



Quarterly Congestion Analysis Report Top 10 Bottlenecks

2nd Quarter 2021

September 2021



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About the Region

About the Region

Located in the heart of the Mid-Atlantic on the east coast, the Baltimore region includes:



The Baltimore region is the nation's 19th largest market, with over 2.5 million people. The market also ranks among the top 20 in the country in the number of households, total effective buying income and retail sales.

Baltimore Metropolitan Region



Prepared by
 Transportation Planning Division
 Projected Coordinate System: NAD 1983 State Plane (ft)
 Data Source: BMC, © NAVTEQ 2016, TIGER/Line®, MTA
 Printed - April 2017



Bottleneck Analytics

How are bottleneck conditions tracked?

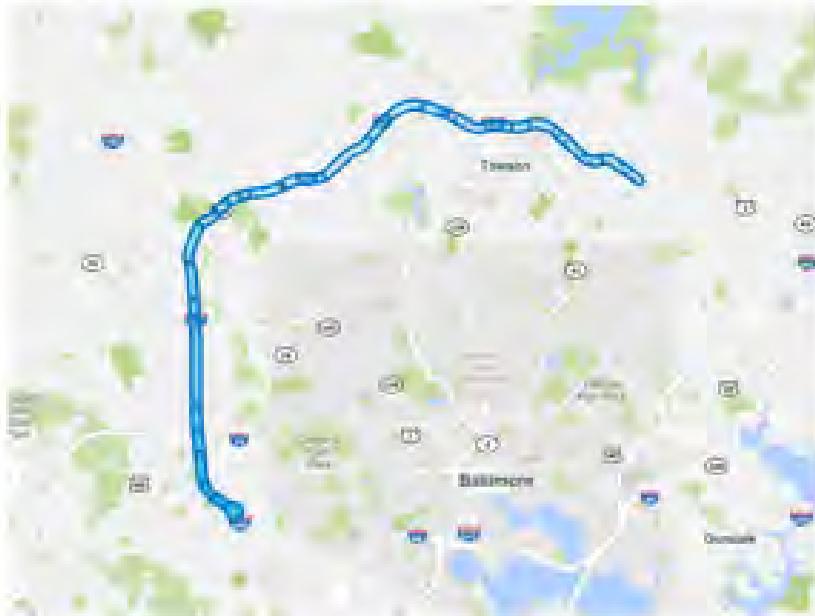
- **Rank** - The ranked position of the location according to the current table ordering by **Base Impact** – the aggregation of queue length over time for congestion at each location in mile minutes. It is then weighted by **Total Delay** – Raw speed drop weighted by VMT factor.
- **Average max length** - The average maximum length, in miles, of queues formed by congestion originating at the location.
- **Average daily duration** - The average amount of time per day that congestion is identified originating at the location.
- **All Events/Incidents** - The number of traffic events and incidents that occurred within the space of the bottleneck at any time during the time period being analyzed.
- **Volume Estimate** - AADT weighted by queue length.

| Rank | Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------|---|----------------------------|------------------------|-----------------------|------------------------|
| 1 | I-695 OL @ EDMONDSON AVE/EXIT 14 | 5.01 | 2 h 43 m | 834 | 88946 |
| 2 | I-695 IL @ I-83/MD-25/EXIT 23 | 3.53 | 2 h 56 m | 463 | 95048 |
| 3 | I-695 IL @ I-70/EXIT 16 | 2.11 | 2 h 54 m | 233 | 95068 |
| 4 | I-695 OL @ US-40/EXIT 15 | 3.57 | 1 h 48 m | 766 | 89650 |
| 5 | I-95 N @ MD-100/EXIT 43 | 4.23 | 1 h 22 m | 310 | 95604 |
| 6 | I-95 N @ MD-295/BALTIMORE WASHINGTON PKWY/EXIT 52 | 2.26 | 1 h 50 m | 641 | 93260 |
| 7 | MD-295 S @ POWDER MILL RD | 5.26 | 1 h 24 m | 318 | 45940 |
| 8 | I-695 IL @ MD-542/LOCH RAVEN BLVD/EXIT 29 | 3.71 | 53 m | 496 | 85789 |
| 9 | I-95 N @ MD-175/EXIT 41 | 3.23 | 1 h 12 m | 243 | 95344 |
| 10 | I-695 OL @ I-83/MD-25/EXIT 23 | 3.48 | 1 h 06 m | 484 | 79378 |

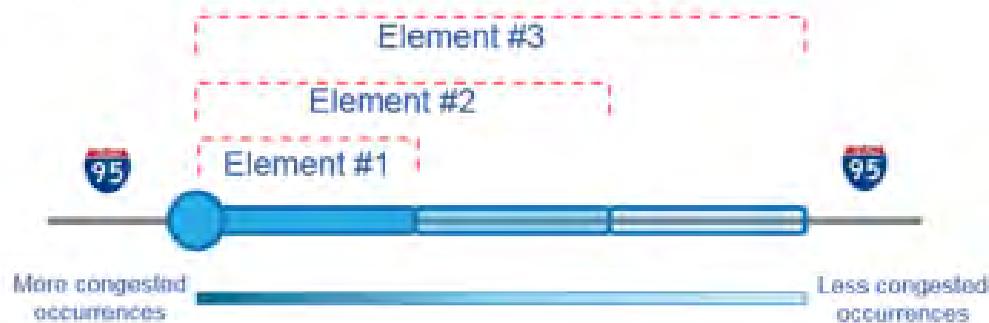
IL = Inner Loop

OL = Outer Loop

Maps



The Map view displays selected bottlenecks on a map. Each element occurring at the selected location is layered on the map, extending upstream from the head location to the maximum length of the specific *element*. As each element adds another layer on the map, road segments become more opaque. Segments closest to the head become the most opaque as they are more frequently affected by congestion at the selected location.



Top 10 Bottleneck Rankings in the Baltimore Region – 2nd Quarter 2021

Top 10 Bottlenecks – 2nd Quarter 2021

Ranked by Base Impact - the aggregation of queue length over time for congestion at each location in mile minutes. It is then weighted by **Total Delay** – Raw speed drop weighted by VMT factor.

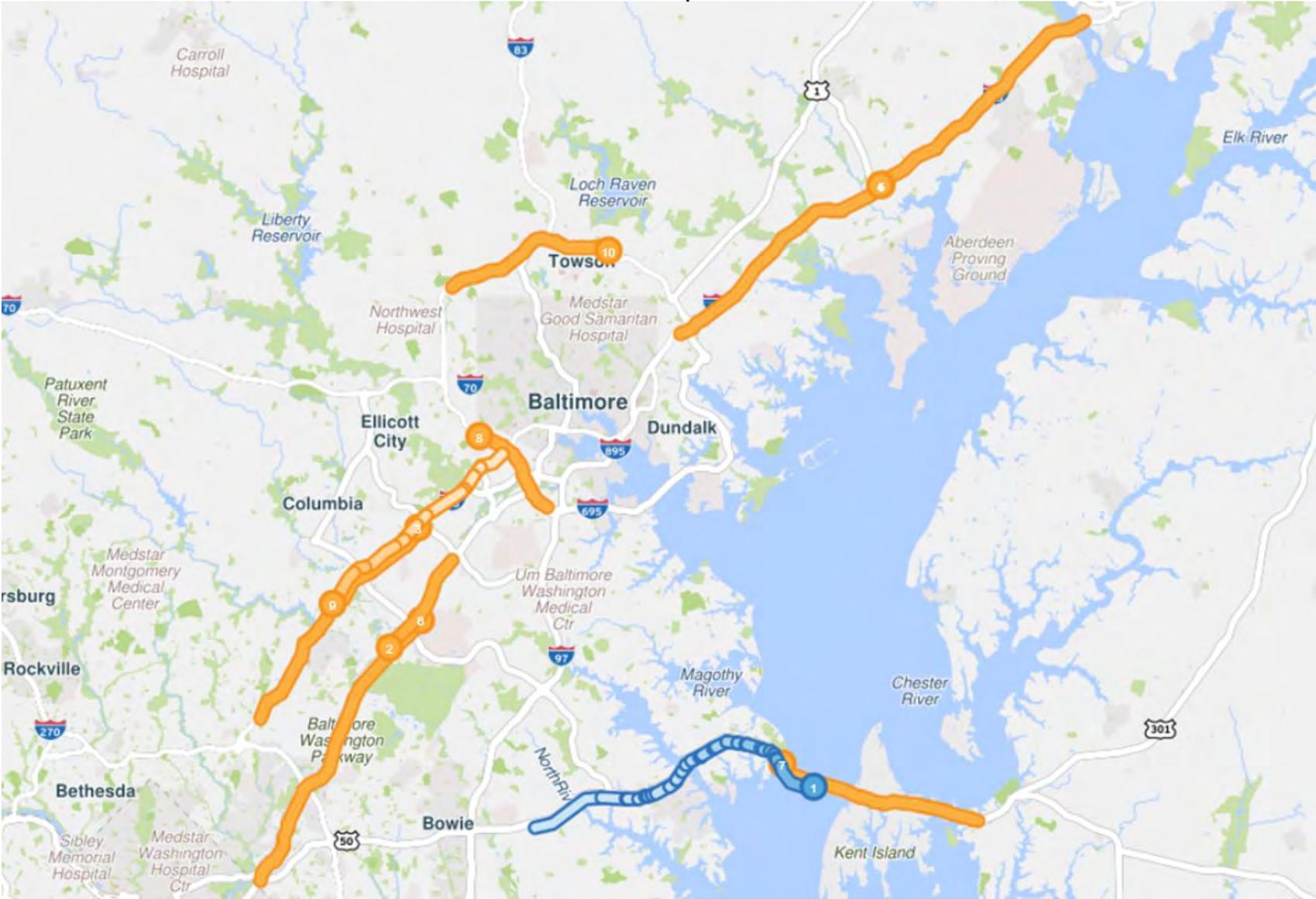
| Rank | Location | Previous Quarter Ranking | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------|---------------------------------------|--------------------------|----------------------------|------------------------|-----------------------|------------------------|
| 1 | US-50 E @ BAY BRIDGE | 3 | 5.42 | 1 h 36 m | 842 | 39,475 |
| 2 | MD-295 S @ MD-198 | | 3.02 | 4 h 14 m | 93 | 48,044 |
| 3 | I-95 N @ MD-100/EXIT 43 | 5 | 3.89 | 2 h 1 m | 422 | 102,448 |
| 4 | I-95 N @ MD-24/EXIT 77 | | 4.53 | 1 h 46 m | 422 | 71,435 |
| 5 | I-95 S @ MD-24/EXIT 77 | | 5.52 | 1 h 43 m | 206 | 53,964 |
| 6 | MD-295 N @ CANINE RD | 4 | 3.03 | 1 h 43 m | 231 | 49,834 |
| 7 | US-50 W @ BAY BRIDGE | | 5.51 | 1 h 22 m | 610 | 33,676 |
| 8 | I-695 IL @ MD-372/WILKENS AVE/EXIT 12 | 6 | 1.92 | 1 h 26 m | 191 | 97,812 |
| 9 | I-95 S @ MD-216/EXIT 35 | | 4.35 | 45 m | 343 | 101,620 |
| 10 | I-695 IL @ PROVIDENCE RD/EXIT 28 | 2 | 4.11 | 49 m | 314 | 87,902 |

IL = Inner Loop

OL = Outer Loop

Top 10 Bottlenecks – 2nd Quarter 2021

Site Map



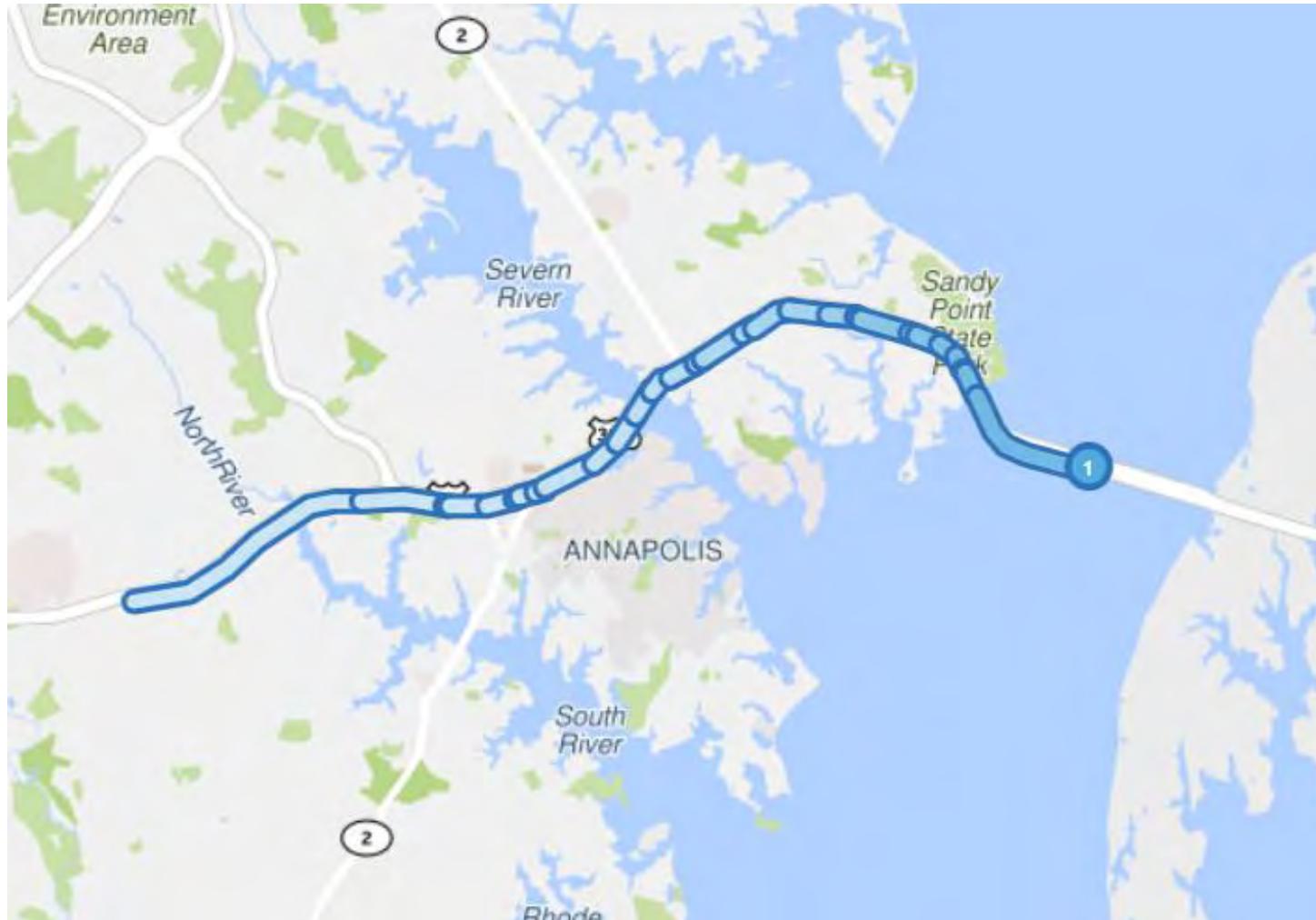
Top 10 Bottleneck Rankings in the Baltimore Region – 2nd Quarter 2021 by Location

Includes:

- Location Maps with notes on each bottleneck condition
- Speed Graphs
- Travel Time Graphs
- Congestion Scan Heat Diagrams

#1 Ranked Bottleneck – 2nd Quarter 2021 Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 E @ BAY BRIDGE | 5.42 | 1 h 36 m | 842 | 39,475 |

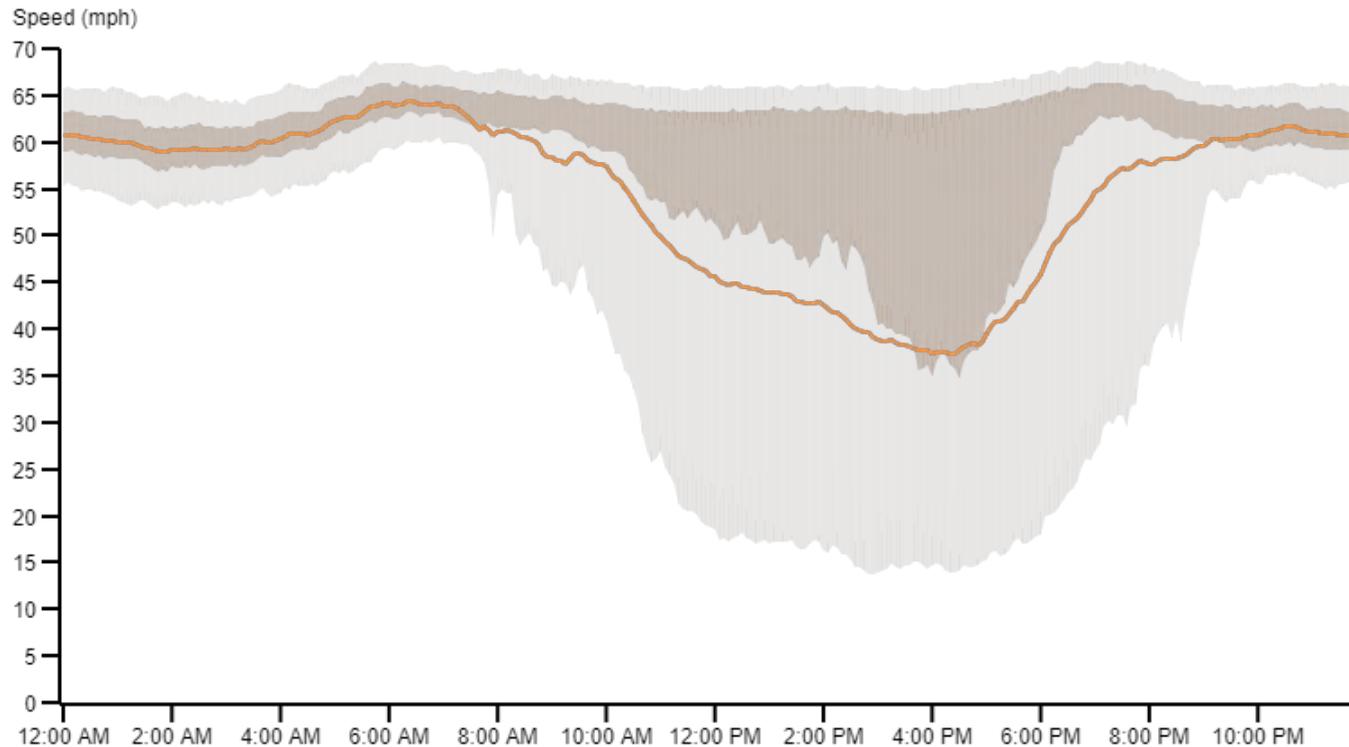


Notes: Heavy weekend traffic heading to the Maryland beach resorts. Miscellaneous Rehabilitation of the Bay Bridge Suspension Spans and Bay Bridge automated lane closure system in operation. Two-way traffic on the eastbound span when the westbound span is closed for deck rehabilitation.

#1 Ranked Bottleneck –2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 E @ BAY BRIDGE | 5.42 | 1 h 36 m | 842 | 39,475 |

Speed for US-50 E @ Bay Bridge
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Eastbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#1 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

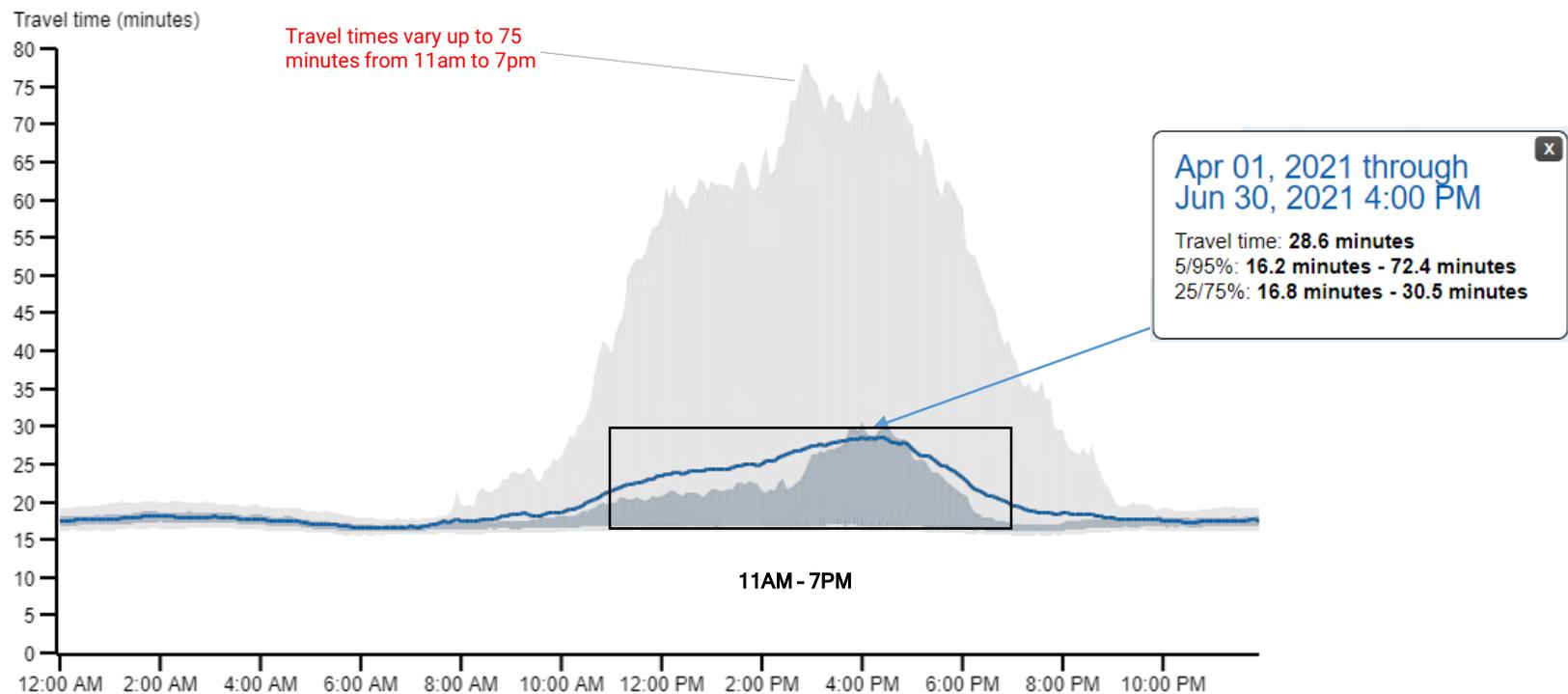
| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 E @ BAY BRIDGE | 5.42 | 1 h 36 m | 842 | 39,475 |

Eastbound

Travel time for US-50 E @ Bay Bridge

Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

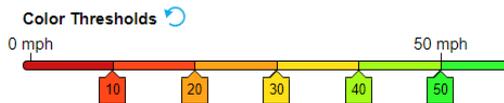
Eastbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#1 Ranked Bottleneck –2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 E @ BAY BRIDGE | 5.42 | 1 h 36 m | 842 | 39,475 |

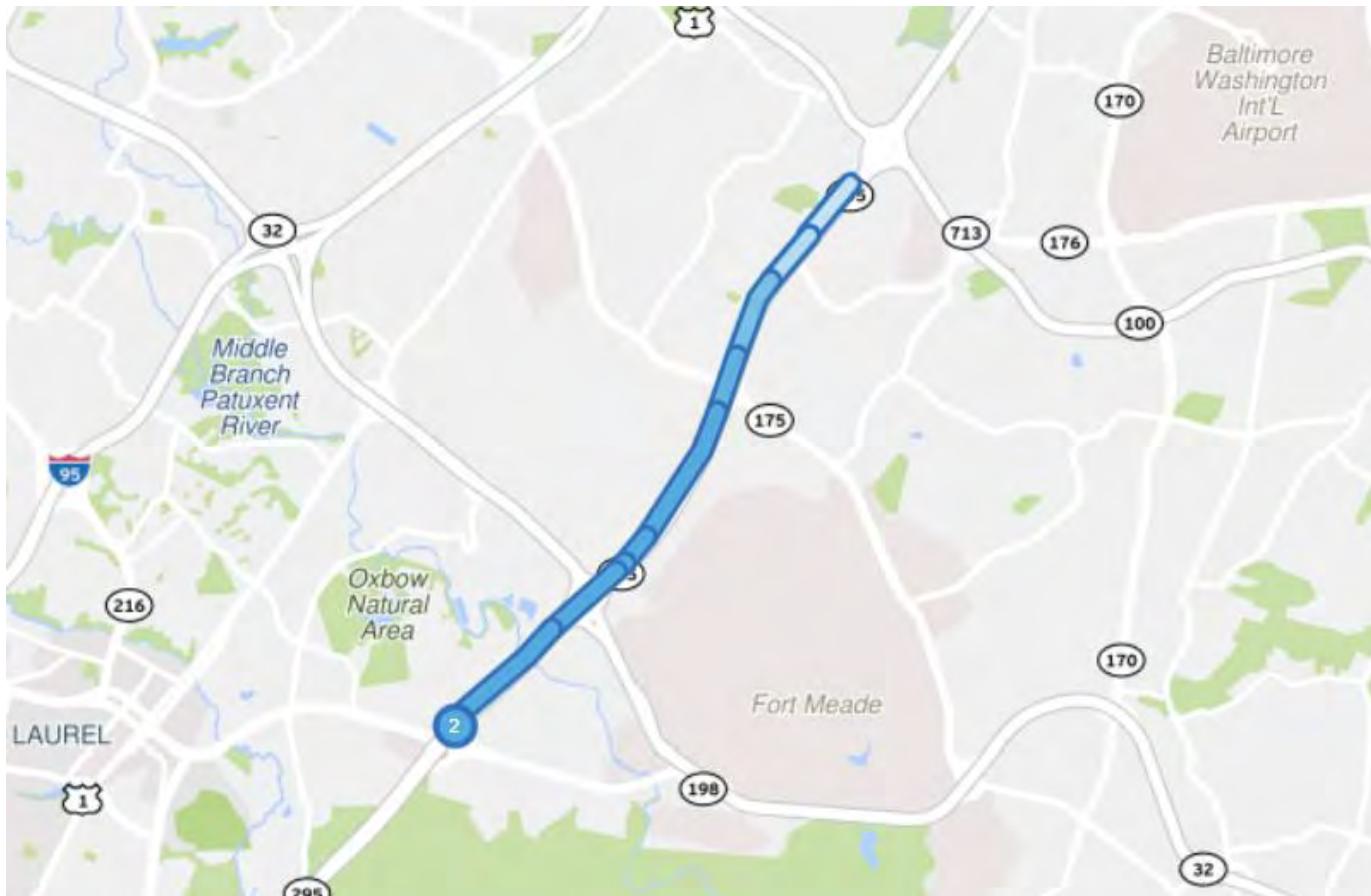


Locations of Congestion (EB)

