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APPLICATION OF

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TOLL ROAD INVESTORS
PARTNERSHIP II, L.P.

CASE NO. PUR-2023-00089

For authorization for an increase in the
maximum level of tolls

REPORT OF MICHAEL D. THOMAS, SENIOR HEARING EXAMINER

May 15, 2024

Section 56-542 D of the Code of Virginia (“Code”) provides that the State Corporation Commission (“Commission”) may, upon application and after an investigation, order substituted for any toll being charged by the operator of a roadway subject to the Virginia Highway Corporation Act of 1988 (“Act”), § 56-535 *et seq.* of the Code, a toll which is set at a level: (i) “which is reasonable to the user in relation to the benefit obtained;” (ii) “which will not materially discourage use of the roadway by the public;” and (iii) “which will provide the operator no more than a reasonable return as determined by the Commission. Any proposed toll rates that fail to meet these criteria as determined by the Commission are contrary to the public interest, and the Commission *shall* not approve such toll rates.”¹

Toll Road Investors Partnership II, L.P. (“TRIP II” or “Company”), the owner and operator of the Dulles Greenway (“Greenway”), filed an application (“Application”) with the Commission for an increase in the maximum peak (or Congestion Pricing) and off-peak tolls (“Proposed Tolls”) to be effective January 1, 2024, or upon issuance of a final order in this case.

While the record in this proceeding established that TRIP II’s Proposed Tolls would provide the Company no more than a reasonable return, the evidence also showed TRIP II’s Proposed Tolls will materially discourage use of the Greenway. Moreover, TRIP II failed to prove by a preponderance of the evidence that its Proposed Tolls are reasonable to the user in relation to the benefit obtained. Under the circumstances, TRIP II’s Application must be denied as contrary to the public interest pursuant to Code § 56-542 D. Furthermore, because TRIP II rejected as confiscatory the Alternate Tolls included in the Application, I recommend that the Commission not exercise its discretion to establish toll rates that comply with the Act.

Additionally, the record supports denying at this time, TRIP II’s request for a streamlined rate review process. However, I recommend the Commission consider the establishment of a working group of interested parties to look at ways to streamline the process before the Commission and report back to the Commission. Furthermore, I recommend the Commission approve the continued use of the Reinvested Earnings Account (“REA”), incorporating Staff’s average allowed return methodology, as a means of tracking returns that were authorized to investors versus returns that have been realized by those investors, and at the same time, determining whether future proposed toll rates allow TRIP II no more than a reasonable return. Finally, given TRIP II’s failure

¹ Code § 56-542 D (emphasis added).

to meet its burden of proof associated with establishing the applicable statutory requirements for a toll increase, I find it unnecessary to address herein the constitutional argument raised by the Company in this case. Nevertheless, I recognize that the Commission has the necessary information and arguments before it, memorialized in the briefs of case participants, to address such argument if it finds it appropriate to do so.

HISTORY OF THE CASE

On July 11, 2023, TRIP II filed its Application with the Commission for an increase in the maximum level of tolls on the Greenway. Concurrent with the filing of its Application, TRIP II also filed a Motion for Protective Ruling and a proposed protective ruling to establish procedures governing the production and use of confidential information in this proceeding.

In addition, TRIP II provided a forward-looking analysis with its Application as required by Code § 56-542 D.² Specifically, Code § 56-542 D states that:

Any application to increase toll rates shall include a forward-looking analysis that demonstrates that the proposed toll rates will be reasonable to the user in relation to the benefit obtained, not likely to materially discourage use of the roadway, and provide the operator no more than a reasonable return. Such forward-looking analysis shall include reasonable projections of anticipated traffic levels, including the impact of social and economic conditions anticipated during the time period that the proposed toll rates would be in effect.

The Code further requires the Virginia Department of Transportation (“VDOT”) to “review and provide comments upon the [Company’s forward-looking] analysis to the Commission.”³

In its Application, TRIP II requested approval to increase its peak and off-peak tolls to be effective January 1, 2024, or upon issuance of a final order in this case, as follows:⁴

Maximum Peak Tolls					Off-Peak, Maximum Base Toll				
Hours 6:30 AM – 9:00 AM Eastbound									
4:00 PM – 6:30 PM Westbound									
2-Axle	3-Axle	4-Axle	5-Axle	6-Axle or More	2-Axle	3-Axle	4-Axle	5-Axle	6-Axle or More
\$8.10	\$16.20	\$20.25	\$24.30	\$24.30	\$6.40	\$12.80	\$16.00	\$19.20	\$19.20

² TRIP II’s forward-looking analysis is attached to the Direct Testimony of David Cuneo as Exhibit DC-2.

³ Code § 56-542 D. 2.

⁴ Ex. 2, at 8, 16 (Application). The Application was filed in both public and confidential versions. The confidential version is Ex. 2C. The Commission denied TRIP II’s request that a final order be issued in this matter by January 1, 2024. The Commission noted that TRIP II has control over the timing of filing its Application and a period of less than six months does not provide sufficient time to fully review the issues presented in the Application. In its Order for Notice and Hearing, the Commission established a reasonable procedural schedule designed to balance the interests of TRIP II as well as other interested parties who may wish to participate in this proceeding.

TRIP II stated the \$8.10 for two-axle vehicles during peak hours and \$6.40 for two-axle vehicles during off-peak hours as well as similar increases for multi-axle vehicles are the minimum tolls necessary to permit the Company to meet its financial obligations and to reach a point in the future where it will be able to have the opportunity to earn a reasonable return on the capital invested in the Greenway.⁵

TRIP II also requested that the Commission specifically authorize a streamlined process to consider and to approve future toll increases under Code § 56-542 D to reduce the lag between increases in the tolls on the Greenway.⁶ TRIP II asserted this would minimize each increase and provide the Company with the opportunity to generate sufficient revenues to meet its financial obligations and have the opportunity to earn a reasonable return in the future.⁷

On August 7, 2023, the Commission entered an Order for Notice and Hearing which, among other things: docketed the Application; established a procedural schedule; allowed interested persons the opportunity to file written comments on the Application; allowed interested persons to participate as a respondent in this proceeding by filing a Notice of Participation; directed VDOT to file its comments on TRIP II's forward-looking analysis with the Commission; directed Commission Staff ("Staff") to investigate the Application and file its testimony and exhibits with the Commission; scheduled a telephonic public witness hearing for January 30, 2024; scheduled a public evidentiary hearing for January 31, 2024; and appointed a Hearing Examiner to conduct all further proceedings in this matter on behalf of the Commission and file a final report.

By Hearing Examiner's Ruling entered on August 8, 2023, TRIP II's Motion for Protective Ruling was granted.

On September 29, 2023, TRIP II filed its Proof of Publication and Service of Notice ("Proof of Notice").⁸

On September 20, 2023, the Board of Supervisors of Loudoun County, Virginia, ("County") filed a Notice of Participation. In support, the County stated the Greenway extends for approximately 14 miles between Leesburg, Virginia, and Washington Dulles International Airport ("Dulles Airport"), most of which passes through Loudoun County. Residents and employees of Loudoun County use the Greenway regularly and would be affected by any toll increase. In addition, the County asserted the proposed toll increases would shift additional traffic to county roads, imposing additional burdens on the County and its taxpayers. Accordingly, the County stated it has an interest in this proceeding that cannot be adequately represented by another party.⁹ The County requested that the Commission deny TRIP II's Application in its entirety because the requested increase fails to satisfy the requirements of Code § 56-542 D, which permits the Commission to revise toll rates charged by TRIP II only if the revised rates: (i) are reasonable to the user in relation to the benefit obtained; (ii) will not materially discourage use of the roadway by

⁵ *Id.*

⁶ *Id.* at 16.

⁷ *Id.*

⁸ Ex. 1 (Proof of Notice).

⁹ County Notice of Participation at 2.

the public; and (iii) will provide TRIP II with no more than a reasonable return as determined by the Commission.¹⁰

On September 29, 2023, the Office of the Attorney General's Division of Consumer Counsel ("Consumer Counsel") filed a Notice of Participation.

On September 29, 2023, the County filed a Motion for an Extension of Time to File Direct Testimony, to Amend the Procedural Schedule, and for Expedited Consideration ("Motion"). Among other things, the County requested: (i) an extension of the date to file its direct testimony;¹¹ (ii) an extension of the date for the telephonic hearing for public witnesses and an extension of the date for the evidentiary hearing;¹² (iii) an in-person public witness hearing in Loudoun County, or in the alternative, at least one additional telephonic public witness hearing;¹³ and (iv) a request for expedited consideration.¹⁴

By Hearing Examiner's Ruling entered on October 2, 2023, it was directed that any response to the County's Motion be filed on or before October 10, 2023, and any reply be filed on or before October 13, 2023.

On October 4, 2023, the Office of the Attorney General's Government Operations & Transactions Division ("VDOT Counsel"), filed a letter responding to the County's Motion. VDOT reviewed the Motion and agreed that, as stated in paragraph 19 of the Motion, it is not a party to this proceeding. Accordingly, VDOT took no position with respect to the requests for schedule adjustments stated in the Motion.¹⁵ VDOT further noted that paragraph 12 of the Motion requested that "VDOT file comments on TRIP II's forward-looking analysis *and* any similar analysis submitted by a respondent." VDOT stated this request conflicts with its role set forth in Code § 56-542 D, which limits VDOT to reviewing the analysis submitted by TRIP II.¹⁶

On October 6, 2023, Consumer Counsel, filed a letter responding to the Motion. Consumer Counsel stated in recognition of the significant public interest in toll rates on the Greenway among citizens of Northern Virginia, it supported the County's request to schedule at least one in-person public witness hearing in Loudoun County prior to the evidentiary hearing in Richmond, in addition to the telephonic public witness hearing already scheduled.¹⁷ Consumer Counsel took no position with respect to the Motion's other requests for changes to the procedural schedule in this case.¹⁸

On October 10, 2023, TRIP II filed a Response in Opposition to the County's Motion ("Response").¹⁹ TRIP II asserted three grounds in opposition to the Motion. First, TRIP II

¹⁰ *Id.* at 2-3.

¹¹ County Motion at 2-4.

¹² *Id.* at 4-5.

¹³ *Id.* at 5-6.

¹⁴ *Id.* at 6.

¹⁵ VDOT Response at 1.

¹⁶ *Id.* at 2.

¹⁷ Consumer Counsel Response at 1.

¹⁸ *Id.* at 2.

¹⁹ TRIP II took no position on whether additional hearings to receive public witness testimony should be scheduled. TRIP II noted that the options for the public to submit public comments in writing or in person have been known since

maintained the County's reasoning supporting the request for an extension of time was without merit. TRIP II noted that the County could have formally considered TRIP II's Application at one of its earlier meetings prior to its September 19, 2023, Business Meeting.²⁰ Second, TRIP II asserted the County's request that VDOT provide comments on its forward-looking analysis was inconsistent with Code § 56-542 D. TRIP II noted the statute establishes a limited role in this proceeding for VDOT specifically to review the forward-looking analysis submitted by TRIP II, the applicant.²¹ Third, TRIP II claimed the County's proposed adjustment to the procedural schedule would prejudice TRIP II and its counsel. TRIP II noted its counsel was already committed to represent another client in a rate case before the Commission on the dates proposed by the County, and any delay would prejudice TRIP II because it must forego months of revenue that it needs to meet its debt service and other financial obligations.²² TRIP II requested that the procedural schedule established in the Commission's Procedural Order remain in place.²³

On October 13, 2023, the County filed its Reply. The County argued five grounds in support of its Motion. First, the County asserted TRIP II controls the timing of applications to increase its toll rates. The County noted that TRIP II delayed the filing of its Application while it pursued, unsuccessfully, a legislative change that would eliminate the Commission's jurisdiction over the Greenway.²⁴ Second, the County argued the Board of Supervisors ("Board") timely considered TRIP II's Application. The County noted that TRIP II did not serve the Board with a copy of the Commission's Procedural Order until September 8, 2023, and the Board timely considered TRIP II's Application at its September Business Meeting.²⁵ Third, the County argued the Commission should direct VDOT to provide comments on the County's forward-looking analysis. The County argued there is no conflict between its request and Code § 56-542 D.²⁶ Fourth, the County contended its proposed adjustments to the procedural schedule would not confuse the public. The County noted no party, including TRIP II, opposed an additional hearing to receive public witness testimony.²⁷ Fifth, the County argued that its proposed adjustments to the procedural schedule would not prejudice TRIP II or its counsel. The County noted TRIP II does not assert that it must receive a decision from the Commission by a date certain to avoid defaulting on its debt service or "other financial obligations," or that a six-week extension would cause such a default. The County emphasized that, rather than offering to consider dates that would work with

the Commission issued its Procedural Order, along with press releases associated with that order. On August 8, 2023, the County issued its own press release regarding the opportunity to submit public comments in this proceeding (<https://www.loudoun.gov/CivicAlerts.aspx?AID=8544>). TRIP II argued just as the County could have intervened earlier in this proceeding, it could have requested additional public hearings earlier. TRIP II noted that it has already completed the required notice to the public in this proceeding, including notifying the public of the date of the hearing for public witness testimony. TRIP II believes the County should bear the additional cost to publish notice of any other public witness hearings scheduled in this proceeding. TRIP II Response at 2, n.1.

²⁰ TRIP II Response at 5-6.

²¹ *Id.* at 6.

²² *Id.* at 7-8.

²³ *Id.* at 2.

²⁴ County Reply at 2-3.

²⁵ *Id.* at 3-7.

²⁶ *Id.* at 7-10.

²⁷ *Id.* at 10-11. The County does not agree that it should bear any costs to publish notice of additional public witness hearings. The County argued that TRIP II is entirely responsible for the timing of its Application, and this is a cost that TRIP II must shoulder alone. *Id.* at 11, n.32.

its counsel's schedule, TRIP II rejected *any* extension of the public witness and evidentiary hearings.²⁸

By Hearing Examiner's Ruling entered on October 18, 2023, the County's request for an extension of time was granted in part, the County's request for a local public witness hearing was granted, and the County's request for the Commission to direct VDOT to provide comments on the County's forward-looking analysis was denied.

By Hearing Examiner's Ruling entered on November 21, 2023, a local public witness hearing was scheduled for January 9, 2024, commencing at 6:00 p.m. and concluding at 10:00 p.m., at Freedom – South Riding High School, 25450 Riding Center Drive, Chantilly, Virginia 20152.

On November 30, 2023, VDOT filed its *Dulles Greenway Forward Looking Analysis Review* ("VDOT Review") with the Commission in public and a confidential versions.²⁹ VDOT retained the services of C&M Associates, Inc. ("C&M"), to conduct the review.³⁰ C&M focused its review on three areas of TRIP II's forward-looking analysis: (i) the rate-benefit analysis which reviewed whether TRIP II's forward-looking analysis demonstrates the proposed toll rate change "will be reasonable to the user in relation to the benefit obtained," pursuant to Code § 56-542,³¹ (ii) the roadway use analysis which reviewed whether TRIP II's forward-looking analysis demonstrates the proposed toll rate change will "materially discourage use of the roadway," as defined in Code § 56-542 A,³² and (iii) the operator return analysis which reviewed the methodological completeness of TRIP II's forward-looking analysis demonstrating whether the proposed toll-rate change will "provide the operator no more than a reasonable return," pursuant to Code § 56-542.³³ Lastly, C&M provided general comments regarding TRIP II's forward-looking analysis.³⁴

Public witness testimony concerning the Application was provided at hearings on January 9 and January 30, 2024. The remainder of the evidentiary hearing was convened as scheduled on February 28, 2024. TRIP II appeared by its counsel Timothy E. Biller, Esquire, and Andrea D. Gardner, Esquire, with the law firm of Hunton Andrews Kurth, LLP. The County appeared by its counsel Andrew J. Flavin, Esquire, Stephen C. Piepgrass, Esquire, and Dascher L. Pasco, Esquire, with the law firm of Troutman Pepper Hamilton Sanders LLP, and Nicholas J. Lawrence, Esquire, with the Office of the County Attorney for Loudoun County. Consumer Counsel appeared by its counsel C. Meade Browder, Jr., Esquire, and John E. Farmer, Jr., Esquire. Staff appeared by its counsel William H. Chambliss, Esquire,

²⁸ *Id.* at 11-12.

²⁹ Ex. 3 (VDOT Review). On January 30, 2024, VDOT refiled its VDOT Review, which was identical to the one filed on November 30, 2023, except as follows: (1) modification of the limited disclaimer on page (i); and (2) the removal of the redactions. Portions of the VDOT Review are no longer confidential.

³⁰ C&M specializes in advising private and public clients in the development of toll projects. Since 2004, C&M has participated in nearly 200 toll projects providing toll policy advise, stakeholder engagement, traffic & revenue forecasting, and project financing support. As part of its project financing support, C&M has conducted over 30 investment grade traffic & revenue studies that have supported \$20 billion in debt plus equity in the U.S. and international financial markets. VDOT Review at 4.

³¹ *Id.* at 5-6.

³² *Id.* at 7-10.

³³ *Id.* at 11.

³⁴ *Id.* at 12.

C. Austin Skeens, Esquire, and Andrew F. Major, Esquire. At the conclusion of the evidentiary hearing, the Hearing Examiner requested that Post-Hearing Briefs be filed in this proceeding in lieu of closing arguments.³⁵

HISTORY OF THE DULLES GREENWAY

Virginia Highway Corporation Act of 1988

To understand the history of the Greenway, one must go back to the beginning with the adoption of the Act. To date, the Greenway is the only private toll road approved under the Act. To address concerns with the Act, the General Assembly adopted the Public-Private Transportation Act of 1995, § 33.2-1800 *et seq.* of the Code, which effectively superseded the Act.

Prior to the adoption of the Act, VDOT had begun planning for a public extension of the Dulles Toll Road ("DTR") in 1986. The plan included using tolls from the DTR to offset debt service in the early years of the Dulles Toll Road Extension ("DTRE"),³⁶ but the DTRE would be financed primarily from tolls. VDOT intended to operate both roads as a single VDOT facility. In May 1987, Leesburg Town Council and the Loudoun County Board of Supervisors passed unanimous resolutions endorsing the need for an extension of the DTR terminating in Leesburg, although these resolutions did not endorse any specific proposal. VDOT began detailed engineering on the project and completed a draft environmental report in the summer of 1988. VDOT planned on submitting its proposal to the Commonwealth Transportation Board ("CTB") in November 1988.³⁷

Early private development efforts were spearheaded in 1986 by Municipal Development Corporation ("MDC"), about the same time VDOT and Loudoun County began to consider a public extension of the DTR.³⁸ VDOT and Loudoun County officials were receptive to MDC's assertions that a private toll road would be cheaper and faster to build than a public toll road, but those officials wanted to ensure the interests of the public in general and the users of the toll road in particular were protected. This resulted in the inclusion of a requirement in the proposed Act that the private toll road operator demonstrate a private option was relatively more cost-efficient and would open the road more quickly than a public option. Unless the private toll road was cheaper and could be built more quickly, it was difficult to see how the roadway could be considered in the public interest. MDC was the driving force behind the General Assembly's adoption of the Act in early 1988.³⁹

The Act established a general framework for government approval and oversight of private toll road projects in Virginia. The Greenway is not mentioned in the Act, but it was the only project approved under the Act. The Act provided:

³⁵ Tr. at 625.

³⁶ Before it was named the Dulles Greenway, the proposed roadway between the DTR and Leesburg was referred to as the Dulles Toll Road Extension. *See*, Ex. 17, Appendix B at 21.

³⁷ Ex. 17, Appendix B at 31-32.

³⁸ *Id.* at 24.

³⁹ *Id.* at 28-29.

The General Assembly finds that there is a compelling public need for rapid construction of safe and efficient highways . . . and that it is in the public interest to encourage the construction of additional safe, convenient and economic highway facilities by private parties, provided that adequate safeguards are provided against default in the construction and operation obligations of the operators of roadways. The public interest shall include without limitation the relative speed of the construction of the project and the relative cost efficiency of private construction of the project.⁴⁰

The Act provided a four-step process for approval. First, the CTB must approve the construction cost, location, and design of the roadway, and its interconnection with any other road under the jurisdiction of the CTB, in order to provide for the convenience of the public. The CTB could not reject the design, if the design conformed to VDOT design standards for toll roads.⁴¹ The CTB's decision would be guided by the following policy considerations:

The Board shall approve . . . if there is a public need for the project and the project and its connections are compatible with the existing highway network. . . . In making its determinations, the Board shall keep in mind the public interest, which may include, without limitation, such considerations as the relative speed of the construction of the project and the allocation of the financial and human resources of [VDOT].⁴²

Second, if the project was approved by the CTB, VDOT and the operator had to enter into a comprehensive agreement providing for VDOT review of plans and specifications, inspection of construction, and oversight of maintenance.⁴³

Third, contemporaneously with the filing of any application with the Commission for a certificate of authority, the applicant had to provide the local governing body of each jurisdiction through which any part of the roadway passed (Fairfax County, Loudoun County, and the Town of Leesburg) with the information filed with the Commission and an overall description of the project and its benefits. Each local jurisdiction through which the roadway passed would have to approve any interconnection with its streets or roads. Local authorities could participate in proceedings before the CTB and the Commission.⁴⁴

Finally, the applicant had to apply to the Commission for approval. Among other things, the application had to include the route, the property owners affected by the roadway, how the right-of-way was to be acquired, local comprehensive plans, a financing plan and proposed tolls, an operation plan, a list of permits and approvals required for the roadway, a list of public utility facilities to be crossed, and confirmation that the roadway would be built to VDOT standards and that VDOT had approved the plans and specifications for the roadway.⁴⁵ The Commission could not issue the certificate of authority if any affected local jurisdiction requested by a duly adopted resolution that the application be denied. In effect,

⁴⁰ Ex. 17, Appendix B at 29; Code § 56-537.

⁴¹ *Id.* at 29-30; Code § 56-544.

⁴² *Id.* at 30; Code § 56-544.

⁴³ *Id.*; Code § 56-544 B.

⁴⁴ *Id.*; Code § 56-546.

⁴⁵ *Id.*; Code § 56-540.

the localities had absolute veto authority over the issuance of the certificate of authority by the Commission. The Commission had to find, after notice and an opportunity for a hearing, that the application was complete, that approval of the application was in the public interest, and that the applicant had complied with the provisions of the Act.⁴⁶

The toll road franchise would expire 10 years after the initial debt was paid off and the roadway would be transferred to the Commonwealth at no cost at the end of the franchise.⁴⁷ The operator would own the roadway during the life of the franchise, was responsible for maintenance, and was responsible for maintaining liability insurance on the roadway. During the franchise, the operator had to contract with the Virginia State Police to enforce traffic and public safety laws.⁴⁸

After the Act was passed, MDC ran into financial difficulty and backed out of the DTRE project. In September 1988, several principals of MDC then formed the Toll Road Corporation of Virginia ("TRCV"),⁴⁹ a Virginia corporation with its principal office location in Leesburg, Virginia, to pursue the private option for the DTRE.⁵⁰

Commonwealth Transportation Board

By the fall of 1988, VDOT's public DTRE option was in the state's six-year highway plan and TRCV was trying to catch up. TRCV submitted a preliminary application for the private DTRE option to the CTB for its November 1988 meeting. The CTB rejected TRCV's application as incomplete and approved VDOT's proposed alignment for the DTRE. In December 1988, TRCV was advised that its proposed alignment could be considered acceptable if it was part of a complete application. In the interim, VDOT pursued approval for financing for its public DTRE option. In early 1989, the General Assembly approved the issuance of the bonds for the public option, but the approval contained a condition that the bonds could not be issued if the Commission issued a certificate of authority to a private operator to construct and operate the DTRE.⁵¹

In March 1989, TRCV submitted a complete application to the CTB. TRCV proposed to construct the DTRE for a total development cost of \$146 million, consisting of \$110 million in taxable debt and \$36 million in equity, of which \$108 million was needed to construct the roadway and \$38 million was needed to cover development costs and fund reserves to cover operating deficits in the early years of operation. TRCV proposed an initial toll of \$1.50 per vehicle in 1992, increasing to \$1.75 in 1994, \$2.00 in 1996, and \$2.25 in 1998, thereafter increasing by \$0.25 every three years until it reached \$3.25 in 2010. TRCV's traffic consultant predicted that traffic volume would increase from 19,550 vehicles per day in 1992 to 33,992 in 1995, and 86,850 in 2010.⁵²

When TRCV filed its application with the CTB, VDOT stopped work on the public DTRE option. To compare both proposals, VDOT's consultant completed the cost estimates, and traffic and revenue projections for the public option. The public option would open in April 1993, about

⁴⁶ *Id.*; Code § 56-539.

⁴⁷ *Id.* at 30-31; Code § 56-551.

⁴⁸ *Id.* at 31; Code § 56-543.

⁴⁹ The Toll Road Corporation of Virginia was the predecessor of TRIP II.

⁵⁰ Ex. 17, Appendix B at 33-34.

⁵¹ *Id.* at 34-35.

⁵² *Id.* at 35-36.

15 months after TRCV's proposed completion date. Construction would cost approximately \$184.7 million, of which VDOT estimated that it would have to pay approximately \$24.9 million for larger interchanges and \$38.4 million to obtain the necessary right-of-way. TRCV's proposal presumed no right-of-way cost because TRCV thought it could obtain the right-of-way through donations. The construction for the public option would have been financed by \$188.4 million in tax-exempt 30-year bonds paying 7.5% annual interest. Operating deficits in the early years would be made up by \$51.6 million in surpluses generated by the DTR. VDOT projected that it could maintain a toll of \$1.50 per vehicle for the life of the project. In later years, this toll would generate approximately \$704.7 million in surpluses that VDOT could use on other transportation projects in the region. At the time, VDOT estimated that the public option would cost state residents approximately \$1.7 billion over the life of the project, while the private option would cost approximately \$3.0 billion.⁵³

In July 1989, the County unanimously approved a statement requesting that the CTB approve TRCV's application with some reservations relating to financial issues that could be addressed before the Commission and design issues that could be resolved by the CTB and VDOT. The affected localities and the public were generally in favor of TRCV's private DTRE option. The CTB approved TRCV's application on July 20, 1989. The CTB conditioned its approval on a number of design changes and on TRCV reaching a satisfactory agreement with VDOT governing oversight of specifications, construction, and maintenance. The design changes requested by the County and approved by the CTB increased the cost of the private option by approximately \$50 million, which eliminated the cost difference between the public and private options.⁵⁴

Commission Certificate of Authority

On February 2, 1990, TRCV filed an application with the Commission to construct, own, and operate the Greenway.⁵⁵ By the time TRCV filed its application, total project costs (construction, finance, and project administration) had increased from approximately \$145.6 million to \$198.9 million. TRCV's plan at the end of construction was to sell the roadway to a lessor for \$198.9 million, and then lease back over 30 years (with an option to buy back or extend for the next 10 years) at payments that would be the equivalent to those on a 30-year debt paying 10.03% annual interest. Early annual operating deficits would be covered by approximately \$30 million in equity, with an additional \$5 million if needed. The proposed tolls were the same as presented to the CTB.⁵⁶

By Order dated February 13, 1990, the Commission directed the preparation of a Staff report and provided an opportunity for public comments and requests for hearing on the application. The Commission received numerous comments on the application and one request for a hearing that was subsequently withdrawn. In general, the comments submitted to the Commission favored construction of the private DTRE option by TRCV.⁵⁷

⁵³ *Id.* at 37-38.

⁵⁴ *Id.* at 42.

⁵⁵ *Application of Toll Road Corporation of Virginia, For a certificate of authority and approval of rate 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, Opinion and Final Order (July 6, 1990) ("1990 Certificate Case").

⁵⁶ Ex. 17, Appendix B at 46.

⁵⁷ 1990 Certificate Case at 197.

Staff filed its report on April 17, 1990. In that report, Staff compared the cost of construction, timeline of construction, and impact on the public over the life of the project between what appeared to be two competing proposals, a VDOT public option and a TRCV private option to construct the DTRE. Staff concluded that the proposed total cost of service to the public, over the 40-year life of the project, was approximately \$894.8 million for the VDOT public option compared to the approximately \$3.5 billion for the TRCV private option. Staff's conclusion that the private build option was significantly more costly was based on: (i) TRCV's higher debt service costs compared to debt issued by a government agency; (ii) TRCV's projected dividend payments to its shareholders in excess of approximately \$1.1 billion over the life of the project; and (iii) the payment of income taxes and property taxes in excess of approximately \$785 million by TRCV over the life of the project that were not required for VDOT. Based on its review of the public and private options, Staff was unable to recommend issuance of a certificate of authority because of doubt about the project's viability based on the information in the application at that time.⁵⁸

On April 18, 1990, the Commission issued an Order requiring TRCV to file additional material providing its best estimates and information about the project's costs, schedule, and related matters. Similar information was requested from VDOT. The requested information was filed on May 2, 1990. The responses to the Commission's April 18, 1990 Order and the Staff report led the Commission to schedule a hearing for June 27, 1990. TRCV, VDOT, and Staff each presented evidence at the hearing.⁵⁹

In response to the Commission's April 18, 1990 Order, the Commissioner of VDOT submitted a letter stating that any toll facility between Dulles Airport and the Town of Leesburg bypass "is to be developed by [TRCV], and [VDOT] has no plans to build this facility with public funds."⁶⁰ In addition, the Commissioner testified at the June 27, 1990 hearing that "his Department was in support of [TRCV's] Application and recommended that the certificate be issued."⁶¹

In its Opinion and Final Order entered on July 6, 1990, the Commission noted its decision "consigns any VDOT-constructed toll facility . . . to the realm of the hypothetical."⁶² The Commission further noted that there were "no competing applicants for a certificate of authority to construct this project, and the single public sector entity with authority to do so has removed itself from any practical consideration as an alternative by which to measure the relative speed of construction and cost efficiency offered by [TRCV]."⁶³

The Commission opined:

[w]e have diligently sought to give full efficacy to the public policy enunciated by the General Assembly in § 56-537, including the particular relativity tests to determine if the project is in the public interest. Having found that there is a public need for the project, it would be inconsistent with the public interest to deny the Application on the

⁵⁸ Ex. 17 at 3 (Oliver Direct 2013 Investigation Case).

⁵⁹ 1990 Certificate Case at 197.

⁶⁰ *Id.* at 198.

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

ground that its relative project life costs greatly exceed those of VDOT which have become totally academic with VDOT having said that it does not intend to build the project. Put succinctly, [TRCV's] proposal is the only game in town.⁶⁴

The Commission issued the certificate of authority, approved the proposed sale/leaseback agreement, approved the establishment of the REA, established the effective returns on equity for the life of project, and established the initial tolls included in TRCV's supplemental filing. The Commission established an initial toll of \$1.50 through December 31, 1993; and follow-up tolls of \$1.75 from January 1, 1994, through December 31, 1995; and \$2.00 from January 1, 1996, through December 31, 1997. Thereafter, the toll would increase every three years until it reached \$3.25 in 2010.⁶⁵

During the 1991 session of the General Assembly, the General Assembly amended Code § 56-539 to permit the Commission to transfer of a certificate of authority for the operation of a private toll road from a corporation to a limited partnership. This transfer could occur after consultation with the CTB and notice to the governing body of any jurisdiction through which the roadway passes. On May 23, 1991, TRCV filed a Petition for Amendment and Transfer of Certificate requesting that the Commission approve the transfer of its certificate of authority to TRIP II, a Virginia limited partnership. Upon approval of the transfer, the project would be financed in a different manner than the proposed sale/leaseback previously approved by the Commission. TRCV proposed to transfer its certificate to a limited partnership to permit greater financing flexibility for the project.⁶⁶

No interested party objected to the transfer of the certificate of authority from TRCV to TRIP II. In its Order Amending Certificate, the Commission noted again that there was no public alternative to the private DTRE option. In addition, the CTB renewed its approval of the project including the current alignment, project costs and schedules. The Commission determined:

[n]otwithstanding the changes approved by the [CTB] and the delays encountered by TRCV over the last year, the project itself remains in the public interest. Significant progress towards consummation of the project has been made, and there remains no alternative. In these circumstances, transfer of the certificate would be in the public interest to the extent that it would permit continued advancement of the project.⁶⁷

The Commission noted that approval of the transfer of the certificate hinged on whether the new financing plan was a reasonable alternative to the proposed sale/leaseback proposal. Under the revised financing plan, permanent funding would be obtained through bank term loans, permanent loans, and senior and subordinate deferred interest loans. Staff reviewed the financing plan and concluded that it offered greater financing flexibility than TRCV's previous proposal. Staff noted that Fitch Investors Service issued a private rating on the project's senior secured notes which

⁶⁴ *Id.*

⁶⁵ *Id.* at 199.

⁶⁶ *Application of Toll Road Corporation of Virginia, For a certificate of authority and approval of rate of return, toll rates and ratemaking methodology pursuant to the Virginia Highway Corporation Act of 1988*, Case No. PUA-1990-00013, 1991 S.C.C. Ann. Rep. 208, Order Amending Certificate (Jun. 28, 1991) ("Amendment No. 1 Case").

⁶⁷ Amendment No. 1 Case at 208.

would make them investment grade. However, Staff also noted that changes to the project had increased the cumulative direct cost to the public to approximately \$5.5 billion for the private DTRE option.⁶⁸

The Commission found that the revised financing plan was reasonable and that the transfer of the certificate of authority was in the public interest. The Commission authorized the transfer of the certificate from TRCV to TRIP II and further authorized an increase in the initial toll from \$1.50 to \$1.75 because of project delays.⁶⁹

On June 11, 1992, TRCV filed an application requesting additional amendments to its certificate of authority. The application was served on all interested parties and the localities affected by the private DTRE option. On June 30, 1992, Staff filed a report analyzing TRCV's application. Staff found that significant progress had been made toward the initiation of construction of the project. However, TRCV was unable to complete the financing of the project until July 31, 1992, or thereafter. The commencement of construction was expected immediately after financial closing.⁷⁰

In its Order, the Commission noted "[t]here remain no proposals to construct any comparable project."⁷¹ The Commission determined TRCV's modifications to its last financing plan were reasonable, and found that they were consistent with the existing terms of the certificate, as amended, so that no further amendment was necessary. The Commission further found that no further amendment of the certificate was required to accommodate the proposed changes in the partnership structure. The Commission further noted "[a]lthough construction will begin more than two years after issuance of our original certificate, we do not believe revocation of the certificate for that reason under § 56-549 would be justified under these circumstances, assuming construction begins within the next several months."⁷²

On July 2, 1993, TRCV filed an application requesting further amendments to its certificate of authority. TRCV requested that the Commission approve its current financing plan, project timetable and other matters related to the private DTRE option. The application was served on interested parties and the localities affected by the proposed toll road project. TRCV submitted a revised financing and partnership structure for Commission approval.⁷³

On July 15, 1993, Staff filed a report on its review of the application. Staff reported that the revised financing plan and partnership structure were consistent with the Commission's prior approval and authorization, including transfer of the certificate from TRCV directly to TRIP II. Staff also reported that changes consistent with the intent of the certificate had been made in the

⁶⁸ *Id.*; Ex. 17 at 3 n.5 (Oliver Direct 2013 Investigation Case).

