

TRAFFIC CONDITIONS DURING SAFETRACK SURGE 1, JUNE 4-16

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TPB Technical Committee
July 8, 2016



Surge 1

1 June 4 - 16

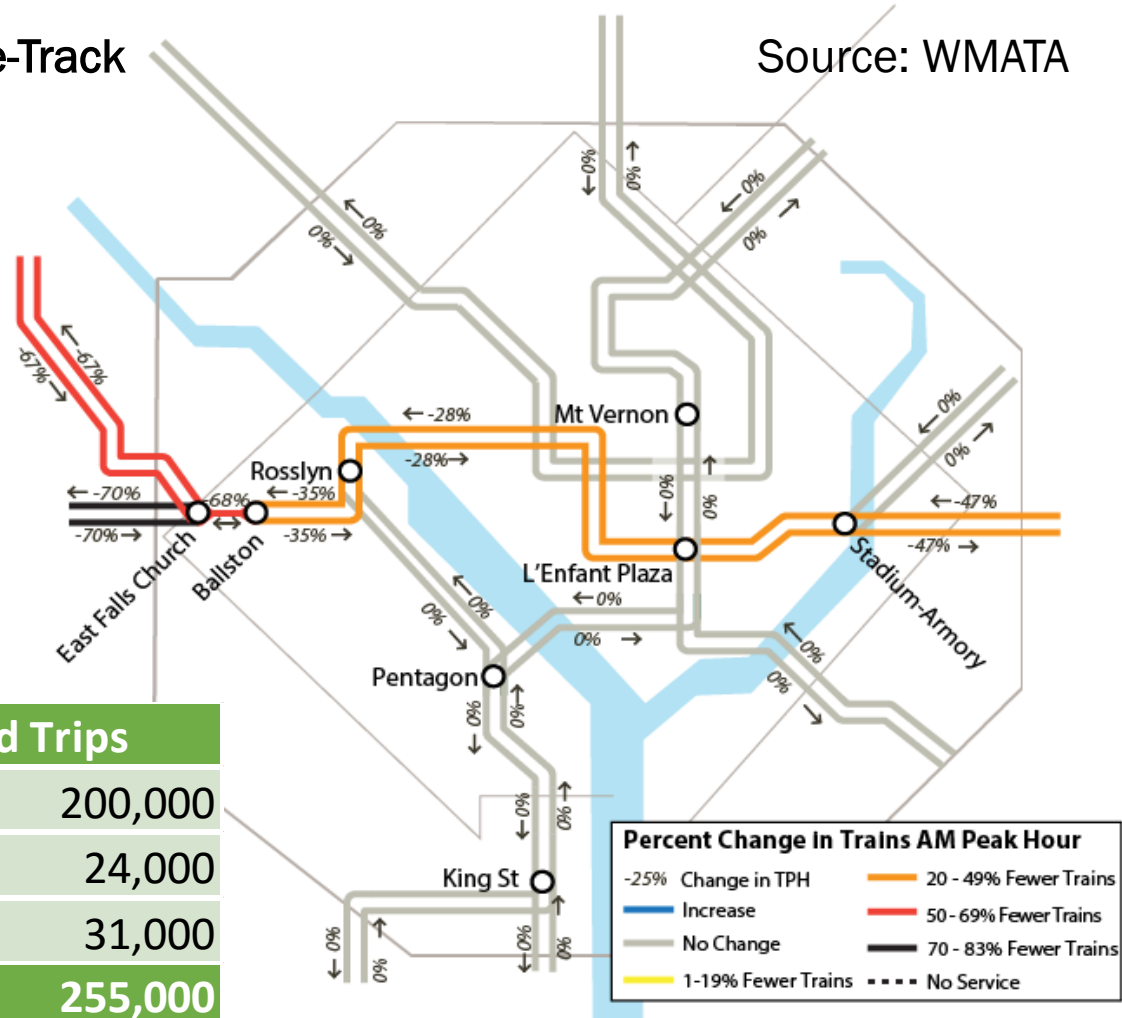
East Falls Church to Ballston Single-Track

Total Days	13
Weekdays	9
Weekend Days	4
Holidays	0

About 35% of daily trips impacted

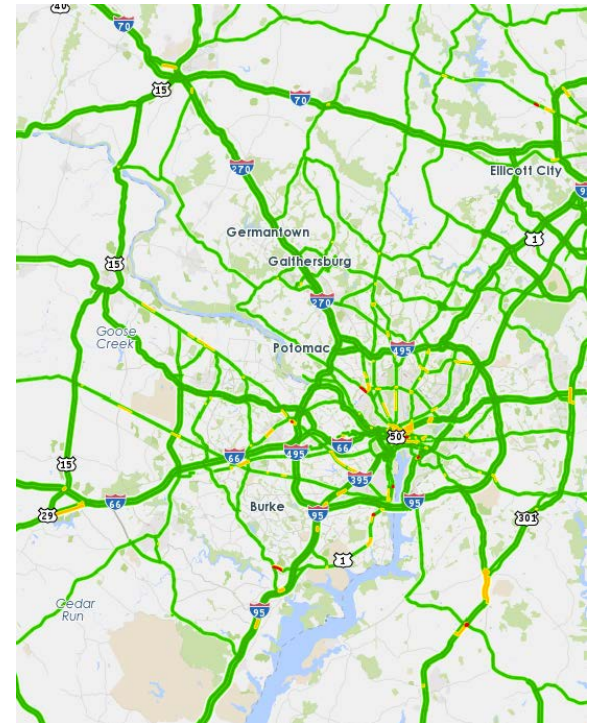
Total Impacted Peak Trips per Day

Service Change	Impacted Trips
20% - 49% Fewer Trains	200,000
50% - 69% Fewer Trains	24,000
70% - 83% Fewer Trains	31,000
Total	255,000



