



COMMONWEALTH of VIRGINIA
Office of the
SECRETARY of TRANSPORTATION

**Transform66: Inside the Beltway
6 Month Performance Review**

Nick Donohue
Deputy Secretary of Transportation
July 17, 2018



Transform66: Inside the Beltway

- **Result of a multi-year planning that started during the McDonnell Administration**
- **2016 compromise reached with General Assembly**
 - **Convert I-66 to express lanes from 5:30a-9:30a EB and 3:00p-7:00p WB**
 - **Widening I-66 EB from the Dulles Connector Road to Ballston**
 - **groundbreaking took place last week**
 - **Re-invest toll revenues in the corridor for improvements recommended by NVTC – \$24M allocated to-date**
 - **HOV-2 to HOV-3 when 66 Outside the Beltway opens in 2022**

Transform66: 6-Month Performance Review

- **Morning peak period travel speeds**
 - I-66
 - Parallel arterials
- **Evening peak period travel speeds**
 - I-66
 - Parallel arterials
- **Toll rates and usage**
- **Morning shoulder period analysis**
- **Incidents**

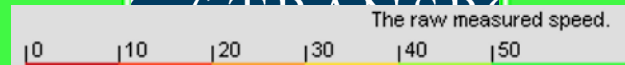
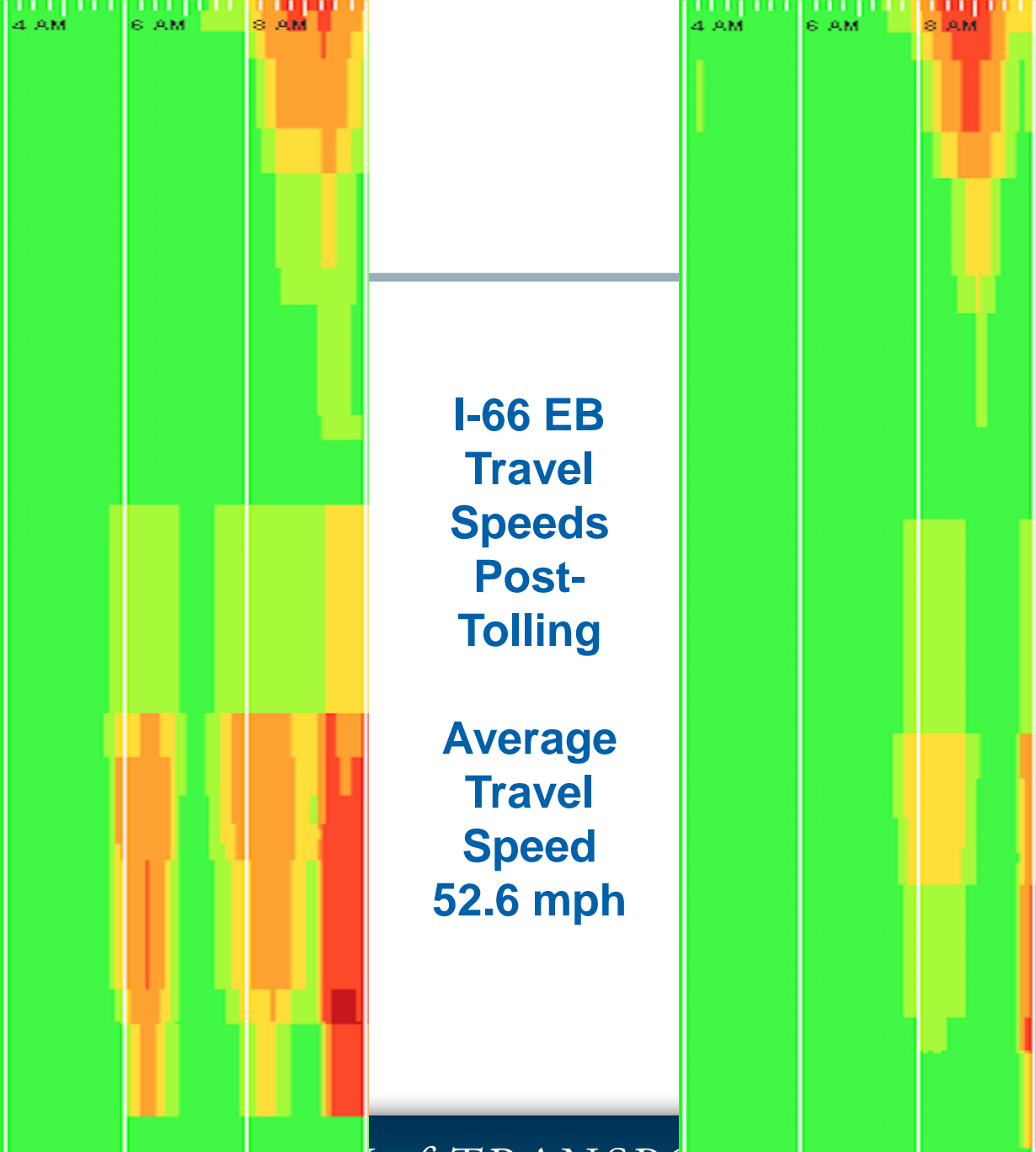
- US-29/LE...
- SCOTT ST
- US-29/LE...
- VA-120/G...
- FAIRFAX ...
- SYCAMOR...
- US-29/VA...
- VA-267/E...
- VA-7/LEES...