A: 11AM – 7PM : Bay Dale Dr to Bay Bridge Toll Plaza

#2 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 S @ MD-198 | 3.02 | 4 h 14 m | 93 | 48,044 |



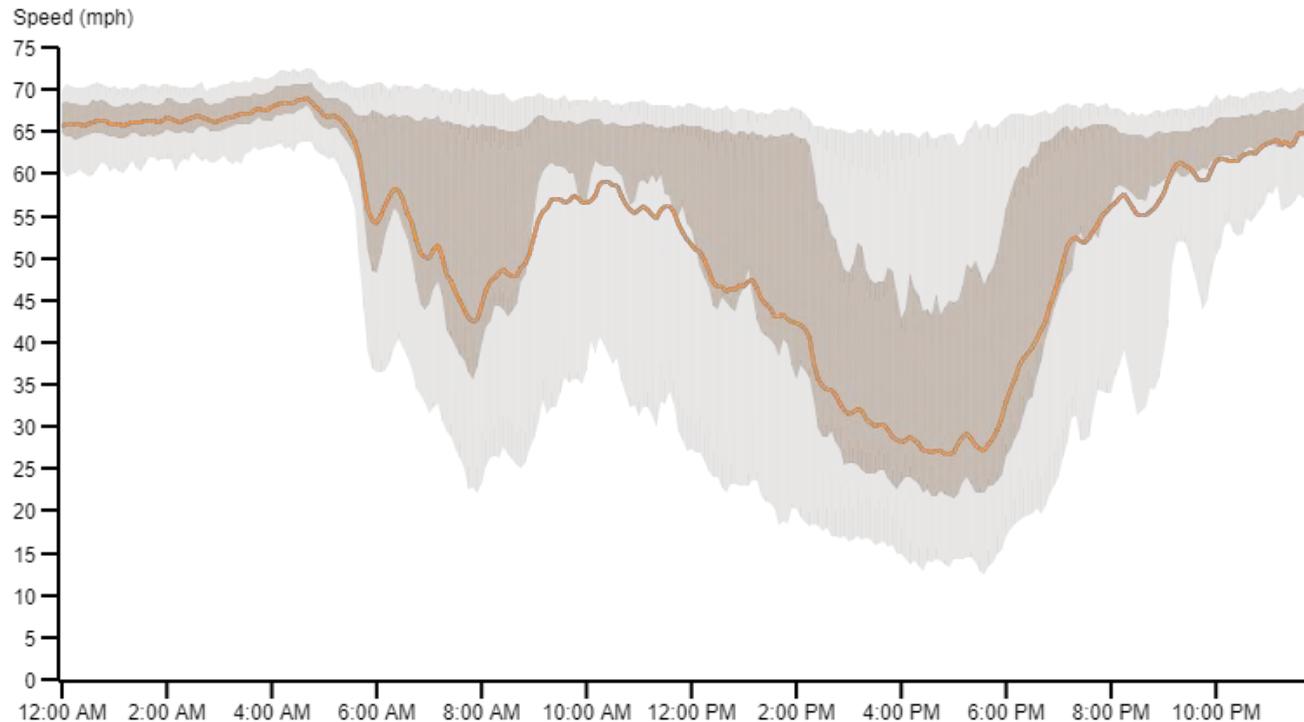
Notes: Southbound PM congestion from MD-198 extending into the southern portion of the Baltimore region near Fort Meade occurring during both the morning and afternoon peak periods. Volume related delays caused by factors such as Baltimore commuters to DC and Fort Meade and the MD-295 merge with the heavily congested Capital Beltway.

#2 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 S @ MD-198 | 3.02 | 4 h 14 m | 93 | 48,044 |

Speed for MD-295 S @ MD-198
Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Southbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#2 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

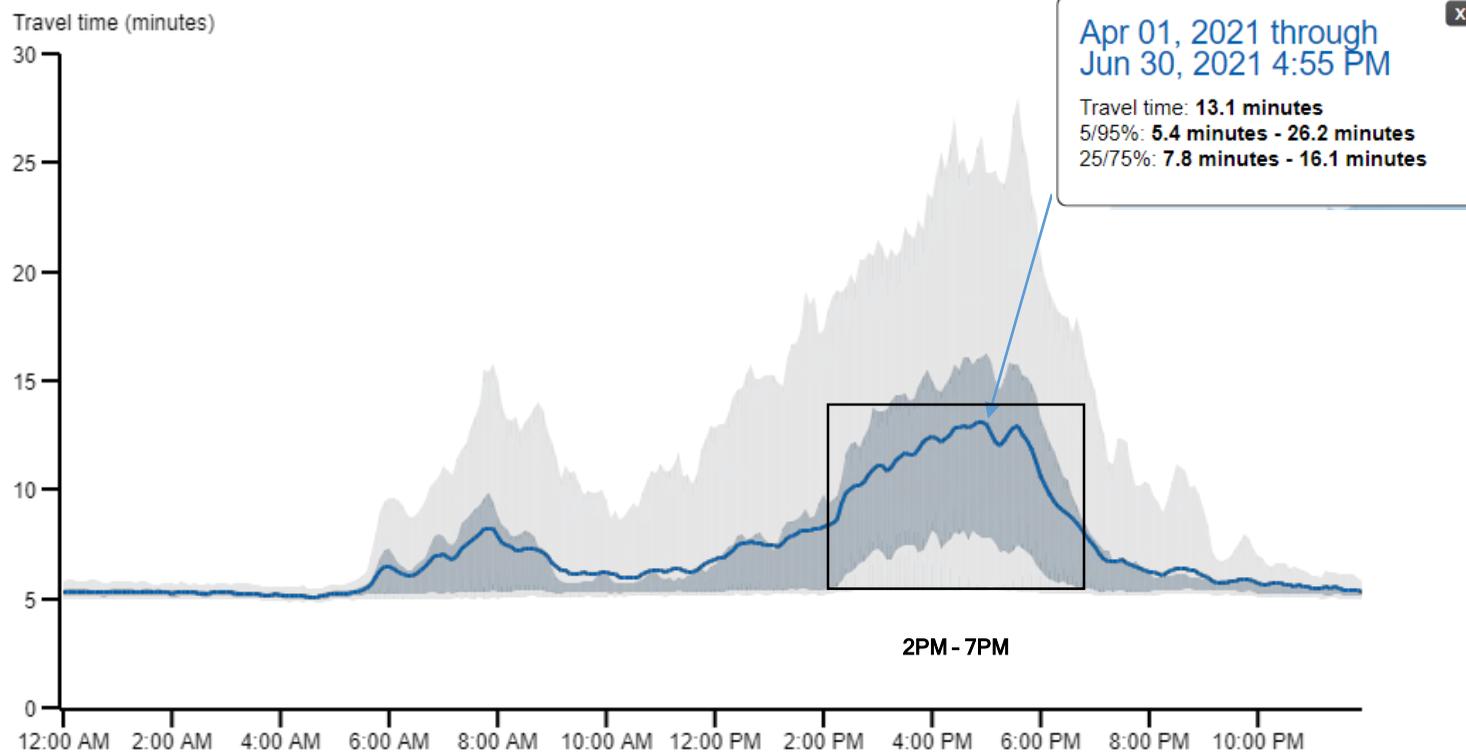
| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 S @ MD-198 | 3.02 | 4 h 14 m | 93 | 48,044 |

Southbound

Travel time for MD-295 S @ MD-198

Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Southbound

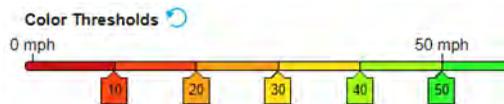
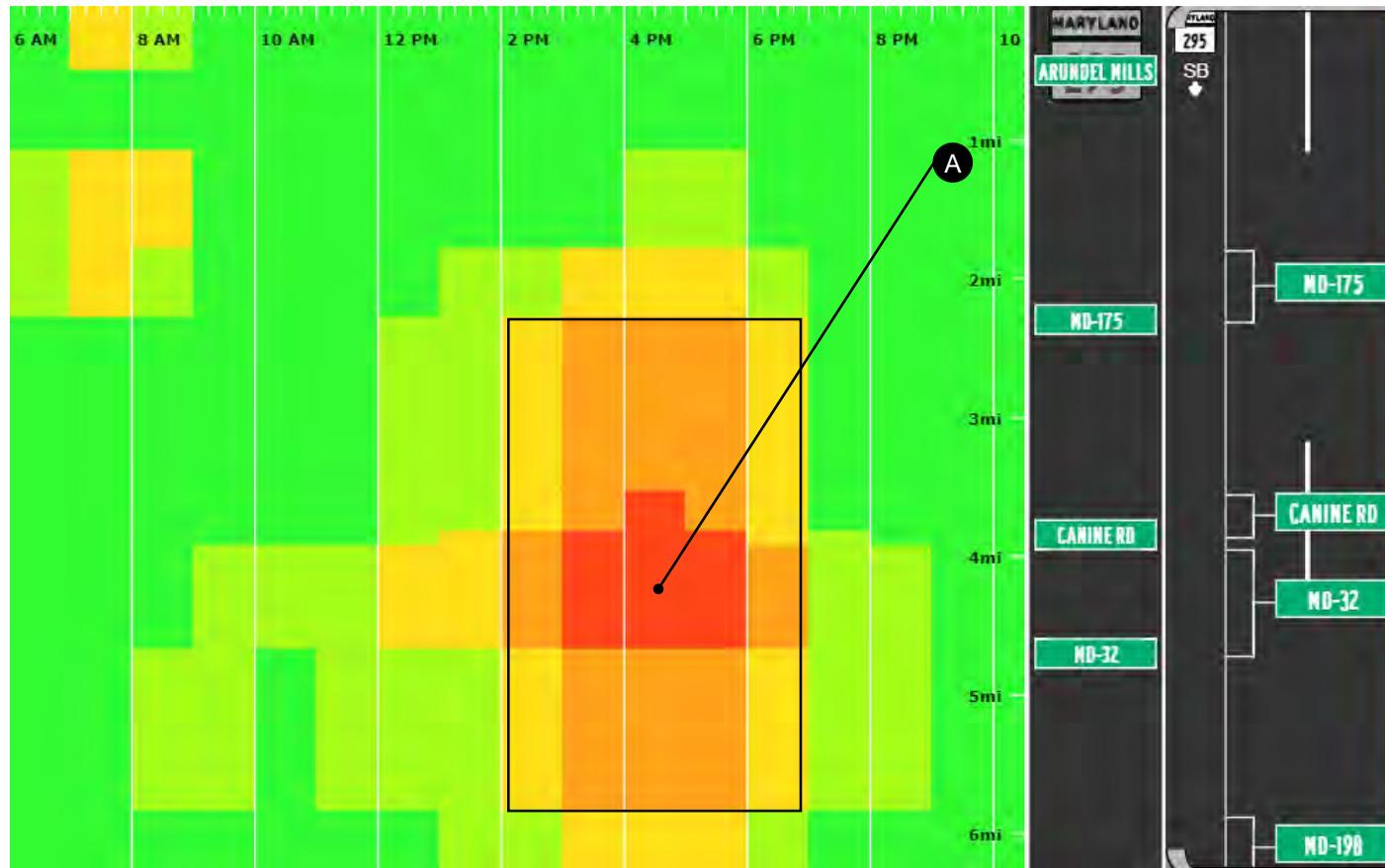


- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#2 Ranked Bottleneck – 2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 S @ MD-198 | 3.02 | 4 h 14 m | 93 | 48,044 |

Southbound

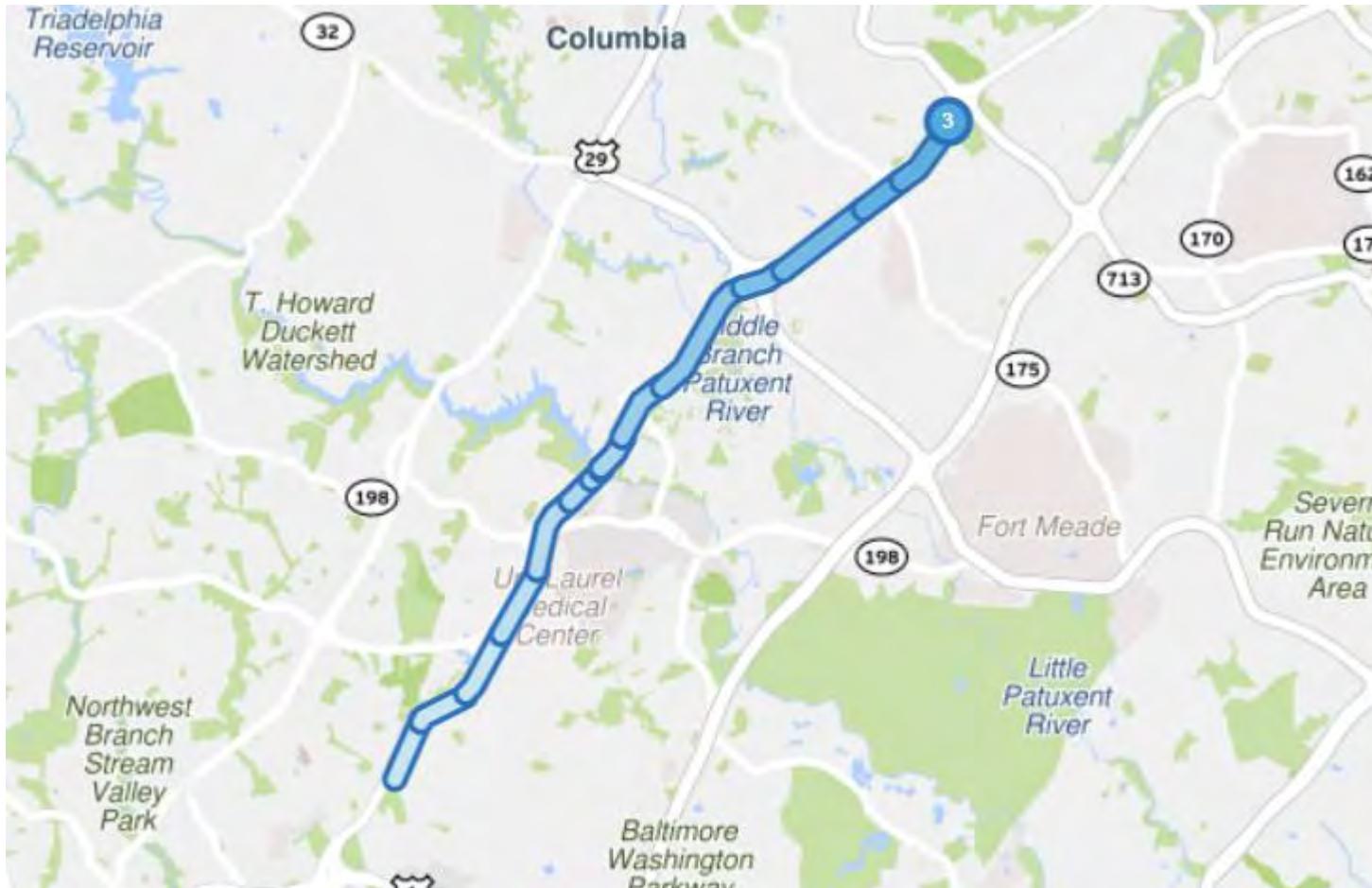


Locations of Congestion (SB)

A: 2PM - 7PM : Arundel Mills Blvd to MD-198

#3 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-100/EXIT 43 | 3.89 | 2 h 1 m | 422 | 102,448 |



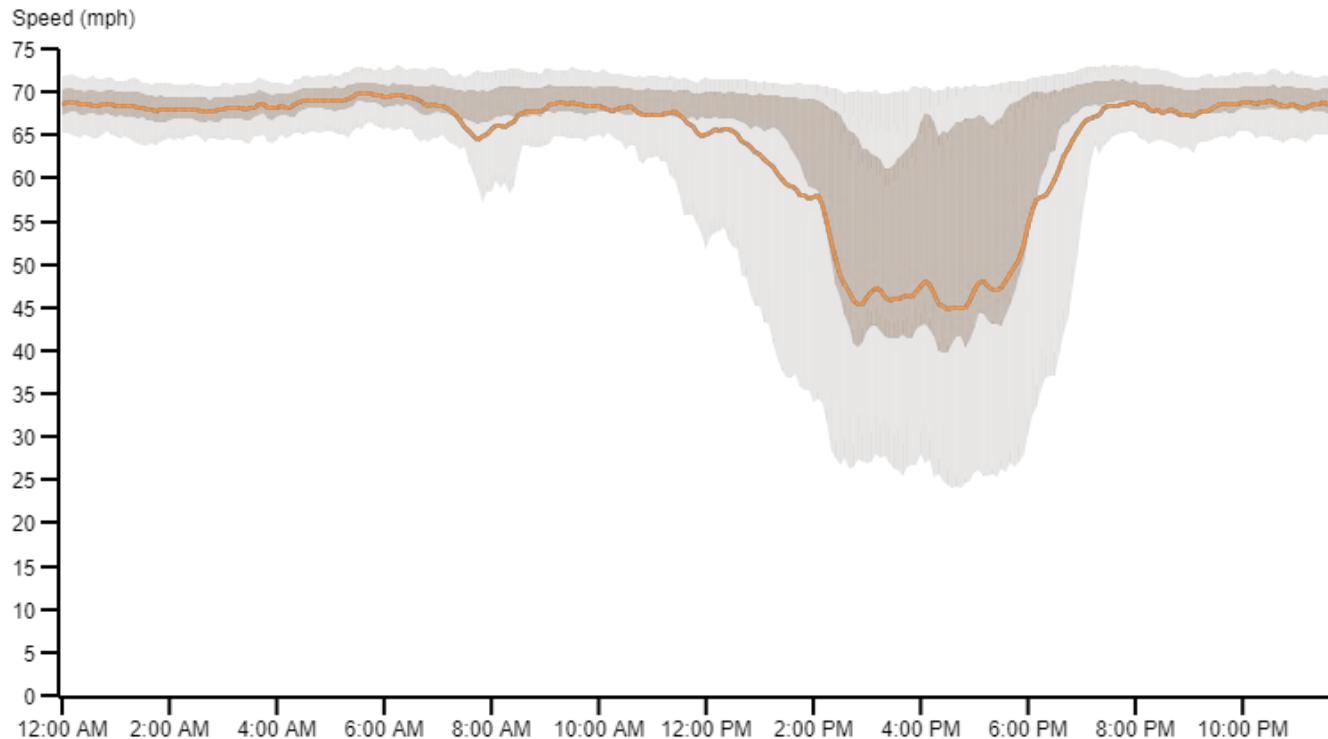
Notes: Congestion in the afternoon rush hour. Contributing factors include traffic entering at MD-175, weaving to exit at MD-100, and the half-mile uphill grade midway between MD-175 and MD-100.

#3 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-100/EXIT 43 | 3.89 | 2 h 1 m | 422 | 102,448 |

Speed for I-95 N @ MD-100/EXIT 43
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Northbound

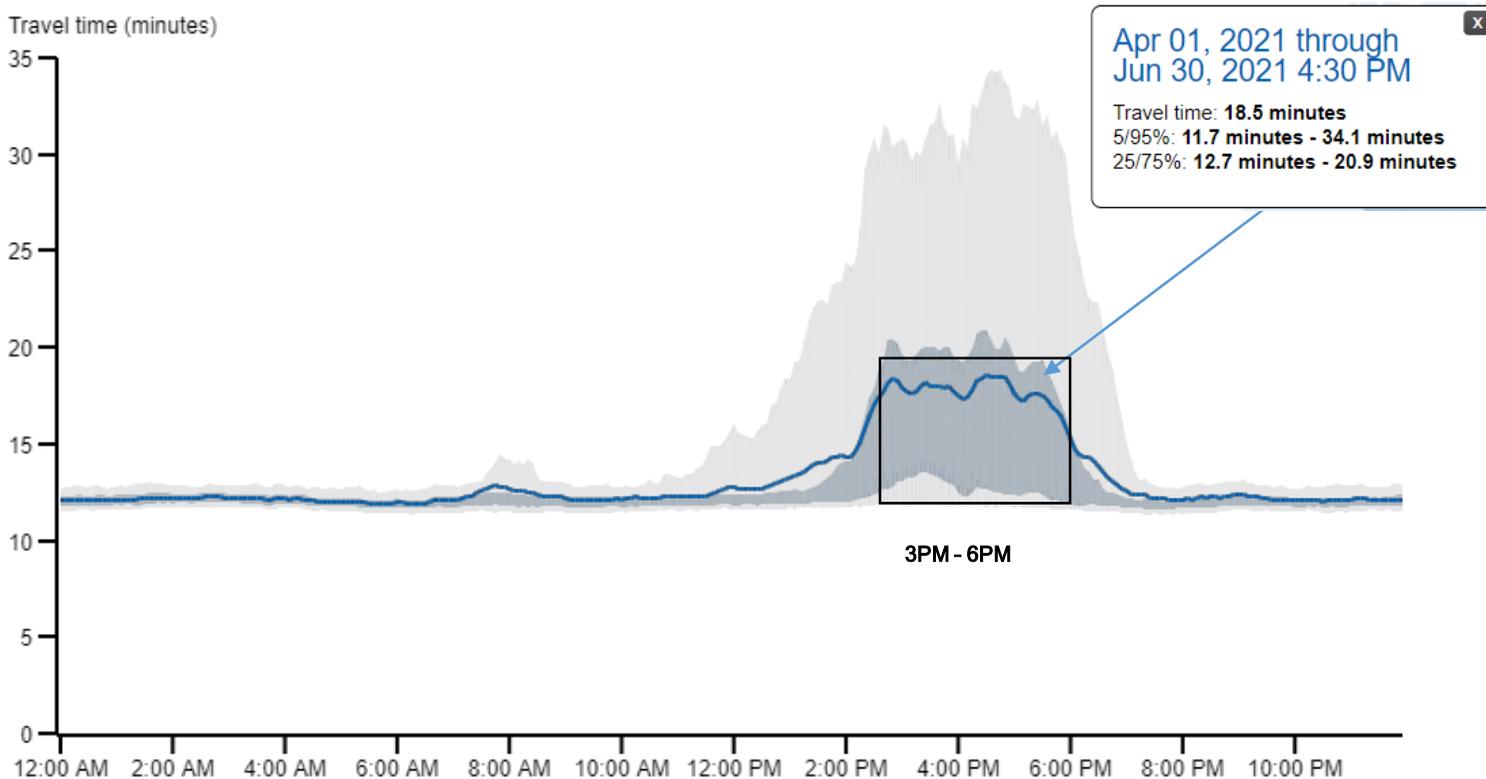


- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#3 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-100/EXIT 43 | 3.89 | 2 h 1 m | 422 | 102,448 |

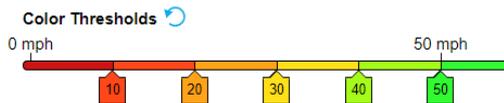
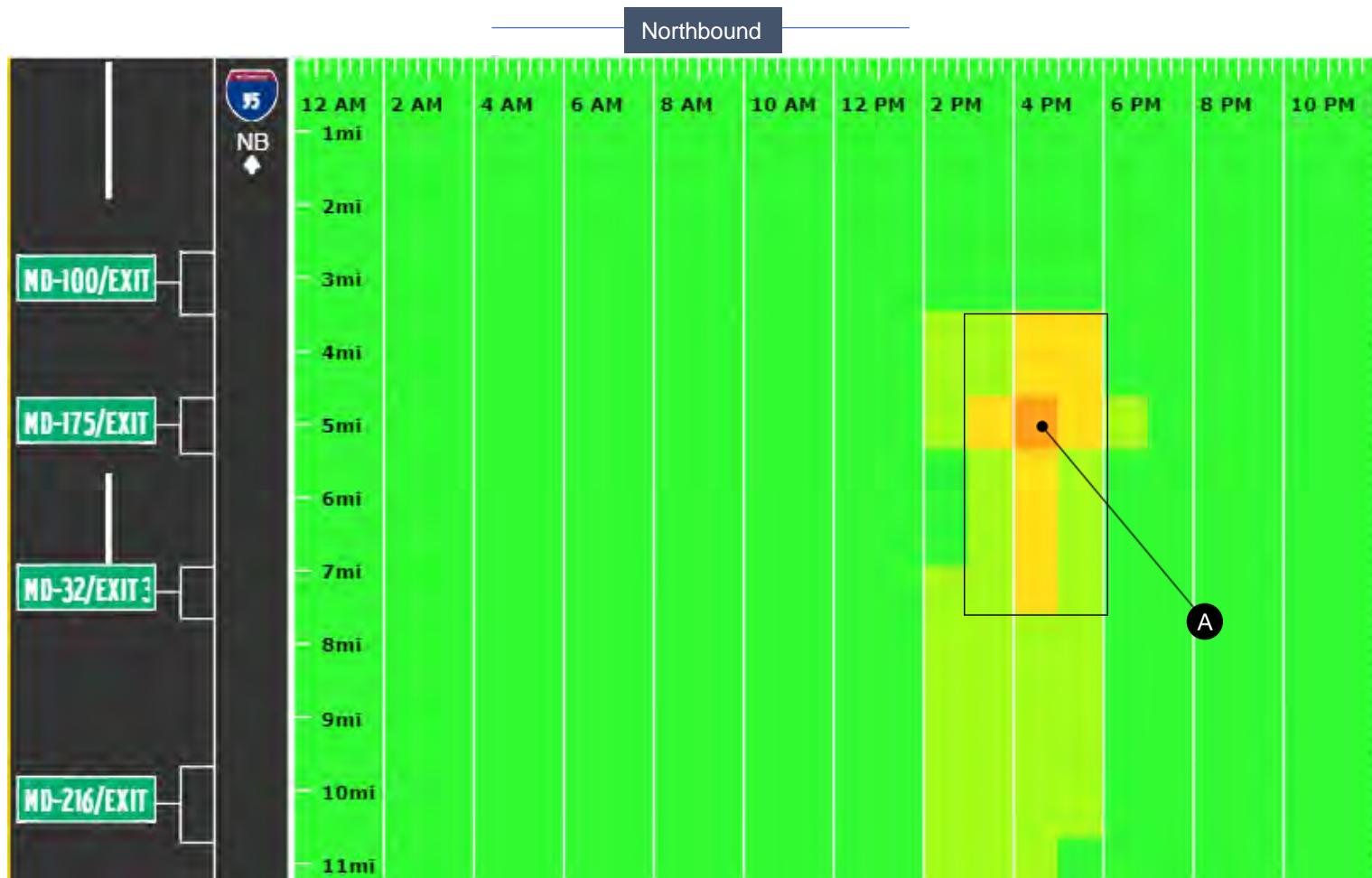
Northbound
 Travel time for I-95 N @ MD-100/EXIT 43
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Northbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#3 Ranked Bottleneck – 2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-100/EXIT 43 | 3.89 | 2 h 1 m | 422 | 102,448 |