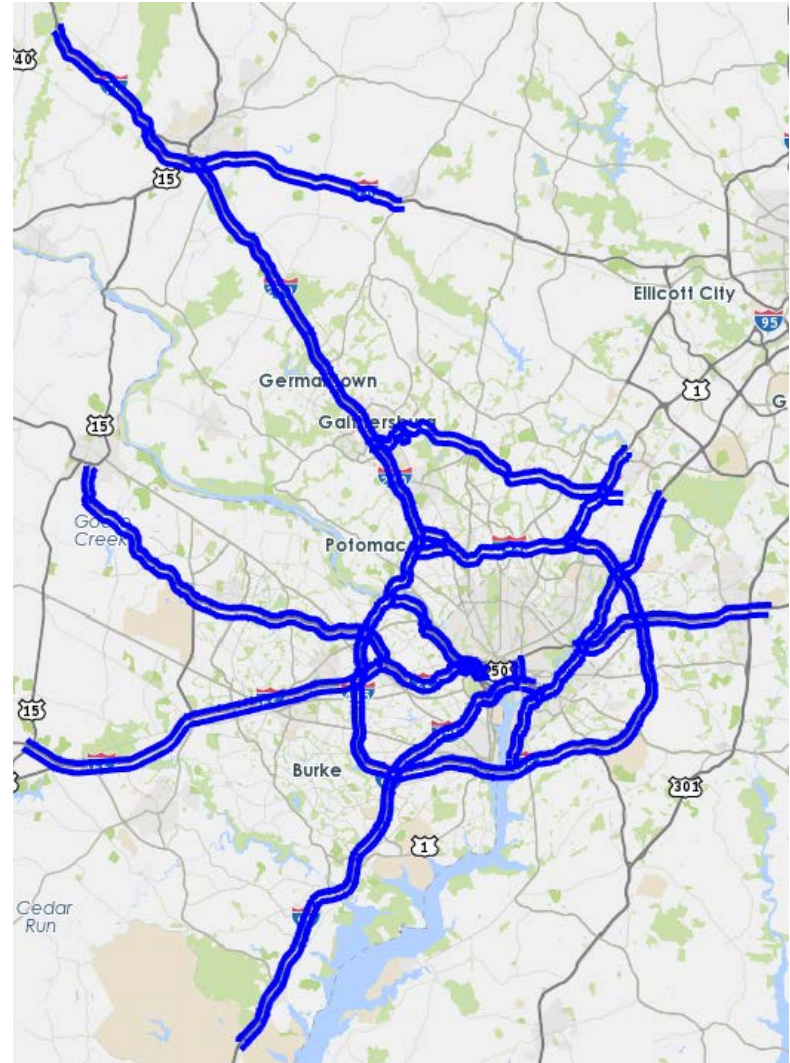
Data & Methodology

- I-95 Corridor Coalition Vehicle Probe Project (INRIX) data
- Typical conditions: May 2016 conditions, e.g.
 - Typical Monday condition is the average of May 9, 16 and 23
 - Weekdays only (weekends ignored)
- Scope:
 - Regional overview by freeways and arterials
 - Selected routes
 - Road segments



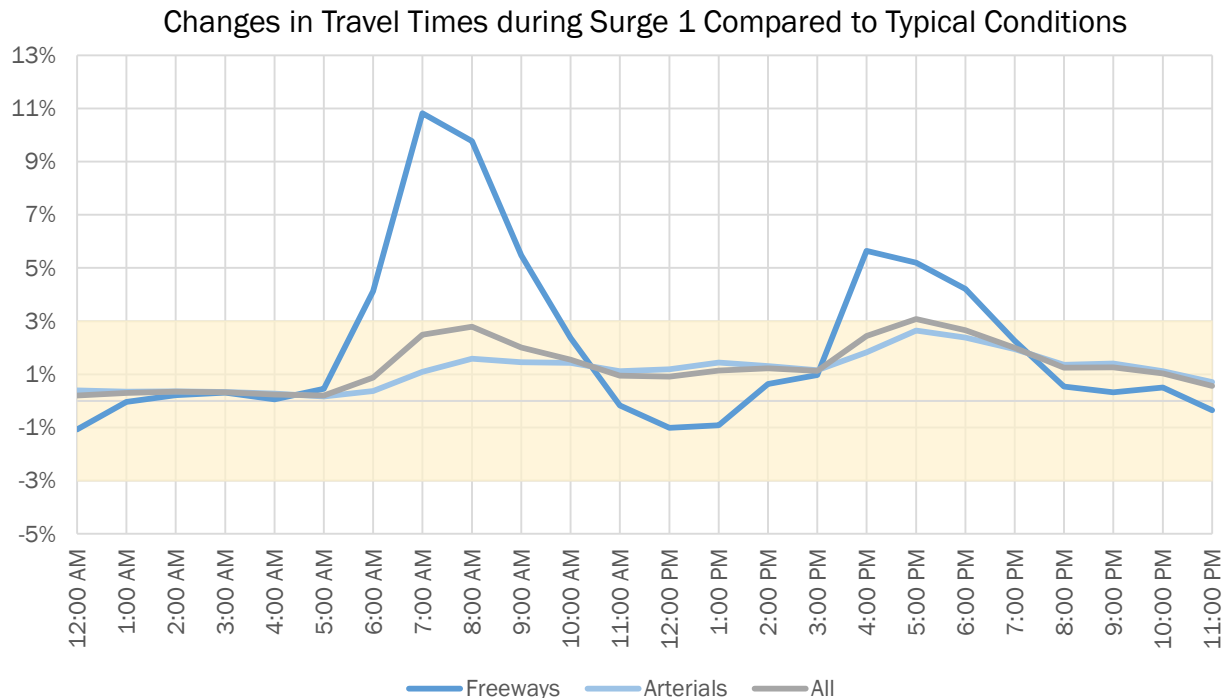
Freeways

- Both directions
- About 720 directional miles
- Including speed & travel time reports for
 - I-395 HOV Lanes
 - I-95 Express Lanes
 - I-495 Express Lanes



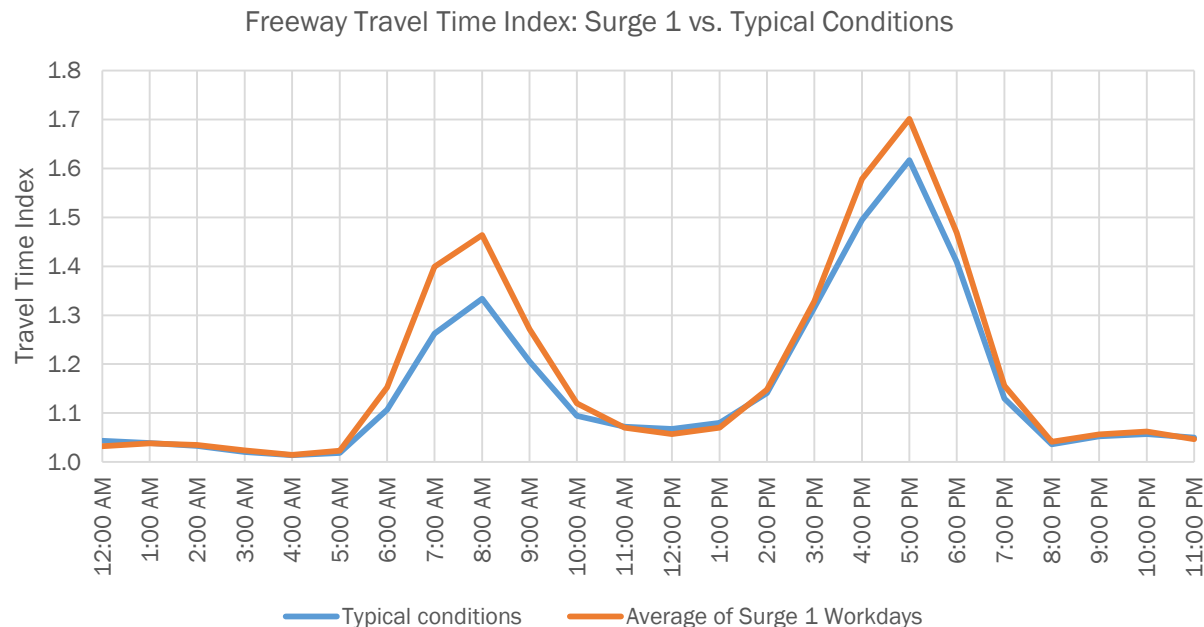
Overall Increased Congestion

- Freeways saw the largest increases, especially weekday mornings
 - 11% increase between 7:00-8:00 A.M.
 - 6% increase between 4:00-5:00 P.M.
- Arterial roadways also experienced increased travel times but the increase was less than 3% throughout the day