**I-66 EB
Travel
Speeds
Pre-
Tolling**

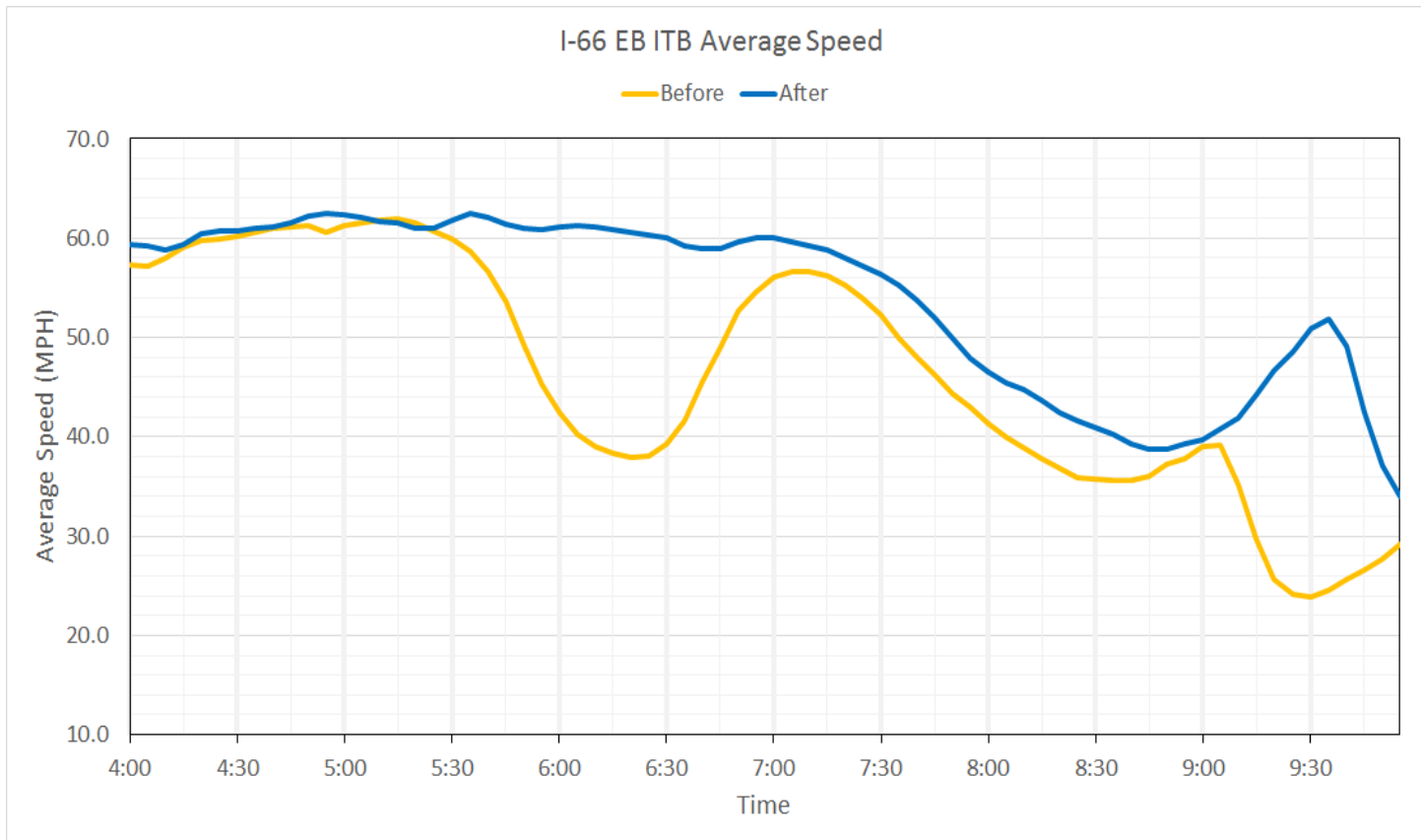
**Average
Travel
Speed
43.8 mph**

**I-66 EB
Travel
Speeds
Post-
Tolling**

**Average
Travel
Speed
52.6 mph**



I-66 Eastbound Average Travel Speeds Pre- and Post-Tolling 6 month comparison

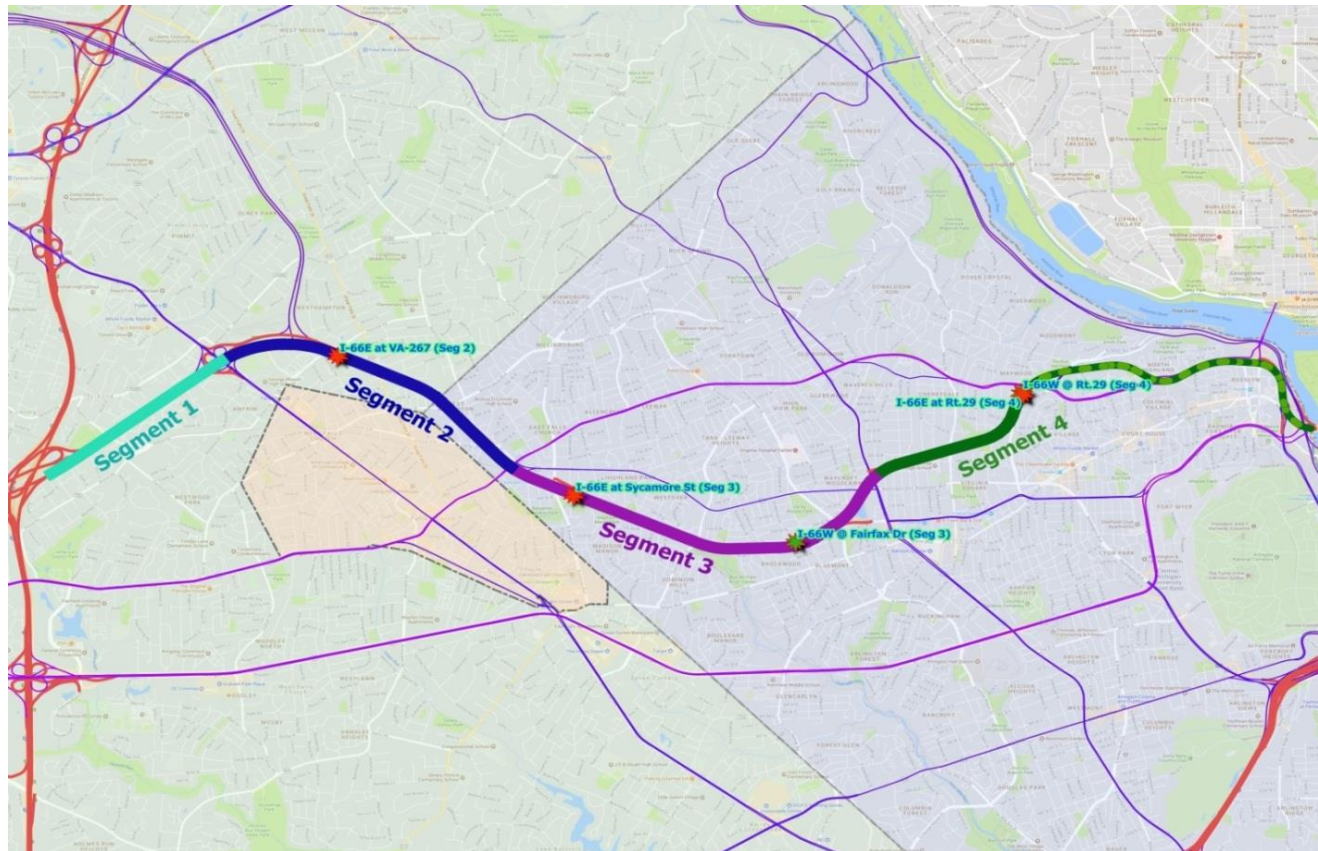


**Before
43.8 mph**

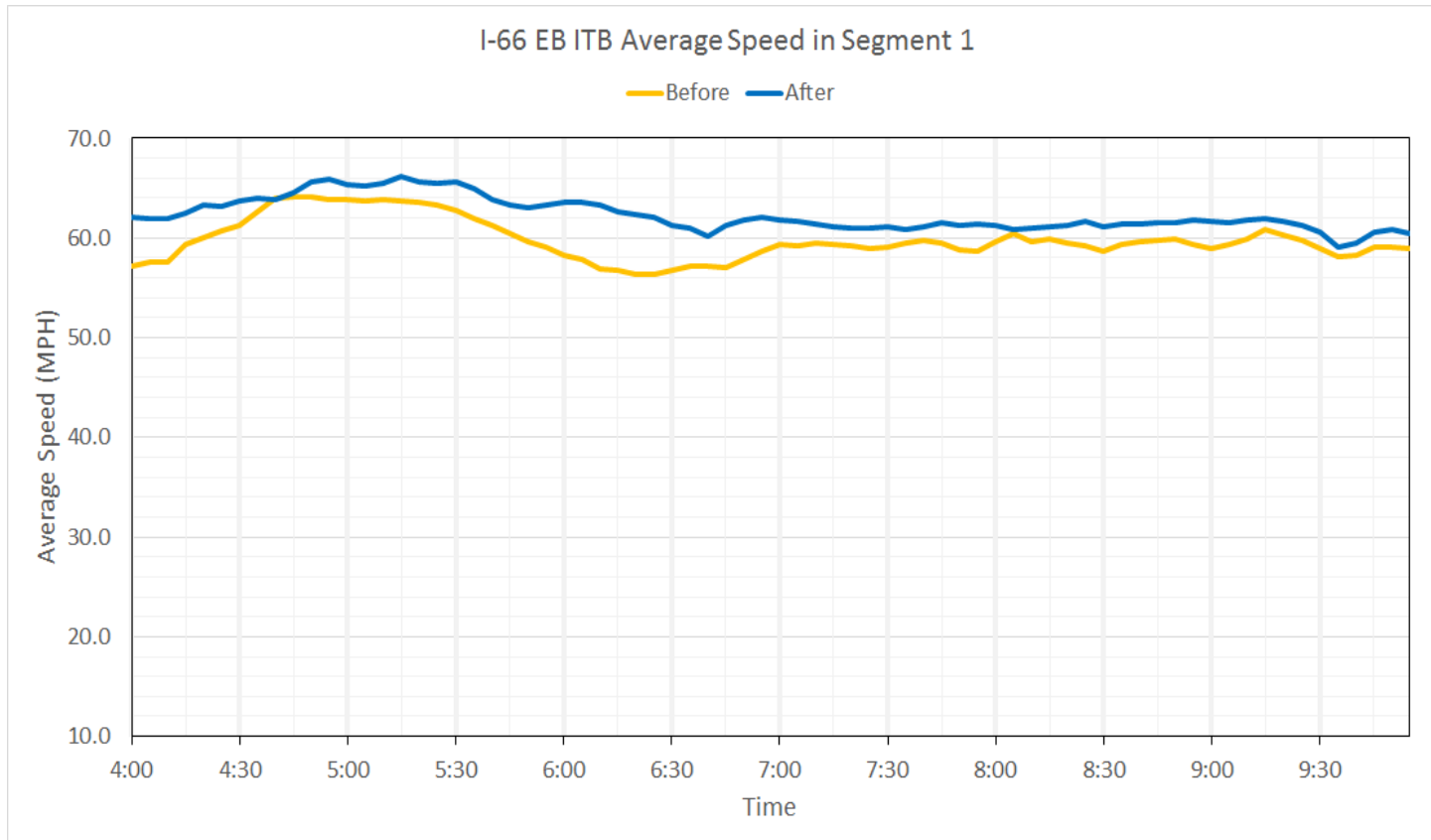
**After
52.6 mph**

**20.1%
increase**

I-66 Inside the Beltway - Segments



I-66 EB Segment 1 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

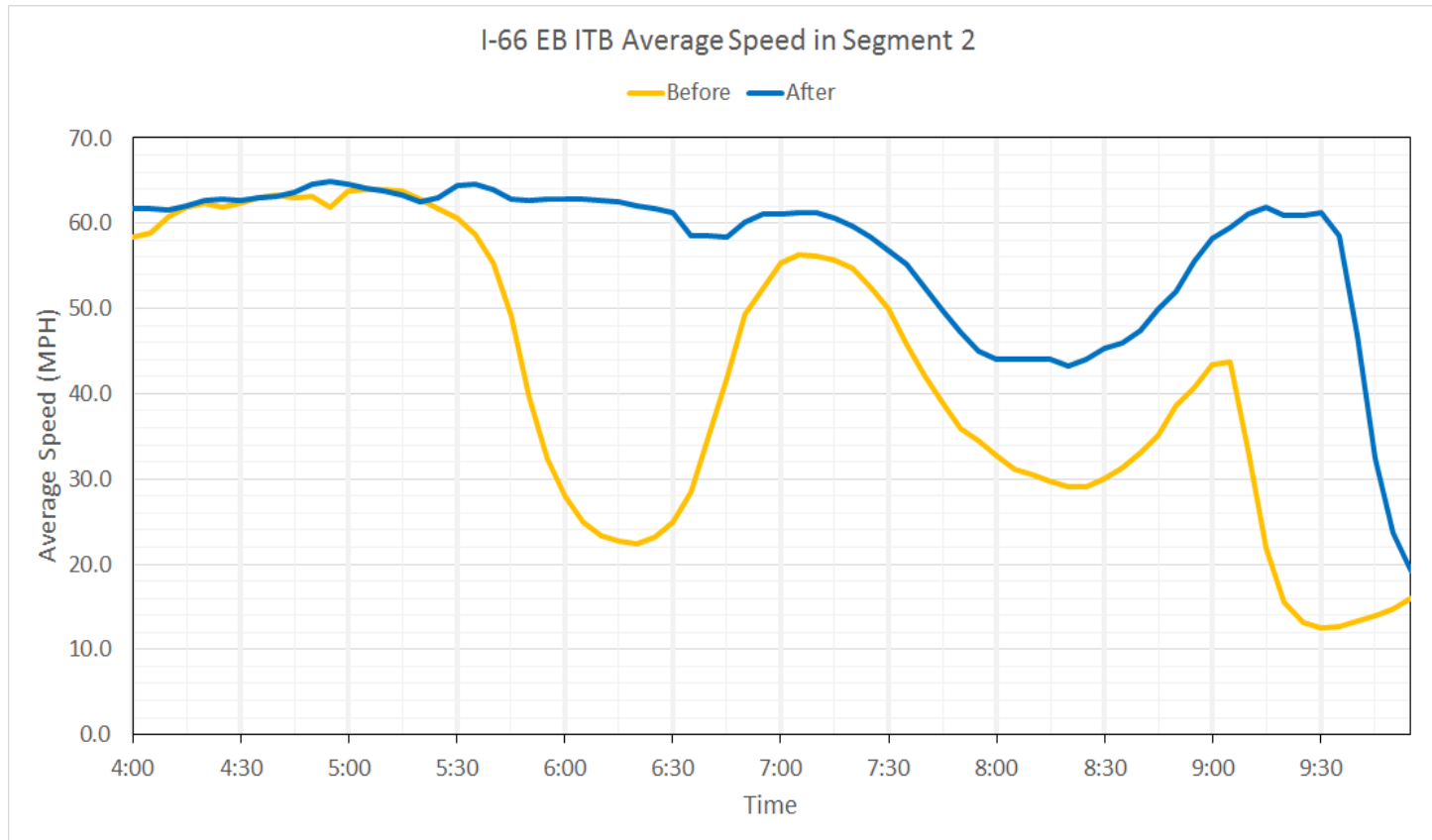


**Before
59.1 mph**

**After
61.9 mph**

**4.7%
increase**

I-66 EB Segment 2 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

