

CONGESTION REPORT

3rd Quarter 2020

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

October 12, 2020



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.

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CONGESTION – TRAVEL TIME INDEX (TTI)

Interstate System

TTI 3rd Quarter 2019: **1.10** ↓18.4% or -0.25¹
 TTI Trailing 4 Quarters: **1.18** ↓14.4% or -0.2²

Non-Interstate NHS³

TTI 3rd Quarter 2019: **1.07** ↓8.8% or -0.1
 TTI Trailing 4 Quarters: **1.12** ↓6.1% or -0.07

Transit-Significant⁴

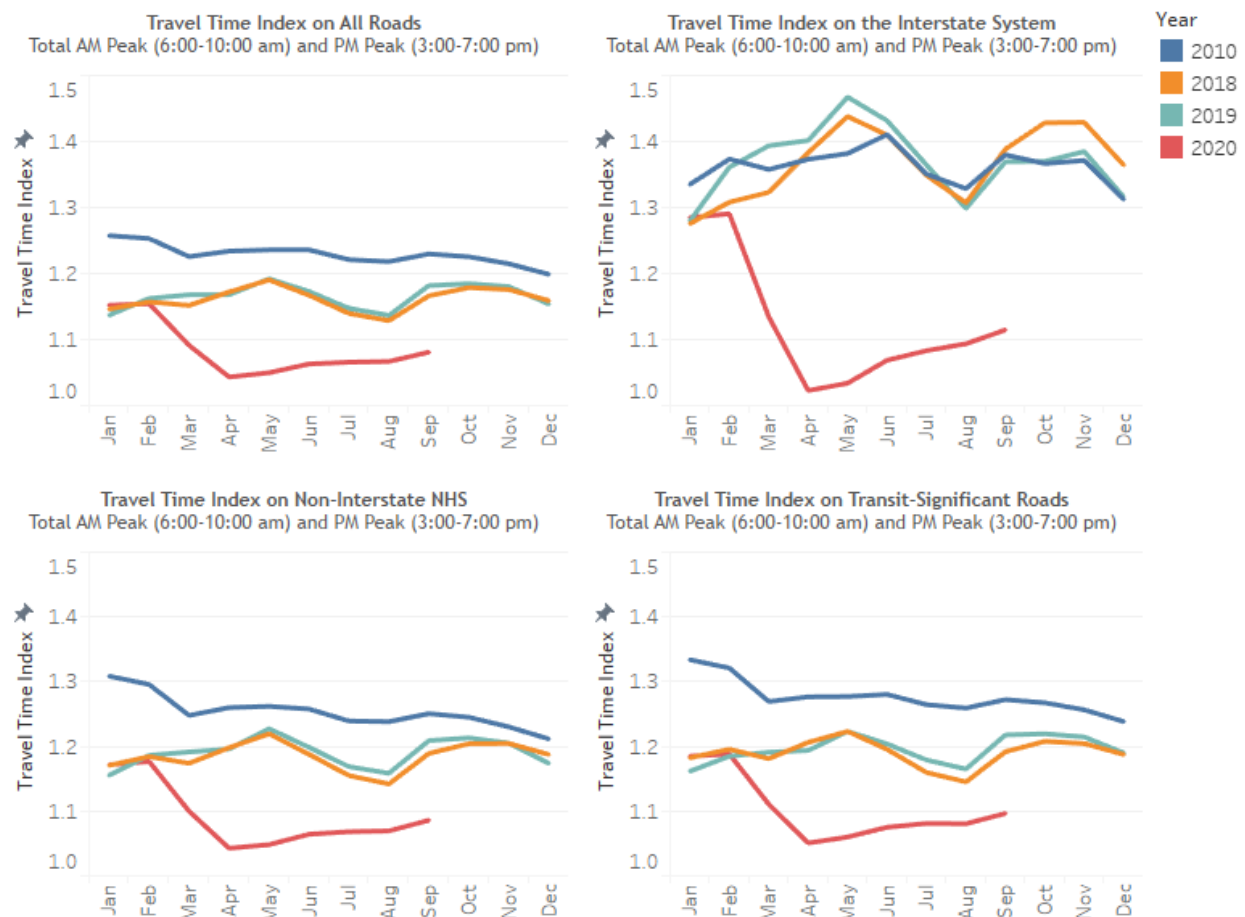
TTI 3rd Quarter 2019: **1.09** ↓8.5% or -0.1
 TTI Trailing 4 Quarters: **1.13** ↓5.4% or -0.06