Peak Spreading and Worsening

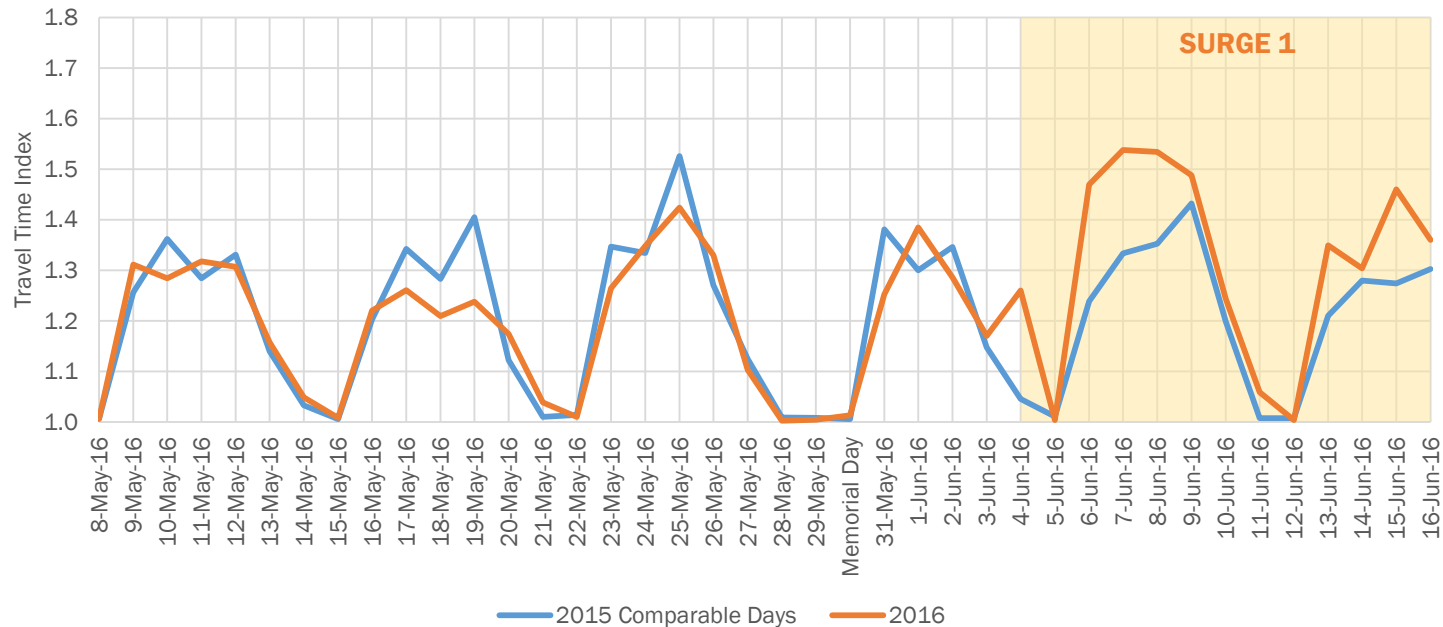
- During Surge 1, both the AM and PM peak periods were longer and worse than normal.
- The worst traffic occurred between 8:00 and 9:00 A.M. and 5:00 and 6:00 P.M., the same peak hours as a typical weekday. However, the greatest increase in congestion in the AM peak was observed one hour earlier than the normal peak hour (shown in previous slide)



A New Traffic Pattern at Onset

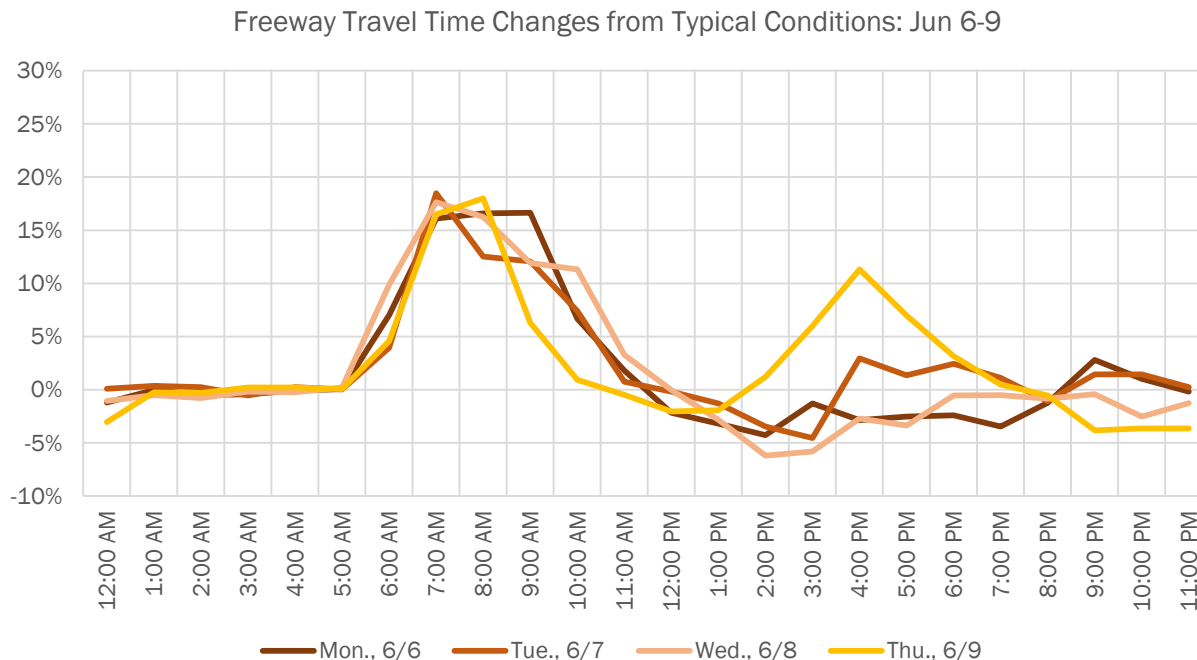
- A new traffic condition pattern was noticeable between 7:00 and 8:00 A.M. on area's freeways, especially during the first week.
- Congestion levels during this time were higher than the same time one year earlier and May 2016, including the week before Memorial Day, when traffic is usually worse than normal

Freeway Travel Time Index Before and During Surge 1, 7:00-8:00 A.M.



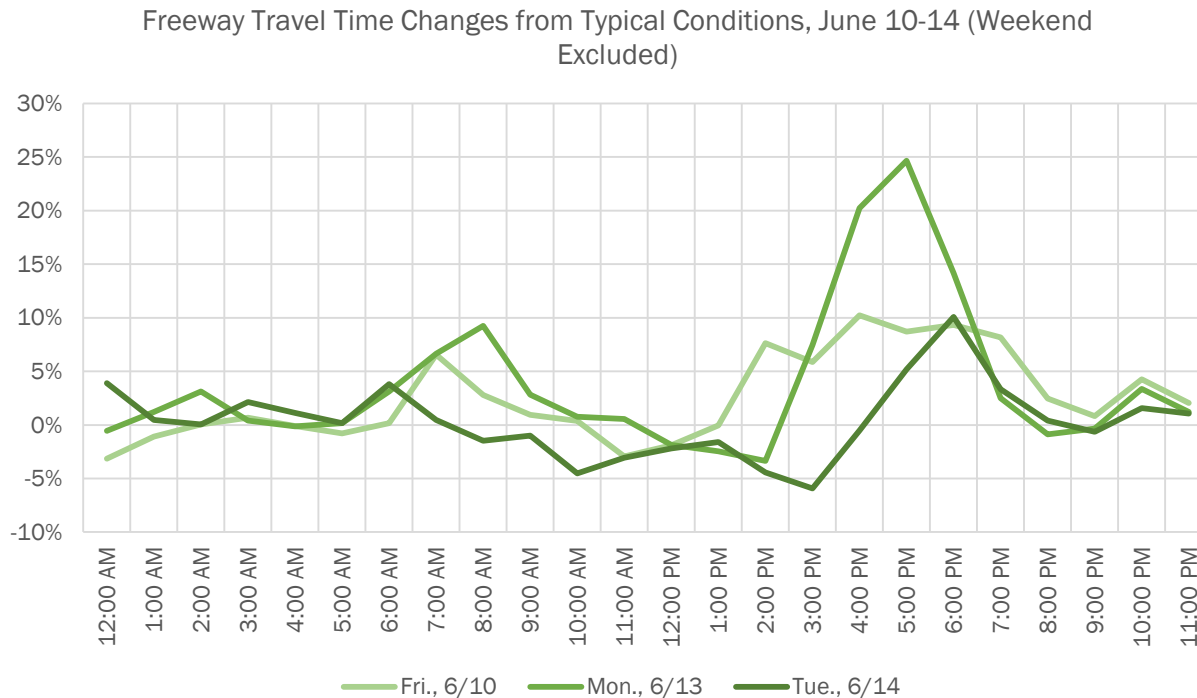
Stage 1 (6/6-9): Sudden, Large Increase in AM

