

MEMORANDUM

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SUBJECT: Brief Analysis of Major Roadway Impacts of the Partial Federal Government Shutdown

DATE: January 15, 2019

This memorandum summarizes the findings of a brief analysis of selected transportation impacts of the current partial federal government shutdown.

FINDINGS

Overall the analysis indicates that there has been a considerable reduction in congestion on the region's major roadways during the morning commuter period this year on account of the partial shutdown of the federal government agencies and the impacted private sector (federal contractors) businesses.

The following were noteworthy findings of this analysis:

- The most significant differences were seen in the morning peak periods, for "inbound" directions. The tables and graphics below show examples of the increase of speeds and decreases in travel times along these example corridors.
- Speeds and congestion for other times of day, including evening rush hours, and for non-peak directions, were not found to be significantly different from historic conditions.
 (Graphics/tables for times/routes not significantly changed have not been included at this time.)
- These observed conditions have similarities to typical "summertime" (July/August)
 conditions, with reduced morning peak demand, but similar or even increased evening
 demand but morning speed increases during the partial federal government shutdown
 period have been more dramatic.

It should be noted that the above findings could be affected by other factors:

- Some school districts were not in session on January 3 and 4, 2019, but were understood to be back in session by January 9; whether schools are in session impacts traffic patterns.
- Other changing factors, not just the partial government shutdown, could affect year-to-year variations in traffic, such as weather, incidents, construction zones, and fuel prices. These factors were not analyzed.

Table 1: Travel Time (Minutes) at Approximately 7:00 AM
Selected January 2019 Dates* During Partial Government Shutdown Compared to 2018
Major Commuter Routes "Inbound" Only

Route	Distance miles	January 2018	January 2019	Improvement	Improvement
I-270 from I-70 to I-370	23.7	49	29	20 min	41 %
I-270 from I-370 to I-495	11.7	20	17	3 min	15 %
BW Pkwy from MD 198 to US 50	16.2	25	21	4 min	16 %
I-66 from VA 28 to I-495	12.7	19	19	0 min	0%
I-66 from I-495 to TR Bridge	11.3	13	12	1 min	8%
I-495 from I-270 to I-66	10.9	21	12	9 min	43%
I-95 from VA 234 to Franconia Rd.	21.7	31	27	4 min	13%
I-395 from I-495 to New York Ave.	12.1	26	23	3 min	12%

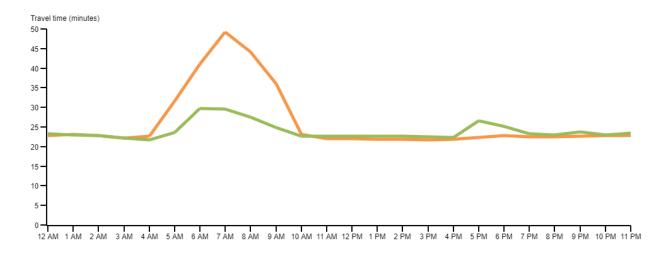
^{*} January 3, 4, 10, and 11, 2018; January 2, 3, 9, and 10, 2019. All dates are Wednesdays and Thursdays.

Table 2: Speeds (Miles per Hour) at Approximately 7:00 AM
Selected January 2019 Dates* During Partial Government Shutdown Compared to 2018
Major Commuter Routes "Inbound" Only

Route	Distance miles	January 2018	January 2019	Improvement	Improvement
I-270 from I-70 to I-370	23.7	29	49	20 mph	68%
I-270 from I-370 to I-495	11.7	35	45	10 mph	29%
BW Pkwy from MD 175 to US 50	16.2	39	47	8 mph	20%
I-66 from VA 28 to I-495	12.7	40	40	0 mph	0%
I-66 from I-495 to TR Bridge	11.3	52	54	2 mph	4%
I-495 from I-270 to I-66	10.9	31	56	25 mph	65%
I-95 from VA 234 to Franconia Rd.	21.7	42	47	5 mph	12%
I-395 from I-495 to New York Ave.	12.1	28	37	9 mph	32%

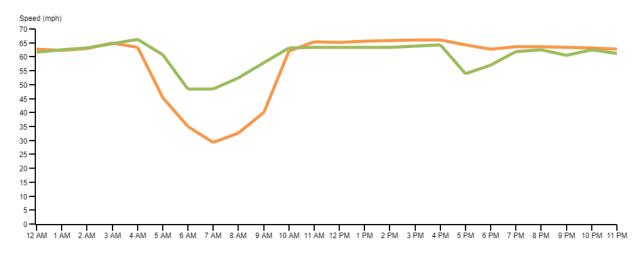
^{*} January 3, 4, 10, and 11, 2018; January 2, 3, 9, and 10, 2019. All dates are Wednesdays and Thursdays.