All Roads

TTI 3rd Quarter 2019: **1.07** ↓7.3% or -0.08
 TTI Trailing 4 Quarters: **1.11** ↓5.0% or -0.06

¹ Compared to 3rd Quarter 2019; ² Compared 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 3rd Quarter 2019: **1.37** ↓25.5% or -0.47¹
 PTI Trailing 4 Quarters: **1.49** ↓22.2% or -0.42²

Non-Interstate NHS³

PTI 3rd Quarter 2019: **1.17** ↓15.9% or -0.22
 PTI Trailing 4 Quarters: **1.25** ↓12.1% or -0.17

Transit-Significant⁴

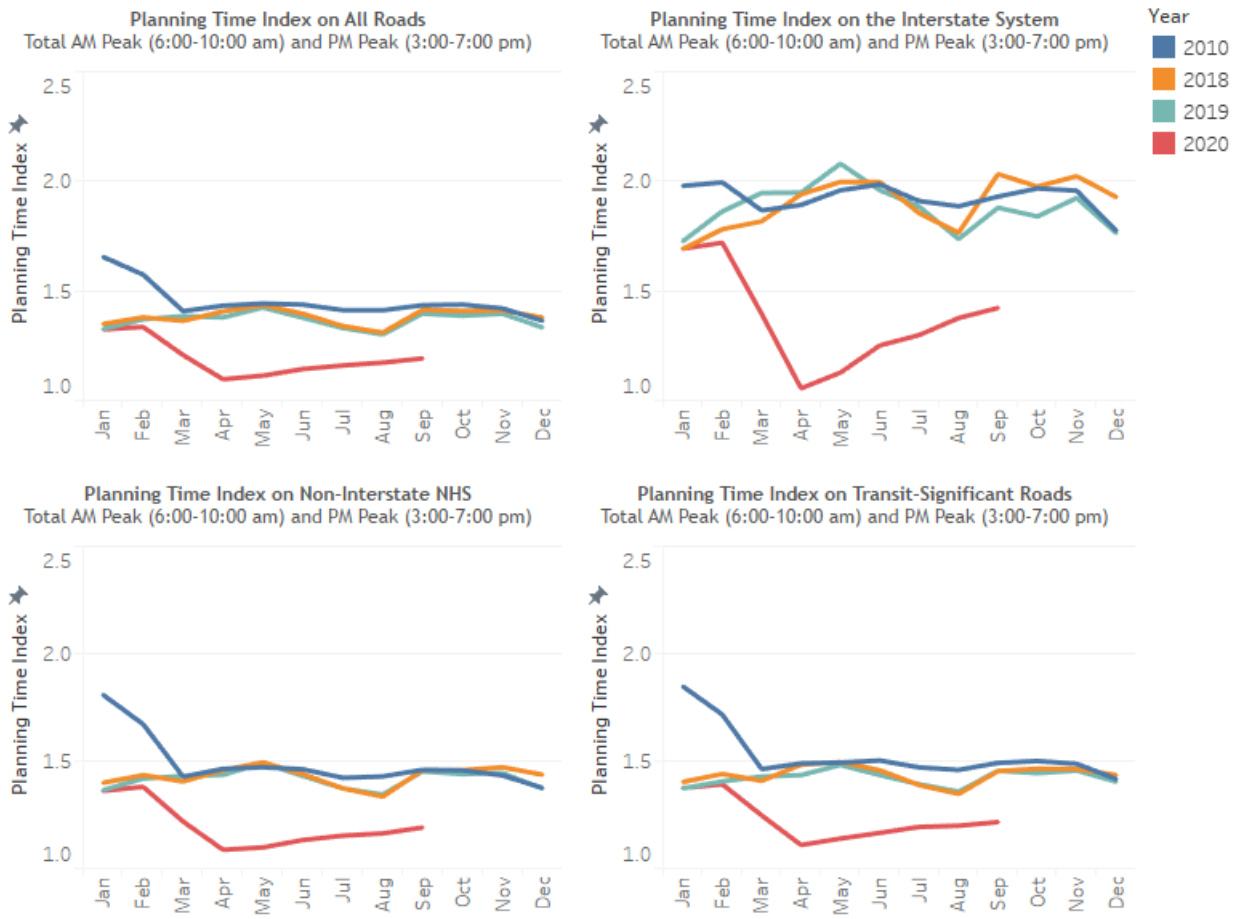
PTI 3rd Quarter 2019: **1.20** ↓14.2% or -0.2
 PTI Trailing 4 Quarters: **1.28** ↓10.4% or -0.15