- Congestion patterns changed in notable ways over the course of Surge 1 and they might be an indication of travelers' adjustments to the new travel pattern
 - During the first four weekdays of Surge 1 (Monday (6/6) through Thursday (6/9)), the AM peak period saw much larger increases in congestion than the PM peak period



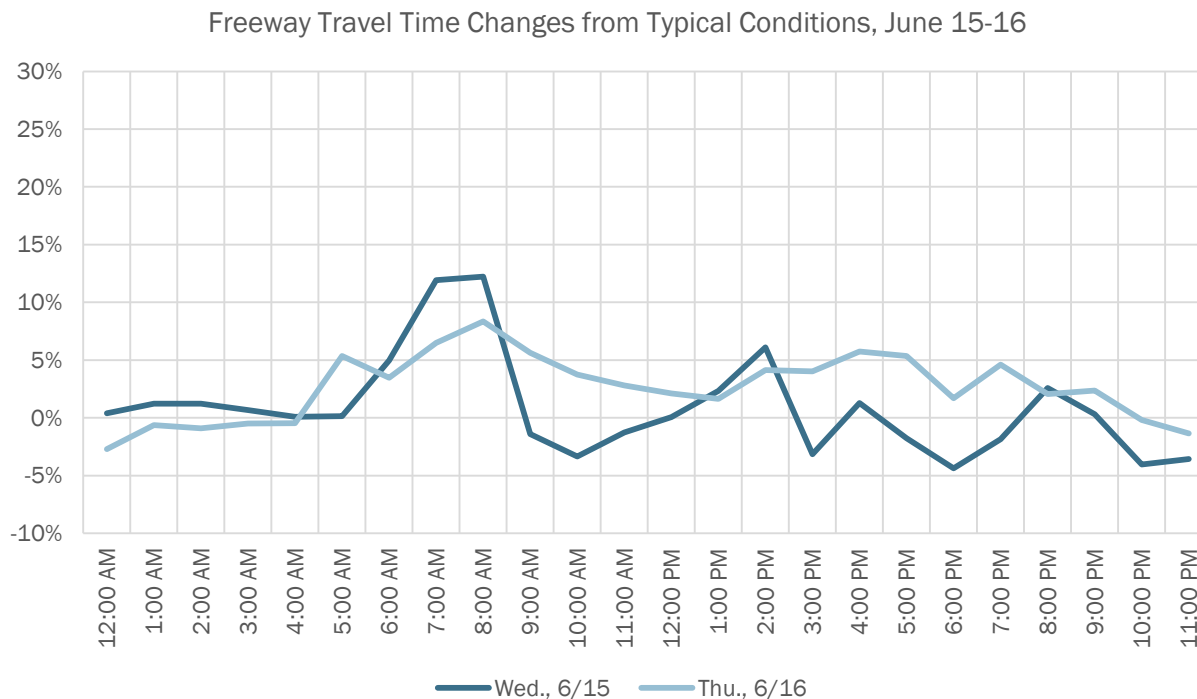
Stage 2 (6/10-14): Larger Increase in PM

- From Friday (6/10) through Tuesday (6/14), excluding Saturday and Sunday, that pattern reversed and the PM peak period saw the greatest increases in congestion



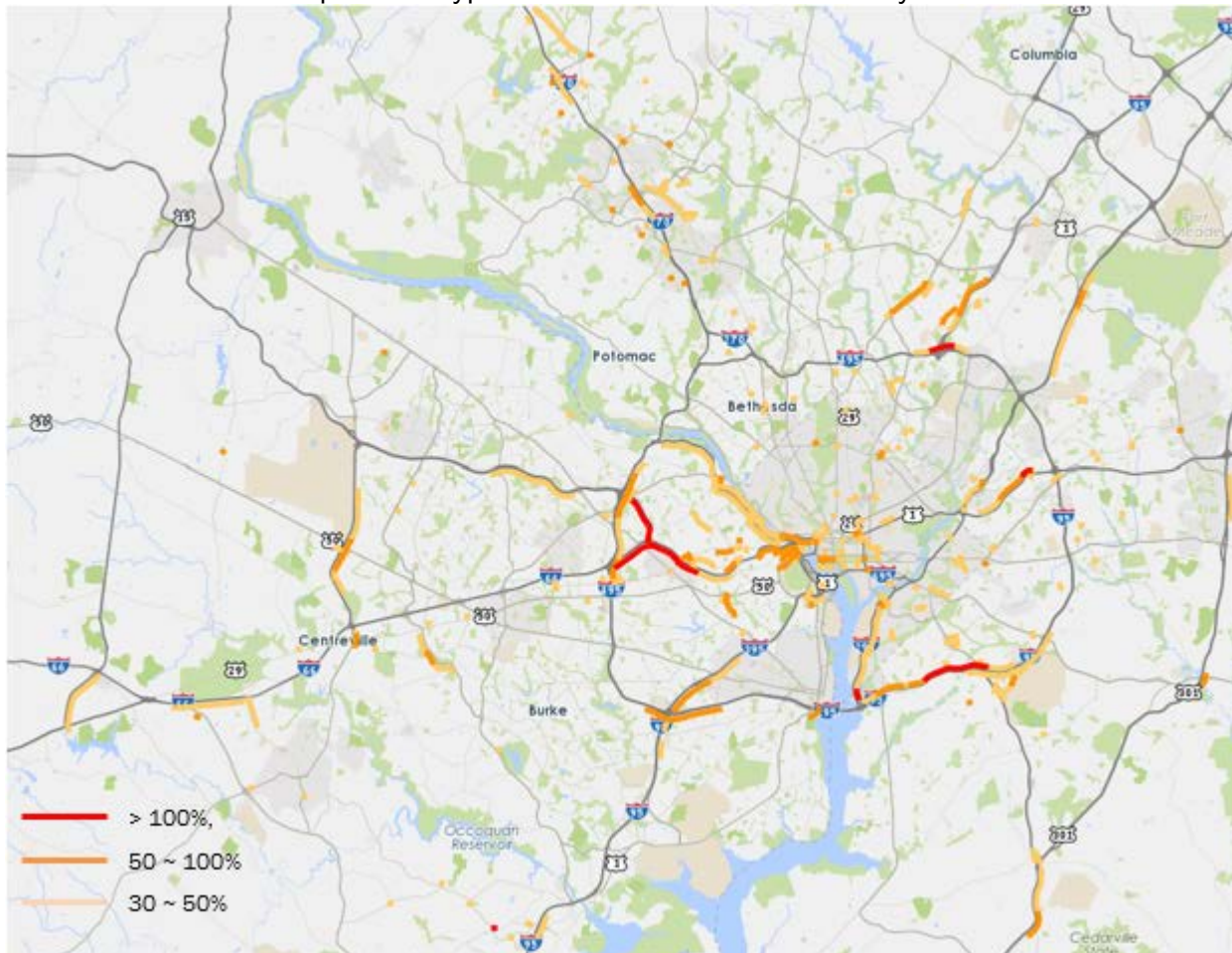
Stage 3 (6/15-16): Larger Increase in AM Again