⁶⁹ *Id.* at 208-209.

⁷⁰ *Application of Toll Road Corporation of Virginia, For a certificate of authority and approval of rate of return, toll rates and ratemaking methodology pursuant to the Virginia Highway Corporation Act of 1988*, Case No. PUA-1990-00013, 1992 S.C.C. Ann. Rep. 205, Second Order Amending Certificate (July 21, 1992) ("Amendment No. 2 Case").

⁷¹ Amendment No. 2 Case at 205.

⁷² *Id.*

⁷³ *Application of Toll Road Corporation of Virginia, For a certificate of authority and approval of rate of return, toll rates and ratemaking methodology pursuant to the Virginia Highway Corporation Act of 1988*, Case No. PUA-1990-00013, 1993 S.C.C. Ann. Rep. 178, Third Order Amending Certificate (Aug. 19, 1993) ("Amendment No. 3 Case").

composition of the investors, the amount of the investment, and in the dollar amounts of the financing plan. Staff recommended approval of TRCV's request for a finding that, upon financial closing, the provisions of Code § 56-549 regarding failure to begin construction within two years of the issuance of a project's certificate would not be a basis for revocation of the certificate if the closing occurred with the next few months.⁷⁴

The Commission found that the modifications from the last financing plan and partnership structure were reasonable and in the public interest, and that they were consistent with the existing certificate of authority, as amended. The Commission found that no further amendment of the certificate was needed to accommodate the current financing plan and partnership structure.⁷⁵

On December 27, 1993, TRIP II filed an application seeking approval of its financing plan and setting the term of its certificate of authority in accordance with Code § 56-551.⁷⁶ In addition, TRIP II filed insurance policies, proofs of coverage and related materials on November 29, 1993, and November 9, 1993, as required by Code § 56-545. In a Fourth Order Amending Certificate entered on December 14, 1994, the Commission determined TRIP II's financing plan was substantially the same in concept as previously approved, and after revision, found acceptable the insurance policies and proof of coverage. Based on the application, the original financing for the Greenway extended until April 2, 2026. Accordingly, the Commission amended TRIP II's certificate of authority to terminate on April 2, 2036, unless extended by the Commission.⁷⁷

By the time construction was completed on the Greenway, the roadway was neither faster to construct nor less costly than the initially proposed public DTRE option. However, as noted by the Commission on multiple occasions, the public DTRE option was "totally academic," and the private option was "the only game in town" and, although subject to construction delays, the private option "remain[ed] in the public interest."⁷⁸

The Dulles Greenway Opens

The Greenway opened on September 29, 1995, with tolls set at \$1.75. During the opening months of the roadway, TRIP II experienced low traffic volumes, which led to revenue shortfalls and the beginning of the Company's financial woes. On December 12, 1995, TRIP II filed an application to modify its tariff to delay a toll increase scheduled to take effect on January 1, 1996, which would have increased its authorized toll from \$1.75 to \$2.00. In support of its application, TRIP II stated the delay in the increase in tolls was necessary to attract and maintain ridership levels on the Greenway. The Commission approved TRIP II's request. The Commission directed TRIP II that if it chose to implement the previously approved toll increase, it had to file a revised tariff with the Commission at least 30 days prior to the effective date of the increase.⁷⁹

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Application of Toll Road Corporation of Virginia, For a certificate of authority and approval of rate of return, toll rates and ratemaking methodology pursuant to the Virginia Highway Corporation Act of 1988*, Case No. PUA-1990-00013, 1994 S.C.C. Ann. Rep. 207, Fourth Order Amending Certificate (Dec. 14, 1994) ("Amendment No. 4 Case").

⁷⁷ *Id.*

⁷⁸ 1990 Certificate Case at 198; Amendment No. 1 Case at 208; Amendment No. 2 Case at 205.

⁷⁹ *Application of Toll Road Investors Partnership II, L.P., For a Reduction in Toll Rates*, Case No. PUA-1995-00066, 1995 S.C.C. Ann. Rep. 230, Final Order (Dec. 13, 1995); Ex. 17 at 6 (Oliver Direct 2013 Investigation Case).

On February 22, 1996, TRIP II filed an application to modify its tariff to implement temporary toll reductions and promotional discounts designed to increase ridership on the Greenway. By Order entered on March 1, 1996, the Commission authorized that TRIP II could implement variances in its toll rates so long as the variances were nondiscriminatory and did not cause the actual toll to exceed the \$2.00 toll previously approved by the Commission. This allowed TRIP II the flexibility to offer promotions and discounts as long as the resulting toll was below the \$2.00 cap. Effective March 8, 1996, TRIP II reduced the toll rate on the Greenway from \$1.75 per vehicle to \$1.00.⁸⁰

In the fall of 1998, TRIP II filed an application requesting approval to refinance debt incurred in the construction of the Greenway.⁸¹ The Commission directed Staff to review TRIP II's application and file a report. Staff noted that TRIP II was in default on various loans and notes. In its application, TRIP II intended to take advantage of lower interest rates to issue approximately \$360 million in new debt. TRIP II planned to secure credit enhancements for the debt through a financial surety who was expected to assume some of the risk for future payments of interest and repayment of principal.⁸² Most of the new debt would be discounted "zero-coupon" bonds which were designed to reduce TRIP II's current debt service and allow TRIP II the opportunity to accrue the cash needed to pay off the bonds over the "next few years."⁸³ Staff concluded that "the proposed refinancing was in the public interest and did not appear to conflict with any provision of law."⁸⁴ Staff recommended that the Commission approve the refinancing.⁸⁵ Interested individuals and government agencies were permitted to file comments on TRIP II's application and no comments were received.⁸⁶

In its Order Approving Refinancing entered on November 24, 1998, the Commission noted TRIP II was "in default on various financial obligations. If successful, the refinancing would allow [TRIP II] to cure its default and provide an opportunity to put the Greenway on sounder financial footing. An improved financial position would foster uninterrupted operation of the project. Accordingly, the proposal is in the public interest."⁸⁷ The Commission further noted that its:

finding that the proposed refinancing is in the public interest should not be interpreted as Commission approval of the particular securities [TRIP II] proposes to issue. Commission approval pursuant to the [Act] is independent of, and in addition to, any other approval required under state and federal law before any securities may be issued. The Commission assumes that [TRIP II] will secure all required approvals. Likewise, our approval of the refinancing plan is not a guarantee of repayment of principal or

⁸⁰ *Application of Toll Road Investors Partnership II, L.P., For an order modifying its tariff*, Case No, PUA-1996-00009, 1995 S.C.C. Ann. Rep. 230, Final Order (Mar. 1, 1996); Ex. 17 at 6 (Oliver Direct 2013 Investigation Case).

⁸¹ 1998 Bond Refinancing Case at 455.

⁸² *Id.*

⁸³ *Id.* at 455. The refinancing would allow TRIP II the opportunity to reduce its current debt expenses, continue operating, and buy time to accrue the principal and interest necessary to pay off the zero-coupon bonds at maturity.

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.* at 454.

⁸⁷ *Id.* at 455.

payment of interest on any securities or an extension of the credit of the Commonwealth or any of its political subdivisions.⁸⁸

The Commission further noted that “approval of this refinancing does not guarantee any particular level of tolls or toll structure. Tolls and other fees or charges for use of the roadway will be established and revised as provided by law.”⁸⁹ The Commission approved TRIP II’s refinancing plan.⁹⁰

On April 29, 1999, TRIP II refinanced all of its outstanding debt obligations by issuing Series 1999A Senior Bonds in the amount of \$35,000,000 and Series 1999B Senior Zero-Coupon Bonds with an original principal amount of \$297,782,516, as well as two subordinated notes, Series 1999C in the amount of \$42,993,458 and Series 1999D in the amount of \$29,023,568. In addition to retiring its existing debt obligations, the remaining proceeds were, in large part, used to fund a number of escrow accounts that were to be used to fund future debt repayments and to make improvements to the Greenway. The four series of bonds issued in 1999 carried interest rates or implied yield to maturities (“YTM”) ranging from 6.10% to 11%.⁹¹

On July 3, 2001, TRIP II filed an application for approval of a plan to call certain outstanding bonds and to raise additional capital by issuing new bonds maturing from 2026 to 2056. In conjunction with the refinancing, TRIP II requested an extension of the termination date of its certificate of authority from April 2, 2036, to April 2, 2056, or a later date if any bonds remain outstanding.⁹²

The Commission directed Staff to investigate TRIP II’s application. In its report, Staff noted significant commercial development around Dulles Airport and in Loudoun County prompted TRIP II’s refinancing proposal. In particular, new corporate development, including large facilities for AOL Time Warner and WorldCom, and growing residential communities along the Greenway led to a corresponding increase in traffic on the Greenway and surrounding roadways. The capital improvements to be funded by the proposed refinancing were contemplated by TRIP II and VDOT.⁹³ In addition, Staff concluded that TRIP II did not have the cash flow from operating revenue, after paying operating expenses and covering its current financial obligations, to fund a major capital improvement program. The Commission noted funding these improvements through higher tolls could discourage use of the Greenway and reduce TRIP II’s revenues. The Commission determined issuing zero-coupon bonds appeared reasonable.⁹⁴

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ Ex. 17 at 12 (Oliver Direct 2013 Investigation Case).

⁹² *Application of Toll Road Investors Partnership, II, L.P., For Approval of Refinancing and Amendment of Certificate of Authority*, Case No. PUF-2001-00017, 2001 S.C.C. Ann. Rep. 652, Final Order Approving Refinancing and Amending Certificate of Authority (“Refinancing Order”) (Nov. 7, 2001) (“2001 Bond Refinancing Case”); *Application of Toll Road Investors Partnership, II, L.P., For Approval of Refinancing and Amendment of Certificate of Authority*, Case No. PUF-2001-00017, 2001 S.C.C. Ann. Rep. 655, Errata Order (Nov. 27, 2001).

⁹³ *Id.*

⁹⁴ *Id.* at 653.

In its Refinancing Order, The Commission specifically stated:

[w]e approved a refinancing of the Dulles Greenway on November 24, 1998, [in the 1998 Bond Refinancing Case]. [TRIP II] identified in its application now before the Commission the need for additional investment, and the Staff agreed. [TRIP II] determined that a refinancing using zero-coupon bonds with extended maturities to replace the debt authorized in 1998 and to raise additional funds was an appropriate financing tool. The Staff concurred with [TRIP II's] assessment. Upon consideration of the record previously described, the Commission will grant [TRIP II's] application to the extent discussed in this Order. The Commission finds that the refinancing is in the public interest, and we will approve the refinancing proposal.⁹⁵

The Commission authorized TRIP II to issue approximately \$270 million in new zero-coupon bonds with the proceeds to be used to retire approximately \$100 million of existing debt and to finance improvements to the Greenway, and extended the termination date of TRIP II's certificate of authority to end on the earlier of the date ten years after the last maturity date of any bond issued, or upon the final payment of principal or interest of any bond issued, pursuant to the authority granted in the current case.⁹⁶

On May 30, 2003, TRIP II filed an application to increase the toll ceiling on the Greenway from the \$2.00 maximum toll established in 1996, to \$3.00.⁹⁷ In a Report filed on June 21, 2004,⁹⁸ the Commission's Hearing Examiner concluded that "the record clearly demonstrates the Company's need for higher revenues to meet increasing debt service obligations, to properly operate the road, to help fund the substantial improvements for the road that will be necessary in the future, to stabilize the Company's financial condition, and to improve the likelihood of future investor returns."⁹⁹ The Hearing Examiner also found that the "Company's current revenue stream . . . is adequate to pay its current operating expenses; however, rapidly escalating debt service requirements and payment of accrued interest will soon require additional revenue."¹⁰⁰ Lastly, the Hearing Examiner concluded that the Company should conduct studies regarding three rate design matters: (i) time-of-day congestion pricing; (ii) distance pricing; and (iii) pricing for trucks with three axles and for those with four or more axles.¹⁰¹

The Commission adopted the Hearing Examiner's Report, except for the Hearing Examiner's recommendation for TRIP II to conduct the three rate design studies. Instead, the Commission required TRIP II to provide such studies if it proposed a change in rate design in its tariff. The Commission found the Hearing Examiner's recommendation to increase the maximum toll rate ceiling to \$3.00 in phased increases was reasonable to the user in relation to the benefit

⁹⁵ *Id.*

⁹⁶ *Id.* at 654.

⁹⁷ *Application of Toll Road Investors Partnership II, L.P., To Revise Tolls*, Case No. PUE-2003-00230, 2004 S.C.C. Ann. Rep. 357, Final Order (July 6, 2004) ("2004 Rate Case").

⁹⁸ 2004 Rate Case, Doc. Con. Cen. No. 341876, Report of Deborah V. Ellenberg, Chief Hearing Examiner (Jun. 21, 2004).

⁹⁹ *Id.* at 16.

¹⁰⁰ *Id.* at 18.

¹⁰¹ *Id.* at 21-22.

obtained, would not materially discourage use of the roadway by the public, and would provide TRIP II no more than a reasonable return.¹⁰²

On November 12, 2004, TRIP II filed a letter with the Commission advising that the Company was expected to complete the 2001 Bond Refinancing on or about December 15, 2004, if TRIP II could obtain from the Commission confirmation that no further approvals were required.¹⁰³ TRIP II explained that modifications had been made since the Commission entered its Refinancing Order in the 2001 Bond Refinancing Case. TRIP II identified how its current refinancing plan differed from the plan approved in the 2001 Bond Refinancing Case: (1) the amount of debt to be issued increased from approximately \$270 million to approximately \$298 million; (2) the new debt to be issued would be insured by MBIA at a cost of approximately \$55 million, the original application did not contemplate bond insurance; (3) the Multi-Modal Insured Project Revenue Bonds would carry a variable interest rate, but would be hedged through an interest rate swap agreement; (4) the new debt would not entirely be in the form of zero-coupon bonds, but rather the following mix of bonds (i) approximately \$143.8 million was expected to be Multi-Modal Insured Project Revenue Bonds, with mandatory early redemption obligations tied to available cash after funding operations, (ii) approximately \$38.6 million was expected to be Senior Callable Zero-Coupon Insured Project Revenue Bonds, with mandatory early redemption obligations tied to available cash after funding operations, and (iii) approximately \$116.2 million was expected to be Senior Zero-Coupon Insured Project Revenue Bonds.¹⁰⁴

The Commission, after considering the application in the 2001 Bond Refinancing Case, the Refinancing Order, the Company's letter dated November 12, 2004, and the applicable law, and having been advised by its Staff, found as follows. The Commission treated the November 12, 2004, letter filed by TRIP II as an amendment to its application in the 2001 Bond Refinancing Case. The Commission found the new refinancing proposal was materially different from that approved in the Refinancing Order and, as a result, TRIP II's proposal required separate approval by the Commission. The Commission also found "the new refinancing proposal is in the public interest, and we approve such proposal."¹⁰⁵

On March 2, 2005, TRIP II refinanced its highest cost debt with lower cost debt by issuing three series of zero-coupon bonds, Series 2005A, 2005B, and 2005C. The proceeds from the issuance of these zero-coupon bonds totaled \$390,603,050. The proceeds were used in part to retire TRIP II's Series 1999C and 1999D bonds, to fund numerous escrow accounts, to pay issuance costs including the insurance premium to insure the bonds, and to fund construction projects. A portion of the proceeds was used to pay an equity distribution to partners. The debt issued carried YTM ranging from approximately 5.425% to 7.3%.¹⁰⁶

¹⁰² 2004 Rate Case at 3-4.

¹⁰³ *Application of Toll Road Investors Partnership II, L.P., For Approval of Refinancing*, Case No. PUF-2001-00017, 2004 S.C.C. Ann. Rep. 543, Order Approving Refinancing (Nov. 19, 2004) ("2004 Bond Refinancing Case").

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ Ex. 17, at 12 (Oliver Direct 2013 Investigation Case).

On July 19, 2006, TRIP II filed an application to increase its maximum level of tolls.¹⁰⁷ TRIP II proposed incremental increases in the maximum toll for two-axle vehicles over five years. The maximum toll would increase from \$3.00, as of July 1, 2007, to \$4.00 as of January 1, 2012. TRIP II also proposed to change its toll structure for vehicles with more than two axles and to implement congestion pricing during periods of peak usage.¹⁰⁸

At the hearing, a number of public officials testified, including Congressman Frank R. Wolf. He opposed the proposed toll increase citing the financial burden on the people who lived west of the Washington Metropolitan area and had little choice except the Greenway for their daily commute.¹⁰⁹ The opposition expressed by public witnesses was “fairly characterized as unanimous and vehement, terms such as ‘highway robbery’ and ‘cash cow’ being expressed.”¹¹⁰

In deciding the 2007 Rate Case, the Commission went to great lengths to explain the position wherein it found itself. The Commission stated:

[a]lmost 20 years ago, the Commonwealth made a series of policy decisions that leave us little choice but to make the decision we make in this case. Those decisions led to a regulated private company constructing and operating the Dulles Greenway. This was done pursuant to legislation passed by the General Assembly during its 1988 session. This Commission authorized the construction of the facility and approved its original and subsequent financing. During the progress of the case resulting in that authorization, the Staff filed its report on April 17, 1990. In that report, the Staff compared the cost of construction, timeline for construction, and impact on the consuming public over the life of the project between what appeared to be two competing proposals, one by [VDOT] and the applicant, [TRCV]. The Staff report concluded that ‘projected total cost of service to the using public over the 40 year life of the project is \$894.8 million for VDOT compared to \$3.5 billion for TRCV.’ The report explained that the private build option would be significantly higher based on TRCV’s higher debt service cost compared to debt issued by government agency, projected dividend payments to its shareholders in excess of \$1.1 billion over the life of the project, and payment of income taxes and property taxes in excess of \$785 million by TRCV that are not required of VDOT. Our Staff was unable to recommend issuance of a certificate because of doubts about the project’s viability based on the information in the application at that time.

This Commission had no opportunity to decide between these competitors, for on May 1, 1990, the Commissioner of VDOT filed a letter in the case announcing that: ‘The department has no plans to build this facility with public funds.’ The Commissioner testified at the evidentiary hearing that his department was in support of the application and recommended that a certificate be issued.

¹⁰⁷ *Application of Toll Road Investors Partnership II, L.P., For an Increase in the Maximum Authorized Level of Tolls*, Case No. PUE-2006-00081, 2007 S.C.C. Ann. Rep. 346, Final Order (Sep. 11, 2007) (“2007 Rate Case”).

¹⁰⁸ 2007 Rate Case at 346.

¹⁰⁹ 2007 Rate Case, Doc. Con. Cen. No. 382765, Report of Howard P. Anderson, Jr., Hearing Examiner at 1-2 (Jun. 28, 2007).

¹¹⁰ 2007 Rate Case at 347.

It is fair to state that it was known with a reasonable certainty that a private toll road would have the burden of greatly increased tolls over those that might be charged by a VDOT constructed highway. This Commission noted that with regards to toll rates, 'the VDOT traffic and revenue study projected the VDOT constructed project to require as little as a \$1 toll constant over the life of the project.' The Town of Leesburg and the County of Loudoun were among the participants in the certification case, and the Commission noted that there was general support favoring the building of the extension by TRCV. At that point in time the situation presented was that if a private toll road was not to be built, there would be no road at all. In its order dated July 6, 1990, the Commission stated that: 'Having found that there is a public need for the project, it would be inconsistent with the public interest to deny the application on the ground that its relative project life costs greatly exceed those of VDOT which had become totally academic with VDOT having said it does not intend to build the project. Succinctly, the applicant's proposal is the only game in town.'

Some of the public witnesses expressed condemnation of the concept of a project built as a 'public-private partnership,' and well they might in view of their practical experience as users of the Greenway. This case presents the private part of that partnership, and the piper must be paid. The payment is in the form of an amount 'which will provide the operator no more than a reasonable return.'¹¹¹

Ultimately, the Commission found that the proposed toll structure with its ceilings for two-axle vehicles and other vehicles and phased implementation would satisfy the statutory criteria and should be approved. Further, the Commission found the introduction of congestion pricing to the toll structure would promote the efficient utilization of the Greenway. The Commission declined to direct TRIP II to study distance-based tolls citing its decision in the 2004 Rate Case.¹¹²

During the 2008 Session, the General Assembly adopted an amendment to Code § 56-542, which added a new Subsection I to be effective January 1, 2013, through January 1, 2020. This amendment provided that:

[u]pon application of and public notification by [TRIP II], filed not more than once within any 12-month period, the Commission *shall* approve to become effective within 45 days of any request to increase tolls by a percentage that (i) is equal the increase in the CPI, as defined in subsection A, from the date the Commission last approved a toll increase, plus one percent, (ii) is equal to the increase in the real GDP, as defined in subsection A, from the date the Commission last approved a toll increase, or (iii) 2.8%, whichever is greatest, which increase in the tolls approved by the Commission is hereafter referred to as the "annual percentage increase."¹¹³ (emphasis added).

This amendment put in place a series of toll rate increases for the Greenway.

¹¹¹ *Id.* at 347.

¹¹² *Id.* at 348.

¹¹³ 2008 Va. Acts chs. 841, 844.

In 2008, at the request of Congressman Frank Wolf, the Office of the Attorney General initiated an inquiry into the financial transactions of the Greenway. Congressman Wolf was concerned with the current level of maximum tolls on the Greenway authorized by the Commission as well as the adequacy of consumer protections. Specifically, Congressman Wolf requested an inquiry into whether information submitted to the Commission by TRIP II was factual and accurate, particularly as it related to entities affiliated with the diversified holding company Macquarie Group Limited (formerly Macquarie Bank Limited).¹¹⁴

In a series of transactions in September 2005, MIG purchased TRIP II's general partner (Shenandoah Greenway Corporation) as well as one of its limited partners (Brown and Root Toll Road Investment Partners, Inc.). In addition, MIG provided loans to TRIP II's other limited partnerships (Shenandoah Limited Partnership, Shenandoah I LLC, and AIE, LLC) and entered into options agreements to buy each partnership. These transactions provided MIG with a 100% economic interest in TRIP II. In December 2006, MIG sold 50% of its interest in TRIP II to MIP, making MIP the controlling equity owner of TRIP II.¹¹⁵

Regarding transactions between TRIP II and Macquarie affiliates, the Attorney General's consultant reviewed all cash transactions from September 2005 through December 2007 to identify cash payments paid directly or indirectly to any affiliates and owners of TRIP II. The consultant noted that two payments were made to MIG and MIP, one on December 31, 2005, in the amount of \$19,802,752 and one on December 31, 2006, in the amount of \$12,270,735. These two equity distributions were approved by the Trustee, after finding that TRIP II had met its minimum financial ratios and other obligations mandated under the Master Indenture of Trust. No unauthorized transactions were found.¹¹⁶

The conclusions in the report to the Attorney General were particularly blunt, and included the following:

[b]ased on the history of the Dulles Greenway it has been well-known for some eighteen years that a private toll road would be significantly more expensive than a publicly funded project. Furthermore, it has been known since the inception of the Greenway that due to the realities of market demand and initial impact on the public, the Greenway's earnings (profits) must be deferred from the early life of the project to later periods. These deferred earnings by definition must be made up with future earnings potential thereby placing upward pressure on future (now current) toll rates.

With regards to the relationship between TRIP II and Macquarie, there is no doubt the legal structure of the Macquarie entities and their 2005 acquisition of TRIP II is

¹¹⁴ *Id.*, Appendix A at 1. Macquarie Group Limited ("MGL") was a diversified Australian holding company headquartered in Sydney, Australia, that provided banking, financial, advisory, and investment services worldwide, and was listed on the Australian Stock Exchange. Macquarie Infrastructure Group ("MIG") was a separately traded Australian entity comprised of two Australian trusts and a Bermuda exempted mutual fund company. A wholly owned subsidiary of MGL acted as the trustee to the two Australian trusts and as an advisor to the Bermuda company. Macquarie Infrastructure Partners ("MIP") was a diversified unlisted investment fund headquartered in New York, whose investors are primarily located in North America. *Id.*, Appendix A at 8.

¹¹⁵ *Id.*, Appendix A at 9-10.

¹¹⁶ *Id.*, Appendix A at 15.

complex and somewhat confusing. However, there is no evidence to suggest that the financial information relating to equity distributions and/or affiliated transactions submitted to the [Commission] supporting TRIP II's proposed toll increases in Case No. PUE-2006-00081 was not factual or accurate based on the procedures employed.

Finally, as noted, the Greenway is the only private toll road built and operated under the 1988 Act, and it will likely be the only one now that there is the Public-Private Transportation Act of 1995. The PPTA sought to improve upon the approach to privatization set forth in the 1988 Act and it increased responsibility and authority of public entities, including local governments and regional authorities, in privatizing the construction and operation of transportation facilities.¹¹⁷

On January 30, 2013, in response to complaint letters filed by Delegate David I. Ramadan, the Commission entered an Order Initiating Investigation, which docketed the case for the purpose of investigating TRIP II's toll rates.¹¹⁸ As part of the investigation, the Commission also directed participants in the case, including Staff, "to address and define with specificity the standards that the Commission should apply" when considering whether the Greenway's toll rates comply with the criteria set forth in Code § 56-542 D, such that the tolls are set at a level: (i) "which is reasonable to the user in relation to the benefit obtained;" (ii) "which will not materially discourage use of the roadway by the public;" and (iii) "which will provide the operator no more than a reasonable return as determined by the Commission."¹¹⁹

After considering the arguments and evidence presented in the case, the Commission found that TRIP II's current toll rates should not be adjusted as a result of the investigation, and that the investigation should be concluded.¹²⁰ The Commission also found that it was reasonable not to define further the three requirements in Code § 56-542 D because the record showed that application of each of the three requirements may include a fact-intensive analysis. The Commission concluded that "further defining the standards for each of the requirements is unnecessary and may unreasonably limit the relevant facts that interested parties may present – now or in future proceedings – for consideration under the three statutorily-mandated criteria."¹²¹ The Commission ultimately found that TRIP II's current rates met the three statutory requirements of Code § 56-542 D.¹²²

The Commission's decision in the 2013 Investigation Case was appealed to the Supreme Court of Virginia.¹²³ The court found that: (i) the Commission did not err in its construction and application of Code § 56-542 D;¹²⁴ (ii) there was evidence in the record to support the Commission's finding that the existing toll rates would not materially discourage use of the

¹¹⁷ *Id.*, Appendix A at 18.

¹¹⁸ *Commonwealth of Virginia, ex rel. State Corporation Commission, 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, Doc. Con. Cen. No. 467524, Order Initiating Investigation at 1 (Jan. 30, 2013) ("2013 Investigation Case").

¹¹⁹ *Id.* at 3.

¹²⁰ 2013 Investigation Case, 2015 S.C.C. Ann. Rep. 190, Order Concluding Investigation at 3-4 (Sep. 4, 2015).

¹²¹ *Id.* at 6.

¹²² *Id.* at 6-7, 8, and 9.

¹²³ *Bd. of Supervisors of Loudoun Cnty. v. State Corp. Comm'n*, 292 Va. 444, 790 S.E.2d 460 (2016).

¹²⁴ *Id.* at 455, 466.

Greenway by the public;¹²⁵ and (iii) there was evidence in the record to support the Commission's finding that the existing toll rates would provide the operator no more than a reasonable return.¹²⁶

The court affirmed the Commission's Order Concluding Investigation that ended the Commission's investigation of the toll rates for the Greenway without substituting new rates under the authority of Code § 56-542 D.¹²⁷

On July 1, 2016, pursuant to the Commission's Order Concluding Investigation in the 2013 Investigation Case, TRIP II filed a report detailing its discussions with VDOT regarding distance-based tolls on the Greenway. TRIP II met with VDOT officials on January 5, 2016, and subsequent to that meeting provided those officials additional cost information to convert its existing facilities to automated distance-based tolling. TRIP II had TransCore¹²⁸ prepare a rough estimate to replace the Greenway's existing toll collection system with a new automated toll collection system. The total cost for all engineering, equipment, and roadway improvements was approximately \$25.6 million.¹²⁹

In its letter to VDOT on May 27, 2016, TRIP II provided its position on the efficacy of studying distance-based tolls and the reasoning supporting its position. Essentially, TRIP II stated that further study of distance-based tolls would not be effective, necessary, or practical, nor would it change TRIP II's conclusion that it is not practical or feasible to convert the Greenway to distance-based tolls. TRIP II provided three reasons supporting its position: (i) the Greenway was not designed for distance-based tolls; (ii) the cost to install automated distance-based tolling equipment would be prohibitively expensive; and (iii) distance-based tolls could threaten the financial viability of TRIP II and cause traffic congestion at the interconnection with the DTR.¹³⁰

In its response on June 27, 2016, VDOT generally concurred with TRIP II's position that further study of distance-based tolls was not warranted. VDOT also cautioned that due consideration had to be given to potential impacts on the area's road network and unintended consequences that might result from distance-based tolls on the Greenway. VDOT and TRIP II also agreed that further study might be warranted if significant changes occurred to alleviate the existing obstacles to implementing distanced-based tolls.¹³¹

During the 2019 Session of the General Assembly, Senate Joint Resolution No. 254 was adopted and it directed VDOT to study the feasibility of purchasing all or part of the Greenway.¹³² VDOT filed Senate Document No. 5, *A Study of the Feasibility of Purchasing All or Part of the Dulles Greenway (SJR 254, 2019)*, during the 2020 of the General Assembly.¹³³ VDOT concluded the following:

¹²⁵ *Id.* at 458, 468

¹²⁶ *Id.* at 460, 469.

¹²⁷ *Id.*

¹²⁸ TransCore is a company that specializes in delivering transportation solutions, including comprehensive tolling infrastructure, advanced traffic management systems, and radio frequency identification ("RFID") systems.

¹²⁹ Ex. 32, Exhibit RNH-2R at 3, 14-15.

¹³⁰ *Id.*, Exhibit RNH-2R at 3-4, 8-13.

¹³¹ *Id.*, Exhibit RNH-2R at 4.

¹³² Senate Joint Resolution No. 254, 2019 General Assembly Session.

¹³³ Senate Document No. 5, 2020 General Assembly Session.

- Based on the Act and other legal limitations, the Commonwealth cannot require TRIP II to refinance its outstanding debt obligations at a lower rate even if such debt instruments were available.¹³⁴
- Further, in accordance with the Act, VDOT cannot assume the cost of operations and maintenance (inclusive of snow removal), and State Police charges cannot be eliminated even if the Commonwealth or another public entity owned the Greenway.
- An optimized buy-back plan would require General Assembly action and TRIP II's cooperation. For purposes of this analysis, buy-back is defined as the acquisition of all or a portion of the rights and obligations of TRIP II in order for the Commonwealth to obtain ownership interests or operational control of the Greenway. This report does not examine other aspects of a potential buy-back, such as the assumption of operational and revenue risks inherent in the takeover by the Commonwealth of a more than 20-year old facility.
- Assuming General Assembly action and TRIP II cooperation, a buy-back plan could involve use of distance-based tolling revenue to issue 9(c) general obligation bonds or the creation of a 63-20 corporation.¹³⁵ But each option has limitations. While 9(d) bonds are also a potential financing option, the Commonwealth's debt capacity could be impacted by this option.
- VDOT, working with the Office of the Attorney General and bond counsel, has determined that with General Assembly action, tax-free status¹³⁶ for the Greenway could be granted if the Commonwealth or another public entity were the exclusive owner of the Greenway or if the Greenway assets were redefined as indirectly owned by the Commonwealth. Existing sources of law do not provide clarity on the effects of a partial ownership structure.¹³⁷

In essence, VDOT determined that it would be prohibitively costly for the Commonwealth to acquire the Greenway.

On January 20, 2020, TRIP II completed an application to increase its maximum level of tolls.¹³⁸ TRIP II requested approval of a toll schedule that provided small annual increases (\$0.40 to \$0.50 per year) in the maximum two-axle vehicle peak tolls over a five-year period from \$6.15 on January 1, 2021 to \$7.90 on January 1, 2025, and small annual increases (\$0.25 to \$0.30 per year) in the maximum two-axle vehicle off-peak tolls over a five-year period from \$5.00 on

¹³⁴ VDOT determined that as of December 31, 2018, the cost of retiring TRIP II's approximately \$1.0 billion in outstanding bond debt would have totaled approximately \$1.6 to \$1.9 billion. VDOT's estimate assumed a call or optional redemption of the 1999 series bonds, and the payment of an early repayment fee. The 2005 series bonds are not callable and they must be defeased, in other words all the principal and interest must be paid. See, Senate Document No. 5 at 5-6.

¹³⁵ A 63-20 corporation is a nonprofit corporation that is able to issue tax-free debt on behalf of private project developers. See, IRS Revenue Ruling 63-20.

¹³⁶ The report used the term "tax-free status" to equate to exemption from state and local taxation pursuant to Article X, §6(a)(1) of the *Virginia Constitution* and § 58.1-3606(A)(1) of the Code. See, Senate Document No. 5 at n.2.

¹³⁷ Senate Document No. 5 at 4-5.

¹³⁸ *Application of Toll Road Investors Partnership II, L.P., For an increase in the maximum level of tolls*, Case No. PUR-2019-00218, 2021 S.C.C. Ann. Rep. 172, Final Order (Apr. 26, 2021) ("2019 Rate Case").