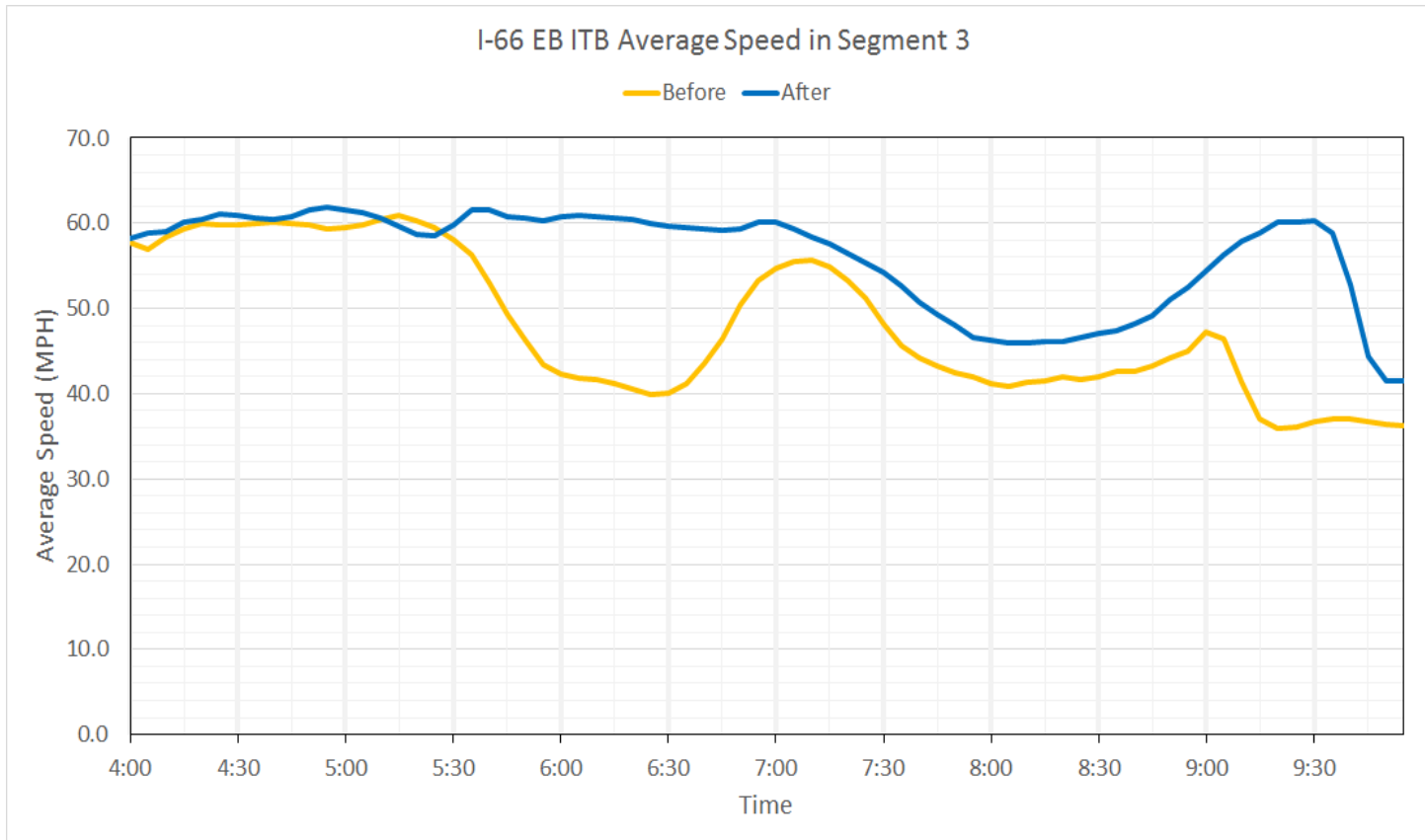


**Before
37.8 mph**

**After
56.3 mph**

**48.9%
increase**

I-66 EB Segment 3 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

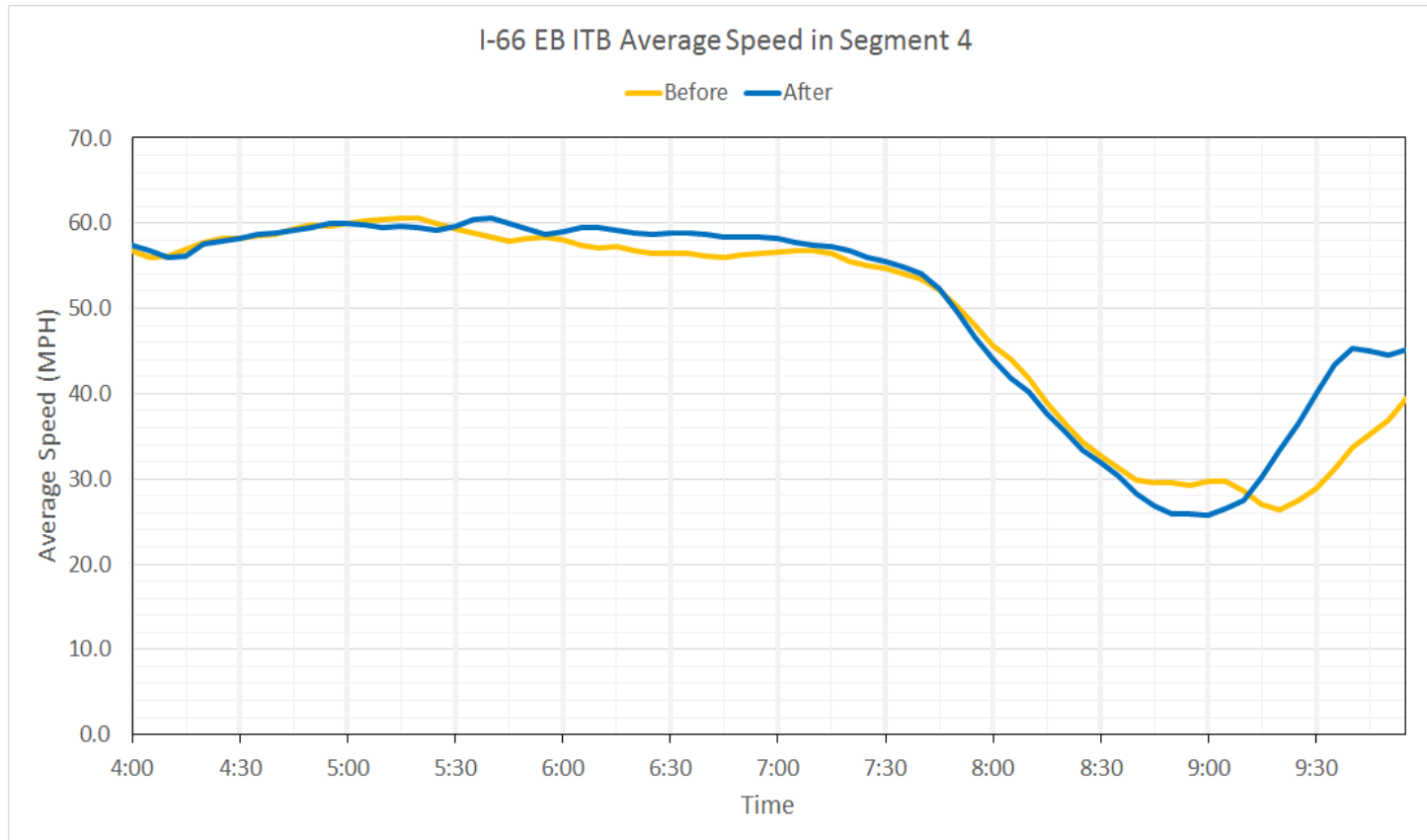


**Before
45.3 mph**

**After
55.3 mph**

**22.1%
increase**

I-66 EB Segment 4 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

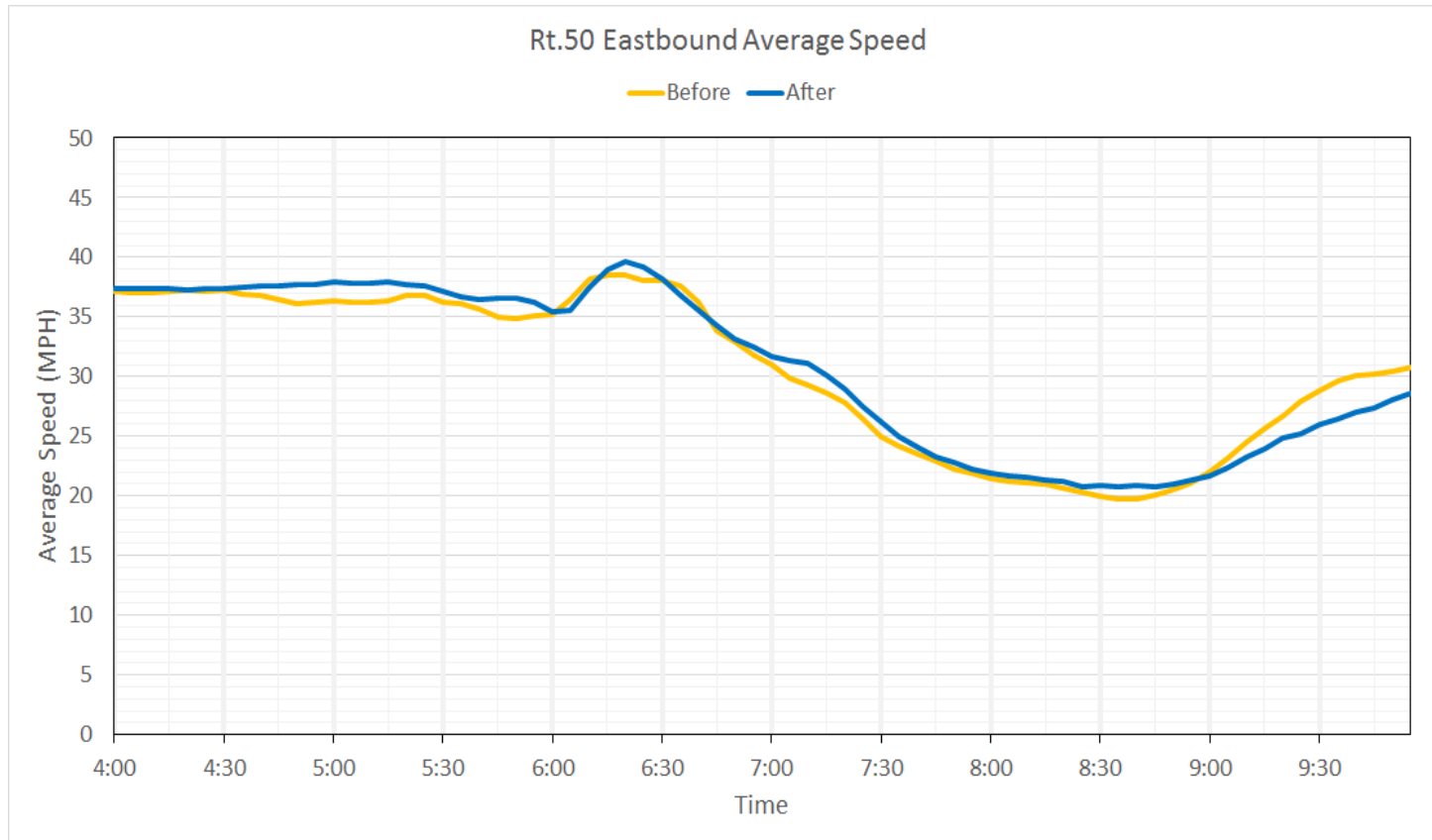


**Before
47.4 mph**

**After
48.0 mph**

**1.3%
increase**

Route 50 EB AM Average Travel Speeds Pre- and Post-Tolling 6 month comparison

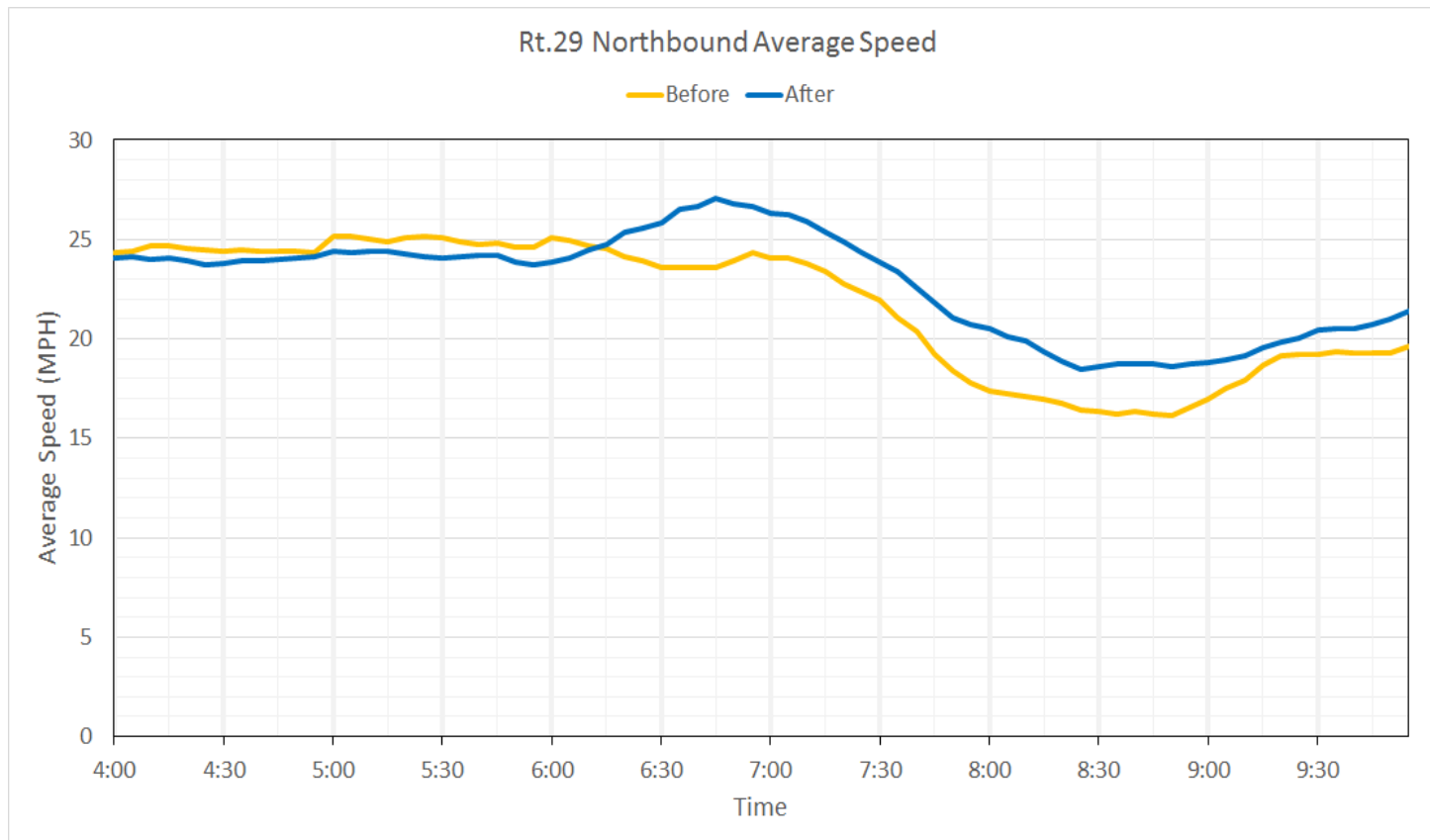


**Before
28.3 mph**

**After
28.7 mph**

**1.3%
increase**

