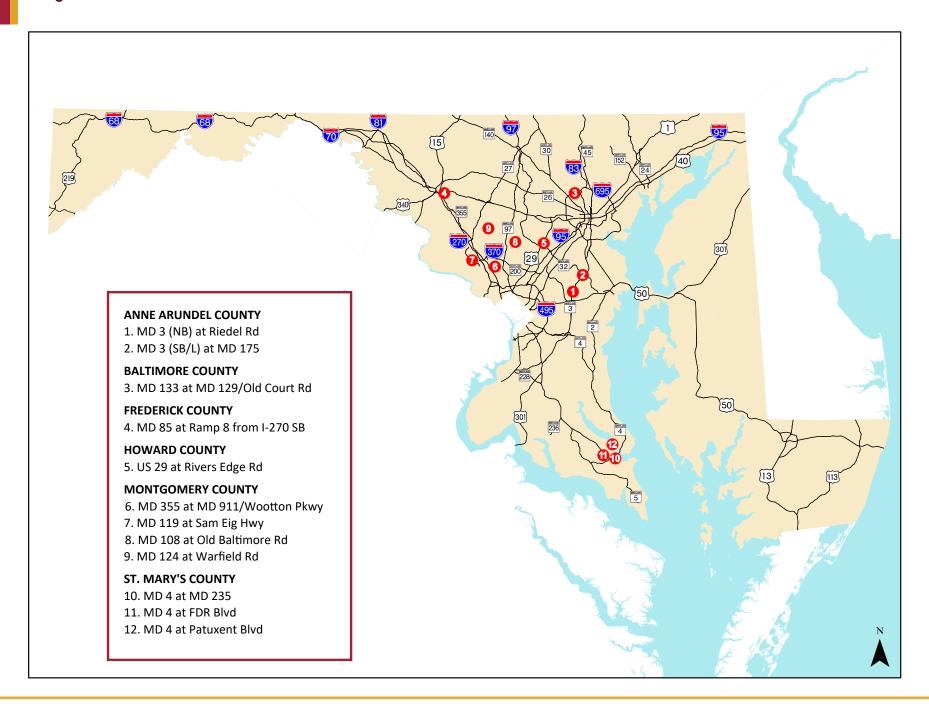
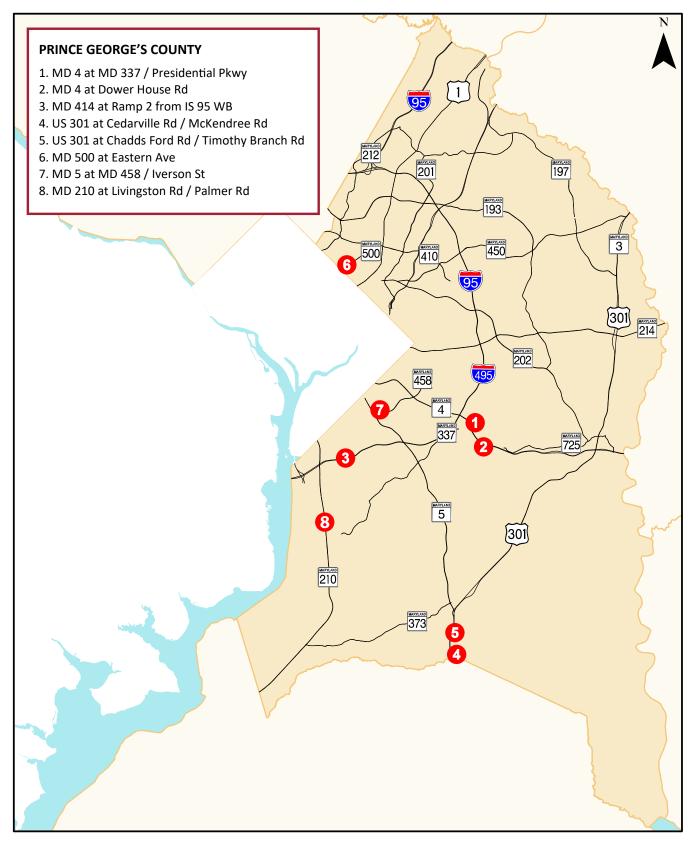


Figure 12 - Level of Service F Intersections







Note: List represents only locations counted in the last five years.



WES MOORE Governor

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ARUNA MILLER Lt. Governor

WILLIAM PINES, PE, PMP, CCM **SHA Administrator**

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