Exhibit No. ____
Witness: GB

DIRECT TESTIMONY OF
GRAEME BEVANS
ON BEHALF OF
TOLL ROAD INVESTORS PARTNERSHIP II, L.P.
CASE NO. PUR-2019-00218

Exhibit No. ____
Witness: GB

SUMMARY OF DIRECT TESTIMONY OF GRAEME BEVANS

Company Witness Graeme Bevans provides an overview of Toll Road Investors Partnership II, L.P.'s ("TRIP II") proposed toll increase for the Dulles Greenway ("Greenway") and the relevant history and background on the Greenway. In particular, he provides a history of the Greenway and ownership of the roadway. Mr. Bevans also provides an overview of the historical financial performance of the Greenway and the financial restructurings undertaken by the Company and previously reviewed and approved by the State Corporation Commission ("Commission" or "SCC"). Additionally, Mr. Bevans provides a history of toll prices on the Greenway, the manner in which toll prices have been set in the past, and a comparison of Greenway toll prices to other toll prices in the region.

Mr. Bevans discusses how investments made by Loudoun County and the Commonwealth to improve alternate un-tolled routes negatively affects the Greenway. He also explains the investments and improvements the Company has made and continues to make in the Greenway.

Finally, Mr. Bevans discusses TRIP II's requested increase in toll prices and describes the support provided with the Application to confirm that the tolls meet the requirements of Section 56-542 D of the Virginia Code ("Va. Code" or "Code"). In particular, Mr. Bevans confirms that the proposed tolls will provide no more than a reasonable return in compliance with the statute.

Exhibit No. ____
Witness: GB

DIRECT TESTIMONY
OF
GRAEME BEVANS
ON BEHALF OF
TOLL ROAD INVESTORS PARTNERSHIP II, L.P.
BEFORE THE
STATE CORPORATION COMMISSION OF
VIRGINIA CASE NO. PUR-2019-00218

Q. Please state your name, business address, and position of employment with Toll Road Investors Partnership II, L.P. ("TRIP II," or "Company").

A. My name is Graeme Bevans. I am the Chairman of the Board of Directors of Shenandoah Greenway Corporation, the General Partner of TRIP II, and the Chief Executive Officer of Atlas Arteria, a global owner, operator and developer of toll roads, with a portfolio of four toll roads in France, Germany and the United States. Atlas Arteria is the owner of a 100% effective economic interest in TRIP II.

Q. Please describe your responsibilities as Chairman of the Board of Directors of the General Partner of TRIP II.

A. As Chairman of the Board of Directors, I oversee the entire operations of TRIP II, providing leadership to the business and supporting the Chief Executive Officer and other executive management team members in the business.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide an overview of the Company's proposed toll increase for the Dulles Greenway ("Greenway"). In doing so, I provide relevant history and background on the Greenway as well as Commission oversight of the road. I will also explain how investments made in alternate routes by Loudoun

County and the Commonwealth affect the Greenway; the improvements the Company has made and continues to make in the Greenway; the relative benefits of the Greenway versus other tolls roads in the area; and the amount the Company has paid in expenses (e.g., state police, taxes, etc.) versus the amount that has been paid to investors to-date.

Q. Please describe how your testimony is organized.

A. My testimony is organized as follows:

I. Background and Ownership History of the Greenway

II. History of Debt on the Greenway

III. Toll Pricing on the Greenway

IV. Improvements to Alternate Roads and Investment in the Greenway

V. Proposed Toll Increase for the Greenway.

I. Background and Ownership History of the Greenway

Q. What was the legal basis for construction and operation of the Greenway?

A. In 1988, the Virginia General Assembly passed the Virginia Highway Corporation Act of 1988, §§ 56-535 *et seq.* (the "Act"), which authorized the construction of private toll roads in the Commonwealth. The Act sought to encourage private investment in needed infrastructure. The Act sets forth the requirements that a proposed project must meet, provides for regulation by the Commission, including standards for setting toll rates (in accordance with the Code), and addresses numerous other aspects of any such project.

In 1989, the Toll Road Corporation of Virginia ("TRCV") presented a proposal to fund, construct and operate a private toll road as an extension of the existing, state-

owned Dulles Toll Road ("DTR") running from the western terminus of the DTR in the area of Dulles International Airport to Leesburg, Virginia, known now as the Greenway, under the Act. The application was approved by the Commonwealth Transportation Board in July 1989, and on July 6, 1990, in Case No. PUE-1990-00013, the Commission issued TRCV a certificate of authority ("Certificate"), pursuant to the Act, to construct and collect tolls on the Greenway, making it the first private toll road in Virginia since 1816 and the only private toll road to be regulated by the Commission.

On June 28, 1991, the Commission, in its Order Amending Certificate in Case No. PUA-1990-00013, authorized and approved the transfer of the Certificate to a limited partnership, Toll Road Investors Partnership II ("TRIP II"). TRCV transferred the Certificate to TRIP II on September 28, 1993. Financing was secured that same year and all the land the road is on was acquired by TRIP II in fee simple or via an easement agreement with the Metropolitan Washington Airports Authority ("MWAA"), which operates the adjacent Dulles International Airport. Construction began the following year in early 1994 and the road opened to traffic on September 29, 1995.

Q. What made a private toll road in Loudoun County an interesting project for investors to consider?

A. Several factors came together in the late 1980s to make the undertaking of the Dulles Greenway project an interesting business concept.

The Act sets the stage for Virginia corporations (and, shortly thereafter, for Virginia partnerships) to consider projects involving the design, finance, construction and operation of toll roads in the Commonwealth.

In northern Virginia, a public need was taking shape. Loudoun County was in the early stages of its extraordinary growth—increasing numbers of residents and businesses were requiring alternate ways to travel east and west through the County with Route 7 being the only major road heading east/west through the northern part of the region. Public finances were limited and with excess revenues from the DTR being directed elsewhere by the state legislature, the Virginia Department of Transportation ("VDOT") indicated at the time that such a project was not in its plans despite the Commonwealth Transportation Board stating that the need for an extension of the existing DTR to Leesburg had long been evident.

TRCV was the first private entity to express an interest in such a project and was able to open the Greenway to traffic 18 months faster than VDOT had indicated they could if they were to build it, with no risks or costs borne by tax payers or the local or state governments.

Q. What are the benefits of the Greenway?

A. The Commission has long recognized that a road through this corridor likely would not have been built had TRIP II not stepped up and taken on the development and construction of the Greenway. Loudoun County too has recognized the Greenway's contribution to the economic growth of the area. Indeed, as explained by previous Supervisor James G. Barton, "[t]he Greenway has made it easier for western Loudoun

to grow by leaps and bounds."[1] Similarly, County Supervisor Geary Higgins has previously "noted that the Greenway is a great asset for Loudoun County."[2]

For more than 20 years, the Greenway has been an integral part of the transportation network in eastern Loudoun County, providing a high-quality, safe route for drivers. As a primary artery between Leesburg (and points west) and the DTR (including Reston, Tysons Corner and other points east), the Greenway provides users with multiple benefits, including quicker travel times at higher average speeds, lower vehicle operating costs, and a safer driving environment with substantially lower accident rates.

A complement to the public road network, the Greenway also relieves the financial burden of local and state agencies charged with providing transportation as these agencies have never been required to commit public funds to the Greenway. As such, the Greenway not only serves drivers who pay to use it, it also benefits the local community by alleviating congestion that would otherwise be on surrounding public roads.

Q. How much did it cost to construct the Greenway and how was it financed?

A. At the time of opening in 1995, the total cost to acquire the right-of-way, construct the road, install surfacing and safety fixtures, and install toll collection equipment was approximately $315 million. This did not include capital expenditure incurred to

[1] Justin Blum, "*Dulles Greenway a 'Double-Edged Sword,'*" The Washington Post, July 26, 1999.
[2] *See* page 7 *Ex Parte: In the matter of investigating the toll rates of Toll Road Investors Partnership II, L.P., under § 56-542 D of the Code of Virginia*, Case No. PUE-2013-00011, Report of A. Ann Berkebile, Hearing Examiner (Jan. 30, 2014).

deliver the additional planned improvements that were part of the Comprehensive Agreement. Additional operating, funding, and development costs were also incurred, resulting in a total of $40 million in equity from the original Limited Partners and approximately $311 million in debt invested into TRIP II. The debt funding included approximately $254 million in fixed-rate First Mortgage Notes with a group of insurance companies, and a $57 million Construction Loan provided by a group of banks. This was all relatively expensive financing with a weighted average annual interest rate of approximately 9.80%. Interest was payable quarterly on most of the debt with some of the First Mortgage Notes accruing interest to be paid at a later date.

