

CONGESTION REPORT

2nd 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



National Capital Region
Transportation Planning Board

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.

CREDITS

Author: Jan-Mou Li, Daivamani Sivasailam

Project Management: Andrew J. Meese

Oversight: Kanti Srikanth

Data/Tools: I-95 Corridor Coalition Vehicle Probe Project; INRIX, Inc.;
CATT Lab of University of Maryland

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CONGESTION – TRAVEL TIME INDEX (TTI)

Interstate System

TTI 2nd Quarter 2017: 1.40 ↑0.4% or 0.01¹
 TTI Trailing 4 Quarters: 1.35 ↑0.9% or 0.01²

Non-Interstate NHS³

TTI 2nd Quarter 2017: 1.22 ↑1.2% or 0.02
 TTI Trailing 4 Quarters: 1.20 ↓0.7% or -0.01

Transit-Significant⁴

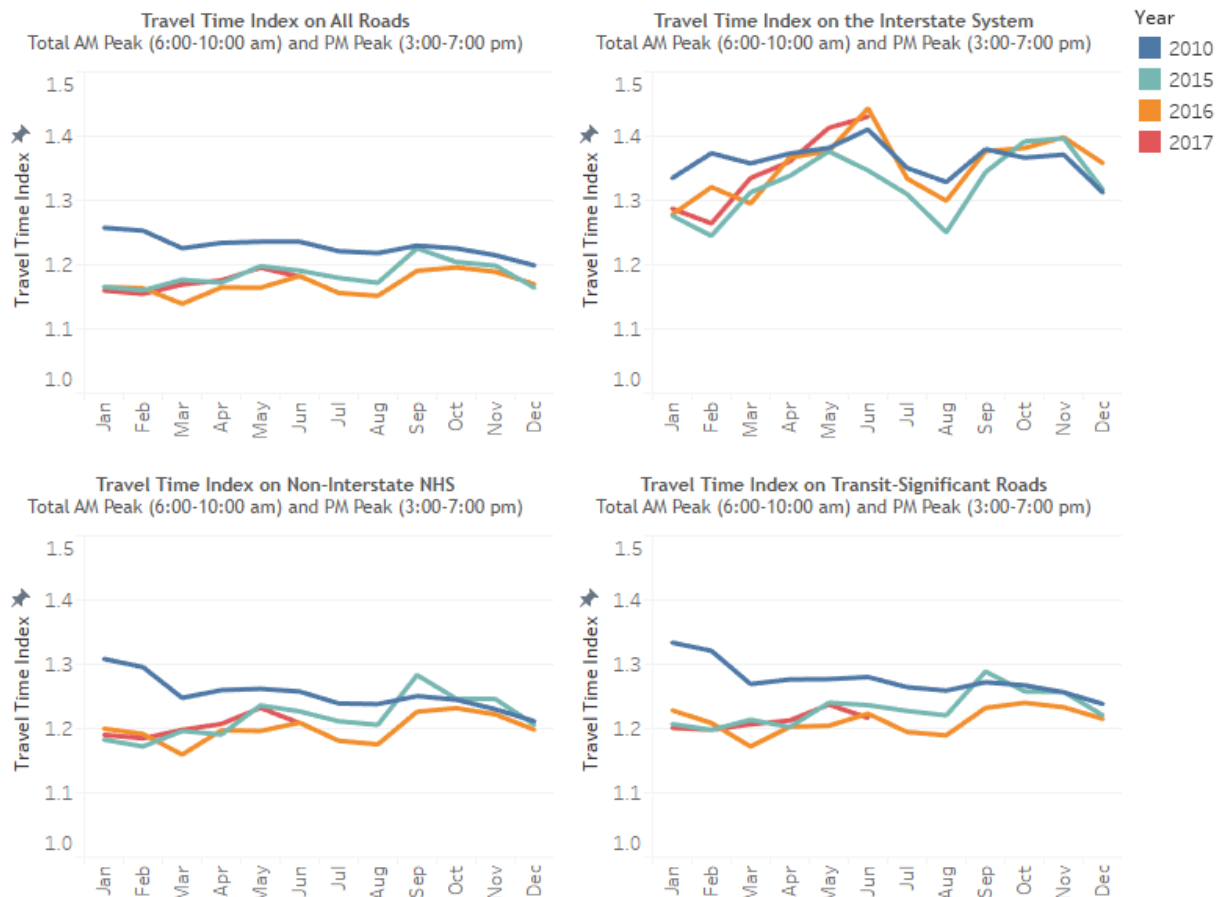
TTI 2nd Quarter 2017: 1.22 ↑1.0% or 0.01
 TTI Trailing 4 Quarters: 1.21 ↓0.9% or -0.01

All Roads

TTI 2nd Quarter 2017: 1.18 ↑1.2% or 0.01
 TTI Trailing 4 Quarters: 1.17 ↓0.2% or -0.003

