



# Dulles Toll Road Rate Setting Process

Public Hearings Slides  
FOR HNTB– June 22, 2018



# Dulles Toll Road Operations



# Serving our Customers

- The Dulles Toll Road is a critical transportation link to the region's infrastructure.
- On a typical work day, more than 107,000 vehicles pass through the Dulles Toll Road mainline plaza.
- The Toll Road provides access to employment, shopping and residential communities.



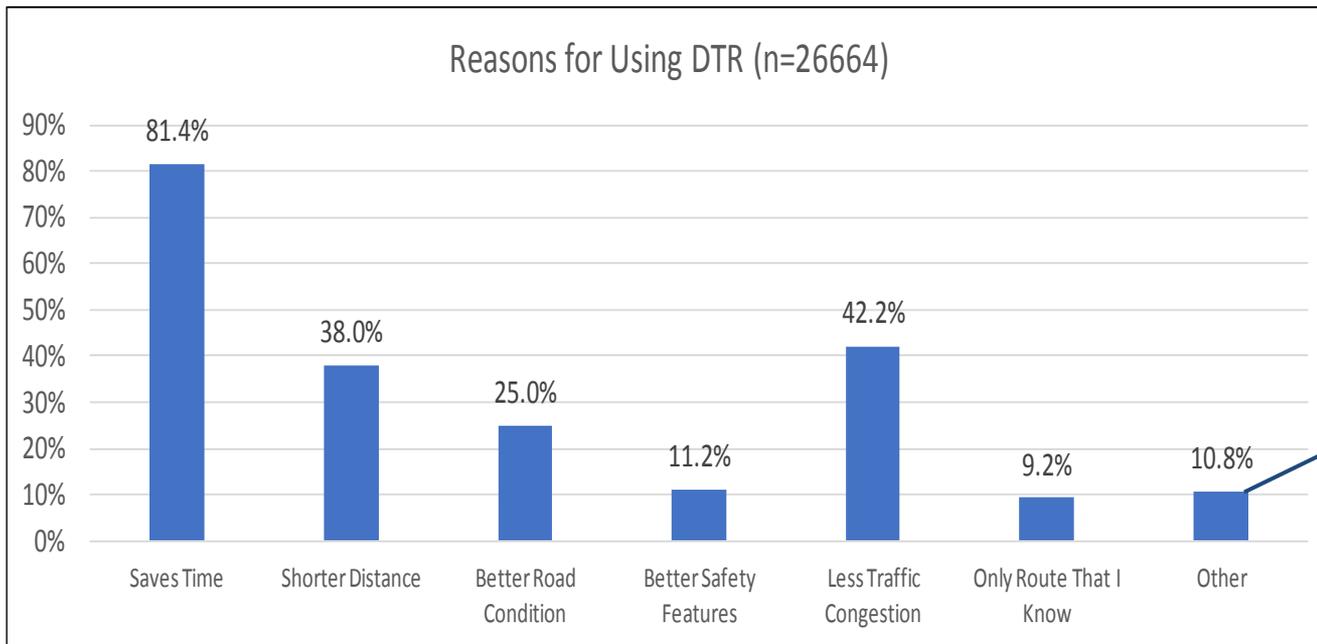


# Serving our Customers

- Investments are made annually for roadway operations and infrastructure enhancements.
- Dedicated police/safety service patrol respond to quickly clear accidents and incidents, resulting in quicker restoration of normal traffic flow.
- Twenty-four hour priority inclement weather response keeping travel lanes clear on 112 lane miles of highway.



# Toll Road Customer Feedback



Most frequently cited reasons:  
-- No traffic lights.  
-- Most direct route.  
-- Habit.  
-- Reliability.



# Dedicated Safety Service Patrol

- Free Motorist Assistance Program
- Emergency service to motorists in need: dial #77



## 2017 Safety Service Patrol Statistics

Flat Tire	813
Towing Required	478
Disabled Vehicles	155
Gas Needed	195
Debris Removal	364
Motorist Assistance	95
Abandoned Vehicles	125
Jump Starts	74
Assist Officer	24
Traffic Control	66



# Dulles Corridor Improvements



# Dulles Corridor Improvement Program

## Major Accomplishments

- **Noise Wall Program** – Constructed 6 new sound walls and replaced 2 existing sound walls between 2012 and 2017
- **Pavement Rehabilitation** – Since 2013, have repaved 46 lane miles of roadway pavement which provides a safer roadway
- **Bridge Maintenance and Rehabilitation Program** – Have made repairs to 33 Bridges and Culverts
- **Lane Conversion** - Converted 19 Exact Change Lanes to EZ Pass Only lanes enhancing traffic throughput



# Dulles Corridor Projects



Sound Wall Projects



Pavement Repair



EZPass Only Lanes



Bridge Maintenance



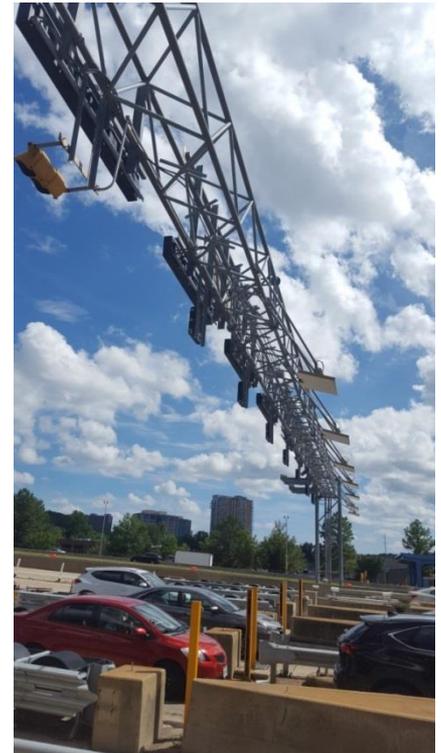
# **Dulles Corridor Improvements Underway: New Enhanced Toll Collection System**



# Project Overview

The new enhanced toll collection system will provide the latest tolling technology providing greater reliability, improved accuracy, and less maintenance cost.

