# CONGESTION REPORT 3rd Quarter 2017

A quarterly update of the National Capital Region's traffic congestion, travel time reliability, top-10 bottlenecks and featured spotlight

May 7, 2018



## **ABOUT TPB**

Transportation planning at the regional level is coordinated in the Washington area by the National Capital Region Transportation Planning Board (TPB). Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia, and the District of Columbia, local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning of the Metropolitan Washington Council of Governments.

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#### **ACCOMMODATIONS**

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# **CONGESTION REPORT**

## 3<sup>rd</sup> Quarter 2017

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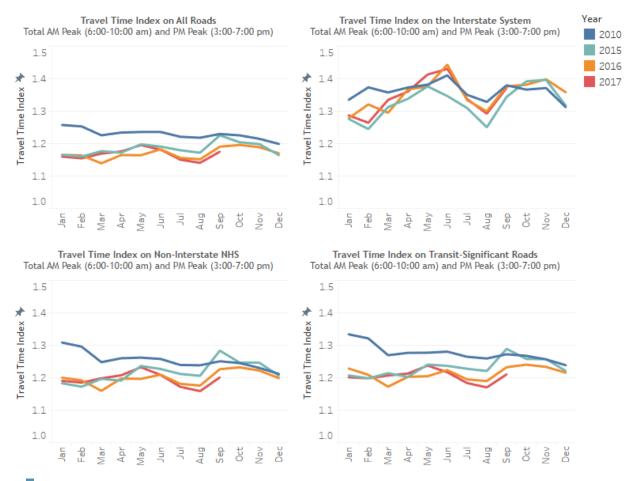
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## **CONGESTION - TRAVEL TIME INDEX (TTI)**

Interstate System TTI 3 <sup>rd</sup> Quarter 2017: TTI Trailing 4 Quarters:	1.33 1.35	\$\tag{0.2\% or -0.003\frac{1}{2}}\$ \$\tag{0.2\% or 0.003\frac{2}{2}}\$	Non-Interstate NHS <sup>3</sup> TTI 3 <sup>rd</sup> Quarter 2017: TTI Trailing 4 Quarters:	1.18 1.20	↓1.4% or -0.02 ↓0.2% or -0.003
Transit-Significant <sup>4</sup> TTI 3 <sup>rd</sup> Quarter 2017: TTI Trailing 4 Quarters:	1.19 1.21	↓1.5% or -0.02 ↓0.5% or -0.01	All Roads TTI 3 <sup>rd</sup> Quarter 2017: TTI Trailing 4 Quarters:	1.16 1.17	↓0.9% or -0.01 ↑0.1% or 0.001

<sup>&</sup>lt;sup>1</sup> Compared to 3<sup>rd</sup> Quarter 2016; <sup>2</sup>Compared to one year earlier; <sup>3</sup> NHS: National Highway System; <sup>4</sup> See "Background" section.

Figure 1 Monthly Travel Time Index for Total AM peak (6:00-10:00 am) and PM peak (3:00-7:00 pm)



*Travel Time Index* (TTI), defined as the ratio of actual travel time to free-flow travel time, measures the intensity of congestion. The higher the index, the more congested traffic conditions it represents, e.g., TTI = 1.00 means free flow conditions, while TTI = 1.30 indicates the actual travel time is 30% longer than the free-flow travel time.

## **RELIABILITY - PLANNING TIME INDEX (PTI)**

Interstate System PTI 3 <sup>rd</sup> Quarter 2017: PTI Trailing 4 Quarters:	1.84 1.87	↓0.5% or -0.01¹ ↓2.0% or -0.04²	Non-Interstate NHS <sup>3</sup> PTI 3 <sup>rd</sup> Quarter 2017: PTI Trailing 4 Quarters:	1.42 1.46	\$\\ \1.7\% \text{ or -0.03} \\ \10.1\% \text{ or 0.002}
Transit-Significant <sup>4</sup> PTI 3 <sup>rd</sup> Quarter 2017: PTI Trailing 4 Quarters:	1.44 1.47	↓1.1% or -0.02 ↓0.4% or -0.01	<b>All Roads</b> PTI 3 <sup>rd</sup> Quarter 2017: PTI Trailing 4 Quarters:	1.38 1.40	\$\\$\1.0\% \text{ or -0.01} \\ \\$\0.3\% \text{ or 0.004}\$

<sup>&</sup>lt;sup>1</sup> Compared to 3<sup>rd</sup> Quarter 2016;<sup>2</sup>Compared to one year earlier; <sup>3</sup> NHS: National Highway System; <sup>4</sup> See "Background" section.