¹ Compared to 2nd Quarter 2016; ²Compared to one year earlier; ³ NHS: National Highway System; ⁴ 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 2nd Quarter 2017: 1.93 ↓2.6% or -0.05¹
 PTI Trailing 4 Quarters: 1.87 ↓1.2% or -0.02²

Non-Interstate NHS³

PTI 2nd Quarter 2017: 1.48 ↑2.2% or 0.03
 PTI Trailing 4 Quarters: 1.46 ↑0.1% or -0.001

Transit-Significant⁴

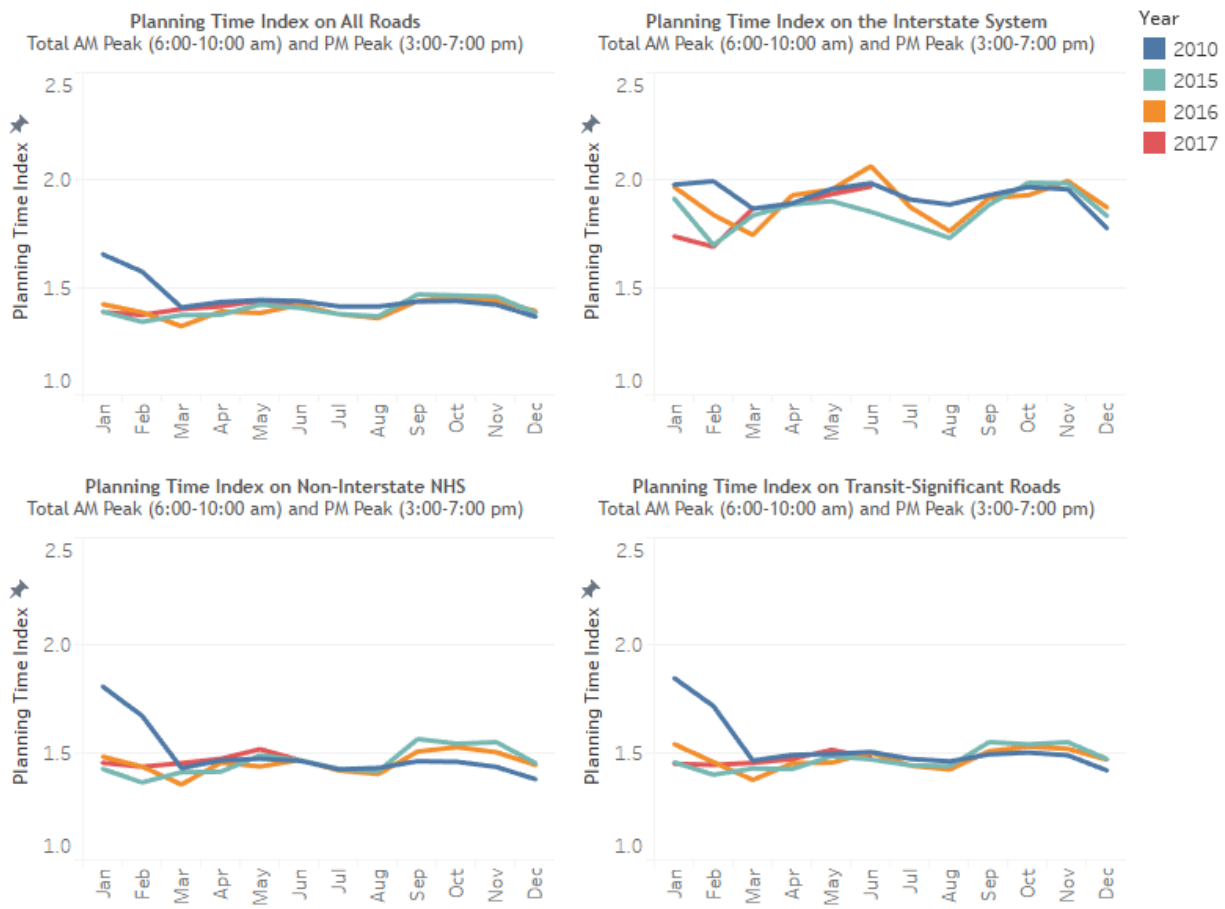
PTI 2nd Quarter 2017: 1.49 ↑1.3% or 0.02
 PTI Trailing 4 Quarters: 1.47 ↓0.4% or -0.01

All Roads

PTI 2nd Quarter 2017: 1.42 ↑1.8% or 0.03
 PTI Trailing 4 Quarters: 1.41 ↑0.3% or 0.004

¹ Compared to 2nd Quarter 2016; ² Compared to one year earlier; ³ NHS: National Highway System; ⁴ 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)