- Enhanced IT security standards
- New Hardware including:
  - Digital Lane Signage
  - Enhanced Camera Technology
  - Upgraded Vehicle Classification Readers and Antennas
- Completion 2019



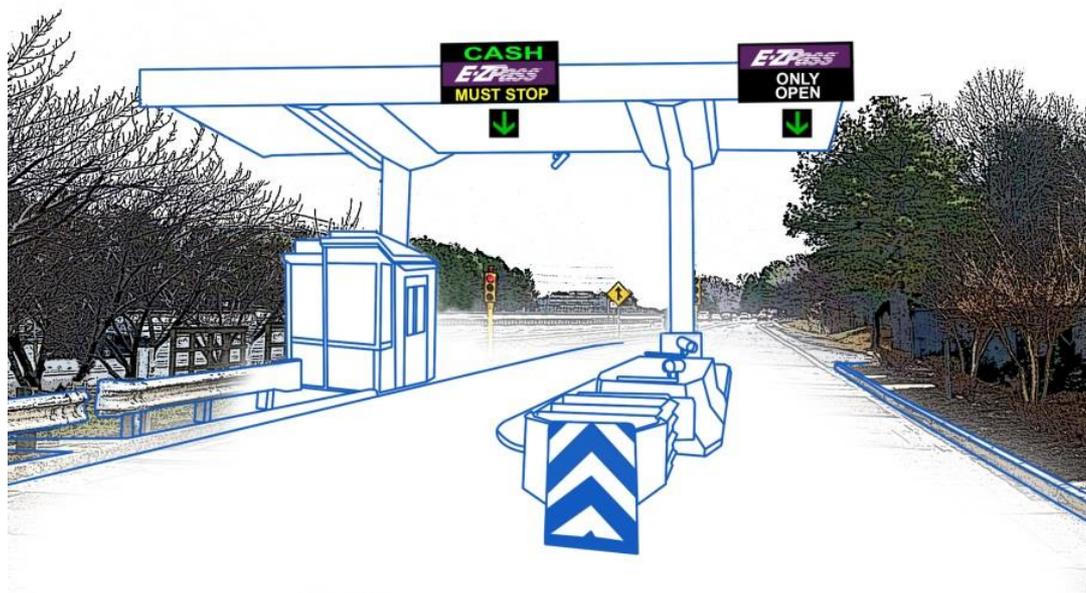


# Conceptual View of Future Main Toll



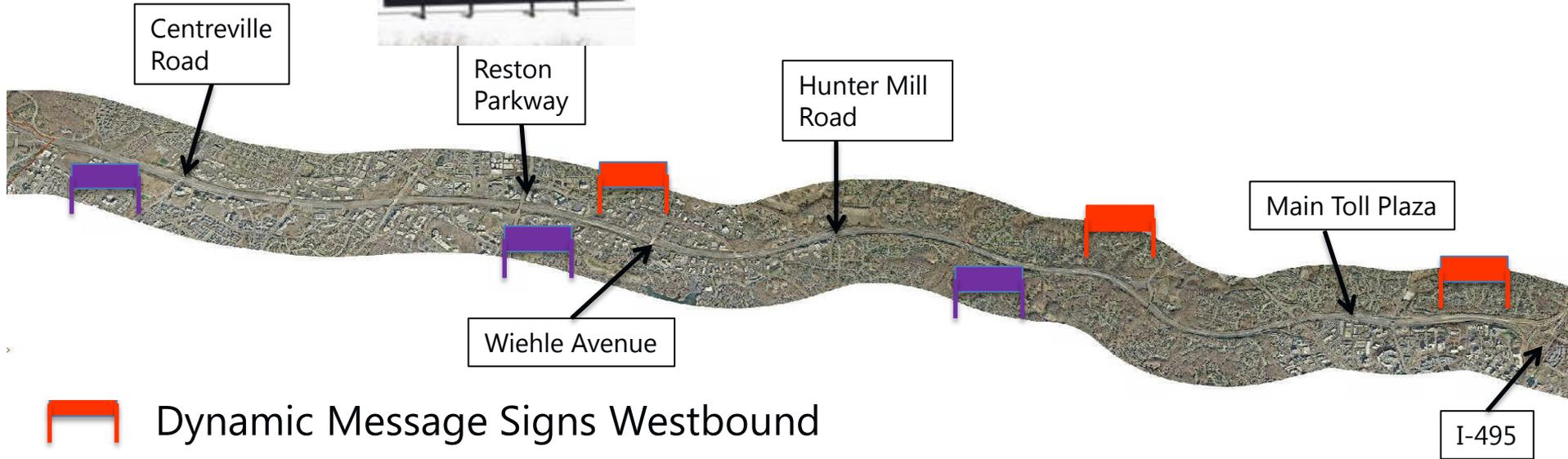


# Conceptual View of Future Ramp Toll Plaza





# Overhead Dynamic Message Board Project

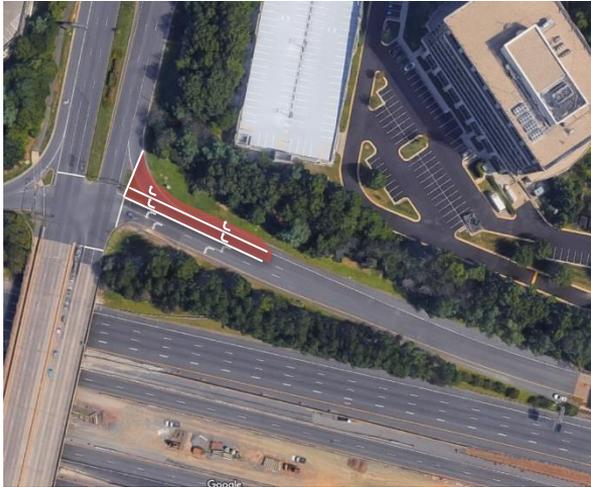


 Dynamic Message Signs Westbound

 Dynamic Message Signs Eastbound



# 2018-19 Projects – Short Term Geometric Improvements



Reston Parkway –  
Additional right turn lane



Spring Hill Road –  
Add right turn lane

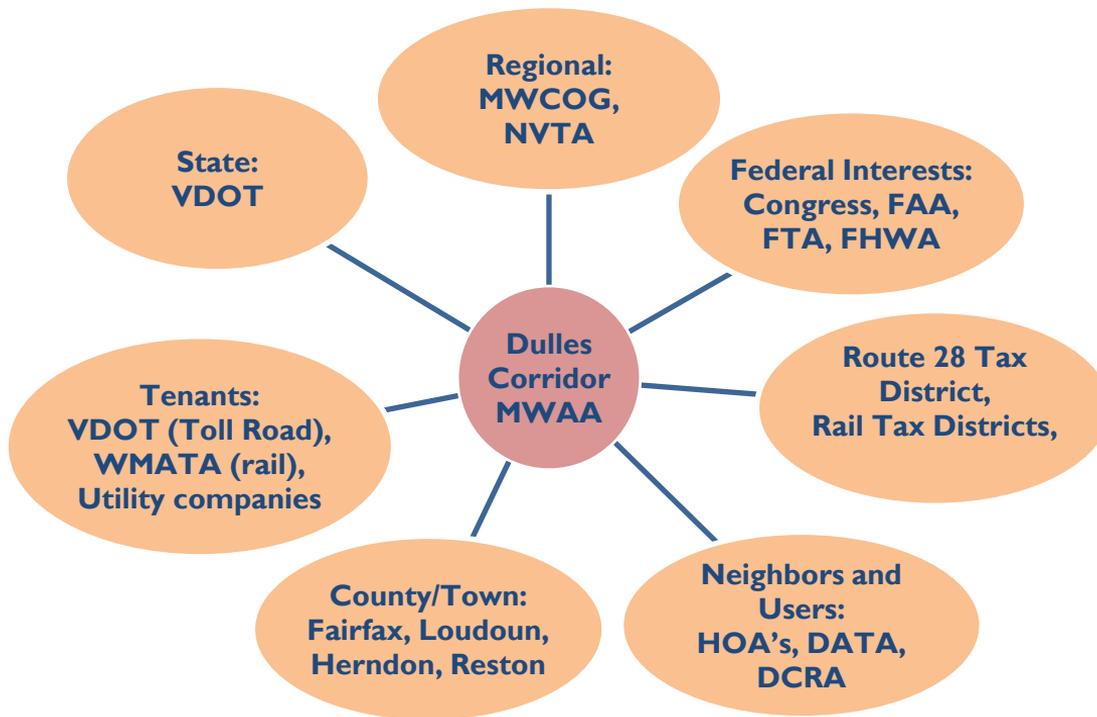


Centreville Road On Ramp-  
Extend merge lane



# Planning for Future Improvements

Long Term Strategic Planning for Route 28/DTR, Reston, and Tysons Corner with our partners:





# Dulles Corridor Metrorail Project



# Silver Line At-A-Glance

- Seamless integration with current 106-mile Metro system
- 23-mile extension that branches off existing Orange Line after East Falls Church Station, providing direct connections to DC without transfers
- 11 new stations
  - 5 in Phase 1
  - 6 in Phase 2
- **Phase 1:** East Falls Church to Wiehle Avenue in Reston; opened in 2014
- **Phase 2:** Wiehle Avenue through Dulles Airport to Ashburn. Construction is 78 percent complete; anticipated revenue service in 2020.