January 1, 2021 to \$6.15 on January 1, 2025. TRIP II also proposed that the maximum toll for three-axle vehicles be established as double the two-axle maximum and that the maximum toll for vehicles with four to five axles be equal to the maximum toll for three-axle vehicles plus an amount equal to 50% of the of the two-axle maximum toll for each additional axle above three axles. The Company proposed that vehicles with more than five axles pay the same toll as vehicles with five axles.¹³⁹

In support of its application, TRIP II asserted that the proposed tolls would allow the Company “to continue to provide a safer, more efficient, and well-maintained alternative travel route for drivers.”¹⁴⁰

The Commission found that there was evidence in the record to support the conclusion that the three criteria in Code § 56-542 D had been met for approval of certain peak and off-peak toll increases.¹⁴¹ However, the Commission noted that this was not the end of its discretion, and that Code § 56-542 D does not mandate that the Commission increase toll rates if the three criteria are met. The Commission noted the Supreme Court of Virginia has expressly held:

Subsection (D) does not set forth any circumstances under which the Commission is required to order the ‘substitution]’ of new toll rates. Code § 56-542(D). Rather, subsection (D) provides that the Commission ‘may’ do so ‘after investigation’ – limited solely by the condition that any new toll rates that ‘may’ be set are to comply with the provision's three criteria¹⁴²

In exercising its “may” discretion under Code § 56-542 D, the Commission found that peak tolls should not be increased at that time due to the changes and uncertainty brought about by the COVID pandemic, as addressed in the evidentiary record. The Commission further found that there were offsetting considerations to support the exercise of its “may” discretion in a different manner for approval of off-peak toll increases. The Commission noted there was evidence in the record showing that it was reasonable to reduce the differential between peak and off-peak tolls. The Commission noted the Supreme Court of Virginia affirmed the Commission’s authority to consider the Company’s cost recovery in exercising its discretion under Code § 56-542 D. Accordingly, the Commission agreed with Staff’s expert accounting witness that increasing off-peak tolls would permit TRIP II to recover operating costs and debt obligations. Lastly, the Commission, after considering the uncertainty related to the COVID pandemic, limited its approval of the off-peak toll increases to the proposed increases for 2021 and 2022. In sum, the Commission determined that its findings were within its statutory discretion, had a rational basis, and were supported by the evidentiary record.¹⁴³

During the 2021 Special Session I, the General Assembly repealed Subsection I of Code § 56-542, added a new Subsection J establishing standards for TRIP II to refinance any of its

¹³⁹ *Id.* at 172.
¹⁴⁰ Ex. 2, at 1-2 (Application).
¹⁴¹ 2019 Rate Case at 174
¹⁴² *Id.* See, *Bd. of Supervisors of Loudoun Cnty. v. State Corp. Comm’n*, 292 Va. 444, 454, 790 S.E.2d 460, 465 (2016).
¹⁴³ *Id.* at 174-75.

existing debt, and defined “materially discourage use.” As defined, “materially discourage use” means:

to cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic attributable to the toll rate charge as validated by (i) an investment grade travel demand model that takes population growth into consideration or (ii) in the case of an investigation into current toll rates, an actual traffic study that takes population growth into consideration.¹⁴⁴

This is the first case in which the Commission must decide TRIP II’s proposed toll increases under the recent amendments to Code § 56-542.

WRITTEN COMMENTS

Over 900 written comments were received from residents of Loudoun County and surrounding areas. The vast majority of comments submitted to Commission believe the existing tolls discourage use of the Greenway and are opposed to any toll increase. However, there were fewer than 10 comments that were in favor of a toll increase or a limited toll increase. The comments below provide a representative sample of the common themes that were raised in the written comments submitted in this case:

- The Commission should reject TRIP II’s proposed Greenway toll increases since the increased tolls will further materially discourage the use of the Greenway by the public. The tolls are already high enough and structured in a way that they already discourage the public’s use of the Greenway. As an example of the public’s overwhelming avoidance of the Greenway, one only needs to personally experience the bottleneck at the DTR and Route 28 and other locations due to individuals avoiding the Greenway’s exorbitant cost, as well as Route 7 and Route 50 being severely congested as the Greenway has few vehicles. Additionally, Greenway tolls are structured in a manner (flat toll rate whether you get off at the first exit or the last) intended to discourage public use of the Greenway (which would incur greater maintenance costs) to gouge its few vulnerable customers, Virginia residents who are desperate to get to and from work quickly and cannot afford to wait in the traffic jams the Greenway’s non-use from exorbitant tolls creates. I have been a resident of Loudoun County since 2015 and I have traveled to and from points beyond for many years, and I have never used the Greenway and I never will, save for some extreme emergency – I will not support the price-gouging of my desperate neighbors by unscrupulous interests.
- My vote is a strong NO! I already avoid the Greenway like the plague, even though I live 5 minutes from the end point in Leesburg. I do not even like to use the Greenway when my company offers to reimburse for it. No one likes being ripped-off and that is what these increases feel like year after year. Super convenient, less stressful, saves time – all the factors that would lead you to use the Greenway but greed keeps me from doing so.

¹⁴⁴ 2021 Va. Acts chs.349, 350.

- For TRIP II's own sake, they should keep the tolls as they are, if not reduce them. Everyone I know goes well out of their way to avoid driving on the Greenway between the Sterling exit and Leesburg. The general consensus is that the tolls are already ridiculously overpriced, especially as compared to the toll rates between Washington D.C. and Dulles Airport, and there are plenty of other good surface roads that can be used for free. Right now, I rarely use the Greenway. If the increased tolls are approved, I won't use it ever. The proposed toll increases will almost certainly result in even fewer drivers choosing to use the Greenway.
- The current toll rates on the Greenway provide no real benefit, particularly any significant time savings, 1 to 5 minutes over alternative routes.
- To increase ridership on the Greenway, the tolls should be reduced or reasonable distance-based tolls should be implemented.
- The Commission should act in the public interest and (1) deny TRIP II's proposed toll increases and (2) impose distance-based tolls.
- For transparency purposes, it should be clear when you go through the toll booths what toll you are actually being charged. Currently, this is not happening. Now that the Greenway has gone to only electronic toll collection, there are times when the Greenway's equipment fails to register the E-ZPass transponder in the car, in which case you receive a bill in the mail for the toll and a \$25 service fee. Attempts to resolve the issue with the Greenway often prove to be frustrating as their customer service is extremely poor.
- There is no valid public policy rationale to allow a foreign private investment interest to profit further by excessively burdening the public with exorbitant tolls.
- The Greenway is already making Loudoun County an area of haves and have nots and it is unreasonably putting pressure on the poor and middle class. The state's transportation network should be for all residents, not just the wealthy ones.
- The proposed toll increases would be ruinous for middle and lower income commuters and will drive more drivers off the Greenway to local roads.
- If the past toll increases were excessive, TRIP II's proposed toll increases are just downright highway robbery. If the toll is increased, then I will never use the Greenway under any circumstances.
- The Greenway is a desperation road that is only used when absolutely necessary, otherwise residents avoid the Greenway. Drivers would rather sit in traffic and save their money for Starbucks than pay the tolls on the Greenway.
- The Greenway is also known as the "Lexus Lanes."
- Please approve whatever toll increases are proposed. Eventually, traffic will decrease and the owners will walk away once the venture becomes unprofitable to maintain. The Commonwealth will take over the roadway and lower toll rates will be subsidized by taxes – everybody wins.
- The Greenway serves as a vital artery for residents of western Loudoun County to access work and commerce locations in Reston, Tysons Corner, Arlington, and Washington D.C. Without this reliable, high-speed, low-traffic throughway to points east, we would not be able to take advantage of Loudoun's suburban and rural environs and lower cost of living. While the cost in tolls to use the Greenway is high, it returns a valuable service. Toll increases that maintain the road and ensure an unencumbered volume of traffic during peak commute times are well warranted.

- The Greenway overall is a well-run organization by providing timely and complete roadway maintenance and prevention. Disabled vehicles, roadway obstructions, and hazards are addressed in a timely fashion. The current toll rates are relatively high, especially during commuting periods. But it is for the above mentioned reasons that so many, including myself, elect to use the Greenway. In a time when there is a push to reduce fuel costs and move to a more stable economy, there is a desire to price the Greenway out of the average commuter's budget and create a hardship to using a transportation corridor. The current Greenway tolls already require their own budget because they are high. A significant increase measured in dollars not cents outweighs the benefits and surpasses any pay increase most worker may receive. Please limit any toll increases at this time.
- I am 100% in favor of the Greenway's requested toll increase. I lived here when the Greenway first opened, and we heard the same negative comments about the tolls being too high then, just as we do now. First and foremost, no one is compelled to use the Greenway. It is a matter of choice whether or not we use the Greenway, and if we choose to do so, we should expect to pay a toll for the excellent drive the Greenway provides. Every day we make choices on how we spend our money and our time. The Greenway should not be penalized on their rate hikes because certain persons do not want to pay for the toll. We have other travel choices.
- Run the Greenway on the basis of supply and demand. The market will decide if the toll is attractive. If the toll is too high, TRIP II will lose money. If the toll is too low, TRIP II should have the ability to raise it. Problem solved.
- The Greenway's toll increases should be limited to no more than 5% over current toll rates, or they should be tied to the Consumer Price Index.

SUMMARY OF THE RECORD

Public Witnesses

Pursuant to a Hearing Examiner's Ruling entered on November 21, 2023, a local public witness hearing was convened at 6:00 p.m. on January 9, 2024, at Freedom – South Riding High School, Chantilly, Virginia. The following individuals testified at that hearing.

Suhas Subramanyam, a member of the Virginia State Senate who represents Loudoun County, testified that he was responsible two years ago for the amendments to Code § 56-542. He maintained those amendments were designed to prevent the type of toll increases on the Greenway that were proposed in this case. In particular, he focused on the statutory language "materially discourage use of the road." He explained the intent behind the amendments was to clarify the meaning of the statute and clarify what a reasonable rate of return really is. Senator Subramanyam noted TRIP II's current toll rates already discourage use of the Greenway. He has heard from many residents in Loudoun County about how they have been affected by the toll increases on the Greenway, and how they have resorted to using local roads instead of the Greenway, even when there was traffic on those roads. He asserted the underutilization of the Greenway has increased expenses for Loudoun County and VDOT as they have had to accommodate the increased traffic on local roads. Senator Subramanyam believes the Greenway's existing tolls materially discourage use of the roadway. He further believes the proposed toll increases, 40% increase in peak tolls and

22% increase in off-peak tolls, will further reduce traffic on the Greenway and negatively impact the citizens of Loudoun County. Senator Subramanyam discussed the impact the high tolls have on quality of life, with longer commute times for those that cannot afford the Greenway and higher costs for those that can. Senator Subramanyam urged the Commission to reject TRIP II's proposed toll increases.¹⁴⁵

Phyllis Randle, chair at large for the Board, dispelled the myth that Loudoun County is the richest county in America. She noted that the county has the highest median income, however, income is not the same as wealth. During the COVID pandemic, she learned that there are many families in the county that are just two paychecks away from experiencing a serious financial emergency and maintained the current toll rates on the Greenway are cost prohibitive for those citizens. Ms. Randle believes any toll increase would be untenable. She noted the proposed annual cost for commuters on the Greenway would be approximately \$4,000, which for some residents would be two house payments. She believes that the cost of the Greenway is out of reach for many citizens and the high costs have created a roadway just for the wealthy. Ms. Randle observed that TRIP II is a private company with foreign ownership that is entitled to make a profit from the Greenway. However, in her capacity as chair of the Board, she resists the notion that only people with certain means have the right to traffic options that allow them more time with their families. She believes the same options should be available to the mom working two jobs to make ends meet or the single dad with two kids who wants to make it to one of their after school activities. Ms. Randle would like to believe that TRIP II cares about the citizens of the county, but she questioned whether the Company believes the proposed toll increases are a sound business decision. She suggested an increase in tolls at this time, may lead to a significant fall in ridership as individuals and businesses refuse to accept the proposed toll increases. Ms. Randle questioned whether TRIP II has considered that the Board will continue to listen to its residents and create more alternatives to the Greenway that allow residents to get from Point A to Point B without having to use the Greenway, whether traffic patterns on the Greenway will never return to pre-COVID levels, or whether Loudoun County will continue to invest more transit options so that the Greenway is not even needed? Ms. Randle believes the proposed toll increases may lead to TRIP II's own demise, and the Company will have no one to blame but itself.¹⁴⁶

Koran Saines, a member of the Board representing the Sterling District, has many constituents who could use the Greenway but do not because the tolls are too high. For this reason, he opposes TRIP II's proposed toll increases. Mr. Saines noted TRIP II's proposed toll increases would result in a commuter using the Greenway during peak times paying approximately \$4,212 in tolls annually. Mr. Saines believes that while Loudoun County's population has steadily increased, TRIP II's proposal would further decrease traffic on the Greenway. He noted that many residents in the county simply cannot afford the extravagance of paying \$4,212 per year to shave a few minutes on their daily commute. He further noted that many families need that money for daily living expenses. Mr. Saines offered comments that were posted by residents on the County's Facebook page:

¹⁴⁵ Tr. at 5-7 (Subramanyam).

¹⁴⁶ *Id.* at 8-11 (Randle).

- Sounds like their goal is to make sure no one uses it. A 40% increase? \$8.10 in peak hours up from \$5.80? I already do everything possible to avoid the Greenway. This is just plain greedy.
- We would use it, but it's too expensive already. And Route 7, it's much improved from when the Greenway opened. Lowering prices might bring more users.
- Dulles greed way operators strike again. They don't seem to get that lowering tolls would increase revenue. Instead, next to nobody will be using this highway.

Mr. Saines is unsure whether traffic patterns and work habits will ever recover from the COVID pandemic. He noted the DTR's new toll rates set in January 2023, are more reasonable, \$4 for a complete main line trip and \$2 at on/off ramps, and thousands of people use that road daily. He believes TRIP II should mirror the DTR toll rates for the Greenway. Mr. Saines explained the burden that higher tolls have placed on Loudoun County with more congestion on local roads, and increased maintenance costs for the county and VDOT. He believes the Greenway should be part of the county's transportation solution rather than an impediment. In sum, Mr. Saines believes lower rates would attract, not drive away, motorists.¹⁴⁷

Matt Letourneau, a member of the Board representing the Dulles District, acknowledged that no group of citizens is likely to support a toll rate increase. However, he emphasized that the area served by the Greenway and what it costs is truly unique. He noted that virtually every year TRIP II is either seeking a toll increase or seeking legislation from the General Assembly guaranteeing long-term rate increases. Mr. Letourneau believes TRIP II's efforts are becoming more desperate every year because there is a fundamental fact that cannot be ignored: the Greenway cost around \$350 million to build over 30 years ago, and as of today, it has over a billion dollars of debt encumbering the asset. Mr. Letourneau is the finance chairman of the Board and the Washington Metropolitan Area Transportation Authority ("WMATA") Board of Directors so he is familiar with financing large transportation projects. He believes no entity should have over a billion dollars in debt on an asset built over 30 years ago. He noted that a series of decisions by the foreign owners of the Greenway have been on the backs of residents of Loudoun County, who have been responsible for paying the never-ending debt on the Greenway. Mr. Letourneau explained how over the years, TRIP II used extravagant expenses that were not essential to the operation of the Greenway to justify increased tolls on users. He also asserted that this practice went on for many years when toll increases were pretty much guaranteed under the legislation in place at the time, while the owners of the Greenway used the roadway to leverage their increasing debt for other facilities in their portfolio. Mr. Letourneau observed since the Greenway's last attempt at a toll increase, the General Assembly passed legislation clarifying the requirements that must be met before a toll increase may be approved. He noted that there is ample empirical evidence that the value of using the Greenway no longer exists, and that is why drivers have been abandoning it. Mr. Letourneau believes if the toll increases are approved, you will see tumbleweeds on the Greenway instead of cars. He noted the county's population continues to grow and traffic on the county's roads has returned to pre-pandemic levels, while traffic on the Greenway remains below pre-pandemic levels. Mr. Letourneau explained that growth on adjacent roadways has required Loudoun County and the Commonwealth to invest hundreds of millions into transportation improvements to serve the area while the Greenway remains vastly underutilized. He explained

¹⁴⁷ *Id.* at 12-15 (Saines).

drivers simply will not take the Greenway because the tolls are too high. He asserted that drivers would rather sit in traffic on the free alternative routes because they consider the Greenway's tolls unreasonable, and TRIP II response is to double down with another proposed toll increase. Mr. Letourneau urged the Commission to deny TRIP II's proposed toll increases. He maintained that at the end of the day, the decisions made by the private operator of the Greenway over the years should not burden Loudoun County or its residents. Mr. Letourneau believes approving the requested toll increases would burden both.¹⁴⁸

Caleb Kershner, a member of the Board representing the Catoctin District, testified that his constituents who live in western Loudoun County and who use the Greenway exits at the end of the roadway for the Leesburg Bypass, Battlefield Parkway, and Shreve Mill Road will be significantly impacted by TRIP II's proposed toll increases. Mr. Kershner believes the requested increases are 100% unreasonable. He noted his confusion with TRIP II's request. He stated ridership is already down on the Greenway and questioned how a 40% increase in tolls would encourage use. If the toll increases are approved, Mr. Kershner stated he would stop using the Greenway, which is a sentiment expressed by many of his constituents. He believes the proposed toll increases would hurt his constituents, materially discourage use of the roadway, force drivers onto already crowded alternative routes, and force the Board to consider other transportation solutions to address traffic congestion. Mr. Kershner urged the Commission to reject TRIP II's proposed toll increases.¹⁴⁹

Laura Tekrony, a member of the Board representing the Little River District, objected to TRIP II's proposed toll increases. She believes the proposed increases are outrageous. She noted that data already shows that usage of the Greenway is down because of the high tolls, and residents in her district have told her that they do not use the Greenway because of the high tolls. In her last election, Ms. Tekrony knocked on approximately 15,000 doors, so she knows firsthand that this is an issue for her constituents. Her constituents avoid the Greenway, and so does she for one of the alternative routes. Ms. Tekrony noted Loudoun County's roads are more congested because the Greenway is not carrying its share of the traffic and because the owners of the Greenway keep raising tolls and refuse to implement distance-based tolling. Ms. Tekrony noted Loudoun County has consistently supported distance-based tolling and she believes usage will continue to decline if TRIP II's proposed toll increases are approved.¹⁵⁰

Juli Briskman, vice chair of the Board representing the Algonkian District, echoed the comments of the previous members of the Board. She believes residents that use the Greenway or those who might use the Greenway are being impacted economically. Additionally, she believes resident quality of life and the environment is being impacted. Ms. Briskman represents the northeastern part of Loudoun County and she does not hear much about the Greenway, except that everyone tries to avoid it. She also avoids the Greenway whenever she has an opportunity to use it. She does so on principle because she believes the tolls are ridiculous and because the tolls are not distance-based. Ms. Briskman highlighted the hidden costs associated with the Greenway. Specifically, she explained that the more people avoid the Greenway, the more Loudoun County has to spend to build roads and the more VDOT has to spend to maintain those roads. This directly impacts the taxpayers in her district. In addition, the high tolls on the Greenway are negatively

¹⁴⁸ *Id.* at 16-21 (Letourneau).

¹⁴⁹ *Id.* at 22-23 (Kershner).

¹⁵⁰ *Id.* at 24-26 (Tekrony).

impacting the county's economic development efforts. Businesses looking at Loudoun County are choosing to locate where their employees have easy commuting options. Ms. Briskman has an MBA and she believes it is counterintuitive to believe the Greenway is going to be more successful and economically viable, if you reduce the usage of the roadway as the result of toll increases. Ms. Briskman believes a toll increase will only increase the disparity between residents because lower income residents will spend a larger percentage of their income on the Greenway than wealthy residents. Basically, the Greenway will become a roadway for the wealthy and the quality of life for everyone else in Loudoun County will suffer.¹⁵¹

Sylvia Glass, a member of the Board representing the Broad Run District which covers large parts of Ashburn, voiced her concern with the rising tolls on the Greenway. She stated the Greenway runs right through Ashburn but residents actively avoid the roadway. She believes no one uses the roadway because the tolls are already too high. She emphasized that if the Proposed Tolls are approved, the rush hour toll rates would be \$8.10, and a typical commuter would pay over \$4,000 per year in tolls, which does not include the cost of gas, vehicle maintenance, or weekend trips. Ms. Glass explained since the Greenway opened there has been a steady increase in tolls that have coincided with a steady decrease in drivers on the Greenway as drivers got priced out of using the roadway. She further explained that those drivers who can no longer afford the Greenway have been pushed onto local roads and the county has had to respond by building roads to compete directly with the Greenway at a cost of millions of dollars. She confirmed that the county will continue to spend millions for roads if toll conditions on the Greenway continue to worsen, and if this happens, Loudoun County and Virginia will have millions less to spend on other vital services. Ms. Glass urged the Commission to deny TRIP II's request for the proposed toll increases.¹⁵²

Henry Eickelberg, treasurer of Loudoun County, expressed his concerns over the proposed toll increases and the fiscal impact those increases will have on the county. He noted the recent changes to Code § 56-542 and that the Commission must follow the statute. From his perspective, the Greenway needs to be an asset for Loudoun County and its residents, and with the Proposed Tolls it will not be such an asset. Mr. Eickelberg expressed concern over the county's tax base as realtors direct their clients away from neighborhoods near the Greenway because of the high tolls. Mr. Eickelberg believes the Greenway should be named "Lexus Lanes" because that is the only type of people who are going to be able to afford it. He addressed TRIP II's outstanding debt and echoed the sentiment of others that the Company's borrowing of more money than it has the ability to pay off is of no concern to the residents of Loudoun County. Lastly, Mr. Eickelberg noted Code § 56-542 empowers the Commission to approve TRIP II's rates, which includes reducing rates if the rates are too high and have a deleterious effect on the traffic on the Greenway.¹⁵³

Richard Fernandez, a resident of Loudoun County, stated he uses the Greenway every day and he is neither for nor against TRIP II's proposed toll increases. He gave three reasons why. First, when the Greenway was first proposed, state and local government officials had the opportunity to reject the project, but the consensus at the time was the project was going to be good for Loudoun County, which proved not to be true. Second, after the Greenway opened, TRIP II had

¹⁵¹ *Id.* at 26-30 (Briskman).

¹⁵² *Id.* at 59-62 (Glass).

¹⁵³ *Id.* at 30-33 (Eickelberg).

to lower the tolls to get people to use the Greenway and when people started using the roadway and became dependent on it, TRIP II started raising the tolls. Third, Mr. Fernandez stated it is a consumer choice whether to use the Greenway or not and maintained that choice should be left to the consumer. By choice, Mr. Fernandez uses the Greenway every day because it allows him to get to and from work quickly with less stress.¹⁵⁴

Paul Tabler, a resident of Loudoun County, opposes TRIP II's proposed toll increases. Mr. Tabler used to take the Greenway to and from work but recent increases in the toll have caused him to shift to only taking it in the morning when he needs to get to work. In the afternoon, he takes one of the alternative routes to travel home because he has the time. As time goes by, he is using the Greenway less and less. He stated at most of the entrances to the Greenway, it is unclear what your toll will actually be. He can see how some people may get sticker shock when they see their bill at the end of the month. Mr. Tabler believes increasing the toll will only reduce usage on the Greenway and ultimately reduce TRIP II's overall income. Mr. Tabler questioned why the taxes or fees charged the Greenway could not be decreased to avoid a toll increase.¹⁵⁵

Mike Clancy, a resident of Loudoun County and candidate for Congress in Virginia's 10th Congressional District, opposes TRIP II's proposed toll increases. He believes the request defies common sense and logic, is contrary to basic principles of business and economics, and fails to meet the legal standard for a toll increase of any amount. Mr. Clancy noted TRIP II admits it is not generating sufficient revenue to earn a reasonable return on its investment. Assuming that is true, Mr. Clancy believes the question that should be asked is why? He asserted the answer was provided by TRIP II when it acknowledged that the Greenway has low traffic volume since the tolls are already too high and drivers are choosing to use the free alternatives. He also understands TRIP II expects the low traffic volume to continue. Mr. Clancy believes an increase in tolls will only make the situation worse by further pushing drivers to the free alternative roads. Mr. Clancy believes TRIP II needs to lower the tolls on the Greenway to increase revenues. He highlighted that five cars paying \$2 will generate more revenue than one car paying \$8. Mr. Clancy questioned whether the Greenway's tolls are reasonable to user in relation to the benefit obtained. He stated drivers are not going to pay \$8 or \$6 to save \$0.25 on gas and 2 to 4 minutes of drive time because, in his assessment, this makes no sense. Mr. Clancy refuted TRIP II's claim that the Greenway is helping to alleviate local road congestion. He noted that TRIP II has admitted its financial problems are related to low ridership. He contended that instead of trying to increase ridership, TRIP II's proposed toll increases will only further reduce usage of the Greenway and push more cars onto local roadways. Mr. Clancy noted the law requires that TRIP II's requested toll increase must not materially discourage use of the roadway. He further noted the population of Loudoun County has increased by 130,000 and that substantial increase in population has not translated to ridership on the Greenway. Mr. Clancy believes the primary reason for this is the Greenway's tolls and increasing the toll rate will only discourage drivers from using the roadway. Mr. Clancy believes this is the absolute worse time to proposed toll increases because the economy is still trying to recover from the COVID pandemic. He believes the only logical path for TRIP II to increase revenues is to increase usage and the only way to increase usage is to decrease toll by at least 50%. He reasoned that if people are not using the Greenway at current rates, increasing tolls

¹⁵⁴ *Id.* at 33-36 (Fernandez).

¹⁵⁵ *Id.* at 37-39 (Tabler).

by 40% is not going to solve that problem. Mr. Clancy urged the Commission to deny TRIP II's Application and instead direct a reduction in toll rates including distance-based tolls.¹⁵⁶

David Ramadan, a resident of Loudoun County and a former member of the General Assembly, testified "here we go again" with TRIP II requesting another toll increase. He noted the many cases in the past in which the Commission's hands were tied and it had to approve fixed toll increases for the Greenway. He remarked that those times have passed with the adoption of the amendments to Code § 56-542. He stated there is now no question what "materially discourage use" or "benefit to the user" mean. He further stated "[n]o British fuzzy math expert this time should be able to come up with a formula that came down from Mars."¹⁵⁷ If a \$4 toll 15 years ago made former Congressman Frank Wolf call it highway robbery, Mr. Ramadan is unsure what an \$8 toll would make him call it today. He stated a \$3 toll discouraged use of the Greenway, the current toll discourages use of the Greenway, and at \$8 it will stop usage of the Greenway. Mr. Ramadan observed since the Greenway was built, the population of Loudoun County has tripled, yet usage of the Greenway has declined over the same period. He believes the reason why is because the tolls are highway robbery. Mr. Ramadan stated there is no benefit to taking the Greenway. In his view, no reasonable person could tell the Commission that driving on the Greenway and taking one exit in eastern Loudoun County for one mile is worth \$8, regardless of how much income that person has. Mr. Ramadan encouraged the Commission to base a reasonable return on the \$350 million invested in the roadway, not \$1 billion in debt that TRIP II has incurred. He noted that the Commission has repeatedly told TRIP II that the Commonwealth does not guarantee that debt. Mr. Ramadan believes the Commission should not only deny TRIP II's Application but should also reduce the tolls to the point where the tolls only cover TRIP II's debt service. He believes TRIP II's return should be based on a \$350 to \$400 million rate base, plus operating expenses, and a 10% to 15% profit. That would result in a toll of \$2 to \$2.50, which Mr. Ramadan believes everyone in Loudoun County would pay. Mr. Ramadan observed that over the years TRIP II was tone deaf regarding the impact that its rate increases were having on the citizens of Loudoun County. He believes now that the Commission has been given the tools to reign in TRIP II's tolls, TRIP II has gone to the General Assembly and is seeking to be regulated under the laws governing Public Private Partnerships ("P3s"). Mr. Ramadan believes TRIP II's Application is a ploy to garner approval from the General Assembly to change the manner it is regulated – essentially suggesting to the General Assembly that a request for a 40% increase in tolls could be avoided if the Company is regulated as a P3. Lastly, Mr. Ramadan urged the Commission to deny TRIP II's Application because it does not meet the requirements of Code § 56-542.¹⁵⁸

Mitchell Turner, a resident of Hamilton in Loudoun County, testified that he would like to see the public interest protected in this proceeding. He would also like to see his faith in government restored because, from his perspective and no matter how you look at it, TRIP II's proposed toll increases appear to be a scam. Mr. Turner gave five reasons why TRIP II's tolls should be frozen indefinitely, or, ideally, lowered. First, he maintained flat rate tolling needs to be eliminated and distance-based tolling needs to be implemented and until TRIP II remedies that situation, it should not be afforded any toll increases. Second, he asserted TRIP II's debt situation should play no part in setting tolls. Relatedly, he supported a full audit of TRIP II's debt financing.

¹⁵⁶ *Id.* at 39-43 (Clancy).

¹⁵⁷ *Id.* at 45 (Ramadan).

¹⁵⁸ *Id.* at 44-49.

Third, he contended Greenway tolls have pushed traffic onto other roadways and Loudoun County taxpayers have had to fund significant improvements to Route 7 and Route 28 to address traffic congestion. Fourth, he emphasized that the population of Loudoun County has increased significantly while at the same time traffic on the Greenway continues to decline because of the high tolls. Lastly, Mr. Turner encouraged the Commission to make the tolls on the Greenway more reasonable so that consumers have a real choice whether to take the Greenway, or not.¹⁵⁹

Jay Rowzie, a resident of Loudoun County, has worked in real estate for 30 years in the area. He used the Greenway when it first opened but he no longer uses the roadway. He has seen a continuous decline in usage over the years. Mr. Rowzie now goes out of his way not to use the Greenway. Two nights a week, he takes his daughter to travel soccer practice in Leesburg using one of the local alternative routes and he can see how empty the Greenway is compared to local roads. Many of Mr. Rowzie's real estate clients are teachers and they live in western Loudoun County because the cost of living is less than in eastern Loudoun County. He noted those teachers go out of their way to avoid the Greenway because it is unaffordable. Mr. Rowzie urged the Commission to reject TRIP II's proposed toll increases outright.¹⁶⁰

Beverly Tate, a life-long resident of Loudoun County, opposed TRIP's proposed toll increases. She acknowledged that using the Greenway is a convenience that saves commuters time during peak travel times. However, she maintained that with the new normal after the COVID pandemic, TRIP II must change with the times and alter its toll structure and implement distance-based tolling and possibly decrease its overall tolls. Ms. Tate noted the tolls on the Greenway must be reasonable in relation to the benefits of using the road. She further noted that while incomes in Loudoun County may be higher than average, not every driver has the ability to absorb the proposed toll increases. Ms. Tate urged the Commission to deny TRIP II's Application and encourage reasonable distance-based tolls.¹⁶¹

Robert Whitfield, with the Fairfax County Taxpayers Alliance Board, opposed TRIP II's overall toll increase because of discrimination and inequities in tolling. He supports distance-based tolls on the Greenway. Mr. Whitfield believes TRIP II should offer a discount to frequent users of the Greenway to address affordability.¹⁶²

Elsa Wright, a resident of Loudoun County, stated the demographics of the county should be considered when setting TRIP II's tolls. She stated that contrary to popular belief not everyone in the county is wealthy. She noted there is a large population of military retirees and others on fixed incomes. Ms. Wright questioned, as the surviving spouse of a military retiree, whether she can continue to afford living in Loudoun County. She urged the Commission to deny TRIP II's Application.¹⁶³

¹⁵⁹ *Id.* at 50-54 (Turner).

¹⁶⁰ *Id.* at 54-56 (Rowzie).

¹⁶¹ *Id.* at 57-59 (Tate).

¹⁶² *Id.* at 62-64 (Whitfield).

¹⁶³ *Id.* at 65-66 (Wright).

Fred Ferares, a resident of Aldie in Loudoun County and president of the Willowsford Homeowners Association, a community of 2,330 homes located in Aldie and Ashburn, testified in opposition to TRIP II's proposed toll increases. Mr. Ferares indicated he is a resident that makes a choice not to use the Greenway, unless absolutely constrained by time. He explained the reality of using the Greenway. He uses Loudoun County Parkway to Old Ox Road, Route 606, to get to the Greenway when he chooses to take the roadway. Under TRIP II's proposal, it would cost him \$8.10 to use the Greenway for 1.4 miles to get to the DTR. Mr. Ferares urged the Commission to deny TRIP II's Application, direct a reduction in the toll for the full length of the Greenway, and direct the implementation of distance-based tolls to increase usage and create value for the residents of Loudoun County.¹⁶⁴

Karen Olsen, a resident of Hamilton in Loudoun County, characterized herself as an average middle class working mom who has not used the Greenway in 14 years because it is too pricey and is not a good use of her time and resources. She indicated that her friends and neighbors do not use the Greenway for the same reasons. If the tolls on the Greenway were increased, she believes it really would not be worth the \$8 toll. She noted that not everyone in Loudoun County is wealthy. She noted that at an income of \$20 per hour, your time is worth \$5 for 15 minutes. Ms. Olsen questioned why anyone would spend \$8 to save 5 to 10 minutes on the Greenway. She believes the Greenway is really not worth it. Ms. Olsen urged the Commission to deny TRIP II's proposed toll increases. If TRIP II lowered its tolls, she might consider actually using the Greenway. Lastly, she noted it is not clear when you enter the Greenway what toll you are being charged, which impacts tourists and other visitors to Loudoun County.¹⁶⁵

Jill Ferares, a resident of Aldie in Loudoun County, opposes TRIP II's proposed toll increases. She avoids the Greenway whenever possible; however, if she needs to get to a doctor's appointment timely, she will take the Greenway but never on the way home because it is too costly. She believes a 40% increase in tolls "breaks the bank." Under TRIP II's Proposed Tolls, she would pay \$8.10 to drive 1.3 miles on the Greenway. Ms. Ferares believes TRIP II's Proposed Tolls are excessive.¹⁶⁶

Mary Ellis, a resident of Loudoun County, believes TRIP II's current toll rates and the proposed toll rates are cost prohibitive. She is retired and lives on a fixed income. She explained that she once mistakenly got on the Greenway and was shocked when she saw her E-ZPass bill. She had to ask her neighbors if the amount was correct. Ms. Ellis stated that she "flat out" refuses to use the Greenway; maintained the tolls are prohibitive; and asserted there is no value to using the roadway. Lastly, Ms. Ellis believes the Greenway is a waste of resources for Loudon County and the Commonwealth because it is so underutilized.¹⁶⁷

Richard Johanson, a resident of Loudoun County, testified that he works in Reston and his company requires its employees to be in the office five days a week. While he has the financial resources to use the Greenway for his commute and still pay his bills, Mr. Johanson represented that he chooses not to because it would be an irresponsible use of his money. He testified that he avoids

¹⁶⁴ *Id.* at 66-68 (Ferares).