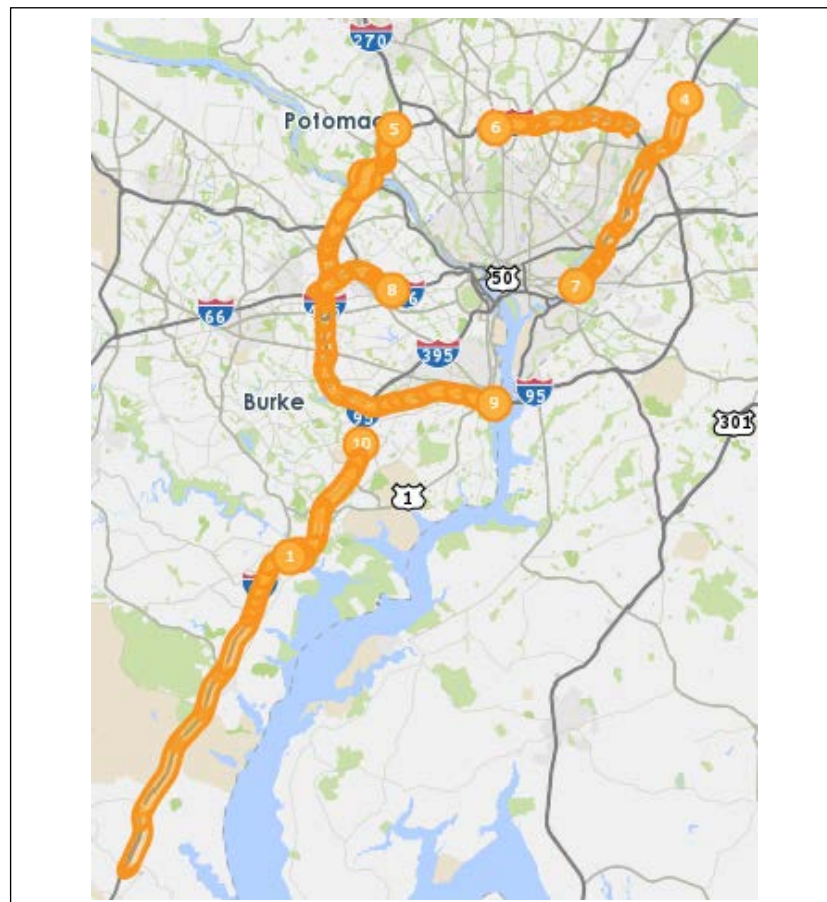


Planning Time Index (PTI), defined as the ratio of 95th percentile travel time to free flow travel time, measures travel time reliability. The higher the index, the less reliable traffic conditions it represents, e.g., PTI = 1.30 means a traveler has to budget 30% longer than the uncongested travel time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

TOP 10 BOTTLENECKS

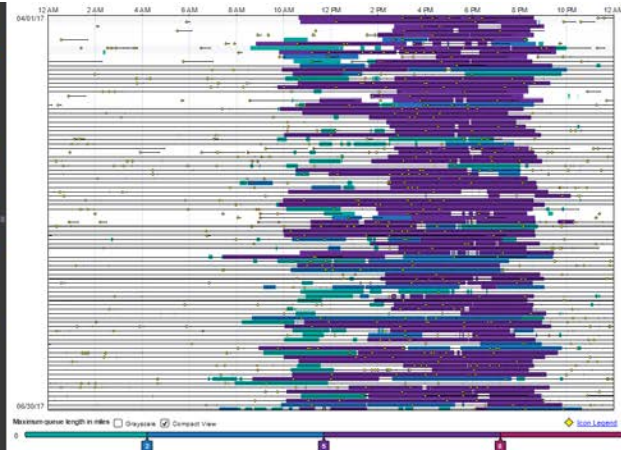
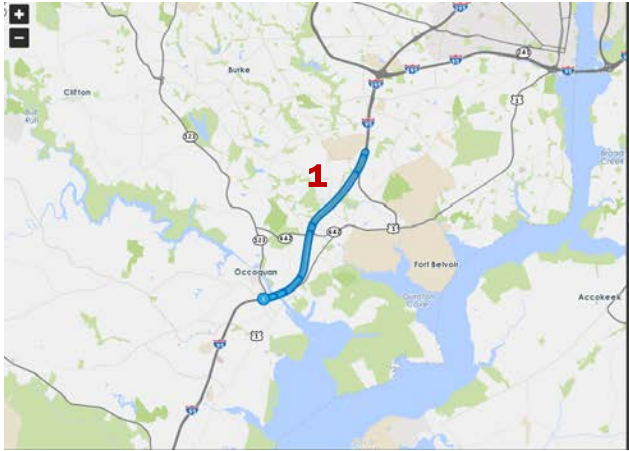
Rank (Last Quarter Rank)	Location	Average duration	Average max length (miles)	Total duration	Impact factor
1 (1)*	I-95 S @ VA-123/EXIT 160	8 h 23 m	3.57	31 d 18 h 55 m	156,028.75
2 (17)	I-95 N @ VA-123/EXIT 160	5 h 01 m	3.7	19 d 01 h 25 m	109,665.03
3 (12)	I-495 CW @ CLARA BARTON PKWY/EXIT 41	5 h 22 m	3.88	20 d 09 h 23 m	105,250.47
4 (3)	BALTIMORE-WASHINGTON PARKWAY N @ POWDER MILL RD	7 h 43 m	2.75	29 d 07 h 16 m	102,877.11
5 (2)	I-495 CW @ I-270 SPUR	2 h 39 m	5.26	10 d 02 h 29 m	95,675.34
6 (5)	I-495 CCW @ MD-97/GEORGIA AVE/EXIT 31	4 h 35 m	2.9	17 d 09 h 42 m	89,809.96
7 (4)	DC-295 S @ EAST CAPITOL ST	10 h 52 m	1.24	41 d 05 h 37 m	83,360.80
8 (7)	I-66 E @ SYCAMORE ST/EXIT 69	7 h 49 m	1.86	29 d 15 h 46 m	82,773.48
9 (25)	I-495 CCW @ WOODROW WILSON MEMORIAL BRIDGE	2 h 19 m	5.05	8 d 19 h 37 m	73,144.05
10 (52)	I-95 N @ BACKLICK RD/EXIT 167	3 h 30 m	2.31	13 d 06 h 49 m	71,998.82