Route 29 EB AM Average Travel Speeds Pre- and Post-Tolling 6 month comparison

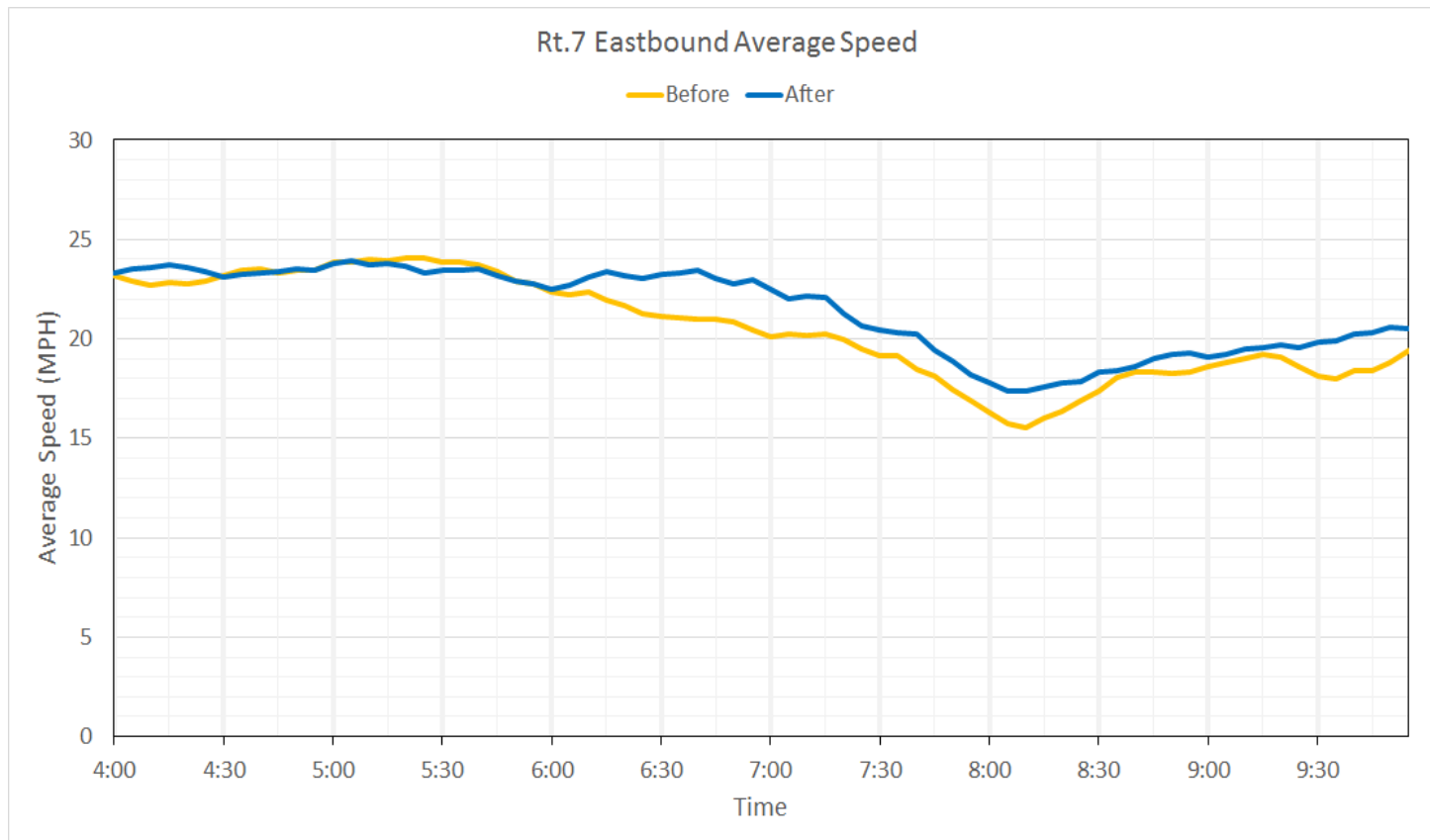


**Before
21.0 mph**

**After
22.6 mph**

**7.7%
increase**

Route 7 EB AM Average Travel Speeds Pre- and Post-Tolling 6 month comparison

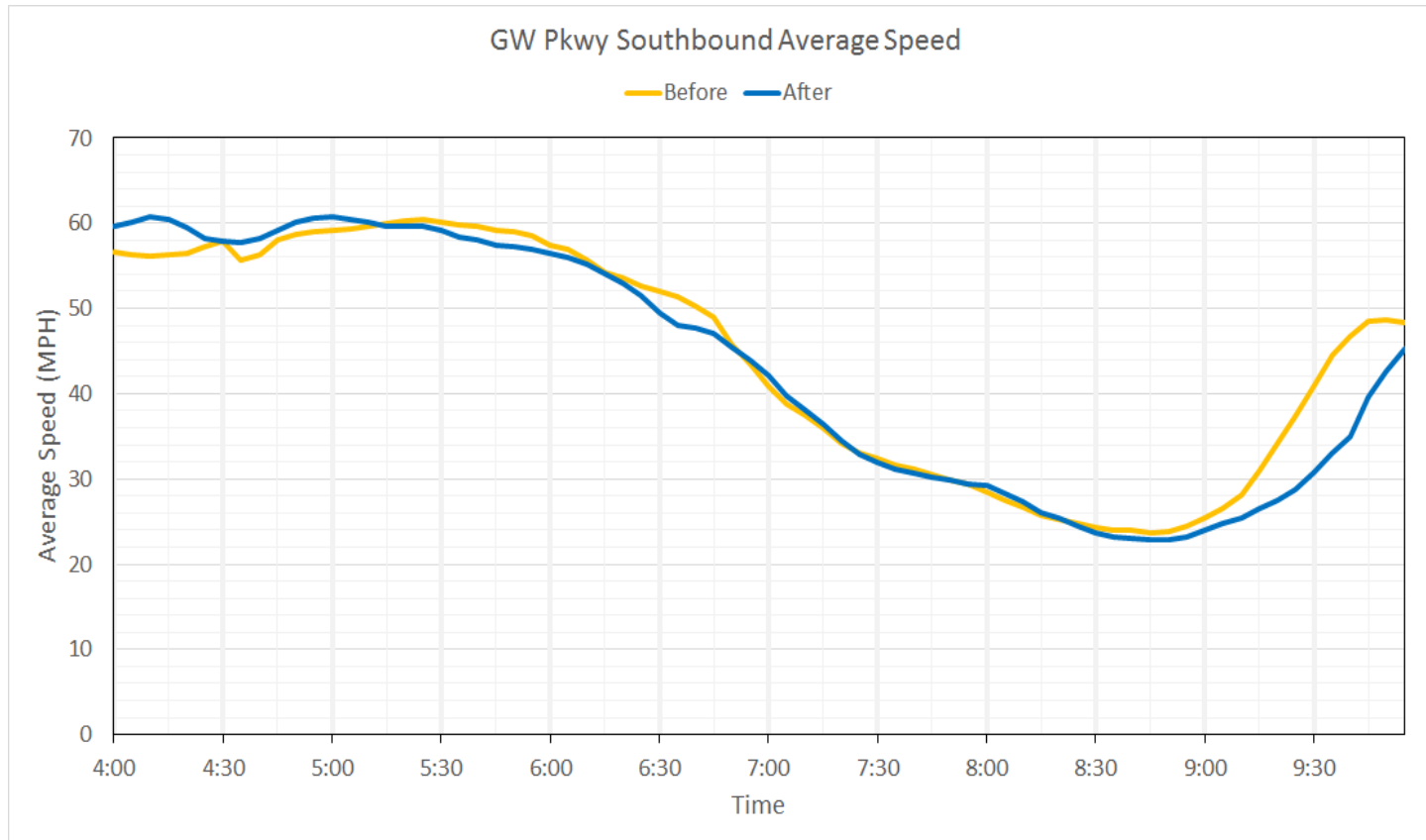


**Before
19.7 mph**

**After
20.8 mph**

**5.6%
increase**

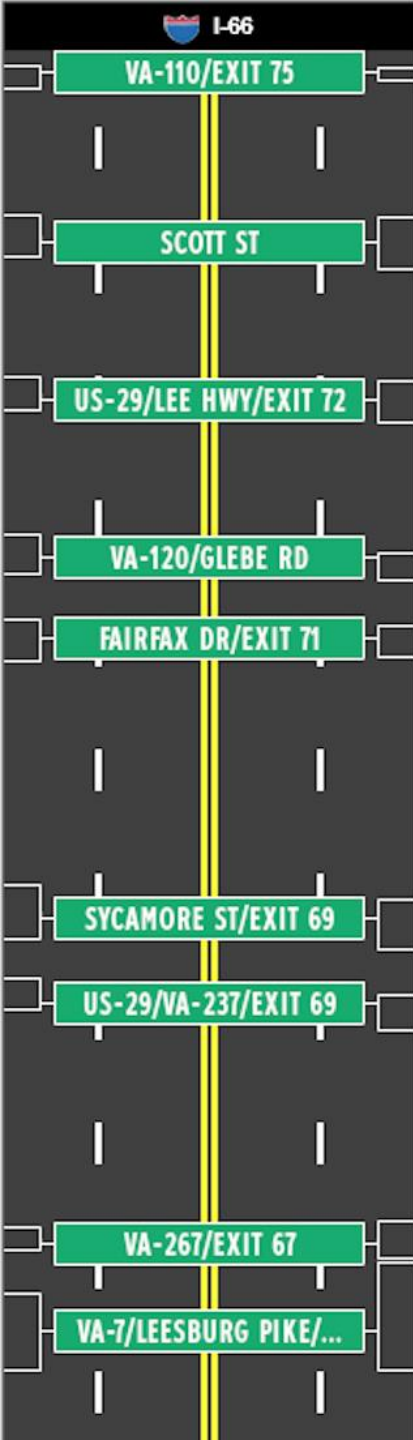
GW Parkway SB AM Average Travel Speeds Pre- and Post-Tolling 6 month comparison



**Before
38.9 mph**

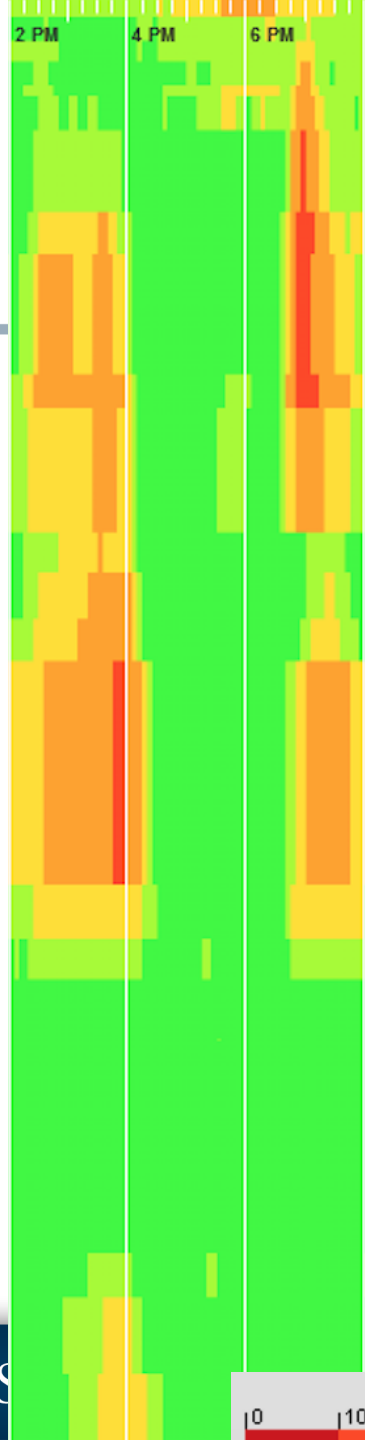
**After
37.9 mph**

**2.7%
decrease**



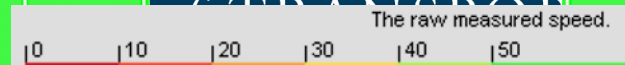
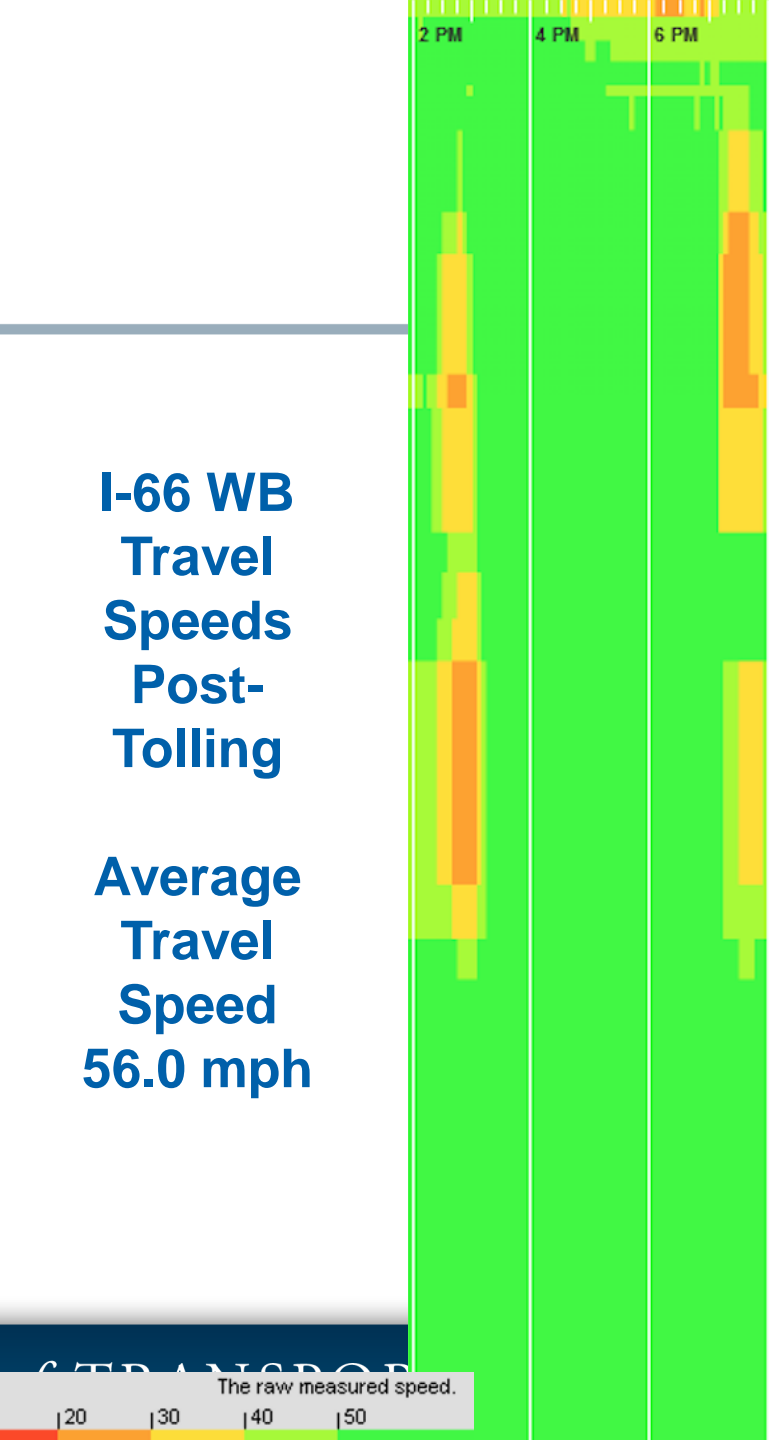
**I-66 WB
Travel
Speeds
Pre-
Tolling**