¹⁶⁵ *Id.* at 68-70 (Olsen).

¹⁶⁶ *Id.* at 70-71 (Ferares).

¹⁶⁷ *Id.* at 71-73 (Ellis).

the Greenway “like the plague.” He has colleagues at work who could shorten their commute but they also do not use the Greenway. Mr. Johanson questioned the toll rate because, in his view, he should not have to pay the same toll to drive a portion of the Greenway, as someone who drives all the way to Leesburg. If TRIP II implemented distance-based tolls, Mr. Johanson would consider using the Greenway. Mr. Johanson urged the Commission to deny TRIP II’s Application.¹⁶⁸

John Hancock, a resident of Loudoun County, testified he is a retired civil servant and he presently cannot afford to use the Greenway. He views the Greenway as barrier to getting his healthcare in Tysons Corner and visiting his family in Alexandria. Mr. Hancock’s pet peeve # 235 is when private companies own public infrastructure. He believes it is bad for the community. Mr. Hancock urged the Commission to deny TRIP II’s Application, look for ways to reduce the current toll rates, and look into the financial stability of TRIP II.¹⁶⁹

Hava Madireddy, a resident of Loudoun County, testified a commuter on the Greenway currently pays \$3,016 per year in tolls and noted that would increase to \$4,212 per year under TRIP II’s Proposed Tolls. He indicated the per capita income in Loudoun County is \$67,251 and noted that under the proposed tolls, a resident would pay approximately 6.2% of their income annually to use the Greenway. Mr. Madireddy noted, contrary to what people may have heard, 20% of the residents in Northern Virginia cannot afford basic needs like shelter, food, and healthcare. He noted most live paycheck-to-paycheck and cannot even set aside \$1,000 for emergencies. In his assessment, TRIP II’s proposed toll increases are going to greatly impact those individuals in Loudoun County. Mr. Madireddy urged the Commission to deny TRIP II’s proposed toll increases and direct TRIP II to implement distance-based tolls.¹⁷⁰

Daniel Bulles, a resident of Loudoun County, questioned why every toll increase requested by TRIP II has been approved by the Commission. He believes TRIP II proposed a ridiculous 40% increase in tolls hoping to settle for a 20% increase. He questioned the implementation of peak and non-peak tolls and the plate fee if you do not have an E-ZPass. Mr. Bulles raised concerns with the extension of TRIP II’s franchise from 2036 to 2056. He was particularly concerned with the firing of all the toll attendants, and the implementation of electronic tolling. With the implementation of electronic tolling, he does not believe TRIP II’s argument that it is too difficult to implement distance-based tolls. Mr. Bulles urged the Commission to deny TRIP II’s Application and to further investigate TRIP II’s operations.¹⁷¹

Todd Rogers testified that for the 20 years he has lived in Loudoun County, the Greenway has been so cost prohibitive that he has never used it to get out of town. Mr. Rogers noted, if he wanted to go to dinner in Leesburg, the cost would be \$16.20 round trip, roughly the same amount he pays to drive the entire 150 miles of the Pennsylvania Turnpike to get to Pittsburgh to visit family. He believes it is pretty clear that drivers in Loudoun County avoid the Greenway. Mr. Rogers believes there are a number of ways for TRIP II to test whether a decrease in tolls will have a corresponding increase in traffic and revenues. He further believes that fiscal mismanagement is the root cause of TRIP II’s financial problems. He maintained mismanagement

¹⁶⁸ *Id.* at 73-75 (Johanson).

¹⁶⁹ *Id.* at 76-78 (Hancock).

¹⁷⁰ *Id.* at 78-81 (Madireddy).

¹⁷¹ *Id.* at 81-84 (Bulles).

is evidenced by TRIP II leveraging its debt three times the value of the Greenway. Mr. Rogers supports distance-based tolls on the Greenway as a solution to the high toll rates. He would not be adverse to the Commonwealth using eminent domain to take control of the Greenway from TRIP II. Mr. Rogers urged the Commission to deny TRIP II's proposed toll increases.¹⁷²

Jairo Jaru, a resident of Loudoun County, testified he opposes the proposed toll increases. He believes the existing tolls are already too high. Mr. Jaru lives in the Broadlands community which borders the Greenway and emphasized the only thing green about the Greenway is its name. He lives next to the Greenway and there are no noise barriers between the Greenway and his home. He represented that he experiences all the noise and pollution from the roadway. Mr. Jaru supports distance-based tolls on the Greenway and he believes increasing the toll to \$8 will only discourage use of the roadway. At present, Mr. Jaru only uses the Greenway when it is absolutely necessary. If the Proposed Tolls are implemented, he will stop using the roadway.¹⁷³

Moeen Naqui, a resident of Ashburn in Loudoun County, testified that he moved to the area two years ago and was not aware of the toll roads or their cost. He was surprised by the outrageous cost. He explained that, as a student, he traveled from his home in New Jersey across Pennsylvania to Harrisburg to attend college for the same cost that he would have to pay to go from his home in Ashburn to Tysons Corner. He avoids the Greenway and takes Loudoun County Parkway to get to Tysons Corner, which only takes him an additional 5 minutes to get to work in the morning and an additional 10 minutes to get home in the evening. The same holds true for most people he knows. He believes there should be distance-based tolls on the Greenway. Since the Greenway is underutilized, Mr. Naqui believes this puts additional pressure on local roads. He noted most of his friends do not realize the cost of the Greenway because of the poor signage at the on-ramps, and when they do, they are shocked by the cost.¹⁷⁴

David Jones, a resident of Loudoun County, believes the proposed 40% increase in tolls on the Greenway is outrageous. He believes the high tolls are the result of either mismanagement or TRIP II is using revenues from the Greenway to fund other projects. Mr. Jones is unaware of any business that would run up a billion dollar debt on a \$350 million loan. Additionally, he believes the taxpayers of Loudoun County should not have to fund additional road improvement projects because of the Greenway. Mr. Jones believes simple economics would encourage TRIP II to lower the tolls to increase traffic volume and revenues. Mr. Jones lives off Loudoun County Parkway and he has seen firsthand the increase in traffic from people avoiding the Greenway. He avoids the Greenway unless he is in extremis and is running late, but he always avoids the Greenway on the return trip. Lastly, Mr. Jones believes lowering the tolls on the Greenway would benefit the citizens of Loudoun County.¹⁷⁵

Max Dalton, a resident of South Riding in Loudoun County, is a construction contractor who spends approximately \$3,500 per month on the Greenway to move equipment and personnel around the county. Mr. Dalton explained that his business owns trucks and trailers and he is charged per axle whenever they use the Greenway, which he considers an abuse. He believes the

¹⁷² *Id.* at 84-89 (Rogers).

¹⁷³ *Id.* at 90-91 (Jaru).

¹⁷⁴ *Id.* at 91-95 (Naqui).

¹⁷⁵ *Id.* at 95-97 (Jones).

Greenway's current financial condition is either the result of mismanagement or misuse of funds. He noted since it opened, the Greenway has been obnoxiously expensive. Mr. Dalton favors a toll reduction so that more people in Loudoun County might use the Greenway.¹⁷⁶

Jasihri Vijayaraman, a resident of Loudoun County, believes TRIP II is trying to bully its way to another toll increase. When he moved to Loudoun County, he had to ask the listing agent what was going on with the Greenway. He noted that Loudoun County has one of the highest median incomes in the country and yet people go out of their way to avoid the Greenway. He believes TRIP II is not using the Greenway to benefit the citizens of Loudoun County, and is not using valuable land to its highest and best use. Mr. Vijayaraman believes the Greenway could be the economic engine for Loudoun County. He believes the Commonwealth should use the power of eminent domain to purchase the Greenway because TRIP II is holding the citizens of Loudoun County captive. He believes the land could then be used for the benefit of the public.¹⁷⁷

Jessica Monte testified when she first moved to Ashburn in Loudoun County, she factored the cost of the Greenway into her monthly mortgage payment. She already pays approximately \$2,000 per year in tolls and the proposed toll increases would increase that by \$1,000 per year. Ms. Monte explained she is currently working on her doctorate at George Washington University and she teaches at Marymount University. She testified she is not someone who can easily afford the toll increase. She noted that while most of her neighbors work in Information Technology or for the federal government and can afford the Greenway, most wake up early to drive around it. She testified that she takes grief from her husband for using the Greenway, but prefers to sleep in and be nicer to her students. Ms. Monte urged the Commission to keep the tolls where they are or reduce them to increase ridership on the Greenway.¹⁷⁸

Sree Nagireddi, a resident of Loudoun County, highlighted the two most recent Greenway toll increases of 5% in 2020 and 5.3% in 2022 and represented that these increases outpaced salary growth in the area. He proposed a shift to distance-based tolling, which would make the price proportional to the distance traveled and ease the burden on commuters. He explained that based on where he lives he would pay \$6 to drive two exits. He believes the technology exists to have distance-based tolls. He noted that TRIP II has already eliminated manned toll booths. He noted the population of Loudoun County has doubled in the last 20 years and the road network has been unable to keep up with that growth. He believes the citizens of Loudoun County deserve a free alternative to the Greenway. Additionally, he believes TRIP II should be required to increase ridership on the Greenway to increase revenues before seeking a toll increase. Mr. Nagireddi urged the Commission to deny TRIP II's proposed toll increases.¹⁷⁹

Danny O'Brien, a resident of South Riding in Loudoun County, addressed three issues. First, he maintained people would be more likely to use the Greenway if the tolls were more reasonable. Mr. O'Brien encourages his family to avoid the Greenway because of the cost, but he and his family would likely use the Greenway if the costs were more reasonable. Second, he

¹⁷⁶ *Id.* at 98-100 (Dalton).

¹⁷⁷ *Id.* at 100-03 (Vijayaraman).

¹⁷⁸ *Id.* at 104-05 (Monte).

¹⁷⁹ *Id.* at 106-10 (Nagireddi).

claimed increasing the toll would make the Greenway the highest cost toll road per mile in the United States. Third, Mr. O'Brien indicated he cannot comprehend how a roadway that cost \$350 million to build has accrued over \$1 billion in debt. To him, this sound like gross negligence. Mr. O'Brien would like to understand more about how TRIP II got into the financial predicament it is in and why it needs an absurd toll increase. Mr. O'Brien opposes the proposed toll increases; however, he testified that if the tolls were lowered he would likely be a regular Greenway user.¹⁸⁰

Anthony Russo, a resident of Broadlands in Loudoun County, considers the Greenway "biblically expensive," even though he is originally from Boston and is used to paying tolls. He avoids the Greenway whenever possible because of the cost. He prefers not to support the Greenway because the revenues are supporting a company headquartered in Australia. Additionally, by not using the Greenway, Mr. Russo calculated that he could afford to purchase two to three dinners at the grocery store for the savings in tolls. Mr. Russo is disappointed that the issue of distance-based tolls has not been addressed even though it has been over ten years since the issue was first raised. He cannot understand why distance-based tolls are not feasible. He maintained that ridership on the Greenway is down because people are unable to pay the tolls or people are just not going to pay the tolls. Mr. Russo urged the Commission to: deny the proposed toll increases, consider lowering the existing tolls, implement distance-based tolls, and consider the Commonwealth taking the Greenway by eminent domain.¹⁸¹

Tom Ward, a local economist who supports P3s, believes they must be managed well from the very first design, through completion, and during operation. He questioned how a \$300 million road has accrued over \$1 billion in debt. He believes something is being mismanaged. He asserted that contrary to the concept "let's build it and they will come," the high cost of the Greenway has forced drivers onto the free alternative routes. Mr. Ward believes TRIP II needs to incentivize use of the Greenway, including distance-based tolls to improved revenues.¹⁸²

Ron Mayer, a former member of the Board who represented the Broad Run District, testified when he ran for the Board in 2015, he ran on a pledge to build alternatives to the Greenway. He now lives in Leesburg and the message he receives is clear: people avoid the Greenway and they want the county to help them avoid the Greenway. He avoids the Greenway because of the cost. He stated he does not want the Greenway to lose, but believes there needs to be a solution that represents a win-win for both sides. Mr. Mayer believes the unreasonable debt incurred by TRIP II should not be used as a basis for determining reasonable profits. He further believes users of the Greenway should not be financing any debt outside what it actually took to construct and maintain the roadway under reasonable circumstances, and should not be forced to finance debt under creative Wall Street or Australian debt schemes. Mr. Mayer believes more people would use the Greenway if it was reasonably priced. In addition, while he believes the Loudoun County wants to have the Greenway as a partner, he maintains raising tolls 40% for peak and 20% for off-peak usage is not the answer.¹⁸³

¹⁸⁰ *Id.* at 110-13 (O'Brien).
¹⁸¹ *Id.* at 113-18 (Russo).
¹⁸² *Id.* at 119-21 (Ward).
¹⁸³ *Id.* at 122-26 (Mayer).

Michael Pastis lives in Loudoun County near the Metro Silver Line and works in Washington D.C. When he first moved to Loudoun County a year ago, he used the Greenway for his daily commute but he could not believe how fast his E-ZPass was running out. Instead, he started using Route 28 for his commute, although he could afford to use the Greenway but chooses not to. Mr. Pastis questioned the financing for the Greenway and the debt the Greenway has accrued. To him, it seems like the Greenway has been mismanaged and TRIP II should be held accountable for that mismanagement. He cannot understand why the Greenway has not been paid off. Mr. Pastis believes more people would use the Greenway if it was more reasonably priced. Lastly, Mr. Pastis noted it is obvious the Greenway is the source of frustration and anger for the residents of Loudoun County.¹⁸⁴

Pursuant to the Commission’s Order for Notice and Hearing entered on August 7, 2023, a telephonic public witness hearing was convened on January 30, 2024. The following individuals testified at that hearing.

John Gallagher, a resident of Ashburn in Loudoun County, opposes the proposed toll increases because they will drastically reduce access to a vital transportation artery for a majority of Loudoun County residents. He noted the Greenway was built as a public-private partnership meant to benefit both the community and the investors. He maintained the Greenway currently discourages use because it is too expensive for most drivers. He also claimed the proposed toll increases will just decrease the number of people who can afford to use the roadway. In Mr. Gallagher’s view, since the road is monopoly, the state and the owners have a heightened duty to ensure that any toll increase is as small as possible so that the greatest number of residents have access to such a vital transportation route. Mr. Gallagher believes TRIP II has not made the case that the proposed toll increases are necessary or justified. He further believes if the Greenway cannot operate at the current toll rates, which are already expensive and discourage use, then the Commonwealth should reconsider who should run the Greenway and whether it is being properly managed.¹⁸⁵

Pradeep Hazra, a resident of Brambleton in Loudoun County, testified he is an occasional user of the Greenway. He believes any increase in tolls would make the Greenway completely cost prohibitive, which is unfair for the residents of Loudoun County. Since he lives so close to one of the Greenway exits, Mr. Hazra supports distance-based tolls as a way to lower the cost of using the Greenway.¹⁸⁶

Toll Road Investors Partnership II, L.P. Direct Testimony

TRIP II presented the direct testimony of three witnesses: **Renée N. Hamilton**, Chief Executive Officer of TRIP II; **Steve Weller**, Lead of Forecasting and Analytics, North America, for Atlas Arteria;¹⁸⁷ and **David Cuneo**, a Director at Steer Davies & Gleve, Inc. (“Steer”).¹⁸⁸

¹⁸⁴ *Id.* at 126-29 (Pastis).

¹⁸⁵ *Id.* at 136-39 (Gallagher).

¹⁸⁶ *Id.* at 142-44 (Hazra).

¹⁸⁷ Atlas Arteria is the owner of a 100% effective economic interest in TRIP II. Ex. 5, at 1 (Weller Direct).

¹⁸⁸ Steer is a global transportation consulting company headquartered in London, England. Ex. 6, at 1 (Cuneo Direct).

In her direct testimony, **Ms. Hamilton** provided a brief history of the Greenway, including the financing to construct, improve, and operate the roadway; outlined the benefits the Greenway provides to the community; discussed toll pricing on the Greenway; provided an overview of the proposed toll increases in the Application; discussed the factors that have impacted the financial performance of TRIP II; discussed the financial impact the Proposed Tolls would have on TRIP II; discussed the impacts of recent changes to the Act; and proposed a process for setting rates going forward under the amended Act.¹⁸⁹

Ms. Hamilton sponsored the following exhibits with her direct testimony:

- CONFIDENTIAL Exhibit RNH-1: Projected Cash Flows – Proposed Tolls;
- CONFIDENTIAL Exhibit RNH-2: Projected Cash Flows – Sample Tolls;¹⁹⁰
- Exhibit RNH-3: Dulles Greenway REA Calculation; and
- Exhibit RNH-4: Internal Rate Of Return.

Ms. Hamilton provided a history of the Greenway starting with the adoption of the Act in 1988, which authorized the construction of private toll roads in Virginia; the issuance of a certificate of authority to TRCV in July 1990; the transfer of the certificate of authority to TRIP II in September 1993; and the opening of the Greenway to traffic in September 1995. Ms. Hamilton stated since the Greenway opened, not one dollar of public funds was used to construct or operate the roadway.¹⁹¹

Ms. Hamilton summarized the benefits the Greenway has provided to Loudoun County, including facilitating economic development and providing part of the transportation network in eastern Loudoun County. According to TRIP II, as a primary artery between Leesburg (and points west) and the DTR (including Reston, Tysons Corner, and other points east), the Greenway provides quicker and more reliable travel times at higher average speeds, lower vehicle operating costs, and a safer driving environment with lower accident rates on a well-maintained and safe roadway. In particular, Ms. Hamilton highlighted the economic benefits to the community of eliminating the tax burden of constructing the roadway, eliminating the daily operations and maintenance expenses, and the environmental benefits associated with the Greenway.¹⁹²

Ms. Hamilton summarized the support TRIP II has provided to charitable organizations in the local community, which among other things, included providing a \$2,000 scholarship each year to a graduating senior at Loudoun County's 15 public high schools and its work with the Loudoun Wildlife Conservancy and the American Eagle Foundation to install two high-definition live-stream cameras overlooking a bald eagle nest.¹⁹³

¹⁸⁹ Ex. 4, at 2 (Hamilton Direct). Ms. Hamilton's direct testimony was filed in both public and confidential versions. The confidential version is Ex. 4C.

¹⁹⁰ The Sample Tolls are also referred to as the Alternate Tolls in TRIP II's Application. See, Ex. 4, at 28 (Hamilton Direct).

¹⁹¹ *Id.* at 3-4.

¹⁹² *Id.* at 4-5.

¹⁹³ *Id.* at 5-7.

Ms. Hamilton described TRIP II's involvement in the Leesburg Bypass Improvement Project, which improved traffic flow on Route 15 to relieve congestion on the west end of the Greenway during the evening commute. TRIP II managed the construction and design of the \$4.4 million project on behalf of Loudoun County and financed 50% of the overall project costs. The project was completed on time and on budget in the Spring of 2022 and provides a safer merge on to the Leesburg Bypass. In addition, Ms. Hamilton described the widening of the Greenway and DTR east of the Mainline Plaza to Centerville Road. This project was completed in January 2021 at a cost of \$17.2 million and improved the safety and traffic flow of Greenway travelers on to the DTR east bound during the morning commute.¹⁹⁴

Ms. Hamilton confirmed that, unlike other state roads and privately operated toll roads in Virginia, TRIP II pays property taxes to Loudoun County every year, which totaled approximately \$1.9 million in 2022. Since it opened, TRIP II has paid approximately \$66 million in taxes to Loudoun County to support economic growth and provide services to its residents. In addition, TRIP II pays \$600,000 in annual land rent to the Metropolitan Washington Airports Authority ("MWAA") under a lease agreement, which is set to increase to \$2 million per year beginning in 2036. In total, TRIP II has paid approximately \$12.7 million to MWAA in land rental fees through 2022, with an additional \$600,000 due at the end of June 2023.¹⁹⁵

Ms. Hamilton provided the financing history for the Greenway. She explained that when it opened in 1995, the total cost to acquire the right-of-way, construct the road, install the paving and safety features, and install the toll collection equipment was approximately \$315 million, which did not include planned improvements TRIP II was required to construct. Additional operating, funding, and development costs were also incurred, which resulted in the original limited partners contributing approximately \$40 million in equity funding and approximately \$311 million in debt funding. The debt funding included approximately \$254 million in fixed-rate First Mortgage Notes and a \$57 million Construction Loan with a 9.80% weighted average annual interest rate.¹⁹⁶

Ms. Hamilton explained the Greenway has failed to meet traffic expectations since it opened and the resulting traffic flows have produced insufficient revenues to meet its debt obligations, resulting in TRIP II refinancing its debt on two occasions and obtaining an extension of its franchise from 2036 to 2056. TRIP II's first debt restructuring was in 1999, resulting in an increase in the total level of debt by \$149 million. As the result of continuing under-performance, TRIP II restructured its debt again in March 2005. This debt refinancing resulted in an increase in debt of approximately \$355 million, bringing the total debt level at the time to \$882 million. TRIP II obtained an extension of its toll road franchise to 2056 to provide it the opportunity to pay-off its restructured debt. The Commission approved both debt restructurings.¹⁹⁷

Ms. Hamilton explained how the debt balance on the Greenway increased from \$882 million in 2005 to more than \$1.121 billion as of December 31, 2022. She indicated the majority of TRIP II's debt is structured as zero-coupon bonds, which are sold at a discount and the interest accrues over the life of the bond, payable upon the bond's maturity along with principle. As a

¹⁹⁴ *Id.* at 7-8.

¹⁹⁵ *Id.* at 8-9.

¹⁹⁶ *Id.* at 9.

¹⁹⁷ *Id.* at 9-10.

result, the amount of outstanding debt increases every year until the bonds reach maturity. The maturity of the bonds were spread over the life of TRIP II's certificate to match anticipated revenues. Lastly, Ms. Hamilton confirmed that TRIP II has not issued any new debt since it refinanced its debt in 2005.¹⁹⁸

As part a condition of refinancing its debt, Ms. Hamilton explained TRIP II cannot make a distribution to its equity holders unless two covenants are met:

1. Minimum Coverage Ratio ("MCR"): Net Toll Revenue (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 and Operating Reserve 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.

Ms. Hamilton explained that TRIP II was able in 2010 to repurchase \$64 million in face value bonds at a discount for \$34 million, but this repurchase did not count towards the calculation of the two bond covenants. TRIP II has not met the MCR since 2010 and has not met the ACR since 2019. As a result, she represented equity investors have received no return on their investment.¹⁹⁹

According to Ms. Hamilton, TRIP II's total debt service for 2023 was approximately \$69.5 million, which is scheduled to increase to \$70.6 million in 2024 and \$71.6 million in 2025. The total debt would increase annually through 2024 when it reaches \$81 million. Ms. Hamilton provided a chart showing TRIP II's total annual debt service through 2056, which totals approximately \$2.6 billion.²⁰⁰

Ms. Hamilton explained tolls for the Greenway are set using a statutory methodology that does not directly take into account debt service or other operating or capital costs of TRIP II. She noted that debt service is the largest expenditure incurred by TRIP II on an annual basis. For that reason, she maintained increasing annual debt service and debt service coverage requirements require steady increases in toll prices for TRIP II to meet its debt obligations and provide a return on its investment. Ms. Hamilton noted in previous Commission cases²⁰¹ the ability of TRIP II to meet its debt obligations was a relevant consideration when evaluating potential changes to the Company's tolls.²⁰²

¹⁹⁸ *Id.* at 10-11.

¹⁹⁹ *Id.* at 11-12.

²⁰⁰ *Id.* at 12-13.

²⁰¹ *See e.g.*, 2013 Investigation Case at 193 n.24.

²⁰² Ex. 4, at 13-14 (Hamilton Direct).

Ms. Hamilton provided TRIP II's debt coverage ratios for the past four years, which are set forth in the table below:

	2019	2020	2021	2022
MCR (1.25x)	1.20x	0.64x	0.85x	0.77x
ACR (1.15x)	1.20x	0.64x	0.83x	0.74x

Ms. Hamilton explained that TRIP II was required in 2022 and 2023 to draw down its reserves to replenish the Early Redemption Fund with respect to obligations under its 2005 series bonds. This was the first time TRIP II had to draw on its reserves to service its debt. Ms. Hamilton indicated that TRIP II expects to utilize additional reserve funds to meet the Early Redemption Schedule for the 2005B bonds in February 2024, with the exact amount dependent on traffic volumes through the end of 2023.²⁰³

Ms. Hamilton discussed the major drivers that impact TRIP II's financial performance. First, she indicated that, unlike other state roads and private toll roads, TRIP II pays property taxes to Loudoun County of approximately \$1.9 million for the year ending December 2022. She also testified TRIP II paid approximately \$1.2 million in additional taxes to the Dulles Rail Service District to fund the Metro Silver Line extension to Loudoun County; and approximately \$210,000 in additional taxes to the Route 28 Highway Transportation District to fund improvements to Route 28. Additionally, Ms. Hamilton mentioned the annual lease payment of \$600,000 to the MWAA, and the requirement that TRIP II pay approximately \$750,000 per year for the Virginia State Police to patrol the Greenway. Second, she emphasized that TRIP II has to compete with public roads, and during the period 2013 through 2019, significant improvements were made to reduce traffic congestion on existing local roads. During this period, she maintained TRIP II was limited in its ability to request toll increases. TRIP II estimated the impact to be 38,000 AADT lost to other local roads by 2019, which equates to approximately \$69 million in annual revenue assuming an average toll of \$5.00. Third, Ms. Hamilton explained TRIP II was unsuccessful in getting an increase in peak tolls in its last rate case. She represented that had the request been approved, for 2021 and 2022, TRIP II would have received an additional \$3 million in revenue. According to Ms. Hamilton, the inability to get approval for the proposed peak tolls continues to impact TRIP II's operating margins.²⁰⁴

Ms. Hamilton explained how TRIP II's toll prices are set under the current statutory scheme. She noted the recent statutory amendments to Code § 56-542 D defined the term "materially discourage use" in the statute; required VDOT to review and provide comments on TRIP II's forward-looking analysis that it must provide as part of its Application; and prohibited the Commission from authorizing more than one annual toll increase. According to Ms. Hamilton, these changes impact TRIP II in two ways: (i) TRIP II will be required to hire traffic experts to develop, and update, "an investment-grade travel demand model" to verify the extent to which its proposed tolls could be expected to impact traffic on the Greenway, which results in costs to all parties each time TRIP II seeks a toll increase; and (ii) the limitation on the Commission that it may approve no more than one annual toll increase may force TRIP II to file near annual toll increase

²⁰³ *Id.* at 15.

²⁰⁴ *Id.* at 16-18.

applications. For this reason, TRIP II is seeking to streamline the Commission's consideration of future applications to reduce regulatory lag and cost.²⁰⁵

Ms. Hamilton explained that to address its concern with regulatory lag and cost, TRIP II proposed that the Commission allow the Company to file future applications utilizing the same methodology and inputs as approved in this case. She further suggested that, if Staff and VDOT determine that TRIP II appropriately updated the inputs and that, based on this updated analysis, the proposed tolls continue to meet the statutory tests consistent with the Commission's prior orders, TRIP II could implement its proposed tolls on a specific date after public notice of the increases and without the necessity for a full rate hearing. She also indicated that if TRIP II determined that changes are needed in its methodology or inputs, the Company would explain the changes and the Commission would have the option of allowing the streamlined process to continue or schedule a hearing on the Company's application.²⁰⁶

Ms. Hamilton compared TRIP II's existing tolls with other tolls charged in the region. She explained the Greenway's minimum off-peak toll for two-axle vehicles is \$5.25 (\$0.38 per mile), \$10.50 for three axles, \$13.10 for four axles, and \$15.75 for five axles or more. The Greenway's peak toll for two-axle vehicles is \$5.80 (\$0.42 per mile), \$11.55 for three axles, \$14.60 for four axles, and \$17.50 for five axles or more. Ms. Hamilton compared these tolls with the tolls on the DTR, which DTR connects from the eastern end of the Greenway to the Capital Beltway in Fairfax County, and the VDOT Express Lanes in the region. She explained the DTR's current 2023 toll is \$6.00 for the 14 mile trip (\$0.43 per mile), \$4.00 for the mainline and \$2.00 at the ramps. She indicated the DTR is scheduled for regular rate increases every five years through 2048 and its next toll increase is scheduled for 2028 when the full trip will increase to \$7.25 (\$0.52 per mile), \$4.72 for the mainline and \$2.50 at the ramps. For the VDOT Express Lanes, Ms. Hamilton explained the cost varies by location. On I-495 from the Springfield Interchange west to the Maryland border which covers 14 miles, the average daytime off-peak toll was \$9.82 (\$0.70 per mile) and the average peak period/peak direction toll was \$18.97 (\$1.35 per mile. On I-95/395 from Courthouse Road near Fredericksburg through the Springfield Interchange to the Potomac River which covers 39 miles of reversable express lanes, the average daytime off-peak toll was \$23.35 (\$0.60 per mile) and the average peak period toll was \$40.54 (\$1.04 per mile). On I-66, which covers approximately 10 miles of reversable express lanes, the tolls are dynamic, increasing with demand to ensure smooth traffic flow and reliable travel times. The average daytime off-peak toll was \$9.82 (\$0.70 per mile) and the average peak period/peak direction toll was \$18.97 (\$1.35 per mile). There is no maximum toll on I-66, as traffic demand for the express lanes increase, the toll increases.²⁰⁷

Ms. Hamilton explained that Code § 33.1-252 requires TRIP II to waive the tolls on the Greenway to numerous state agencies, state officers, and state employees, as well as school buses, public buses, and any commuter bus having a capacity of 20 or more passengers. In addition, tolls are waived for the WMATA. She testified that in 2022, the Greenway accommodated 148,000 non-revenue trips, which resulted in approximately \$814,214 in lost revenue. Since 2010, the Greenway

²⁰⁵ *Id.* at 18-21.

²⁰⁶ *Id.* at 21.

²⁰⁷ *Id.* at 21-25.

has accommodated approximately 2.3 million non-revenue trips, which represents approximately \$11.4 million in lost revenue²⁰⁸

Ms. Hamilton believes TRIP II's Proposed Tolls meet the requirements of Code § 56-542 D because the tolls are reasonable to the user in relation to the benefit obtained and will not materially discourage use of the roadway by the public. She also believes the Proposed Tolls will provide TRIP II no more than a reasonable return and will provide the Company with the opportunity to earn a reasonable return. Additionally, she represented that TRIP II also calculated Alternate Tolls taking into account whether the tolls materially discourage traffic as defined by the Act, which resulted in a maximum peak toll of \$6.45 and a maximum off-peak toll of \$5.85. TRIP II does not support these tolls because they will not allow the Company to earn a reasonable return.²⁰⁹

The financial impact of the Proposed Tolls is included in Ms. Hamilton's Confidential Exhibit RNH-1 under three different scenarios, including (i) negative annual traffic growth of 2.50%; (ii) annual traffic growth of 0.00%; and (iii) positive annual traffic growth of 2.50%. Ms. Hamilton noted that under the traffic scenario of positive traffic growth the revenue from the Proposed Tolls fall over \$2 million short of a break even cash flow, would not be expected to generate any return on equity, but would allow TRIP II to service its debt. Additionally, the revenues would be insufficient to cover the Company's capital requirements in 2024.²¹⁰

Ms. Hamilton explained the REA is a mechanism established by the Commission in Case No. PUA-1990-00013²¹¹ to track and preserve TRIP II's ability to earn a reasonable return considering the tolls actually set under the Act. The REA balance is approximately \$11 billion, which represents the authorized but unearned returns since the construction of the roadway. Ms. Hamilton believes the REA balance will never be fully recovered by TRIP II's equity investors but should be considered when establishing a reasonable rate of return.²¹²

Ms. Hamilton described the internal rate of return ("IRR") analysis provided by TRIP II for Staff to assess the reasonableness of the Company's return on equity ("ROE").²¹³ TRIP II's IRR analysis indicates the Company is entitled to an allowed IRR of 17.8% for the period ending December 31, 2022. The analysis further shows that TRIP II's actual IRR was -3.5%, demonstrating that the Company has earned an inadequate return based on the toll levels that were approved in the 2019 Rate Case.²¹⁴

Ms. Hamilton confirmed that TRIP II's Proposed Tolls were not designed to begin drawing down the REA and will not even allow the Company to break even. She indicated that TRIP II will need several "robust" rate increases over the next several years along with traffic growth to be able to pay dividends to its investors.²¹⁵

²⁰⁸ *Id.* at 25-26.

²⁰⁹ *Id.* at 27-28.

²¹⁰ *Id.* at 29-31.

²¹¹ 1990 Certificate Case.

²¹² Ex. 4, at 31-34 (Hamilton Direct).

²¹³ *See Id.*, at Exhibit RNH-4.

²¹⁴ *Id.* at 34-35.

²¹⁵ *Id.* at 35-36.

In sum, Ms. Hamilton believes TRIP II's Proposed Tolls are needed for the long-term financial health and viability of the Company and the Greenway.²¹⁶

On cross-examination, Ms. Hamilton confirmed that when the Commission approved the 1999 and 2005 debt refinancings, the Commission did not guarantee any particular level of tolls or toll structure. Additionally, she confirmed, subject to check, that no proceeds from either the 1999 or the 2005 refinancing were used to make a distribution to equity investors. She noted the majority of TRIP II's debt was restructured into zero-coupon bonds and the debt was deliberately structured to match anticipated increases in revenues over time from traffic and toll growth.²¹⁷

Ms. Hamilton confirmed that for the 1999 bond refinancing, TRIP II forecast that Greenway traffic for 2023 and 2024 would be approximately 128,000 trips per day, and in this proceeding, TRIP II is forecasting fewer than 37,000 tips per day. She agreed during the same period, the population of Loudoun County increased by 500%. In addition, TRIP II projected an average toll of \$2.48 for 2023 and 2024.²¹⁸

Ms. Hamilton confirmed debt service is the largest annual expense for TRIP II. She further stated that in previous cases, TRIP II's ability to service its debt was an important consideration when evaluating the Company's tolls. She agreed debt service language does not appear in Code § 56-542 D.²¹⁹

Regarding TRIP II's proposed streamlined regulatory process, Ms. Hamilton confirmed that while she did not get into specifics in her direct testimony, the Company wants to work on a collaborative process that would eliminate the need for a full hearing. She suggested TRIP II, Staff, and other interested parties would develop the process, which may or may not include a public hearing. To streamline the process, Ms. Hamilton confirmed TRIP II would use the same methodologies and inputs to the Steer Model that were used in this case. Although Ms. Hamilton recognized that the Steer Model is proprietary, she stated that there are ways for Staff and interested parties to run sensitivity analyses on the Steer Model to verify its results. Ms. Hamilton confirmed that prior to filing its Application, TRIP II did not share the Company's proposed streamlined regulatory process with either Staff or the County.²²⁰

Ms. Hamilton agreed that roads are a cost center for the County, the County does not derive any revenues from the use of its roads, the County maintains roads that connect with the Greenway, and the County has made improvements to some of these roads that connect with the Greenway.²²¹

Ms. Hamilton confirmed that if TRIP II received the peak tolls that it requested in its last toll rate case, the Company's revenues would have been approximately \$3 million higher for 2021 and 2022. She indicated that in February 2022, TRIP II had to use approximately \$17.6 million in reserve funds to replenish the Early Redemption Fund for its 2005 series bonds, and in February

²¹⁶ *Id.* at 36-37.