Q. How was the land acquired?

A. Section 56-541 of the Act provides that an operator of any project does not have the power of eminent domain. As a result, TRIP II acquired all the necessary property in fee simple through private means in the early 1990s, which was a costly and time-consuming exercise. A small portion toward the eastern end is leased from MWAA under a long term easement agreement that currently requires TRIP II to pay MWAA $600,000 per annum for use of the land. This lease payment to MWAA is due to increase to $2 million per annum from 2036 onward.

Q. Can you please explain the ownership history of TRIP II?

A. TRIP II is a partnership with a common real estate private equity Limited Partner ("LP") / General Partner ("GP") structure. The LPs are the direct investors in the partnership providing the equity funding, and the GP typically invests a small amount

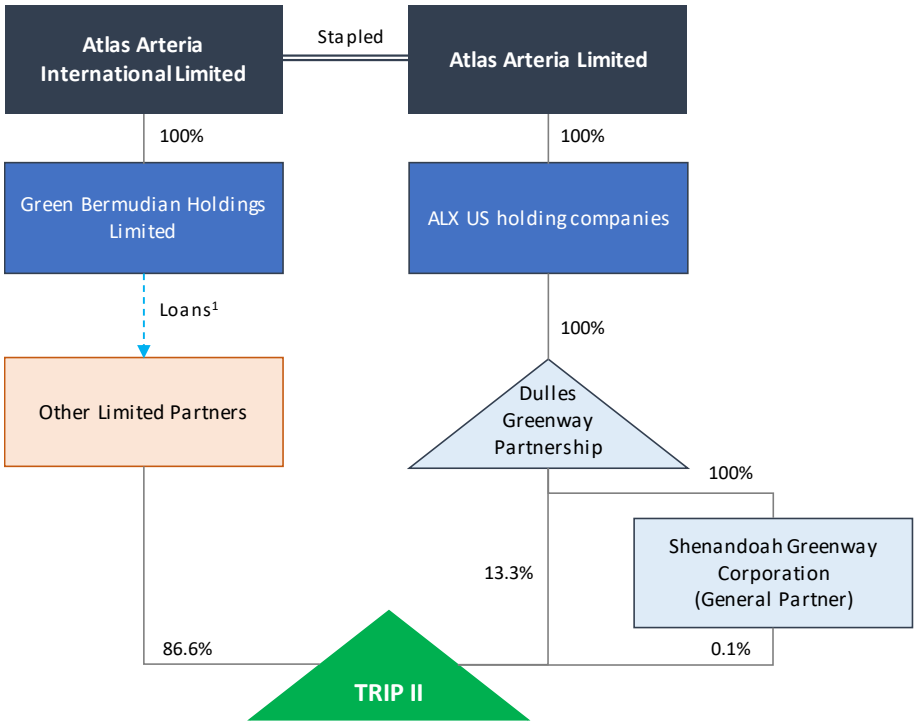
of capital and has primary responsibility for the day-to-day management and operation of the partnership on behalf of the LPs, which in TRIP II's case involves operating and maintaining the Greenway.

In late August 2005, Macquarie Infrastructure Group ("MIG") acquired a 13.3% direct interest in the project from Kellogg, Brown & Root; a 100% interest in the General Partner, Shenandoah Greenway Corporation, which also has a 0.1% interest in TRIP II; and rights over the combined 86.6% economic interests of the remaining LPs, giving MIG 100% effective ownership.

In December 2006, MIG divested 50.0% of its interests to Macquarie Infrastructure Partners ("MIP"). In 2010 MIG was reorganized into two separate Australian Stock Exchange ("ASX") listed toll road groups, Intoll and Macquarie Atlas Roads ("MQA"), with MQA assuming MIG's estimated 50.0% economic interest in the Greenway. In May 2017, MQA acquired the remaining estimated economic 50.0% interest from MIP, increasing MQA's estimated economic interest to 100.0%.

Q. Who are the current owners of the Greenway?

A. MQA was externally managed by Macquarie Fund Advisors Pty Limited until March 31, 2019, when the management agreements with Macquarie were terminated following a vote by shareholders to internalize management and rename the business Atlas Arteria ("ALX"). ALX, with its new management team, continues to be publicly traded on the ASX and holds a 100% effective economic interest in TRIP II. The diagram below illustrates the current ownership of TRIP II:



Notes: (1) Estimated economic interest held through ~86.6% subordinated loans secured against the equity held by the other limited partners. Remaining 13.4% interest held through equity.

II. History of Debt on the Greenway

Q. Can you explain how the initial debt amount of approximately $311 million has grown to more than $1 billion as of June 30, 2019?

A. The increase in debt can be attributed to TRIP II's financial performance and resulting refinancings occurring in 1999 and 2005, as well as the type of debt held by TRIP II.

Weaker than anticipated traffic on the road when it opened in 1995 resulted in insufficient cash flows for the business to meet its debt obligations and caused a default situation almost immediately.

The default situation was cured with the restructuring of TRIP II's debt in 1999, which was reviewed and approved by the SCC. The debt was restructured in four tranches of 1999 series bonds:

1) 1999A current interest bonds with original face value of $35 million, 7.125% interest rate, and maturity of February 2035;
2) 1999B zero coupon accreting bonds with an original face value of approximately $298 million, yield to maturity ("YTM") of 7.3% and staggered maturities from 2003 to 2035;
3) 1999C first tier subordinated compound interest project revenue bonds with a face value of $43 million and 9.33% YTM interest rate; and
4) 1999D second tier subordinated compound interest project revenue bonds with a face value of $29 million and 11% interest rate.

This restructuring led to an increase in the total level of debt outstanding between December 31, 1998, and December 31, 1999, of approximately $149 million. This brought the total debt level at that time to **$**419 million**,** with the proceeds from the additional debt being used in part to pay (i) issuance costs of $9 million, (ii) bond insurance premiums of approximately $29 million to National Public Finance Guarantee Corporation ("NPFG")[3] to fully insure the bonds in favor of bondholders, and (iii) and fund several escrow and reserve accounts required under the terms of the new debt.

[3] NPFG is a fully owned subsidiary of MBIA Inc., one of the largest bond insurers in the United States.

The business continued to perform below expectations, and in March 2005 TRIP II restructured its debt again following support from VDOT and Commission approval in Case No. PUF-2001-00017, along with a 20-year extension of the project concession to 2056. This 2005 series of bonds was issued in three tranches:

1) 2005A senior callable zero-coupon bonds with a principal amount of $162 million, YTM of 5.425% compounding semi-annually in February and August, and a maturity date of February 2045. For any year from 2006 through 2021 in which the partnership has sufficient cash available in the Early Redemption Fund, the 2005A bonds are subject to mandatory early redemption in February of each year as per the mandatory redemption schedule;
2) 2005B senior callable zero-coupon bonds with a principal amount of approximately $54 million, YTM of 5.7% compounding semi-annually in February and August, and a maturity date of February 2043. For any year from 2022 through 2035 in which the partnership has sufficient cash available in the Early Redemption Fund, the 2005B bonds are subject to mandatory early redemption in February of each year as per the mandatory redemption schedule;
3) 2005C senior callable zero-coupon bonds with a principal amount of approximately $174 million, YTM ranging from 5.55% to 5.65% compounding semi-annually in February and August, and a staggered maturity from February 2036 through February 2056.

The total proceeds from that debt issuance of approximately $391 million were used to:

- Redeem the 1999C and 1999D subordinated bonds plus accrued interest payable at a total cost of approximately $128 million;
- Fund approximately $98 million in capital improvements without having to increase tolls, including the completion of widening the entire Dulles Greenway from four to six lanes, construction of interchanges at Exit 2 (Route 654/Battlefield Parkway) and Exit 3 (Route 653/Shreve Mill Road), construction of a dedicated ramp (Ramp E) for access to Dulles International Airport, expansion of the mainline toll plaza to 18 lanes, and improvements to the interchange at Exit 8 (Route 606/Old Ox Road);
- Pay issuance costs of approximately $77 million, including approximately $57 million in bond insurance premiums to fully insure the bonds;
- Fund the reserve accounts to secure future debt service obligations with approximately $18 million; and
- The balance of approximately $70 million was distributed to investors.