**Average
Travel
Speed
45.3 mph**

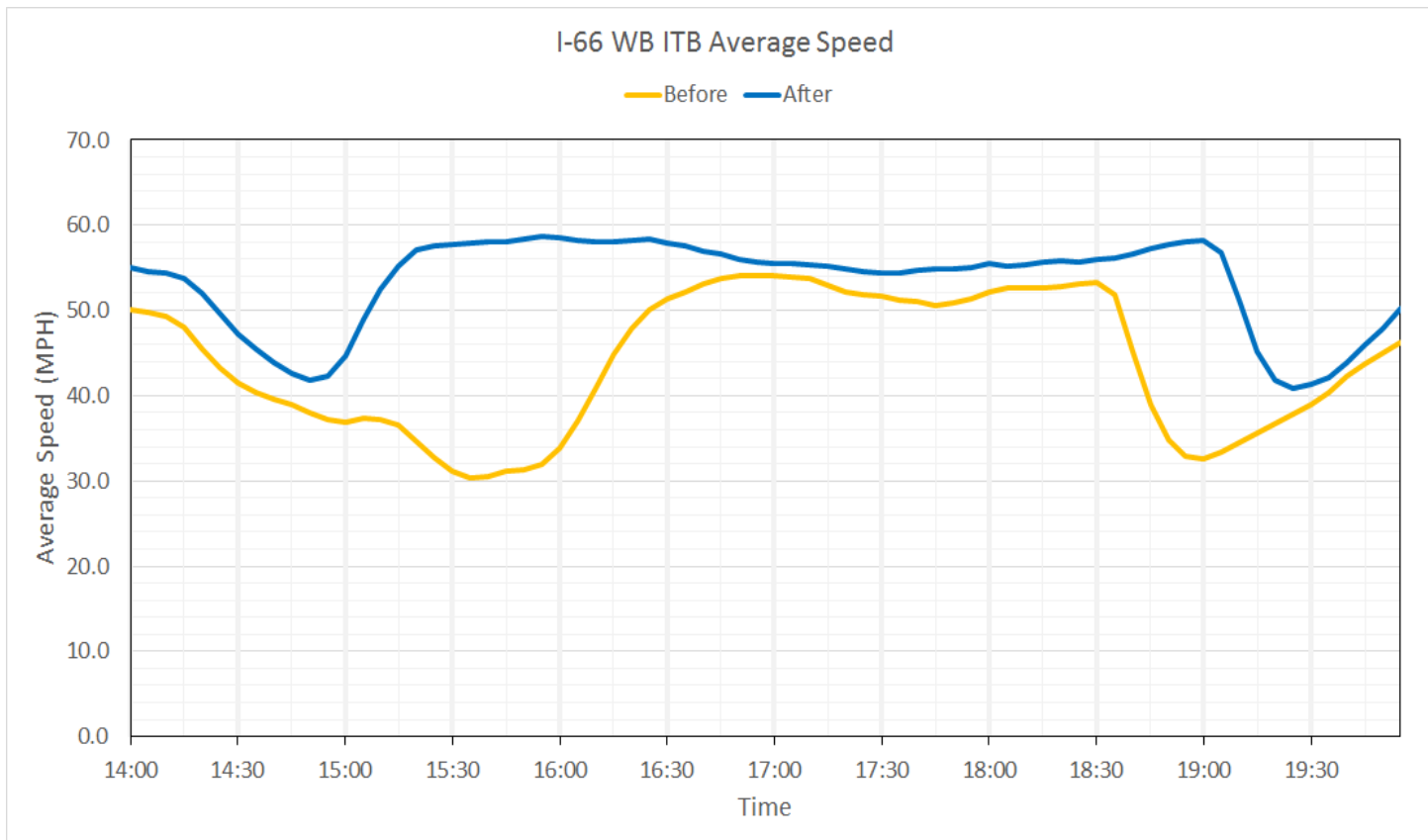


**I-66 WB
Travel
Speeds
Post-
Tolling**

**Average
Travel
Speed
56.0 mph**



I-66 Westbound PM Average Travel Speeds Pre- and Post-Tolling 6 month comparison

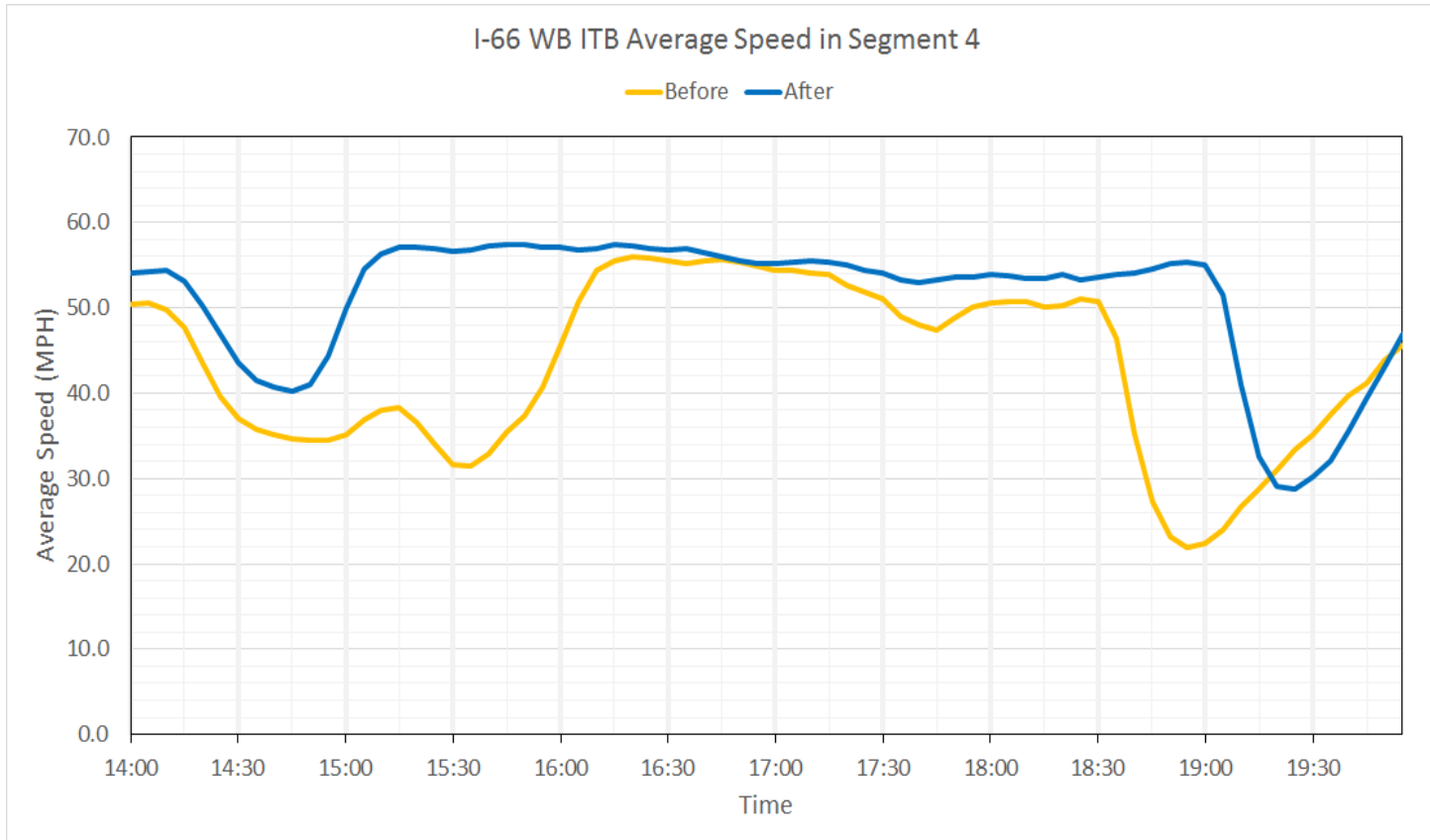


**Before
45.3 mph**

**After
56.0 mph**

**23.6%
increase**

I-66 WB Segment 4 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

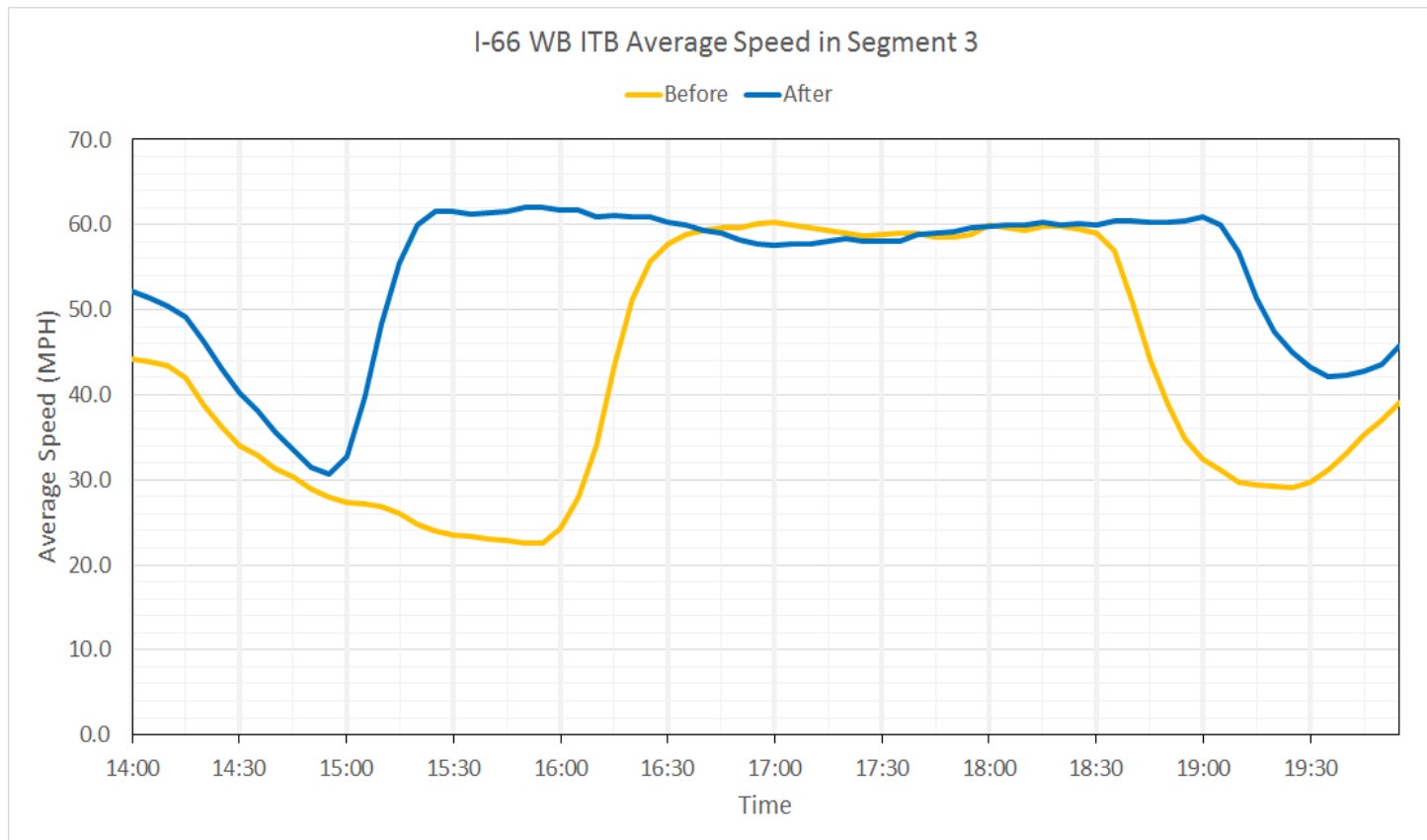


**Before
45.9 mph**

**After
55.3 mph**

**20.5%
increase**

I-66 WB Segment 3 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

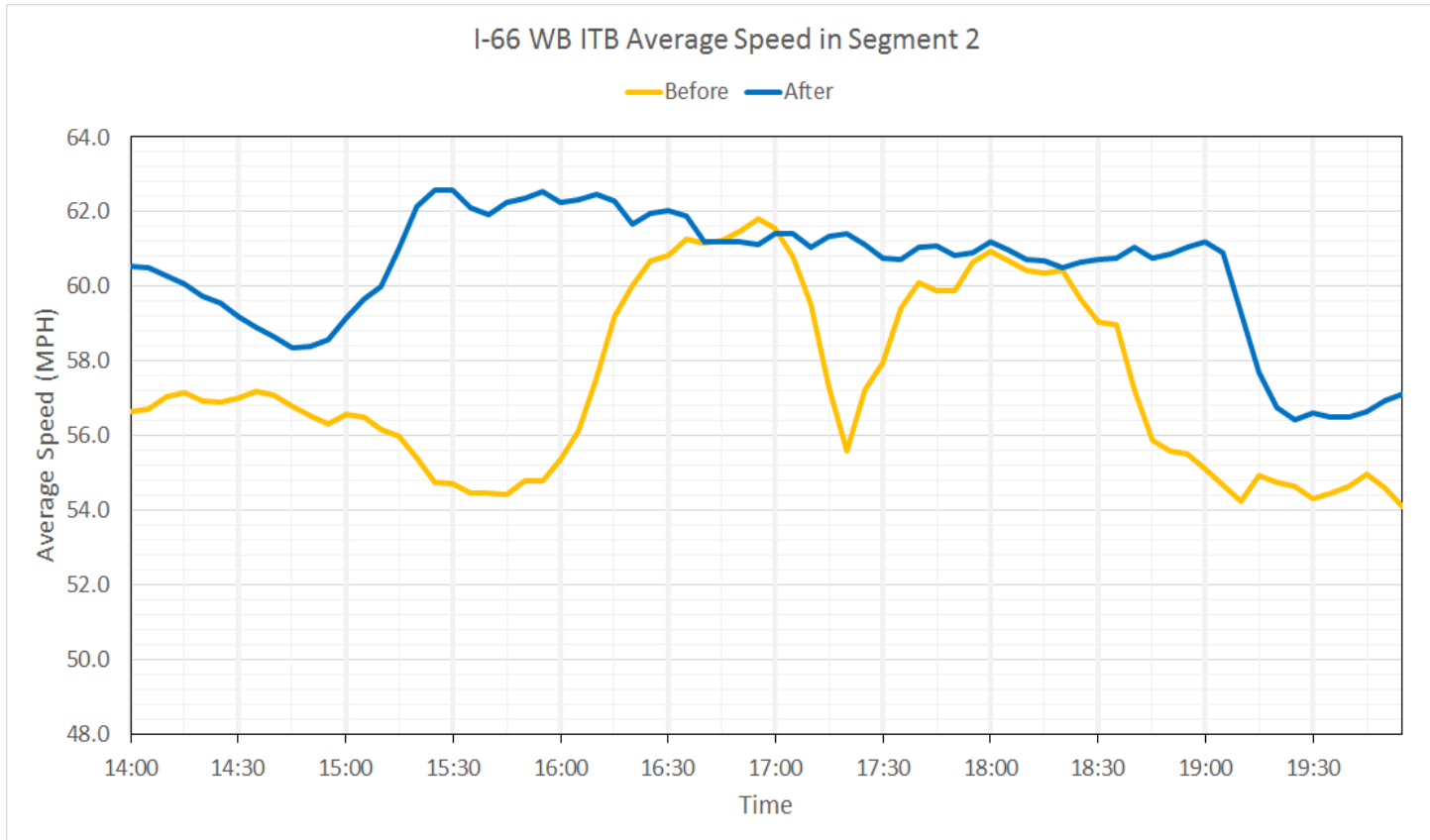


**Before
46.6 mph**

**After
58.6 mph**

**25.8%
increase**

I-66 WB Segment 2 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

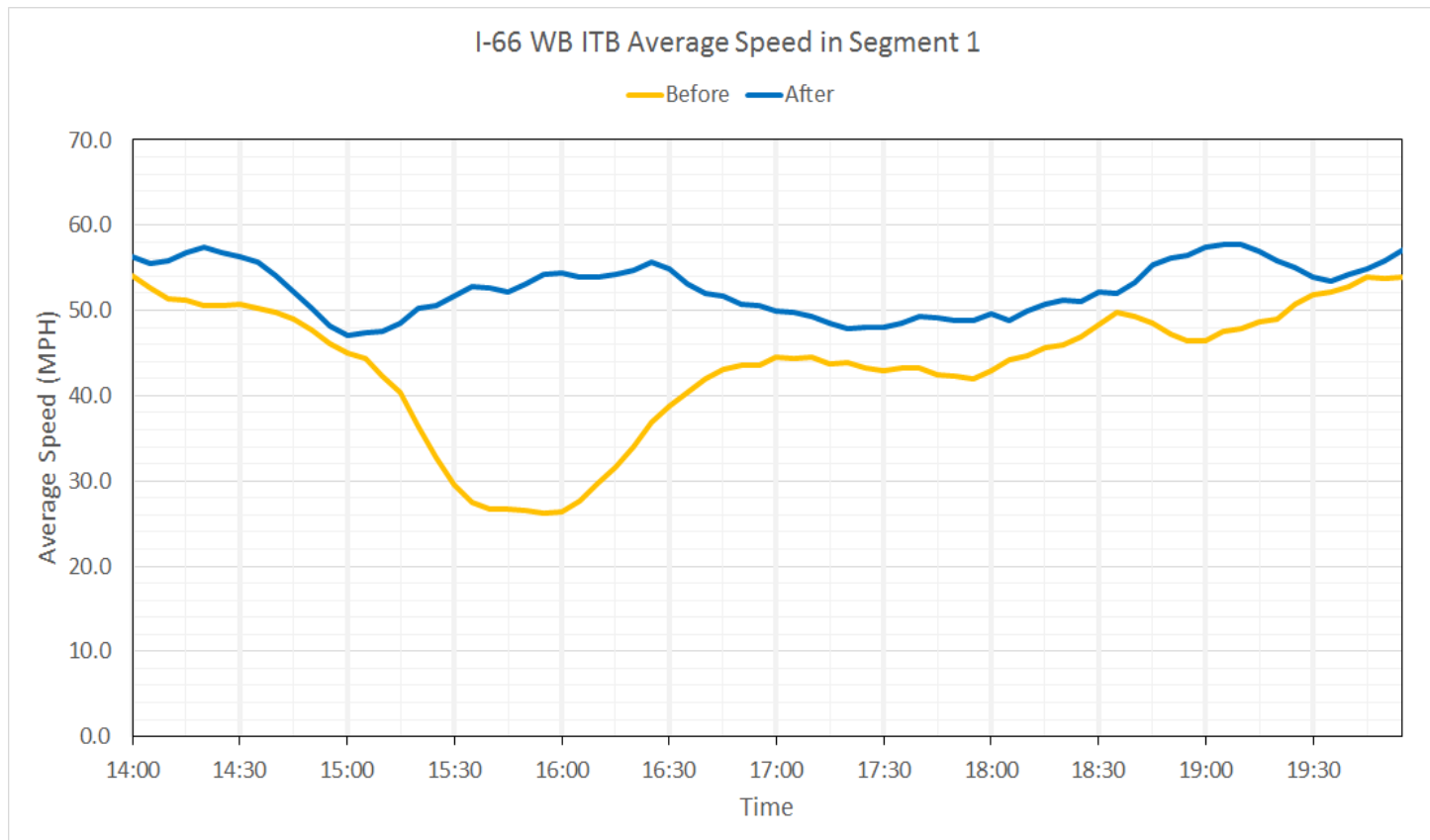


**Before
58.2 mph**

**After
61.3 mph**

**5.3%
increase**

I-66 WB Segment 1 Average Travel Speeds Pre- and Post-Tolling 6 month comparison

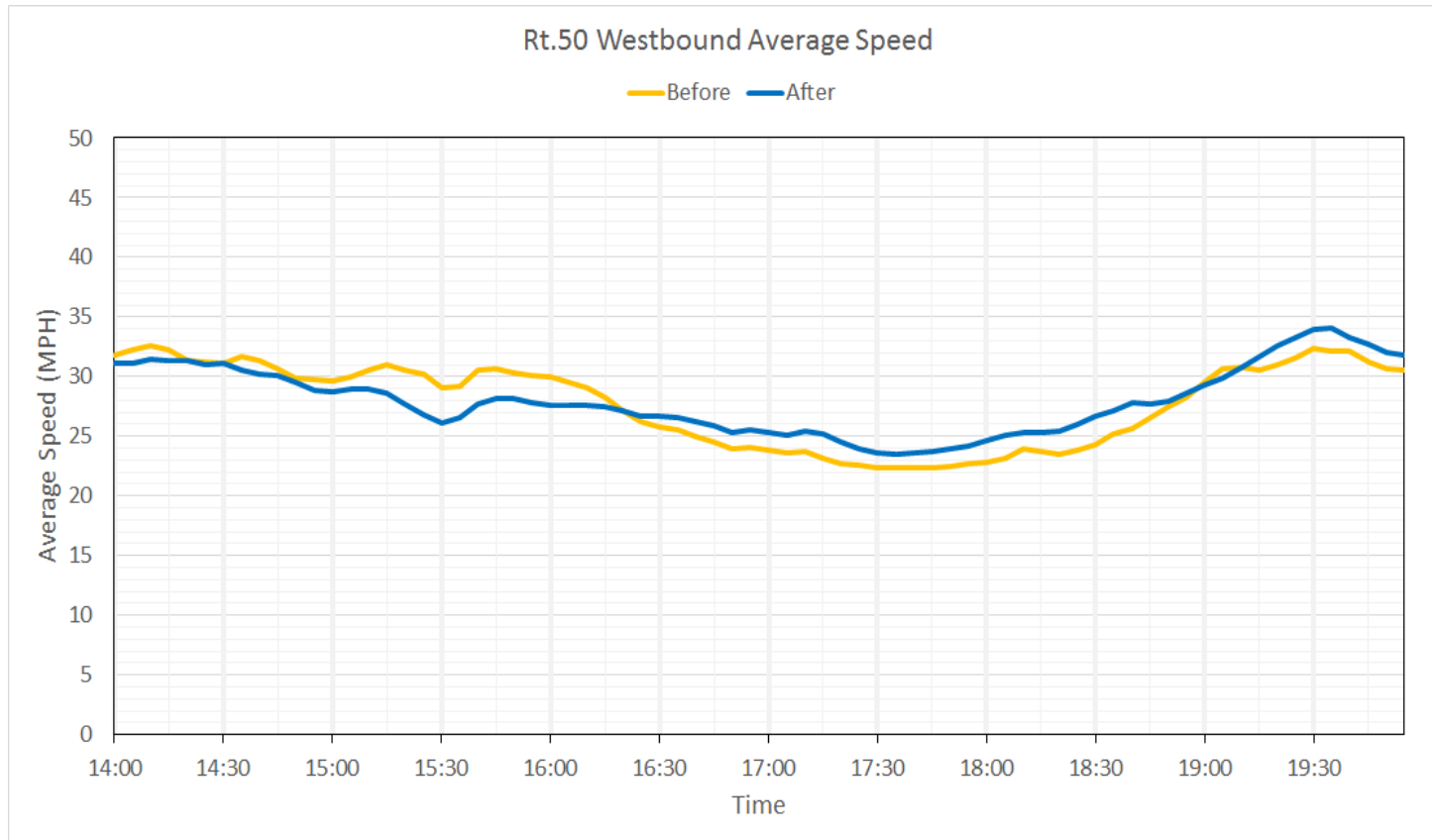


**Before
40.1 mph**

**After
51.3 mph**

**27.9%
increase**