Figure 2 Monthly Planning Time Index for Total AM peak (6:00-10:00 am) and PM peak (3:00-7:00 pm)



*Planning Time Index* (PTI), defined as the ratio of 95th percentile travel time to free flow travel time, measures travel time reliability. The higher the index, the less reliable traffic conditions it represents, e.g., PTI = 1.30 means a traveler has to budget 30% longer than the uncongested travel time to arrive on time 95% of the instances (i.e., 19 out of 20 trips).

# **TOP 10 BOTTLENECKS**

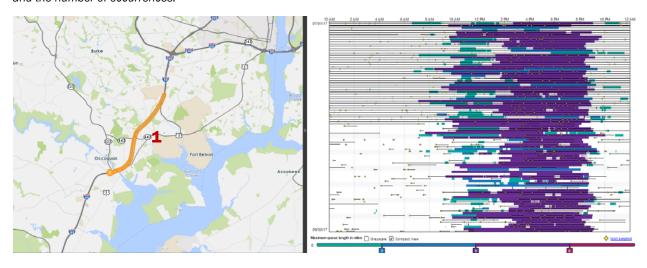
Rank (Last Quarter Rank)	Location	Average duration	Average max length (miles)	Total duration	Impact factor
1 (1)*	I-95 S @ VA-123/EXIT 160	9 h 05 m	3.4	34 d 20 h 54 m	157,241.71
2 (4)	BALTIMORE-WASHINGTON PARKWAY N @ POWDER MILL RD	7 h 27 m	2.58	28 d 14 h 51 m	92,273.87
3 (2)	I-95 N @ VA-123/EXIT 160	4 h 35 m	3.32	17 d 15 h 02 m	86,092.17
4 (7)	DC-295 S @ EAST CAPITOL ST	11 h 02 m	1.21	42 d 08 h 20 m	84,691.59
5 (5)	I-495 CW @ I-270 SPUR	2 h 33 m	4.71	9 d 19 h 22 m	82,688.03
6 (6)	I-495 CCW @ MD-97/GEORGIA AVE/EXIT 31	4 h 16 m	2.84	16 d 09 h 52 m	81,650.07
7 (3)	I-495 CW @ CLARA BARTON PKWY/EXIT 41	4 h 40 m	3.08	17 d 21 h 40 m	75,005.66
8 (8)	I-66 E @ SYCAMORE ST/EXIT 69	7 h 00 m	1.74	26 d 20 h 42 m	72,046.73
9 (10)	I-95 N @ BACKLICK RD/EXIT 167	3 h 29 m	2.46	13 d 09 h 54 m	67,586.38
10 (16)	BALTIMORE-WASHINGTON PARKWAY N @ I-95/I-495	4 h 06 m	3.07	15 d 17 h 29 m	61,999.70

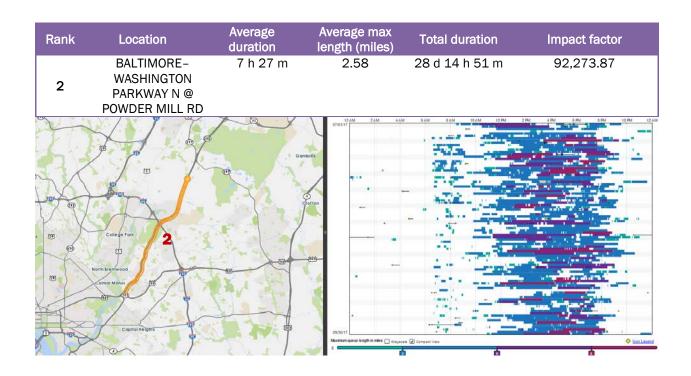
<sup>\*</sup> See "Bottlenecks" section in the "Background" chapter for ranking variability from quarter to quarter.

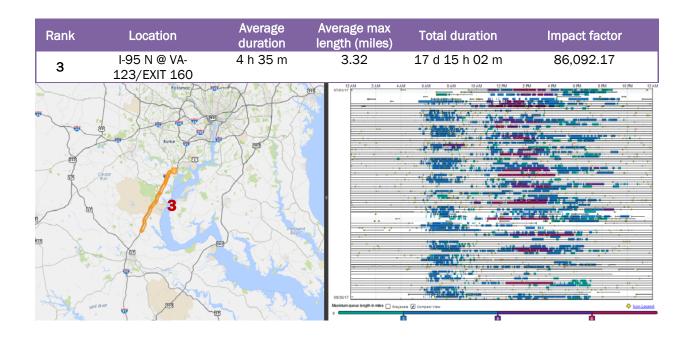


Rank	Location	Average duration	Average max length (miles)	Total duration	Impact factor*
1	I-95 S @ VA- 123/EXIT 160	9 h 05 m	3.4	34 d 20 h 54 m	157,241.71