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# Phase 1: Opened July 2014

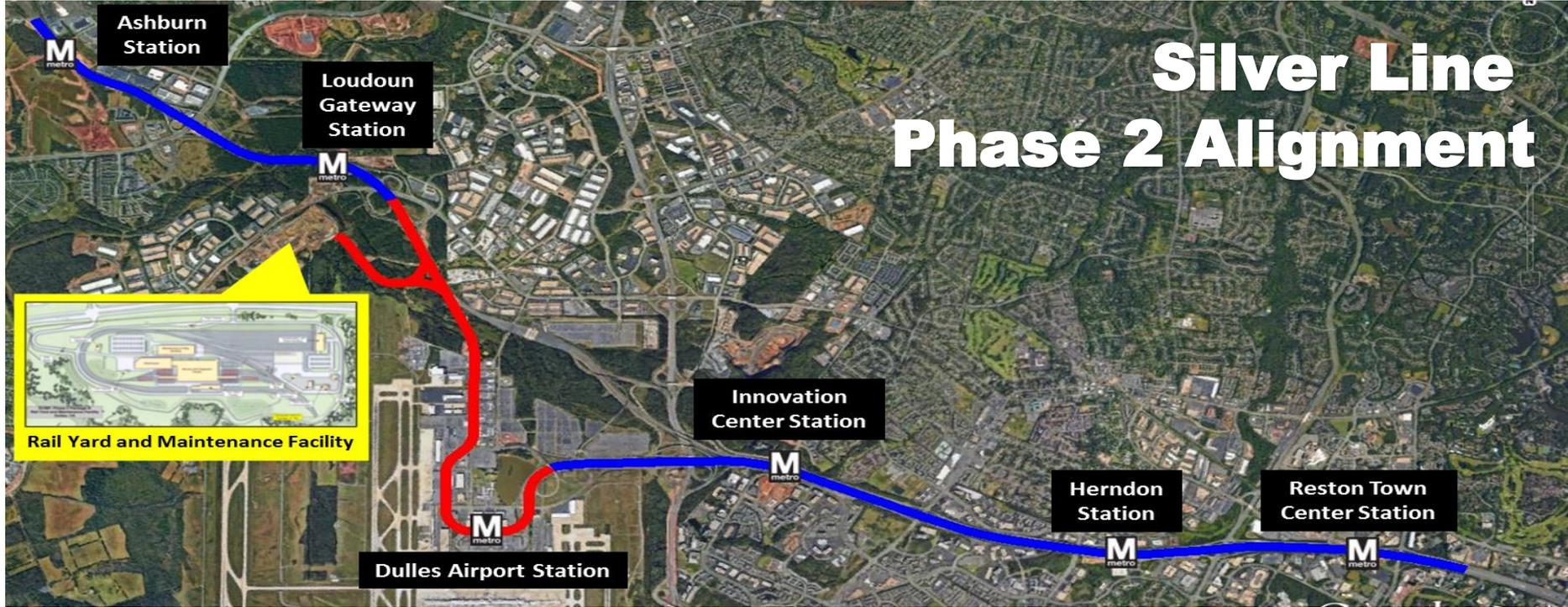




# Phase 1 Stations







### PACKAGE A:

Mainline and Stations Design-Build Contractor: **Capital Rail Constructors**

**(CRC)**

- Clark Construction Group, LLC
- Kiewit Infrastructure South Co.

### PACKAGE B:

Rail Yard & Maintenance Facility Contractor: **Hensel Phelps**

**Parking Garages** to be developed by Fairfax and Loudoun counties



# Phase 2 - Scope

- 11.4 mile extension from Wiehle Avenue in Reston to Ashburn
- 6 Stations:
  - Reston Town Center
  - Herndon
  - Innovation Center
  - Dulles Airport
  - Loudoun Gateway
  - Ashburn
- Rail yard and maintenance facility on 90 acres of Dulles Airport land, off Old Ox Road (Route 606).
- 5 new parking garages
  - Herndon and Innovation Center garages under construction by Fairfax County
  - Two at Ashburn and one at Loudoun Gateway under construction by Loudoun County
  - No commuter parking at Reston Town Center or Dulles Airport