* See "Bottlenecks" section in the "Background" chapter for ranking variability from quarter to quarter.

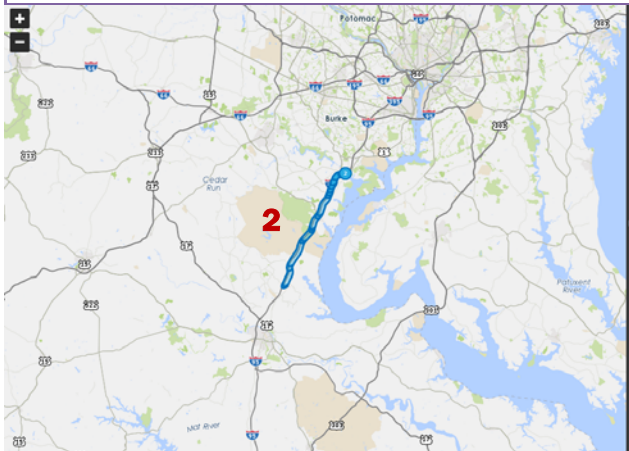


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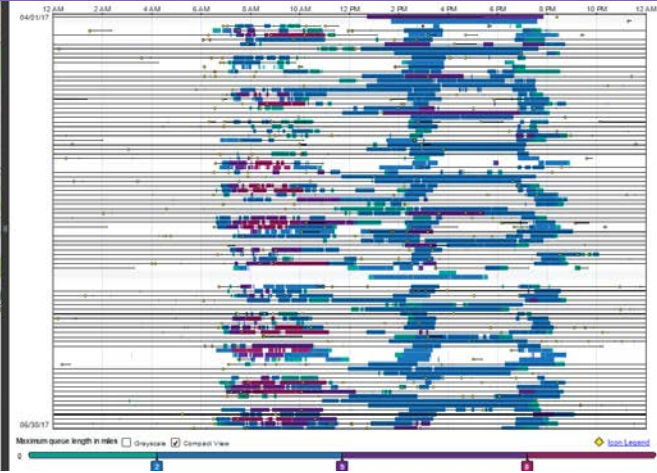
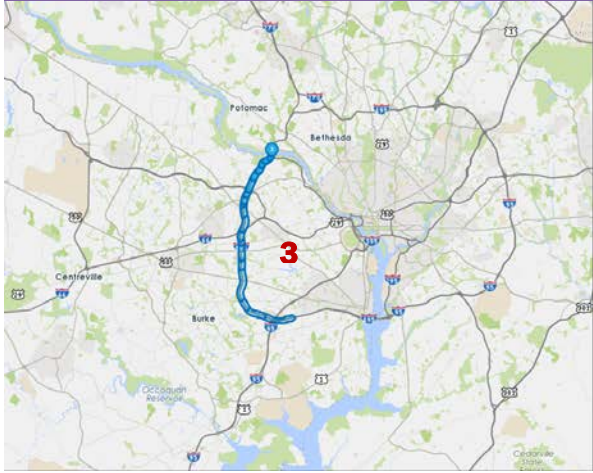
* The Impact Factor of a bottleneck is simply the product of the Average Duration (minutes), Average Max Length (miles) and the number of occurrences.