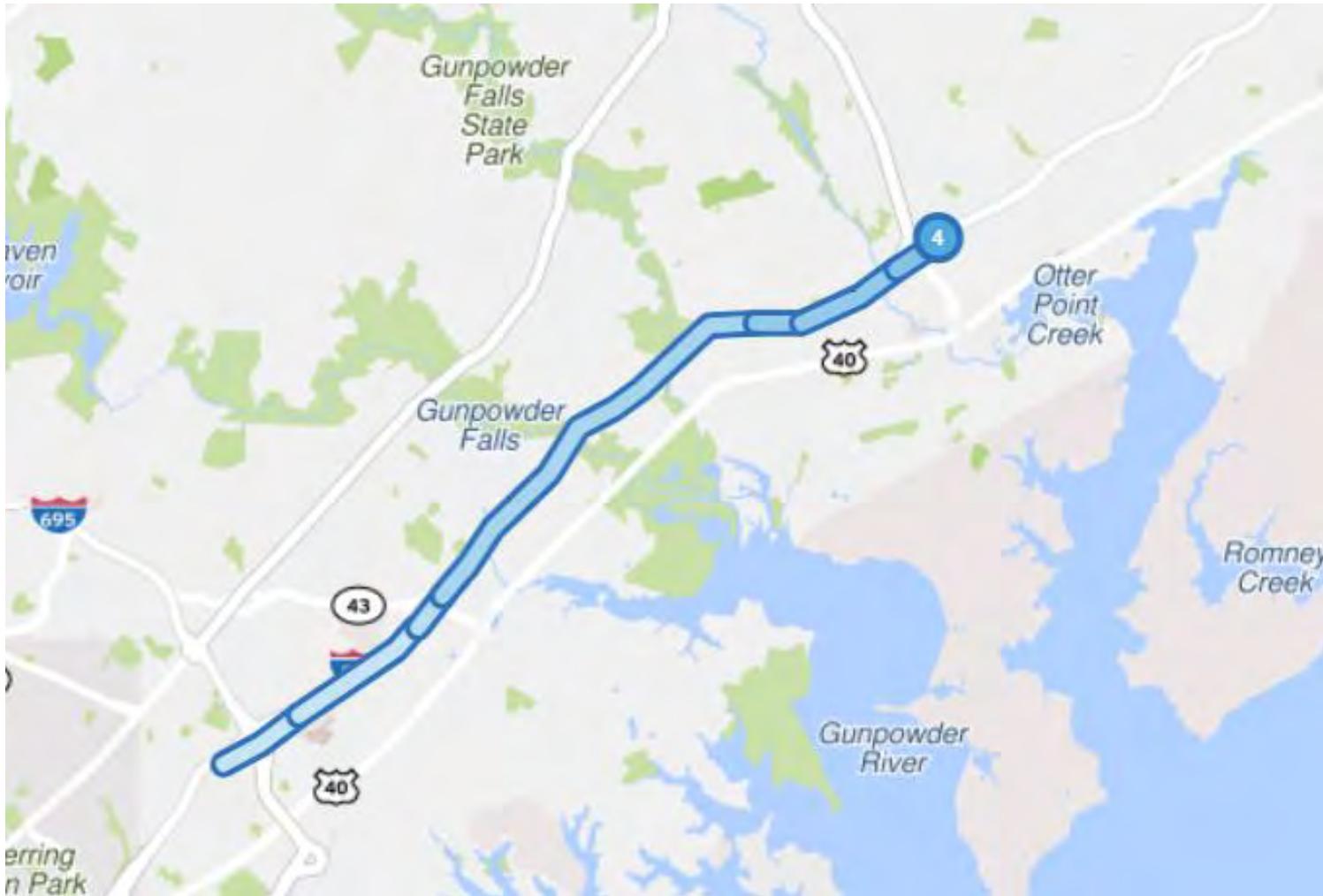


Locations of Congestion (NB)

A: 3 PM - 6 PM : MD-32 to MD-100

#4 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-24/EXIT 77 | 4.53 | 1 h 46 m | 422 | 71,435 |



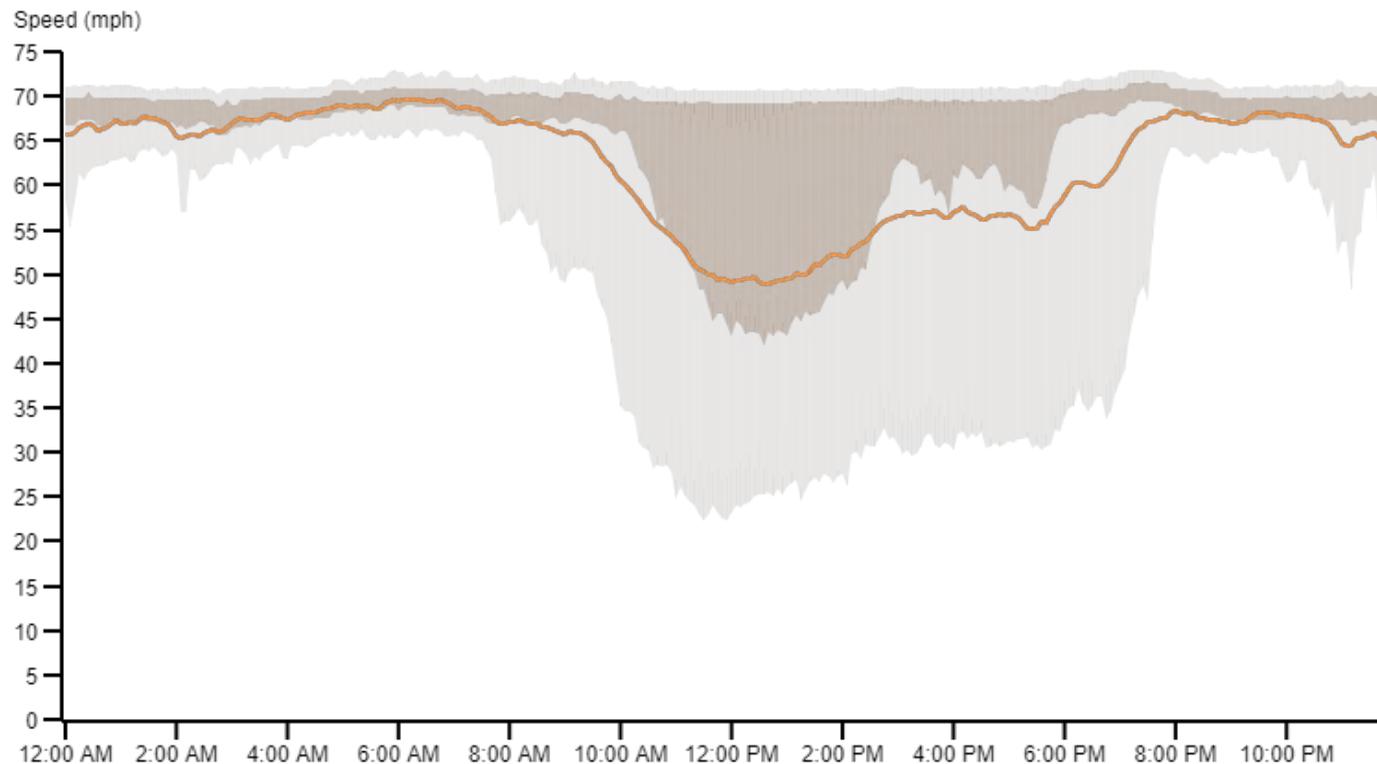
Notes: I-95 Express Toll Lanes Northbound Extension From MD 43 to MD 152 is responsible for off-peak shoulder and lane closures. The extension is expected to be open to traffic by the end of 2023 to MD 152, with the full extension to north of MD 24 open to traffic by the end of 2026. This includes the Old Joppa Road Overpass Replacement. Off-peak shoulder and lane closures.

#4 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-24/EXIT 77 | 4.53 | 1 h 46 m | 422 | 71,435 |

Speed for I-95 N @ MD-24/EXIT 77
Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Northbound

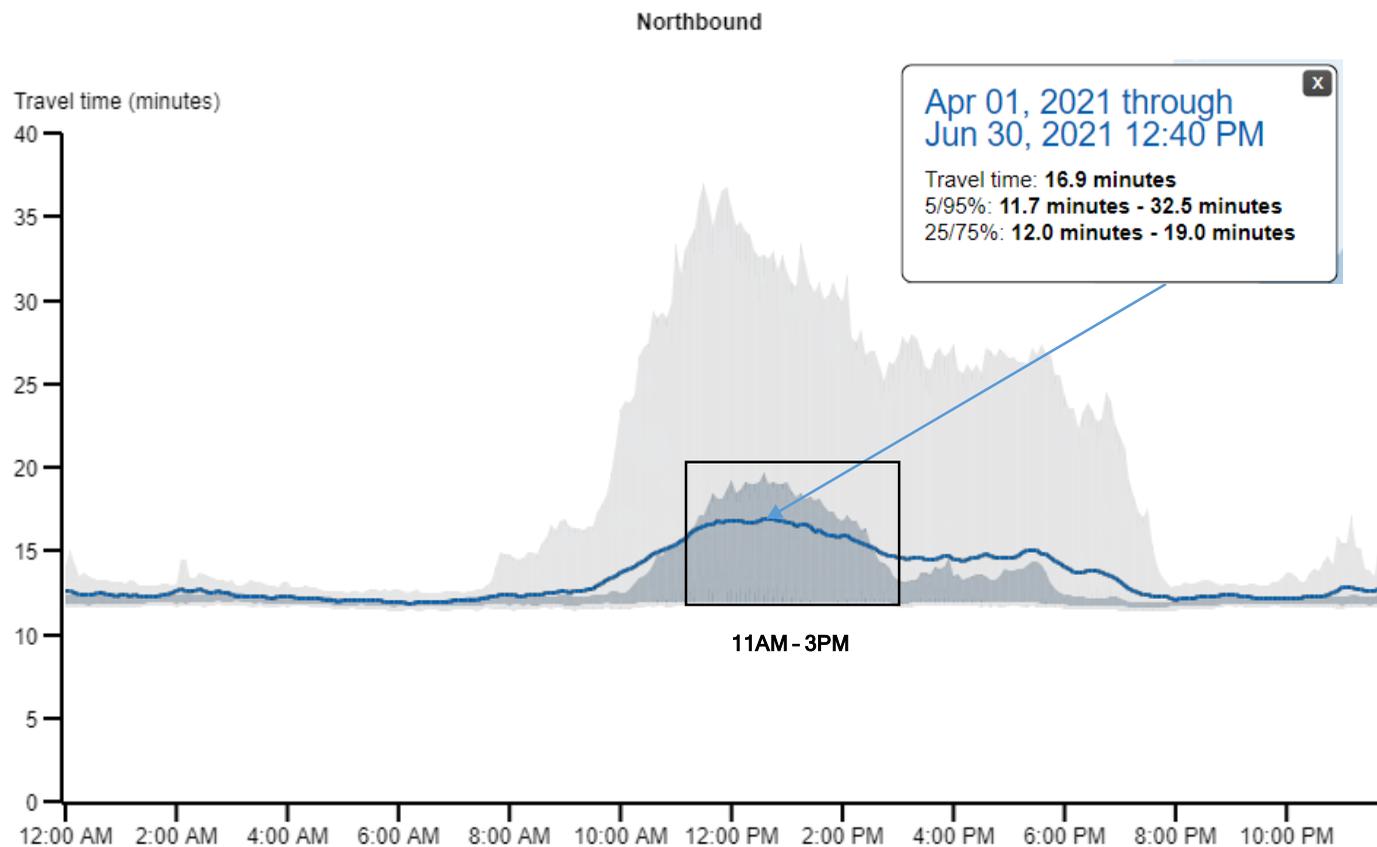


- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#4 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-24/EXIT 77 | 4.53 | 1 h 46 m | 422 | 71,435 |

Northbound
 Travel time for I-95 N @ MD-24/EXIT 77
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

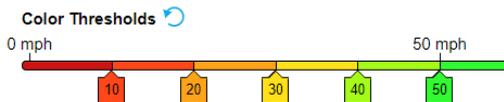
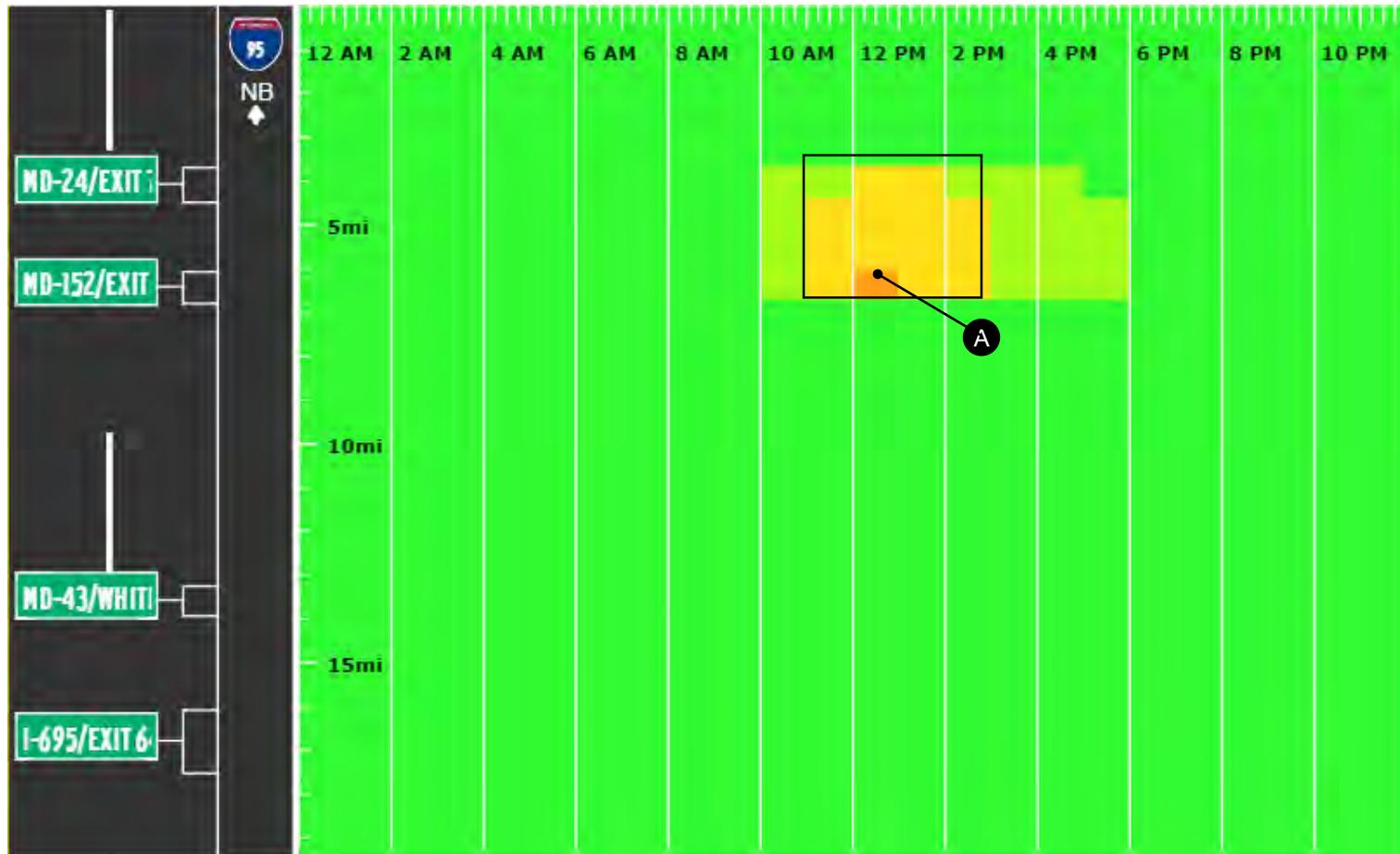


- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#4 Ranked Bottleneck – 2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 N @ MD-24/EXIT 77 | 4.53 | 1 h 46 m | 422 | 71,435 |

Northbound

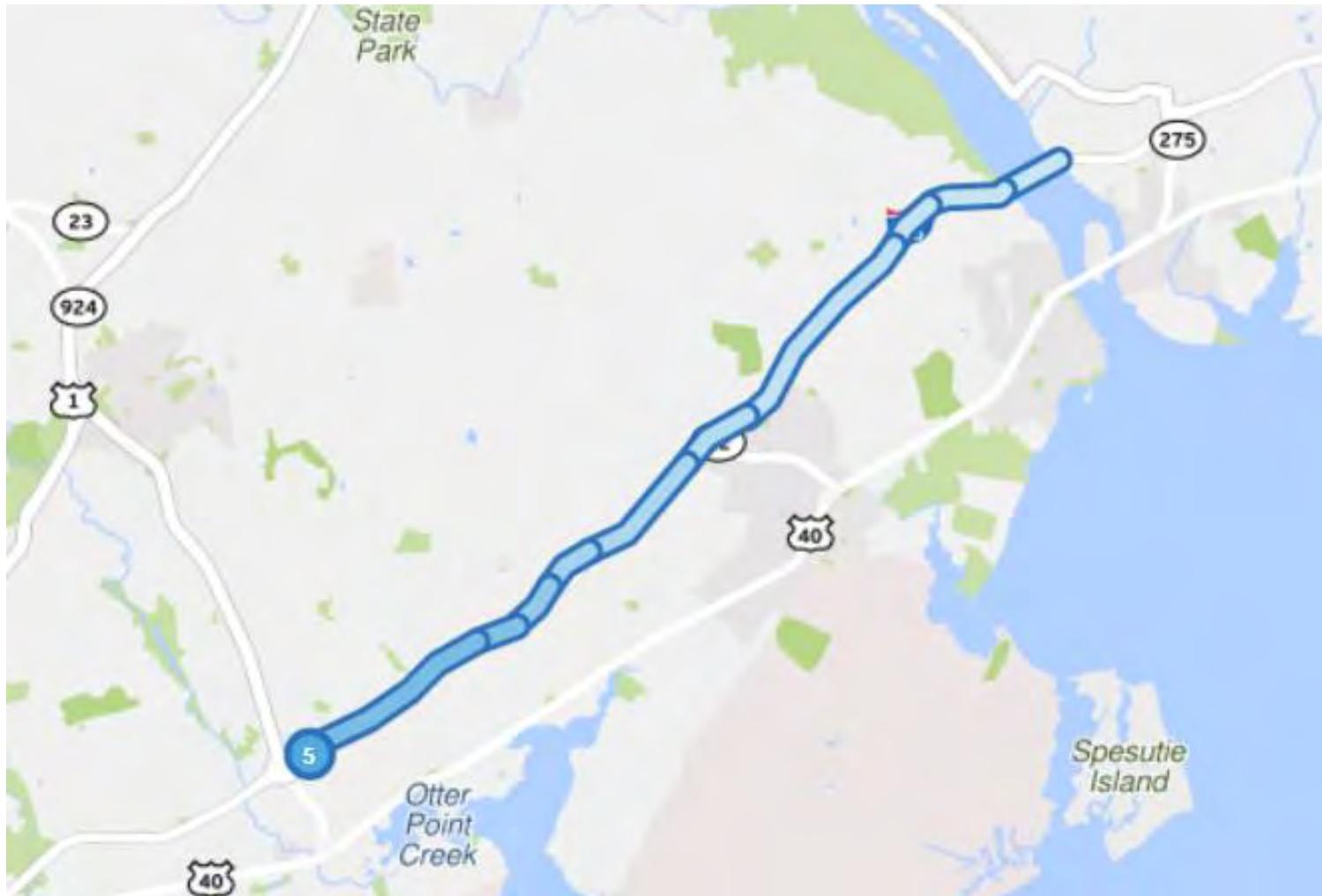


Locations of Congestion (NB)

A: 11AM - 3PM: MD-152/Mountain Rd to MD-24

#5 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-24/EXIT 77 | 5.52 | 1 h 43 m | 206 | 53,964 |

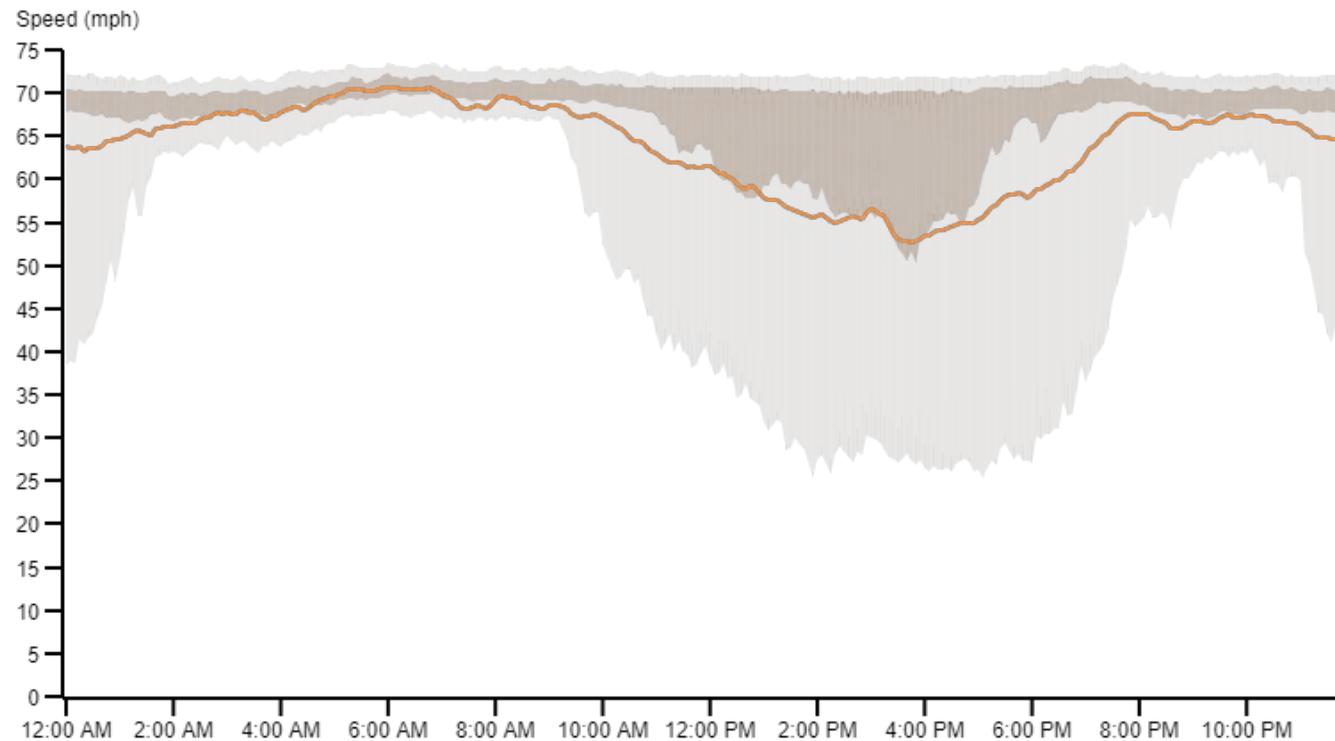


Notes: MD 152 to MD 24 Auxiliary Lane & MD 24 Ramp Improvement project. Off-peak shoulder and lane closures. The Clayton Road Bridge Overpass Reconstruction is also affecting traffic in this high volume area.