²¹⁷ Tr. at 208-15 (Hamilton).

²¹⁸ *Id.* at 215-19.

²¹⁹ *Id.* at 219-23.

²²⁰ *Id.* at 225-29.

²²¹ *Id.* at 229-32.

2023, TRIP II had to use approximately \$11.5 million in reserve funds to replenish the Early Redemption Fund for its 2005 series bonds. Ms. Hamilton noted that the additional revenues would have only offset a portion of the draws on the Company's reserve funds.²²²

Ms. Hamilton confirmed the DTR does not have true distanced based tolls, but it does collect a toll at its on/off ramps and at its main toll plaza.²²³ She confirmed the Greenway was not designed for distance-based tolls. Ms. Hamilton referenced the VDOT study that found that distance-based tolls on the Greenway were not practical because of cost.²²⁴

On questioning from the bench, Ms. Hamilton confirmed two capital projects, improving the interconnections with the Leesburg Bypass and the merge with the DTR, were paid out of TRIP II's Improvement Fund and are treated as capital improvements on the Company's books.²²⁵

Ms. Hamilton confirmed the restricted bond accounts on TRIP II's books (Senior Debt Service Fund, Senior Debt Service Reserve Fund, Early Redemption Fund, and Early Redemption Reserve Fund) were required by the Company's bond insurer, who also required the MCR and ACR ratios before an equity distribution could be made.²²⁶

On redirect, Ms. Hamilton agreed that the Great Recession and the COVID pandemic would have impacted any traffic projections that were prepared as part of TRIP II's 1999 bond refinancing. In addition, Ms. Hamilton was unsure whether the forecasted \$2.48 toll for 2023 and 2024 included any adjustment for inflation between 1999 and 2024.²²⁷

Ms. Hamilton confirmed that TRIP II first notified Staff in mid-May that the Company would include a proposed streamlined regulatory process in its Application.²²⁸

Lastly, Ms. Hamilton confirmed TRIP II collects a \$2.00 ramp toll for the DTR when cars exit from the DTR onto the Greenway.²²⁹

In his direct testimony, **Mr. Weller** addressed the traffic operations and traffic characteristics in the Greenway corridor. He also addressed the impact of the COVID pandemic and the ongoing recovery on the roadway. Lastly, Mr. Weller supported the Proposed Tolls and the analysis of two of the criteria under Code § 56-542 D presented by Company witness Cuneo.²³⁰

Mr. Weller explained the Greenway experienced a decline in traffic of up to 75% by April 2020 as the result of the COVID pandemic and its lockdowns. He indicated traffic recovered slightly from May to October 2020, but traffic growth remained slow due to the rise in variants of

²²² *Id.* at 235-36.

²²³ As of January 1, 2023, the two-axle E-ZPass rate for the DTR is \$2.00 at the ramps and \$4.00 at the main toll plaza, resulting in a maximum toll of \$6.00 and a minimum toll of \$4.00 for a partial trip. www.dullestollroad.com.

²²⁴ Tr. at 238-42 (Hamilton); *See*, Ex. 32 at Exhibit RNH-2R.

²²⁵ *Id.* at 243-45.

²²⁶ *Id.* at 246-47.

²²⁷ *Id.* at 249-50.

²²⁸ *Id.* at 250-51.

²²⁹ *Id.* at 252.

²³⁰ Ex. 5, at 2 (Weller Direct).

the virus and continued working from home. He further represented that, compared to 2019 traffic levels, traffic on the Greenway was down 42.8% in 2020, 35.1% in 2021, 30.8% in 2022, and 28.8% through March 2023. He testified that although there has been a steady improvement in traffic levels, peak traffic on the Greenway remains low.²³¹

Mr. Weller noted other roads in the region had similar traffic reductions during the early phases of the COVID pandemic; however, the Greenway and the DTR have been slower to recover due to more prevalent work from home practices continuing in the corridor. He explained that, compared to 2019 levels, DTR traffic was down by 39.5% in 2020, 28.3% in 2021, 19.5% in 2022, and 20.4% through April 2023. Mr. Weller further noted the Greenway and the DTR are part of a technology-centric corridor in which many of the larger employers such as Appian, Google, Microsoft, and others have been slow to require workers to return to the office. As previously noted, the traffic patterns on the Greenway and the DTR have largely mirrored each other, with the Greenway slightly trailing the DTR in terms of recovery. Mr. Weller noted the work from home trend is also evident in other areas of the country that have concentrations of high-tech companies.²³²

Mr. Weller explained TRIP II's view on the continued economic recovery from the COVID pandemic is addressed in the Steer Report. He testified that since there are no independent variables that can be applied to understand the return-to-office pattern and forecast into the future, Steer developed time series models to develop a forecast of traffic patterns based on several return-to-office scenarios. These included: (i) peak period and direction mainline auto; (ii) contra peak direction mainline auto; (iii) off-peak mainline auto; and (iv) mainline weekend auto. The results of this analysis are shown in a chart on page 10 of Mr. Weller's direct testimony.²³³

Mr. Weller discussed the alternative routes to the Greenway and the impact those roads have on ridership. These routes include Routes 7 and 28. He indicated Evergreen Mills Road also provides an alternative to the Greenway for trips to and from the Stone Ridge/South Riding/Chantilly area, connecting Route 15 south of Leesburg to the Loudoun County Parkway. For trips between Ashburn/Brambleton and Dulles Airport, he indicated Waxpool Road, Loudoun County Parkway, Old Ox Road, and Gloucester Parkway to Route 28 provide alternatives to the Greenway. According to Mr. Weller historical traffic patterns have shown that improvements on the alternative routes reduces traffic on the Greenway.²³⁴

Mr. Weller testified that TRIP II monitors traffic times on the alternative routes compared to the Greenway. Through April 2023, the average peak period travel time savings on weekdays was approximately 4.3 minutes in the morning eastbound peak hour and 7 minutes westbound afternoon peak hour. He testified for shorter trips, the Greenway saves on average 8 minutes versus 14 minutes on the free alternatives.²³⁵

²³¹ *Id.* at 3-4.

²³² *Id.* at 4-8.

²³³ *Id.* at 9-10.

²³⁴ *Id.* at 10-11.

²³⁵ *Id.* at 12-13

Mr. Weller described the \$20 million in improvements TRIP II has made to improve traffic flows at the eastern and western ends of the Greenway.²³⁶

Mr. Weller explained TRIP II calculated the Proposed Tolls of \$8.10 peak and \$6.40 off-peak to remain close to the 20% peak price premium the Commission has historically allowed to the base toll. Mr. Weller believes these tolls still provide value for the Greenways customers and will allow TRIP II the opportunity to generate sufficient revenue to meet its financial obligations. He noted the Greenway provides benefits to various market segments at all times of the day, but provides the most benefits during peak periods. Mr. Weller believes the peak pricing is appropriate because as traffic continues to recover and the corridor continues to experience natural economic growth, the peak differential will ensure that Greenway customers are provided reduced traffic and reliable travel times.²³⁷

Mr. Weller explained the Greenway tolls have not kept up with inflation. He maintained both peak and off-peak tolls require increases of 20% and 9% respectively for 2024 to keep pace with inflation. For comparison, TRIP II's Proposed Tolls for peak and off-peak rates are slightly lower than those requested in 2019 after adjusting them for inflation since 2020. Consequently, Mr. Weller asserted the real toll increases sought by TRIP II are slightly lower than those requested in 2019.²³⁸

Mr. Weller discussed TRIP II's proposed methodology for calculating "material discouragement" and an alternative methodology also developed by the Company. He explained based on actual traffic patterns, TRIP II proposed to compare Steer's forecast of 2024 AADT to the actual AADT for calendar year 2022, which was the last year the Company implemented a toll increase. This allowed the Steer Model to consider the impacts of additional factors to assess the impact of the Proposed Tolls on the changes in the Greenway's traffic levels. He indicated TRIP II's alternative methodology is equivalent to the implied elasticity measure that was presented in prior analyses of TRIP II's tolls. The alternative method would use the results of the Steer travel demand model to determine the forecasted traffic in 2024 without a toll increase and compare it to the traffic forecasted by the model in 2024 with the toll increases in place. According to Mr. Weller TRIP II does not support the use of the alternative methodology because it compares two forecasts of traffic, which reduces the reliability of the analysis given the changes that have occurred in recent years.²³⁹

On cross-examination, Mr. Weller confirmed that through March 2023 traffic on the Greenway was down 28.8% relative to 2019 traffic levels, and traffic on the Greenway was recovering from the COVID pandemic more slowly than other roads in the region. He confirmed that traffic on Route 7 and Route 15 recovered to pre-pandemic levels by May 2023, and traffic generally in Loudoun County had recovered to pre-pandemic levels by February 2022. Mr. Weller confirmed that some toll roads in technology centric corridors had recovered to pre-pandemic levels and some have not.²⁴⁰

²³⁶ *Id.* at 14-16.

²³⁷ *Id.* at 17-18.

²³⁸ *Id.* at 18-21.

²³⁹ Ex. 5, at 22-23 (Weller Direct).

²⁴⁰ Tr. at 257-59 (Weller).

Mr. Weller confirmed that improvements to alternative roads have reduced the travel time savings on the Greenway and have also reduced traffic on the Greenway. He agreed the Greenway's toll rates and toll increases impact people's decisions to use these alternative roads.²⁴¹

Mr. Weller confirmed that since the last toll increase in 2019, the Greenway's tolls have not kept pace with inflation. He confirmed that TRIP II did not compare its tolls to inflation since the Greenway opened in 1995.²⁴²

Mr. Weller was asked from the bench if the Greenway is underutilized, how could TRIP II justify its congestion pricing? He replied that the benefits are the travel time savings and the benefits accruing to drivers in the BCA.²⁴³

Mr. Weller confirmed as part of TRIP II's material discouragement analysis, the Company considered the timing regarding filing for toll increases, and traffic growth and limited toll increases in recent years, neither of which is included in Code § 56-542.²⁴⁴

Mr. Weller confirmed the Steer Model, not a measurement of implied elasticity, was used to compare the forecasted traffic in 2024 with and without the proposed toll increases. He acknowledged that although TRIP II does not support this method of measuring material discouragement, TRIP II's reasons for rejecting this methodology are not included in Code § 56-542.²⁴⁵

Mr. Weller explained the price differential on the Greenway, peak and non-peak pricing, was put in place based on expected congestion in the future. He confirmed there is currently no congestion on the Greenway and with a toll increase traffic is likely to decline on the Greenway.²⁴⁶

On redirect, Mr. Weller agreed the lack of congestion on the Greenway is a reason to have congestion pricing and maintained there are positive benefits for all drivers during peak times on the Greenway. In addition, he confirmed the language in Code § 56-542 provides that the Commission shall not approve more than one year of toll rate increases proposed by the operator.²⁴⁷

In his direct testimony, **Mr. Cuneo** explain Steer was retained to prepare a report to support TRIP II's Application. He noted the Steer Report addressed two of the statutory tests required under Code § 56-542. Specifically, the Steer Report details Steer's objective, independent, expert analysis of whether the tolls proposed in TRIP II's Application are reasonable in relation to the benefit obtained; and will not materially discourage use of the Greenway by the public.²⁴⁸

²⁴¹ *Id.* at 261-62.

²⁴² *Id.* at 262-63. When the Greenway first opened the toll was \$1.75 and was lowered to \$1.00 not long thereafter to encourage ridership. The inflation adjusted toll from January 1996 to February 2024 for the \$1.00 toll would be \$2.01 and for the \$1.75 toll would be \$3.52. *See*, Bureau of Labor Statistics – CPI Inflation Calculator at <https://data.bls.gov>.

²⁴³ *Id.* at 263-65.

²⁴⁴ *Id.* at 267-68.

²⁴⁵ *Id.* at 269-70.

²⁴⁶ *Id.* at 270-71.

²⁴⁷ *Id.* at 272-74.

²⁴⁸ Ex. 6, at 2 (Cuneo Direct).

Mr. Cuneo divided his testimony into two parts: (1) Reasonableness of Proposed Toll Prices in Relation to Benefits Obtained; and (2) Proposed Toll Prices' Impact on Use of the Greenway by the Public. In addition, he sponsored the Steer Report, Exhibit DC-2 included with his direct testimony.²⁴⁹

Mr. Cuneo led the team at Steer that conducted the investment grade traffic and revenue study for the Greenway using the Steer Model. He explained the multiple factors that were analyzed as part of developing the Steer Report, including: (i) reviewing the existing conditions on the Greenway and the nearby road network; (ii) reviewing and analyzing data sets of Greenway transactions and toll rates, study area traffic levels, origin-destination trip patterns, and travel times; (iii) reviewing population, employment, and household income levels; and (iv) reviewing and analyzing the Greenway's traffic patterns and the roadway's recovery from the COVID pandemic. He also indicated the Steer Model included the social and economic conditions anticipated during the time period that the Proposed Tolls would be in effect. The model compared the forecasted 2024 traffic levels against the 2022 traffic levels to assess whether the Proposed Tolls meet the material discouragement requirement in the Act. In addition, Steer conducted a BCA to assess the reasonableness of the benefits provided by the Greenway relative to the Proposed Toll rates.²⁵⁰

Mr. Cuneo described the BCA that was developed following the guidance and best practices recommended by the U.S. Department of Transportation ("USDOT"), which provides a systematic framework for qualifying and evaluating the expected benefits and costs of the proposed changes in the Greenway's tolls. He explained that the BCA looked at: (i) value of time ("VOT") savings; (ii) value of reliability ("VOR") savings; (iii) vehicle operating cost ("VOC") savings; and (iv) safety benefit ("SB") savings for several classes of users. The user classes included: personal travel; business travel; airport trips; and truck trips. Alternative routes, in particular Routes 7 and 28, were used for comparison purposes to quantify the Greenway's benefits.²⁵¹

Mr. Cuneo explained how the VOT was calculated for personal travel, business travel and truck travel. He also explained that Steer measured VOR by estimating the additional time travelers plan to offset potential delays, a concept known as "Buffer Time." Although USDOT guidance does not provided specific recommendations on how to measure VOR, Mr. Cuneo indicated the Federal Highway Administration has developed and recommended certain reliability metrics that include Buffer Time and Buffer Time Index. Buffer Time is estimated as the difference between planning (95th percentile) and average (mean) observed travel time. Steer concluded that both the Greenway's lower congestion and higher posted speed limits provide users with VOT and VOR on their trips at all times of the day when compared to alternative routes. Steer also concluded the VOC is lower for users of the Greenway compared to the Composite Alternative Route 2²⁵² because

²⁴⁹ *Id.*

²⁵⁰ *Id.* at 3.

²⁵¹ *Id.* at 4-5.

²⁵² Composite Alternate Route 2 is a combination of three routes, two of which share approximately half their total length. Both of these routes begin on Evergreen Mill Road on the south side of Leesburg. The first route takes Evergreen Mill Road until it tees into Loudoun County Parkway, follows Loudoun County Parkway until it connects with Old Ox Road, and then on to Route 28, before continuing to the DTR. This route has a posted speed of 55 mph for most of its length with some sections at 45 mph and 35 mph. The second route turns off of Evergreen Mill Road by way of Ryan Road to access Loudoun County Parkway, before taking Waxpool Road to connect to Route 28, and then to the DTR. This route is longer and has a greater portion of its length at 45 mph or lower. The third route is the

of the non-stop option offered by the Greenway results in reduced vehicle wear and tear and more efficient fuel consumption. However, Mr. Cuneo represented the Greenway had a slightly higher VOC relative to Alternative Route 1²⁵³ due to the Greenway's higher travel speed causing higher fuel consumption. He testified that Steer calculated the SB savings by comparing vehicle accident rates on the Greenway with vehicle accident rates on alternative routes. According to Mr. Cuneo Steer concluded that the Greenway provides SB savings to users by reducing the likelihood of fatalities, injuries, and property damage from vehicle crashes due to lower rates of accidents or levels of each accident's severity.²⁵⁴

Mr. Cuneo testified that based on the Steer Report, and relative to Routes 7 and 28, all auto users of the Greenway accrue positive benefits that are greater than the toll rate during peak travel times, and all auto users except those for commuting or personal travel have positive benefits during off-peak travel times. He indicated that for truck travelers, the benefits are less than the costs for peak and off-peak travel times. Mr. Cuneo indicated that combining for all travelers and time periods, the Greenway provides a positive benefit-cost ratio of 1.15 relative to Routes 7 and 28. Mr. Cuneo noted the Steer Report did not capture qualitative benefits of driving on the Greenway such as peace of mind from driving on a well-maintained limited access roadway, an increased sense of safety from driving on a road with limited truck traffic, and driving on a road with no traffic signals.²⁵⁵

Based on the Steer Report, Mr. Cuneo opined that the Proposed Tolls are reasonable to the user in relation to the benefit obtained.²⁵⁶

Mr. Cuneo described the "materially discourage use" analysis in the Steer Report. As represented in the Steer Report, the Proposed Tolls meet the 3% material discouragement test required under the Act because the Steer Model forecasts traffic to be 8.1% higher in 2024 following the proposed toll increases, than in 2022, the year of the last toll increase.²⁵⁷

Based on the Steer Report, Mr. Cuneo opined that the proposed increase in tolls will not materially discourage use of the Greenway.²⁵⁸

On cross-examination, Mr. Cuneo confirmed that population growth drives traffic growth and agreed the population of Loudoun County has grown dramatically since the Greenway opened in 1995. In addition, he acknowledged the population of Fairfax County has grown but not to the same extent as Loudoun County. Mr. Cuneo confirmed similar growth in employment were

shortest of the three but has the largest portion of the route at 45 mph or lower. The route starts on Sycolin Road, which changes its name to Ashburn Farm Parkway, before connecting with Waxpool Road, and takes Route 28 to the DTR. The final Composite Alternate Route is the weighted average of the times and distances based on their relative traffic share of the three routes described above. *See*, Ex. 19, at 9 (Smith Direct).

²⁵³ Alternate Route 1 begins at the Route 7/15 Bypass and proceeds east on Route 7 and then exits south on Route 28 to reach the DTR. In this area, Route 7 is a six-lane divided highway and Route 28 is a limited access divided highway. Alternate Route 1 is approximately the same length as the Greenway, 14 miles, and the speed limit is 55 miles per hour ("mph") compared to 65 mph for the Greenway. *See, Id.* at 8.

²⁵⁴ *Id.* at 5-10.

²⁵⁵ *Id.* at 11-12.

²⁵⁶ *Id.* at 12.

²⁵⁷ *Id.* at 12-17.

²⁵⁸ *Id.* at 18.

observed in both counties. He agreed that during the period 2005 through 2023, traffic generally declined from 60,000 trips per day on the Greenway to fewer than 40,000 trips per day.²⁵⁹

Mr. Cuneo confirmed that Steer did not provide its proprietary traffic demand model to the County, but maintained that is common in traffic and revenue forecasting. He confirmed that the County provided AECOM's proprietary model to Steer subject to the Protective Ruling entered in this case. In addition, Mr. Cuneo confirmed that Steer did not provide its capture model to the County, but did share the details of how the model operates.²⁶⁰

Mr. Cuneo explained in calibrating the Steer Model to produce forecasts that accurately matched observed traffic, Steer established the \$0.50 Electronic Payment Bonus ("EPB") for all drivers of the Greenway, whether they drive one exit or the entire Greenway, and the bonus is included in the VOT calculation.²⁶¹

Mr. Cuneo confirmed the VOT used in the Steer Model was \$32.90 per hour for peak times and \$25.60 for off-peak times. He explained the BCA follows USDOT guidance and uses strictly income information to determine VOT, which varies by user segment. For comparing against Alternative 1, the Steer capture model used a VOT of \$38.44 per hour to \$63.91 per hour for peak trips and \$38.44 to \$43.09 for off-peak trips, which replicates actual driver behaviors.²⁶²

Mr. Cuneo confirmed the Steer Model considered users of the Greenway who lived or worked in Loudoun County or Fairfax County. The model did not consider users who may reside outside those two counties, which Mr. Cuneo confirmed is consistent with USDOT guidance.²⁶³

Mr. Cuneo agreed VOR is a component of VOT, and confirmed the higher the VOT, the higher the VOR. He also agreed the VOR in this case is higher than the VOR used in the 2019 Rate Case by approximately 100%. To calculate the VOR, Mr. Cuneo explained Steer looked at Buffer Time and determined that westbound afternoon peak traffic was five times greater than eastbound morning traffic. He also confirmed Steer used one week of traffic, October 4, 2022 to October 10, 2022, in its VOR analysis. The traffic information for that week was purchased by TRIP II from TomTom and supplied to Steer. In contrast, Mr. Cuneo confirmed the 2019 Rate Case relied on one year of TomTom traffic data to compute VOR.²⁶⁴

Mr. Cuneo distinguished the BCA analysis used in the 2019 Rate Case, which analyzed full and partial trips, with Steer's analysis in this case, which only analyzed full trips. Mr. Cuneo believes the consultant in the 2019 Rate Case made a simplifying assumption that the benefits of partial trips were proportional to the distance and that the analysis in that case was for illustrative purposes. Mr. Cuneo confirmed Steer did not perform a BCA for partial trips because it would have been a more involved process to develop it and to do it properly. Mr. Cuneo is unaware of any requirement that would have prohibited Steer from doing a partial trip BCA.²⁶⁵

²⁵⁹ Tr. at 281-82 (Cuneo).

²⁶⁰ *Id.* at 282-84.

²⁶¹ *Id.* at 285-87.

²⁶² *Id.* at 286-89.

²⁶³ *Id.* at 290-91.

²⁶⁴ Tr. at 289-96 (Cuneo).

²⁶⁵ *Id.* at 296-98, 305-06.

Mr. Cuneo confirmed the Steer Model compared 2024 forecasted traffic with 2022 actual traffic and determined there would be no material discouragement with the proposed toll increases. He reported that based on the results of the Steer Model, an increase of peak tolls of 40% and off-peak tolls of 22%, the model forecasted that daily travel would increase by 8.1%. Mr. Cuneo confirmed the decision to compare 2022 actual traffic with 2024 forecasted traffic was based on rate case timing considerations and limited toll increases in recent years, neither of which are addressed one way or the other in Code § 56-542. Mr. Cuneo agreed that comparing 2022 actual traffic with a 2024 forecast would, at least in part, reflect the impact of the 2019 rate increase. Mr. Cuneo agreed it would be possible to compare 2024 traffic with and without the toll increase, and acknowledged this appeared to be the analysis performed by the AECOM’s model.²⁶⁶

Mr. Cuneo confirmed the Steer Model compared 2024 traffic with and without the toll increase and determined there would be a 6.3% decrease in traffic.²⁶⁷

On redirect, Mr. Cuneo explained the usual industry practice in developing an investment grade travel demand model and what information is shared among the various consultants involved in the case. Mr. Cuneo cited an example of an investment grade travel demand model Steer developed for the I-66 outside the beltway project that was reviewed by traffic advisors for the lenders, USDOT, VDOT, and the credit rating agencies. In this case, Mr. Cuneo confirmed Steer was willing to share all information produced by the Steer Model, outside the proprietary portions of the model.²⁶⁸

Virginia Department of Transportation Review

On behalf of VDOT, C&M conducted a review of TRIP II’s forward-looking analysis filed with its Application. C&M focused its review on three areas of TRIP II’s forward-looking analysis: (i) the rate-benefit analysis which reviewed whether TRIP II’s forward-looking analysis demonstrates the proposed toll rate change “will be reasonable to the user in relation to the benefit obtained,” pursuant to Code § 56-542;²⁶⁹ (ii) the roadway use analysis which reviewed whether TRIP II’s forward-looking analysis demonstrates the proposed toll rate change will “materially discourage use of the roadway,” as defined in Code § 56-542 A;²⁷⁰ and (iii) the operator return analysis which reviewed the methodological completeness of TRIP II’s forward-looking analysis demonstrating whether the proposed toll-rate change will “provide the operator no more than a reasonable return,” pursuant to Code § 56-542.²⁷¹ Lastly, C&M provided general comments regarding TRIP II’s forward-looking analysis.²⁷²

C&M reviewed TRIP II’s forward-looking rate-benefit analysis and commented on whether the analysis demonstrates that the proposed toll rate change “will be reasonable to the user in relation to the benefit obtained,” pursuant to Code § 56-542. C&M commented: “[t]he overall rate-benefit methodology and analysis in TRIP II’s forward-looking analysis appears to be reasonable

²⁶⁶ *Id.* at 299-303.

²⁶⁷ *Id.* at 303-04.

²⁶⁸ *Id.* at 306-09.

²⁶⁹ Ex. 3, at 5-6 (VDOT Review).

²⁷⁰ *Id.* at 7-10.

²⁷¹ *Id.* at 11.

²⁷² *Id.* at 12.

within the constraints of provided data and information, as included in the TRIP II report. . . . For the sections/paragraphs not mentioned in the comments below, C&M finds the discussion reasonable, in principle.”²⁷³

C&M’s specific comments on TRIP II’s rate-benefit analysis included the following. First, C&M commented TRIP II’s forward-looking analysis appears to focus solely on the Greenway; however, the BCA guidance from the USDOT requires this analysis to be performed at the corridor level (project facility plus competing roadways) to determine the impact of traffic shifted to alternative roadways and any “disbenefits” accruing to those roadways. C&M understood TRIP II’s rate-benefit analysis was “a unique approach used in context of the given analysis to show user benefits.”²⁷⁴ However, C&M believes the “approach may not fully comply with USDOT’s BCA guidance”²⁷⁵ Second, C&M commented TRIP II’s analysis should consider additional origin-destination pairs to consider the Greenway’s benefit in a larger regional setting and possibly more locally. C&M believes assessing these additional origin-destination pairs “could change the [Greenway’s] benefit calculation.”²⁷⁶ Third, C&M commented that TRIP II should consider expanding its study area beyond Loudoun and Fairfax Counties. C&M believes “a more comprehensive analysis to identify the [Greenway’s] area of influence would be more appropriate.” Although it might not change the overall results, C&M believes it would make TRIP II’s analysis more robust.²⁷⁷ Lastly, C&M commented there are unclear elements in TRIP II’s analysis concerning the VOT savings for trucks using the Greenway.²⁷⁸

C&M reviewed TRIP II’s forward-looking rate-benefit analysis and commented on whether the analysis demonstrates that the proposed toll rate change “will materially discourage use of the roadway,” as defined in Code § 56-542 D. C&M found: (i) TRIP II’s methodology for the roadway use analysis to be simplistic, “relying on generic assumptions and limited corridor-specific studies;” (ii) based on the observed traffic for recent months, “the growth rate thus far appears to lag behind the recovery assumed in the traffic forecast for 2024;” and (iii) “addressing the material discouragement clause by comparing traffic levels from two years is an arguable approach.”²⁷⁹ C&M found the overall methodology used by TRIP II “under the roadway use analysis reasonable within the bounds of the presented data inputs.” Lastly, C&M provided additional comments concerning TRIP II’s roadway use analysis.²⁸⁰

C&M’s comments on TRIP II’s roadway use analysis included the following. First, C&M commented Trip II’s 7.4% base rate case traffic growth seems to be optimistic, even with projected population growth and planned land development, which implies optimistic COVID pandemic recovery assumptions in the study. Additionally, C&M noted “the network improvements presented in Table 4-2 and Table 6-1 of TRIP II’s forward-looking analysis, as well as transit operation improvements in the Dulles Corridor, including WMATA’s Silver [L]ine, could likely

²⁷³ *Id.* at 5.
²⁷⁴ *Id.*
²⁷⁵ *Id.*
²⁷⁶ *Id.* at 6.
²⁷⁷ *Id.*
²⁷⁸ *Id.*
²⁷⁹ *Id.* at 7.
²⁸⁰ *Id.*

result in reduced traffic growth on the Dulles Greenway.”²⁸¹ Second, C&M commented TRIP II’s method of estimating “material discouragement” based on two different years is open to interpretation. Specifically, C&M noted that the wording in the statute “takes population growth into consideration” is open to interpretation. C&M explained “evaluating traffic volumes in 2024 (with a toll increase) versus 2022 (observed toll rate), may have implications regarding material discouragement evaluation.” Considering its concerns with the language of Code § 56-542, C&M was unable to comment further on this aspect of TRIP II’s analysis.²⁸² Third, C&M commented TRIP II’s roadway use analysis does not consider the shift to other traffic modes (Washington Metro and Commuter Buses) due to a toll rate increase. C&M believes “it would be prudent to consider the impact of mode shifts to the available competing transit routes with an increase in tolls in the Greenway corridor.”²⁸³ Fourth, C&M raised concerns with TRIP II’s methodology for computing its VOT estimates for peak and off-peak periods in 2019 dollars per hour, based on prevailing household incomes. C&M explained “[t]his is different from the industry standard for investment grade studies where corridor-specific studies/surveys are typically conducted to determine assumptions/inputs, such as VOT by different market segments, including vehicle type, trip purpose, time period, and day of travel, among other elements.”²⁸⁴ Fifth, C&M commented that TRIP II’s loaded network comparisons show alternative routes having lower growth rates than the Greenway. TRIP II’s comparison indicates higher daily traffic growth of more than 7% for the Greenway (even with higher tolls) than the other competing roads, Route 7 (4%) and Route 28 (2%), implying a faster recovery on the Greenway as a toll road compared to toll-free alternatives in the corridor.²⁸⁵ Sixth, C&M expressed concern with the capture rate model in the roadway use analysis, which estimates the proportion of traffic that shifts to the Greenway under current conditions including prevailing toll rates and traffic conditions. C&M is concerned that “it is unclear whether the capture rate model for the future year proposed toll rate scenario accounts for the network improvements along the corridor, such as Route 7 widening, which would reduce the congestion on alternative roads and may result in lower capture rates on the Greenway.”²⁸⁶ Lastly, C&M commented TRIP II’s 2024 network does not reflect Route 7 widening improvements as reported in the study. C&M views Route 7 as a competing alternative for long-distance trips, and any major improvements to Route 7 may impact Greenway traffic.²⁸⁷

C&M reviewed TRIP II’s operator return analysis to determine whether TRIP II applied industry-standard methods, models, and assumptions when ascertaining whether the proposed toll rate change “will provide the operator no more than a reasonable return,” pursuant to Code § 56-542.²⁸⁸ Given the information reviewed, “C&M believes that the methodology and inputs used by TRIP II are sufficient to perform an adequate analysis and calculation of the operator return for the proposed toll increases.”²⁸⁹

²⁸¹ *Id.*

²⁸² *Id.* at 8.

²⁸³ *Id.*

²⁸⁴ *Id.* at 9.

²⁸⁵ *Id.*

²⁸⁶ *Id.* at 10.

²⁸⁷ *Id.*

²⁸⁸ *Id.* at 11.

²⁸⁹ *Id.*

Finally, C&M summarized its comments on its review of TRIP II's forward-looking analysis. C&M confirmed that it "did not conduct any additional analysis as part of [its] review," and its "comments are not intended to provide a judgment of the results included in TRIP II's [A]pplication."²⁹⁰ C&M's comments were "focused entirely on the methodological completeness of TRIP II's forward-looking analysis."²⁹¹ C&M found the overall methodology followed under TRIP II's forward-looking analysis was reasonable given the data presented and other information supporting the Application. However, C&M noted that TRIP II's methodology "could benefit from more detailed corridor-based studies, which are typically expected in an investment grade analysis," and "the actual traffic recovery needs to be closely monitored in the near term against the included traffic forecast in TRIP II's forward-looking analysis."²⁹² C&M stated this is particularly true given the delayed traffic recovery observed in the Greenway's most recent traffic data.²⁹³

Board of Supervisors of Loudoun County

The County presented the direct testimony of four witnesses: **Tim Hemstreet**, County Administrator for Loudoun County; **Joseph Kroboth, III, PE**, Deputy Assistant County Administrator for Loudoun County; **David B. Roden, PE**, Senior Consulting Manager at AECOM,²⁹⁴ and **Michael J. Webb, PhD**, Vice President of Regulatory Economics Group, LLC ("REG").²⁹⁵

In his direct testimony, **Mr. Hemstreet** discussed the County's motivation for participating in this case, and explained the County's growth and how TRIP II's Application to increase tolls on the Greenway will harm that growth.²⁹⁶

Mr. Hemstreet explained the Greenway is a significant component of the County's transportation network between Leesburg and Route 28, and the County has a vested interest in its operation. He indicated the Greenway was intended to alleviate congestion on local roads and provide a reasonably priced and faster alternative to travel across the eastern part of the County. Mr. Hemstreet noted the County's population has increased significantly since 2005, while Greenway traffic decreased and traffic on major alternatives (Routes 7, 28, and 50) increased. Additionally, he maintained TRIP II's own analyses show that the Greenway's high tolls are pushing traffic onto local roads, and as a result, more state and local funding is required to maintain those roads. Mr. Hemstreet described the Greenway as a luxury that most ordinary citizens in Loudoun County cannot afford. He believes the Greenway should benefit all citizens and visitors, not just the most affluent.²⁹⁷

²⁹⁰ *Id.* at 12.

²⁹¹ *Id.*

²⁹² *Id.*

²⁹³ *Id.*

²⁹⁴ AECOM is a global consulting firm with an office in Arlington, Virginia, that provides advice on a variety of infrastructure and transportation projects. Ex. 8, at 2 (Roden Direct).