All Roads

PTI 3rd Quarter 2019: **1.17** ↓12.5% or -0.17
 PTI Trailing 4 Quarters: **1.24** ↓9.9% or -0.14

¹ Compared to 3rd Quarter 2019; 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)

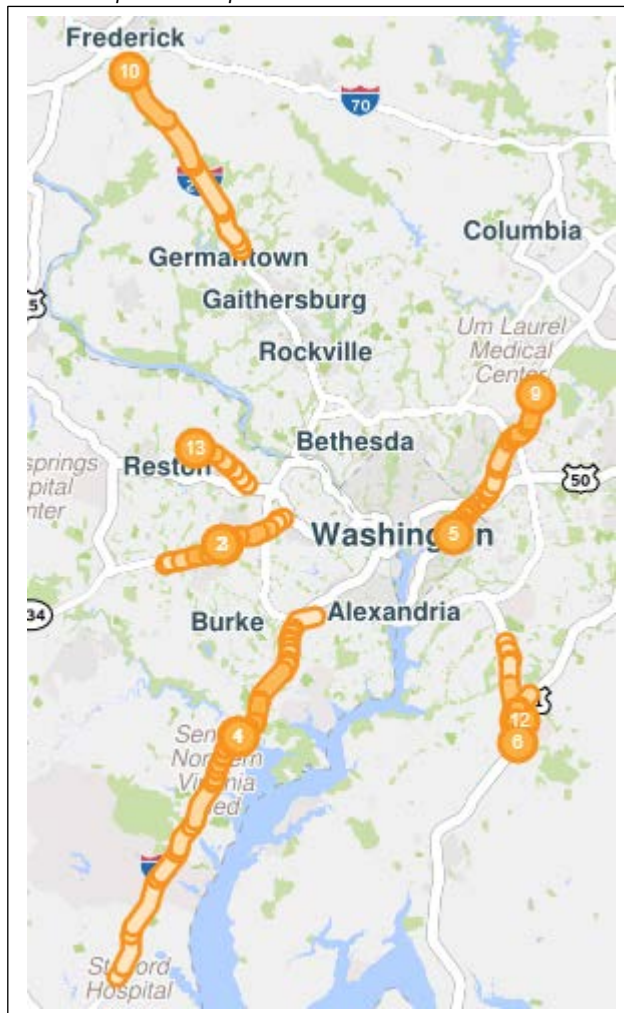


Planning Time Index (PTI), defined as the ratio of 95th percentile travel time to free flow travel time, measures travel time reliability. The higher the index, the less reliable traffic conditions it represents, e.g., PTI = 1.30 means a traveler must budget 30% longer than the uncongested travel time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

TOP 10 BOTTLENECKS

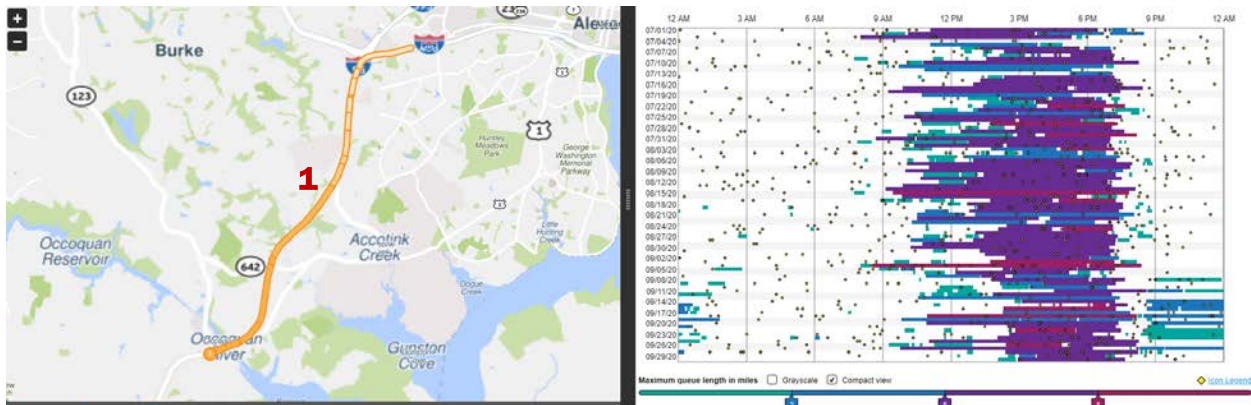
Rank (Last Quarter Rank)	Location	Average duration	Average max length (miles)	Total duration	Impact factor
1 (1)	I-95 S @ VA-123/EXIT 160	7 h 49 m	3.43	29 d 23 h 9 m	113,750
2 (17)	I-66 E @ VADEN DR/EXIT 62	6 h 20 m	1.73	24 d 7 h 56 m	54,028
3 (**)	I-66 W @ VADEN DR/EXIT 62	3 h 27 m	2.35	13 d 5 h 49 m	45,786
4 (27)	I-95 N @ VA-123/EXIT 160	2 h 9 m	3.96	8 d 7 h 2 m	43,451
5 (25)	DC-295 S @ E CAPITOL ST	6 h 34 m	1.25	25 d 5 h 15 m	40,743
6 (49)	US-301 S @ MCKENDREE RD/CEDARVILLE RD	3 h 9 m	2.34	12 d 3 h 12 m	39,024
7 (**)	BW PKWY N @ POWDER MILL RD	3 h 15 m	2.5	12 d 12 h 11 m	33,050
8 (**)	I-270 N @ MD-85/EXIT 31	52 m	7.61	3 d 7 h 58 m	31,112
9 (**)	MD-5 S @ US-301/SHORT CUT RD	3 h 9 m	1.68	12 d 2 h 55 m	24,538
10 (10)	VA-7 W @ VA-674	3 h 50 m	0.98	14 d 17 h 25 m	22,459