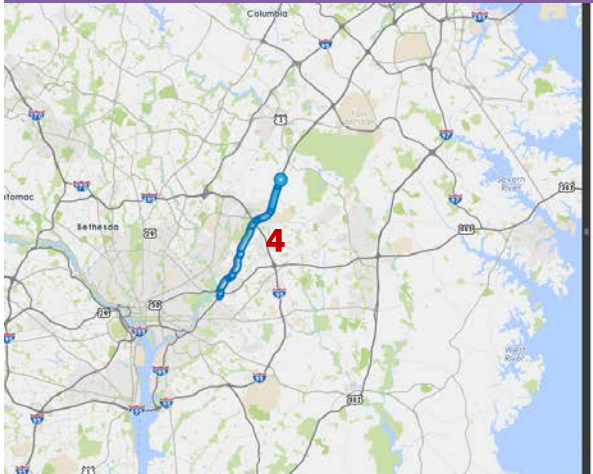
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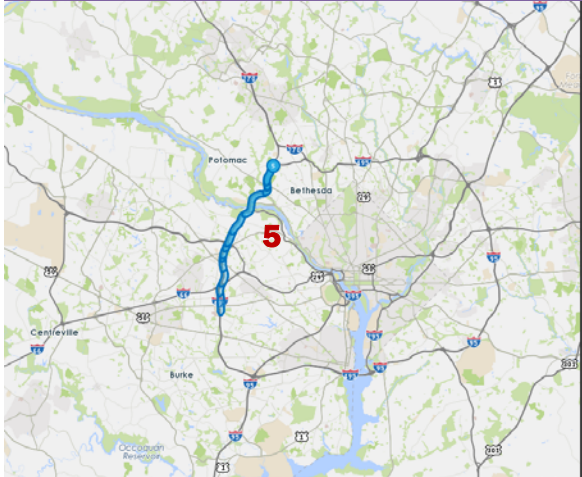
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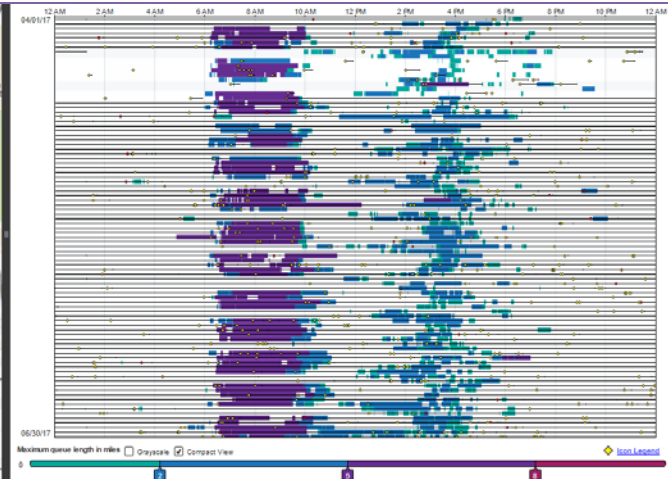
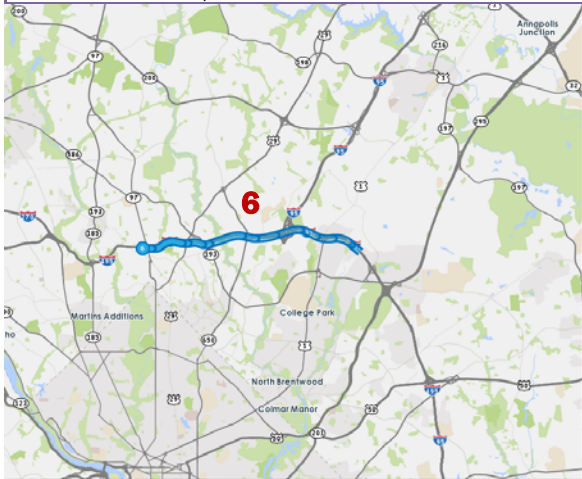
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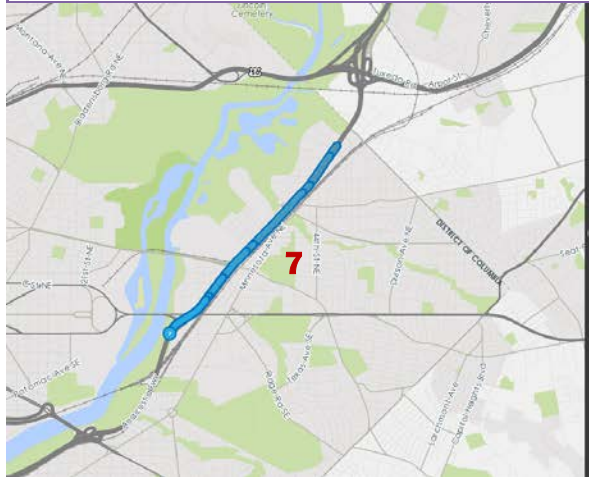
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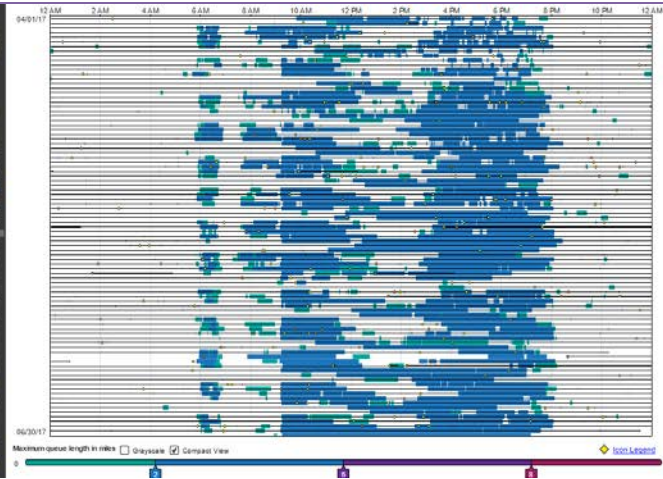