This refinancing led to an increase in the total level of debt outstanding between December 31, 2004 and December 31, 2005 of approximately $355 million, bringing the total debt level at that time to $882 million.

As part of its ongoing financial obligations with regard to the 1999 and 2005 bonds, TRIP II is required to meet two covenant tests before being able to make distributions to equity holders. These two tests are the:

1) Minimum Coverage Ratio ("MCR"): Net Toll Revenue (essentially toll revenue less operating costs) shall equal at least 1.25 times the Debt Service on all Senior Bonds outstanding for each fiscal year. Failure to meet this covenant locks up distributable cash until the MCR has been satisfied for a consecutive period of 12 months.
2) Additional Coverage Ratio ("ACR"): Net Toll Revenue less transfers to the Improvement Fund shall equal at least 1.15 times Debt Service. Failure to meet this covenant locks up distributable cash for a period of 36 months.

The majority of TRIP II's debt is structured as zero-coupon bonds. Zero coupon bonds do not pay interest in cash during the life of the bonds. Instead, they are sold at a discount to their face value at maturity and the interest accrues on top of the principal over the life of the bond, payable upon the bond's maturity along with the principal. As a result, the amount of outstanding debt continues to increase over time until the bonds reach maturity. The maturities of the bonds were spread over the life of the Certificate to provide a known, and defined path for debt service over time. The debt was deliberately structured in this way to allow for lower toll prices earlier in the life of the Greenway with the anticipation that traffic volumes would increase over time, generating sufficient revenues and cash flows to cover the increasing debt service obligations.

However, traffic volumes have not increased as much as anticipated. TRIP II even undertook to reduce its debt burden with free cash flows available in the business between October 2011 and February 2012. During that time, TRIP II paid roughly $34 million to buy back approximately $64 million in face value of bonds. While this

reduced the actual cash debt service TRIP II needs to make up to and including 2021, the debt covenants continue to be calculated based on the full debt service as if the bonds had not been retired. As a result, TRIP II has been struggling to meet the covenants and has not met the MCR since 2010, which has also meant the business has been unable to make any distributions to its LPs to at least repay them for the equity they have invested to construct and improve the road let alone provide any return on that investment.

As of June 30, 2019, TRIP II had five separate series of bonds outstanding, two from the 1999 financing and three from the 2005 financing, totaling approximately $1,022 million in principal and accumulated interest as at June 30, 2019. The table below provides the key features of each series of bonds outstanding as at June 30, 2019.

	1999A	1999B	2005A	2005B	2005C
Type	Senior Current Interest Insured Bonds	Senior Zero Coupon Insured Bonds	Senior Callable Zero Coupon Bonds	Senior Callable Zero Coupon Bonds	Senior Zero Coupon Bonds
Dated	15 April 1999	29 April 1999	2 March 2005	2 March 2005	2 March 2005
Amount	$35,000,000	$297,782,516	$162,438,434	$53,761,686	$174,402,930
Current Balance	$34,964,194	$462,005,571	$20,261,863	$120,341,363	$384,504,107
Rate	7.125% interest, payable semi-annually	7.300% YTM	5.425% YTM	5.700% YTM	Weighted avg YTM ~5.60%
Term / Maturity	15 Feb 2035	Staggered (2003 to 2035)	15 Feb 2045 Early Redemption Schedule target: 2021	15 Feb 2043 Early Redemption Schedule target: 2035	Staggered (2036 to 2056)
Issuer Buyback	No	Yes (bonds maturing on or before 2021)	Yes	No	No
Early Redemption	Yes, but with make whole premium	Yes, but with make whole premium	Targets 2005A Early Redemption Schedule	Targets 2005B Early Redemption Schedule	No
Defeasible	Yes	Yes	Yes	Yes	Yes

Q. Did the Commission approve these refinancings?

A. Yes. The Commission approved the 1999 refinancing in Case No. PUF-1998-00025 and the 2005 Refinancing in Case No. PUF-2001-00017.

Q. What is the current and future level of debt service?

A. In 2019, TRIP II has made total principal and interest payments of approximately $53 million on its outstanding bonds. Total debt service out to the end of the Certificate is shown in the table below. It should be noted that debt service in 2020 and 2021 is

significantly lower as a result of the bond buybacks in 2011 and 2012 that I outlined earlier in this testimony.

Total Debt Serivce						
	1999A	1999B	2005A	2005B	2005C	
Year	Principle and Interest	Principle and Accrued Interest	Principle and Accrued Interest	Principle and Accrued Interest	Principle and Accrued Interest	Total Debt Service
2020	$2,493,750	$13,400,000	$14,600,000			$30,493,750
2021	$2,493,750	$29,400,000	$6,768,320			$38,662,070
2022	$2,493,750	$47,400,000		$18,636,339		$68,530,089
2023	$2,493,750	$49,500,000		$17,548,700		$69,542,450
2024	$2,493,750	$51,600,000		$16,468,109		$70,561,859
2025	$2,493,750	$53,900,000		$15,194,807		$71,588,557
2026	$2,493,750	$55,600,000		$14,526,220		$72,619,970
2027	$2,493,750	$57,300,000		$13,863,661		$73,657,411
2028	$2,493,750	$59,100,000		$13,107,024		$74,700,774
2029	$2,493,750	$60,900,000		$12,355,615		$75,749,365
2030	$2,493,750	$62,700,000		$11,608,996		$76,802,746
2031	$2,493,750	$64,700,000		$10,667,258		$77,861,008
2032	$2,493,750	$66,700,000		$9,729,347		$78,923,097
2033	$2,493,750	$66,700,000		$10,789,148		$79,982,898
2034	$2,493,750	$66,700,000		$11,851,692		$81,045,442
2035	$36,246,875	$28,700,000		$11,727,218		$76,674,093
2036					$69,500,000	$69,500,000
2037					$70,200,000	$70,200,000
2038					$70,900,000	$70,900,000
2039					$71,600,000	$71,600,000
2040					$72,300,000	$72,300,000
2041					$73,000,000	$73,000,000
2042					$73,700,000	$73,700,000
2043					$74,400,000	$74,400,000
2044					$75,100,000	$75,100,000
2045					$75,900,000	$75,900,000
2046					$76,700,000	$76,700,000
2047					$77,500,000	$77,500,000
2048					$78,300,000	$78,300,000
2049					$79,100,000	$79,100,000
2050					$79,900,000	$79,900,000
2051					$80,700,000	$80,700,000
2052					$81,500,000	$81,500,000
2053					$82,300,000	$82,300,000
2054					$83,100,000	$83,100,000
2055					$83,900,000	$83,900,000
2056					$84,700,000	$84,700,000
Total	**$124,359,375**	**$1,259,800,000**	**$256,468,320**	**$188,074,134**	**$1,614,300,000**	**$3,443,001,829**

Q. Does the level of debt service impact toll rates?

A. Yes. Unlike traditional regulated utilities, whose rates are established by the SCC based on the total cost of providing service, which includes debt service obligations, toll prices for the Greenway are set using a methodology that does not directly factor in the debt service of the business.

Debt service is by far the largest expenditure incurred by TRIP II on an annual basis. The bond indentures include provisions that require TRIP II use its best efforts to seek and obtain the authorization of the Commission to allow such toll rates that are expected to generate sufficient revenues for the business to meet the MCR.

As detailed in the table above, TRIP II will have significant increases in its debt service costs over the coming years, which, along with these debt coverage requirements, will require a steady increase in tolls.

III. Toll Pricing on the Greenway

Q. How are toll prices set on the Greenway?

A. Section 56-542 D of the Va. Code gives the Commission the duty and authority to approve or revise toll rates on the Greenway that it finds: (i) are reasonable to the user in relation to the benefit obtained; (ii) will not materially discourage use of the roadway by the public; and (iii) provide the operator with no more than a reasonable rate of return as determined by the Commission.

In 2008, § 56-542 of the Code was expanded to provide a defined framework for determining annual increases in the maximum level of tolls for the period January 1,

2013, through January 1, 2020.[4] Upon annual application of and public notification by the operator, tolls could be increased by a percentage equal to the greater of: (i) the increase in the Consumer Price Increase ("CPI") plus one percent; (ii) increase in the Annual Real Gross Domestic Project ("real GDP"); or (iii) 2.8 percent. The Commission most recently approved toll increases under this Code section on April 4, 2019.[5]

This rate setting methodology is unique to the Greenway and is not applied to any other toll road in the Commonwealth. The Commission has previously recognized that a traditional public utility rate methodology in which rates are established based on the current level of booked investment and expenses would not be feasible from a practical perspective and is not legally required. Instead, recognizing that the Greenway would likely generate significant losses in the early years of the roadway, the Commission provided the ratemaking framework described here to recognize that tolls in the early years would not provide a reasonable return and permit these unrealized earnings to be deferred to later periods in TRIP II's statutory tolling period. This deferred earnings methodology is consistent with pricing in unregulated competitive markets in which supply and demand dictate losses in the early stages of a project with the opportunity to make up for these losses in the later years of such projects.