²⁹⁵ REG provides a broad range of consulting services to regulated firms, primarily in the energy industry. Ex. 10, at 2 (Webb Direct).

²⁹⁶ Ex. 27, at 3 (Hemstreet Direct).

²⁹⁷ *Id.* at 3-4.

Mr. Hemstreet explained that as part of the County's transportation planning, public input is sought and such input indicates the Greenway's high tolls are driving users off the roadway onto other local roads, which is a factor in the County's planning process. He represented that if TRIP II's latest toll increase is approved, the County will advise its employees to avoid the Greenway when traveling on official business because paying the higher tolls is not a good use of resources.²⁹⁸

Mr. Hemstreet explained the County has grown from 86,000 residents in 1990 to 420,959 in 2020, an over fourfold increase. He represented that Loudoun County has been the fastest growing county in Virginia for decades and is one of the five fastest growing counties in the nation. The County expects its population to increase to 550,000 by 2050. The County has seen similar economic growth driven primarily by Dulles Airport and a world-class digital fiber network. The County is seeking to diversify its economic base by creating desirable areas to attract new corporate headquarters, which is dependent on the quality of life offered by the County. Mr. Hemstreet described the County's efforts to promote tourism, which has a more than \$1.7 billion economic impact for the County and supports approximately 17,000 tourism jobs.²⁹⁹

Mr. Hemstreet described how the Greenway's toll rates impact the County's growth and development. He explained to attract economic growth, the County needs its transportation infrastructure to work and not be financially burdensome. He testified that for years, the County has heard from its citizens and businesses that the Greenway is negatively impacting the County's economy. Mr. Hemstreet noted the Greenway's tolls are already too high and have discouraged use of the roadway, as the County seeks to grow its economy. From the County's perspective, if the Greenway would help facilitate economic growth, the County would *want* drivers to use the roadway, not avoid it as they are currently doing. Mr. Hemstreet believes raising rates at this time will only result in fewer and fewer users of the Greenway.³⁰⁰

Mr. Hemstreet explained a factor in the County's transportation planning process is traffic that is diverted off the Greenway because of high tolls, which ultimately requires more investment from the County and the Commonwealth to accommodate the increased traffic on local roads.³⁰¹

Finally, Mr. Hemstreet addressed TRIP II's proposal to streamline the Commission process to consider future Greenway toll increases. He maintained TRIP II has not sufficiently explained what sort of alternative process it is seeking. Mr. Hemstreet confirmed since the County and its citizens have a significant interest in the Greenway's toll rates and their impacts on local alternative roads, the County strongly opposes any changes that would limit public and/or the evidentiary hearing process. To the extent the Commission might seek to shorten the procedural schedule, Mr. Hemstreet reminded the Commission of the process a locality must follow to participate in a Commission proceeding.³⁰²

²⁹⁸ *Id.* at 4.

²⁹⁹ *Id.* at 5-6.

³⁰⁰ *Id.* at 6-7.

³⁰¹ *Id.* at 7.

³⁰² *Id.* at 7-8.

On surrebuttal, Mr. Hemstreet confirmed the County is not competing to draw traffic away from the Greenway. The County views the Greenway as part of its critical transportation infrastructure; however, the County cannot rely on the Greenway to move traffic. He explained that for the County, road improvements are a cost center not a revenue center. He represented the County's six-year capital improvement budget is \$3.5 billion, and 40% of that is dedicated to road construction.³⁰³

Mr. Hemstreet confirmed the County opposes TRIP II's proposed toll increases because they create an additional burden on the County's residents and businesses. In addition, he maintained the Greenway's tolls discourage use so the roadway does not relieve traffic congestion which forces the County to expend tax dollars to mitigate traffic congestion caused by underutilization of the Greenway.³⁰⁴

Mr. Hemstreet was unaware of any outreach or notification by TRIP II prior to filing its Application regarding the Company's proposed streamlined regulatory process.³⁰⁵

On cross-examination, Mr. Hemstreet confirmed the County announced its opposition to TRIP II's proposed toll increases three days after the Company filed its Application with the Commission.³⁰⁶

Mr. Hemstreet acknowledged that TRIP II pays taxes to the County and the County would not want to lose a substantial amount of tax revenue. In terms of TRIP II's proposed toll increases, he maintained the County wants to ensure that TRIP II justifies the increases and that the increases meet the requirements of Code § 56-542.³⁰⁷

On redirect, Mr. Hemstreet confirmed that, when TRIP II filed its Application, no one from the Company reached out to the County to engage in any sort of collaborative process to streamline the regulatory process to adjust tolls in the future. He further confirmed the County opposes the toll increases proposed in this case primarily because of the 40% peak and the 20% off-peak toll increases. The County believes the increases do not meet the statutory standards, and in particular, the increases should not materially discourage use of the Greenway.³⁰⁸

In his direct testimony, **Mr. Kroboth** responded to certain allegations made by TRIP II witness Hamilton with respect to the County's investments in local roads outside the Greenway.³⁰⁹

In particular, Mr. Kroboth addressed the statement that the County made "significant investments" in order to "develop free alternatives to compete with the Greenway." He strongly disagreed with the statement. Mr. Kroboth explained that prior to 2012, the Commonwealth and private developers were the primary funding sources and constructors for the roadway improvements in the County. He indicated that from 2020 through 2024, the County appropriated

³⁰³ Tr. at 492-93 (Hemstreet).

³⁰⁴ *Id.* at 493.

³⁰⁵ *Id.* at 493-95.

³⁰⁶ *Id.* at 496-501.

³⁰⁷ *Id.* at 503-04.

³⁰⁸ *Id.* at 505-07.

³⁰⁹ Ex. 30, at 3 (Kroboth Direct).

approximately \$697 million to accommodate its rapid growth. Mr. Kroboth confirmed the County does not invest its limited public resources to “compete” with the Greenway because there is no incentive to do so. He explained local roads are a cost center for the County, not a revenue source. He further explained the County, Commonwealth, regional partners, and the private sector (collectively, “Transportation Partners”) have invested significant resources to maintain and improve local roadways to facilitate access and travel to and from various parts of the County. Mr. Kroboth cited numerous instances in which improvements made by the County have enhanced connectivity opportunities for the Greenway, not compete with it. However, he believes exorbitant toll rates on the Greenway have created a cost barrier for many drivers traveling through the County. As a result, he believes those drivers have switched to using local roads.³¹⁰

Mr. Kroboth further explained, as it relates to the Greenway, the County and its Transportation Partners are best described as “providers of last resort.” He noted that County residents and visitors are free to use the Greenway if they are willing to pay the requisite tolls. But if they are unwilling or unable to pay the tolls, the County and its Transportation Partners must maintain and improve the alternatives to the Greenway (Routes 7, 28, and 50) to accommodate the additional traffic.³¹¹

Mr. Kroboth explained how the County prioritizes planned transportation improvements. The County relies on its Capital Improvement Program (“CIP”) and VDOT’s Six-Year Improvement Program (“SYIP”) to plan and prioritize transportation improvements, which are generally prioritized based on congestion mitigation and safety. New roadways and alignments are determined by computer modeling of trips generated by planned uses. Competitively awarded funding is awarded to specific projects using a performance-based analysis to address congestion mitigation, safety, economic development, and connectivity. Mr. Kroboth maintained the premise that the County competes with the Greenway is counterintuitive to the County’s goals of reducing congestion, providing for local land use access, and improving safety.³¹²

Mr. Kroboth summarized the County’s CIP and VDOT’s SYIP process. He indicated that as a result of those processes, the County’s priority projects include: (1) projects that complete missing segments of arterial and major collector corridors that are included in the Commonwealth Transportation Plan; (2) projects within the County’s Intersection Improvement Program to add capacity to reduce congestion and the frequency of crashes; (3) projects to provide connectivity in and around the County’s Metro stations; (4) projects that provide significant economic development benefits to the County; (5) projects within the County’s Sidewalk and Trail Program to offer multi-modal choice for the County’s citizens; and (6) projects that incorporate “complete streets” concepts and features.³¹³

Finally, Mr. Kroboth explained how the Greenway factors into the County’s transportation planning. He noted that over the period 1990 and 2020, the County’s population more than quadrupled, which included residents who would be expected to use the Greenway for regular travel. He noted use of the Greenway has *declined* over the same period, and, even if TRIP II’s

³¹⁰ *Id.* at 3-5.

³¹¹ *Id.* at 5.

³¹² *Id.* at 5-6.

³¹³ *Id.* at 6-7.

analysis is accurate, which he disputed, the Application shows that Greenway traffic has declined while the County's population has increased dramatically. Mr. Kroboth explained the fact that many more residents and visitors to the County are relying on local alternatives to the Greenway suggests these former users no longer find the tolls reasonable in relation to the purported benefits obtained by using the Greenway. If priced appropriately, Mr. Kroboth believes the Greenway has a competitive advantage because it is the only east-west roadway corridor designed and constructed to limited access highway standards, and Dulles Airport prevents competing parallel routes from being developed. In addition, since in his assessment the Greenway's Current and Proposed Tolls materially discourage use of the roadway, Mr. Kroboth believes the roadway will never be expanded from its current six lanes to accommodate any additional traffic.³¹⁴

On surrebuttal, Mr. Kroboth explained how the County and VDOT prioritize improvements to local roads. The primary consideration is to reduce congestion and improve safety. After that, the focus is on addressing missing roadway links, access to Metro stations, and the intersection improvement program to address congestion and safety. Finally, land development projects that support economic development are addressed. Mr. Kroboth detailed the County roadway projects designed to improve access to the Greenway, including the Belmont Ridge corridor, Loudoun County Parkway corridor, Crosstrail Boulevard corridor, Old Ox Road corridor, and Route 28. He confirmed access to the Greenway is part of the County's transportation plan.³¹⁵

On cross-examination, Mr. Kroboth confirmed the County does not compete with the Greenway. In fact, Mr. Kroboth believes if tolls are priced appropriately, the Greenway has a distinct competitive advantage in a motorist's route selection decision because it is the only east-west limited access highway in Loudoun County.³¹⁶

In his direct testimony, **Mr. Roden** addressed the Steer Report, identified its flaws, discussed the Steer Report's toll elasticity modeling, explained the results of a similar modeling analysis performed by AECOM, and discussed the findings of AECOM's 2024 Analysis.³¹⁷

Mr. Roden described the Steer Report, which was an investment grade traffic and revenue study for the Greenway. He noted the Steer Report generally followed a state-of-practice travel demand modeling approach for traffic and revenue studies. However, Mr. Roden identified several issues relating to Steer's major assumptions and key inputs that raise concerns with the Steer Report's results and conclusions. First, there were several issues with the VOT factor used in the report, including that VOT values were inconsistently documented and were higher than VOT values used by other local transportation agencies. Second, Steer applied an EPB in its model that is not commonly used and not adequately supported in the report. Third, Steer failed to account for changes to the networks in its 2022 and 2024 models. Fourth, Steer did not appropriately document how the Logit capture model was applied in the report.³¹⁸

³¹⁴ *Id.* at 7-9.

³¹⁵ Tr. at 509-10 (Kroboth).

³¹⁶ *Id.* at 529-30.

³¹⁷ Ex. 8, at 4 (Roden Direct).

³¹⁸ *Id.* at 4-5.

Mr. Roden identified the inconsistencies in the VOT values used in various sections of the Steer Report. He explained the contradictory VOT values used in the Report call into question Steer's conclusions regarding user benefits. While Steer claimed the various VOT values were tested in a general cost of travel calculation, Mr. Roden stated it is unclear why VOT values were calculated alongside other parameters. He further stated VOT values are usually determined using income data or survey data and should remain unchanged once determined. He asserted that assuming Steer used the values of \$32.90 per hour for peak times and \$25.60 per hour for off-peak times, Steer's VOT is higher than VOT values used in other local studies and regional models. He explained that by comparison, the MWAA conducted a comprehensive traffic and revenue study for the DTR in 2018 based on a stated preference survey. In the MWAA study, the average VOT was estimated based on the survey data at \$19.38 per hour, which is approximately 40% lower than Steer's VOT. The MWAA conducted a second study for the DTR in 2021, which reported a VOT value of \$28.61 for home-based work trips and lower VOT values, ranging down to \$19.74, for other trips. According to Mr. Roden for the greater Washington D.C. region, VOT values for single occupancy vehicles range between \$29 and \$25 in 2019 dollars for peak and off-peak time periods. For Loudoun County, he identified VOT values for single occupancy vehicles range from \$18 for peak hours and \$12 for off-peak per hours.³¹⁹

Mr. Roden explained the other factors that should be taken into consideration when calculating VOT. In particular, he noted when income increases, the VOT grows at a slower rate. Since VOT growth is slower as income increases, he maintained the factor used to calculate the VOT based on income should be smaller at higher income levels. In addition, he explained VOT values from different sources are comparable with each other as long as there is an understanding of the differences in market segment, such as time-of-day, trip purpose, vehicle occupancy, and vehicle class.³²⁰

In sum, Mr. Roden believes the VOT values used in the Steer Report are much higher than VOT values used by transportation agencies in the Washington D.C. region. He also indicated the higher VOT impacts the VOR used in the Steer Report resulting in an overstatement of the VOR.³²¹

Mr. Roden addressed the EPB used in the Steer Report. He noted Steer reduced the toll rates used in its model by \$0.50 to account for the fact that users of the Greenway might discount the toll in their mind due to the passage of time between using the roadway and paying the Smart Tag or E-ZPass bill. Mr. Roden and his firm found that this approach is uncommon, lacked rationale for use in traffic and revenue modeling practice, and Steer failed to provide sufficient research to support the discount. Mr. Roden noted applying the \$0.50 discount could result in underestimating toll sensitivity, which could lead to an incorrect conclusion.³²²

Mr. Roden noted other deficiencies in the Steer Report, including failing to account for changes in the transportation network in 2022 and 2024. He indicated that in the 2022 network, Steer failed to include improvements in Route 7 from west of Tyson's Corner to Fairfax County Parkway. He maintained these improvements make it easier to use Route 7 to access the DTR or

³¹⁹ *Id.* at 5-8.

³²⁰ *Id.* at 8-9.

³²¹ *Id.* at 9-10.

³²² *Id.* at 10-11.

continue on Route 7 to Tyson’s Corner, which will likely reduce the travel time savings offered by the Greenway. According to Mr. Roden, Steer also failed to include improvements to seven interchanges on Route 7, as well as a road-widening improvements on Sycolin Road from Hope Parkway to Loudoun Center Place. Furthermore, he contended in the 2024 network, Steer failed to include several road-widening projects, including Belmont Ridge Road from the Loudoun County Parkway to Waxpool Road; Farmwell Road from Ashburn Road to Waxpool Road; Route 7 from Reston Parkway to the DTR; and I-66 HOV lanes and general purpose lanes from the Beltway to US-29.³²³

Mr. Roden also raised concerns with the Steer Report’s failure to document how the Logit capture model was used in the traffic assignment procedure. In his assessment, it is unclear how the traffic is loaded to the network using the model, which is needed to determine if the model is structured correctly.³²⁴

In sum, Mr. Roden and AECOM believe the forgoing flaws in the Steer Report led to biased analyses and results.³²⁵

Mr. Roden explained toll elasticity and provided an example of a toll sensitivity curve for the DTR Mainline Toll Plaza reported in MWAA’s traffic and revenue study from 2018.³²⁶ He explained when the toll rate is low, users are relatively insensitive to toll increases, so revenue can be increased by increasing the toll. When the toll rate is high, users become very sensitive to any toll changes such that increasing tolls will have a marginal impact on revenue due to greater reductions in traffic. This is represented by a high toll elasticity. He explained that in the Steer Report, Steer estimated toll elasticity at the existing toll rate and implied that the traffic impact would be the same when the toll increases. He also noted that the Steer Report shows a combined overall elasticity of -0.24. Mr. Roden believes this toll elasticity is low compared to other toll roads in the region even though the toll is generally higher. He believes using a single point of toll elasticity based on existing conditions, as Steer did, could be misleading and will likely overestimate the demand for the toll road. He favored using a toll curve like that provided by MWAA in his Figure 2.³²⁷

Mr. Roden explained the process used by AECOM to verify the conclusions in the Steer Report. Using its enhanced traffic model, AECOM conducted multiple applications at various toll levels to draw the toll elasticity curve. The model applications included the existing toll rates, proposed toll rates, and three toll levels in between. AECOM also tested the toll rate 25% lower than the existing condition to find the peak point of the revenue curve. Tolls on other facilities were not changed. The toll elasticity curve is shown in Mr. Roden’s Figure 4.³²⁸ As the revenue curve shows, the existing toll rate on the Greenway is close to the level that generates maximum revenue. Mr. Roden explained at this point, users are sensitive to toll rate changes. If the toll rate is increased by approximately 30% as proposed by TRIP II (averaging the proposed toll increases

³²³ *Id.* at 11.
³²⁴ *Id.* at 11-12.
³²⁵ *Id.* at 12.
³²⁶ *Id.* at 13.
³²⁷ *Id.* at 12-14.
³²⁸ *Id.* at 19.

during peak and off-peak times), AECOM’s toll elasticity curve shows that total transactions will decrease by approximately 26%. Mr. Roden explained toll elasticity varies based on the toll range and the levels of tolls, such that using a single toll elasticity value in an analysis, as Steer did, could provide misleading results. He confirmed that the toll elasticity prepared by AECOM is comparable to the analysis in MWAA’s 2018 traffic and revenue report for two similar roadways, the DTR and the Greenway.³²⁹

Finally, Mr. Roden explained AECOM performed a 2024 Analysis to look at TRIP II’s proposed 2024 toll increase based on traffic conditions in Loudoun County, population and employment growth, transportation network capacity improvements, and the proposed toll rates. AECOM’s analysis with the proposed 2024 toll rates showed a significant decrease in traffic levels on the Greenway in 2024. Applying the proposed toll rates to projected 2024 traffic levels, the number of average weekday transactions decreased by 23% relative to existing toll rates from around 43,700 to 33,500. Compared to 2022, the average weekday transactions decreased from around 37,000 under the existing toll rate to 33,500 under the proposed 2024 toll rate, a 9% decrease. To understand these findings, AECOM ran a series of toll sensitivity tests to gauge how much traffic on the Greenway would change at different toll rates. The results are shown in Mr. Roden’s Figure 5.³³⁰ In both the 2022 and 2024 traffic scenarios shown on this figure, the number of average weekday transactions declines significantly as toll rates increase. Using the proposed 2024 toll rates, traffic revenue also declined under both 2022 and 2024 traffic scenarios relative to existing toll rates.³³¹

On surrebuttal, Mr. Roden noted the Steer Report acknowledged using generally similar, but not the same, VOT estimates in the traffic modeling process and the BCA analysis. He noted Steer manipulated VOT to generate the results of each model independently. He explained that VOT is usually determined through a stated preference survey or observed toll increases in the past. He represented that Steer used VOT as a calibration tool to make its model respond to the observed traffic and revenue. Mr. Roden believes this is not standard industry practice, and as an input, VOT should be held constant throughout the modeling process. He asserted that based on the results, the model would then be adjusted to replicate the data seen in the observed impact.³³²

Mr. Roden confirmed AECOM relied on the VOT studies prepared for the DTR by CDM Smith and StanTech, both reputable investment grade travel demand forecasting firms. Mr. Roden believes the two studies were relevant because both studies addressed toll changes on the DTR. Regarding other studies referenced by TRIP II, Mr. Roden explained there was not a one-to-one comparison in Steer’s rebuttal testimony about how its VOT compared to the VOTs used in the other traffic models.³³³

Mr. Roden agreed the VOT was high in the Steer Report, and as a result, VOR was also high because they are related to each other.³³⁴

³²⁹ *Id.* at 14-20.

³³⁰ *Id.* at 24.

³³¹ *Id.* at 20-24.

³³² Tr. at 313-14 (Roden).

³³³ *Id.* at 315-16.

³³⁴ *Id.* at 316-17.

Regarding Steer's EPB, Mr. Roden explained that in the 2021 DTR traffic and revenue study, DTR's consultants used a constant value in their Logit capture model to calculate the toll preference, the probability of using the toll. Mr. Roden explained this is a completely different concept from a fixed value added or subtracted from the toll, which is what Steer has done with its EPB. Mr. Roden noted that Steer provided no justification or documentation supporting the EPB; the number comes out of thin air.³³⁵

Mr. Roden stands by his direct testimony that road improvements were missing from the Steer 2024 network file supplied to AECOM. In addition, he explained the difficulty AECOM had understanding how Steer's capture model is applied. AECOM was unable to validate certain elements of the model.³³⁶

Mr. Roden confirmed that toll elasticity is not included in the Steer Model or in AECOM's model. He explained toll elasticity is an output of the modeling process that allows one to determine the sensitivity of the model to various changes in toll and graph a curve showing the impact of toll changes on ridership volume – the higher the toll, the greater the impact on ridership volume. He explained how a toll elasticity should be done using the data in the 2021 DTR traffic and revenue study and how those results would differ from the value in the Steer Report. Mr. Roden explained at some point the toll elasticity curve slopes down as additional toll increases cause ridership volume to decrease.³³⁷

Mr. Roden defended AECOM's use of the LTOG model, which was developed for the Florida Turnpike Enterprise and is used for turnpike traffic and revenue studies in the state of Florida. He explained the model is more sophisticated than the Steer Model and has features such as 15-minute traffic volumes and embedded toll choice. Mr. Roden believes the LTOG model is very reputable.³³⁸

Mr. Roden believes AECOM's analysis is more reliable because, rather than rely on one week of TomTom data, AECOM used replica data that involves a continuous collection of traffic data that is updated monthly. This data shows that traffic on public roads in the area has recovered from the COVID pandemic.³³⁹

Mr. Roden confirmed that AECOM included prior DTR toll increases and the ramp toll that the Greenway collects on behalf of the DTR in its model. He noted the tolls on the DTR have historically been lower than the tolls on the Greenway, therefore, they have less of an impact on the analysis.³⁴⁰

Mr. Roden used AECOM's model to calculate a toll rate based on current toll rates and the proposed toll rates that would decrease traffic by 3%. His calculations resulted in a peak toll of \$6.07 and an off-peak toll of \$5.26. He also calculated a revenue maximizing toll that increased the

³³⁵ *Id.* at 317-19.

³³⁶ *Id.* at 320-21.

³³⁷ *Id.* at 321-24, 326-27.

³³⁸ *Id.* at 324-25.

³³⁹ *Id.* at 325-26.

³⁴⁰ *Id.* at 327-28.

tolls to the point where you lose more riders than the revenue generated by the toll increase, which resulted in a peak toll of \$6.95 and an off-peak toll of \$5.83. This is shown in Mr. Roden’s direct testimony at Figure 5.³⁴¹

Mr. Roden considers Steer’s material discouragement analysis, which compared 2024 forecasted traffic with 2022 actual traffic to determine the effect of the proposed rate increase, not to be legitimate.³⁴²

On cross-examination, Mr. Roden agreed the 2021 DTR traffic and revenue study updated the study done in 2019, and is the latest study based on the current real-world situation. He confirmed that AECOM used both the 2019 and 2021 studies in its analysis and compared the results of both studies. He explained that the 2021 study shows traffic returning to 2019 levels on Route 7 and other roadways in Loudoun County, while on the Greenway traffic has not recovered. In addition, Mr. Roden compared the VOT calculations from the 2019 and 2021 DTR studies to the VOT numbers in the Steer Report to determine whether the values were in the same range. For consistency, AECOM selected a VOT value based on what was in the 2019 and 2021 DTR studies for its model, calibrated its model with other parameters to generate the volume of traffic observed on the Greenway in 2022, and then used that to forecast traffic on the Greenway for 2024.³⁴³

Mr. Roden explained there is a big difference between including discounts such as the EPB in the Logit capture model, as was done in the 2021 DTR traffic and revenue study to determine the probability of selecting a toll road, and including the discount directly on the toll rates as Steer did. Mr. Roden believes Steer’s approach is improper.³⁴⁴

In his direct testimony, **Dr. Webb** responded to the Steer Report sponsored by TRIP II witness Cuneo. In addition, he responded to various other claims made by TRIP II witnesses Cuneo, Hamilton, and Weller.³⁴⁵

Dr. Webb organized his testimony into the following sections:

- Section II – provided an overview of the Greenway and the Application, and the statutory requirements that must be satisfied for the Commission to increase TRIP II’s toll rates;
- Section III – responded to TRIP II’s analysis of material discouragement and the “alternative method” presented by TRIP II, and proposed a more accurate calculation of material discouragement;
- Section IV – responded to the BCA presented by TRIP II and discussed an apparent data anomaly used in the VOR savings component of the analysis;
- Section V – responded to TRIP II’s claims regarding reasonable return;

³⁴¹ *Id.* at 329-30.
³⁴² *Id.* at 330-31.
³⁴³ *Id.* at 332-37.
³⁴⁴ *Id.* at 337-39.
³⁴⁵ Ex. 10, at 3 (Webb Direct).

- Section VI – discussed other issues in TRIP II’s application including COVID pandemic recovery on the Greenway and surrounding roads, the inflation justification for the toll increase suggested by TRIP II, and the price elasticity of demand; and
- Section VII – summarized overall conclusions regarding TRIP II’s Application.³⁴⁶

Dr. Webb provided an overview of the Greenway. He noted the roadway is unique as it is the only toll road approved and regulated under the Act. He further noted the debt balance of approximately \$1.121 billion accrued by TRIP II over the time it has owned the Greenway.³⁴⁷

Dr. Webb described the 2021 amendments to the Act,³⁴⁸ which require that “[a]ny application to increase toll rates shall include a forward-looking analysis” that includes “reasonable projections of anticipated traffic levels, including the impact of social and economic conditions anticipated during the time period that the proposed toll rates would be in effect.”³⁴⁹ In addition, the amended Act defines “materially discourage use” as “to cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic attributable to the toll rate charged as validated by (i) an investment-grade travel demand model that takes population growth into consideration or (ii) in the case of an investigation into current toll rates, an actual traffic study that takes population growth into consideration.”³⁵⁰

Based on his review of the Steer Report, Dr. Webb concluded TRIP II has not demonstrated that it meets the requirements of Code § 56-542 D. The most significant error that he found was in TRIP II’s analysis of material discouragement. Dr. Webb believes TRIP II misinterpreted the Act to construct an analysis that works to its advantage. However, he believes it is not a properly constructed causal analysis because it conflates multiple factors responsible for changes in traffic between 2022 and 2024 and presents biased results that are meaningless in determining whether the proposed toll increases materially discourages use of the Greenway. On this basis alone, he recommended that the Commission reject TRIP II’s Application. In addition, Dr. Webb’s review of Steer’s BCA identified numerous data issues, including an apparent data anomaly in the calculation of VOT savings, that challenge the validity of the analysis. He stated the BCA is only useful to the extent the inputs are appropriate, and his findings demonstrate the BCA is unreliable because it does not include appropriate inputs.³⁵¹

Dr. Webb explained TRIP II’s material discouragement analysis is presented in Section 6 of the Steer Report.³⁵² He explained that Steer relied on the results of its travel demand model to analyze material discouragement of traffic on the Greenway due to the proposed toll increases. He also indicated Steer compared the observed 2022 AADT on the Greenway to the 2024 projected AADT with the toll increase; found that projected traffic on the Greenway after the proposed toll increases in 2024 would be 8.1% higher than the observed traffic on the Greenway in 2022, the last

³⁴⁶ *Id.* at 3-4.

³⁴⁷ *Id.* at 4-5.

³⁴⁸ *Id.* at 5-6.

³⁴⁹ Code § 56-542 D.

³⁵⁰ Code § 56-542 A.

³⁵¹ *Id.* at 7-8.

³⁵² *See*, Ex. 6, at Ex. DC-2 (Cuneo Direct).

year that toll increases went into effect; and concluded that the Proposed Tolls would not materially discourage use of the Greenway.³⁵³

Dr. Webb believes Steer's material discouragement analysis is severely flawed. In his view, the analysis defies the basic rules of causal analysis which leads to meaningless results and a biased view of traffic levels. For these reasons, he believes Steer's material discouragement analysis does not meet the requirements in the Act.³⁵⁴

Dr. Webb noted the VDOT Review found the methodology for Steer's roadway use analysis to be "simplistic" and "relying on generic assumptions and limited corridor-specific studies."³⁵⁵ Additionally, he noted the VDOT Review found that the growth rate used in the analysis "appears to lag behind the recovery assumed in the traffic forecast for 2024."³⁵⁶ Lastly, he recognized that the VDOT Review found that "addressing the material discouragement clause by comparing traffic levels from two different years is an arguable approach."³⁵⁷

Dr. Webb explained the flaw in Steer's analysis of material discouragement. In his opinion, the analysis fails to properly isolate the interaction between the variables it purports to analyze (toll increase vs. traffic impact) from other variables that could impact traffic. Dr. Webb noted the point is illustrated in the Steer Report's findings that after a 40% increase in peak tolls and a 22% increase in off-peak tolls, daily traffic on the Greenway will increase by 8.1%. Dr. Webb explained that basic economic theory provides that demand curves slope down, meaning that an increase in price will cause a decrease in the quantity demanded, in this case traffic on the Greenway. He believes failure to isolate the variables conflates multiple factors that could contribute to a particular outcome.³⁵⁸

Dr. Webb stated that before the Commission can authorize an operator to raise toll rates, the Act requires the operator to show that the proposed toll rates do not materially discourage use of the roadway, or "cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic *attributable to the toll rate charged*."³⁵⁹ He explained Steer analyzed material discouragement based on the change in the traffic but it did not look at the change in the traffic attributable to *just* the increase in the toll rate charged. He asserted that by comparing 2024 projected traffic to 2022 actual traffic, Steer combined multiple variables responsible for changes in traffic between those two years. As a result, Dr. Webb maintained the Commission cannot determine if, and to what degree, the Proposed Tolls materially discourage traffic on the Greenway. Accordingly, Dr. Webb believes TRIP II's analysis does not meet the requirement set forth in the Act and should be rejected. He believes his position is supported by the VDOT Review which stated that "Evaluating traffic volumes in 2024 (with a toll increase) versus 2022 (observed toll rate), as opposed to the same year 2024 (with and without a toll increase), may have implications regarding material discouragement evaluation."³⁶⁰

³⁵³ Ex. 10, at 8-9 (Webb Direct).

³⁵⁴ *Id.* at 9-10.

³⁵⁵ Ex. 3, at 7 (VDOT Review).

³⁵⁶ *Id.*

³⁵⁷ *Id.*; Ex. 10, at 10 (Webb Direct).

³⁵⁸ Ex. 10, at 10-11 (Webb Direct).

³⁵⁹ Code §§ 56-542 A, D (emphasis added).

³⁶⁰ Ex. 3, at 8 (VDOT Review); Ex. 10, at 10-13 (Webb Direct).

Dr. Webb explained the impact of using 2022 traffic data as the base year in the calculation of material discouragement. He indicated that by using 2022 as the base year, TRIP II's material discouragement analysis offsets the effect of the proposed toll increases with traffic demand caused by other factors such as population growth, employment growth, and COVID pandemic recovery. In addition, he maintained TRIP II's data shows that traffic on the Greenway was abnormally low in 2022, which further biased the results of its material discouragement analysis.³⁶¹

Dr. Webb proposed an alternative material discouragement analysis. He recommended that the percentage change in traffic be measured based on a 2024 forecast year without the increase in tolls, and a 2024 forecast year with the increase in tolls. He explained this isolates the independent variable being tested (*i.e.*, the Proposed Tolls) and normalizes all other independent variables to reflect the 2024 forecast levels (*e.g.*, population, employment, and COVID pandemic recovery). He asserted that as required by the Act, this analysis focuses solely on the impact of the change in toll rates on traffic levels on the Greenway. Dr. Webb explained Steer made this calculation in its report but did not report the results. He indicated the Steer Report showed that daily traffic decreased 6.3% from 2024 under the "Base Rates" assumption (*i.e.*, current rates) to 2024 under the "Proposed Rates" assumption. Dr. Webb prepared a table similar to Table 6-5 in the Steer Report and the results are shown in his Table 1, which shows an overall decrease in 2024 traffic of 6.3% caused by the toll rate increase.³⁶²

Dr. Webb explained the 6.3% decrease in 2024 traffic caused by the proposed toll rate increase indicates that the Proposed Tolls materially discourage use of the Greenway. He highlighted that the Act defines material discouragement as "a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic attributable to the toll rate change."³⁶³ Dr. Webb observed a decrease of 6.3%, which is more than twice the 3% threshold in the Act.³⁶⁴

Dr. Webb responded to the direct testimony of TRIP II witness Weller that the Company does not support the alternative method to calculate material discouragement.³⁶⁵ He noted that Mr. Weller does not address the validity of the methodology, but, instead, complains about the definition of "materially discourage use" in Code § 56-542 A and the requirement that the Commission cannot approve proposed toll rates that materially discourage use of the Greenway. With regard to the complaint that the alternative methodology relies on two forecasts, Dr. Webb noted Steer extensively tested the forecasts produced by the Steer travel demand model to ensure they provided reasonable results, which included a review of the toll elasticities implied by the model's traffic forecasts.³⁶⁶

To address the concern with using two forecasts, Dr. Webb asked County witness Roden to run two additional traffic cases using Steer's travel demand model that sets aside all forecasts:

³⁶¹ Ex. 10, at 13-14 (Webb Direct).

³⁶² *Id.* at 14-16.

³⁶³ Code § 56-542 A.

³⁶⁴ Ex. 10, at 16-17 (Webb Direct).

³⁶⁵ Ex. 5, at 23 (Weller Direct).

³⁶⁶ Ex. 10, at 17-18 (Webb Direct).