#5 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-24/EXIT 77 | 5.52 | 1 h 43 m | 206 | 53,964 |

Speed for I-95 S @ MD-24/EXIT 77
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Southbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

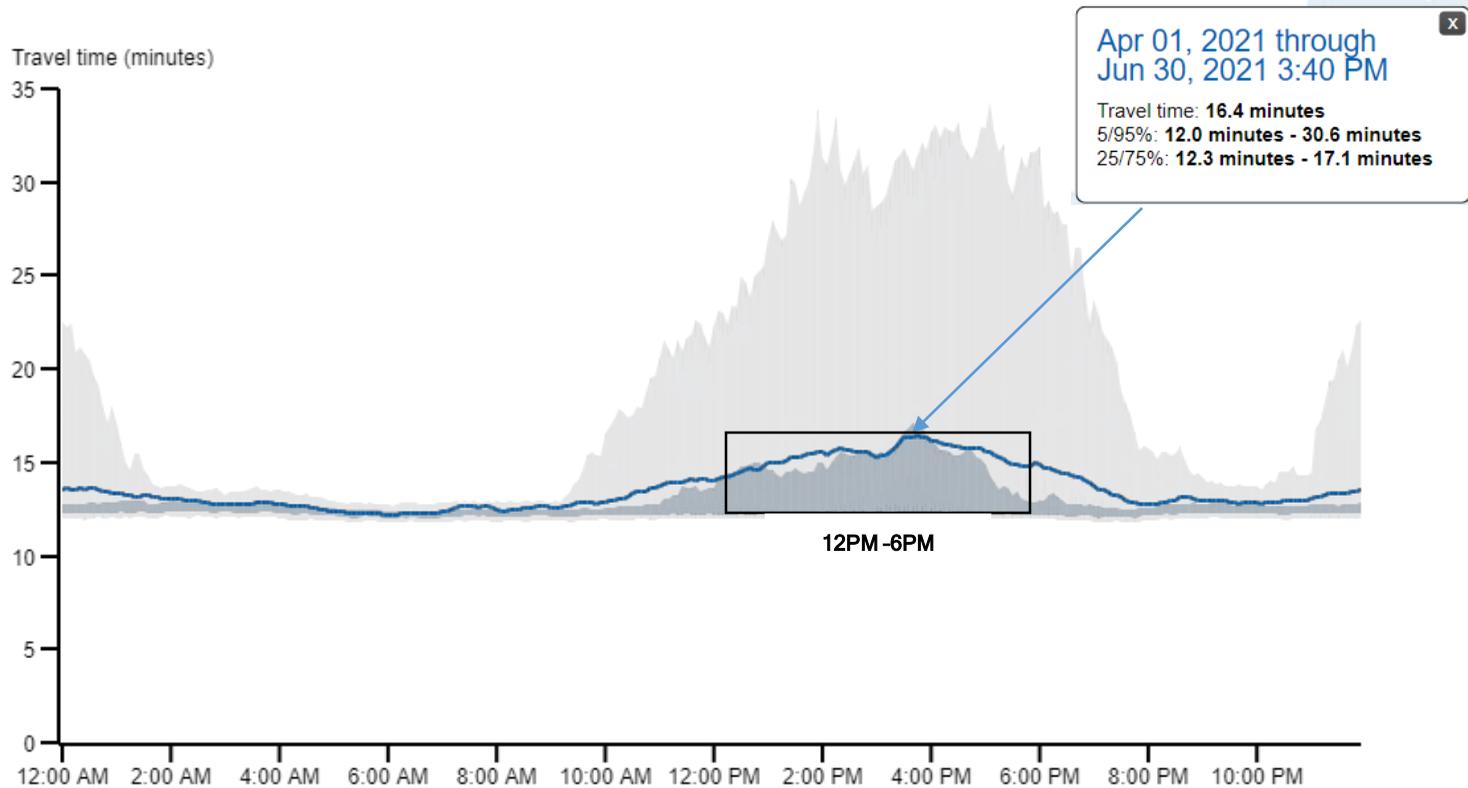
#5 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-24/EXIT 77 | 5.52 | 1 h 43 m | 206 | 53,964 |

Southbound

Travel time for I-95 S @ MD-24/EXIT 77
Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Southbound

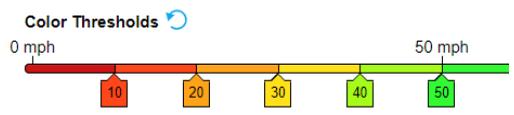
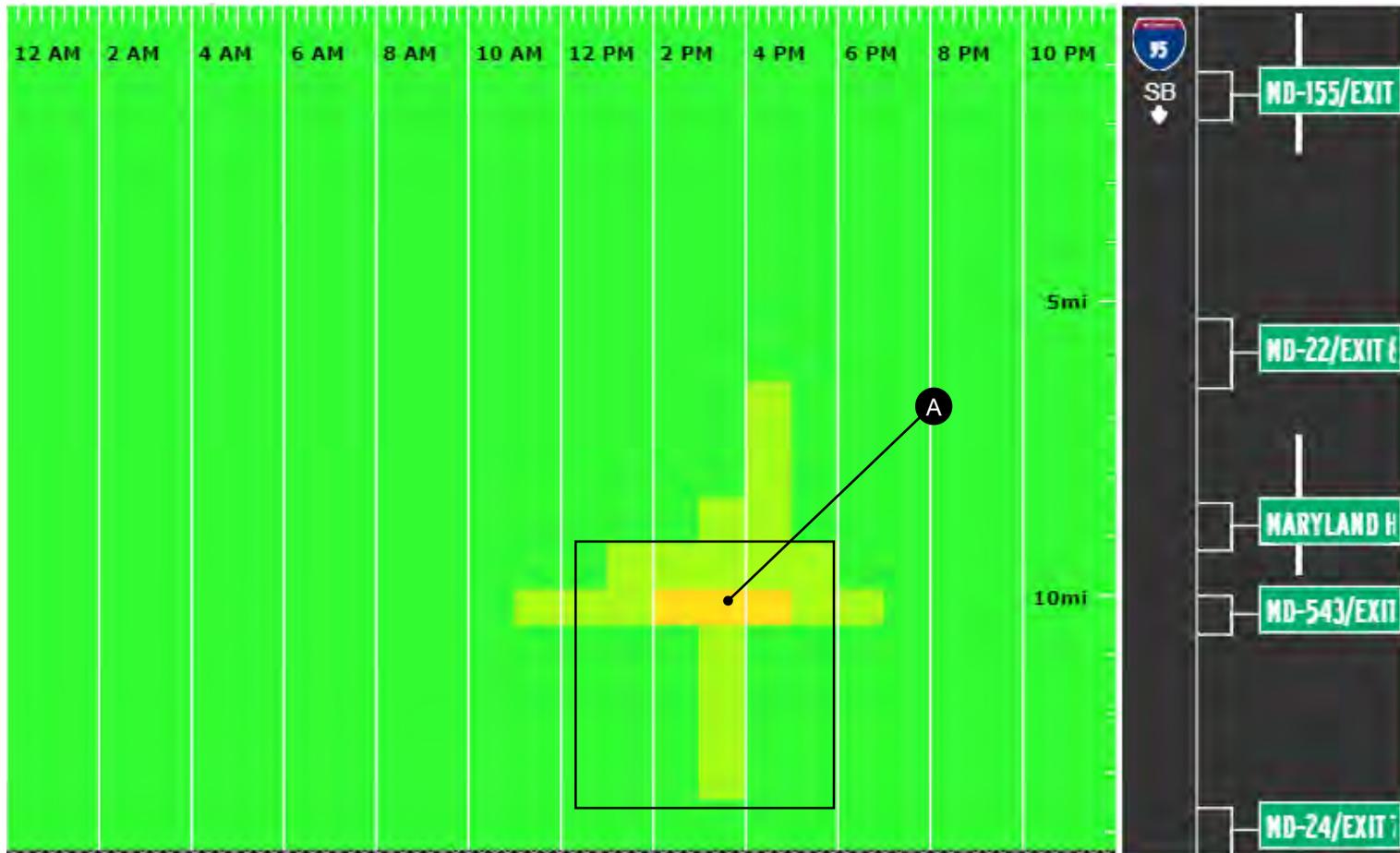


- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#5 Ranked Bottleneck –2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-24/EXIT 77 | 5.52 | 1 h 43 m | 206 | 53,964 |

Southbound

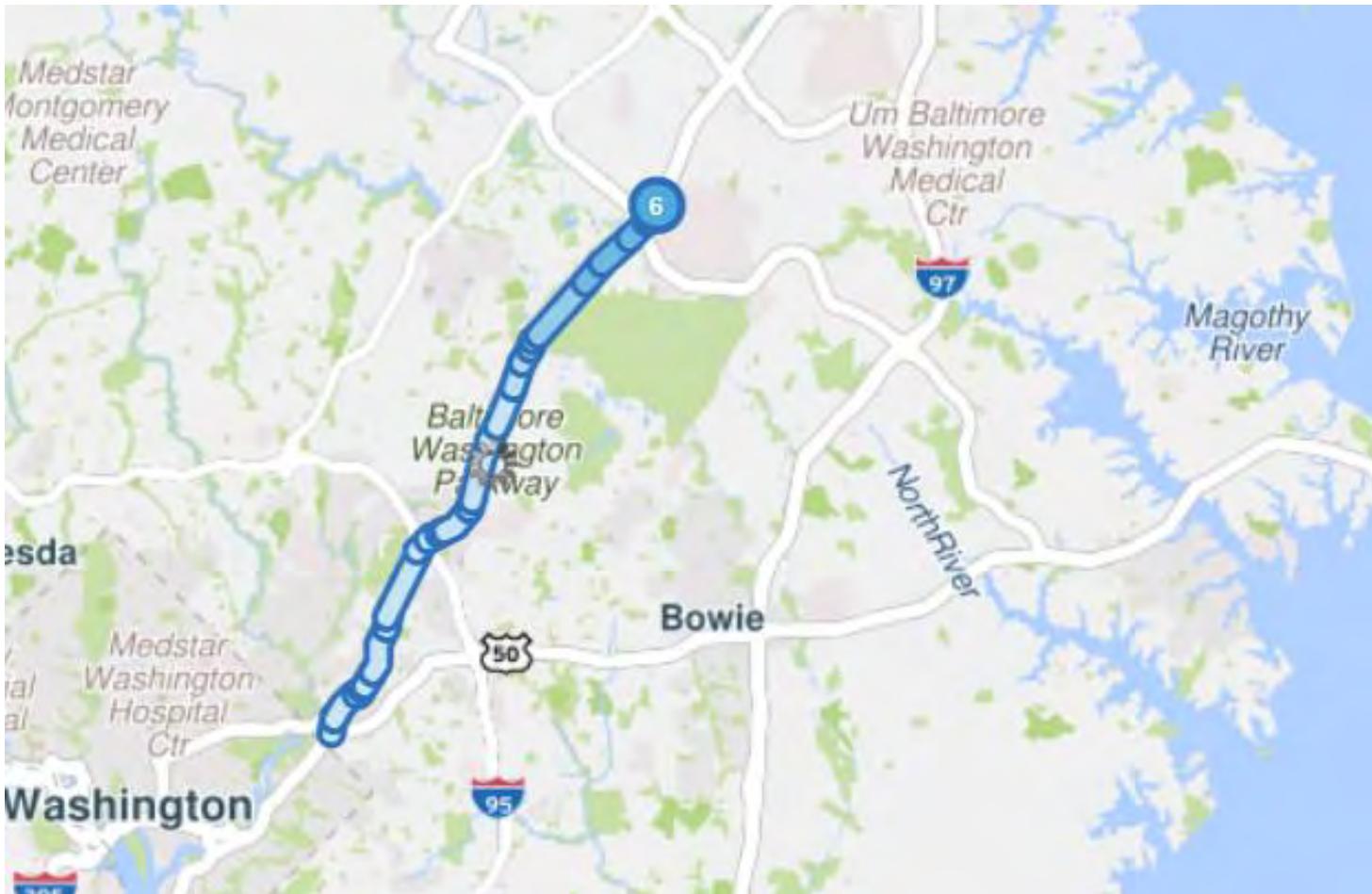


Locations of Congestion (SB)

A: 12PM - 6PM: MD-543 to MD-24

#6 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 N @ CANINE RD | 3.03 | 1 h 43 m | 231 | 49,834 |

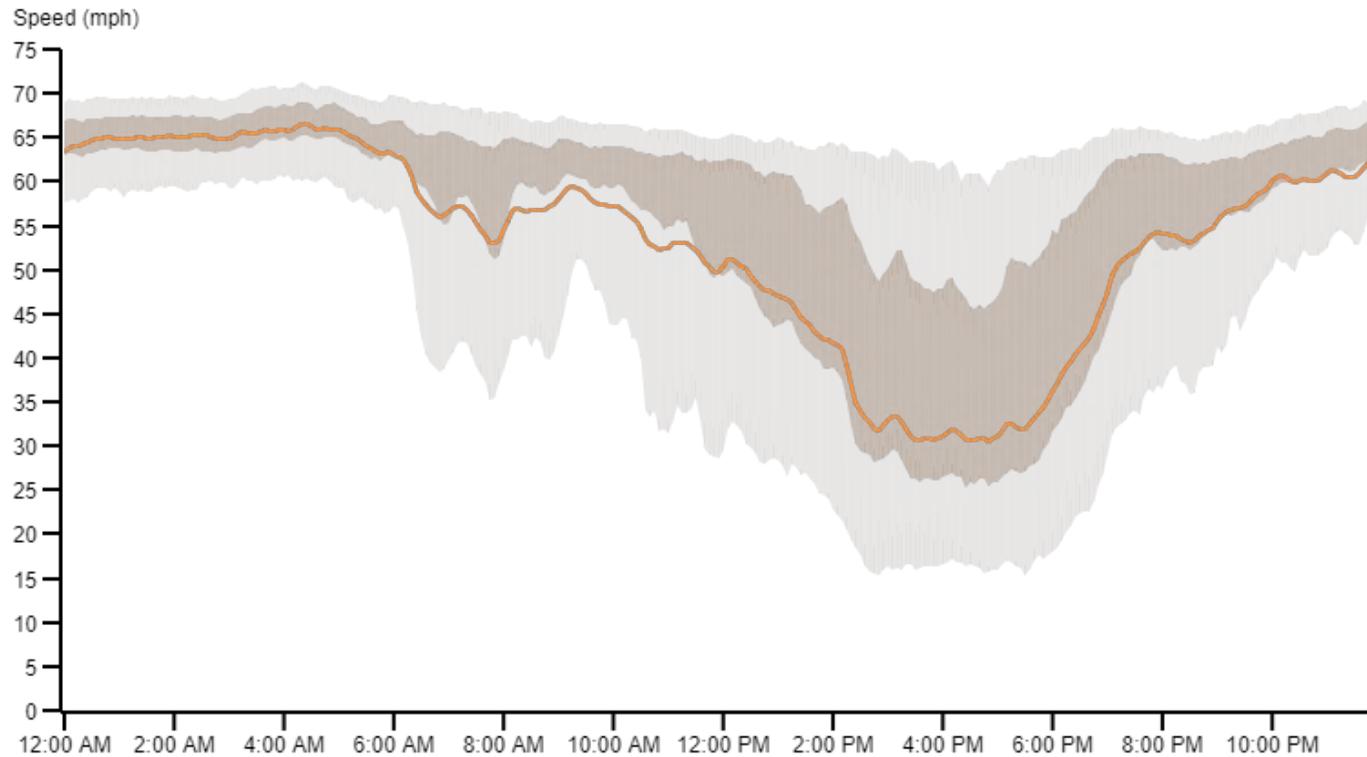


Notes: Afternoon congestion. Level of Service "F" from 3 to 6 pm. A primary cause appeared to be the discharge of traffic from NSA / Ft. Meade onto northbound MD 295 via the Connector Rd. Weaving and merging at the MD 32 interchange also contributed to the congestion.

#6 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 N @ CANINE RD | 3.03 | 1 h 43 m | 231 | 49,834 |

Speed for MD-295 N @ CANINE RD
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Northbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#6 Ranked Bottleneck – 2nd Quarter 2021 – Travel Times

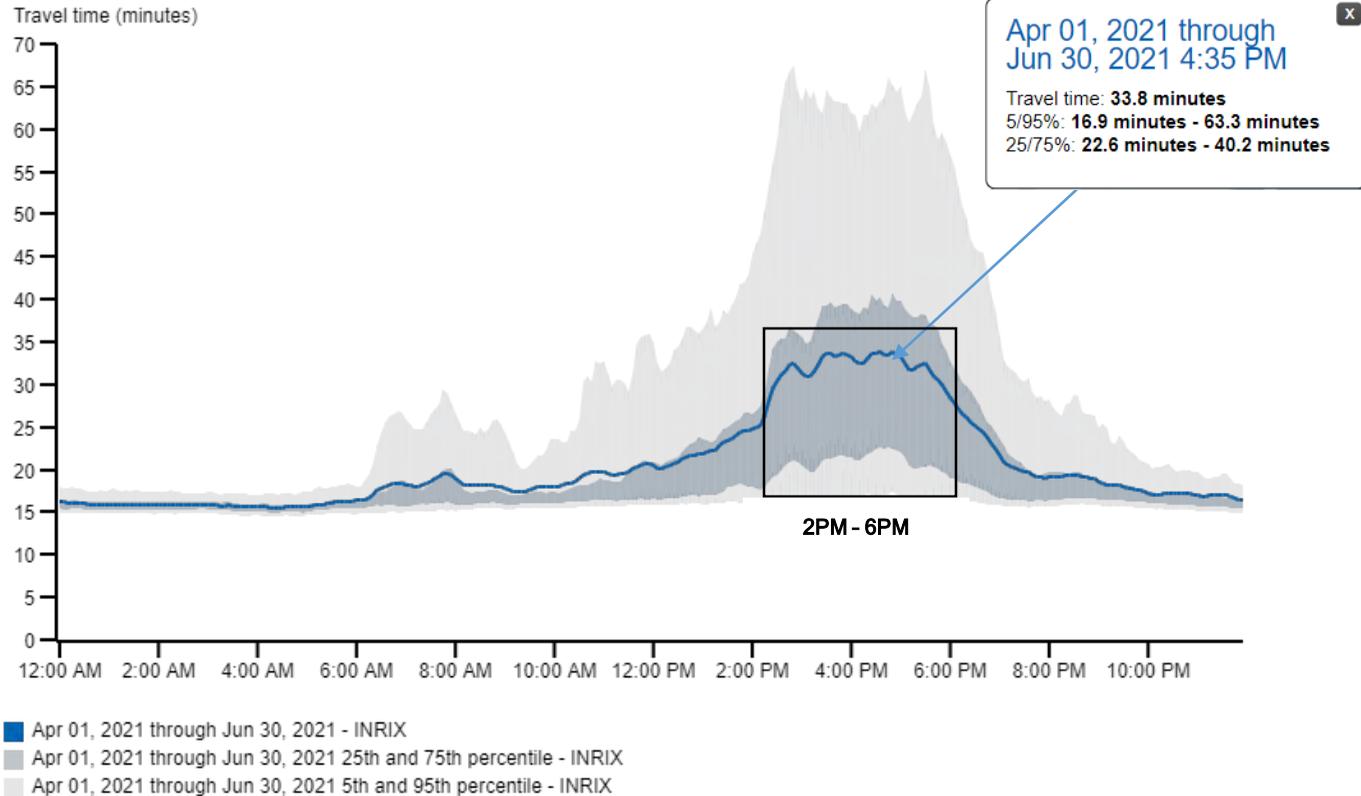
| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 N @ CANINE RD | 3.03 | 1 h 43 m | 231 | 49,834 |

Northbound

Travel time for MD-295 N @ CANINE RD

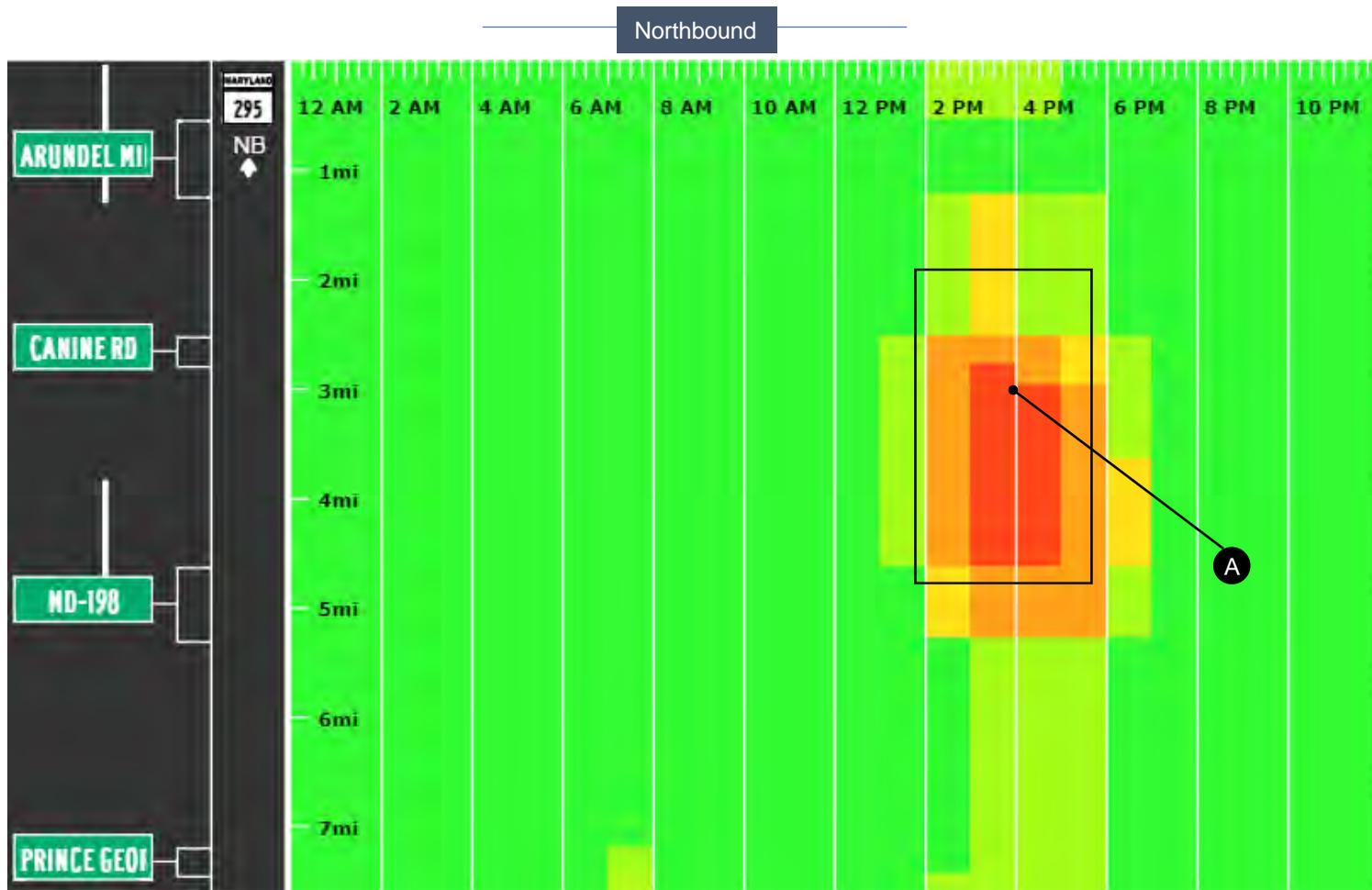
Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Northbound



#6 Ranked Bottleneck – 2nd Quarter 2021 – Congestion Scan

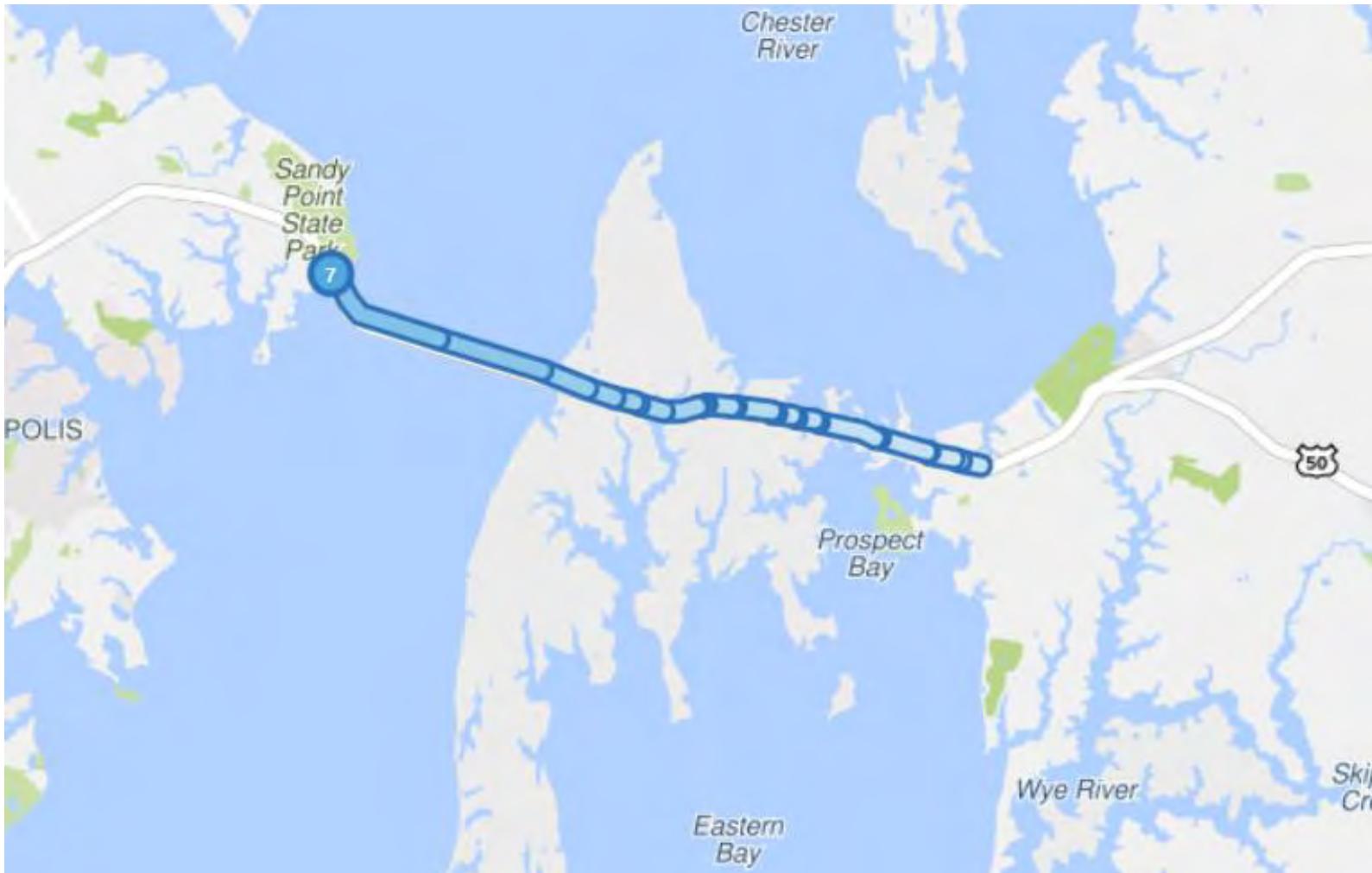
| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| MD-295 N @ CANINE RD | 3.03 | 1 h 43 m | 231 | 49,834 |