Route 50 WB PM Average Travel Speeds Pre- and Post-Tolling 6 month comparison

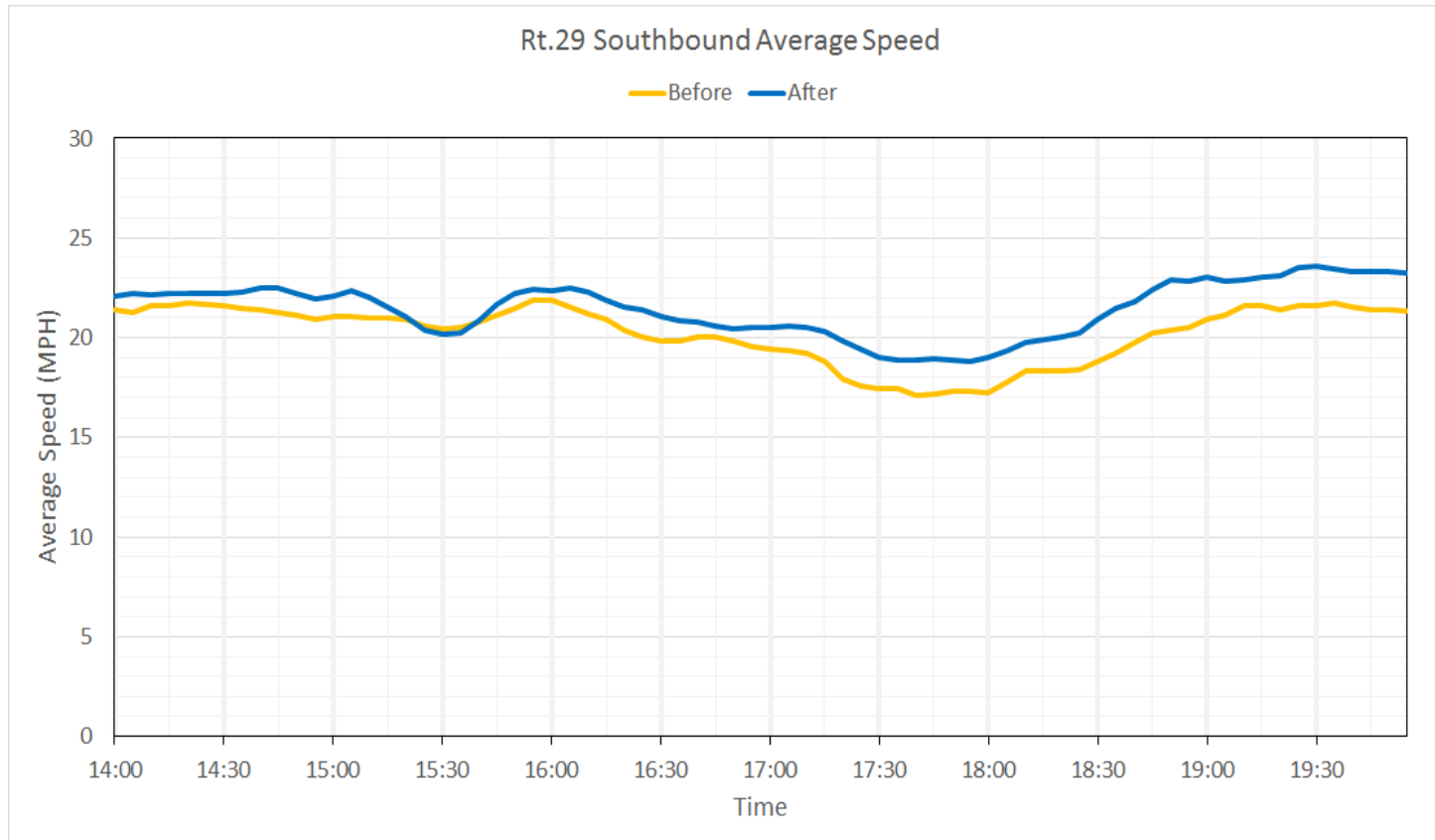


**Before
26.1 mph**

**After
26.3 mph**

**0.9%
increase**

Route 29 WB PM Average Travel Speeds Pre- and Post-Tolling 6 month comparison

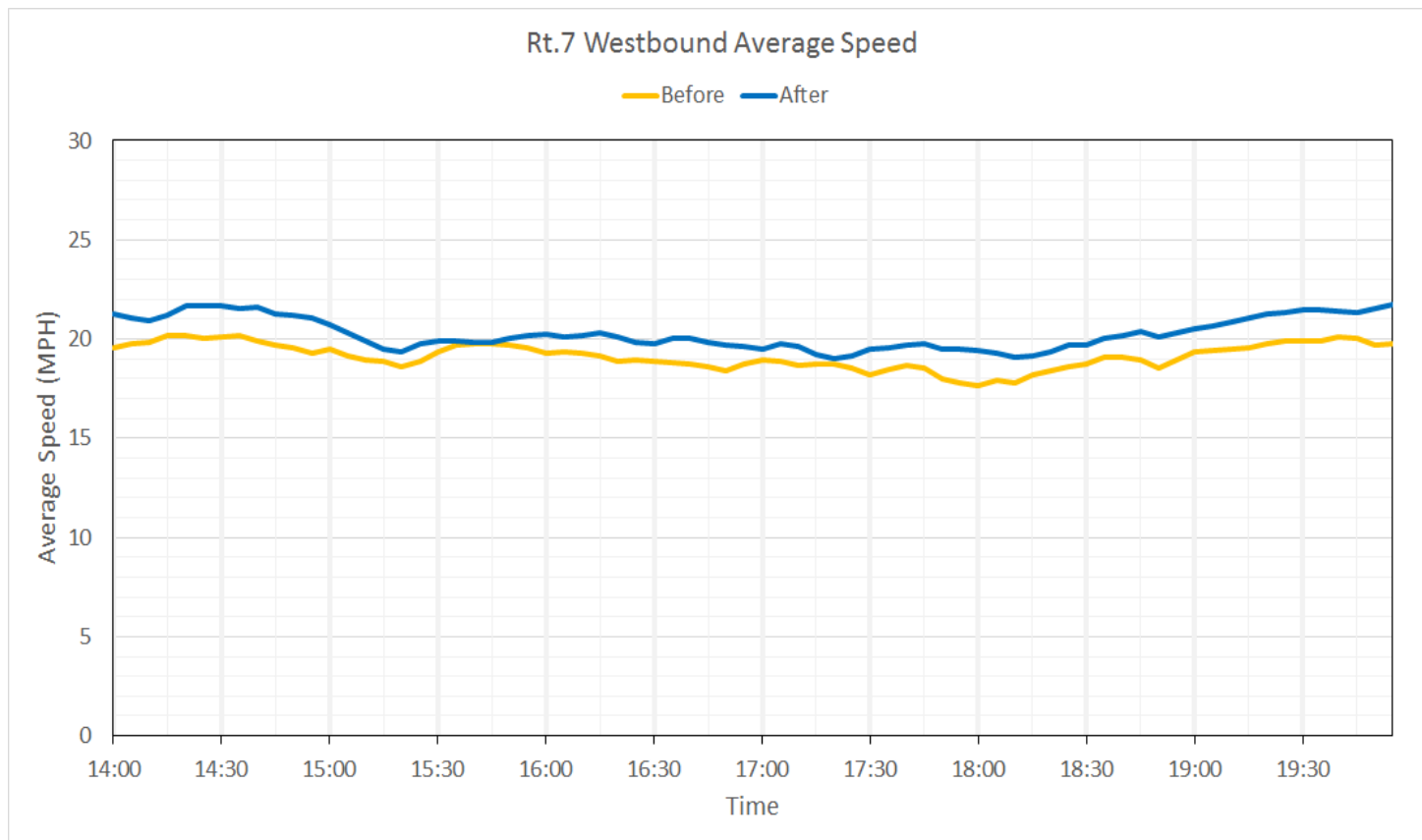


**Before
19.6 mph**

**After
20.8 mph**

**6.2%
increase**

Route 7 WB PM Average Travel Speeds Pre- and Post-Tolling 6 month comparison

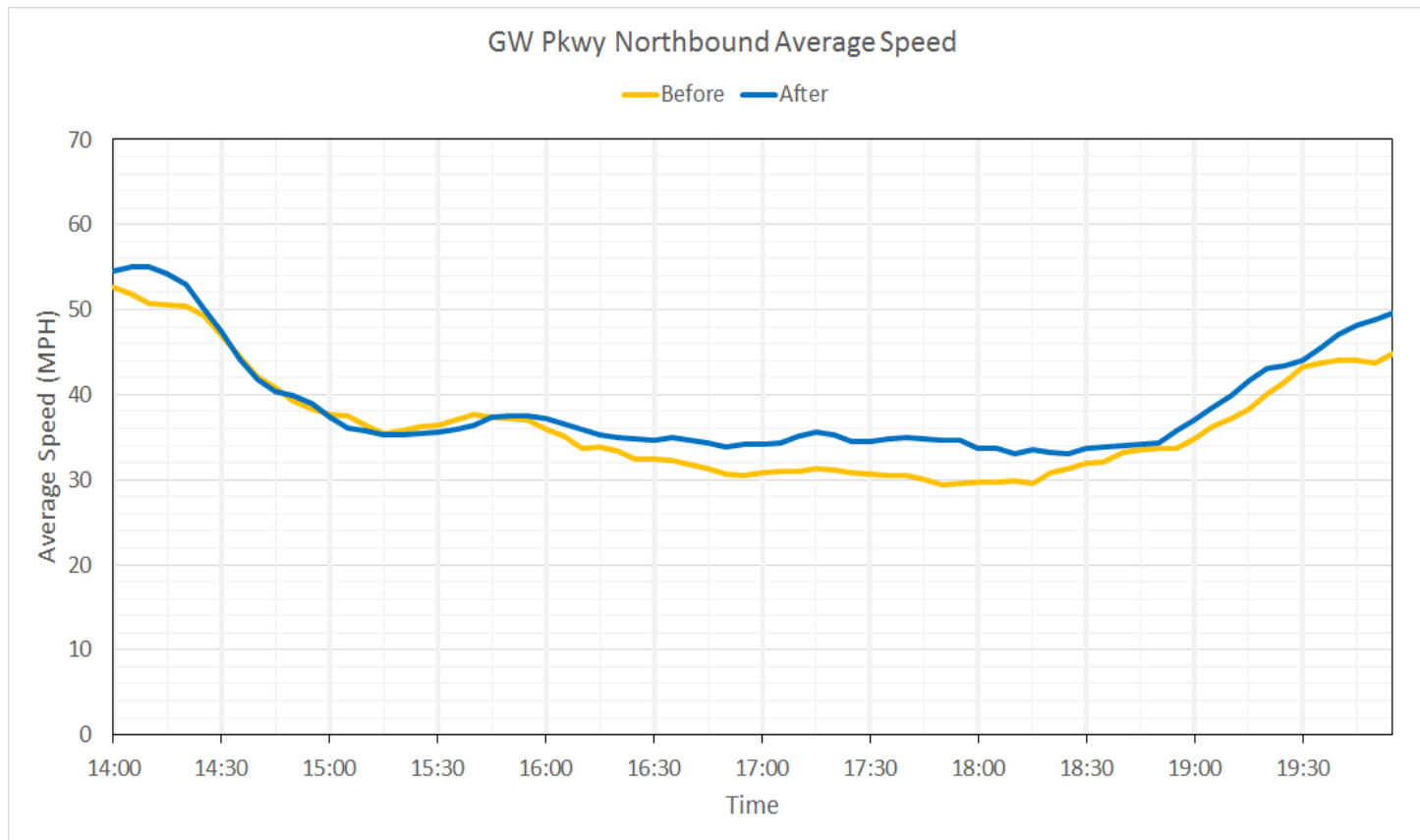


**Before
18.8 mph**

**After
19.8 mph**

**5.1%
increase**

GW Parkway NB PM Average Travel Speeds Pre- and Post-Tolling 6 month comparison



**Before
32.9 mph**

**After
35.0 mph**

**6.3%
increase**

Toll Rates and Usage

- **\$13.09 average price for round trips**
 - **\$8.49 average price for eastbound trips**
 - **\$4.60 average price for westbound trips**
- **30,184 average daily vehicle trips**
 - **13,688 average daily eastbound trips**
 - **16,496 average daily westbound trips**
- **43% of trips on average are HOV**
 - **49.0% of eastbound trips on average are HOV**
 - **37.9% of westbound trips on average are HOV**