[4] Va. Code § 56-542 I.
[5] Final Order, *Application of Toll Road Investors Partnership II, L.P., For an increase in tolls pursuant to §56-542 I of the Code of Virginia*, Case No. PUR-2019-00026 (Apr. 4, 2019).

Q. How long is TRIP II authorized to collect tolls on the Greenway and what happens at the end of this period?

A. The original Certificate as amended in 1994 in Case No. PUA-1990-00013, covered a 40-year operating period to April 2, 2036. This was later extended by the Commission for an additional 20 years to February 15, 2056, as part of the 2005 refinancing. This means that unlike a typical regulated utility with an authorized rate of return, the horizon within which TRIP II is statutorily allowed to earn a return is finite. After the specified term during which the investors may seek to earn a return, or earlier if the Certificate of Authority is terminated, § 56-551 of the Code dictates that the Greenway assets and improvements, which includes all the land currently held by TRIP II in fee simple, will be dedicated to the Commonwealth for highway purposes at no cost to the Commonwealth. Once turned over to the Commonwealth, TRIP II will cease to have any authority or duties with regard to the Greenway and the investors will have no further potential to earn a return from the Greenway.

Q. Please describe the history of tolls on the Greenway.

A. A detailed summary of the procedural history of TRIP II is attached as Exhibit 1 to the Application but I will summarize the history of toll prices here.

When the Commission initially granted the Certificate in 1990, it stipulated three toll rates over a six-year period. From the opening of the Greenway until December 31, 1993, the toll was to be $1.50, and from January 1, 1994, until December 31, 1995, $1.75. For the period January 1, 1996, through December 31, 1997, the rate was to be $2.00. The initial toll schedule also included ramp discounts applicable to shorter

trips on the western end of the road, which is a mechanism that has continued to this day.

When the Greenway opened to traffic in September 1995, the maximum two-axle toll at the mainline toll plaza was $1.75, the rate the Commission had specified for 1995. Soon after opening, traffic fell short of projections with substantially lower patronage due to a difficult economic environment and slower than anticipated development and growth in the corridor surrounding the Greenway. As a result, TRIP II took steps to lower toll prices in an attempt to attract drivers to the road. In December 1995, TRIP II requested permission to suspend the $2.00 increase scheduled for January 1, 1996. The Commission granted the request. In February 1996, TRIP II requested permission to reduce the toll from $1.75 to $1.00. The Commission granted the request, and the $1.00 toll was instituted in March 1996.

At the same time, the Commission recognized that to be responsive to its patrons, the Greenway needed pricing flexibility. To provide this flexibility, the Commission approved the concept that the approved toll, $2.00 at the time, represented a toll ceiling below which the Greenway could raise or lower tolls with only prior notice to the Commission. This ceiling concept remained in effect in future toll rate revisions approved by the Commission. For instance, in Case No. PUE-2003-00230, the Commission approved a gradual increase in the ceiling to $3.00 by July 1, 2007. The Commission also approved congestion management pricing, which allowed for differential pricing during peak and off-peak periods, with the peak price initially calculated at a 20% premium to the base toll rate.

In 2007, the Commission approved new toll rates for the Greenway that raised the ceiling for two-axle toll to $3.40 on January 1, 2009; $3.70 on July 1, 2010; and $4.00 on January 1, 2012.[6] Following this toll increase, the General Assembly amended the Act in 2008 with the introduction of § 56-542 I, which, as described above, permitted annual increases based on a statutory formula for the period January 1, 2013 through January 1, 2020.

Pursuant to § 56-542 I of the Code, the Commission approved the following increases in the maximum allowable tolls:

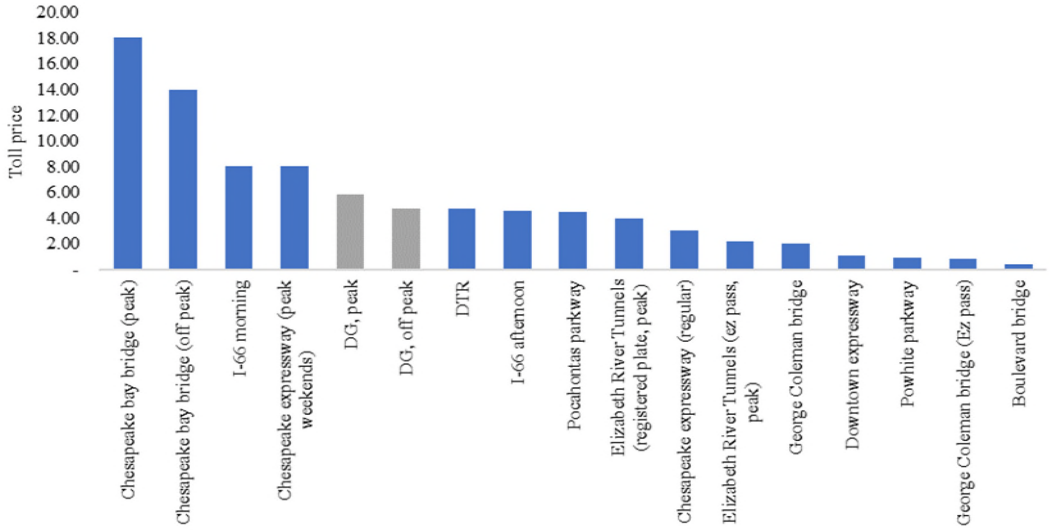
- In 2013, a 3.02% increase;
- In 2014, a 2.8% increase plus an additional $0.03 related to property tax;
- In 2015, a 2.8% increase;
- In 2016, a 2.8% increase plus $0.0182 related to property taxes;
- In 2017, a 3.04% increase plus $0.0213 related to property taxes;
- In 2018, a 3.17% increase plus $0.0004 related to property taxes; and
- In 2019, a 2.91% increase, which was the last toll increase approved by the Commission under § 56-542 I.

Q. How do tolls on the Greenway compare to other tolls charged in the region?

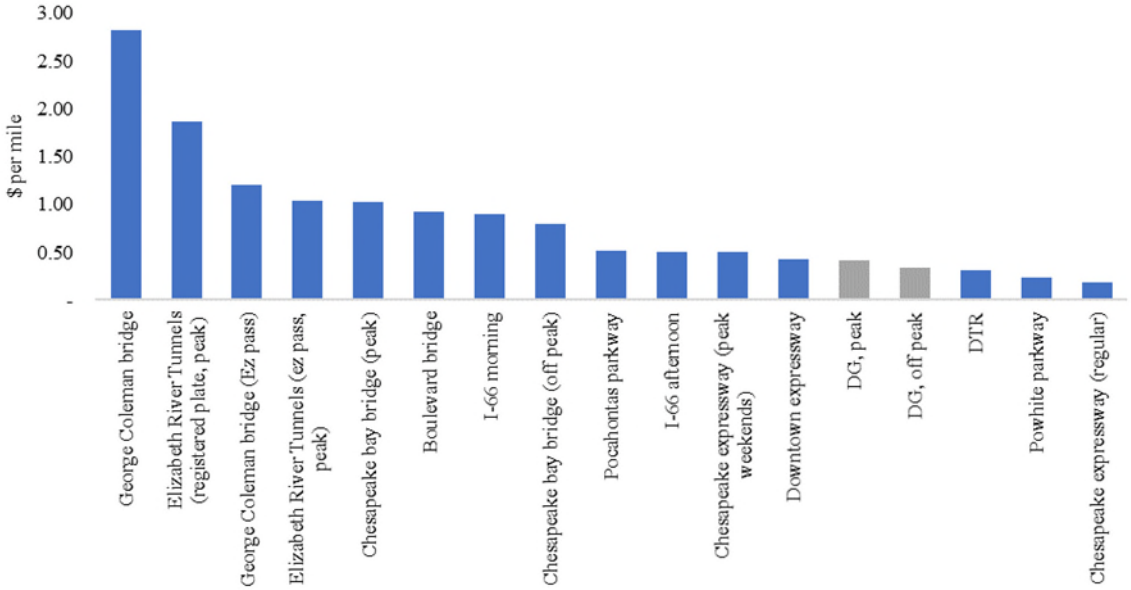
A. As demonstrated in the charts below, Greenway tolls provide good value to users on a per mile basis.[7]