## Phase 2 Construction

Aerial Guideway



Reston Station



At-Grade Track



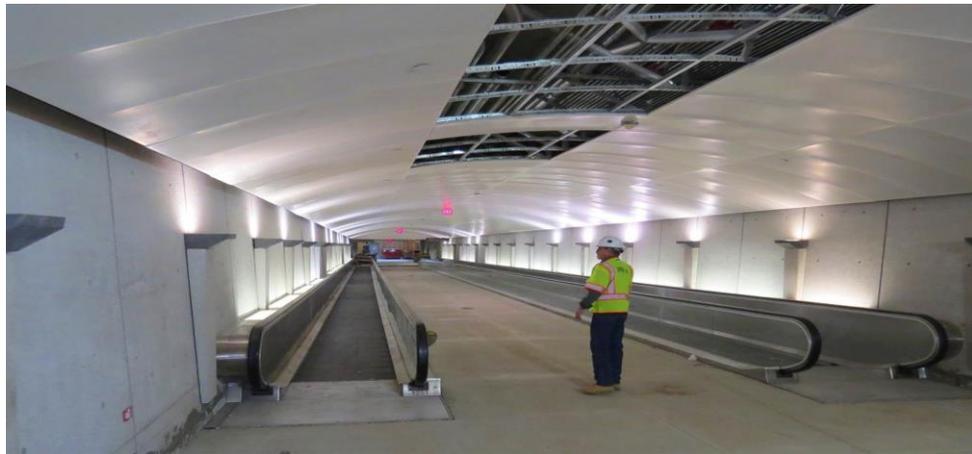
Herndon Station





METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

# Dulles Airport Construction





# Phase 2 Construction





METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

# Rail Yard and Maintenance Facility May 2018



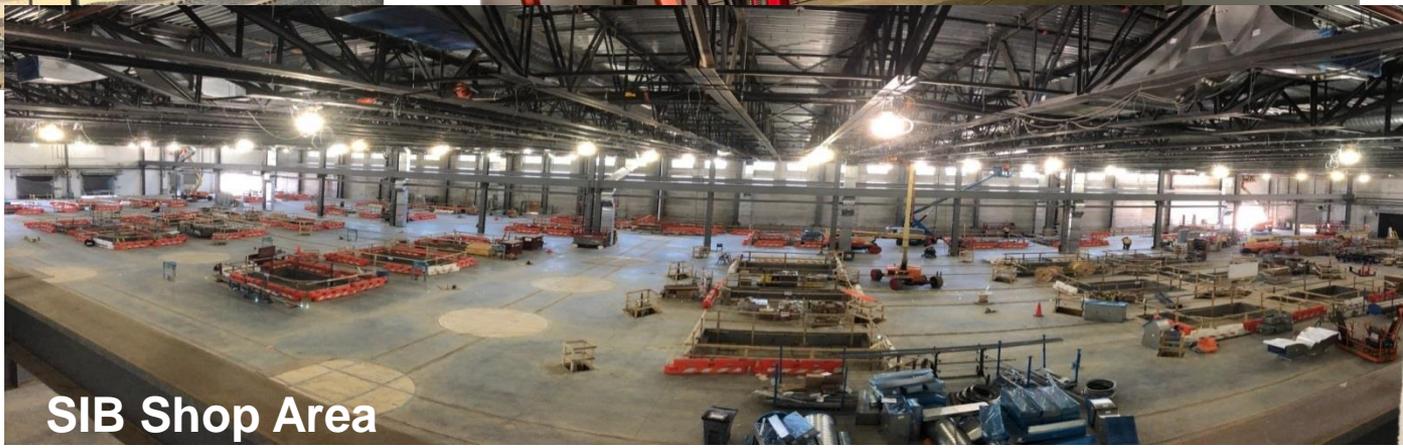


## Rail Yard and Maintenance Facility

Train Wash Facility



MWB Switch Gear



SIB Shop Area



## Phase 2 – Looking Ahead

- Construction is 78 percent complete.
- Once complete, turn over to WMATA for additional testing.
- WMATA to set opening date, anticipated in 2020



# **Finance Plan for the Dulles Corridor Metrorail Project and Proposed Toll Rate Adjustment**



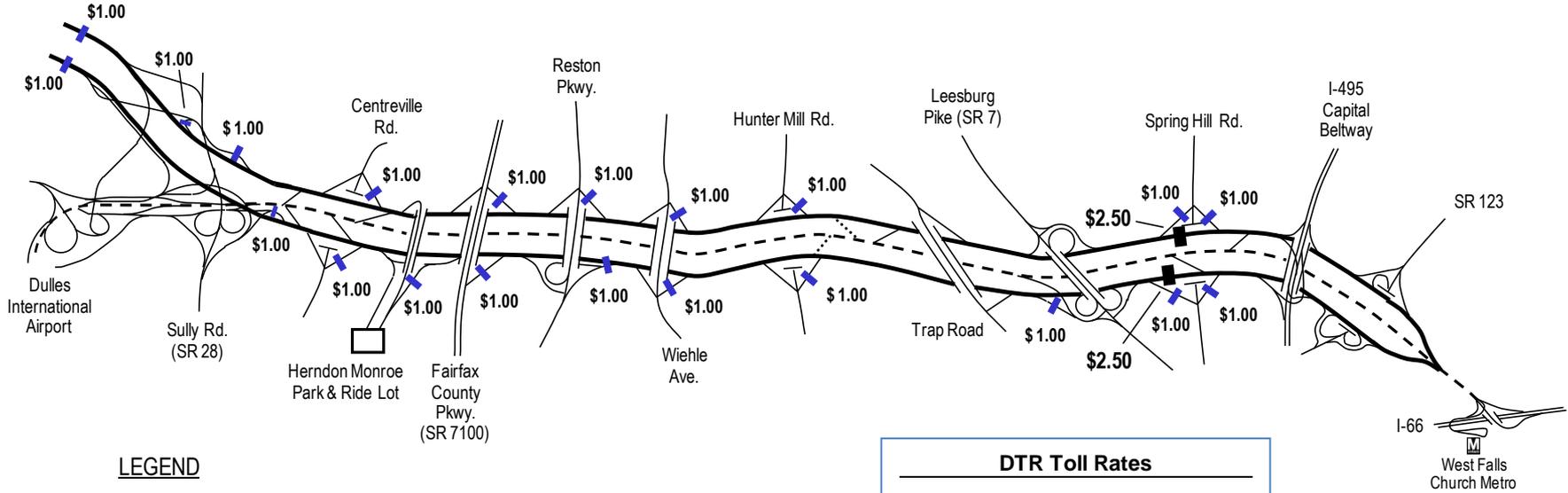
## Airports Authority's Responsibilities Under the Dulles Toll Road Permit and Operating Agreement

- Operate, maintain, and improve the Dulles Toll Road for a 50-year term (through 2058).
- Segregate toll revenues from other MWAA revenues.
- Design, build, and participate in financing the Metrorail Project.
- Design, build, and finance the other capital improvements to the Dulles Corridor with VDOT and regional plan approval.
- In order to generate required revenue to meet responsibilities set forth above, set toll rates after public consultation.

*The Airports Authority is fully committed to financing and constructing the Rail Project in a fiscally responsible manner that minimizes required toll rate increases.*



# Dulles Toll Road Mainline and Ramp Locations



### LEGEND

- Dulles Toll Road
- Dulles Access Highway
- Buses Only
- Mainline Toll Plaza
- Ramp Toll Plaza

DTR Toll Rates		
	Mainline Toll	Ramp Toll
2-axle vehicle	\$2.50	\$1.00
3-axle vehicle	\$5.00	\$2.00
4-axle vehicle	\$6.25	\$2.50
5-axle vehicle	\$7.50	\$3.00
6 or more axles	\$8.75	\$3.50



# Proposed Toll Rate Adjustment

## § 10.1. (Effective January 1, 2019) Tolls for Use of the Dulles Toll Road

Except for persons permitted free use of toll facilities under Virginia Code §33.1-252, it shall be unlawful for any person operating a vehicle to use the Dulles Toll Road (also known as the Omer L. Hirst-Adelard L. Brault Expressway) or any portion thereof without payment of the tolls as set forth in the following schedule:

Vehicle Class	Main Line Plaza*		Ramps*	
2-Axle	<del>\$2.50</del>	\$3.25	<del>\$1.00</del>	\$1.50
3-Axle	<del>\$5.00</del>	\$6.50	<del>\$2.00</del>	\$3.00
4-Axle	<del>\$6.25</del>	\$7.75	<del>\$2.50</del>	\$3.50
5-Axle	<del>\$7.50</del>	\$9.00	<del>\$3.00</del>	\$4.00
6 or more axles	<del>\$8.75</del>	\$10.25	<del>\$3.50</del>	\$4.50

\* Toll rates being replaced by new rates are shown with strike-through line.