Figure 1:
Travel Time for Southbound I-270 between I-70/US 40 (Frederick) and I-370
Selected 2019 dates (green line) versus comparable 2018 dates (orange line)*



^{*} January 3, 4, 10, and 11, 2018; January 2, 3, 9, and 10, 2019. All dates are Wednesdays and Thursdays.

Figure 2:
Example Graphic: Speeds for Southbound I-270 between I-70/US 40 (Frederick) and I-370
Selected 2019 dates (green line) versus comparable 2018 dates (orange line)*

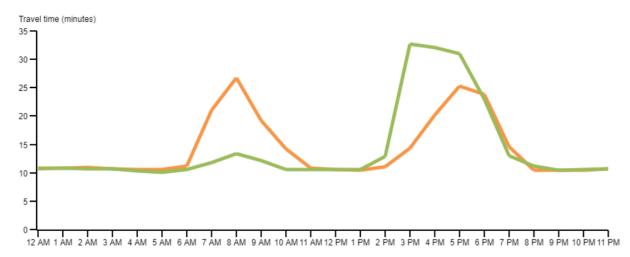


^{*} January 3, 4, 10, and 11, 2018; January 2, 3, 9, and 10, 2019. All dates are Wednesdays and Thursdays.

Figure 3:

Example Graphic: Travel Times for Inner Loop (clockwise) I-495 between I-66 and I-270

Selected 2019 dates (green line) versus comparable 2018 dates (orange line)*

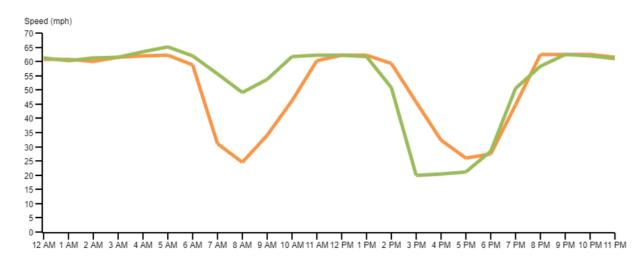


^{*} January 3, 4, 10, and 11, 2018; January 2, 3, 9, and 10, 2019. All dates are Wednesdays and Thursdays.

Figure 4:

Example Graphic: Speeds for Inner Loop (clockwise) I-495 between I-66 and I-270

Selected 2019 dates (green line) versus comparable 2018 dates (orange line)*



^{*} January 3, 4, 10, and 11, 2018; January 2, 3, 9, and 10, 2019. All dates are Wednesdays and Thursdays.

DATA SOURCE

Staff performed analyses of vehicle probe data made available to COG/TPB through the University of Maryland's Probe Data Analytics (PDA) Suite. The PDA provides reliable and verified data, plus tools that facilitate its analysis on a quick-turnaround basis. Caveats are noted that data are subject to change via future error-checking, and that any instantaneous or short-term trends are not assumed to indicate a long-term trend.

METHODOLOGY

Staff selected several representative corridors along major highways of the National Capital Region. The PDA Suite makes available travel speeds as measured from probe vehicles, for given time segments. This allows comparison of travel conditions on different days. For this selected analysis, staff chose four days during the partial federal shutdown: Wednesday, January 2, Thursday, January 3, Wednesday, January 9, and Thursday, January 10, 2019, and compared results on these dates to their closest equivalents in January 2018.

This limited analysis is considered to be a "sensitivity test" for magnitude of speed and congestion impacts. A more detailed analysis would consider other factors, such as traffic volumes, weather, other modes of travel, and results over a longer period of time. Such an analysis is not planned at this time.

Other COG data on the partial federal government shutdown:

- There are 361,000 federal workers in the region.
- A partial shutdown affects 40 percent of these workers, approximately 145,000 people.
- There are more than 400,000 federally contracted employees in the region.

Jurisdiction	% of Regional Federal Workforce		
District of Columbia	15.4%		
Charles County	3.8%		
Frederick County	2.8%		
Montgomery County	18.2%		
Prince George's County	17.1%		
Suburban Maryland	41.9%		
Alexandria	4.3%		
Arlington County	6.4%		
Fairfax	0.3%		
Fairfax County	19.5%		
Falls Church	0.4%		
Loudoun County	4.1%		
Manassas	0.3%		
Manassas Park	0.2%		
Prince William County	7.2%		
Northern Virginia	42.7%		
Region	100.0%		

(COG analysis of 2013-2017 American Community Survey Data)

MORE: View more resources about the federal government shutdown impact on the region.