[6] *See Application of Toll Road Investors Partnership II, L.P., For an increase in the Maximum Authorized Level of Tolls*, Case No. PUE-2006-00081, Final Order (Sept. 11, 2007).
[7] I-66: https://wtop.com/dc-transit/2019/01/average-i-66-price-speeds-from-first-year-of-tollsand-extended-hov-hours/ Pocahontas parkway: www.pocahontas895.com/toll-prices.html Chesapeake Expressway:

Total Toll Price per Trip



Total Toll Price per Mile



www.chesapeakeexpressway.com/ Chesapeake Bay Bridge: www.cbbt.com/current-toll-schedule/ George Coleman Bridge: www.virginiadot.org/travel/hro-tunnel-default.asp#The_Bridges Powhite parkway: www.rmtaonline.org/facilities/# Boulevard Bridge: www.rmtaonline.org/facilities/# Elizabeth Rivers Tunnels: www.driveert.com/toll-info/toll-rates/ Downtown Expressway: www.rmtaonline.org/facilities/# DTR: https://www.dullestollroad.com/toll/toll-rates.

Q. Does TRIP II charge a toll for all users of the Greenway?

A. No. Section 33.1-252 of the Code requires free passage on the Greenway to numerous agencies in performance of their official duties, including, but not limited to:

- The Commissioner of Highways;
- Members of the Commonwealth Transportation Board;
- Members of the Board of Directors of the Virginia Alcoholic Beverage Control Authority;
- Employees of the regulatory and hearings divisions of the Virginia Alcoholic Beverage Control Authority and special agents of the Virginia Alcoholic Beverage Control Authority;
- Persons operating firefighting equipment and emergency medical services vehicles as defined in § 32.1-111.1;
- The Commissioner and employees of the Department of Motor Vehicles;
- Regional jail officials;
- Animal wardens;
- The Director and officers of the Department of Game and Inland Fisheries;
- Local police officers, sheriff's and their deputies, regional jail officials, the Superintendent of the Department of State Police and their employees;
- Employees of VDOT;
- School buses;
- Public transit buses; and

- Any commuter bus having a capacity of 20 or more passengers that is regularly used to transport workers to and from work, such as the Loudoun County Commuter Bus Service.

In 2018, the Greenway accommodated more than 300,000 of these non-revenue trips, which represented more than $1.5 million in lost revenue. Since 2005, the Greenway has accommodated over 4 million non-revenue trips, equivalent to over $16 million in lost revenue.

Q. Do all Greenway users pay the same toll price?

A. No. Toll prices vary based on the time of day, vehicle type, and point of entry or exit on the Greenway. For example, higher toll prices are charged during morning and afternoon peak periods and for vehicles with more than two axles to compensate for the increased wear and tear they cause on the road.[8] On the other hand, drivers traveling shorter distances at the western end are charged lower tolls.

Q. Given TRIP II generates revenue from charging tolls, is the business profitable?

A. No. TRIP II was expected to generate losses in its early years that were to be recuperated in the later part of the term of the Certificate. However, the business has continued to generate losses since opening to traffic in 1995, except for a small profit in 2017, amassing over $600 million in total losses as shown in the table below.

[8] *See Addendum to the 1997 Federal Highway Cost Allocation Study Final Report*, U.S. Department of Transport Federal Highway Administration, May 2000, https://www.fhwa.dot.gov/policy/hcas/addendum.cfm, Table 13

TRIP II Annual Profit/(Loss)	
Date of Audited Financial Statements	**Annual Profit/(Loss)**
December 31, 1993	($3,070,894)
December 31, 1994	($12,519,718)
December 31, 1995	($20,255,803)
December 31, 1996	($49,961,308)
December 31, 1997	($38,975,586)
December 31, 1998	($40,684,074)
December 31, 1999	($51,765,097)
December 31, 2000	($31,371,032)
December 31, 2001	($32,306,923)
December 31, 2002	($33,187,826)
December 31, 2003	($29,913,338)
December 31, 2004	($21,997,426)
December 31, 2005	($41,079,249)
December 31, 2006	($14,682,204)
December 31, 2007	($19,261,359)
December 31, 2008	($29,505,523)
December 31, 2009	($27,827,655)
December 31, 2010	($28,235,875)
December 31, 2011	($24,730,601)
December 31, 2012	($16,731,686)
December 31, 2013	($16,444,429)
December 31, 2014	($12,029,861)
December 31, 2015	($7,832,030)
December 31, 2016	($3,702,237)
December 31, 2017	$770,464
December 31, 2018	($1,947,345)
Total	**($609,248,615)**

Note: Figures from the audited Financial Statements prepared in accordance with GAAP, and do not reflect opportunity costs.

Despite these substantial losses, TRIP II has continued its efforts in the Greenway, investing more than $125 million in private funds to improve the road for public benefit, with approximately $24 million in further improvements underway or planned in the next 12 to 24 months.

Q. If TRIP II generates losses every year, how is it still viable?

A. While the business reports an accounting loss on the profit and loss statement, it usually generates a small positive cash flow that covers the cash expenses of the business and allows it to continue operating as a going concern. The differences between accounting profits/losses and actual cash flow are largely attributable to the reporting of non-cash expenses, such as depreciation and the realization of deferred costs, and the way debt service is recognized in the accounts. The 1999 and 2005 debt refinancing replaced the majority of TRIP II's debt with zero coupon bonds with maturities spread over the life of the Certificate, meaning interest is deferred until each bond matures. As a result, TRIP II reports the full interest expense on the profit and loss statement but the total debt service cash payment for each year can differ.

Q. Does this means TRIP II has been making distributions to its investors while reporting losses?

A. No. Since the Greenway opened to traffic in 1995, approximately $102 million has been distributed to investors, which still hasn't fully compensated them for their total investment in the road. As demonstrated in Exhibit 3 to the Application, no distributions have been made since 2006 and all of the money generated since then has been reinvested into the Greenway or paid to third party bondholders to reduce the debt service of the business.

Q. What has contributed to the financial performance of TRIP II?

A. On a pure operational basis, TRIP II runs an efficient business with an average earnings before interest, tax, depreciation, and amortization ("EBITDA") margin of

approximately 81% over the past five years. However, TRIP II incurs several significant annual costs that other state roads and private toll roads in the Commonwealth do not, and traffic volumes have been negatively impacted by several exogenous factors.

Unlike other state roads and private toll roads in the Commonwealth, the Greenway was built on private land, owned in fee simple by TRIP II. As a result, TRIP II pays property taxes every year to Loudoun County, which totaled over $4 million in 2018. Since acquiring the land, TRIP II has consistently been one of the top tax paying businesses in Loudoun County, paying approximately $54 million in total property taxes. Included in this is nearly $1 million in additional taxes paid into the Dulles Rail Service District to help fund the Metrorail Silver Line extension to Loudoun County, and more than $150,000 in additional Route 28 Highway Transportation Improvement District taxes to help fund improvements to State Route 28.

Furthermore, because part of the land occupied by the Greenway is leased from MWAA, TRIP II pays $600,000 in annual land rental fees to MWAA, which is set to increase to $2 million per year beginning in 2036. In total, TRIP II has paid approximately $11 million to MWAA in land rental fees through 2019.

Finally, TRIP II pays nearly $1 million annually to the Virginia State Police for law enforcement on road.

As discussed later in my testimony, while the continued population and income growth in Loudoun County enabled by the Greenway has created a positive impact on its traffic volumes, toll prices on the DTR and improvements to the surrounding

public road network have created a negative impact on Greenway traffic volumes. In particular, improvements to Route 7 and Route 28 have had a material negative impact on Greenway traffic and have caused lower revenues and cash flows for the business.

IV. Improvements to Alternate Roads and Investment in the Greenway

Q. Please describe investments made by Loudoun County and the Commonwealth in alternative routes and how those routes have impacted the Greenway.