Locations of Congestion (NB)
 A: 2PM - 6PM : MD-198 to Canine Rd

#7 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 W @ BAY BRIDGE | 5.51 | 1 h 22 m | 610 | 33,676 |

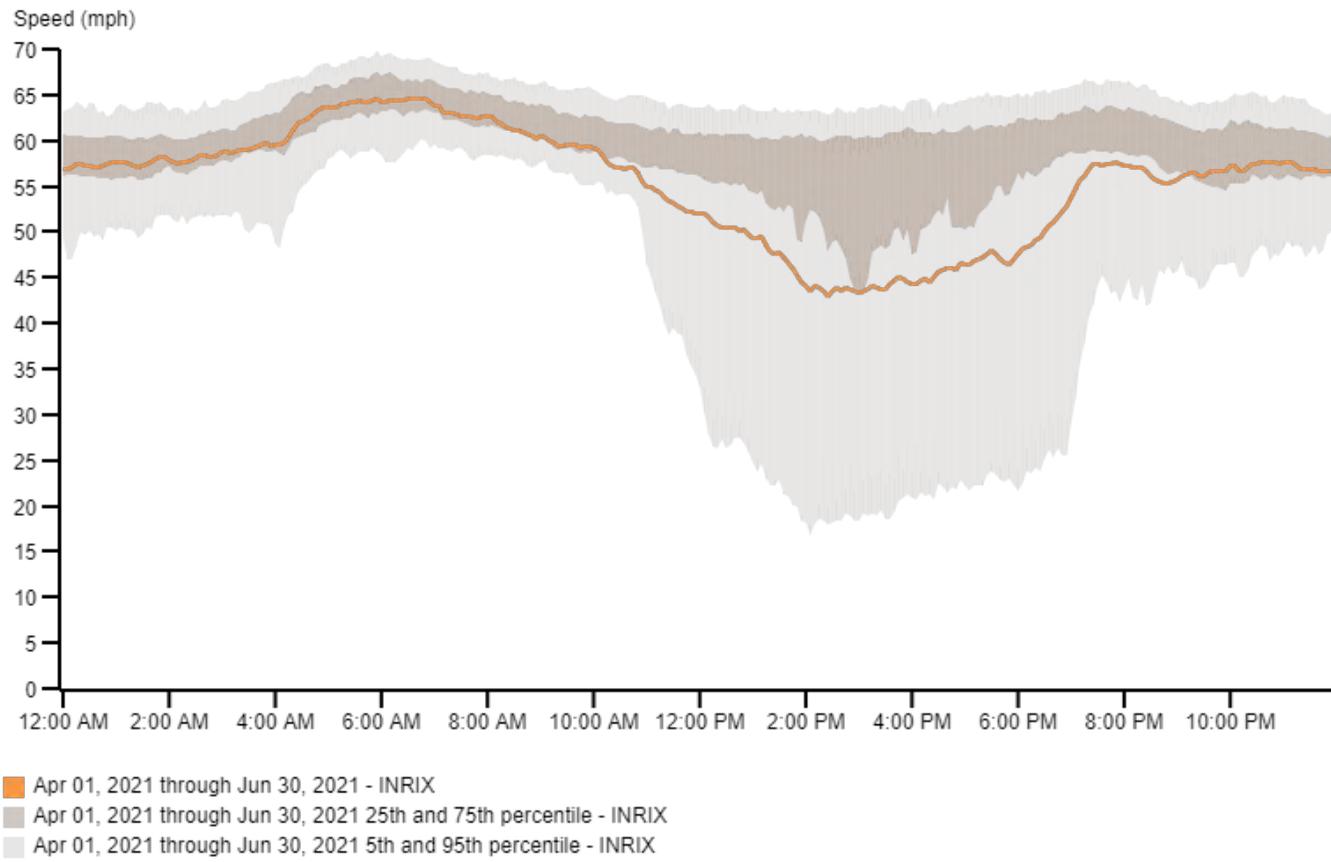


Notes: Preservation/maintenance work and deck rehabilitation on the westbound span. Two-way traffic will operate on the eastbound span during the full westbound span closures. High traffic volumes from return trips from Maryland beach resorts.

#7 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 W @ BAY BRIDGE | 5.51 | 1 h 22 m | 610 | 33,676 |

Speed for US-50 W @ Bay Bridge
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Westbound



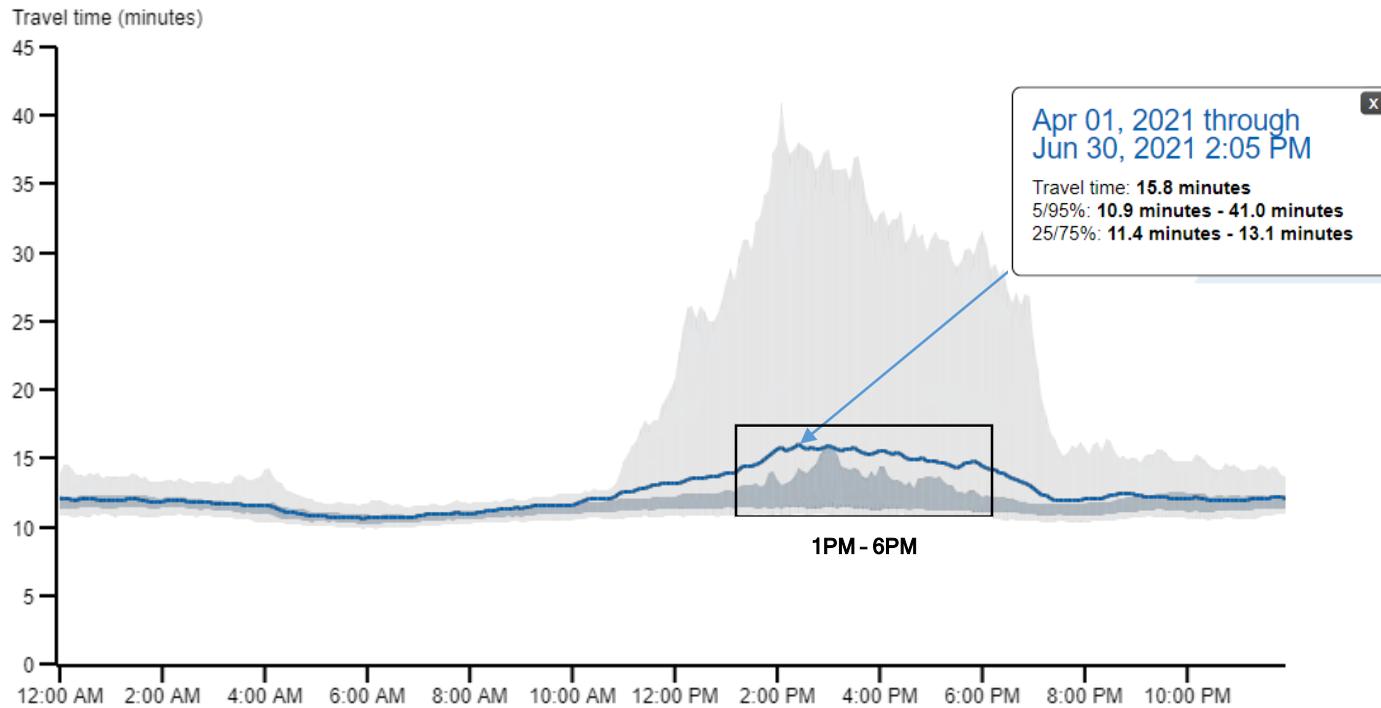
#7 Ranked Bottleneck – 2nd Quarter 2021 – Travel Times

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 W @ BAY BRIDGE | 5.51 | 1 h 22 m | 610 | 33,676 |

Westbound

Travel time for US-50 W @ WILLIAM PRESTON LANE BRG
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Westbound

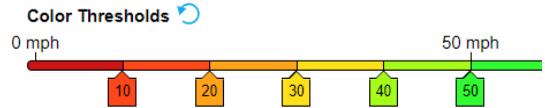
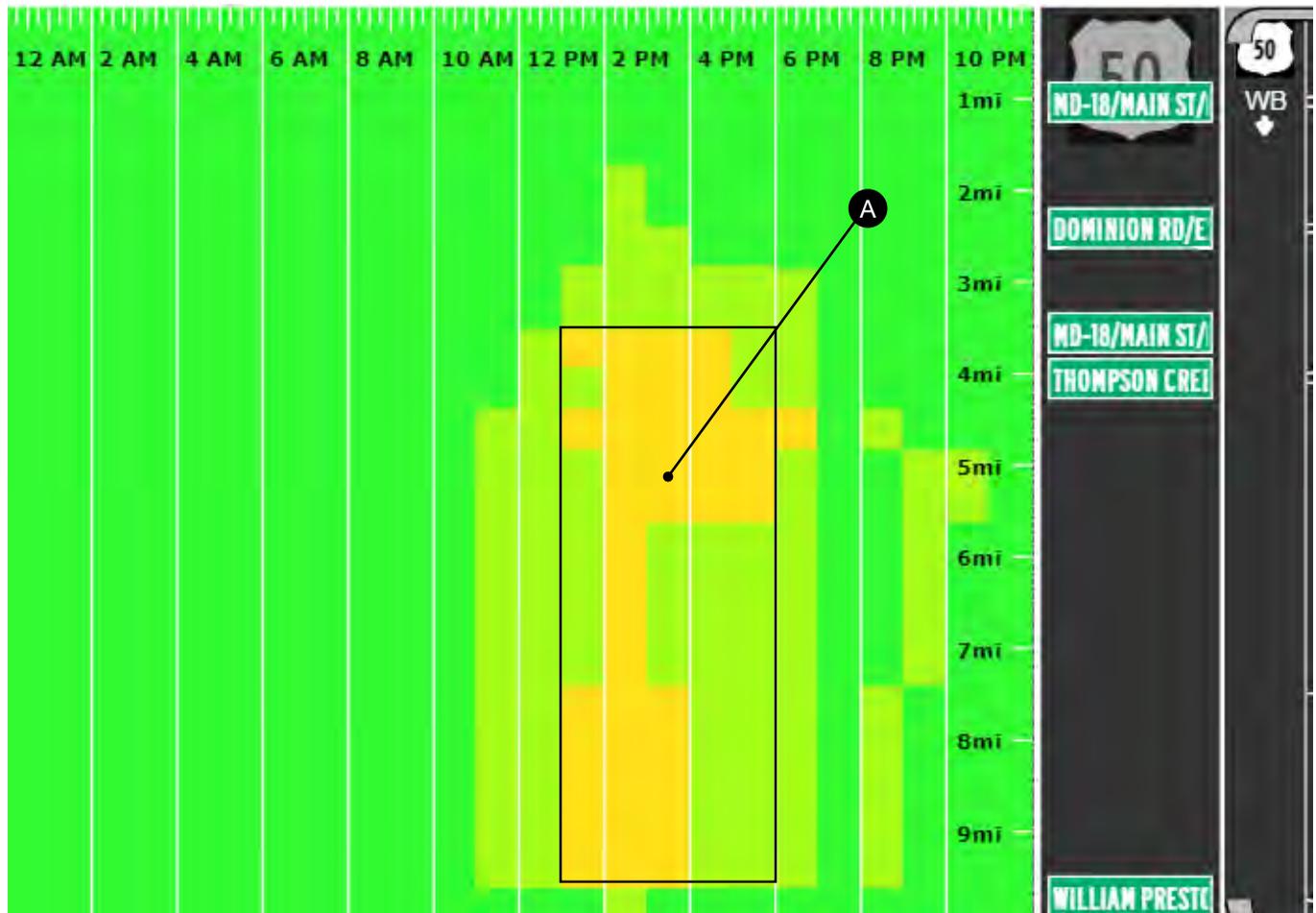


- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#7 Ranked Bottleneck – 2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------|----------------------------|------------------------|-----------------------|------------------------|
| US-50 W @ BAY BRIDGE | 5.51 | 1 h 22 m | 610 | 33,676 |

Westbound

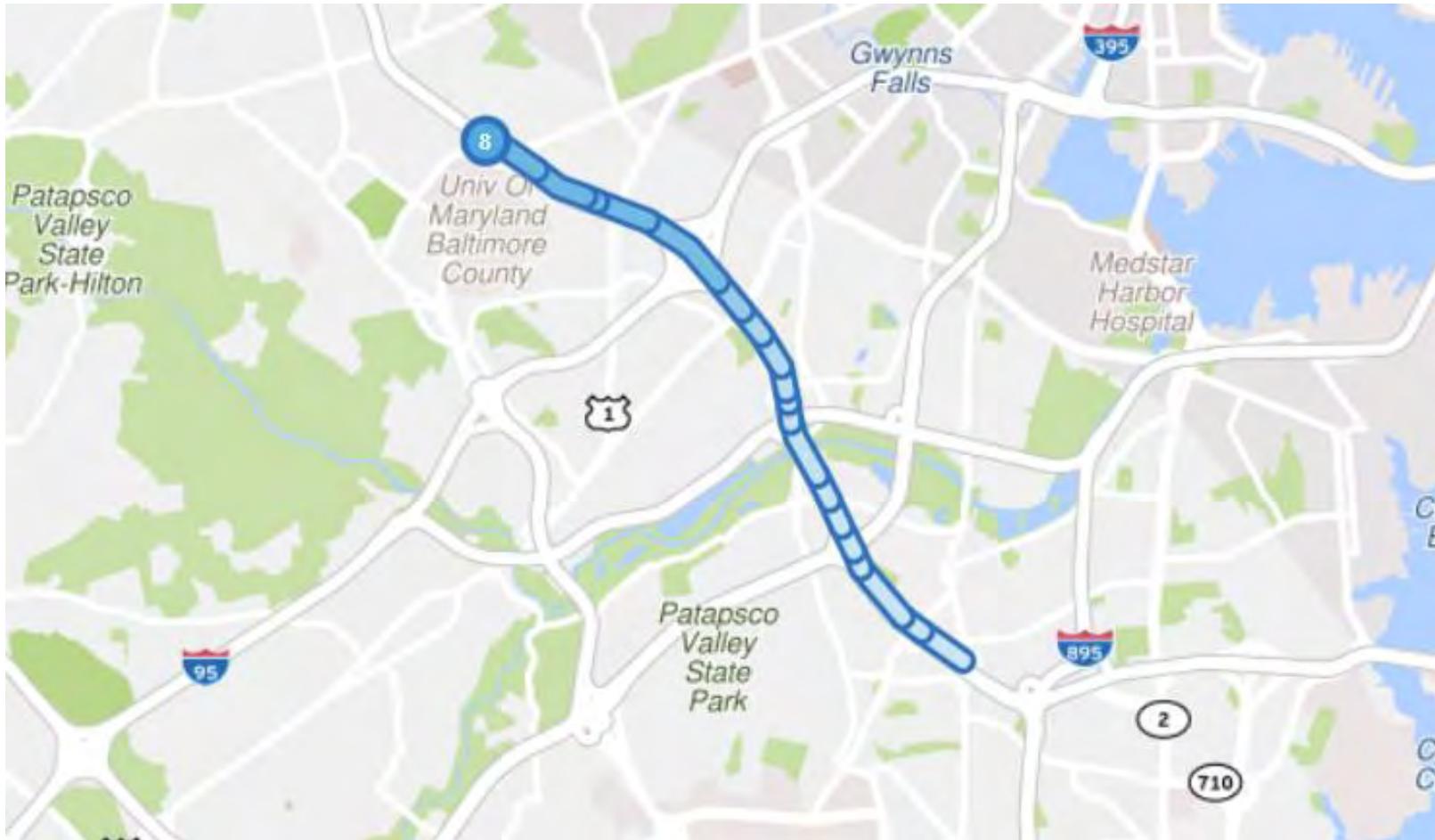


Locations of Congestion (WB)

A: 1PM -6PM: MD-18/Main St to Bay Bridge Toll Plaza

#8 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|---------------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ MD-372/WILKENS AVE/EXIT 12 | 1.92 | 1 h 26 m | 191 | 97,812 |



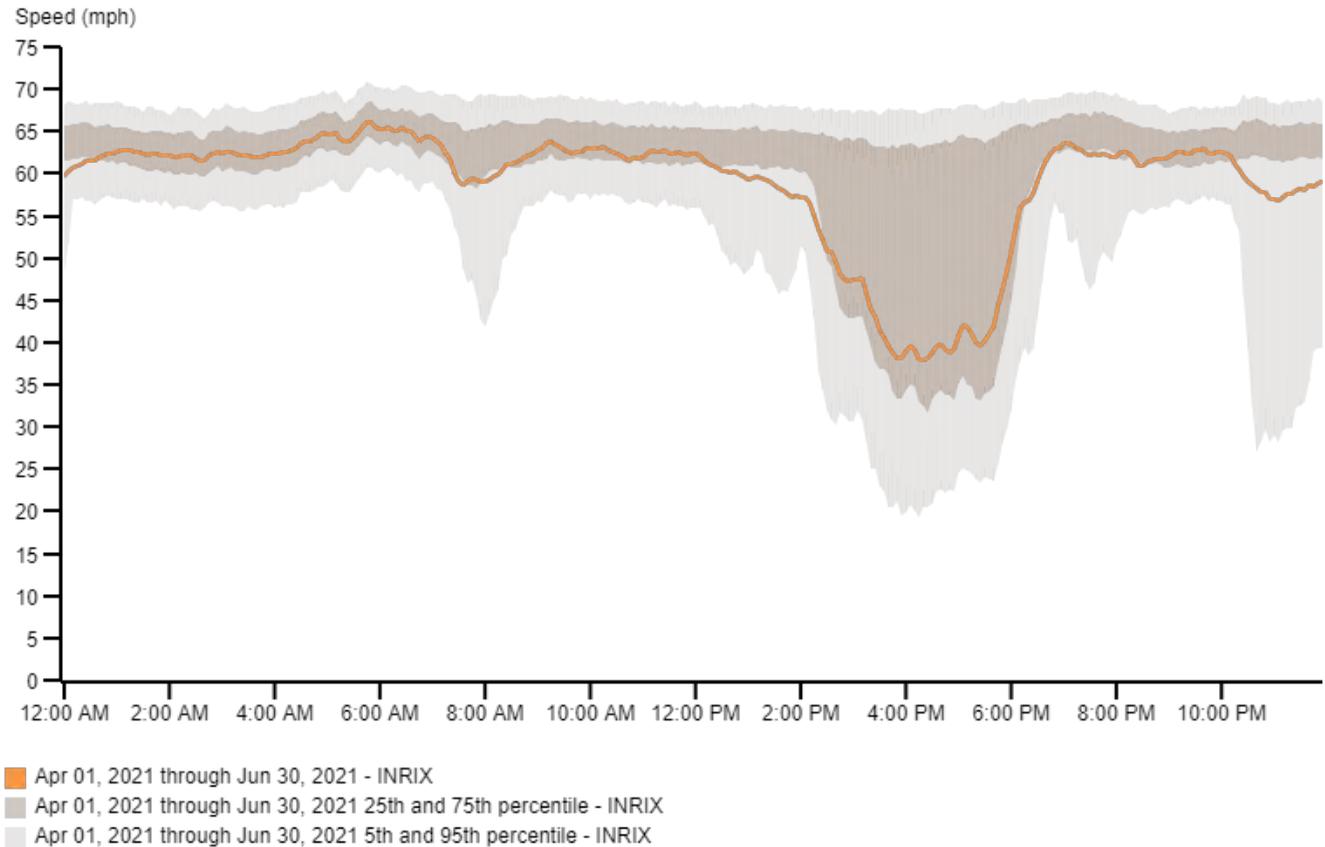
Notes: Afternoon congestion on the inner loop of the beltway with the greatest delays between MD 144 and the lane drop at I-70. High-volume ramps from Security Blvd, I-70 and US 40 contributed to the congestion.

#8 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|---------------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ MD-372/WILKENS AVE/EXIT 12 | 1.92 | 1 h 26 m | 191 | 97,812 |

Speed for I-695 IL @ MD-372/WILKENS AVE/EXIT 12
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

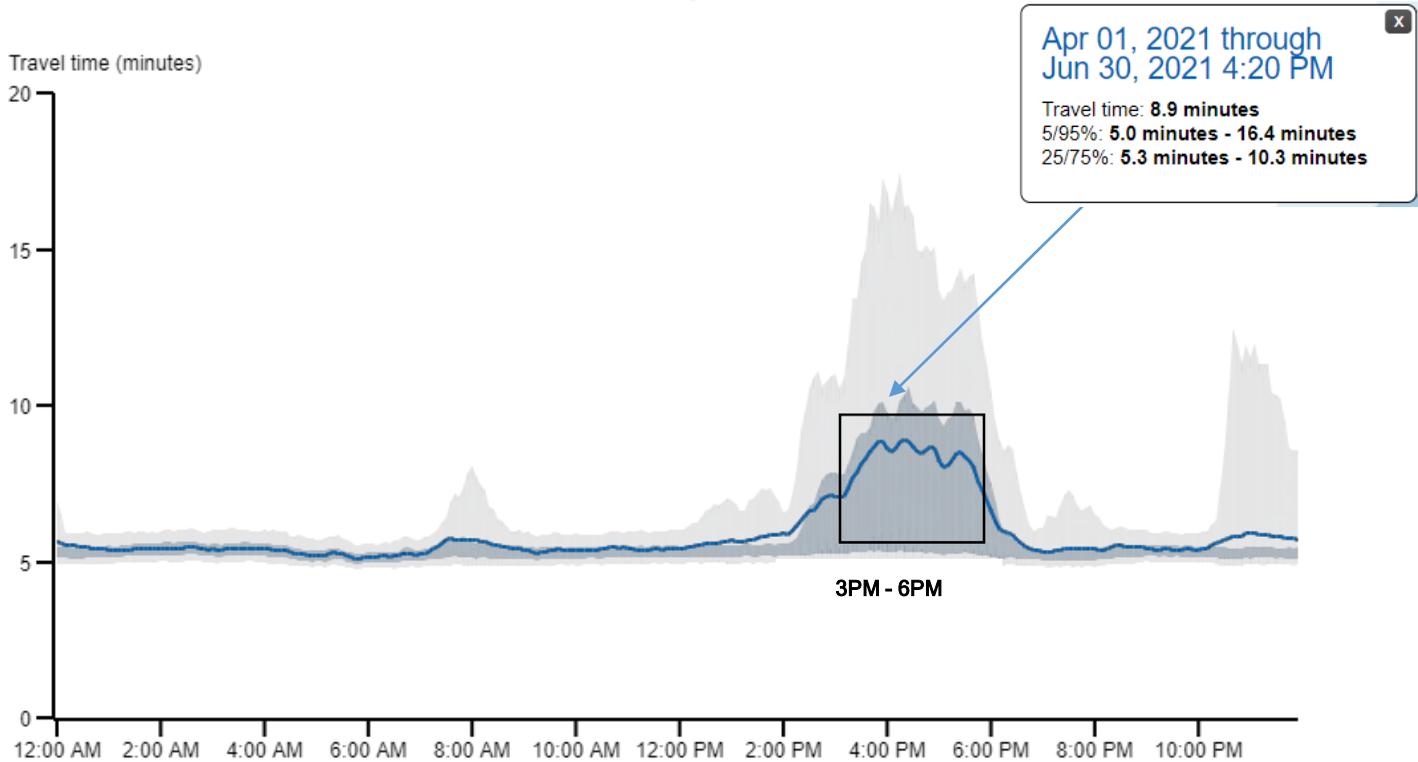
Inner Loop



#8 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|---------------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ MD-372/WILKENS AVE/EXIT 12 | 1.92 | 1 h 26 m | 191 | 97,812 |

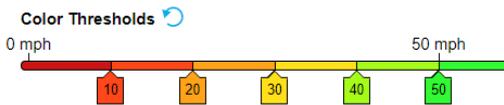
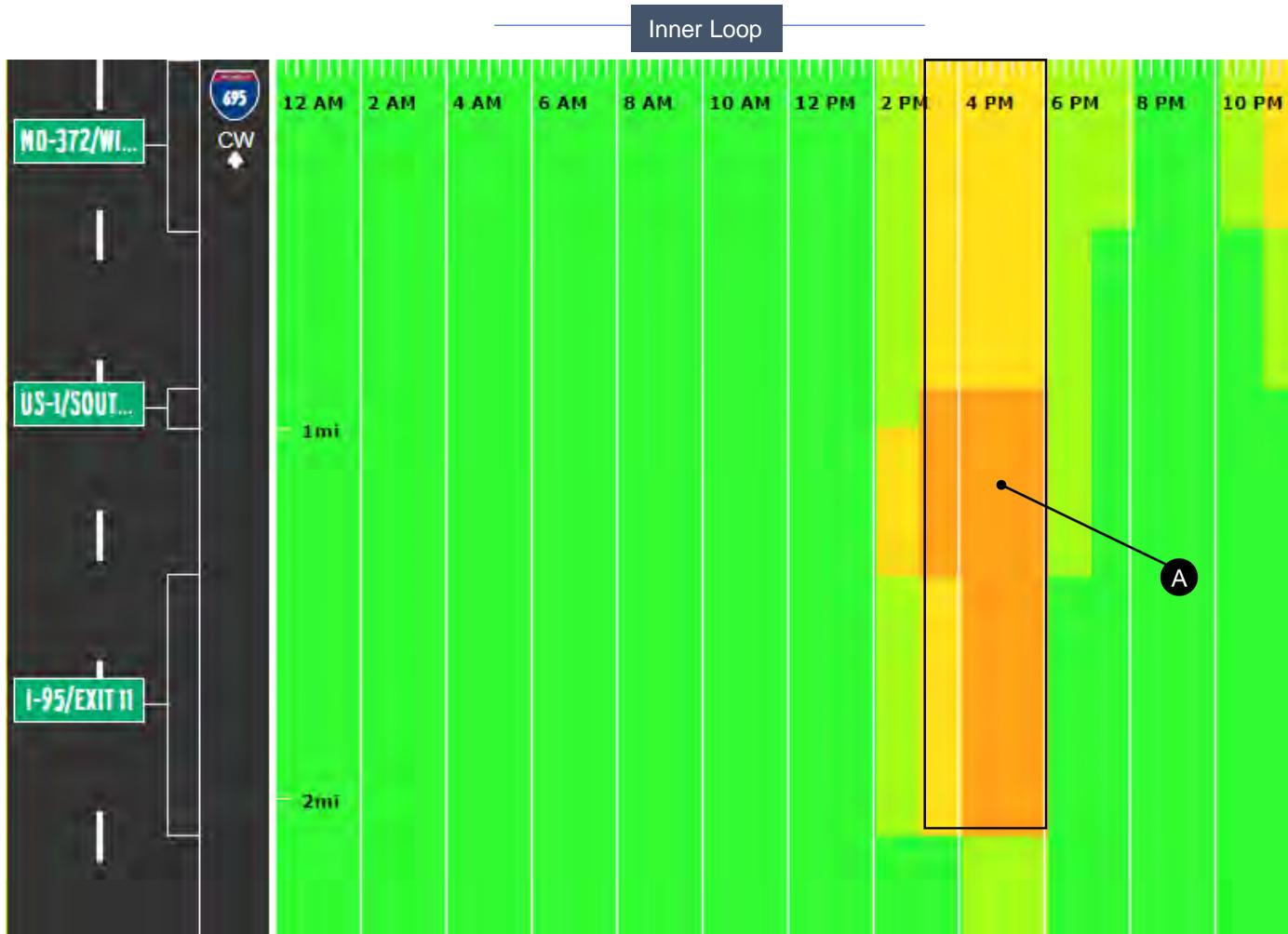
Inner Loop
 Travel time for I-695 IL @ MD-372/WILKENS AVE/EXIT 12
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Inner Loop