- Toward the end of the surge, from Wednesday (6/15) through Thursday (6/16), the AM peak period again had larger increases than the PM peak period, but still less than in the first four weekdays of the surge



Segments w/ Most-Significant Changes: 8:00-9:00 AM

Travel Time Increases in AM Peak Hour (8:00-9:00 A.M.) in Surge 1
Compared to Typical Conditions Observed in May 2016



The greatest increases in congestion occurred in the triangle formed by I-66 EB inside I-495, George Washington Parkway, I-495 and VA-267

Significant increases in congestion occurred on I-95/I-495 inner-loop from MD-5 to I-295, US 50 WB between I-95/I-495 and MD-201/Baltimore-Washington Parkway, I-495 outer-loop at I-95 in MD

Notable increases in congestion occurred on VA-267 EB from VA-286 to VA-7; I-395 NB; and I-95 SB in MD



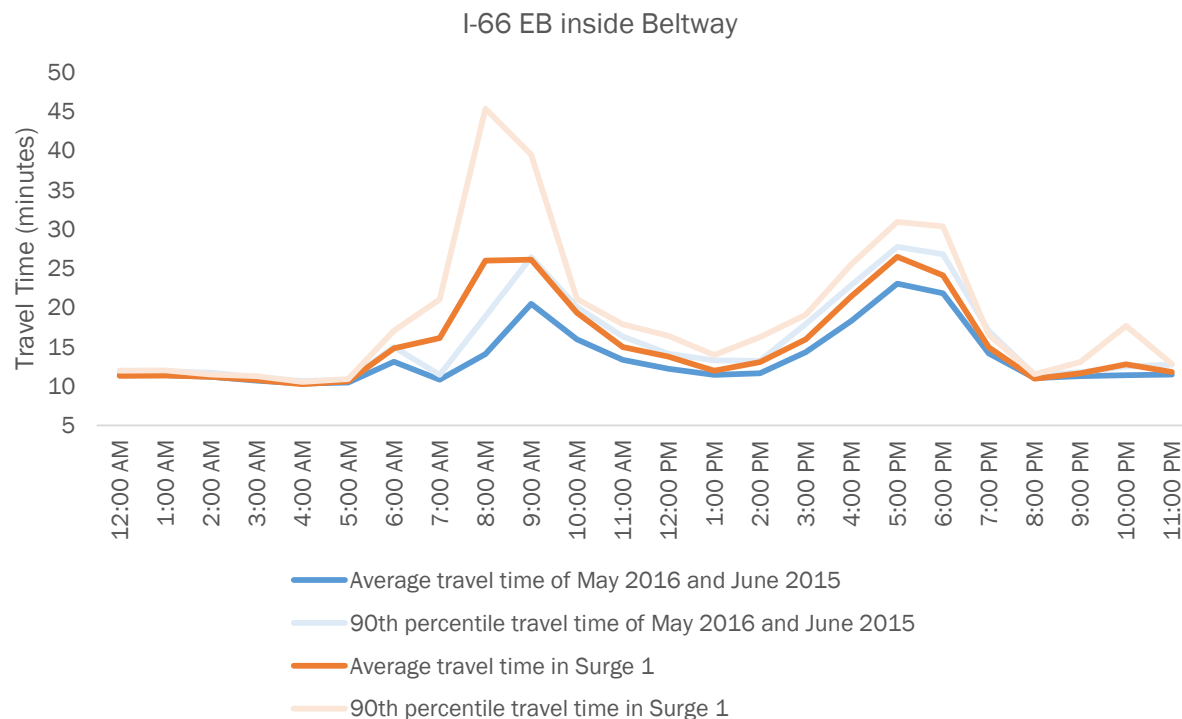
Route Travel Times

- Eight routes studied, more routes explored
- I-66 EB inside the Beltway (parallel facility along Surge 1) had the largest increases in travel times among all studied routes
- Freeways had larger increases in travel times than arterials
- For most routes, both the average and the 90th percentile travel times* increased over typical conditions

* 90% of the travel times are shorter than this 90th percentile travel time.



Route Travel Time: I-66 EB Inside I-495



Conclusions

- Regional overall traffic congestion increased during SafeTrack Surge 1, especially in the AM peak of the first four weekdays
 - Freeways had larger congestion increases than arterials; the AM peak period had larger increases than the PM peak period
 - Most significant congestion increases observed in northern Virginia along I-66 EB and VA-267 EB inside the Beltway, in the vicinity of the Metrorail track work between East Falls Church and Ballston stations
 - Congestion increases also observed on GW Parkway, I-395 NB, I-295 NB and several sections of the Beltway
- The increase of congestion tailed off towards the end of Surge 1, an indication of travelers' adjustments to the new travel pattern in the region
- **It is worthwhile to closely monitor the first few weekdays of each Surge, and provide timely information to the public if significant congestion increases are observed**



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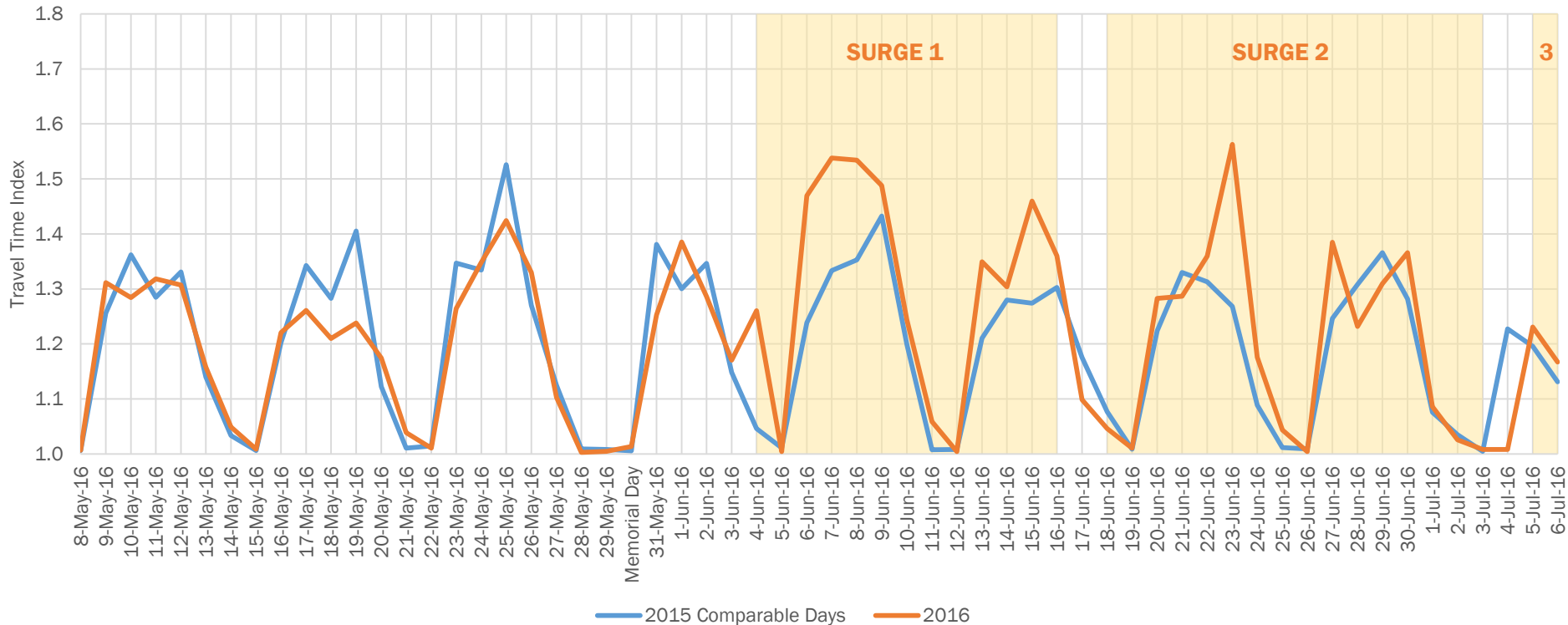
National Capital Region
Transportation Planning Board