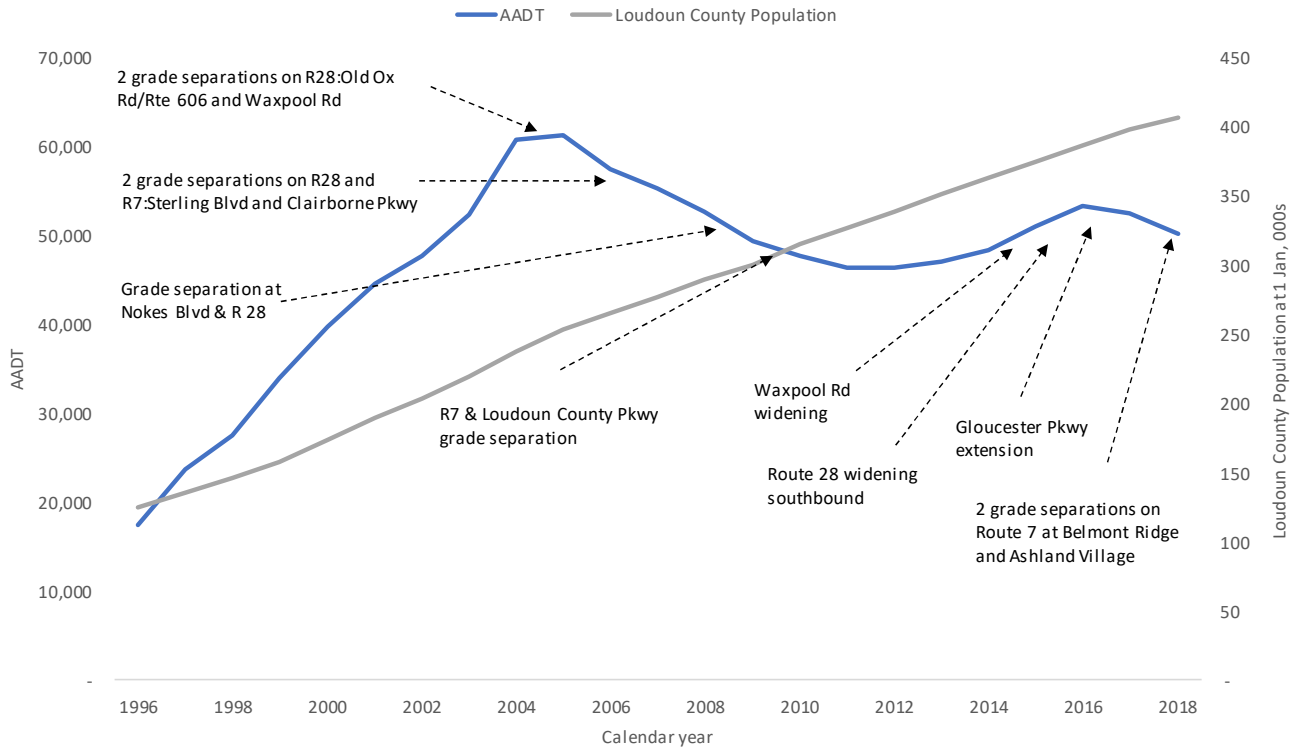
A. Unlike traditional public utilities, the Greenway receives no exclusive service territory and there is no monopoly aspect to the road. So, while the Greenway represents a convenient and efficient means of travel through the area, drivers have several alternative un-tolled public routes available to them should they seek to avoid paying tolls.

Since 2005, Loudoun County has invested aggressively in a series of projects to directly compete with the Greenway and draw traffic away from the road. This includes five grade separations and de-signalizations on Route 7 completed from 2005 to 2018[9] and grade separations to 11 intersections on Route 28 over that same period. According to Company witness Albert Racciatti, an independent traffic consultant retained by TRIP II to provide an assessment of Greenway traffic for this Application, the collective impact of these network improvements has reduced peak traffic on the Greenway by approximately 39,000 average daily trips ("ADT"). By comparison, changes in traffic on the Greenway due to changes in either DTR toll

[9] This includes Claiborne Parkway, Crosstrail Boulevard, Loudoun County Parkway, Ashland Village Boulevard, and Belmont Ridge.

prices or Greenway toll prices have been materially less and have only resulted in a reduction in peak traffic on the Greenway of approximately 18,000 ADT. This indicates that improvements to alternative routes alone have resulted in substantial lost revenue for TRIP II. The timing and impact of each of these improvements can be seen in the graph below:

Dulles Greenway ADT vs Loudoun County Population



In aggregate since 2005, more than $1 billion of improvements to the road network surrounding the Greenway have all been funded by Loudoun County and the Commonwealth of Virginia tax dollars, with small proffers from land developers. This means residents in all parts of the County and the Commonwealth regardless of whether they use the roads have, inequitably, paid for these improvements. In

contrast, the Greenway has never taken a single dollar of government funds and only charges users who actually drive on the road.

Q. What are some examples of the investments in competing roads that have negatively impacted the Greenway?

A. The Sycolin Road overpass over Route 15, which was completed in August 2014 at a cost of approximately $20 million, illustrates this point. Before construction of the overpass, Sycolin Road crossed Route 15 at a signalized intersection. The signalized intersection pulsed traffic westbound on Route 15, which allowed westbound Greenway traffic to easily merge onto Route 15, especially during the afternoon peak period. This is shown in the satellite image below from October 2013, with the possible traffic movement along Sycolin Road on to westbound Route 15 highlighted by the red arrow through the signalized intersection.

Overview of Dulles Greenway, Route 15 and Sycolin Road, Prior to Construction of the Sycolin Rd Overpass, October 2013

Once the Sycolin Road intersection was grade separated, i.e. the overpass was constructed, the traffic no longer pulsed, which prevents Greenway traffic from merging on to the road safely and efficiently, which in turn causes major backlogs of traffic down the Greenway and significantly reduces the travel time savings to Greenway users.

The grade separation also meant that the only realistic route for drivers on Sycolin Road and other roads in the area looking to travel westbound was to enter the Greenway ramp at Battlefield Parkway and join the queue to merge onto Route 15 westbound. In fact, when construction of the overpass began, signs were installed telling drivers to use the Greenway as the detour route. This overpass is highlighted

in the red circle in the satellite image below, and the modified traffic movement is highlighted by the red arrow.

Overview of Dulles Greenway, Route 15 and Sycolin Road, Post to Construction of the Sycolin Rd Overpass, April 2018

Since 2013, the average speed on the Greenway after the Battlefield Parkway Ramp between 5:00 p.m. and 5:30 p.m. has fallen from 55 miles per hour to 21 miles per hour. Average speeds on Route 15 beyond Sycolin Road initially rose with the removal of traffic lights, but since 2019 average speeds are now less than half the speeds of 2013 due to increased traffic exiting the Greenway westbound as well as westbound traffic arriving from Route 7. These lower speeds and increased wait times experienced by Greenway travelers have resulted in unsafe driving at the western end of the road during the afternoon peak period.

To remedy this situation, TRIP II is working with Loudoun County and the Town of Leesburg to improve a section of the westbound Route 7/15 Bypass over the next 24 months. This will involve TRIP II investing substantial capital into a public roadway entirely off TRIP II property under a co-funding agreement with Loudoun County, which will also mean taxpayers will pay to accommodate unforeseen consequences of a project they have already paid for.

Q. Is TRIP II working on other capital improvement projects to improve the Greenway?

A. Yes. In addition to the improvement to the Route 7/15 Bypass, TRIP II has two capital improvement projects underway at the east and west ends of the road.

At the east end of the road, TRIP II is currently well underway with a project that will increase the capacity of the eastern terminus of the Greenway where the road merges with the DTR. This project has been split into two phases:

- Phase 1: Involves adding an additional lane to the inside of the middle median from the Greenway mainline toll plaza to Route 28, widening the existing bridge over Route 28, re-stripping the existing bridge over the DTR/Dulles International Airport Access Highway to accommodate the third lane, and continuing that lane down to where Greenway traffic merges with DTR traffic.
- Phase 2: Involves extending an inside lane along the right-hand side of the DTR from the Greenway merge point through to the Centerville Road (Route 657) off ramp. The Route 657 Interchange ramp will be expanded to two lanes

to accommodate weaving movements between Dulles Greenway traffic joining the DTR and airport traffic exiting onto Route 657.

This two-phased project is expected to improve east bound traffic flows from the Greenway onto the DTR, relieving congestion experienced on the Greenway, especially during the morning peak period, due to increased traffic joining the DTR from Route 28. This should reduce travel times for Greenway users and increase the net benefits they receive from travelling on the road.