(1) actual traffic in 2022 without the toll increase, and (2) actual traffic in 2022 with the proposed toll increases. Dr. Webb explained that this resulted in a decrease in traffic of approximately 9% relative to existing 2022 toll rates, thereby confirming that the toll increase, setting aside all forecasts, materially discourages use of the Greenway. Dr. Webb believes this result should only be used for illustrative purposes.³⁶⁷

Dr. Webb asked County witness Roden to do one additional model run correcting for the errors that Mr. Roden found in the data in the Steer Report. This model run found that the proposed 2024 toll increase will reduce traffic on the Greenway by approximately 23% in 2024, which is more than 7.5 times higher than the 3% threshold for material discouragement in the Act.³⁶⁸

Dr. Webb discussed the impact of population growth in determining material discouragement of use of the Greenway. Since Steer compares 2022 traffic levels with 2024 traffic levels, Dr. Webb believes Steer conflates growth in population and other socioeconomic factors with other changes in traffic. For example, Dr. Webb noted that TRIP II witness Cuneo claims an increase in traffic based on population growth offsets any potential traffic loss due to toll increases. Dr. Webb believes Mr. Cuneo has conflated various causes of traffic change to obscure the significant decline in traffic cause by the proposed toll increases. Dr. Webb believes population growth should be treated as a countervailing factor to traffic lost as a result of a toll increase.³⁶⁹

Dr. Webb addressed the question of whether TRIP II's tolls have already materially discouraged use of the Greenway, which was not addressed in the Steer Report. Dr. Webb noted there has been a decline in the use of the Greenway since its peak in the early 2000s, while population growth in Loudoun County has outpaced growth in traffic on the Greenway. In addition, he noted the Greenway has yet to recover from the decline in traffic associated with the COVID pandemic. In contrast, he noted that traffic levels on Routes 15 and 7 have already recovered to pre-pandemic levels. Dr. Webb believes this is indicative that tolls on the Greenway are already materially discouraging use and additional increases would further shift traffic to alternative roadways in the area.³⁷⁰

Dr. Webb addressed the BCA in the Steer Report. He believes an analysis that relies on broad aggregate measures, such as the Steer Report, must be treated with caution. He explained the variables that drive the outcome are highly sensitive to the inputs. Although Dr. Webb did not review every component of Steer's BCA model, he maintained the high-level and obvious flaws and inconsistencies in the model demonstrate that TRIP II failed to show that the increased tolls will generate benefits commensurate with use. First, Dr. Webb noted that VOT, VOC, and SB savings have all fallen since the 2019 Rate Case. In that case, TRIP II submitted a report prepared by WSP ("WSP Report") that included a BCA analysis with the four same benefit categories used in the Steer Report. Dr. Webb stated comparing the two reports shows that VOT savings for peak times on the Greenway has fallen from 9 minutes to about 5.6 minutes.

³⁶⁷ *Id.* at 18-19.

³⁶⁸ *Id.*

³⁶⁹ *Id.* at 19-21.

³⁷⁰ *Id.* at 21-23.

He also indicated for off-peak hours, the time savings has fallen from approximately 5.4 minutes to 3.2 minutes. Dr. Webb confirmed there have been similar declines in VOC and SB savings.³⁷¹

Dr. Webb noted VOR savings was the only metric that increased since 2019, which increased from \$3.59 in the WSP Report to \$8.74 in the Steer Report, an increase of 143%. He further noted the Steer Report does not explain the dramatic increase. Dr. Webb finds this omission troubling because VOR savings comprise a substantial part of the purported benefits associated with using the Greenway. For this reason, Dr. Webb believes this raises serious doubts about the validity and reliability of the BCA in the Steer Report. Dr. Webb attempted to replicate the calculation in the Steer Report and he found an anomaly in the data that had a significant impact on the reliability results. The anomaly related to the Buffer Time Savings for the westbound afternoon peak was 12.3 minutes, which was five times higher than the eastbound morning peak of 2.4 minutes. Dr. Webb explained the westbound afternoon peak should be similar to the eastbound morning peak Buffer Time savings because of commuters who travel to work in the morning and return home in the evening. He believes the anomaly can be traced to the use of 1 year of traffic data in the WSP Report and 1 week of traffic data in the Steer Report. He noted Steer did not explain why it used the smaller sample size.³⁷²

Dr. Webb adjusted the VOR savings and reproduced the Steer Report's "Table 5-20: Benefits and BCR of the DG vs. Composite Alternative (2024\$)" in his Table 7. Table 7 shows the Total Benefit of the Greenway would decrease from \$11.64 to \$10.59, a reduction of approximately 9%.³⁷³

Dr. Webb noted that in previous applications, TRIP II included a calculation of benefits based on length of trip on the Greenway. Using data from the 2022 Greenway Traffic Operations Report and TRIP II's current Application, Dr. Webb replicated the distance-based benefit calculation TRIP II included in its 2019 Application, which are shown in his Tables 8 and 9. The results show the vast majority of trips will result in a negative benefit. Aggregating the benefits together produced an overall *de minimis* benefit. For example, the aggregate benefit for eastbound trips is \$0.12 and for westbound trips is \$0.60. Dr. Webb noted the benefit could become negative with a small change in any of the assumptions.³⁷⁴

Dr. Webb updated the distance-based benefit calculation using the updated total benefit figures that include the adjusted PM Peak VOR savings discussed above. His calculation demonstrated that the Greenway fails to provide a positive net benefit to users under TRIP II's proposed toll increases. Dr. Webb's Tables 10 and 11 show the results of the distanced-based approach, which are calculated separately for eastbound and westbound trips. Dr. Webb found that when applying the distance-based method of calculating user benefit, adjusting the VOR savings, and using TRIP II's proposed peak two-axle toll, the weighted average net benefit of using the Greenway falls below zero for eastbound trips and slightly exceeds zero for westbound trips. Overall, the net benefit is -\$0.40 in the eastbound direction and \$0.04 in the westbound direction.

³⁷¹ *Id.* at 23-28.

³⁷² *Id.* at 27-32.

³⁷³ *Id.* at 33-34.

³⁷⁴ *Id.* at 35-37.

Based on the forgoing, Dr. Webb concluded that the Greenway fails to provide a net positive benefit to users.³⁷⁵

In sum, Dr. Webb believes the BCA contained in the Steer Report is unreliable. Consequently, he maintained TRIP II, which has the burden of proof, has not demonstrated that the tolls it proposes are commensurate with the benefits the users receive. He believes the Commission should not consider any of the qualitative benefits mentioned by TRIP II witness Cuneo, unless the Commission also considers the qualitative costs (the Greenway is more remote than alternative roads, less consistent safety features such as lights and guardrails, less access to convenience features such as stores and restaurants, and overall cost).³⁷⁶

Dr. Webb responded to TRIP II witness Hamilton's testimony addressing whether current or Proposed Tolls allow TRIP II to earn a reasonable return. In essence, Dr. Webb believes TRIP II's argument is that if its proposed "tolls materially discourage traffic and/or exceed the benefit to users, the Commission nevertheless *must* ensure that TRIP II earns sufficient revenue to cover all its costs, including debt service obligations."³⁷⁷ Dr. Webb did not address the legal implications of assuming that certain portions of the statute may be ignored, or given no weight, but focused his testimony that such an approach is inappropriate.³⁷⁸

In response to TRIP II's testimony that it would be \$10 million to \$14 million short of cash flow neutral, Dr. Webb explained the impact of capital expenditures on cash flows and how businesses finance those capital expenditures. He noted since 2010, TRIP II has reported positive cash flow in 13 out of 13 years, resulting in half a billion dollars of revenue. He also indicated that in its December 2022 financial statements, TRIP II's Statement of Cash Flows shows a Cash and Restricted Cash Balance of \$207,640,274.³⁷⁹

Dr. Webb disagreed with TRIP II witness Hamilton's calculation of the REA shown in Exhibit RNH-3. However, as a practical matter, Dr. Webb believes the REA has no relevance in calculating tolls for the Greenway. For example, he indicated the current REA balance would imply a 2023 toll of \$105 and assumes this toll would have no impact on traffic. Dr. Webb believes it is not reasonable that an equity investment in a regulated toll road of \$144 million made in the 1990s should be worth over \$12 billion today.³⁸⁰

Dr. Webb disagreed with TRIP II witness Hamilton's assertion that TRIP II tolls must be set at a level to recover its debt service costs, even if the necessary toll rates materially discourage traffic or do not provide benefits in excess of their cost. Dr. Webb believes regulated firms should have an opportunity to recover their *prudently* incurred debt costs but maintains TRIP II's debt costs were not prudently incurred. He noted TRIP II has a debt balance of approximately \$1.1 billion. He highlighted the total of all capital expended on the Greenway was approximately \$400 million. Dr. Webb believes it is unreasonable for TRIP II to have more than \$1 billion in debt

³⁷⁵ *Id.* at 38-41.

³⁷⁶ *Id.* at 41-42.

³⁷⁷ *Id.* at 43.

³⁷⁸ *Id.* at 42-43.

³⁷⁹ *Id.* at 43-45.

³⁸⁰ *Id.* at 45-46.

on an asset that is worth \$400 million. Dr. Webb noted when the Commission approved the bond refinancing in 1998, TRIP II projected that the Greenway annual traffic in 2023 would be approximately 128,000 trips per day, and in this case, TRIP II is projecting 2023 traffic at 35,182 trips per days, less than 30% of its prior projection. He also noted that while TRIP II projected in 1998 that it would charge a toll of \$2.48 in 2023, it is now seeking a peak toll of \$8.10, more than three times its prior toll projection.³⁸¹

Dr. Webb explained that in 2005, TRIP II began to dramatically increase its toll rates and traffic on the Greenway began to decline, even when the population of Loudoun County continued to rise at a steady rate. He asserted that, even though traffic started to decline sharply from what it projected to the Commission, TRIP II made no effort to alter its tolls to assess whether a change would increase traffic and revenue. Dr. Webb noted TRIP II has never returned to the tolls it presented to the Commission when it obtained permission to refinance its debt in 1998.³⁸²

Dr. Webb noted that TRIP II's 1998 bond debt has an interest rate of 7.2% while its 2005 bond debt has an interest rate of approximately 5.5%. He explained there have been several extended periods of time over the last 10 years where TRIP II could have refinanced either the 1998 bonds or the 1998 and the 2005 bonds to lower its interest expense. Although Dr. Webb understands that the bonds are structured in a way to make refinancing difficult or costly, he believes entering into such an arrangement in the first place was questionable if not unreasonable. Dr. Webb noted that when the Commission approved the 1998 bond refinancing, the Commission stated:

Our finding that the proposed refinancing is in the public interest should not be interpreted as Commission approval of the particular securities [TRIP II] proposes to issue . . . [I]ikewise, our approval of the refinancing plan is not a guarantee of repayment of principal or payment of interest on any securities or an extension of the credit of the Commonwealth or any of its political subdivisions . . . Commission approval of this refinancing does not guarantee any particular level of tolls or toll structure.³⁸³

Dr. Webb noted despite the Commission's clear statement that refinancing does not guarantee a particular level of tolls, TRIP II witness Hamilton intimates that the Commission has an obligation to approve tolls that will guarantee TRIP II a toll rate sufficient to cover its debt service obligations.³⁸⁴

As a check on TRIP II's toll rates, Dr. Webb calculated the return that TRIP II is earning on its original cost of investment as of the end of 2022 in his Exhibit 5. This exhibit shows, TRIP II is earning an overall return on rate base of 14.77%, which is higher than other regulated entities.

³⁸¹ *Id.* at 46-50.

³⁸² *Id.* at 50-51.

³⁸³ *Application of Toll Road Investors Partnership, II, L.P., For approval of refinancing*, Case No. PUF-1998-00025, 1998 S.C.C. Ann. Rep. 454, Order Approving Refinancing at 455 (Nov. 24, 1998). Similar language appeared in the Commission's Order approving the 2005 bond issuance. *See, Application of Toll Road Investor Partnership, II, L.P., For Approval of Refinancing*, Case No. PUF-2001-00017, 2004 S.C.C. Ann. Rep. 543, Order Approving Refinancing at 543 (Nov. 19, 2004).

³⁸⁴ Ex. 10, at 51-54 (Webb Direct).

Dr. Webb noted TRIP II will continue to earn reasonable returns even if its proposed toll increases are rejected by the Commission. For this reason, Dr. Webb believes that TRIP II’s suggestion that without a toll increase its returns will be unreasonable lacks merit.³⁸⁵

Dr. Webb addressed two other issues raised in TRIP II’s Application, including post-COVID traffic recovery and inflation-based justification for increasing tolls. First, Dr. Webb rebutted TRIP II’s claim that traffic on the Greenway has been slower to recover from the COVID pandemic than other roads in the area. He noted VDOT data shows that traffic in Loudoun County (at a jurisdictional level) returned to pre-2019 levels by the end of February 2022. He surmised the reason for the current slow recovery is the level of the Greenway’s current toll rates and a toll increase will only exacerbate the Greenway’s financial problems.³⁸⁶ Second, Dr. Webb addressed TRIP II witness Weller’s argument that the Greenway’s tolls have not kept up with inflation. Dr. Webb compared the hypothetical inflation-adjusted toll rates for two-axle vehicles since the inception of the Greenway to the actual two-axle peak historic toll rates and to the proposed 2024 two-axle peak toll rates. His analysis showed that that toll increases implemented by TRIP II far exceeded what they would have been if they were simply adjusted for inflation. He found the inflation adjusted toll for 2024 is \$3.60, which is significantly less than the \$5.80 current peak toll and the \$8.10 proposed peak toll. To check his results, Dr. Webb relied on the National Highway Construction Cost Index (“NHCCI”) published by the U.S. Department of Transportation’s Federal Highway Administration. He found TRIP II’s proposed peak toll rates would far exceed the rate of inflation in the NHCCI.³⁸⁷

Dr. Webb explained price elasticity of demand, which is an economic concept that measures the percentage change in quantity demanded that will result in a percentage change in price. He indicated price elasticity of demand ultimately determines the limit to which a toll can be increased. Dr. Webb disagreed with TRIP II’s assertion that its alternative method comparing 2024 traffic with and without the toll increase is equivalent to the implied elasticity measure presented in previous analyses of TRIP II’s tolls. Dr. Webb noted this case is different because the amendments to the Act require applicants to submit a forward-looking investment grade travel demand model that considers additional factors like population growth in addition to price to determine whether the proposed toll rates materially discourage use of the roadway.³⁸⁸

In sum, Dr. Webb believes TRIP II has not shown, and cannot show, that its Proposed Tolls will be commensurate with user benefit and that they do not materially discourage traffic. Further, he maintained TRIP II, the party with the burden of proof, failed to present any evidence suggesting that toll rates lower than the ones proposed would satisfy the requirements of Code § 56-542 D. Accordingly, he recommended that the Commission reject TRIP II’s proposed toll rate increase.³⁸⁹

On surrebuttal, Dr. Webb confirmed that in his Exhibit 5, he calculated an achieved overall return on rate base of 14.38% for TRIP II.³⁹⁰

³⁸⁵ *Id.* at 54-55.
³⁸⁶ *Id.* at 55-57.
³⁸⁷ *Id.* at 57-61.
³⁸⁸ *Id.* at 62-64.
³⁸⁹ *Id.* at 64.
³⁹⁰ Tr. at 344-45 (Webb).

Regarding TRIP II's outstanding debt balance, Dr. Webb stressed when the Commission approved the debt refinancing, the Commission made clear that: (i) the approval did not guarantee the debt or a particular toll structure to repay the debt; and (ii) TRIP II made representations regarding future traffic volumes and its ability to repay the debt that were dramatically different from what actually transpired over the intervening 20 years.³⁹¹

Dr. Webb reiterated that TRIP II has still not explained why the inputs for its BCA have changed so significantly from the 2019 Rate Case and this case.³⁹²

Dr. Webb stated there is no empirical evidence to support TRIP II's assertion that improvements to the free alternatives have caused a decline in traffic on the Greenway. Assuming that the free alternatives have become more attractive, Dr. Webb surmised a large increase in tolls is going to cause a decrease in traffic, not an increase in traffic as suggested by Company witness Cuneo.³⁹³

Dr. Webb disagreed with TRIP II's assertion that if Steer had only analyzed 2024 traffic levels with and without the toll rate increase, its model would have inappropriately ignored inflation. He noted that population growth, socioeconomic conditions, and inflation should have been built into Steer's 2024 traffic forecast and the only variable to change would be the toll rate, which would produce the expected change in traffic volume resulting from only the change in the tolls. Dr. Webb believes Steer's analysis violates the fundamental concept of causal analysis and conflates the changes that happened from 2022 to 2024 to mask the traffic decrease caused by the toll increase.³⁹⁴

Dr. Webb confirmed that his discussion of material discouragement included the 6.3% decrease in demand for the Greenway calculated by Steer, and was not an elasticity calculation as claimed by Company witness Cuneo.³⁹⁵

Dr. Webb noted that the benefits of using the Greenway have increased from the 2010 Rate Case to this case. If TRIP II's assertion that the free alternatives have become more attractive, he asserted the benefits of using the Greenway should go down. Dr. Webb noted TRIP II's increase in benefits in this case was driven by a dramatic increase in the VOR. He expressed his concerns with Steer using only one week of TomTom data to calculate VOR compared to one year of data in the 2019 Rate Case. He believes that looking at actual consumer behavior data over a longer period of time would be more appropriate. In addition, Dr. Webb questioned Steer's calculation of Buffer Time, that is 12 minutes in the evening and 2 minutes in the morning. Dr. Webb conducted his own analysis of Buffer Time and the differential was 7.5 minutes in the evening and 5.5 minutes in the morning, a difference of 2 minutes. This result caused Dr. Webb to question the user benefit component in the Steer Report.³⁹⁶

³⁹¹ *Id.* at 346-47.

³⁹² *Id.* at 347.

³⁹³ *Id.* at 347-49.

³⁹⁴ *Id.* at 349-50.

³⁹⁵ *Id.* at 350-51.

³⁹⁶ *Id.* at 351-56

Dr. Webb confirmed that his alternate BCA calculation included partial trips. He used the same methodology used in the 2019 Rate Case. He testified that in this case, the partial trip benefits either equal the cost or are less than the cost, and that is before any qualitative costs or costs to Loudoun County for diverting traffic onto local roads is considered. Dr. Webb asserted his analysis shows that small tweaks to the Steer Report cause the benefits of using the Greenway to fall below the toll cost.³⁹⁷

Commission Staff

Staff presented the direct testimony of four witnesses: **Steven E. Smith**, a Public Utility Analyst in the Commission’s Division of Public Utility Regulation; **Montasir Abbas, PhD**, a Principal at Intelligent Transportation Concepts (“ITC”) and a Professor in the Department of Civil & Environmental Engineering at Virginia Tech; **Alexander W. Elmes**, Utility Specialist in the Commission’s Division of Utility Accounting and Finance; and **Scott C. Armstrong**, Deputy Director in the Commission’s Division of Utility Accounting and Finance.

In his direct testimony, **Mr. Smith** sponsored the Executive Summary of the Staff’s conclusions in this proceeding and identified the topics and recommendations addressed by each Staff witness.³⁹⁸ Mr. Smith also addressed whether the Proposed Tolls “materially discourage use of the roadway” and are “set at a level which is reasonable to the user in relation to the benefit obtained.”³⁹⁹ In addition, he provided Staff’s response to TRIP II’s proposed streamlined ratemaking process.⁴⁰⁰

Mr. Smith provided the full set of TRIP II’s proposed maximum peak and off-peak toll rates in his Table 3, set forth below:⁴⁰¹

Table 3: Company's Proposed Toll Rates for 2-Axle Vehicles		
Entry/Exit	Peak	Off Peak
Leesburg Bypass	\$ -	\$ -
Battlefield Pkwy	\$ -	\$ -
Shreve Mill Rd.	\$ 5.75	\$ 5.00
Belmont Ridge Rd.	\$ 7.10	\$ 5.55
Claiborne Pkwy	\$ 7.10	\$ 5.55
Ryan Rd.	\$ 7.10	\$ 5.55
Loudoun Co. Pkwy	\$ 8.10	\$ 6.40
Ox Rd.	\$ 8.10	\$ 6.40
Dulles Airport	\$ 8.10	\$ 6.40
Mainline Plaza	\$ 8.10	\$ 6.40

Mr. Smith described the alternate routes to the Greenway for east/west travel in the eastern portion of Loudoun County. The routes were selected by Steer as alternatives to taking the

³⁹⁷ *Id.* at 357-60.

³⁹⁸ Ex. 19, at 1 (Smith Direct).

³⁹⁹ Code § 56-542 D.

⁴⁰⁰ Ex. 19, at 4 (Smith Direct).

⁴⁰¹ *Id.* at 5-8.

Greenway. As explained by Mr. Smith, Alternate Route 1 begins at the Route 7/15 Bypass and proceeds east on Route 7 and then exits south on Route 28 to reach the DTR. In this area, Route 7 is a six-lane divided highway and Route 28 is a limited access divided highway. Alternate Route 1 is approximately the same length as the Greenway, 14 miles, and the speed limit is 55 mph compared to 65 mph for the Greenway. Alternate Route 2 is a combination of three routes, two of which share approximately half their total length. Both of these routes begin on Evergreen Mill Road on the south side of Leesburg. The first route takes Evergreen Mill Road until it tees into Loudoun County Parkway, follows Loudoun County Parkway until it connects with Old Ox Road, and then on to Route 28, before continuing to the DTR. This route has a posted speed of 55 mph for most of its length with some sections at 45 mph and 35 mph. The second route turns off of Evergreen Mill Road by way of Ryan Road to access Loudoun County Parkway, before taking Waxpool Road to connect to Route 28, and then to the DTR. This route is longer and has a greater portion of its length at 45 mph or lower. The third route is the shortest of the three but has the largest portion of the route at 45 mph or lower. The route starts on Sycolin Road, which changes its name to Ashburn Farm Parkway, before connecting with Waxpool Road, and then takes Route 28 to the DTR. The Composite Alternate Route is the weighted average of the times and distances based on their relative traffic share of the three routes described above.⁴⁰²

Mr. Smith described TRIP II's "material discouragement" analysis. He explained that Steer ran its model with three sets of toll rates: current toll rates, proposed toll rates, and alternate toll rates. Mr. Smith noted the "but-for" case comparison between the current toll rates and the proposed toll rates resulted in a 6.3% lower rate of toll road usage at the proposed toll rates, which constitutes a failure of the statutory requirement in Code § 56-542. He indicated the model run of the alternate toll rates passed the statutory requirement with a 2.8% reduction in ridership.⁴⁰³

Mr. Smith discussed Staff's concerns regarding Steer's travel demand model and certain assumptions used in the model. In particular, he expressed concern regarding the comparison between 2022 traffic levels on the Greenway, and the model's projected 2024 traffic levels with the proposed toll rate increase. First, Mr. Smith noted the material discouragement of less than 3% is tied to *the toll rate increase and its impact*. He emphasized that the Company presented an analysis that is a net impact analysis of *all factors* impacting toll road usage, including traffic volume recovery post-COVID. As a result, Mr. Smith indicated the model produces a higher than permissible toll rate because it introduces a projected increase in Greenway traffic post-COVID that obscures the negative impact to traffic on the Greenway attributable *solely* to the toll increase.⁴⁰⁴ Second, Mr. Smith noted that using unforeseen negative economic events that may lower traffic volumes for the base year could create an opportunity for TRIP II to inappropriately increase toll rates on the Greenway by offsetting the impact of a toll increase by artificially inflating traffic volumes.⁴⁰⁵

⁴⁰² *Id.* at 8-9.

⁴⁰³ *Id.* at 9-10.

⁴⁰⁴ *Id.* at 10-11.

⁴⁰⁵ *Id.* at 12.

Next, Mr. Smith discussed the BCA used in the Steer Report to support whether the Proposed Tolls are reasonable in relation to the benefits received by Greenway users. Mr. Smith noted the Commission previously stated in the 2013 Investigation Case.⁴⁰⁶

[T]he statute does not require an absolute pass-fail test, where the toll must show some type of *quantifiable* cost-effective benefit. The statutory term ‘reasonable to the to the user in relation to the benefit obtained’ is broader than that, and it may reasonably include any number of difficult-to-quantify benefits (including reliability and ‘peace of mind from driving on a well maintained, limited access highway’).⁴⁰⁷

Mr. Smith explained the Steer BCA includes four types of benefits: (1) VOT; (2) VOR; (3) VOC; and (4) SB savings. He explained that the VOT accounts for the difference in travel time between using the Greenway and alternate routes and the VOR accounts for the difference in the amount of variation in travel when using the Greenway and alternate routes. He indicated the VOR is based on the difference between the average travel time and the 95th percentile for travel time, or a one-in-twenty event. Additionally, he explained that the VOC accounts for the vehicle operating cost differences calculated on a per mile basis between using the Greenway and alternate routes. Furthermore, he noted that the SB accounts for the difference in total accidents based on accident rates and severities of accidents, per 100 miles, between the Greenway and the county-wide average for Loudoun County. According to Mr. Smith, the Steer BCA compares full length travel by market segment (commuting/personal, business, airport access/egress, and trucks) on the Greenway with traveling on Alternate Route 1 and Alternate Route 2, with either the origin point or destination point being the DTR. Mr. Smith also indicated the inputs for the BCA are based on historically observed data and current toll levels, not forecasted values or proposed tolls. He explained the “benefits” are the savings in VOT, VOR, VOC, and SB achieved by taking the Greenway instead on one of the alternate routes and are reported in 2024 dollars. He indicated the “costs” defined in the BCA are the Proposed Tolls.⁴⁰⁸

Mr. Smith provided the Company's derivation of benefits for each category for each market segment below:

1. VOT:
 - a. Commuting/personal trips uses half the weighted average of the median household income of Fairfax and Loudoun Counties converted to an hourly value based on a 2080-hour work year.⁴⁰⁹
 - b. Business trips use the full estimated hourly total compensation for the DC-VA-MD-WV metro area, which includes parts of Maryland, West Virginia, Northern Virginia and DC.
 - c. The airport access/egress value is 135% of the commuter/personal trips’ value.

⁴⁰⁶ 2013 Investigation Case at 192. (emphasis in original).

⁴⁰⁷ Ex. 19, at 12-13 (Smith Direct).

⁴⁰⁸ *Id.* at 13-14.

⁴⁰⁹ Commuting/personal trips, business trips, and airport access/egress trip are all multiplied by the estimated vehicle occupancy rate of 1.06.

- d. Truck trips convert the driver wages and benefits to an hourly value from a per mile value. To this amount is added the VOT developed in the National Cooperative Highway Research Program Research Report 925 (“NCHRP Report”).⁴¹⁰
2. VOR equals the VOT for that trip type multiplied by an assumed reliability ratio of 1.5.
3. VOC for all trip types is broken down into three subcategories, all reported on a per mile basis:
 - a. Fixed costs include insurance, license, registration, taxes, depreciation, and finance charges.
 - b. Variable costs per mile include tires, oil, maintenance, and repair.
 - c. Fuel cost per mile uses the estimated fuel consumption at the average speed on the different routes.
 - d. SB is the difference between the per mile driven weighted average accident cost between the Greenway and the estimated county-wide average.⁴¹¹

Mr. Smith explained the BCA reports its results as a Benefits Cost Ratio (“BCR”) and a Net Benefits (“NB”) value.⁴¹² He noted the BCR has declined significantly over the life of the Greenway, as the VOT savings have declined from a reported 31 minutes in 2006⁴¹³ to 8.7 minutes in this case and there has been a decline in VOC savings from \$2.22 in 2006⁴¹⁴ to a negative number today compared to the alternate routes. Mr. Smith further noted the decline would have been greater had it not been for the addition of VOR in the BCA calculation in the 2013 Rate Case.⁴¹⁵ VOR represents more than 55% of the value of taking the Greenway on peak trips for all trip types.⁴¹⁶

Mr. Smith explained the difficulties in calculating VOR. He noted USDOT considers reliability to be correlated with time savings when the time savings are related to congestion delays, so it may be difficult to disentangle the two values. Mr. Smith explained the impact of adding VOR to the BCA. If the BCA were calculated using the same set of benefits as in the 2006 Rate Case, then for current toll rates, the BCR would be less than one, indicating that the current costs are greater than the benefits, for all truck trips and off-peak auto trips, and peak commute/personal trips at current toll rates, and the BCR is only above one for business and airport travel. He explained that the weighted average benefits, not including the VOR, has declined from 2.3 times the toll rate

⁴¹⁰ NCHRP Report 925 (Project 07-24), National Academies of Sciences, Engineering, and Medicine 2019. Estimating the Value of Truck Travel Time Reliability. Washington DC: The National Academies Press. <https://nap.nationalacademies.org/read/25655/chapter/1#viii>.

⁴¹¹ Ex. 19, at 15-16 (Smith Direct).

⁴¹² The BCR is the ratio of the toll rate to the estimated benefits of taking the Greenway. A reported value greater than one indicates the benefits are greater than the toll rate while a value less than one indicates that the toll rate exceeds the estimated benefits. The comparison of the BCR over different time periods does not require inflation adjustments and has a simplifying effect on the comparison without the need to use an estimated value adjustment like the consumer price index. Ex. 19, at 16 n.18.

⁴¹³ *Application of Toll Road Investors Partnership II, L.P., For an Increase in the Maximum Authorized Level of Tolls*, Case No. PUE-2006-00081, Exhibit B, Maunsell Report at iii (Jul. 19, 2006) (“2006 Rate Case”).

⁴¹⁴ *Id.*, Exhibit B, Maunsell Report at 30.

⁴¹⁵ See, 2013 Rate Case, Ex. 16, Exhibit B AECOM Report at 41.

⁴¹⁶ Ex. 19, at 16-17 (Smith Direct).

proposed in the 2006 Rate Case,⁴¹⁷ to 0.67 times the toll rates proposed in this case thereby reflecting that for every dollar spent in tolls today on the Greenway, the user would receive \$0.67 in benefits, a net loss for the user. He explained that by adding VOR to the BCA, the BCR is increased to 1.15 times, or \$1.15 of value for every dollar spent. According to Mr. Smith, excluding the VOR in the BCA used to develop the current rates results in a significant reduction in the value of benefits of taking the Greenway relative to its costs.⁴¹⁸

Mr. Smith explained that with the VOR included in the BCA, at the Proposed Tolls and before Staff's recommended changes and corrections, the benefits net of costs calculated by Steer for the Alternate Route 1, is negative for off-peak commuting/personal trips, and for truck trips during both peak and off-peak periods. He indicated this represents the first time the estimated benefits of taking the Greenway will be less than the toll rate for any trip type filed by TRIP II, and a historical low for all previous BCR calculations.⁴¹⁹

Mr. Smith confirmed Steer only performed a BCA analysis for full trips on the Greenway, not partial trips.⁴²⁰

Mr. Smith summarized Staff's review of the BCA and the BCA's inputs and assumptions. He noted Steer's calculation of VOT is significantly higher than the values recommended by USDOT, even though Loudoun County and Fairfax County have higher median incomes compared to the national average.⁴²¹ He explained that the Steer BCA assumes a linear relationship between income and the willingness to pay, as well as a linear relationship with trip length or duration that is not supported by the prevailing research. Mr. Smith also noted the VOT savings is more important over a ten-hour trip than for a ten-minute trip. He explained that according to Steer, the time savings on the Greenway is approximately 4.35 minutes per trip, compared to Alternate Route 1. According to Mr. Smith, the alternate routes are all under 35 minutes in duration and Alternate Route 1 is under 20 minutes, which means the time savings falls within the range that travelers value less, as the trips are not beyond 40 minutes in duration.⁴²²

According to Mr. Smith, Staff recognized that time savings and reliability related to trips to Dulles Airport may be valued at a higher rate than commuting/personal trips. He maintained Steer's method to estimate the proportion of daily trips on the Greenway overestimates the number of daily trips for purposes of air travel. He explained Steer designates that 100% of all traffic using the Greenway access and egress ramps are doing so for air travel. Furthermore, Mr. Smith emphasized that, according to Steer's analysis, no airport or airline personnel, and no employees of

⁴¹⁷ 2006 Rate Case, Exhibit B, Maunsell Report at 39.

⁴¹⁸ Ex. 19, at 17-18 (Smith Direct). At current toll rates, excluding the VOR and with no Staff recommended modifications the weighted average benefit cost ratio is 0.84 and the net benefits are negative for all but the peak business and peak air travel trip types. See, Ex. 19, Attachment SES-2 (Smith Direct).

⁴¹⁹ *Id.* at 19.

⁴²⁰ *Id.* This raises some concerns because partial trips are not considered in the BCA analysis and what impact would those trips have on the overall analysis. Since TRIP II does not have distance pricing, TRIP II's rate structure has a disproportional impact on users who only travel part of the Greenway.

⁴²¹ Office of the Secretary U.S. Department of Transportation, Benefit-Cost Analysis Guidance for Discretionary Grant Programs at 36. <https://www.transportation.gov/sites/dot.gov/files/2022-03/Benefit%20Cost%20Analysis%20Guidance%202022%20%28Revised%29.pdf>.

⁴²² Ex. 19, at 19-21 (Smith Direct).

any of the 37 retail businesses, 42 restaurants that operate inside Dulles Airport, or any vendor or service provider to any of the aforementioned businesses, or any of the employees of other businesses, hotels, or office buildings located on the airport property would ever use the Greenway to travel to or from Dulles Airport. Mr. Smith maintained such assumption, renders the Steer analysis inaccurate. He confirmed that Staff believes Steer's VOT data is inaccurate and has little value in the calculation of the BCA.⁴²³

Mr. Smith discussed Staff's review of VOR and noted the difficulty in separating the calculation of VOR from VOT. He confirmed the 1.5 multiplier used in the Steer Report is the same as that used in the WSP Report in the 2019 Rate Case.⁴²⁴ Additionally, he explained the 1.5 value listed in the Steer Report is the average for truck trips. According to Mr. Smith, Staff recommended in the 2019 Rate Case, and the Hearing Examiner agreed, that a reliability ratio of 1.2 was sufficiently within the high end of the estimated range to evaluate the VOR for the Greenway. He also explained that the 1.2 value was used by AECOM P3 Advisory in the 2013 Investigation Case;⁴²⁵ and noted that no VOT was included in the Maunsell Report in the 2006 Rate Case. Mr. Smith further noted the VOT and VOR in the Steer Report is approximately 100% and 50% higher respectively, than what is represented in the NCHRP Report for trips that are 75 miles or less.⁴²⁶ Staff believes the values in the Steer Report may be unreasonably high.⁴²⁷

Mr. Smith discussed Staff's review of VOC savings. He noted the Steer Report included fixed costs for calculating the VOC, while USDOT recommends not including the fixed costs.⁴²⁸ He also explained that in response to Staff Interrogatory No. 3-57 the Company stated: "the fixed costs per mile are the same whether the traveler is taking the toll road or alternate. So, to answer the last part of the question, taking the toll road does not reduce the fixed cost."⁴²⁹ According to Mr. Smith, in the 2019 Rate Case, the Hearing Examiner agreed with Staff on the exclusion of the fixed costs from the BCA.⁴³⁰ Furthermore, he explained when Steer calculated the VOC for Alternate Route 2, Steer modified the VOC by 120%. Staff understands the 120% adjustment comes from the estimated difference between the fuel consumption on highways versus arterial roads. Mr. Smith maintained the adjustment is unsupported by any prevailing industry literature or practice. Moreover, Mr. Smith noted the multiplier used by Steer was not applied to highway miles, but to a weighted average of highway and arterial road mileage, as such, it was misapplied.⁴³¹

⁴²³ *Id.* at 21-22; This may be the result of only using one-week of traffic data in this case, as opposed to entire year of data in the 2019 Rate Case.