Additional Slides



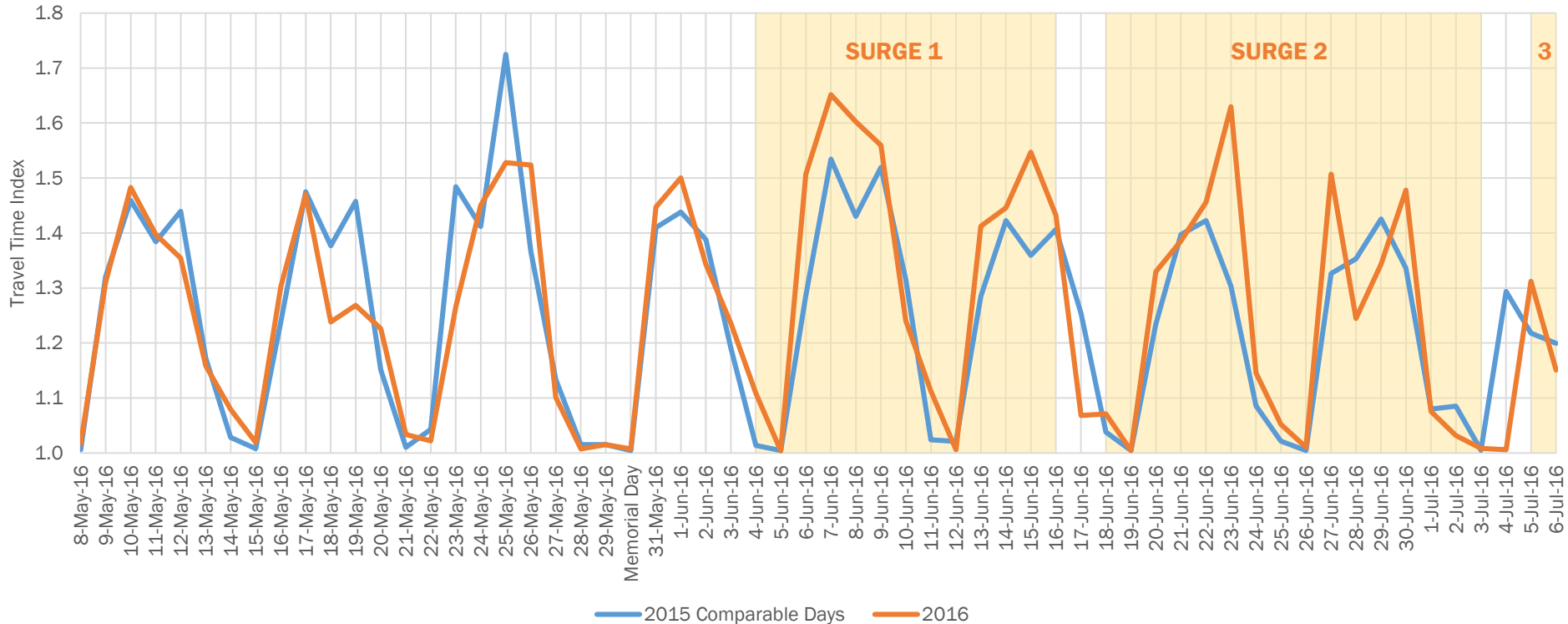
7:00-8:00 AM in Surges 1 & 2

Average Travel Time Index on Area's Freeways, 7:00-8:00 A.M.