**Not in the top 50 bottlenecks of the previous report.

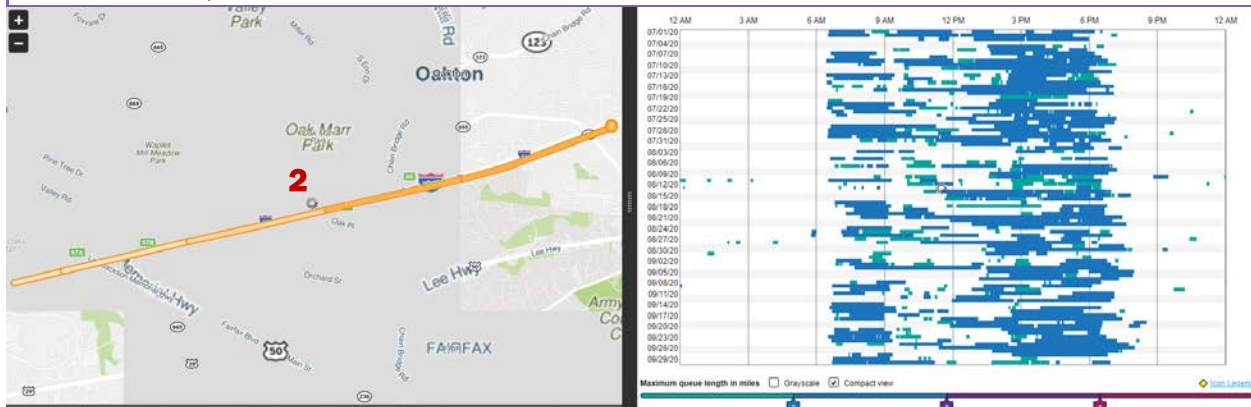


Rank	Location	Average duration	Average max length (miles)	Total duration	Impact factor*
1	I-95 S @ VA-123/EXIT 160	7 h 49 m	3.43	29 d 23 h 9 m	113,750

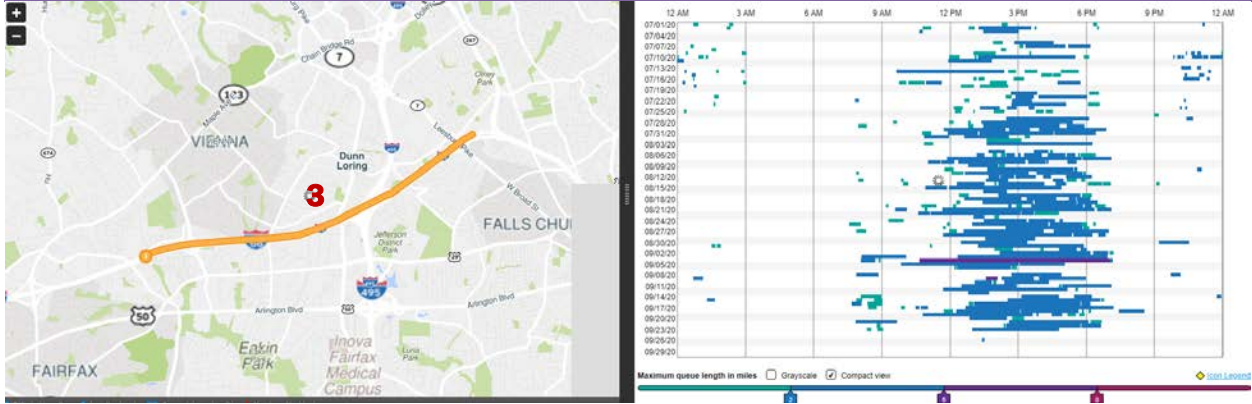
* The Impact Factor of a bottleneck is simply the product of the Average Duration (minutes), Average Max Length (miles) and the number of occurrences.