## Other Considerations for Public Comment

The public is invited to comment on various operational characteristics of the DTR which will assist in future planning, including:

- (1) Whether the proposed amendment of \$1.25 increase in the cost of a typical trip should be allocated as proposed between the ramp and mainline toll plaza (\$0.50 increase at the DTR ramp locations and \$0.75 increase at the mainline toll plaza) or allocated in a different proportion between the ramp and mainline;
- (2) Whether, at a future date to be determined, the toll plaza lanes that allow customers to pay in cash should be converted to “E-ZPass only” (or open road tolling), similar to other newer toll facilities;
- (3) Whether, at a future date to be determined, credit cards should be accepted in certain toll lanes, (similar to the Dulles Greenway); and
- (4) An open invitation to propose any other operational improvements.

These options may have implementation costs or revenue impacts that will require additional analysis before feasibility can be determined.



# Reduction in DTR Trip Costs with TIFIA and State Grants

**Financial Planning Assumption in 2008  
without TIFIA or State Grants**

<u>Year</u>	<u>Mainline</u>	<u>Ramp</u>	<u>Cost of Typical Trip *</u>
2008	\$0.75	\$0.50	<b>\$1.25</b>
2009	\$0.75	\$0.50	<b>\$1.25</b>
2010	\$1.00	\$0.75	<b>\$1.75</b>
2011	\$1.25	\$0.75	<b>\$2.00</b>
2012	\$1.50	\$0.75	<b>\$2.25</b>
2013	\$2.75	\$1.75	<b>\$4.50</b>
2014	\$2.75	\$1.75	<b>\$4.50</b>
2015	\$2.75	\$1.75	<b>\$4.50</b>
2016	\$2.75	\$1.75	<b>\$4.50</b>
2017	\$2.75	\$1.75	<b>\$4.50</b>
2018	\$4.00	\$2.75	<b>\$6.75</b>
2019 - 2022	\$4.00	\$2.75	<b>\$6.75</b>
2023 - 2027	\$5.00	\$3.75	<b>\$8.75</b>
2028 - 2032	\$6.00	\$4.75	<b>\$10.75</b>
2033 - 2037	\$7.00	\$5.75	<b>\$12.75</b>
2038 - 2042	\$8.00	\$6.75	<b>\$14.75</b>
2043 - 2047	\$9.00	\$7.75	<b>\$16.75</b>

**Current Financial Planning Estimates  
with TIFIA and State Grants**

<u>Mainline</u>	<u>Ramp</u>	<u>Cost of Typical Trip *</u>
\$0.75	\$0.50	<b>\$1.25</b>
\$0.75	\$0.50	<b>\$1.25</b>
\$1.00	\$0.75	<b>\$1.75</b>
\$1.25	\$0.75	<b>\$2.00</b>
\$1.50	\$0.75	<b>\$2.25</b>
\$1.75	\$1.00	<b>\$2.75</b>
\$2.50	\$1.00	<b>\$3.50</b>
\$3.25	\$1.50	<b>\$4.75</b>
\$4.00	\$2.00	<b>\$6.00</b>
\$4.75	\$2.50	<b>\$7.25</b>
\$5.50	\$3.25	<b>\$8.75</b>
\$6.25	\$3.75	<b>\$10.00</b>
\$7.00	\$4.25	<b>\$11.25</b>

\* Mainline Plaza toll plus one ramp transaction



# Allocation of Dulles Metrorail Project Costs

SOURCES OF CAPITAL FUNDS \$ Millions	PHASE 1	PHASE 2 <sup>(1)</sup>	RAIL PROJECT BUDGET prior to NVTA and CMAQ		RAIL PROJECT BUDGET after NVTA and CMAQ	
			Total	% of Total	Change	Total
Federal	\$ 900	\$ -	\$ 900	15.6%		\$ 900
Commonwealth of Virginia - Federal Funds <sup>(2)</sup>	75	-	75	1.3%	11.0	86
Commonwealth of Virginia - State Funds <sup>(3)</sup>	177	323	500	8.7%		500
Northern Virginia Transportation Authority <sup>(4)</sup>		-	-	0.0%	60.0	60
Fairfax County	400	527	927	16.1%	(11.4)	916
Loudoun County		276	276	4.8%	(3.4)	273
MWAA (Aviation Funds)		236	236	4.1%	(2.9)	233
MWAA (Dulles Toll Road)	1,430	1,415	2,845	49.4%	(53.3)	2,792
<b>TOTAL SOURCES OF FUNDS</b>	<b>\$ 2,982</b>	<b>\$ 2,778</b>	<b>\$ 5,760</b>	<b>100.0%</b>	<b>\$ -</b>	<b>\$ 5,760</b>

Fixed Amount
Fixed Percentage of total cost
Residual

(1) Phase 2 Parking Garages are to be funded directly by the Counties and are not included in the Total Rail Project Budget.

(2) \$75 million Section 5307 Surface Transportation Program grant and \$11 million Congestion Mitigation and Air Quality Improvement (CMAQ) Program funds.