Work commenced on Phase 1 in January 2019 and is on schedule for completion by the end of 2019 depending on weather. Phase 2 requires a land use permit from MWAA to extend the inside lane along their property, which was received on September 18, 2019. Preliminary works on this Phase began immediately and are underway but will largely shut down for the winter months. Phase 2 of the project is expected to be completed during the first half of 2020. The total cost of this project is approximately $18 million.

At the west end of the road, TRIP II is currently in the design phase of a ramp reconfiguration project that will provide operational improvements along the Greenway's westbound lanes at the western terminus, just prior to the split between the westbound and eastbound Route 7/15 Bypass exits. The improvement mainly consists of reconfiguring the existing pavement width to allow two lanes to proceed towards the westbound Route 7/15 Bypass, converting the inside right lane to an option lane that can exit towards the eastbound Route 7/15 Bypass or continue through to a weave point on the exit ramp to westbound Route 7/15 Bypass. This

Project, along with the improvement on the Route 7/15 Bypass described earlier that TRIP II is co-funding, is expected to help relieve congestion experienced at the western end of the Greenway during the afternoon peak period following the removal of the Sycolin Road stop light on Route 15, which should reduce travel times and increase the net benefit received by Greenway users. This project is expected to cost approximately $3 million and be completed within 12 months.

V. Proposed Toll Increase for the Greenway

Q. Why is TRIP II applying for a toll increase at this time?

A. While TRIP II is focused on running an efficient business today, it must plan for its future obligations associated with the increasing debt service obligations, Loudoun County property taxes, operational and maintenance costs, and major capital improvements, all in the context of softening revenues due to the negative impact on traffic from improvements to the local road network.

Setting a new maximum allowable toll price at this time allows TRIP II management to maintain a business plan consistent with its financial needs. This will enable the business to continue to meet its debt service obligations while continuing to invest in the current and planned upgrades and maintenance on the Greenway that ensure the safety of its users and allow the Greenway to continue to provide a faster alternative through eastern Loudoun County that reduces congestion on the local public road network.

Q. What is TRIP II's proposed toll increase for automobiles?

A. Pursuant to § 56-542 D of the Code, TRIP II proposes to increase the maximum allowable two-axle vehicle peak and off-peak toll prices in annual increments over a five year period. As detailed in the table below, the annual step-ups are proposed to be implemented in the following increments (rounded to the nearest five cents) on January 1 of each year:

	2021	**2022**	**2023**	**2024**	**2025**
Maximum two-axle off-peak toll	$5.00	$5.25	$5.55	$5.85	$6.15
Year-on-year increase	*5.3%*	*5.0%*	*5.7%*	*5.4%*	*5.1%*
Maximum two-axle peak toll (weekday traffic in peak time and direction)	$6.15	$6.55	$6.95	$7.40	$7.90
Year-on-year increase	*6.0%*	*6.5%*	*6.1%*	*6.5%*	*6.8%*

Under this schedule, toll prices are expected to remain reasonable to the user in relation to the benefit obtained without factoring in any additional future benefits that may be derived from travel on the road (such as higher travel time savings as a result of the capital projects at the eastern and western ends of the road), and are not expected to materially discourage use of the roadway.

Q. Is TRIP II proposing a new structure for setting congestion pricing in this Application?

A. Yes. TRIP II proposes to maintain the peak period congestion premium, but has calculated the proposed premium differently than in the past. The premium was initially calculated and approved in in 2007 as a 20% premium to the base off-peak toll. Since that time, both the off-peak and peak tolls have subsequently been

escalated at the same rate, essentially resulting in a diminishment of the premium over time in real terms. This is because under Section 56-542 I, all tolls were increased by the permitted percentage increase independently of other tolls because of the basis by which increases are calculated.

The split pricing schedule TRIP II is proposing in this Application escalates off-peak prices at a slower rate than peak prices. This takes into consideration the lower net benefits exhibited by off-peak travelers that is expected to improve the utilization of the Greenway and reduce congestion by encouraging off-peak travel.

Q. What is TRIP II's proposed truck toll increase?

A. The proposed truck tolls have been calculated based on the same methodology that has previously been used. That is, the maximum toll price for 3-axle vehicles is proposed to be double the two-axle maximum, and the maximum for vehicles with 4 to 5 or more axles will be the maximum toll price for 3-axle vehicles plus an amount equal to 50% of the two-axle maximum toll for each additional axle above 3-axles. Previously, the toll schedule has extended to 6-axle vehicles, however, TRIP II is proposing that vehicles with more than 5 axles will pay the same toll as a 5-axle vehicle.

As this methodology is based on the two-axle vehicle peak and off-peak toll prices, multi-axle vehicle toll prices are also expected to increase at different rates over the five year period. The annual step-ups are proposed to be implemented in the following increments on January 1 of each year:

	2021	2022	2023	2024	2025
Off-peak maximum proposed tolls					
3-axle vehicles	$10.00	$10.50	$11.10	$11.70	$12.30
4-axle vehicles	$12.50	$13.10	$13.85	$14.60	$15.35
5-axle or more vehicles	$15.00	$15.75	$16.65	$17.55	$18.45
Peak maximum proposed tolls					
3-axle vehicles	$12.30	$13.10	$13.90	$14.80	$15.80
4-axle vehicles	$15.35	$16.35	$17.35	$18.50	$19.75
5-axle or more vehicles	$18.45	$19.65	$20.85	$22.20	$23.70

Q. Does TRIP II have flexibility with the discounts that it currently provides at the western end of the roadway?

A. Yes, the Commission has long held that these discounts are voluntary and that it is within TRIP II's discretion whether to offer these or other incentives so long as the tolls charged do not exceed the maximum tolls approved by the Commission.[10] TRIP II is considering discontinuing the discounts at the western end of the Greenway when the tolls approved in this proceeding come into effect, and would simultaneously remove the premium paid by credit card users at those locations.

Q. Pursuant to § 56-542 D, toll rates must be set at a level that is reasonable to the user in relation to the benefit obtained. Do the proposed toll rates meet this test?

A. Yes, the benefits that accrue to a user of the Greenway exceed the cost of using the road across all classes of travel at all times of day. The direct testimony of Company witness Albert Racciatti explains in detail how the toll rates are reasonable to the user

[10] The Commission first made this determination in Case No. PUA-1996-00009. *See* Final Order, *Application of Toll Road Investors Partnership II, L.P., for an order modifying its tariff,* Case No. PUA-1996-00009, 1996 S.C.C. Ann. Rep. 153 (Mar. 1, 1996).

in relation to the benefit obtained based upon factors including time travel time savings, reliability savings, vehicle operating costs savings, and safety benefits. Mr. Racciatti also explains how total quantifiable benefits enjoyed from travelling on the Greenway compared to Route 7 and Route 28 across all users of the Greenway across all times of day are approximately twice the level of the weighted average toll price.