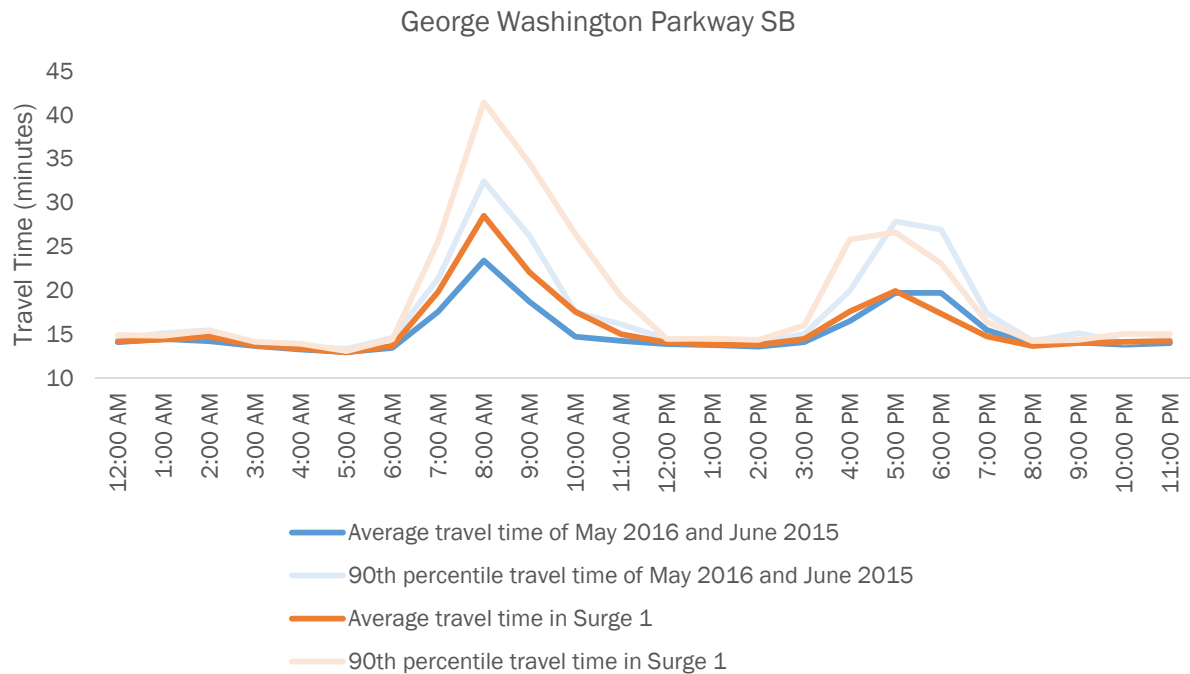


8:00-9:00 AM in Surges 1 & 2

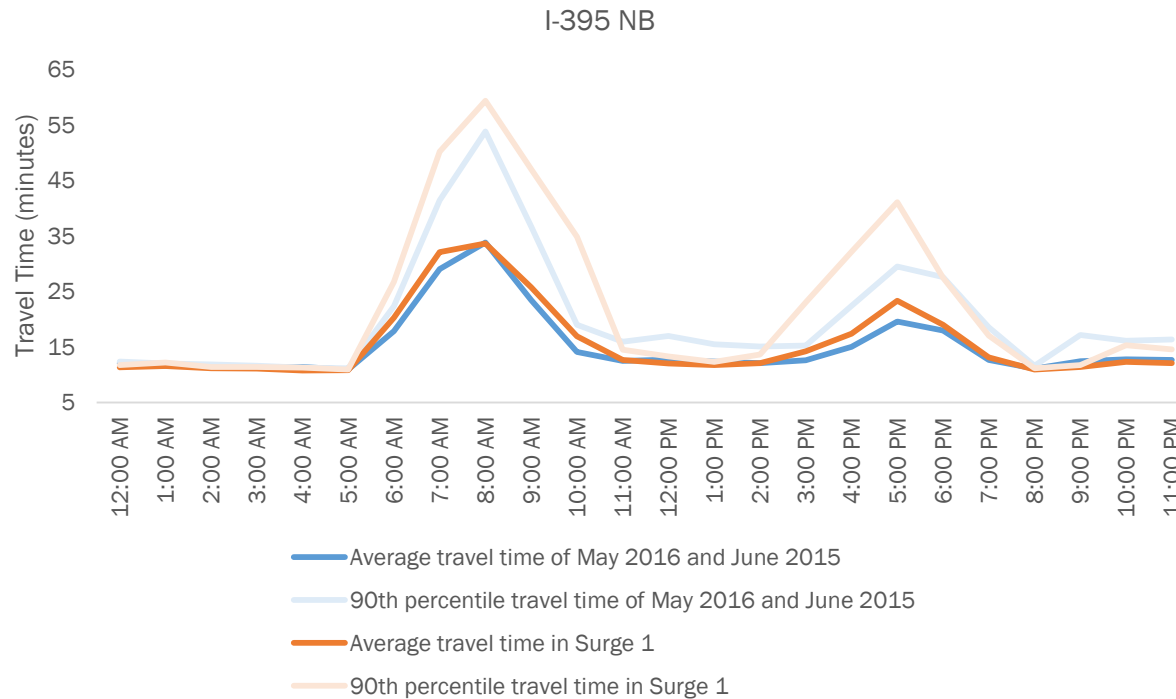
Average Travel Time Index on Area's Freeways, 8:00-9:00 A.M.