Toll Rates and Usage

- **0.28% of all toll payers paid more than \$40 during the first six months**
- **These toll rates are experienced during the height of rush hour between 8am and 9am**
- **HOV usage peaks between 8am and 9am, and appears to be increasing during this time as well**

HOV Penetration	December 2017	May 2018
8:00 – 8:30a	49.3%	59.3%
8:30 – 9:00a	44.9%	54.1%

Toll Rates and Usage

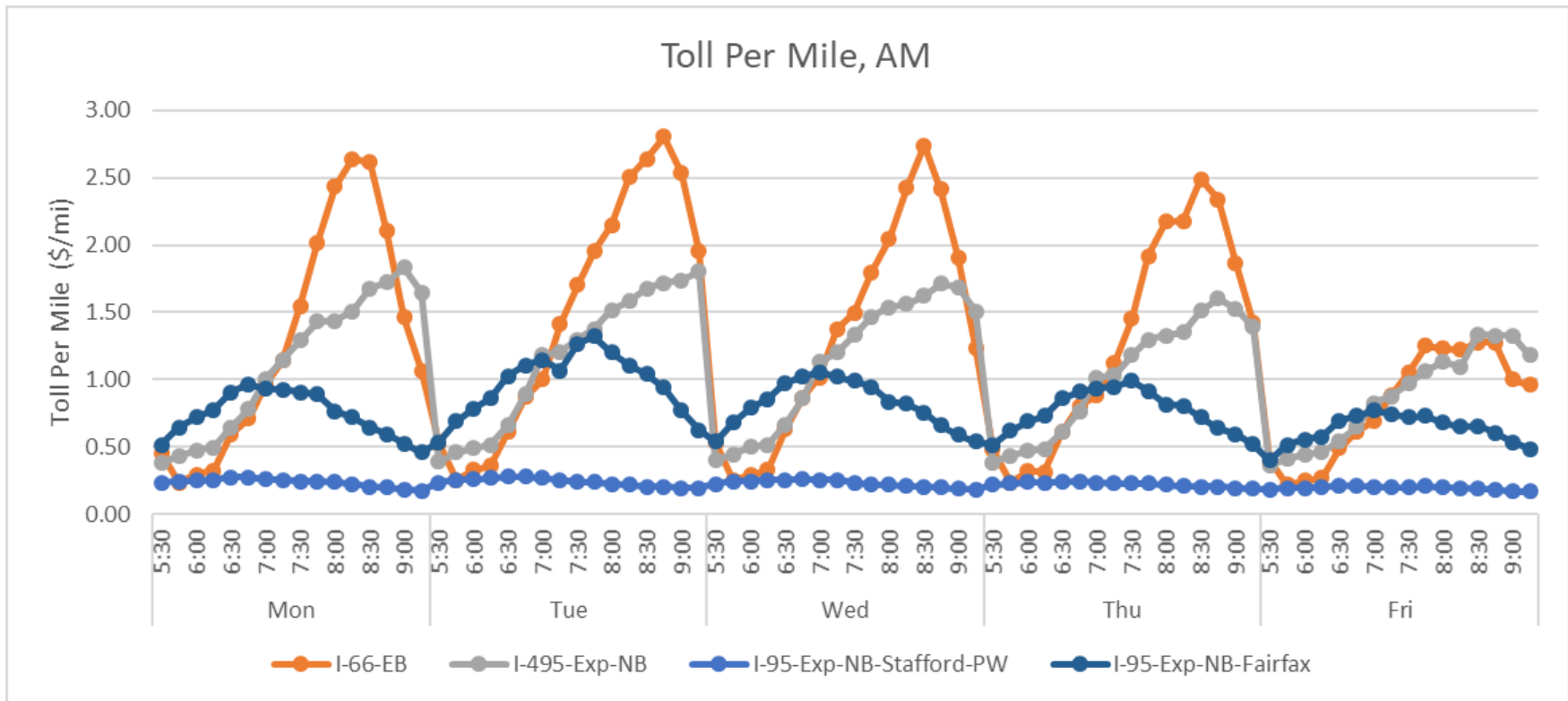
Average Eastbound Toll Paid and HOV Usage

5:30-6:00	6:00-6:30	6:30-7:00	7:00-7:30	7:30-8:00	8:00-8:30	8:30-9:00	9:00-9:30
\$2.54	\$2.64	\$5.06	\$7.59	\$11.63	\$14.13	\$13.86	\$8.52
31.4%	34.7%	45.5%	56.5%	59.0%	56.8%	52.2%	38.1%

Average Westbound Toll Paid and HOV Usage

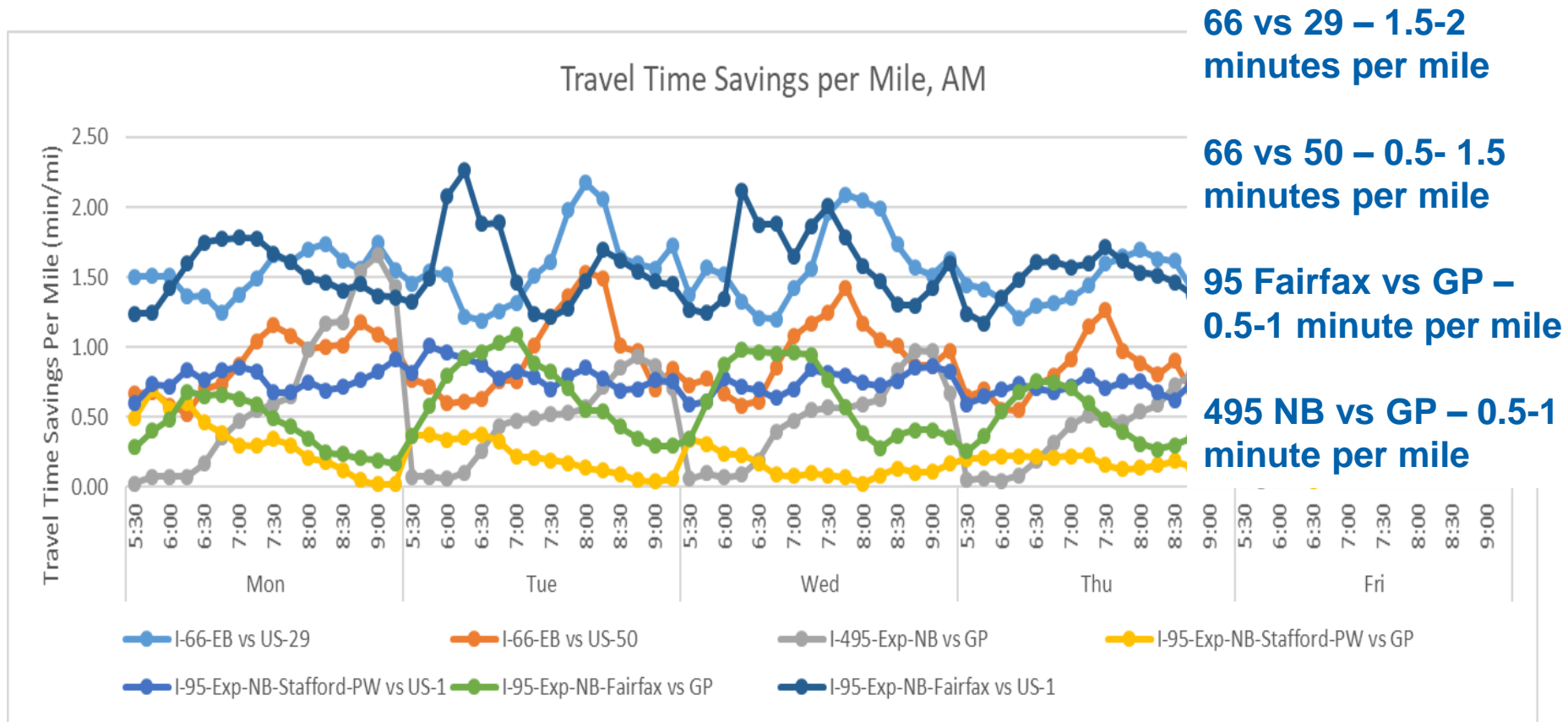
3:00-3:30	3:30-4:00	4:00-4:30	4:30-5:00	5:00-5:30	5:30-6:00	6:00-6:30	6:30-7:00
\$4.34	\$3.92	\$4.32	\$5.17	\$5.36	\$5.67	\$4.71	\$3.67
28.3%	31.2%	39.3%	43.3%	45.4%	45.1%	39.2%	30.3%

Northern Virginia AM Express Lane Toll Rates per Mile



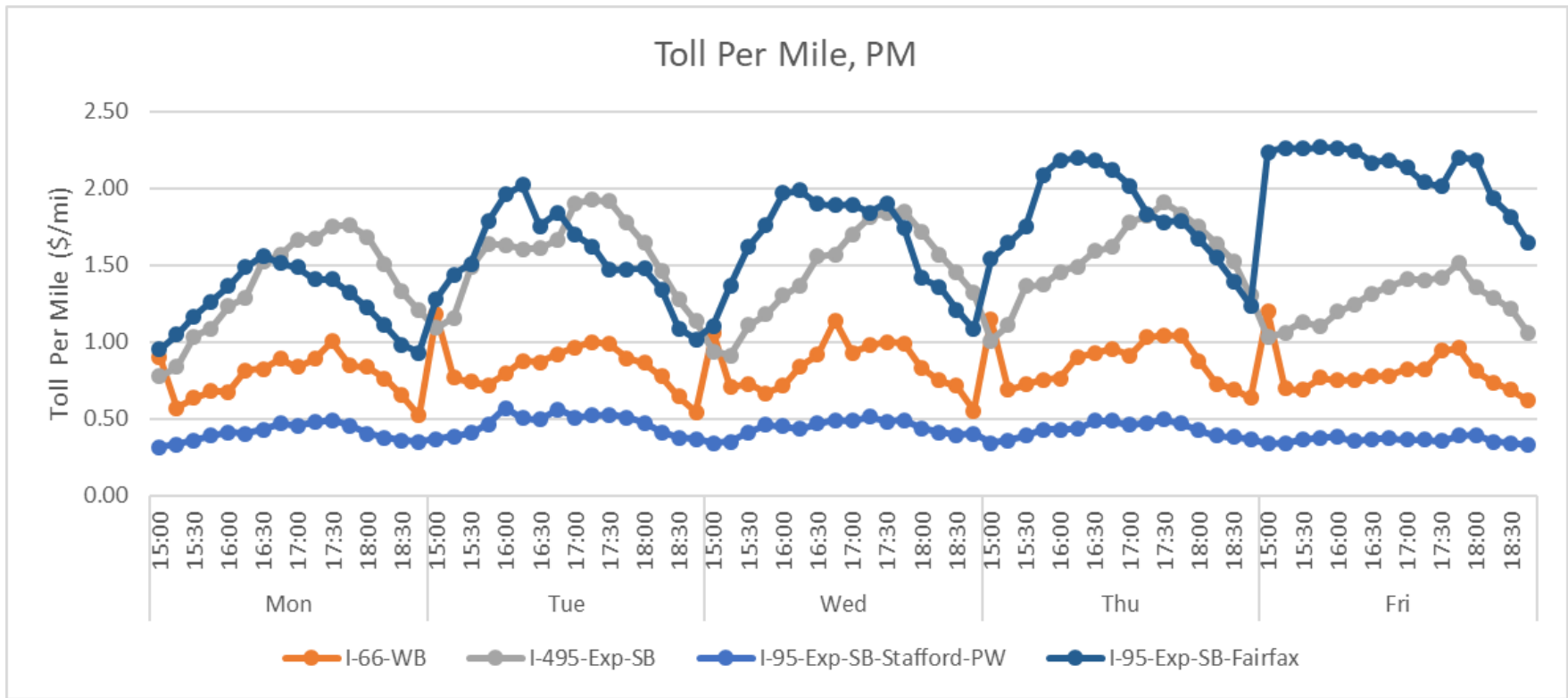
* Compiled by UVA Center for Transportation Studies