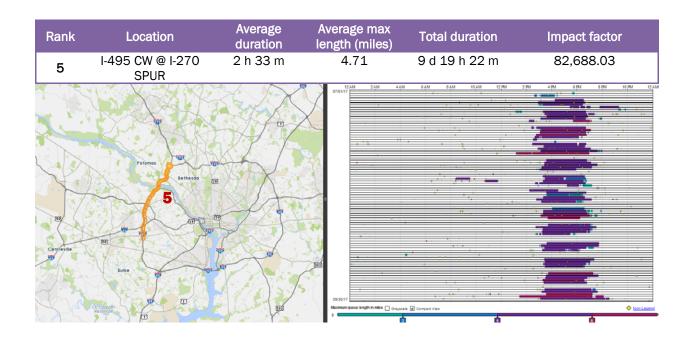
<sup>\*</sup> The Impact Factor of a bottleneck is simply the product of the Average Duration (minutes), Average Max Length (miles) and the number of occurrences.

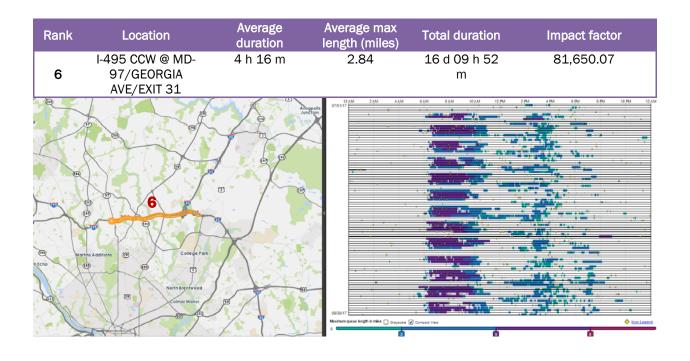


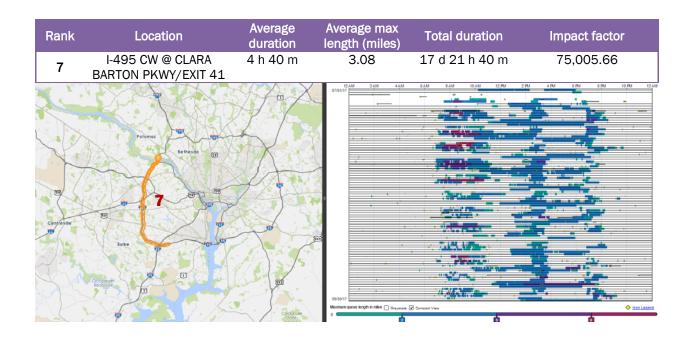


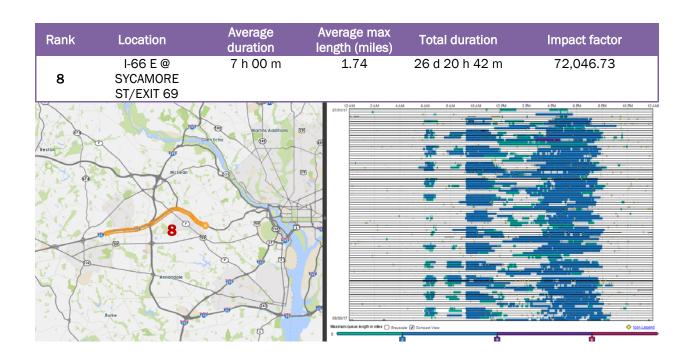


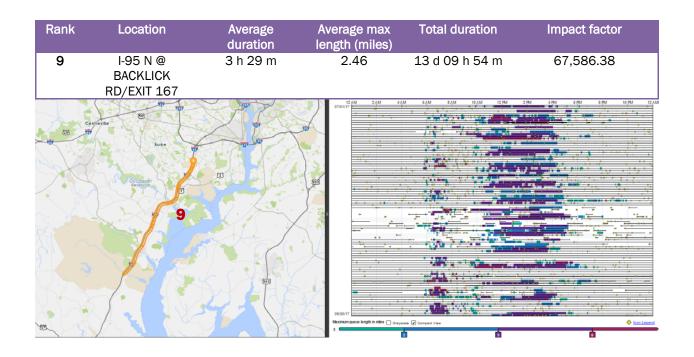