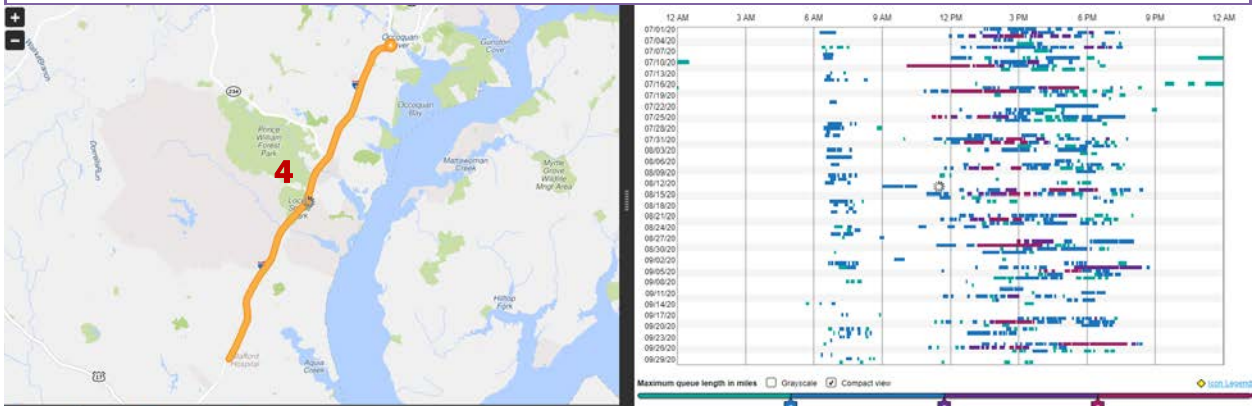
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2	I-66 E @ VADEN DR/EXIT 62	6 h 20 m	1.73	24 d 7 h 56 m	54,028