Northern Virginia AM Estimated Travel Time Savings from Express Lanes



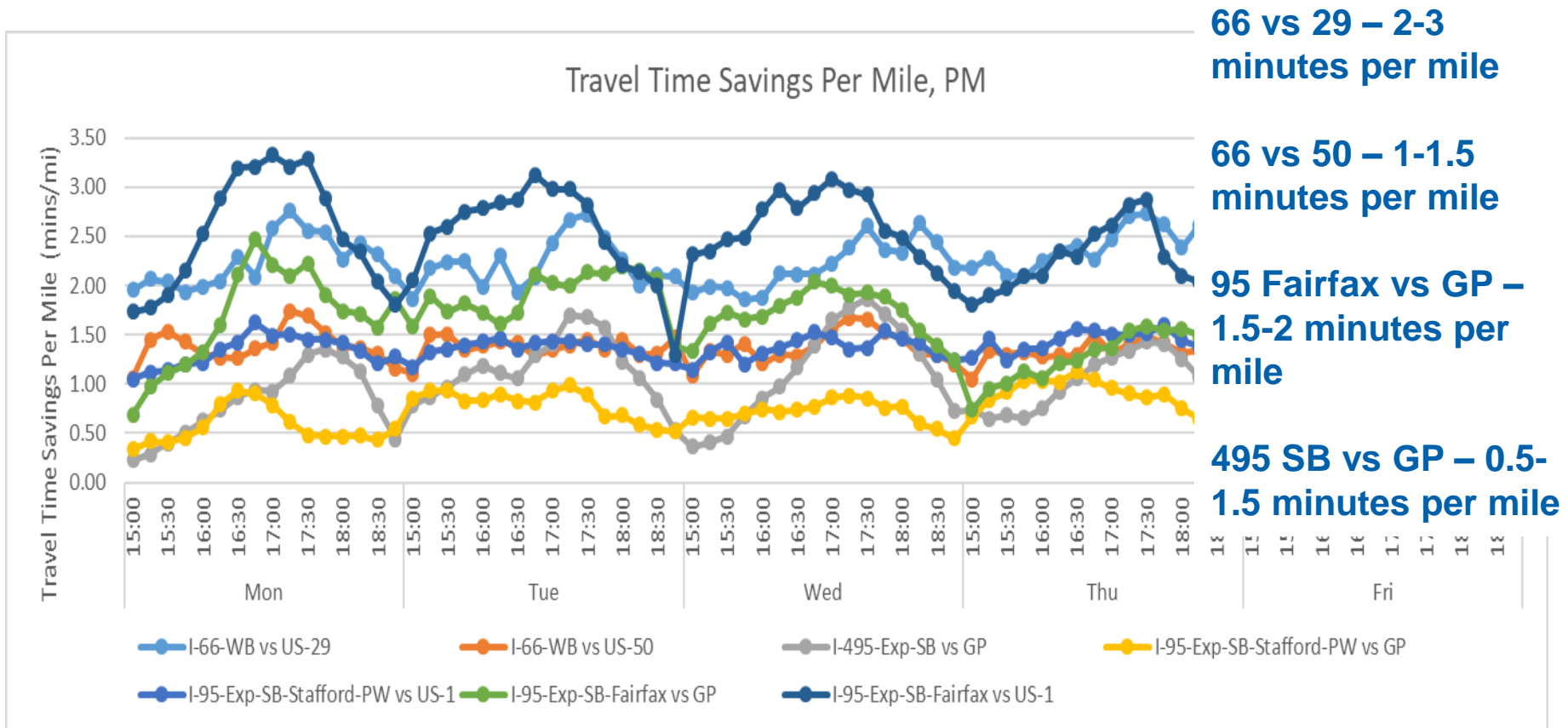
* Compiled by UVA Center for Transportation Studies

Northern Virginia PM Express Lane Toll Rates per Mile



* Compiled by UVA Center for Transportation Studies

Northern Virginia PM Estimated Travel Time Savings from Express Lanes



* Compiled by UVA Center for Transportation Studies

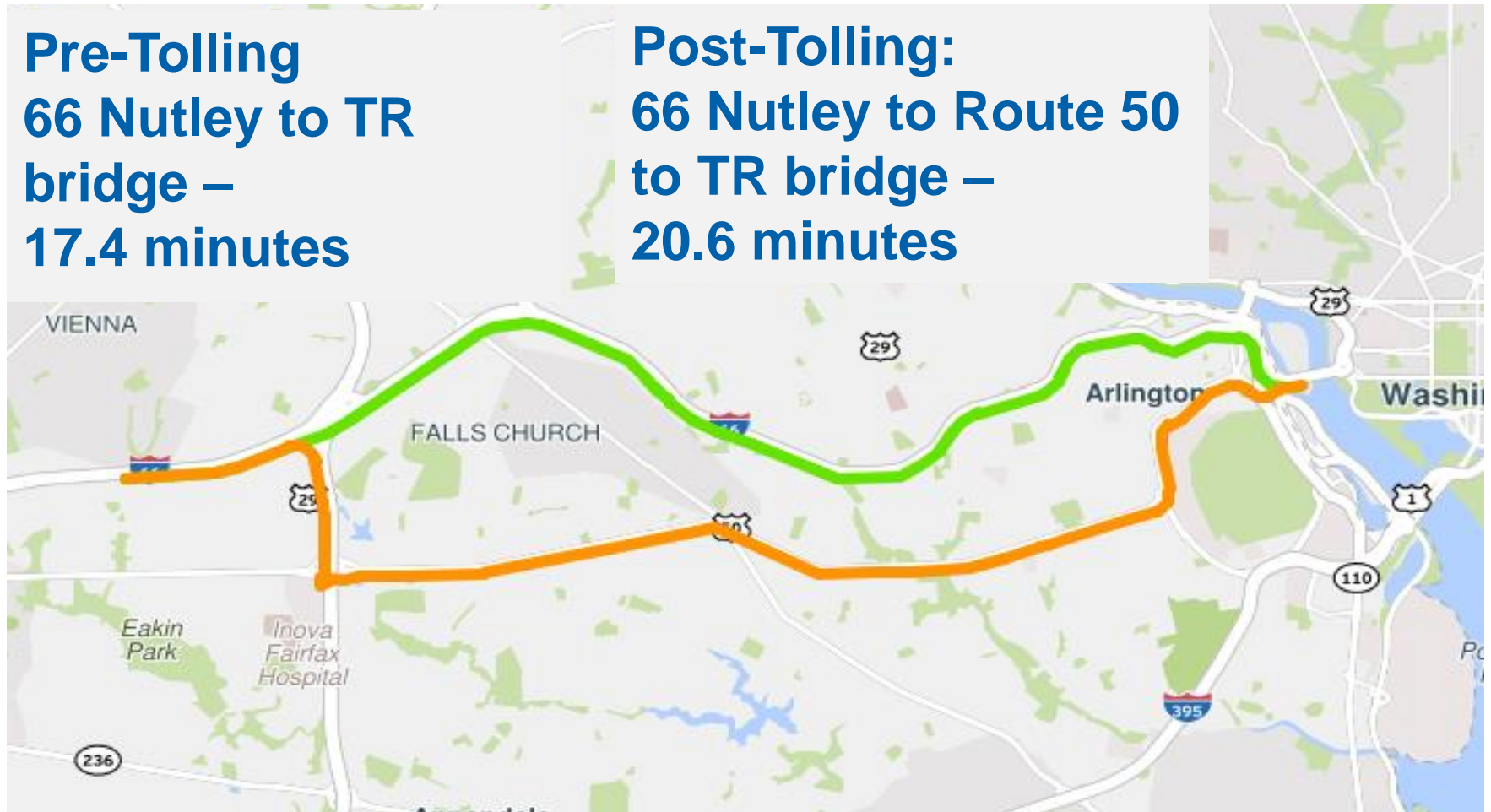
Month-to-Month Usage Statistics

	January	February	March	April	May
EB AM Peak Traffic	12,961	13,958	13,656	14,832	15,340
WB PM Peak Traffic	15,364	16,656	16,447	17,398	18,130
Total Daily HOV Traffic	12,233	13,559	13,101	14,306	14,712

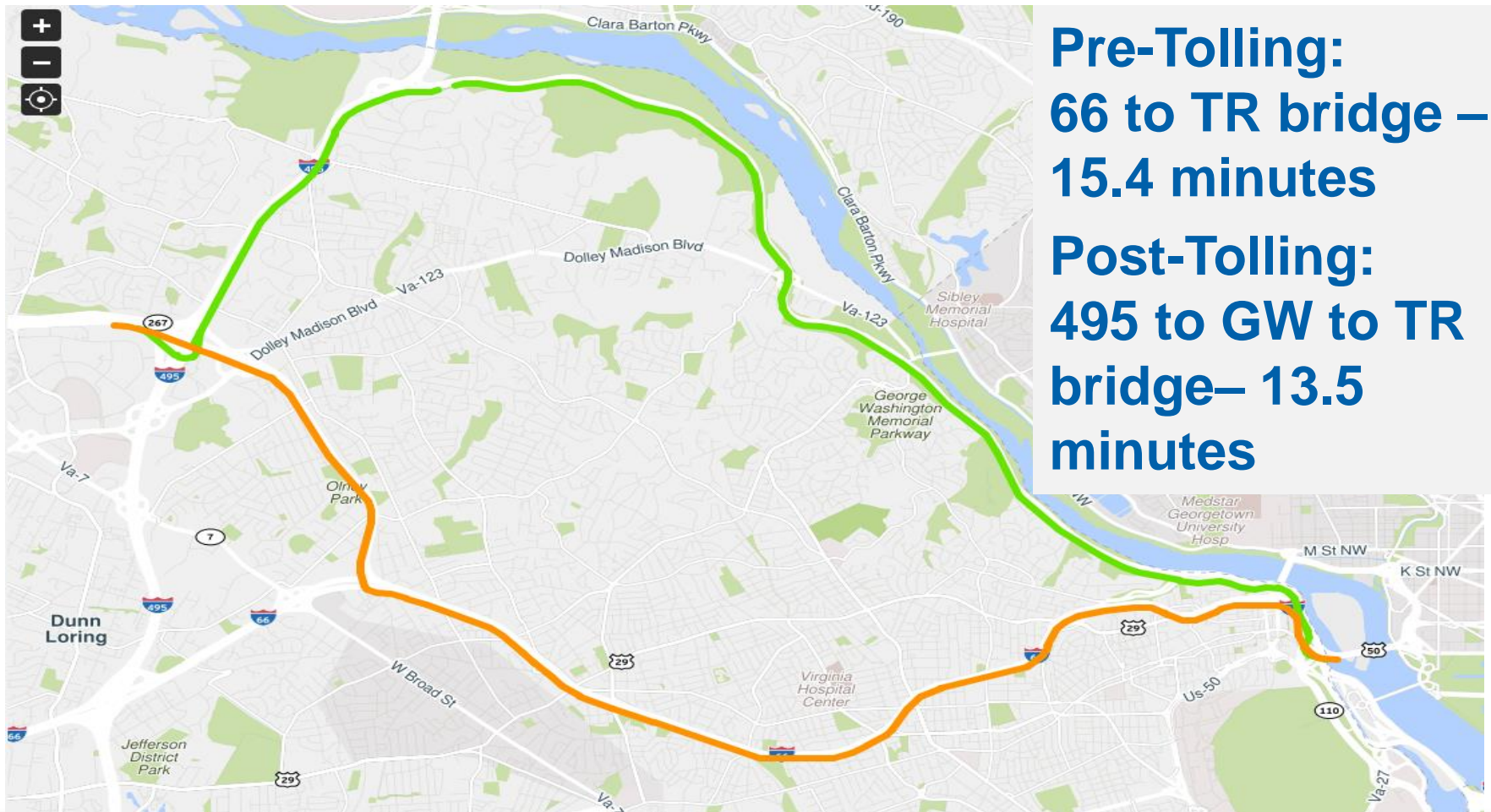
AM Shoulder Period – 6:00am Travel Times

Pre-Tolling
66 Nutley to TR
bridge –
17.4 minutes

Post-Tolling:
66 Nutley to Route 50
to TR bridge –
20.6 minutes



AM Shoulder Period – 6:00am Travel Times



Incidents on I-66

Pre- and Post-Tolling 6 month comparison

	Eastbound		Westbound	
Time Period	Pre-Tolling	Post-Tolling	Pre-Tolling	Post-Tolling
Crashes	248	218	164	132
% Change	12.1% Decrease		15.0% Decrease	

Moving Forward

- **Will continue to monitor performance of Express Lanes and parallel routes**
 - **Seek to identify potential operational improvements**
- **Construction on new eastbound lane is underway and will be complete in 2020**
- **VDOT is testing modifications to tolling system to evaluate opportunities to move more people**
- **Will continue partnership with NVTC to re-invest toll revenues in the corridor**