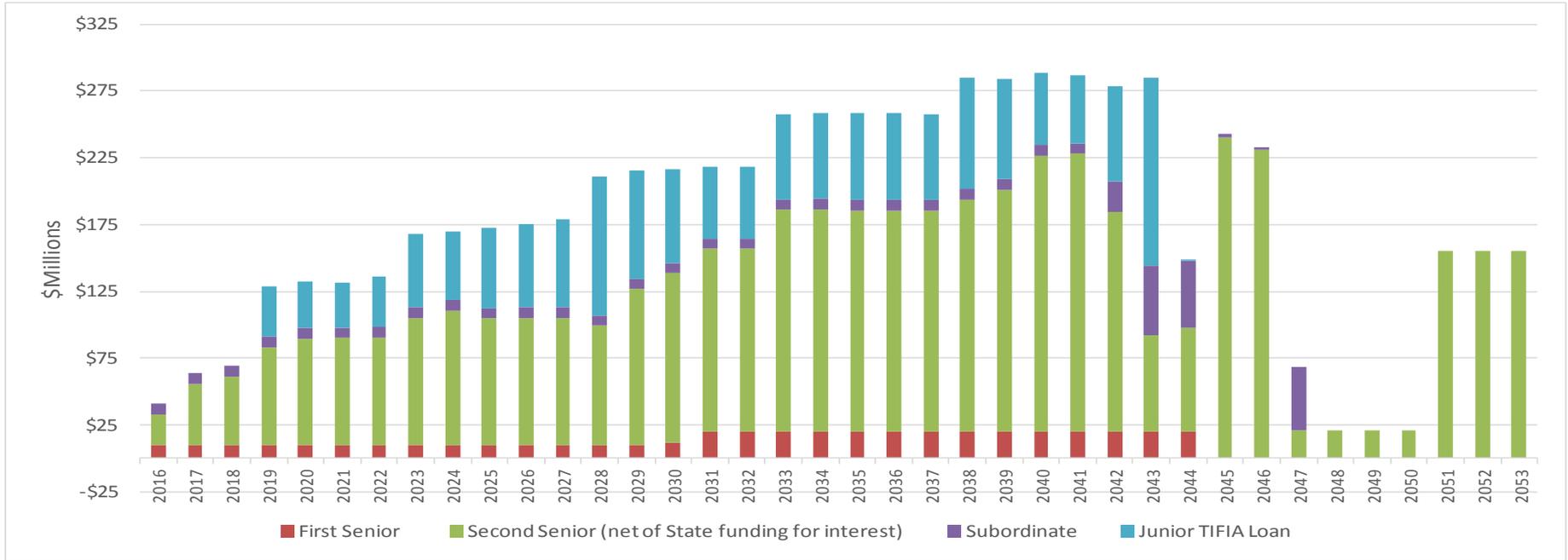
(3) Does not include \$150 million from the Commonwealth that is being used to pay interest on Dulles Toll Road revenue bonds.

(4) Grant from Northern Virginia Transportation Authority (NVTA) can only be used to pay or reimburse capital costs for Innovation Center Metrorail Station.



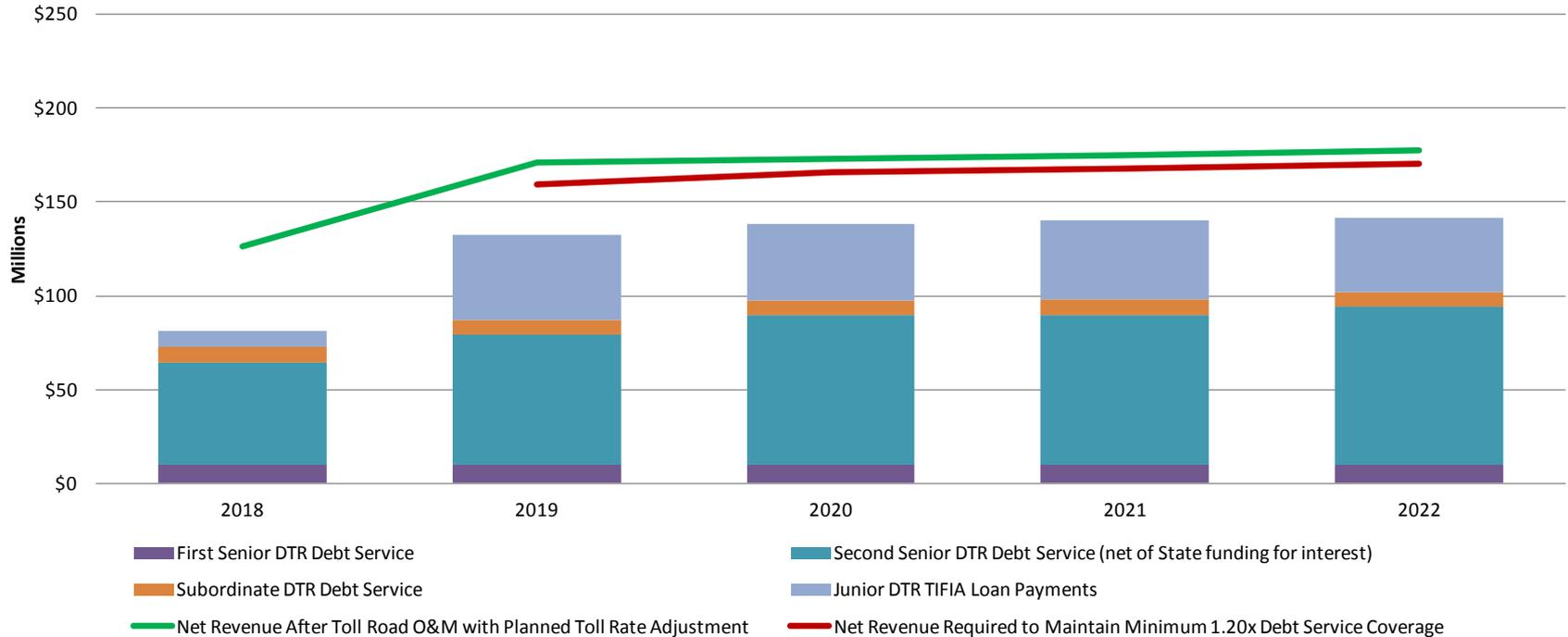
# Dulles Toll Road Revenue Bond Debt Service

The Airports Authority must plan and implement periodic toll adjustments to operate and maintain the DTR, to pay debt service obligations and to comply with bond rate covenants.