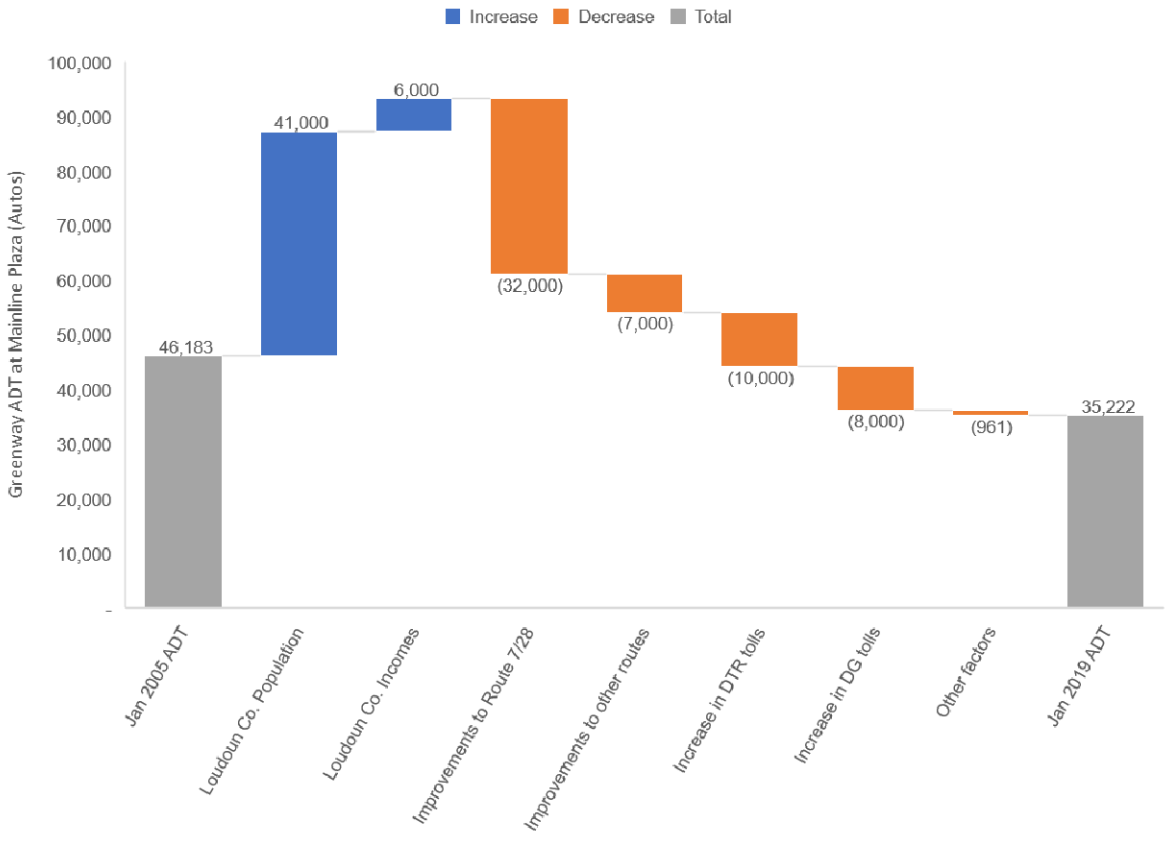
Q. Toll rates must be set at a level that will not materially discourage use of the roadway to the public. Do the proposed toll rates meet this test?

A. Yes. The direct testimony of Mr. Racciatti explains in detail how Greenway toll price elasticities are all slightly below 0, indicating that increases in prices typically result in small declines in traffic and relatively greater increases in revenue. Based on the proposed prices in the Application, weighted average prices would increase by approximately 32% over the five-year period to 2025, which we would expect to result in a total decline in traffic of 6.7% over the same period. In other words, the travel behavior of approximately 93.3% of road users would be unchanged by the proposed prices.

When looking at how various factors have impacted traffic on the Greenway since 2005, Loudoun County population and income growth have increased demand by 47,000 ADT but this increase has been largely negated by improvements to Route 7 and 28 and other competing routes, which have significantly decreased demand by 39,000 ADT collectively. These improvements have had more of a negative impact on Greenway traffic than increases in Greenway and DTR toll prices. In fact, increases in DTR toll prices since 2005 have resulted in a larger negative impact on

Greenway demand than Greenway tolls themselves, reducing demand by 10,000 ADT compared to an 8,000 ADT reduction as a result of Greenway tolls. The impact of each of these factors, along with other factors, such as seasonality and weather, is demonstrated in the graph below with the blue bars representing increases in demand, and the orange bars representing decreases in demand:

Causes of Changes in Traffic Over Time
(Average Daily Traffic at Mainline Plaza, Peak Period Cars)[11]



[11] Based on the peak period econometric model for autos developed by WSP USA using Greenway peak period, revenue-generating auto ADT at Mainline plaza only. Changes in gas prices, rainfall, and snowfall are grouped as "Other" category. This is discussed in more detail in the direct testimony of Company Witness Albert Racciatti.

Q. Pursuant to § 56-542 D, toll rates must provide the operator with no more than a reasonable rate of return as determined by the Commission. Does the current toll rate meet this test?

A. Yes. In recognition of the unique risk profile for a toll road such as the Greenway, the Commission established the reinvested earnings account ("REA") in Case No. PUA-1990-00013.[12] The REA is a mechanism to track the hypothetical balance of invested equity capital, authorized but unearned return on equity, and actual disbursements to equity investors in TRIP II. The 1990 Order approved the REA as "a factor in establishing toll rates and the capital on which the Applicant will have an opportunity to earn a reasonable return, subject to the Commission's continuing jurisdiction to set tolls prospectively which provide no more than a reasonable return and does not discourage use of the road."[13]

Since construction began on the Greenway in 1993, approximately $144 million of equity capital has been contributed to fund the construction and improvement of the roadway, but equity investors have yet to fully recover their investment, receiving total disbursements of approximately $102 million as of June 30, 2019. As a result, TRIP II has accumulated a deficit REA balance as of June 30, 2019, of approximately $7.1 billion, which represents authorized but unearned returns since the construction

[12] *See Application of Toll Road Corporation of Virginia for a certificate of authority and approval or rates of return, toll rates and ratemaking methodology pursuant to the Virginia Highway Corporation Act of 1988*, Case No. PUA-1990-000013, Final Order (July 6, 1990) ("1990 Order").
[13] *Id*. at 8.

of the roadway. Exhibit 3 to the Application presents further detail and supporting calculations.

Consistent with prior applications, TRIP II equity investors have not received a return on their investment in the Greenway as no distributions have been made from the partnership.

Q. Are the tolls proposed by TRIP II in this Application specifically designed to reduce the balance of the REA?

A. No. Although the Company hopes that the tolls will allow it to meet its debt service and other obligations such that it may be able to provide distributions to the ownership in the future, TRIP II has not designed the tolls to specifically begin drawing down the REA.

Q. Has the Commission ever considered distance-based tolling for the Greenway?

A. Yes. The Commission has considered distance-based tolling in prior proceedings, but has never required its implementation.[14] The 1990 application to construct the Greenway made clear to the Commission that the toll structure would be essentially a one-toll road which is the common set up for this type of toll road that runs a short distance with closely spaced exits. The traffic and revenue study submitted as part of the application to the Commission in that proceeding stated that: "[t]he barrier and ramp toll structure is a fair system in that all trips pay a toll, but it is inherently

[14] See *Application of Toll Road Investors Partnership II, L.P., Application for an Increase in the Maximum Authorized Level of Tolls*, Case No. PUE-2006-00081, 2007 S.C.C. Ann. Rep. 346, 348 (Sep. 11, 2007); *Ex Parte: In the matter of investigating the toll rates of Toll Road Investors Partnership II, L.P., under § 56-542 D of the Code of Virginia*, Case No. PUE-2013-00011, Order Closing Case (Sept. 20, 2016).

inequitable because it provides different rates per mile of travel for different trips."[15] The Commission approved the toll structure based on this road configuration and found that the tolls satisfied the requirements of the Act.[16] The Commission declined to require TRIP II to perform feasibility studies in subsequent proceedings as well.[17]

Q. Are there constraints to implementing distance-based pricing on the Greenway?

A. Yes. The design of the Greenway, as set forth and mandated in the Comprehensive Agreement, does not allow for distance-based pricing and implementation of this toll structure would violate the terms of the agreement. The road was specifically designed to be a closed barrier road with tolls collected near the entrance or exit to the road, depending on the direction of travel. The design requirements do not contemplate or allow for the additional structures that would be necessary to record the entry and exit of each car on the Greenway, which is necessary for distance-based pricing.

In addition, if VDOT approved the necessary changes, significant costs would be required to install the necessary infrastructure for distance-based tolling. This would include updating the E-Z Pass readers and installing a fully automated violation enforcement system at each of the existing 46 tolled lanes on the road, as well as constructing new gantries on a further 44 currently un-tolled lanes and fitting them

[15] *See* Exhibit 5B, Appendix A at A1 to the *Application of the Toll Road Corporation of Virginia*, Case No. PUA-1990-00013 (Feb. 2, 1990).
[16] *See Application of Toll Road Corporation of Virginia, For a certificate of authority and approval of rates of return, toll rates and ratemaking methodology pursuant to the Virginia Highway Corporation Act of 1988*, Case No. PUA-1990-00013, 1990 S.C.C. Ann. Rep. 197, 199 (July 6, 1990).
[17] *See, e.g.*, Case No. PUE-2003-00230 and PUE-2013-00011.

out with the required tolling equipment, as well as implementing required back office systems and infrastructure.

Furthermore, while the full impact of implementing distance-based pricing on the Greenway is difficult to predict, the toll price elasticities calculated for this Application suggest that revenues would decline as the increase in traffic from distance-based tolling would not be sufficient to offset the lost revenues from lower toll prices. It is also reasonable to expect that increased usage of the road, especially for short trips, would likely cause a worsening in congestion at the eastern and western ends of the road during peak periods.

Q. Does this conclude your direct testimony?

A. Yes, it does.