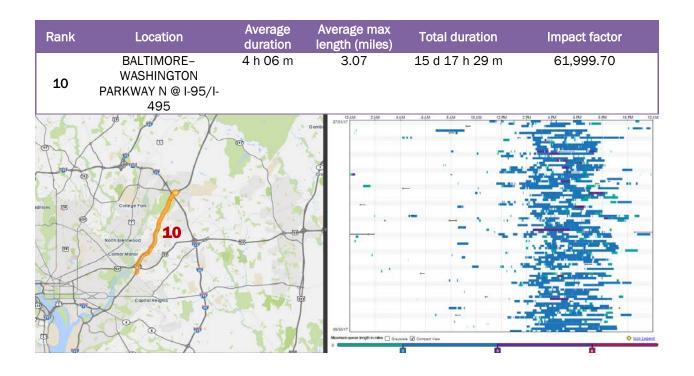




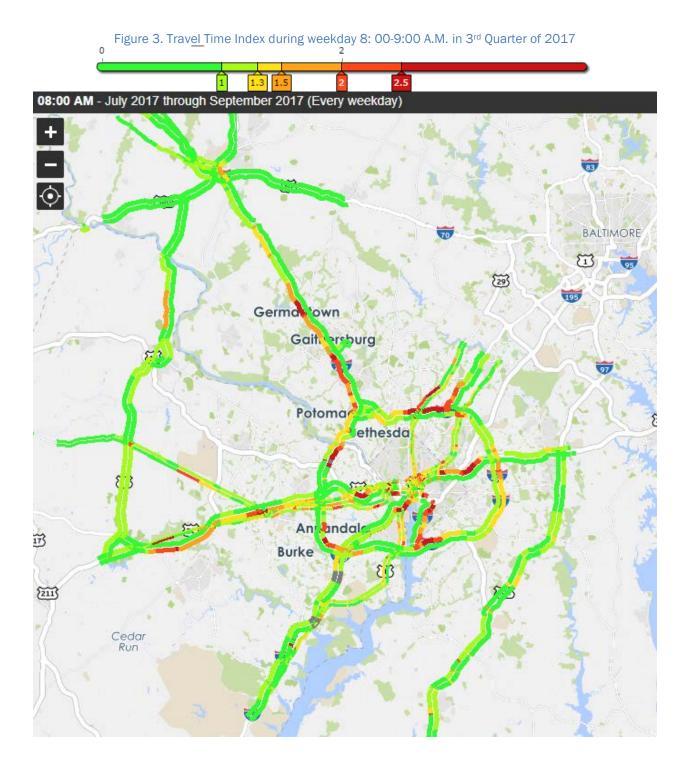


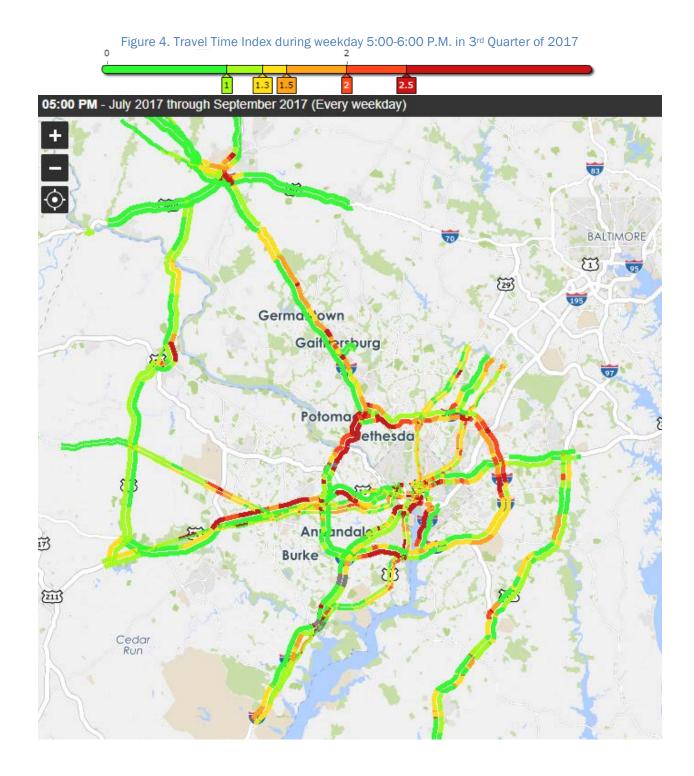






## **CONGESTION MAPS**





## **2017Q3 SPOTLIGHT**

The SPOTLIGHT section of the Regional Congestion Reports is on a hiatus for 2017, and will return during publication of the dashboard's 2018 reports.



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