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#8 Ranked Bottleneck –2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|---------------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ MD-372/WILKENS AVE/EXIT 12 | 1.92 | 1 h 26 m | 191 | 97,812 |

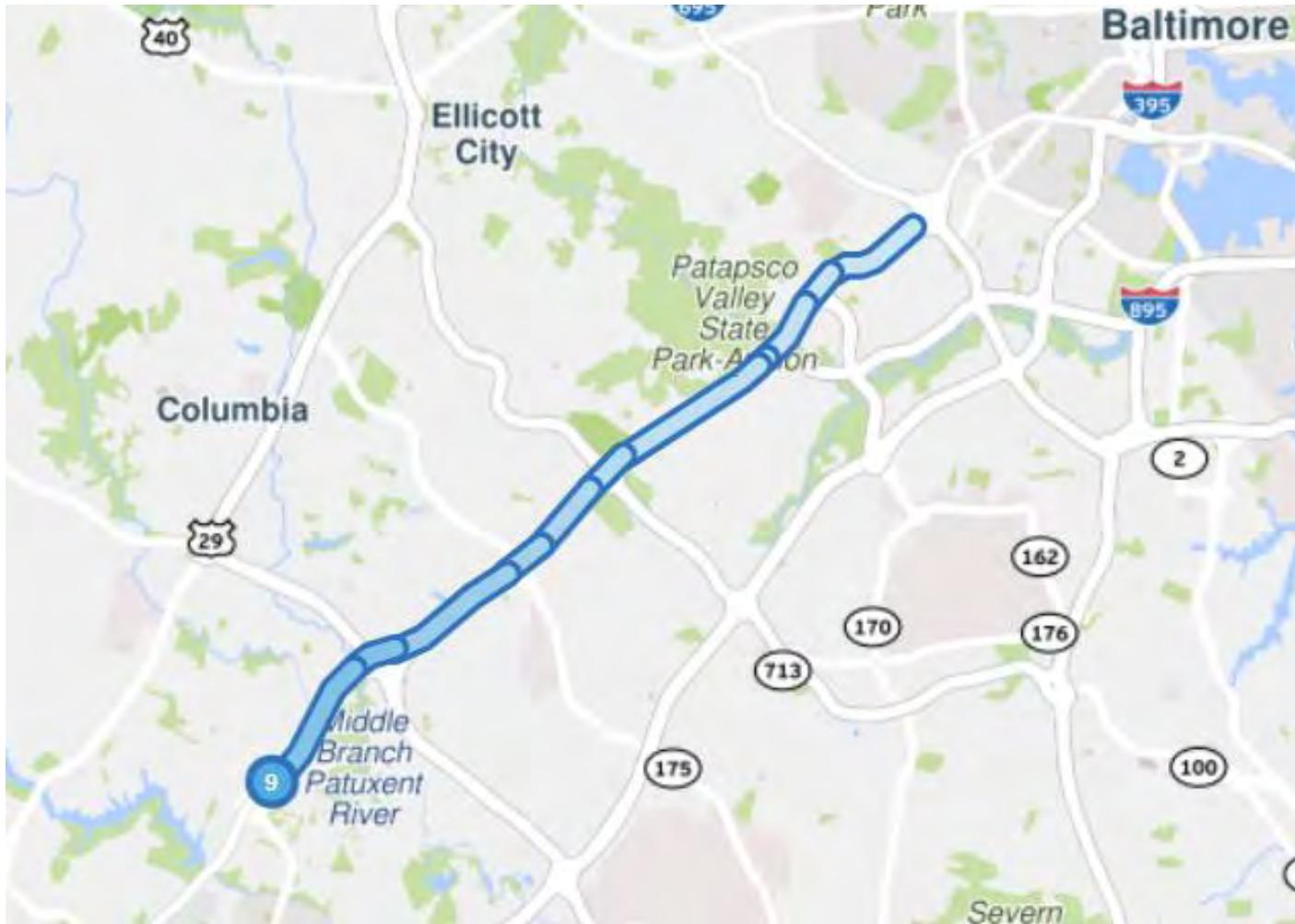


Locations of Congestion (IL)

A: 3PM - 6PM : I=95 to MD-372/Wilkens Ave

#9 Ranked Bottleneck – 2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-216/EXIT 35 | 4.35 | 45 m | 343 | 101,620 |

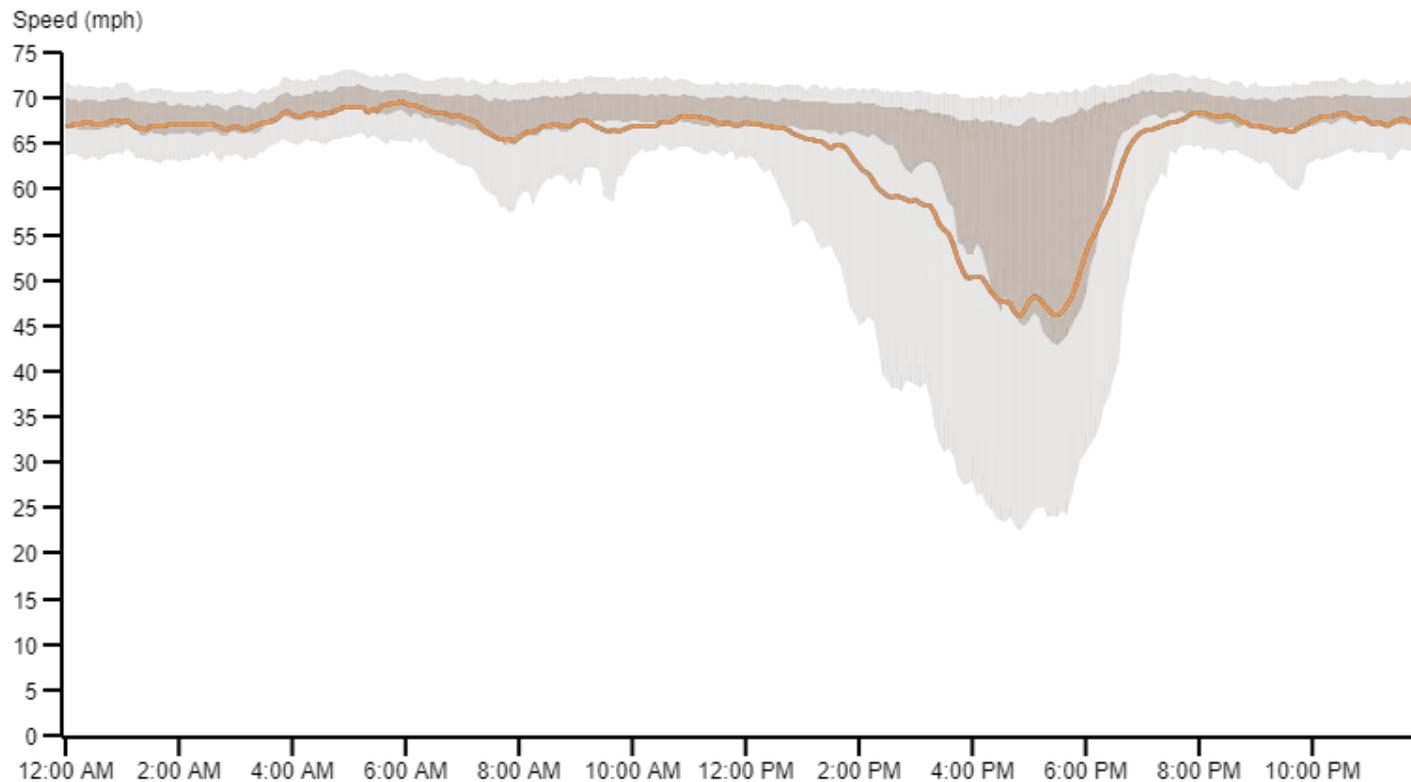


Notes: High traffic volume corridor primarily in the afternoon. Traffic in this corridor has 3 major merge areas at MD-216, MD-32 and MD-175 near Columbia, MD.

#9 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-216/EXIT 35 | 4.35 | 45 m | 343 | 101,620 |

Speed for I-95 S @ MD-216/EXIT 35
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Southbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

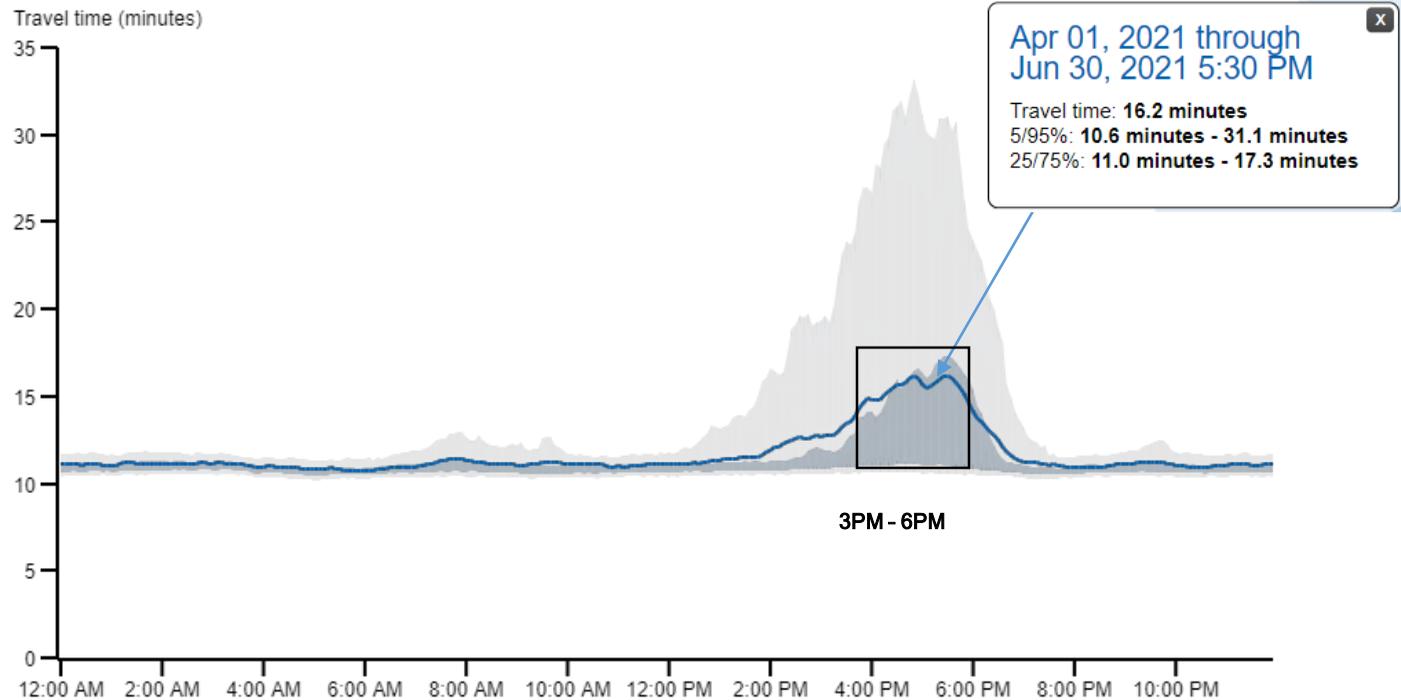
#9 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-216/EXIT 35 | 4.35 | 45 m | 343 | 101,620 |

Southbound

Travel time for I-95 S @ MD-216/EXIT 35
Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

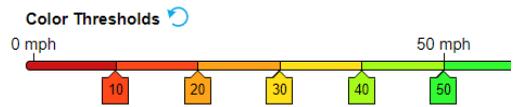
Southbound



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#9 Ranked Bottleneck –2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|-------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-95 S @ MD-216/EXIT 35 | 4.35 | 45 m | 343 | 101,620 |

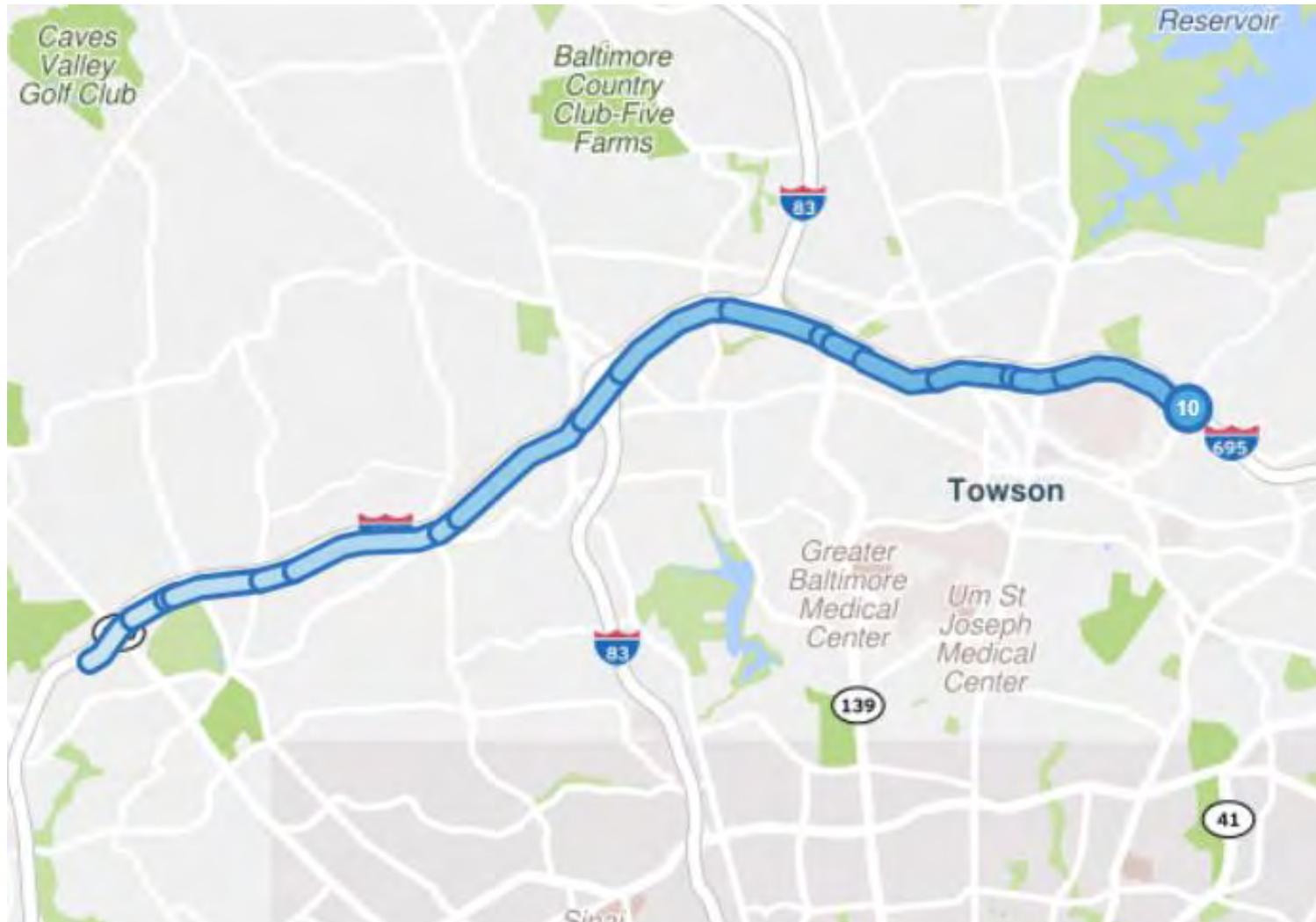


Locations of Congestion (SB)

A: 3PM - 6PM: MD-175 to MD-216

#10 Ranked Bottleneck –2nd Quarter 2021 – Location Map

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ PROVIDENCE RD/EXIT 28 | 4.11 | 49 m | 314 | 87,902 |



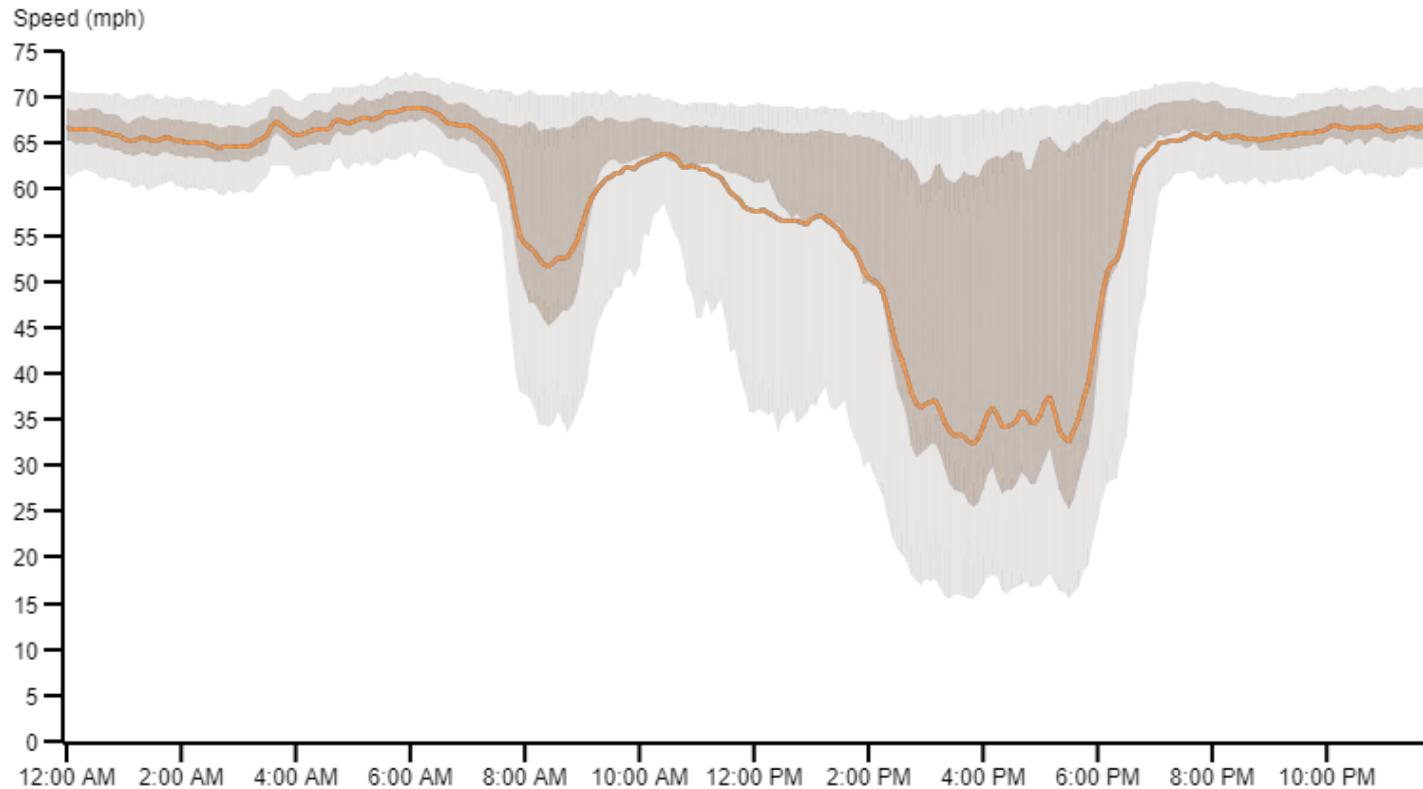
Notes: Congestion was most severe between I-83 and Providence Rd in the PM rush. Factors contributing to this long-standing and extended congested zone: merging and weaving associated with traffic at each interchange; and a lane drop (to three lanes) at MD 45 (York Rd).

#10 Ranked Bottleneck – 2nd Quarter 2021 – Average Speeds Graph

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ PROVIDENCE RD/EXIT 28 | 4.11 | 49 m | 314 | 87,902 |

Speed for I-695 IL @ PROVIDENCE RD/EXIT 28
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021

Inner Loop

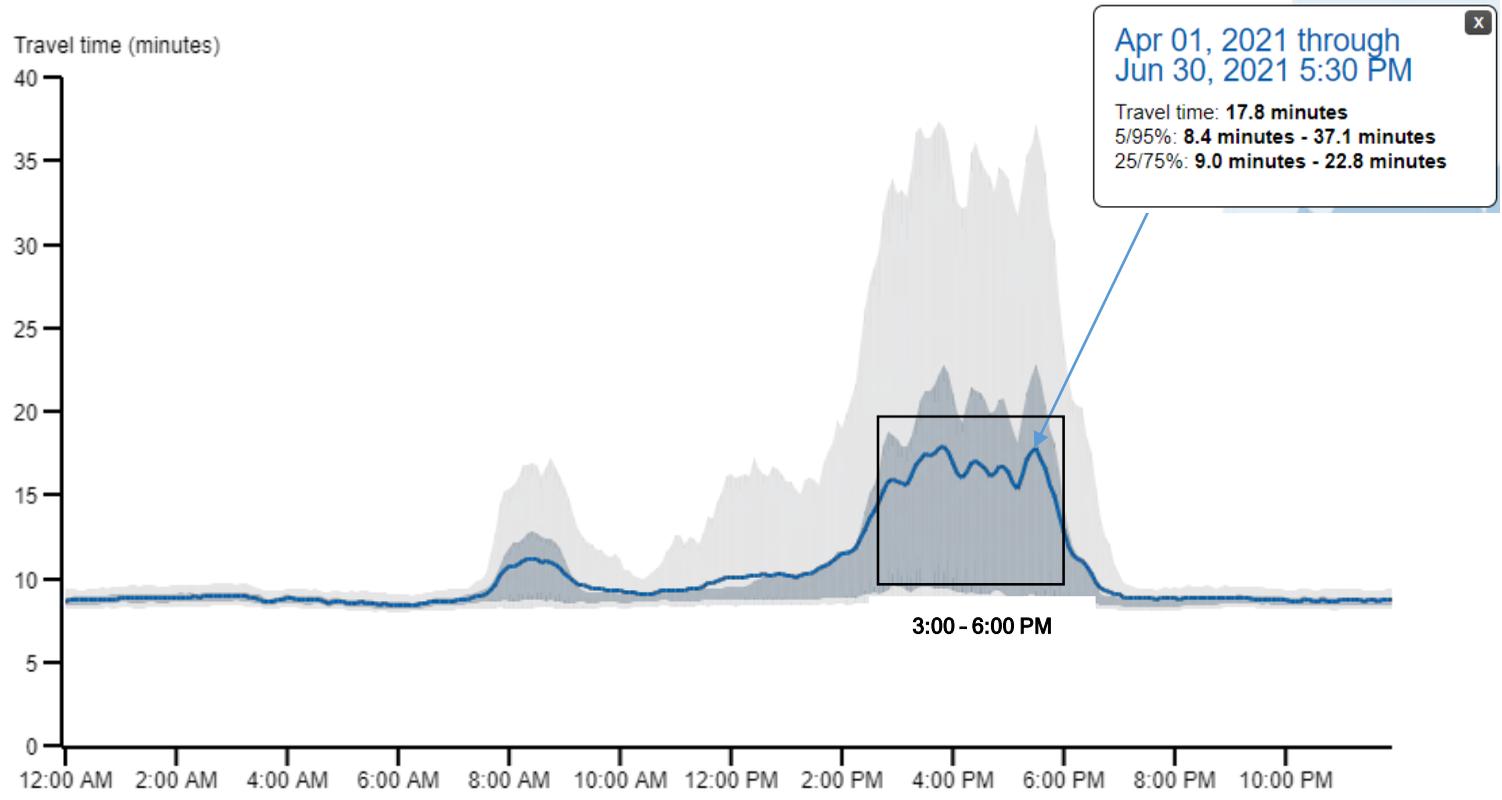


- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#10 Ranked Bottleneck –2nd Quarter 2021 – Travel Times

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ PROVIDENCE RD/EXIT 28 | 4.11 | 49 m | 314 | 87,902 |