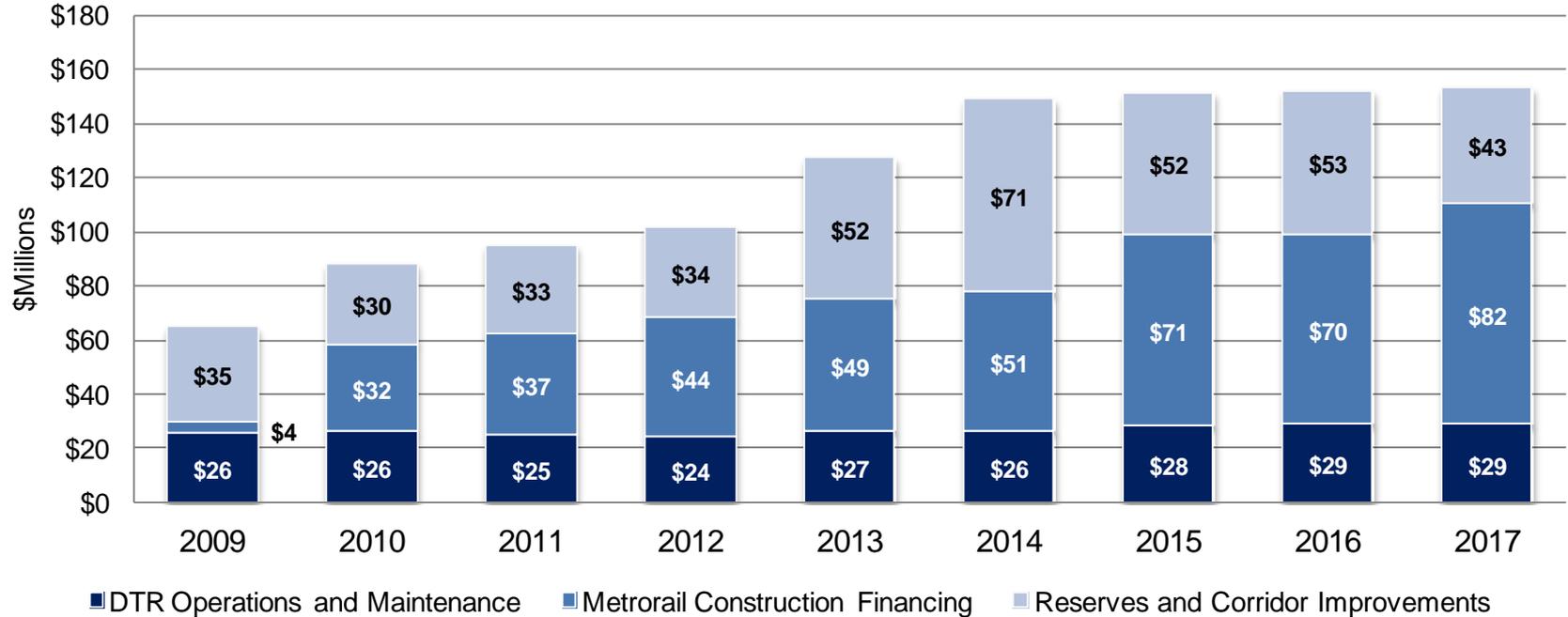
# Projected Net Toll Revenue and Debt Service Coverage with Planned Toll Rate Adjustment \*



\* Based on toll revenue estimates from the Comprehensive Traffic and Revenue Study 2018 Update prepared by CDM Smith.



## Use of Dulles Toll Road Revenue





## Example Toll Rate Comparison

	Length (miles)	Toll for Full Length Trip (2-axles)	Effective Toll per Mile
Dulles Toll Road (2018)	14	\$3.50	\$0.25
Dulles Toll Road (proposed 2019-2022)	14	\$4.75	\$0.34
I-66 Express Lanes Inside the Beltway ( <i>April 2018 average for eastbound AM</i> )	10	\$9.27	\$0.93
Pocahontas Parkway	8.8	\$4.30	\$0.49
Chesapeake Expressway ( <i>peak weekend, May to Sep 2018</i> )	16	\$8.00	\$0.50
I-66 Express Lanes Inside the Beltway ( <i>April 2018 average for westbound PM</i> )	10	\$4.86	\$.49
Dulles Greenway ( <i>2018 peak hour toll rate</i> )	14	\$5.65	\$0.40
495 Express Lanes ( <i>average toll 2017 4Q</i> )	14	\$5.43	\$0.39
Maryland Intercounty Connector ( <i>Video Toll rate - peak Hours</i> )	17.5	\$5.78	\$0.33
Dulles Greenway ( <i>2018 off peak hour toll rate</i> )	14	\$4.65	\$0.33
95 Express Lanes ( <i>average toll 2017 4Q</i> )	29.4	\$8.04	\$0.27
Maryland Intercounty Connector ( <i>E-ZPass rate - peak hours</i> )	17.5	\$3.86	\$0.22