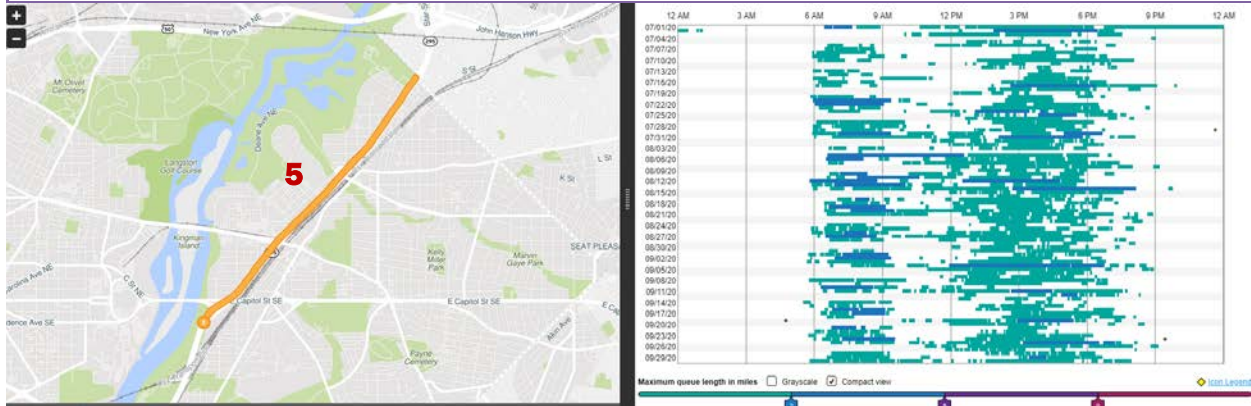
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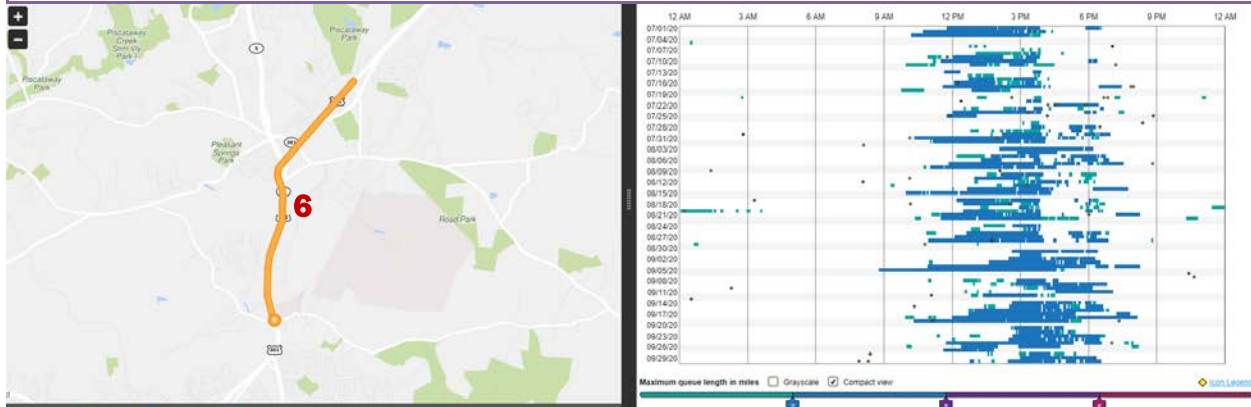
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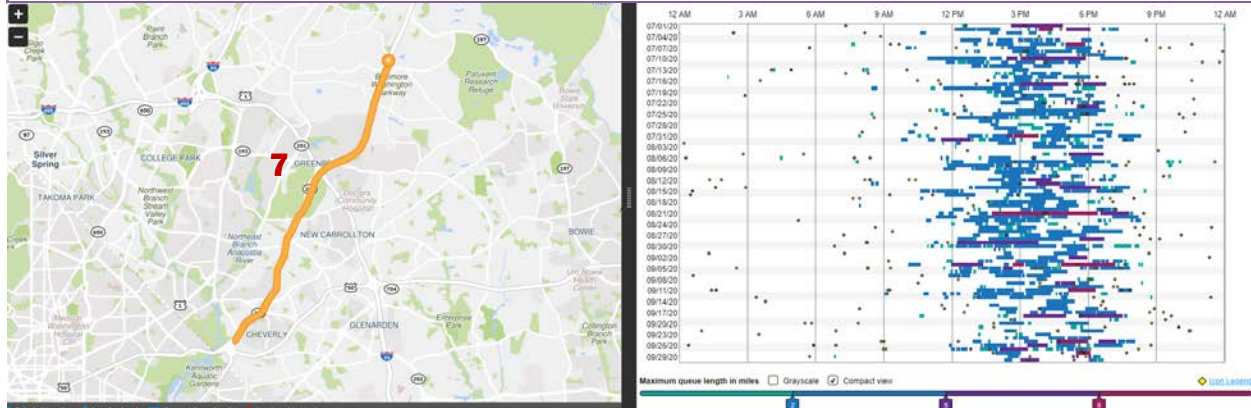
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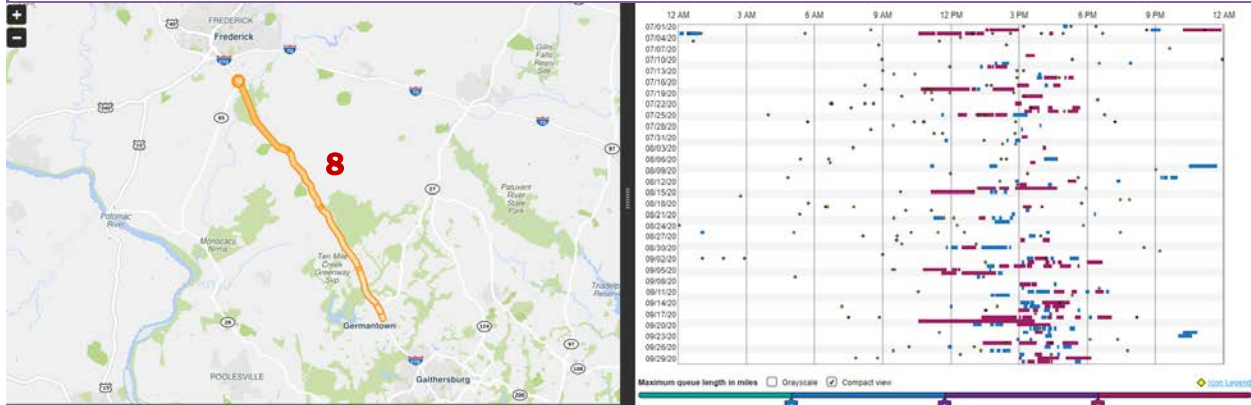
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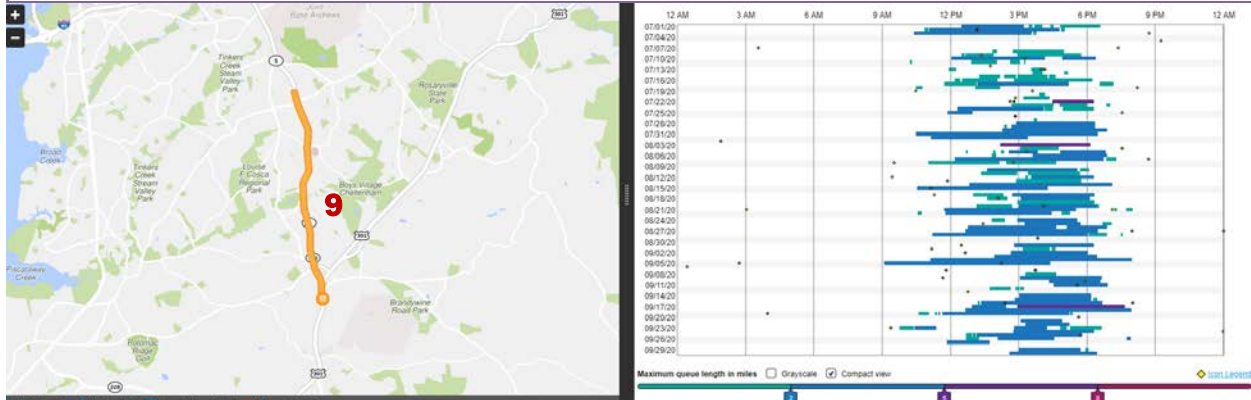
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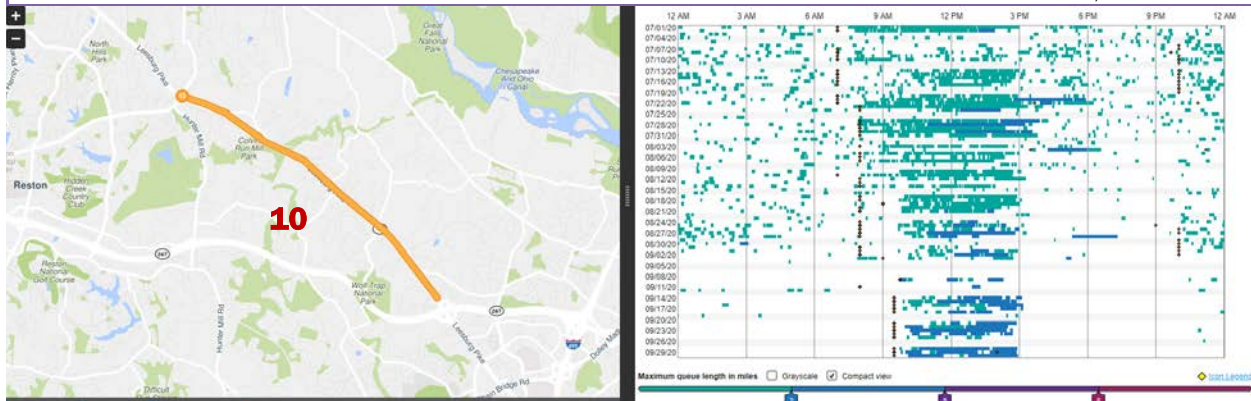
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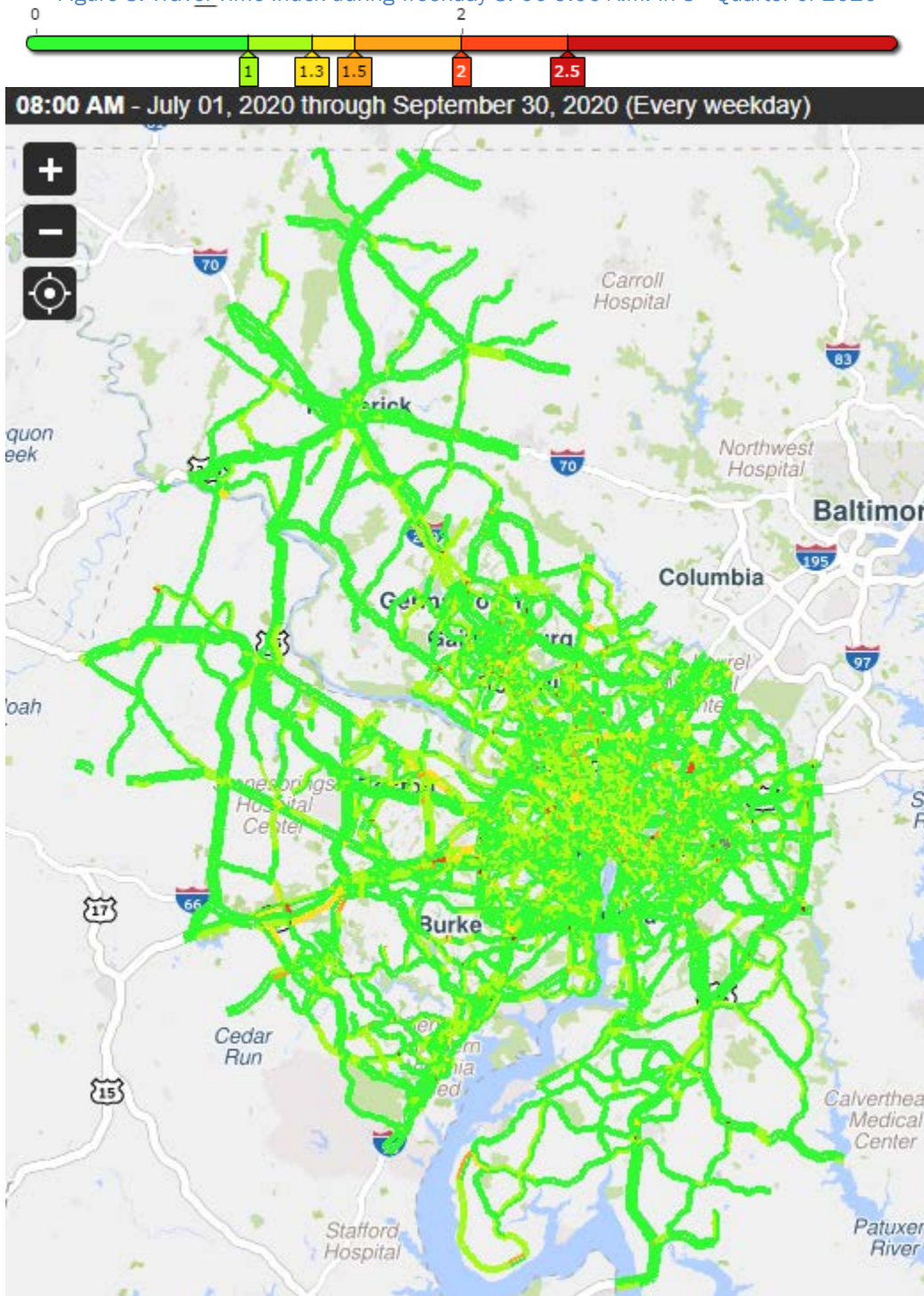


Rank	Location	Average duration	Average max length (miles)	Total duration	Impact factor
10	VA-7 W @ VA-674	3 h 50 m	0.98	14 d 17 h 25 m	22,459



CONGESTION MAPS

Figure 3. Travel Time Index during weekday 8: 00-9:00 A.M. in 3rd Quarter of 2020



2020Q3 SPOTLIGHT: DIFFERENCES BY CORE VS. OUTER AREAS

For the 3rd quarter of 2020, the impacts of the COVID-19 pandemic on regional travel and congestion were still apparent. Notably, congestion appeared to increase (recover) especially in the outer portions of the region, while remaining historically low in the region's core areas. The 3rd quarter also saw a gradual return to the top ten congestion locations being on the region's freeways, rather than was the unusual case for the mostly-arterial top ten of the 2nd quarter of 2020. Nevertheless, for the 3rd quarter, congestion, as indicated by the Travel Time Index and Planning Time Index, remained extremely low by historic standards. How long such low congestion levels will endure will be determined by the length and severity of pandemic impacts, or possibly by people's permanently changed travel patterns and habits, for which only time will tell.



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