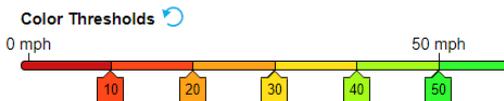
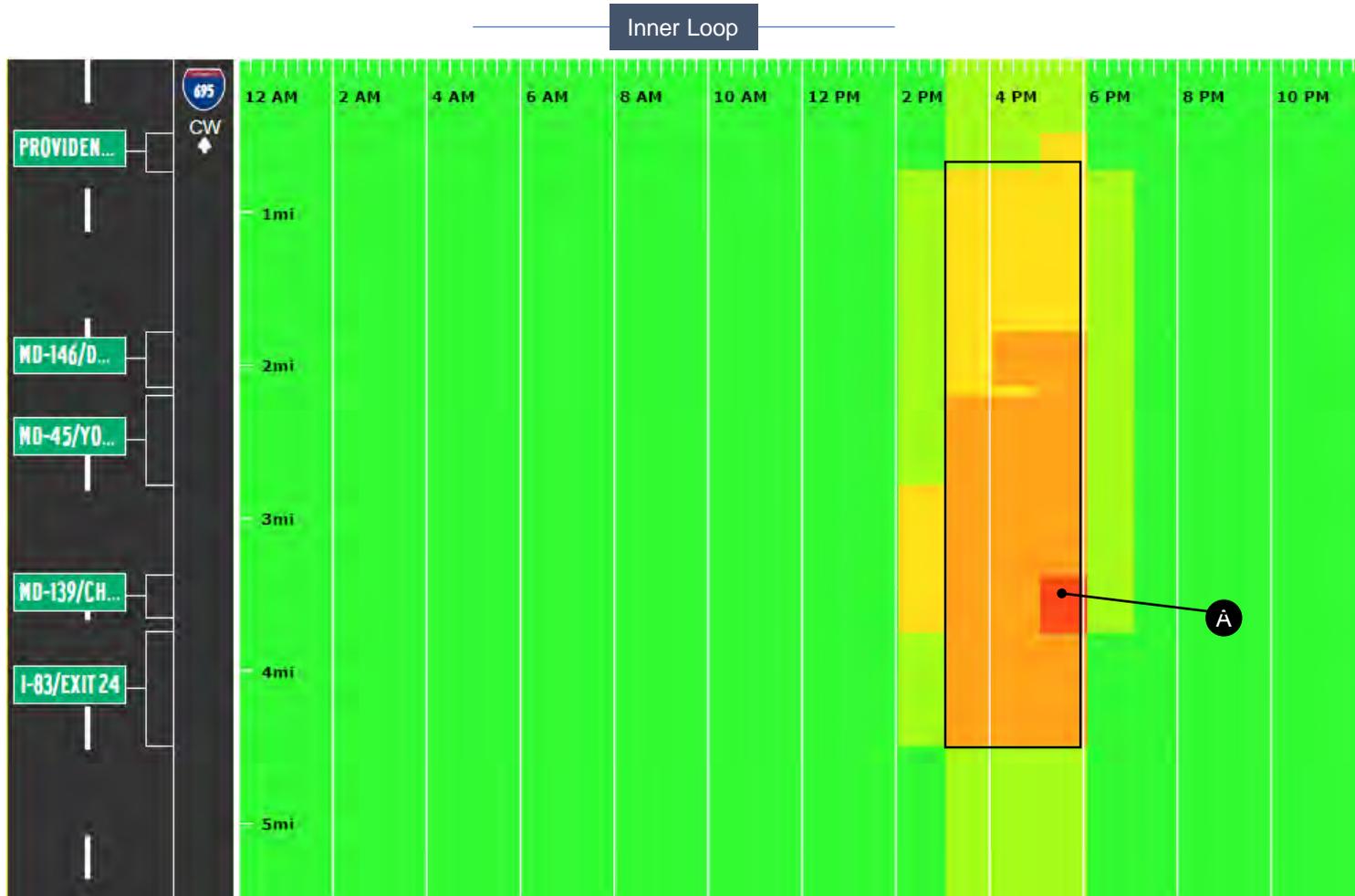
Inner Loop
 Travel time for I-695 IL @ PROVIDENCE RD/EXIT 28
 Averaged per five minutes for Apr 01, 2021 through Jun 30, 2021
 Inner Loop



- Apr 01, 2021 through Jun 30, 2021 - INRIX
- Apr 01, 2021 through Jun 30, 2021 25th and 75th percentile - INRIX
- Apr 01, 2021 through Jun 30, 2021 5th and 95th percentile - INRIX

#10 Ranked Bottleneck –2nd Quarter 2021 – Congestion Scan

| Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|----------------------------------|----------------------------|------------------------|-----------------------|------------------------|
| I-695 IL @ PROVIDENCE RD/EXIT 28 | 4.11 | 49 m | 314 | 87,902 |



Locations of Congestion (IL)

A: 3:00 - 6:00PM: I-83 ramps to Providence Rd

Top 10 Bottlenecks on Non-Limited Access Roads

Top 10 Bottlenecks in the Baltimore Region – Non Limited Access Roads – 2nd Quarter 2021

Ranked by Base Impact - the aggregation of queue length over time for congestion at each location in mile minutes. It is then weighted by **Total Delay** – Raw speed drop weighted by VMT factor.

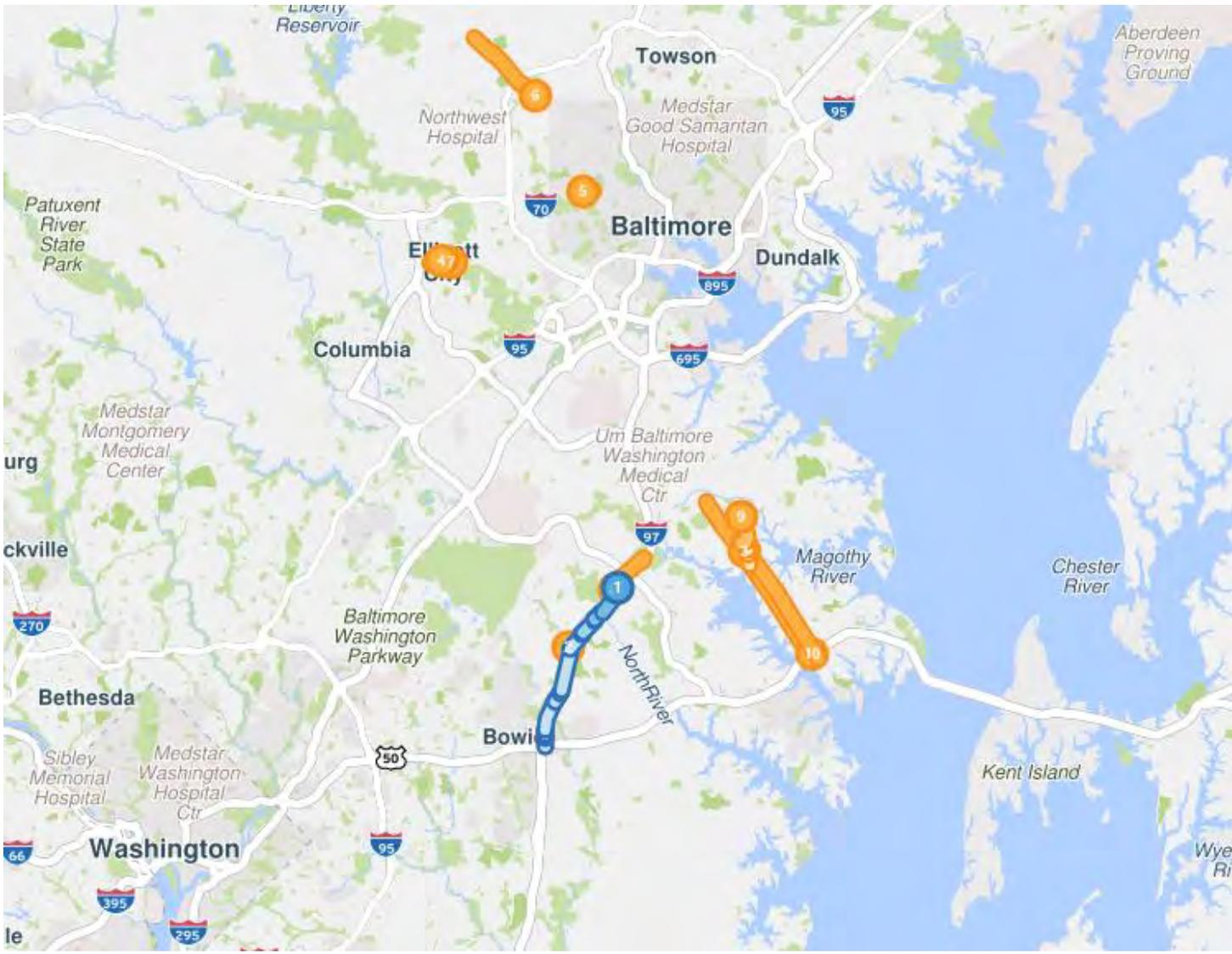
| Rank | Location | Average max length (miles) | Average Daily Duration | All Events/ Incidents | Volume Estimate (AADT) |
|------|--|----------------------------|------------------------|-----------------------|------------------------|
| 1 | MD-3 N @ MD-175/ANNAPOLIS RD/MILLERSVILLE RD | 2.06 | 1 h 22 m | 12 | 34,176 |
| 2 | MD-3 N @ MD-424/DAVIDSONVILLE RD/CONWAY RD | 2.18 | 1 h 21 m | 6 | 35,428 |
| 3 | MD-2 N @ ROBINSON RD | 2.93 | 1 h 09 m | 18 | 28,969 |
| 4 | MD-144 W @ ELLICOTT MILLS DR | 0.48 | 8 h 58 m | 15 | 9,705 |
| 5 | WINDSOR MILL RD @ GWYNNS FALLS PKWY | 0.38 | 10 h 51 m | No data | 9,669 |
| 6 | MD-140 E @ SUDBROOK LA | 0.55 | 6 h 4 m | 59 | 15,299 |
| 7 | MD-144 E @ WESTCHESTER AVE | 0.5 | 9 h 31 m | 8 | 6,663 |
| 8 | MD-3 S @ MD-175/ANNAPOLIS RD/MILLERSVILLE RD | 0.52 | 2 h 44 m | 10 | 28,236 |
| 9 | MD-648 N @ MAGOTHY BRIDGE RD | 1.42 | 56 m | No Data | 27,389 |
| 10 | MD-2 S @ US-301/US-50 | 1.49 | 17 m | 13 | 27,362 |

IL = Inner Loop

OL = Outer Loop

Top 10 Bottlenecks – Non Limited Access Roads – 2nd Quarter 2021

Overview Map



Ranked Bottleneck Lists by Jurisdiction

Top 25 Bottlenecks in Local Jurisdictions- 2nd Quarter 2021

Ranked by Base Impact - the aggregation of queue length over time for congestion at each location in mile minutes. It is then weighted by **Total Delay** – Raw speed drop weighted by VMT factor.

Anne Arundel County

| Rank | Location |
|------|--|
| 1 | US-50 E @ BAY BRIDGE |
| 2 | MD-295 S @ MD-198 |
| 3 | US-50 W @ BAY BRIDGE |
| 4 | MD-295 N @ CANINE RD |
| 5 | MD-295 N @ MD-175 |
| 6 | I-97 S @ MD-178/EXIT 5 |
| 7 | MD-3 N @ MD-175/ANNAPOLIS RD/MILLERSVILLE RD |
| 8 | MD-3 N @ MD-424/DAVIDSONVILLE RD/CONWAY RD |
| 9 | MD-295 N @ MD-32 |
| 10 | MD-295 S @ CANINE RD |
| 11 | MD-2 N @ ROBINSON RD |
| 12 | MD-295 N @ PRINCE GEORGE'S/ARUNDEL CO LINE |
| 13 | MD-295 N @ I-195 |
| 14 | MD-295 N @ MD-100 |
| 15 | US-50 E @ BAY BRIDGE TOLL PLAZA |
| 16 | MD-295 S @ MD-175 |
| 17 | US-50 E @ MD-648/BALTIMORE ANNAPOLIS BLVD |
| 18 | I-97 S @ US-50/US-301 |
| 19 | I-695 CCW @ MD-170/CAMP MEADE RD/EXIT 6 |
| 20 | MD-100 E @ MD-170/TELEGRAPH RD/EXIT 11 |
| 21 | MD-3 S @ MD-175/ANNAPOLIS RD/MILLERSVILLE RD |
| 22 | I-695 CCW @ MD-295/WASH-BALT PKY/EXIT 7 |
| 23 | MD-648 N @ MAGOTHY BRIDGE RD |
| 24 | MD-2 S @ US-301/US-50 |
| 25 | COLLEGE PKY S @ MD-179/CAPE ST CLAIRE RD |

Baltimore City

| Rank | Location |
|------|--|
| 1 | I-895 N @ HARBOR TUNNEL THWY (NORTH) |
| 2 | WINDSOR MILL RD W @ GWYNNNS FALLS PKWY |
| 3 | I-83 S @ MD-25/FALLS RD/EXIT 8 |
| 4 | HOWARD ST S @ W CONWAY ST |
| 5 | I-895 S @ HARBOR TUNNEL THWY (SOUTH) |
| 6 | I-95 N @ KEITH AVE/EXIT 56 |
| 7 | HOWARD ST S @ W PRATT ST |
| 8 | MD-295 N @ BAYARD ST |
| 9 | MARTIN L KING JR BLVD S @ BALTIMORE ST |
| 10 | I-895 N @ HOLABIRD AVE/EXIT 10 |
| 11 | MT ROYAL AVE W @ US-1/W NORTH AVE |
| 12 | FOREST PARK AVE N @ WINDSOR MILL RD |
| 13 | I-895 S @ O'DONNELL ST/EXIT 11 |
| 14 | I-95 N @ FORT MCHENRY TUNNEL |
| 15 | BOSTON ST W @ S CHESTER ST/FLEET ST |
| 16 | W NORTHERN PKY E @ ROLAND AVE |
| 17 | US-40 W @ BROADWAY |
| 18 | W NORTHERN PKY W @ I-83 |
| 19 | MD-173 S @ FORT ARMISTEAD RD |
| 20 | I-83 N @ COLD SPRING LN/EXIT 9 |
| 21 | I-95 N @ I-95 (EAST) |
| 22 | US-40 E @ MD-2/ST PAUL PL |
| 23 | US-40 W @ ATHOL AVE |
| 24 | US-40 W @ MD-295/PACA ST |
| 25 | US-40 E @ WOLFE ST |

Top 25 Bottlenecks in Local Jurisdictions- 2nd Quarter 2021

Ranked by Base Impact - the aggregation of queue length over time for congestion at each location in mile minutes. It is then weighted by **Total Delay** – Raw speed drop weighted by VMT factor.

Baltimore County

| Rank | Location |
|------|--|
| 1 | I-695 IL @ MD-372/WILKENS AVE/EXIT 12 |
| 2 | I-695 IL @ PROVIDENCE RD/EXIT 28 |
| 3 | I-95 N @ MD-152/EXIT 74 |
| 4 | I-95 S @ MD-43/WHITE MARSH BLVD/EXIT 67 |
| 5 | I-695 IL @ MD-122/SECURITY BLVD/EXIT 17 |
| 6 | I-695 OL @ US-40/EXIT 15 |
| 7 | I-70 E @ I-695/EXIT 91 |
| 8 | I-695 OL @ I-70/EXIT 16 |
| 9 | I-695 OL @ MD-567/CROMWELL BR RD/EXIT 29 |
| 10 | I-695 IL @ EDMONDSON AVE/EXIT 14 |
| 11 | I-695 OL @ MD-122/SECURITY BLVD/EXIT 17 |
| 12 | I-695 OL @ MD-26/EXIT 18 |
| 13 | I-695 IL @ I-83/MD-25/EXIT 23 |
| 14 | I-95 N @ I-695/EXIT 49 |
| 15 | I-695 IL @ MD-147/HARFORD RD/EXIT 31 |
| 16 | I-695 IL @ MD-41/PERRING PKY/EXIT 30 |
| 17 | I-695 IL @ MD-542/LOCK RAVEN BLVD/EXIT 29 |
| 18 | I-695 OL @ EDMONDSON AVE/EXIT 14 |
| 19 | I-70 W @ US-29/EXIT 87 |
| 20 | MD-295 N @ MD-648/ANNAPOLIS RD/WATERVIEW AVE |
| 21 | I-695 IL @ I-795/NORTHWEST EXPY/EXIT 19 |
| 22 | I-695 IL @ US-40/EXIT 15 |
| 23 | I-695 IL @ I-70/EXIT 16 |
| 24 | I-695 OL @ MD-41/PERRING PKY/EXIT 30 |
| 25 | MD-140 E @ SUDBROOK LN |

Carroll County

| Rank | Location |
|------|--|
| 1 | MD-30 N @ MD-27/MANCHESTER RD |
| 2 | MD-140 W @ MD-91/GAMBER RD/EMORY RD |
| 3 | MD-30 S @ MD-27/MANCHESTER RD |
| 4 | MD-144 E @ MD-27/RIDGE RD |
| 5 | MD-97 N @ MD-496/BACHMANS VALLEY RD |
| 6 | MD-27 N @ MD-30/MAIN ST |
| 7 | MD-140 W @ MD-194/YORK ST/FREDERICK ST |
| 8 | MD-140 W @ MD-27/MANCHESTER RD |
| 9 | MD-97 N @ MAGNA WAY/AIRPORT DR |
| 10 | MD-482 W @ MD-27/MANCHESTER RD |
| 11 | MD-26 E @ MD-32/SYKESVILLE RD |
| 12 | MD-140 W @ MD-97/MALCOLM DR |
| 13 | MD-32 W @ MD-26/LIBERTY RD |
| 14 | MD-27 N @ MD-482/HAMPSTEAD MEXICO RD |
| 15 | MD-91 N @ MD-140/BALTIMORE BLVD |
| 16 | MD-26 W @ MD-32/SYKESVILLE RD |
| 17 | MD-27 S @ MD-30/MAIN ST |
| 18 | MD-27 N @ MD-26/LIBERTY RD |
| 19 | MD-91 S @ MD-32/SYKESVILLE RD |
| 20 | MD-31 W @ MD-32/W MAIN ST |
| 21 | MD-26 E @ GEORGETOWN BLVD |
| 22 | MD-140 E @ MD-97/MALCOLM DR |
| 23 | MD-32 E @ MD-26/LIBERTY RD |
| 24 | MD-97 S @ MD-32/SYKESVILLE RD |
| 25 | MD-140 E @ GOES MILL RD |

Top 25 Bottlenecks in Local Jurisdictions- 2nd Quarter 2021

Ranked by Base Impact - the aggregation of queue length over time for congestion at each location in mile minutes. It is then weighted by **Total Delay** – Raw speed drop weighted by VMT factor.

Harford County

| Rank | Location |
|------|---|
| 1 | I-95 N @ MD-24/EXIT 77 |
| 2 | I-95 S @ MD-24/EXIT 77 |
| 3 | I-95 N @ MILLARD E TYDINGS MEMORIAL BRG |
| 4 | I-95 N @ MD-543/EXIT 80 |
| 5 | I-95 S @ MD-152/EXIT 74 |
| 6 | I-95 S @ MARYLAND HOUSE |
| 7 | I-95 S @ MD-543/EXIT 80 |
| 8 | MD-152 N @ OLD JOPPA RD |
| 9 | I-95 N @ MD-152/EXIT 74 |
| 10 | I-95 N @ MD-22/MD-132/EXIT 85 |
| 11 | MD-543 S @ US-1/HICKORY BYP |
| 12 | US-1-BR S @ MD-24/VIETNAM VETS MEMORIAL HWY |
| 13 | I-95 N @ MD-155/EXIT 89 |
| 14 | I-95 N @ MARYLAND HOUSE |
| 15 | MD-24 N @ I-95/JOHN F KENNEDY MEMORIAL HWY |
| 16 | US-1 S @ MD-24 |
| 17 | MD-924 S @ MD-24/VIETNAM VETS MEMORIAL HWY |
| 18 | MD-152 N @ SINGER RD |
| 19 | US-1 N @ MD-222/SUSQUEHANNA RIVER RD |
| 20 | MD-22 E @ MD-136/PRIESTFORD RD/CALVARY RD |
| 21 | I-95 S @ MD-155/EXIT 89 |
| 22 | US-1 S @ MD-147/US-1-BR/BELAIR RD |
| 23 | US-1-BR N @ MD-24/VIETNAM VETS MEMORIAL HWY |
| 24 | US-1 N @ MD-924/MD-24/ROCK SPRING RD |
| 25 | MD-543 N @ US-1/HICKORY BYP |

Howard County

| Rank | Location |
|------|---|
| 1 | I-95 N @ MD-100/EXIT 43 |
| 2 | I-95 S @ MD-216/EXIT 35 |
| 3 | I-95 N @ MD-32/EXIT 38 |
| 4 | I-95 S @ MD-175/EXIT 41 |
| 5 | I-95 S @ MD-32/EXIT 38 |
| 6 | I-70 W @ US-29/EXIT 87 |
| 7 | MD-32 W @ I-95 |
| 8 | I-95 N @ MD-175/EXIT 41 |
| 9 | MD-100 W @ EXIT 7 |
| 10 | MD-144 W @ ELLICOTT MILLS DR |
| 11 | I-95 N @ I-895/EXIT 46 |
| 12 | MD-144 E @ WESTCHESTER AVE |
| 13 | I-95 N @ MD-216/EXIT 35 |
| 14 | I-95 S @ I-895/EXIT 46 |
| 15 | I-70 W @ MARRIOTTSVILLE RD/EXIT 83 |
| 16 | I-70 E @ US-29/EXIT 87 |
| 17 | US-40 W @ ST JOHNS LN |
| 18 | US-29 N @ MD-32/EXIT 16 |
| 19 | I-95 N @ PRINCE GEORGE'S/HOWARD CO LINE |
| 20 | US-1 S @ WHISKEY BOTTOM RD |
| 21 | I-95 S @ MD-100/EXIT 43 |
| 22 | I-70 W @ MD-32/EXIT 80 |
| 23 | MD-32 W @ I-70/US-40 |
| 24 | US-29 N @ US-40 |
| 25 | US-40 E @ CENTENNIAL LN/BETHANY LN |

Top 25 Bottlenecks in Local Jurisdictions- 2nd Quarter 2021

Ranked by Base Impact - the aggregation of queue length over time for congestion at each location in mile minutes. It is then weighted by **Total Delay** – Raw speed drop weighted by VMT factor.

Queen Anne's County

| Rank | Location |
|------|---|
| 1 | US-50 W @ BAY BRIDGE |
| 2 | US-50 E @ BAY BRIDGE |
| 3 | US-50 E @ MD-213/CENTREVILLE RD |
| 4 | US-50 W @ MD-213/CENTREVILLE RD |
| 5 | US-50 W @ US-301/BLUE STAR MEML HWY |
| 6 | US-50 W @ MD-18/MAIN ST/EXIT 41 |
| 7 | US-50 W @ MD-522/DOMINION ROAD/EXIT 39B |
| 8 | US-301 S @ US-50 |
| 9 | US-50 W @ NESBIT RD/EXIT 45B |
| 10 | US-50 E @ MD-8/EXIT 37 |
| 11 | US-50 W @ MD-404/QUEEN ANNE HWY |
| 12 | US-50 W @ MD-8/EXIT 37 |
| 13 | US-50 E @ US-301/BLUE STAR MEML HWY |
| 14 | US-50 W @ CHESTER RIVER BEACH RD/EXIT 43B |
| 15 | MD-313 S @ MD-544/MCGINNES RD |
| 16 | US-50 E @ BEGIN FREEWAY |
| 17 | US-50 E @ MD-522/DOMINION ROAD/EXIT 39B |
| 18 | US-50 E @ MD-18/MAIN ST/EXIT 41 |
| 19 | US-50 E @ MD-404/QUEEN ANNE HWY |
| 20 | US-50 W @ DUNDEE AVE/EXIT 40B |
| 21 | US-50 E @ PINEY RD/PINEY CRK RD/EXIT 40A |
| 22 | US-50 E @ MD-18/MAIN ST/EXIT 42 |
| 23 | MD-300 E @ MD-213/CHURCH HILL RD |
| 24 | MD-213 S @ MD-544/MCGINNES RD |
| 25 | US-50 E @ MD-18/MAIN ST/EXIT 38 |

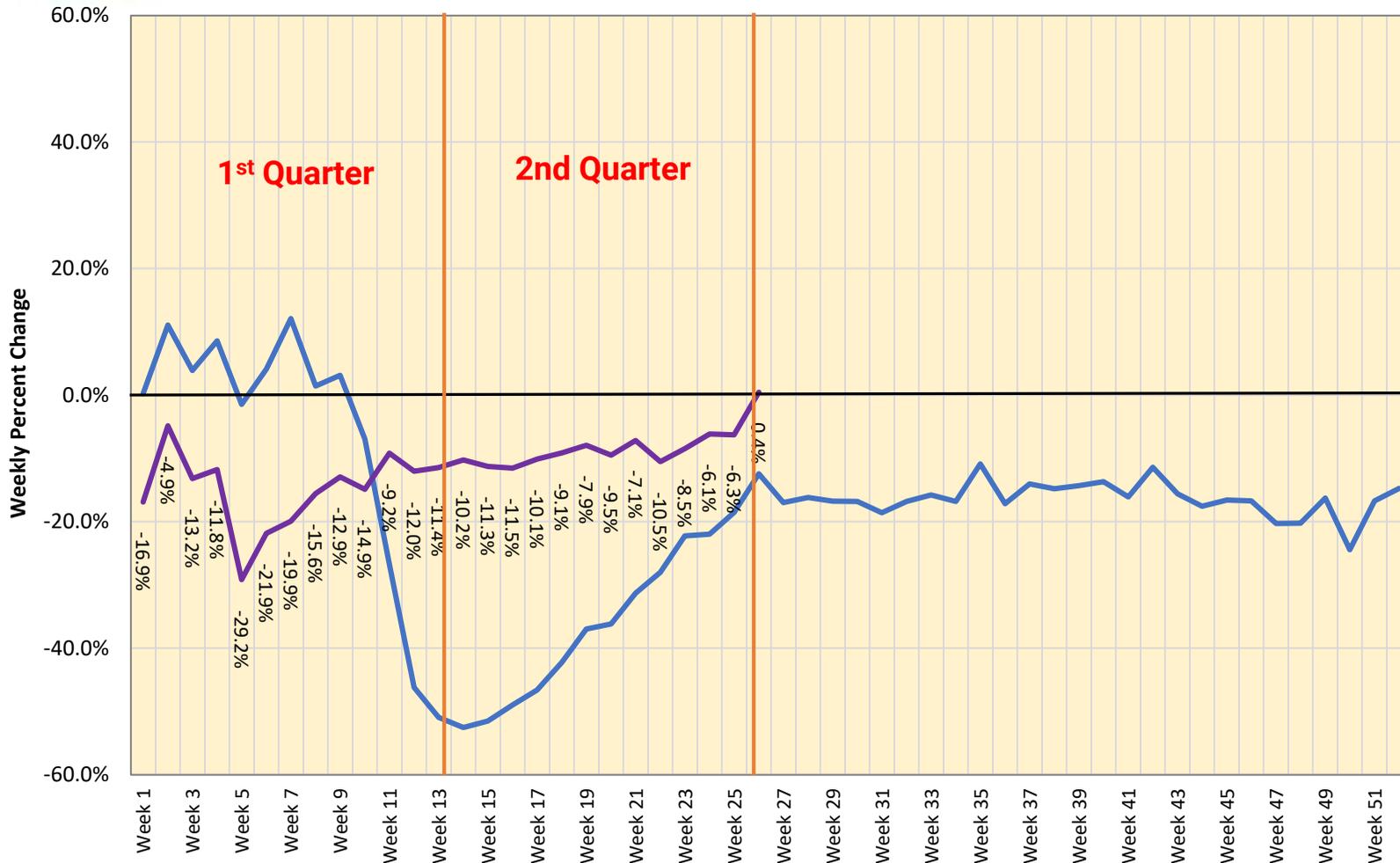
Traffic Volume Trend Graphs

From MDOT/SHA Automated Traffic Recorders
(ATR's)