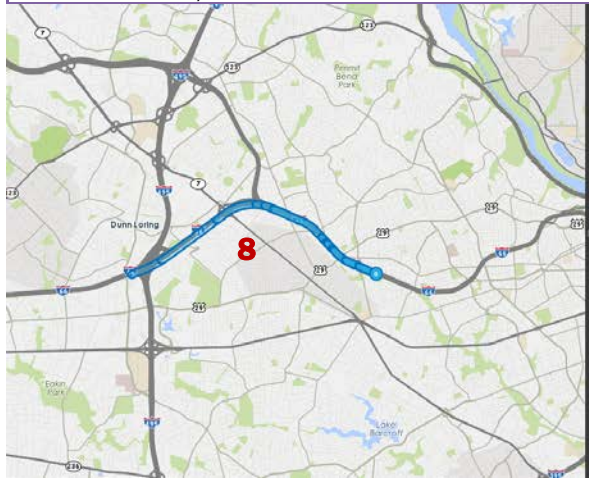
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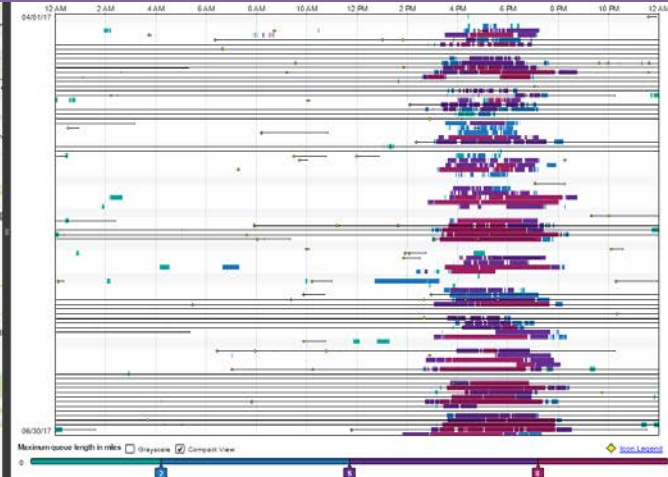
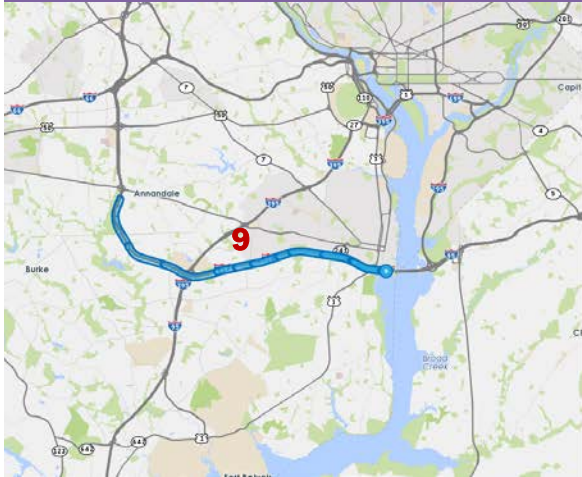
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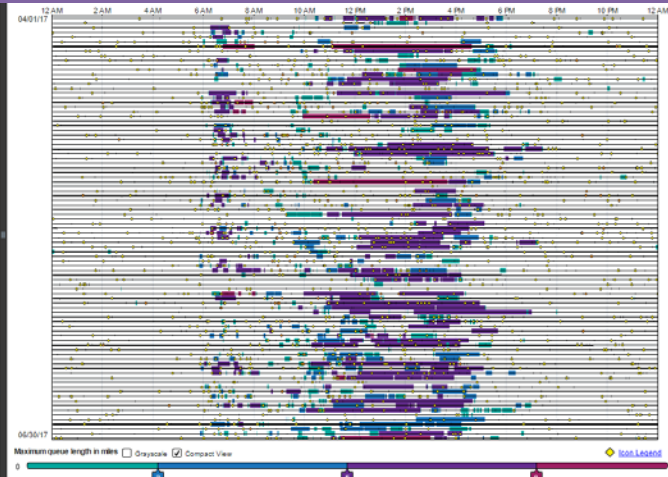
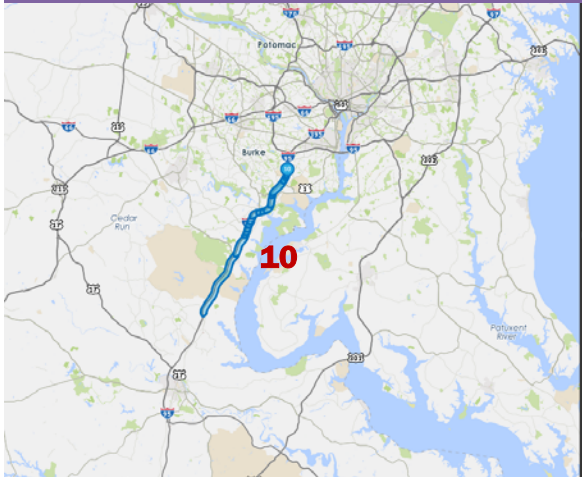
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CONGESTION MAPS