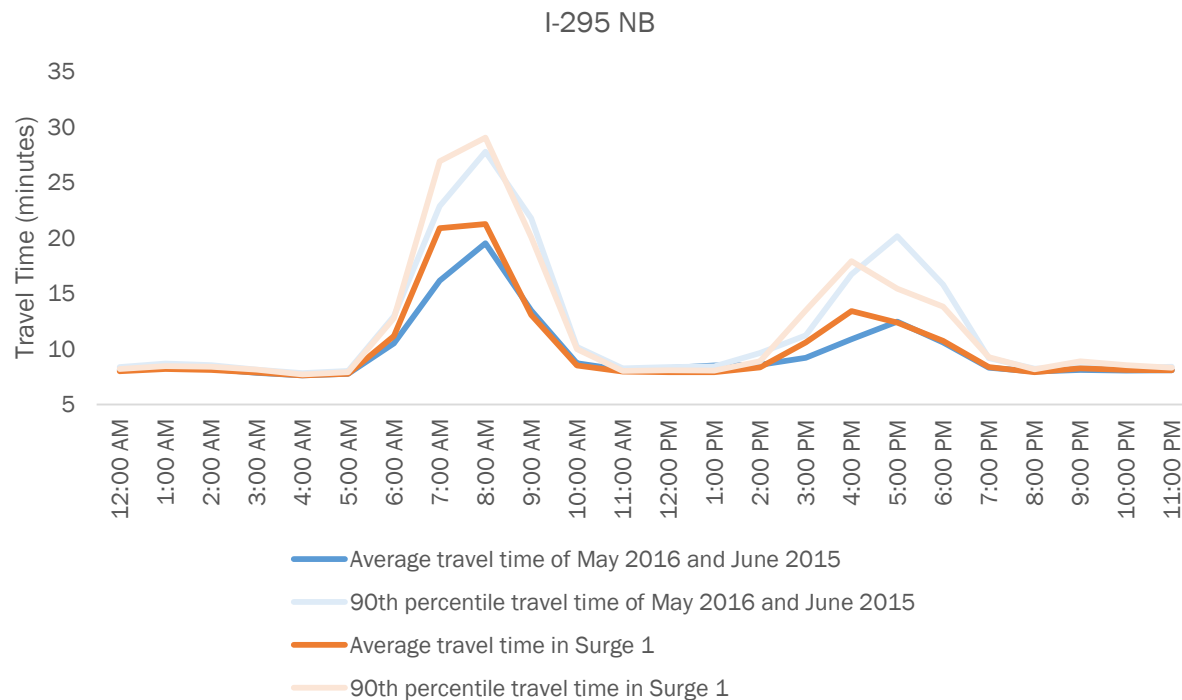
Route Travel Time: GW Pkwy SB



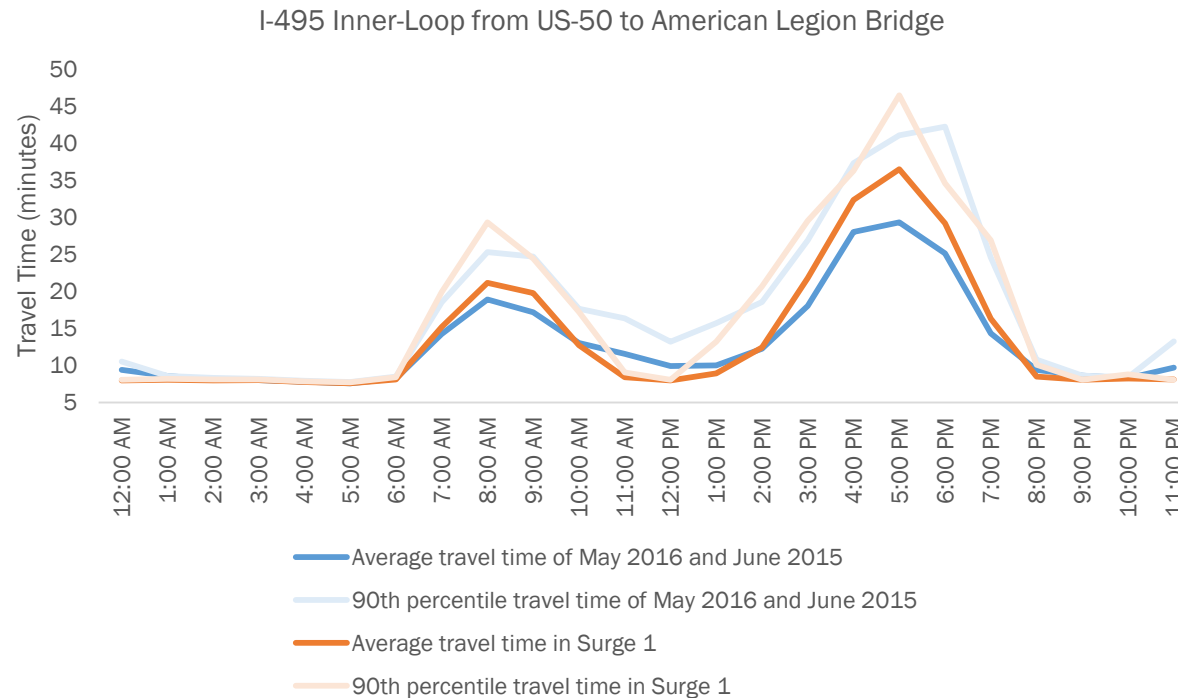
Route Travel Time: I-395 NB



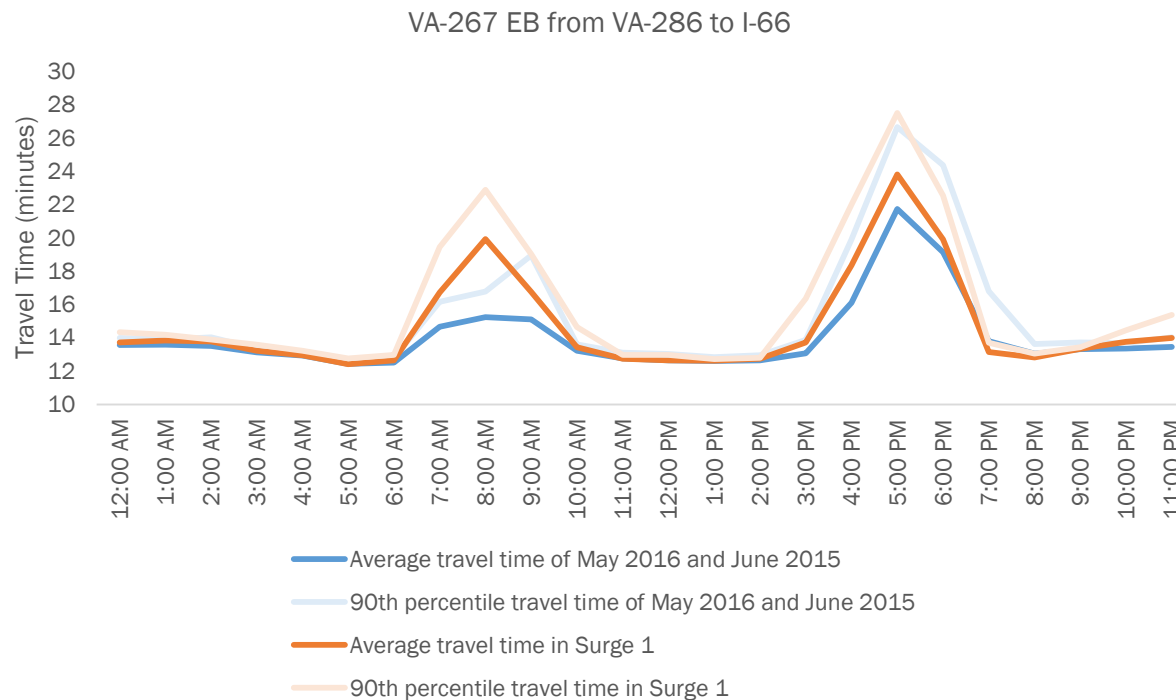
Route Travel Time: I-295 NB



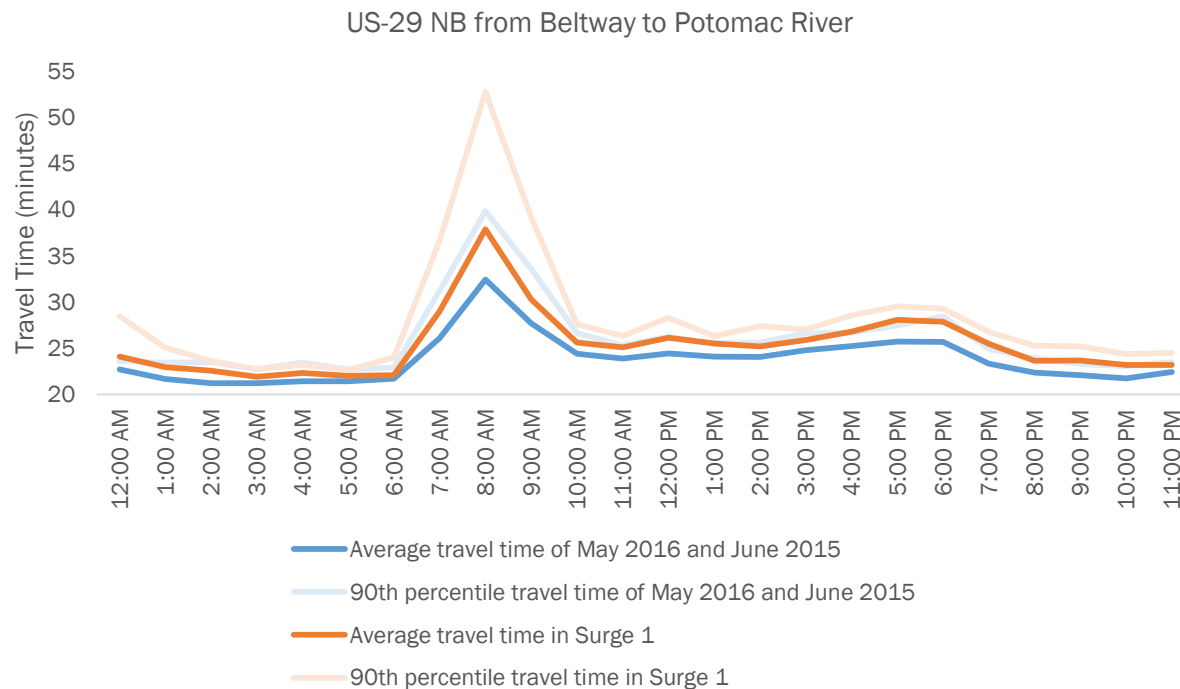
Route Travel Time: I-495 IL from US-50 to ALB



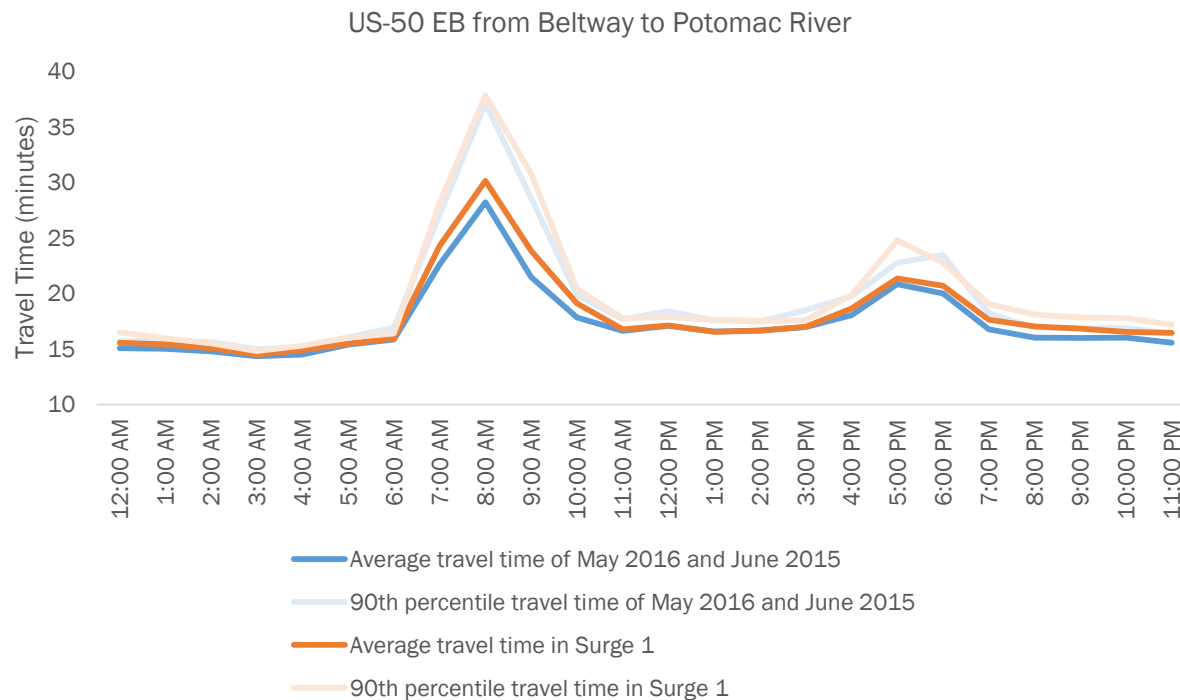
Route Travel Time: VA-267 EB



Route Travel Time: US-29 NB



Route Travel Time: US-50 EB



Route Travel Time: I-395 NB