Traffic Volumes



Weekly Changes at Permanent Counters (ATR) from 2021 to 2019 and 2020 to 2019



— Comparing weekly average ATR Volumes 2020 to 2019**
— Comparing weekly average ATR Volumes 2021 to 2019*

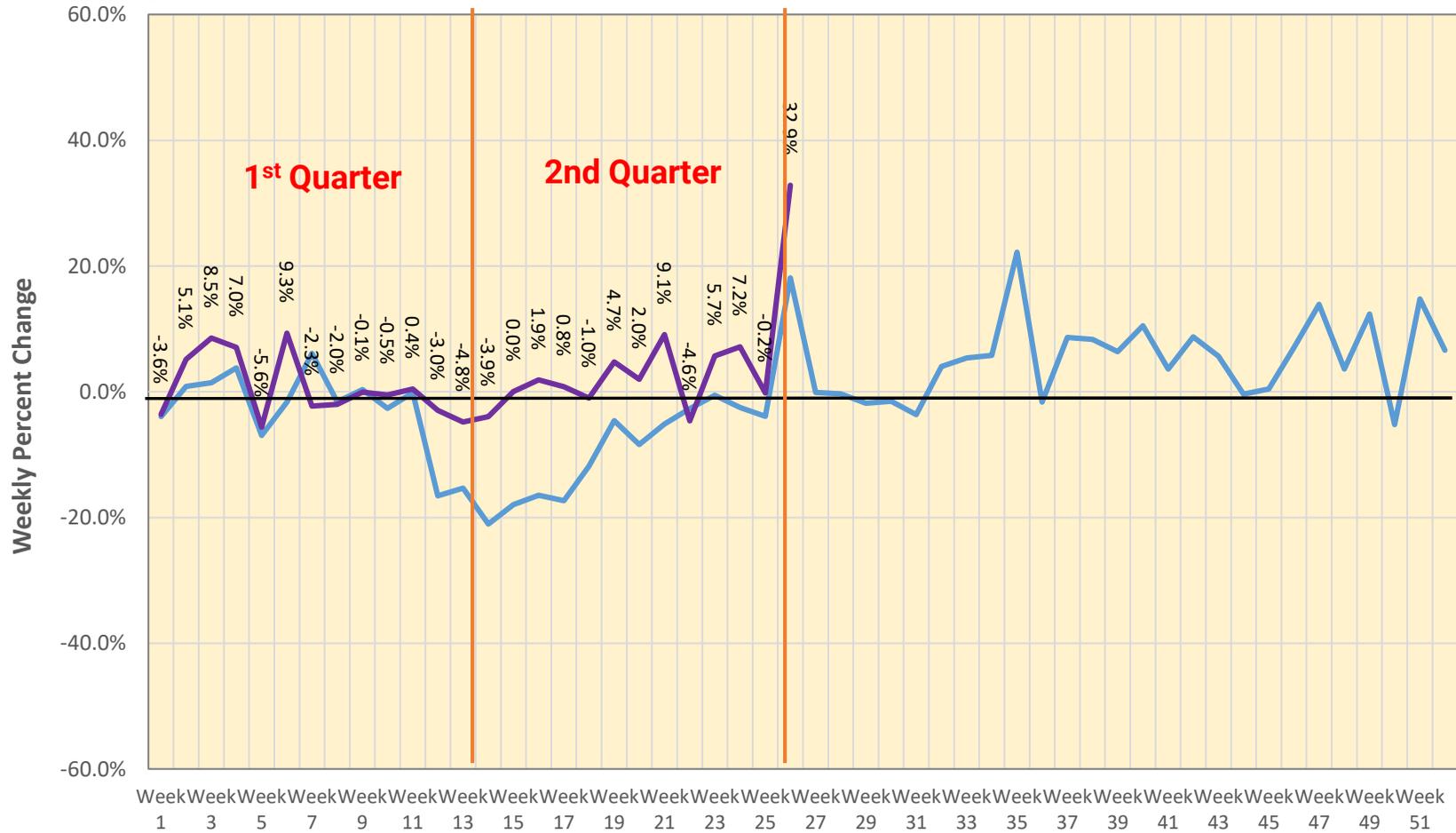
Week Ending

Data prepared by
Data Services Division
Office of Planning and Preliminary Engineering

Truck Volumes



**Weekly Changes in Truck Volumes at Permanent Counters (ATR)
from 2021 to 2019 and 2020 to 2019**



— Comparing weekly average Truck ATR Volume 2020 to 2019**
 — Comparing weekly average Truck ATR Volume 2021 to 2019*

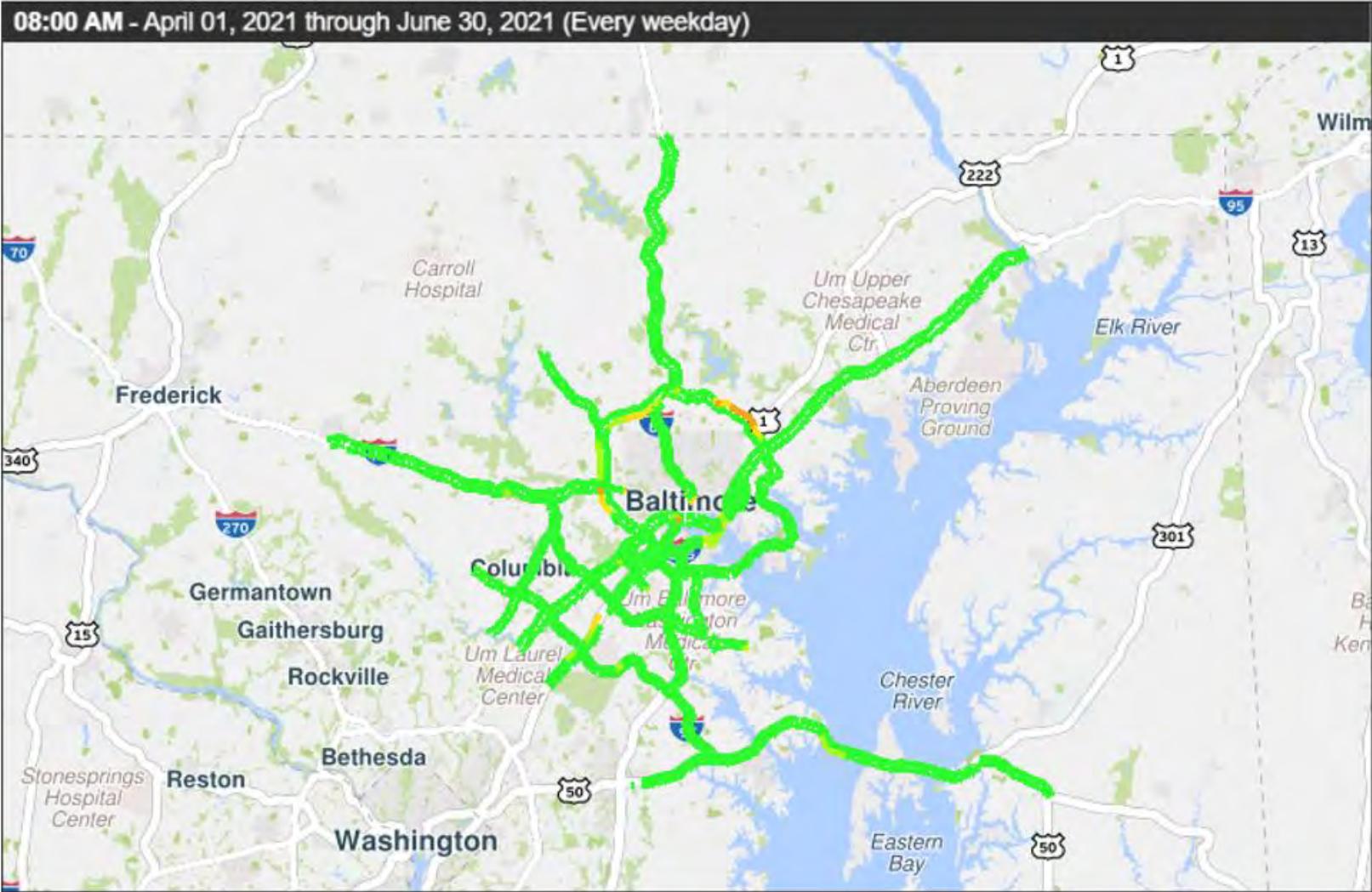
Trucks are FHWA Class 5-13

Week Ending

Data prepared by
 Data Services Division
 Office of Planning and Preliminary Engineering

Regional Speed Maps

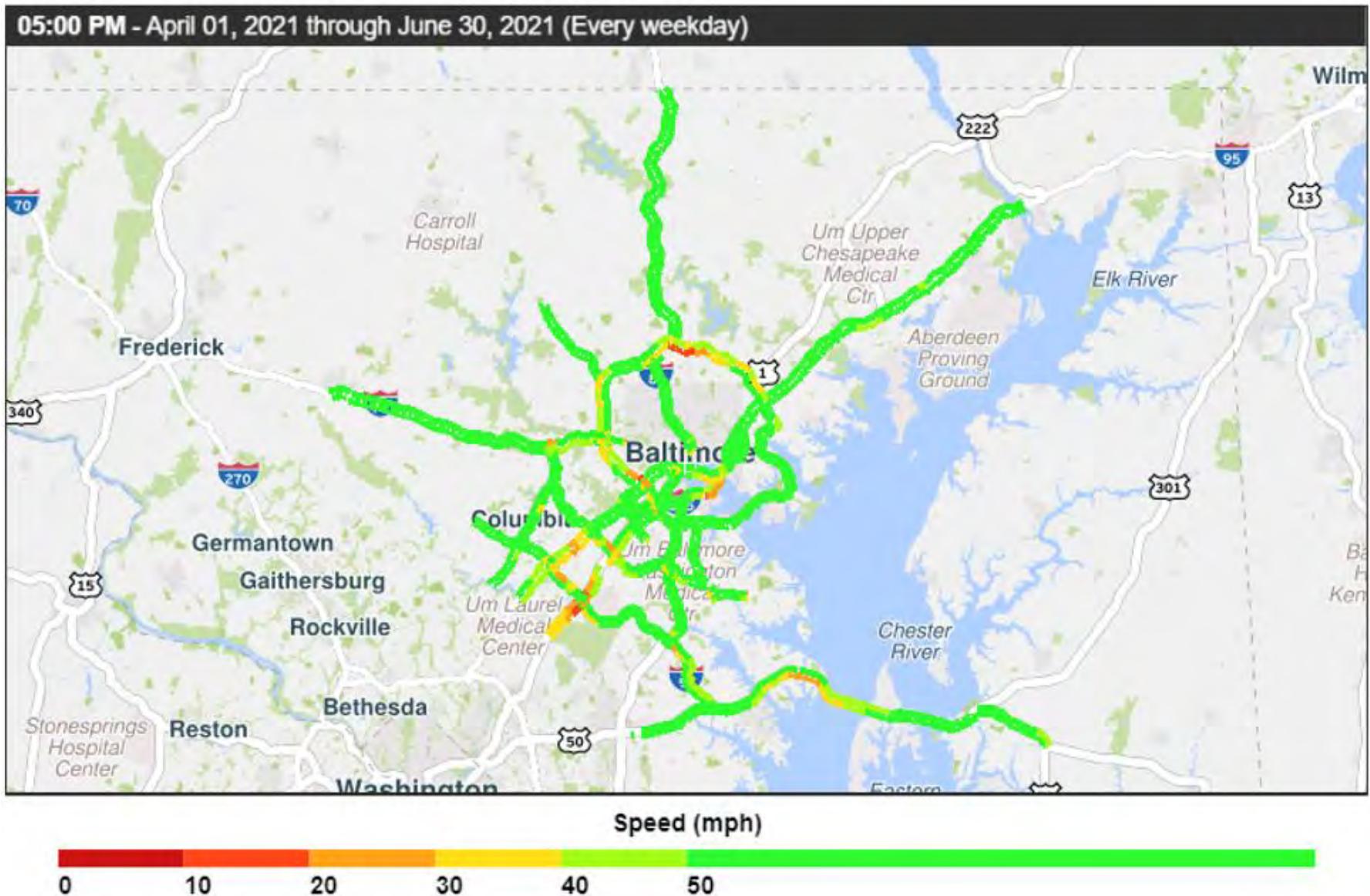
AM Peak Period Rush Hour: April 1 – June 30th



Speed (mph)



PM Peak Period Rush Hour: April 1 – June 30th



System Reliability Performance Measures

Percent of reliable person-miles traveled on the Interstate

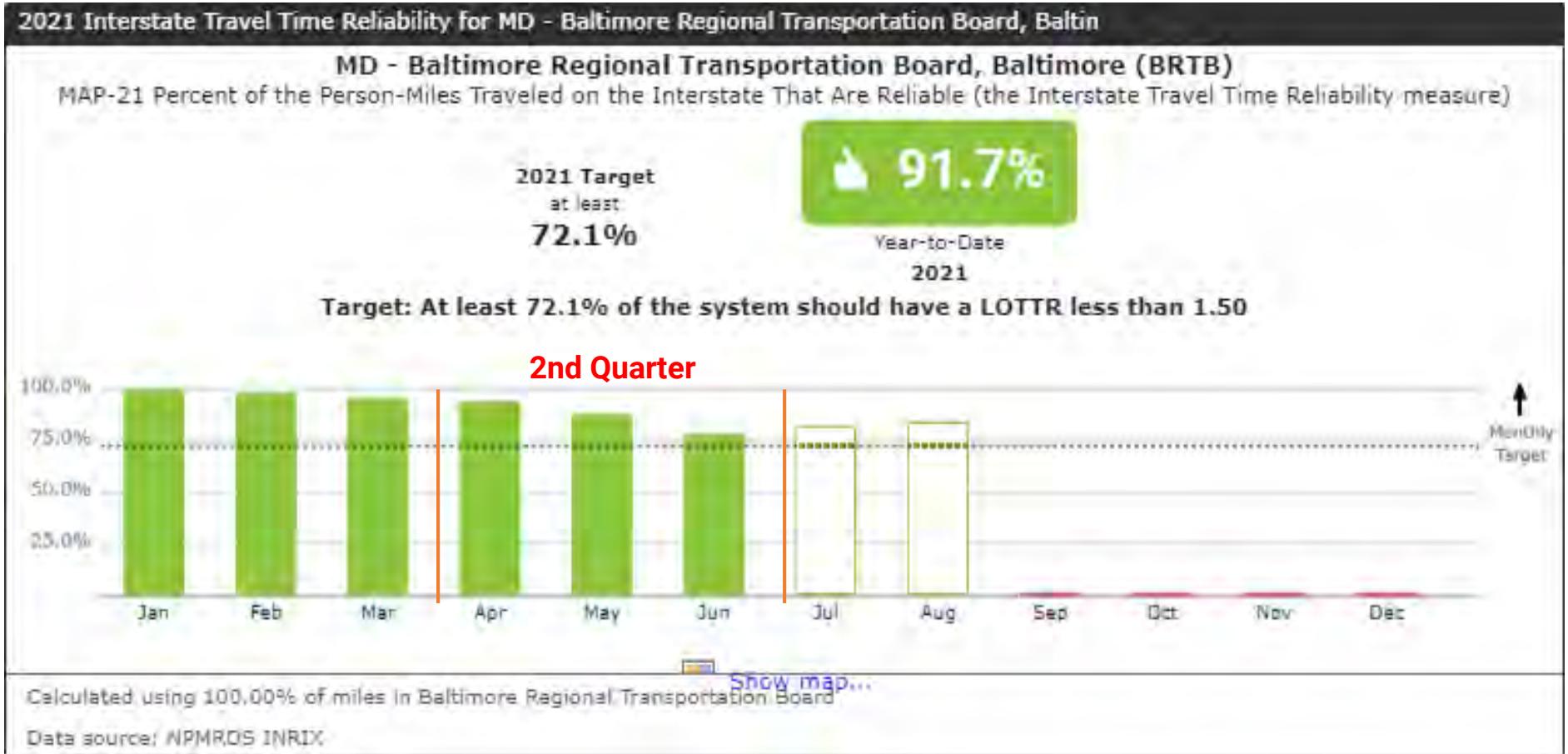
Percent of reliable person-miles traveled on the Non-Interstate NHS

Percentage of Interstate system mileage providing for reliable truck travel time (Truck Travel Time Reliability Index)

* Each state must establish statewide targets and report finding to the Federal Highway Administration. Metropolitan Planning Organizations (MPOs) must either support the established state targets or develop regional targets of their own.

Level of Travel Time Reliability: Interstates

Travel time reliability is the consistency or dependability in travel times, as measured from day-to-day and/or across different times of the day.



Trends in the 2nd Quarter from April through June show a downward trend as traffic conditions begin to approach pre-pandemic levels. An uptick after the end of the quarter may be attributed to summer conditions with schools not in session.

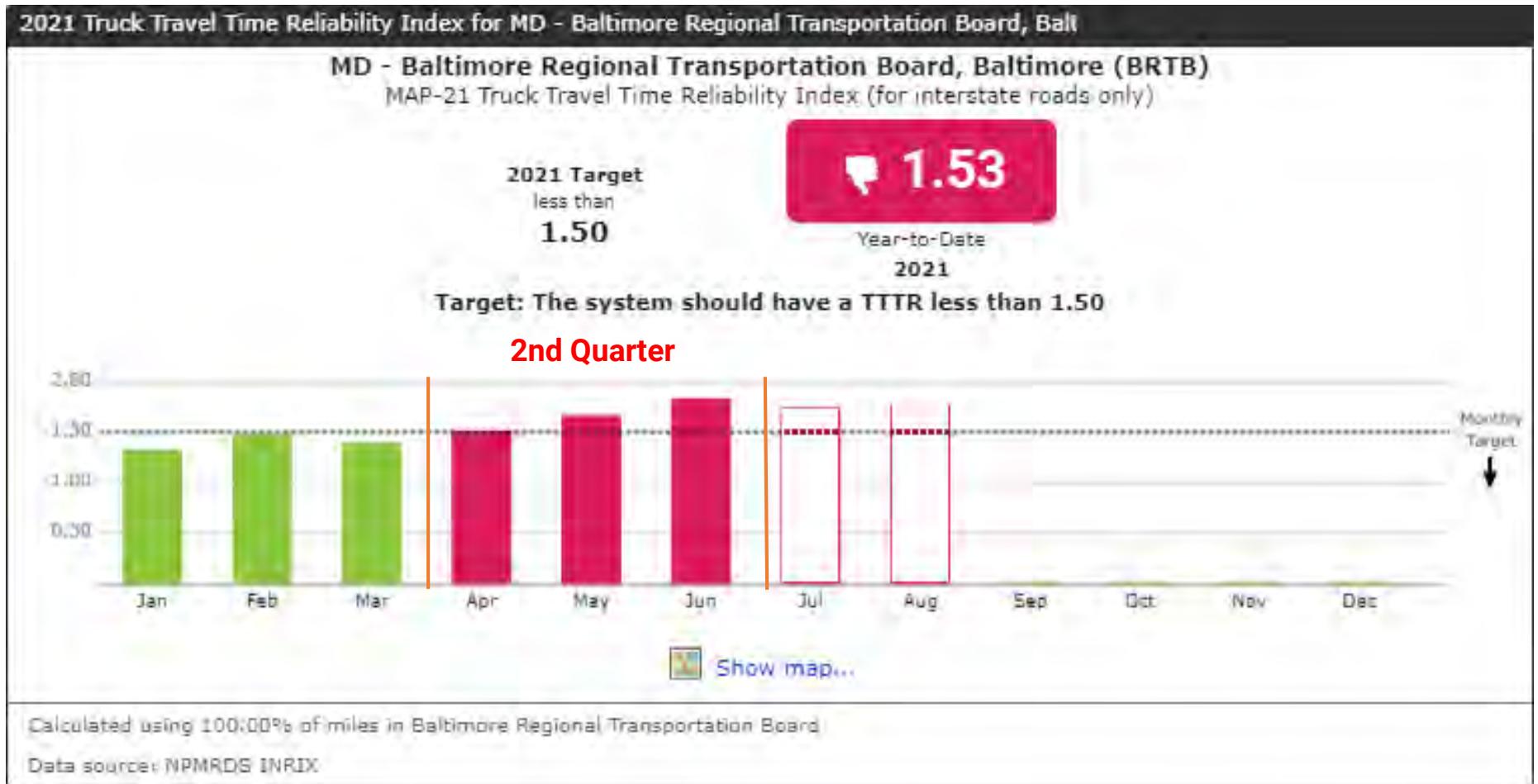
Level of Travel Time Reliability: non-Interstates

Travel time reliability is the consistency or dependability in travel times, as measured from day-to-day and/or across different times of the day.



Level of Truck Travel Time Reliability

Travel time reliability is the consistency or dependability in travel times, as measured from day-to-day and/or across different times of the day.



Ranked Bottleneck Monthly Comparison

| Ranked Bottleneck Comparison | | | | | | | | | | | | Location |
|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---|
| 2020 - 2021 | | | | | | | | | | | Current Month | |
| Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | | |
| 2 | 1 | 3 | 1 | - | - | - | 4 | 2 | - | - | 1 | US-50 E @ WILLIAM PRESTON LANE BRG |
| 9 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 1 | 2 | 1 | 2 | MD-295 S @ MD-198 |
| - | - | 14 | 8 | 18 | 25 | - | 6 | 4 | 3 | 3 | 3 | I-95 N @ MD-100/EXIT 43 |
| - | - | - | 18 | 12 | - | - | - | - | 10 | 2 | 4 | I-95 N @ MD-24/EXIT 77 |
| - | 15 | - | - | - | 8 | - | - | 24 | 12 | 4 | 5 | I-95 S @ MD-24/EXIT 77 |
| 1 | 5 | 1 | 11 | - | - | - | - | - | 16 | 10 | 6 | US-50 W @ WILLIAM PRESTON LANE BRG |
| - | - | - | - | - | - | - | - | - | - | - | 7 | I-95 N @ MILLARD E TYDINGS MEMORIAL BRG |
| - | - | - | 21 | 22 | - | - | - | - | - | 7 | 8 | I-95 S @ MD-216/EXIT 35 |
| - | - | 7 | 9 | 19 | - | - | 5 | 8 | 6 | 6 | 9 | I-695 CW @ MD-372/WILKENS AVE/EXIT 12 |
| - | - | - | - | - | - | - | - | - | - | - | 10 | I-95 N @ MD-543/EXIT 80 |
| - | - | 8 | 6 | 17 | 10 | 4 | - | 6 | 5 | 5 | 11 | MD-295 N @ CANINE RD |
| - | 12 | 5 | 5 | 1 | - | - | 1 | 3 | 8 | - | 12 | I-695 CW @ PROVIDENCE RD/EXIT 28 |
| - | - | - | 7 | - | - | 22 | - | - | - | - | 13 | I-95 S @ MD-152/EXIT 74 |
| - | - | - | - | - | - | - | 20 | 12 | - | 22 | 14 | I-695 CCW @ US-40/EXIT 15 |
| - | - | - | - | - | 11 | - | - | - | - | 15 | 15 | I-95 S @ MD-175/EXIT 41 |
| - | - | - | - | - | - | - | - | - | - | 13 | 16 | I-695 CCW @ I-70/EXIT 16 |
| - | - | - | - | - | - | - | - | - | 21 | - | 17 | I-695 CW @ EDMONDSON AVE/EXIT 14 |
| - | - | - | - | - | - | - | - | 7 | 15 | 14 | 18 | I-695 CW @ MD-122/SECURITY BLVD/EXIT 17 |
| 3 | 4 | 4 | 2 | 6 | 6 | - | - | - | 18 | 8 | 19 | I-895 N @ HARBOR TUNNEL THWY (NORTH) |
| - | - | - | - | - | - | - | - | - | - | - | 20 | I-695 CW @ MD-147/HARFORD RD/EXIT 31 |
| - | - | - | - | 24 | 22 | - | - | - | 14 | - | 21 | I-70 E @ I-695/EXIT 91 |
| - | 23 | - | - | 2 | 13 | 5 | - | - | - | - | 22 | I-95 N @ MD-32/EXIT 38 |
| 18 | 9 | 12 | 14 | - | - | - | - | 15 | 13 | - | 23 | I-95 N @ MD-152/EXIT 74 |
| - | - | 25 | - | - | - | - | - | - | - | - | 24 | I-695 CCW @ MD-26/EXIT 18 |
| - | - | - | - | - | - | - | - | - | - | - | 25 | MD-3 N @ MD-175/ANNAPOLIS RD/MILLERSVILLE |

Conclusions:

MD-295 S @ MD 198 is the most consistent bottleneck placing in the Top 3 every month over the last year.

The #1 bottleneck in June US-50 E at the (William Preston Lane) Bay Bridge is more seasonal now that the ongoing deck rehabilitation has been completed on the eastbound span of the bridge..

Credits



For More Information



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