Figure 3. Travel Time Index during weekday 8: 00-9:00 A.M. in 2nd Quarter of 2017

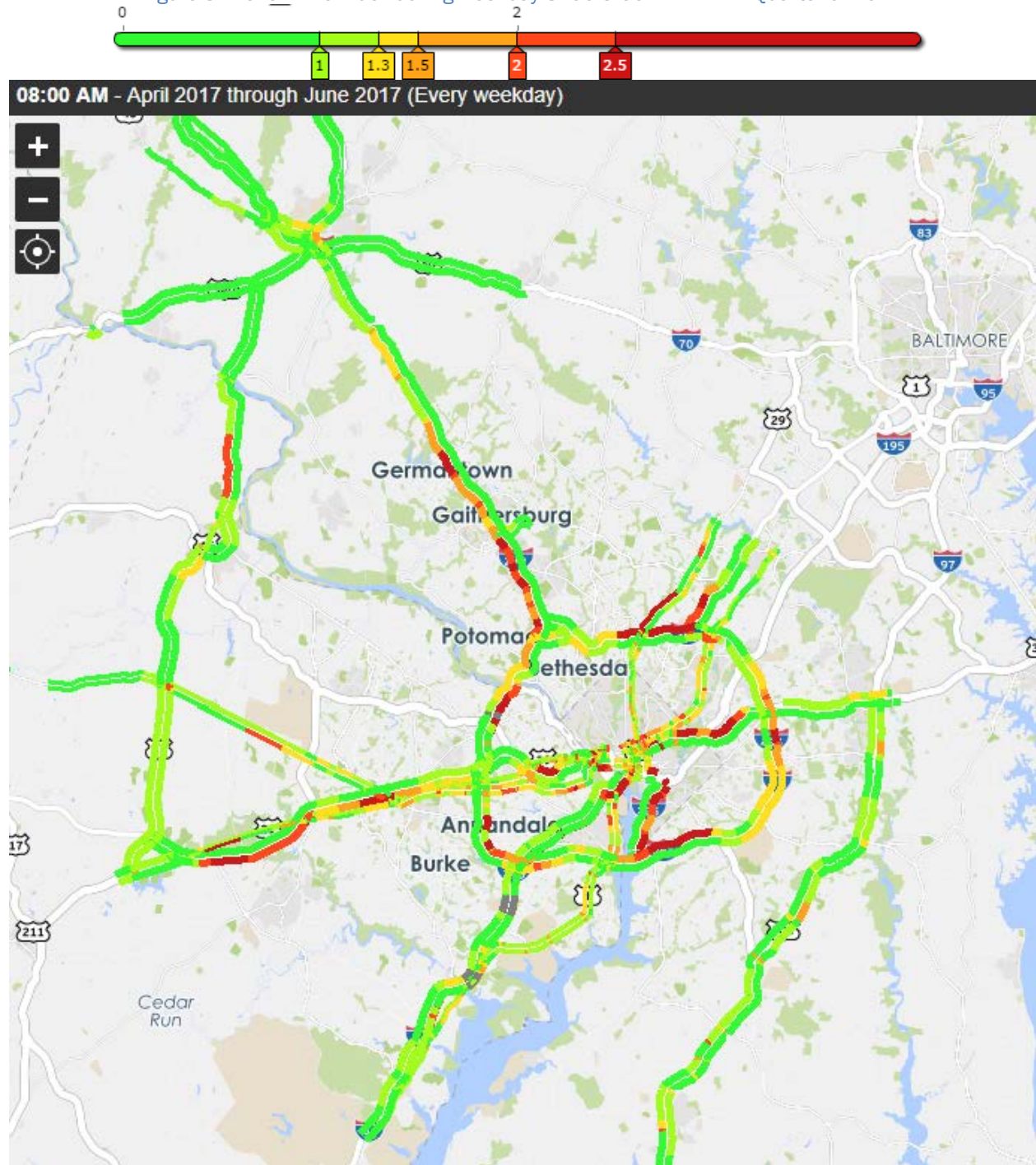
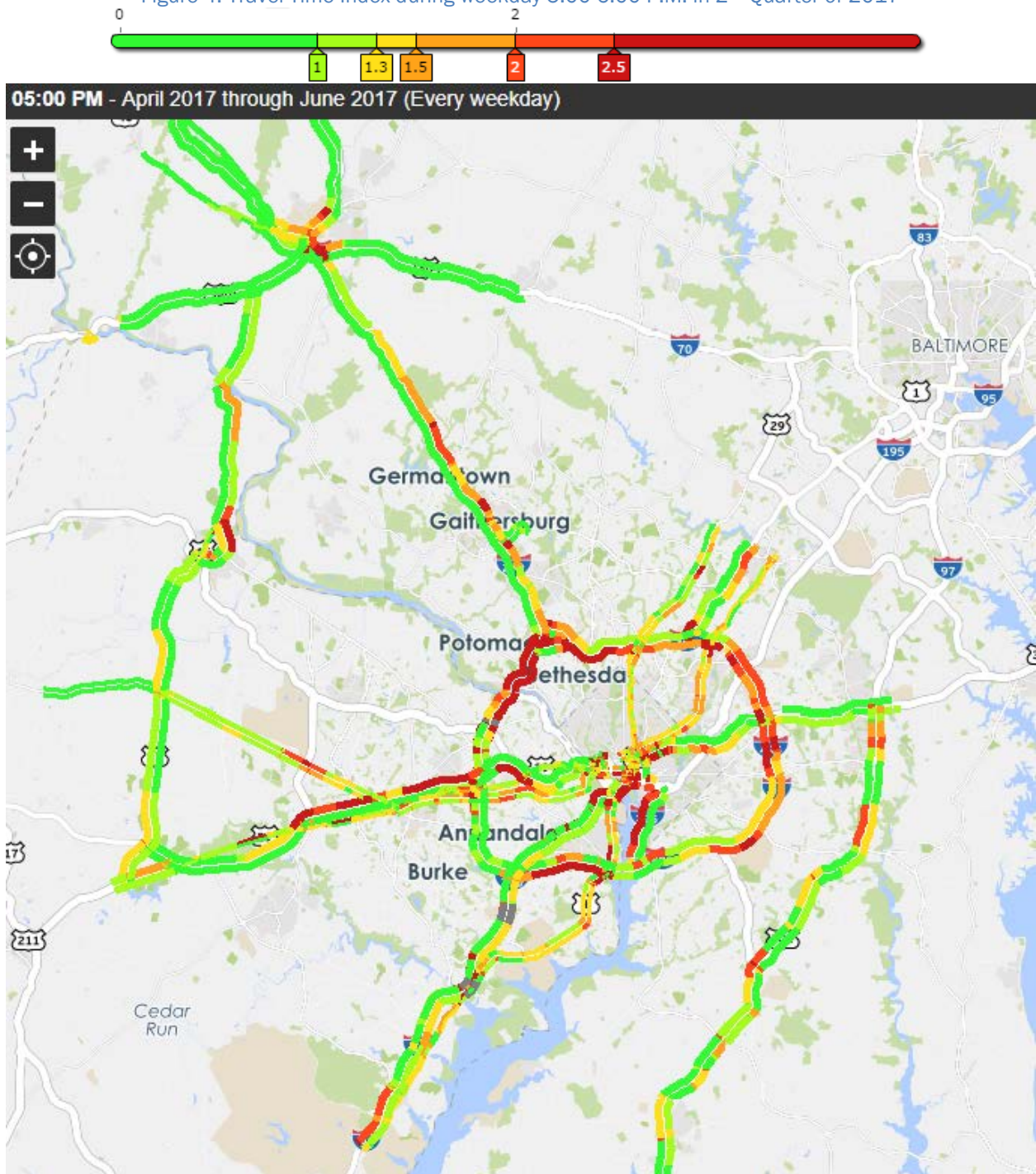


Figure 4. Travel Time Index during weekday 5:00-6:00 P.M. in 2nd Quarter of 2017



2017Q2 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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777 North Capitol Street NE, Suite 300
Washington, DC 20002

www.mwcog.org