⁴²⁴ 2019 Rate Case, Doc. Con. Cen. No. 191230125, Application at 47 (Dec. 12, 2019).

⁴²⁵ 2013 Investigation Case, Doc. Con. Cen. No. 130440267, Direct Testimony of Ashly Yields at 42 (Apr. 30, 2013). AECOM was a consulting firm TRIP II used in the 2013 Investigation Case.

⁴²⁶ NCHRP Report 925 (Project 07-24), National Academies of Sciences, Engineering, and Medicine 2019. Estimating the Value of Truck Travel Time Reliability. Washington DC: The National Academies Press.

<https://nap.nationalacademies.org/read/25655/chapter/1#viii>.

⁴²⁷ Ex. 19, at 23-25 (Smith Direct).

⁴²⁸ Office of the Secretary U.S. Department of Transportation, Benefit-Cost Analysis Guidance for Discretionary Grant Programs at 19 and 41. <https://www.transportation.gov/sites/dot.gov/files/2022-03/Benefit%20Cost%20Analysis%20Guidance%202022%20%28Revised%29.pdf>.

⁴²⁹ Ex. 19, Attachment SES-1.

⁴³⁰ 2019 Rate Case, Doc. Con. Cen. No. 556297, Report of D. Mathias Roussy, Jr., Hearing Examiner at 72 (Oct. 13, 2020).

⁴³¹ Ex. 19, at 25-26 (Smith Direct).

Mr. Smith discussed Staff's review of SB savings. He noted Steer's SB diverged from USDOT recommendations in two ways. First, he indicated Steer used nine years of accident data from 2013 to 2021 and excluded 2022 data. Mr. Smith testified USDOT recommends using the most recent 3-7 years (*i.e.*, 2016 or 2020 through 2022).⁴³² He also represented that Staff's review of the 2022 crash data for Alternate Route 1, the Greenway, and trends in the crash data for those routes over the last six years, indicate that Alternate Route 1 is improving in relation to the Greenway over time. Staff believes including the 2022 data would further reduce the SB expected from taking the Greenway. Second, Mr Smith asserted that Steer's SB fails to adhere to USDOT's declaration of the "need to tie the calculated safety improvements to the specific improvement measures." He explained that the USDOT guidance describes how the data should be tied to specific segments and reflect expected impacts.⁴³³ According to Mr. Smith, the accident data in this case is specific for the Greenway, but the accident data used for the alternate routes is based on county-wide data that is not limited to just the alternate routes. Staff believes it is not possible to state with any confidence that the Greenway offers any SB savings based on the method and data used in the Steer Report calculation, much less to support the specific value offered in the report.⁴³⁴

Mr. Smith described Staff's attempt to revise the SB calculation to make a comparison between the Greenway and Alternate Route 1. Staff's analysis leads to dramatically different results from the Steer Report. For example, over the five-year period 2018 through 2022 one death was recorded on the Greenway and one death was recorded on Alternate Route 1, despite the higher traffic volumes. Staff believes the portion of the SB accounting for fatalities actually favors Alternate Route 1 over the Greenway. Mr. Smith indicated the injury rate on Alternate Route 1 is also significantly lower than the overall Loudoun County average based on the same crash data source used by Steer and the traffic volume data provided in the Steer Report.⁴³⁵

Mr. Smith summarized Staff's adjustments to the BCA. Staff reduced the estimated volume of traffic attributable to air travel by normalizing the airport traffic data to its yearly average. Staff adjusted the VOR reliability ratio to 1.2 for all trip types. Staff also removed the fixed costs from the VOC calculation. For the SB, Staff compared the Greenway to Alternate Route 1 using crash data from 2018 through 2021 and used the data provided by Steer to estimate the volume of traffic and vehicle miles traveled on Alternate Route 1. Staff then used those values to calculate the SB portion of the BCA. Staff's use of the 1.2 reliability ratio reduced the VOR's contribution to the weighted average BCA from \$3.56 to \$2.85. Using the Alternate Route 1 calculated accident cost instead of the county-wide average reduced the SB portion of the BCA from \$2.96 down to \$0.50. The full results, including sensitivities, can be found in Mr. Smith's Attachment SES-7. In sum, Staff believes the BCA in the Steer Report is overstated and the Steer Report's analysis includes a number of errors, deviations from USDOT guidance, and flawed assumptions.⁴³⁶

⁴³² Office of the Secretary U.S. Department of Transportation, Benefit-Cost Analysis Guidance for Discretionary Grant Programs at 16. <https://www.transportation.gov/sites/dot.gov/files/2022-03/Benefit%20Cost%20Analysis%20Guidance%202022%20%28Revised%29.pdf>.

⁴³³ Office of the Secretary U.S. Department of Transportation, Benefit-Cost Analysis Guidance for Discretionary Grant Programs at 14. <https://www.transportation.gov/sites/dot.gov/files/2022-03/Benefit%20Cost%20Analysis%20Guidance%202022%20%28Revised%29.pdf>.

⁴³⁴ Ex. 19, at 26-27 (Smith Direct).

⁴³⁵ *Id.* at 27-29.

⁴³⁶ *Id.* at 29-31.

Mr. Smith confirmed that Staff did not perform an analysis of partial trips on the Greenway because TRIP II did not compile the information needed to perform such an analysis. Staff believes it would be reasonable to conclude that for partial trips the value of using the Greenway is less than its cost for two reasons. First, the cost of partial trips is the same, or substantially the same, as full-length trips, but with lower benefits. Second, the VDOT 2019 feasibility study, indicated that the implementation of distanced-based tolling would increase traffic flow from partial trips to the point that additional investment would be required to alleviate traffic.⁴³⁷ The corollary is that any increase in toll rates would further reduce the number of partial trips.⁴³⁸

Mr. Smith expressed Staff's concerns with TRIP II's proposed streamlined process for future rate increases on the Greenway. First, he noted TRIP II seems to suggest that VDOT and Staff have the authority to make a determination that the Company's future proposed tolls meet the statutory requirements, and that these entities can also determine whether such proposed tolls comply with past Commission orders. Staff believes a litigated proceeding remains the appropriate process for determining appropriate toll rates. Second, he stated that Staff needs the ability to understand the methodology and inputs used in the Steer Model, in high enough resolution, to make a determination whether the modeling methodology is sound, the inputs valid, and the model is correctly calibrated. The same would apply to any future model used to support rate changes proposed by TRIP II.⁴³⁹

Mr. Smith reviewed the feasibility of lowering toll rates on the Greenway to increase traffic and ultimately increase revenues. For this strategy to be feasible, he indicated the lost revenue from lowering the toll rate on current toll road users must be exceeded by the additional revenue from new toll road users. Based on the elasticity estimates, Staff believes there is no support for the proposition that reducing the tolls on the Greenway would generate an increase in total revenue.⁴⁴⁰

Finally, Mr. Smith summarized Staff's conclusions and recommendations:

1. TRIP II's Proposed Tolls will cause an approximate 6.3% reduction in the expected traffic levels on the Greenway and will therefore exceed the threshold of "materially discourage use" found in Code § 56-542.
2. The benefits offered by taking the Greenway have declined over time and this reduction in benefits constitutes an increase in the cost relative to the benefits of taking the Greenway.
3. Staff has a number of concerns with the BCA submitted by TRIP II, which include: (i) the BCA uses county-wide crash data to assess the safety profile of the alternate routes, and (ii) the BCA uses a higher VOR than indicated. Based on Staff's recommended changes to the BCA calculation, current toll rates could be interpreted as no longer being reasonable relative to the benefits offered by taking the Greenway.
4. Staff recommends denying the Company's requested toll rate increase.

⁴³⁷ Virginia Department of Transportation "A Study of the Feasibility of Purchasing All or Part of the Dulles Greenway (SJR 254, 2019)" rga.lis.virginia.gov/Published/2020/SD5/pdf.

⁴³⁸ Ex. 19, at 30 (Smith Direct)..

⁴³⁹ *Id.* at 31-38.

⁴⁴⁰ *Id.* at 38.

5. Alternatively, the Commission should consider approving the alternate toll rates presented in the Steer Report that appear not to violate the material discouragement threshold of 3%.
6. Staff recommends denying the request for a streamlined rate review process. Staff has not had full access to the model used by Steer and therefore cannot fully vet the model. The model itself does not have an established track record, and it will require several years' worth of thorough, and likely iterative study and discovery by Staff to build familiarity and transparency.⁴⁴¹

On surrebuttal, Mr. Smith confirmed that he had read TRIP II's rebuttal testimony and the testimony did not change any of his recommendations. He continued to support his findings that TRIP II's Proposed Tolls were not reasonable to the user in relation to the benefit obtained and the tolls would materially discourage use of the Greenway.⁴⁴²

On cross-examination, Mr. Smith confirmed that Steer's VOT data was inaccurate and had a low value in the BCA calculation; issues arising with the calculation of the VOT would be magnified in the calculation of VOR; and Steer did not perform a BCA analysis on partial trips on the Greenway.⁴⁴³

Mr. Smith confirmed that Staff had concerns with its inability to access the Steer Model. He explained that Staff made two discovery requests for the model and TRIP II declined to provide the model.⁴⁴⁴

Mr. Smith confirmed Staff recommended that TRIP II's Application be denied because the Proposed Tolls exceed the 3% threshold of material discouragement, and the current toll rates could be interpreted as no longer being reasonable in relation to the benefits of taking the Greenway. He further confirmed that Staff recommended denying TRIP II's request for a streamlined regulatory process.⁴⁴⁵

Mr. Smith explained the Commission could view the benefit cost test in two ways: (i) each vehicle class would have to individually pass the test; or (ii) a less stringent view could be that all drivers in the aggregate must pass the test. Under Staff's analysis, TRIP II fails the benefit cost test because current toll rates could be interpreted as no longer being reasonable relative to the benefits offered by taking the Greenway.⁴⁴⁶

Mr. Smith explained that in Staff's BCA analysis of SB savings, he compared the Greenway to Alternate Route 1 and looked at actual crash data reported by the Virginia Department of Motor Vehicles. He could not make a comparison to Alternate Route 2 because the data lacked enough detail to perform the same type of analysis. After reviewing the data, Mr. Smith would be surprised if the crash data for Alternate Route 2 was even close to the county-wide average. He noted that the

⁴⁴¹ *Id.* at 39-40.

⁴⁴² Tr. at 415 (Smith).

⁴⁴³ *Id.* at 416-17.

⁴⁴⁴ *Id.* at 419.

⁴⁴⁵ *Id.* at 420.

⁴⁴⁶ *Id.* at 425-26.

traffic on Alternate Route 1 is significantly higher than the traffic on Alternate Route 2, so the number of accidents on Alternate Route 2 should be proportionately smaller.⁴⁴⁷

Mr. Smith confirmed Staff relied primarily on USDOT guidance for discretionary grant programs as the primary source for determining driver benefits.⁴⁴⁸ In addition, Mr. Smith reviewed a Strategic Highway Research Program report on how highway congestion and pricing affect travel demand for determining the importance of VOT. Mr. Smith explained that according to the research travel time under 30 to 40 minutes has less value and above that threshold it has more value. He further noted that those travel times are longer than the estimated travel times on both the alternate routes and the Greenway. Mr. Smith explained that VOT is essentially a linear function related to income. However, he further noted the research suggests that willingness to pay is not linear and at some tipping point, at the 40 minute mark, the willingness to pay might increase compared to what it would be below that trip duration.⁴⁴⁹

Mr. Smith confirmed that he did not address the qualitative benefits of driving the Greenway in his BCA analysis. In addition, he confirmed the material discouragement analysis must look at 2024 forecasted traffic without the toll increase and 2024 forecasted traffic with the toll increase. Mr. Smith confirmed that circumstance results in a 6.3% reduction in Greenway traffic.⁴⁵⁰

Mr. Smith confirmed he did not have access to the Steer Model. As a result, he could not run variable toll scenarios for the Commission's consideration. Mr. Smith distinguished Staff's experience with the Plexos Model and its experience with the Steer Model. In sum, Mr. Smith believes he "wouldn't want to buy a car without having first checked under the hood and taken it for a test drive." He confirmed Staff has years of experience working with the Plexos Model, in multiple cases, and in sending interrogatories for testing the model's different sensitivities.⁴⁵¹

In response to TRIP II's proposal at the hearing to implement its rate increase in three phases over one year to reduce the negative impact on traffic, Mr. Smith confirmed that Staff has not reviewed the proposal.⁴⁵²

Mr. Smith sponsored Exhibit 21, which provides a summary of Staff's BCA adjustments.⁴⁵³

Mr. Smith reiterated the reasons why Staff is opposed to a streamlined regulatory process. Essentially, Staff's chief concern is not having access to the Steer Model or control over the inputs to that model. When TRIP II met with Staff in advance of filing its Application, Mr. Smith could not recall any discussion related to the Company's proposed streamlined regulatory process. Mr. Smith expressed Staff's frustration with trying to gain access to the Steer Model. He explained that, at first, access was denied because Staff did not have the software to run the model. Staff had its consultant obtain the software, and then, TRIP II denied access because the Steer Model is

⁴⁴⁷ *Id.* at 434-37.

⁴⁴⁸ *Id.* at 437-39. *See*, Ex. 22.

⁴⁴⁹ *Id.* at 439-44. *See*, Ex. 23.

⁴⁵⁰ *Id.* at 444-45.

⁴⁵¹ *Id.* at 446-49.

⁴⁵² *Id.* at 451-54.

⁴⁵³ *Id.* at 476-77. *See*, Ex. 21.

proprietary. If TRIP II had claimed the model was proprietary from the beginning, Mr. Smith believes the direction of Staff's analysis would have gone very differently.⁴⁵⁴

In his direct testimony, **Dr. Abbas** stated ITC was engaged by Staff to:

1. Review the Steer Report in support of TRIP II's Application and provide a general discussion on the reasonableness of Steer's overall approach and a detailed discussion of any elements of the report that may limit its applicability, accuracy, bias its results, or would otherwise call into question its conclusion;
2. Review Steer's travel demand model and provide a detailed discussion on the accuracy and reasonableness of the input data, methods, and assumptions used in the model and the resulting forecast within the study; and
3. Review the traditional econometric traffic growth model and time series model, used to forecast the traffic level recovery path stemming from the COVID pandemic, performed by Steer and provide a detailed discussion on the accuracy and reasonableness of the input data, methods and assumptions used in the Steer forecast.⁴⁵⁵

Dr. Abbas summarized ITC's findings and conclusions:

- Steer reviewed existing conditions and socioeconomic performance, built an investment grade travel demand model, and used its forecasts to evaluate the impact of the proposed toll increases on Greenway traffic, quantifying the benefits and costs of using the Greenway.
- Steer presented a reasonable analysis required to address the requirements of the material discouragement clause.
- While Dr. Abbas did not disagree with most of the analysis, he disagreed with some assumptions and conclusion presented by Steer. These included:
 - Steer should provide an analysis of the Metro Silver Line as one of its alternatives to the Greenway. This would increase the prediction accuracy of the Greenway capture model that is in turn used in the travel demand model, and would result in more accurate findings.
 - Steer should recalibrate the capture model using data obtained after the COVID pandemic; and
 - The BCA should be updated with the results obtained following the recommendations listed above.
- The data presented by Steer supports the hypothesis that commuters with flexible work schedules are shifting to shoulder periods (*i.e.*, non-peak travel times of the day).
- There might be an issue with the revenues not recovering from the COVID pandemic because of the new normal. Since increasing tolls usually result in reduced toll road usage, reduced revenues caused by the COVID pandemic might be difficult to alleviate.
- While time-series econometric models can generally estimate a recovery path, they can only be reliable if no underlying conditions change significantly. For example, the effect of opening the Metro Silver Line, capacity improvements in alternative routes,

⁴⁵⁴ *Id.* at 454-58, 480-82, 484-87.
⁴⁵⁵ Ex. 14, at 1-2 (Abbas Direct).

changes in origin-destination patterns (due to new development), changes in toll rates, etc., will reduce the prediction accuracy of these models. This is evident from the deviation of actual data from forecast data in Figure 3-9 of the Steer Report.⁴⁵⁶

- The approach used by Steer to customize the Metropolitan Washington Council of Governments (“MWCOG”) model and focus on the study area is generally valid but can only be reliable if the capture model is calibrated correctly.
- Steer accounted for the change in capture rates from 2019 to 2022 by implementing multiplication factors to reflect the changes. Dr. Abbas recommended calibrating the capture model using data obtained after the COVID pandemic rather than using multiplication factors. Furthermore, the corresponding calibration parameters should be reported to make sure they are reasonable.
- It should be noted that Steer estimated the 2024 AADT using aggregated markets forecasts based on Seasonal Autoregressive Integrated Moving Average time-series analysis (showing an increase of 16% from its 2022 value) to guide the growth of trips in the 2024 demand matrices. Therefore, any inaccuracies in predicted demand matrices would carry over to the travel demand model output.
- Dr. Abbas disagreed that material discouragement should be applied from the last toll rate application. According to Steer’s results (change in traffic of -6.3% for the proposed rates), TRIP II’s Application does not meet the material discouragement condition.
- In its sensitivity analysis, Steer noted that “the model cannot accurately forecast actual traffic levels with the lower [Value of Travel Time Savings (“VTTS”)].” Dr. Abbas’s statistical modeling of Steer’s output indicated that the travel demand model is equally capable of accurately forecasting the actual traffic levels with the lower VTTS. These results indicate that the Greenway’s 2024 traffic levels are anticipated to be significantly lower than the Greenway’s 2022 traffic levels if the imputed VTTS is half the value as used in the Steer Report.⁴⁵⁷

Dr. Abbas confirmed due to the lack of access to the Steer Model, he was unable to investigate/verify the following:

- whether all planned area developments were considered in the travel demand model;
- examine the origin-destination matrices used in the reduced scope Steer Model; and
- examine how the roadway improvement projects were implemented in the model.⁴⁵⁸

Lastly, Dr. Abbas confirmed his testimony supports his “Summary Report & Findings Case No. PUR-2023-00089 – Application for Approval of a Toll Increase under Section 56-542 D of the Code of Virginia” in its entirety.⁴⁵⁹

On surrebuttal, Dr. Abbas agreed the Metro Silver Line could serve as a substitute for the Greenway for commuters going from Ashburn to Washington D.C. In addition, he believes the Silver Line could help the timing of the alternative roads, which in turn is going to affect traffic on

⁴⁵⁶ Ex. 6, Exhibit DC-2 at 33 (Cuneo Direct).

⁴⁵⁷ Ex. 14, at 2-3 (Abbas Direct).

⁴⁵⁸ *Id.* at 3-4.

⁴⁵⁹ *Id.* at 4, Attachment MA-1.

the Greenway. For these reasons, Dr. Abbas believes the Silver Line should have been included in the Steer Model as an alternative to the Greenway.⁴⁶⁰

On cross-examination, Dr. Abbas agreed Steer should have modeled the Metro Silver Line as one of the alternatives to the Greenway. He believes this would have increased the accuracy of the Greenway capture model. Dr. Abbas confirmed TRIP II has not updated its analysis to include the Silver Line as an alternative to the Greenway, nor was he allowed access to the Steer Model.⁴⁶¹

Dr. Abbas confirmed one of his criticisms of the Steer Report was that the capture model was not calibrated with data from after the COVID pandemic. He noted that demand on some of the alternative routes has recovered while demand on the Greenway has not recovered. He questioned whether this is the new normal for the Greenway. He maintained to determine that, the Steer capture model should have been updated with traffic data as close as reasonably practicable to the date TRIP II filed its Application, July 11, 2023.⁴⁶²

In his direct testimony, Mr. Elmes addressed the finance issues related to setting tolls for TRIP II, including an evaluation of the forward-looking financial impact analysis of the Proposed Tolls, the REA, and the proper comparison of the allowed and earned returns on equity. Staff reviewed these factors to make a determination regarding the requirement in Code § 56-542 D that the tolls charged “will provide the operator no more than a reasonable return as determined by the Commission.”⁴⁶³

Mr. Elmes divided his testimony into three parts: (1) Forward-Looking Financial Impact Analysis; (2) REA and Alternative Monitoring Mechanisms; and (3) TRIP II Financing.⁴⁶⁴

Mr. Elmes confirmed TRIP II provided a forward-looking financial impact analysis of its Proposed Tolls on estimated 2024 cash flows through TRIP II witness Hamilton’s Confidential Exhibit RNH-1. TRIP II provided three scenarios: a baseline scenario, an upside scenario, and a downside scenario.⁴⁶⁵ He noted that in all three scenarios, TRIP II’s estimated net cash flow is negative. Consequently, TRIP II stated it would be unable to make a distribution to equity investors resulting from the Proposed Tolls. Furthermore, Mr. Elmes indicated TRIP II has not met the MCR or the ACR requirements since 2010 and 2019, respectively. Therefore, TRIP II would not be able to make any distributions to equity investors until 2027 at the earliest, presuming minimum coverage thresholds can be met by then.⁴⁶⁶ Considering the negative estimated cash flows under all

⁴⁶⁰ Tr. at 372-73 (Abbas).

⁴⁶¹ *Id.* at 374-75.

⁴⁶² *Id.* at 383-86.

⁴⁶³ Ex. 15, at 1 (Elmes Direct). Mr. Elmes’s direct testimony was filed in both public and confidential versions. The confidential version is Ex. 15C.

⁴⁶⁴ *Id.* at 3.

⁴⁶⁵ In the event of positive estimated net cash flows, the financial impact statement will be unable to *independently* determine whether returns made to equity investors will result in more than a reasonable return. Actual or projected equity distributions would need to be analyzed using the REA and Staff’s internal rate of return analysis to assess the reasonableness of returns over the life of the Greenway. Staff views the forward-looking financial impact statement as simply a check on whether the Company is in position where it has the *capability* to make a distribution to equity investors by meeting its coverage requirements. Ex. 15, at 3-4 n.5.

⁴⁶⁶ The MCR and ACR have equity distribution lock up periods of 12 months and 36 months, respectively, when TRIP II does not meet minimum thresholds.

three scenarios, Mr. Elmes believes it can be reasonably concluded that TRIP II's Proposed Tolls would result in no more than a reasonable return, and most likely, provide negative net cash flow over the initial year rates are in effect.⁴⁶⁷

Mr. Elmes provided a brief history of the REA, which is an off books tracking mechanism designed to capture the difference between the Company's allowed return and the amounts earned by equity investors. He indicated that as of December 31, 2023, the REA balance was \$12.71 billion. Staff agreed with the Company that this balance will almost certainly never be materially recovered. Therefore, Staff recommended the REA be supplemented with an additional way to monitor returns to facilitate the determination whether the Proposed Tolls will result in no more than a reasonable rate of return over the operating life of the Greenway.⁴⁶⁸

Mr. Elmes explained that the Greenway's financial performance has deviated significantly from initial projections, and the REA's compounded growth has far surpassed the Company's original projections. He indicated two debt refinancings and the creation of the MCR and ACR have led to the retention of large cash balances within reserve accounts. In recent years, this retained cash has been used for early debt retirement and to fund capital improvements rather than being distributed to equity investors. Mr. Elmes also provided the table below summarizing the original projections to actual results for the REA since 2019:

Table E

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Original Projected Balance	\$379,465,000	\$382,626,000	\$386,194,000	\$405,611,000	\$395,007,000
Actual Cumulative Balance	\$7,524,707,343	\$8,581,052,560	\$9,782,399,918	\$11,151,935,907	\$12,713,206,934

Mr. Elmes explained that despite the Commission adopting the REA to monitor distributions and assess the ROE without guaranteeing it, and two separate approvals for refinancing, TRIP II has struggled to generate the cash flow to provide distributions to equity investors. In addition, the continued compounding of the REA at the currently authorized ROE has contributed to the substantial growth in the REA balance. At this time, Staff does not recommend transitioning away from using the REA when assessing whether TRIP II has earned more than a reasonable return.⁴⁶⁹

Mr. Elmes presented Staff's internal rate of return analysis using the equity contribution and distribution case flows presented in the REA, which is identical to the approach presented by TRIP II witness Hamilton.⁴⁷⁰ In his Table F, Mr. Elmes summarized returns earned over the operating life of the Greenway, based upon his recommended financial measure to compare the IRR of the Greenway to the average allowed return over the operating life of the Greenway. This resulted in IRR results below the average allowed ROE as well as the currently authorized ROE.⁴⁷¹

⁴⁶⁷ Ex. 15, at 3-8 (Elmes Direct).

⁴⁶⁸ *Id.* at 9-11.

⁴⁶⁹ *Id.* at 12-15.

⁴⁷⁰ See, Ex. 4, at 34-35 (Hamilton Direct).

⁴⁷¹ Ex. 15, at 15-16 (Elmes Direct).

Mr. Elmes provided a brief history of the Greenway's first refinancing in 1999 and its second refinancing in 2005, which were both approved by the Commission.⁴⁷² TRIP II's outstanding debt and invested equity as of December 31, 2022, is summarized in the table below.⁴⁷³

Table G
TRIP II Debt and Equity as of December 31, 2022

Series Outstanding	Amount December 31, 2022*	Interest Rate/Yield
1999A Senior Current Interest Bonds	\$34,972,193	7.125%
1999B Senior Zero Coupon Bonds	\$493,021,198	7.300%
Series 2005B Senior Zero Coupon Bonds	\$126,867,606	5.700%
Series 2005C Senior Zero Coupon Bonds	\$466,184,261	5.600%
Total Debt:	\$1,121,045,258	
Total Invested Equity:	\$144,259,000	14% currently authorized ROE; 17.8% average allowed ROE over life of the Greenway

* Source of outstanding debt: TRIP II 2022 Financial Statements, Note 6.

Mr. Elmes explained why TRIP II's debt increases over time. He indicated the majority of TRIP II's debt is zero-coupon bonds, which are sold at a discount and the principal accrues over time until maturity at which point the entire face value of the bond is due. Mr. Elmes confirmed that TRIP II's debt is rated below investment grade by all three major credit rating agencies with a negative outlook for the future.⁴⁷⁴

Lastly, Mr. Elmes provided Staff's findings and recommendations. Staff concluded that the Proposed Tolls for the Greenway will provide TRIP II with no more than a reasonable return, based on the following:

- the forward-looking financial impact of the Proposed Tolls on estimated 2024 cash flows;
- the earned rate of return under the REA; and
- the internal rate of return over the operating history of the Greenway.

Based on Staff witness Smith's recommendations, Staff presented the estimated coverage ratios based upon three scenarios: (1) increase at the proposed toll rates; (2) increase at the alternate toll rates;⁴⁷⁵ (3) maintain the current toll rates.⁴⁷⁶

⁴⁷² *Application of Toll Road Investors Partnership II, L.P., For approval of refinancing*, Case No. PUF-1998-00025, 1998 S.C.C. Ann. Rep. 454, Order Approving Refinancing (Nov. 24, 1998); *Application of Toll Road Investors Partnership II, L.P., For Approval of Refinancing and Amendment of Certificate of Authority*, Case No. PUF-2001-00017, 2001 S.C.C. Ann. Rep. 652, Final Order Approving Refinancing and Amending Certificate of Authority (Nov. 7, 2001), as corrected by *Application of Toll Road Investors Partnership II, L.P., For Approval of Refinancing and Amendment of Certificate of Authority*, Case No. PUF-2001-00017, 2001 S.C.C. Ann. Rep. 655, Errata Order (Nov. 27, 2001).

⁴⁷³ Ex. 15, at 17-19 (Elmes Direct).

⁴⁷⁴ *Id.* at 20.

⁴⁷⁵ The Alternative Toll Rates or Sample Toll Rates are equivalent to \$6.45 for Maximum Peak Tolls and \$5.85 for Maximum Off-Peak Tolls.

⁴⁷⁶ Ex. 15, at 21 (Elmes Direct).

On cross-examination, Mr. Elmes confirmed the 1999 and 2005 refinancings were the result of weaker than projected traffic revenues. He also confirmed TRIP II has not generated sufficient revenues to provide distributions to equity investors. Mr. Elmes identified several factors that have contributed to the large increase in the REA, in particular the compounding feature that compounds the REA at the currently authorized 14% return of equity. Mr. Elmes confirmed that TRIP II has not had sufficient revenues to even begin drawing down the REA.⁴⁷⁷

Mr. Elmes identified Exhibit 16 as a report prepared by Staff in 1990 addressing the REA. The report provided that: “[w]ithout an appropriate mechanism, regulators 20 years from now may view the project’s cash flows as excessive without recognizing the absence of cash flow in the early years.” Mr. Elmes confirmed without the REA, Staff would have been unable to track the equity returns TRIP II should have earned in the early years of the Greenway’s operation.⁴⁷⁸

Mr. Elmes identified Exhibit 17 as Staff testimony from the 2013 Investigation Case that provides the history of the financing for the Greenway.⁴⁷⁹

On questioning from the bench, Mr. Elmes explained the reason for retaining the REA. He explained Staff views the REA as relevant as a means to track the returns that were authorized to investors versus the returns that have been realized by those investors. Staff views the REA as a tracking tool for those returns, paired with the internal rate of return, which is Staff’s supplemental financial measure for identifying what those returns should have been. Mr. Elmes explained Company witness Hamilton’s Exhibit RNH-3 provides a summary of the equity investments made in the Greenway and the equity distributions made by TRIP II.⁴⁸⁰

In his direct testimony, **Mr. Armstrong** provided the conclusions of Staff’s audit conducted in this proceeding,⁴⁸¹ and Staff’s evaluation of TRIP II’s financial projections for the proposed toll increases.⁴⁸²

Mr. Armstrong confirmed Staff conducted a review of TRIP II’s financial information from 2020 through the third quarter of 2023, and conducted an audit of calendar year 2022.⁴⁸³ Staff’s key findings are as follows:

- TRIP II’s financial results through the third quarter of 2023 continue to be depressed relative to those recognized when the Commission last reviewed tolls pursuant to Code § 56-542 D in the 2019 Rate Case.
- A significant reduction in traffic volumes due to the COVID pandemic caused a rapid deterioration in toll revenues in 2020. While year-over-year toll revenues have shown

⁴⁷⁷ Tr. at 389-91 (Elmes).

⁴⁷⁸ *Id.* at 395-96. *See*, Ex. 16.

⁴⁷⁹ *Id.* at 397-98. *See*, Ex. 17.

⁴⁸⁰ *Id.* at 392-93. *See*, Ex. 4 at Exhibit RNH-3 (Hamilton Direct).

⁴⁸¹ A detailed discussion of Staff’s audit is included in Mr. Armstrong’s Appendix A.

⁴⁸² Ex. 18, at 1 (Armstrong Direct). Mr. Armstrong’s direct testimony was filed in both public and confidential versions. The confidential version is Ex. 18C. A detailed discussion of the financial projection model and its underlying assumptions is included in Mr. Armstrong’s Appendix B.

⁴⁸³ Staff’s review of 2020, 2021, and the first three quarters of 2023 involved summarizing financial results as reported by TRIP II. Staff’s audit of 2022 involved a review of ledgers, bank statements, contracts, invoices, and other source documents on a sample basis.

some improvement since 2020, traffic levels and toll collections through the third quarter of 2023 have fallen short of the 2019 levels. The ultimate scale and duration of COVID's financial effect on TRIP II remains unclear at this time.

- TRIP II's costs are primarily composed of its debt service obligations, including principal and interest on its bonds.
- As in the 2019 Rate Case, Staff recommends continued exclusion of political contributions, charitable contributions, and lobbying costs from determining TRIP II's returns in present and future cases.⁴⁸⁴

Mr. Armstrong provided Staff's findings and recommendations, which included:

- Through the third quarter of 2023, TRIP II's financial results reveal the impacts of the COVID pandemic and post-pandemic performance. TRIP II has not generated positive net income in any year since the Commission last approved tolls in 2019 Rate Case.
- Staff verified that political contributions and lobbying costs are not on TRIP II's books, and as such, do not impact the toll-setting process in this case. For charitable contributions that are on the books, Staff excluded the costs from its analysis of TRIP II's 2024 financial forecast. As a result, they do not impact the toll-setting process in this case. Staff recommended that such costs continue to be excluded from future toll evaluations.
- Staff's evaluation of TRIP II's financial forecast concluded that financial results would very likely remain depressed. A negative cash flow is anticipated whether tolls are changed or not, largely based on existing debt service obligations.⁴⁸⁵

On cross-examination, Mr. Armstrong confirmed political contributions, lobbying costs, and charitable contributions did not impact the toll setting process in this case and should also be excluded in future cases.⁴⁸⁶

Mr. Armstrong confirmed TRIP II will have a negative cash flow whether or not the Commission approves the Proposed Tolls and that is due primarily to TRIP II's existing debt service obligations.⁴⁸⁷

On questioning for the bench, Mr. Armstrong confirmed the REA was an off-books informational tool for the Commission that recognized that the Greenway was expected to struggle financially in the early years. At the time it was established, the expectation was that TRIP II's finances would turn around and that turnaround should not be held against the Company in the toll setting process. Mr. Armstrong confirmed the REA is not a guarantee of any future toll recovery.⁴⁸⁸

Mr. Armstrong explained TRIP II's various reserve accounts and how revenues are wired daily to the revenue fund and then distributed to the various reserve funds. He described this as the "waterfall effect" based on the operational needs of TRIP II. Mr. Armstrong explained the Senior

⁴⁸⁴ Ex. 18, at 4 (Armstrong Direct).

⁴⁸⁵ *Id.* at 2.

⁴⁸⁶ Tr. at 401 (Armstrong).

⁴⁸⁷ *Id.* at 401-02.

⁴⁸⁸ *Id.* at 405-06.

Debt Service Reserve Fund and the Senior Debt Service Fund are used to pay the 1999 bonds, and the Early Redemption Reserve Fund and Early Redemption Fund are used to pay the 2005 bonds. The funds flow from one account to the other when the debt payments are made. Mr. Armstrong confirmed the 1999 series are traditional bonds and the 2005 series bonds are primarily zero-coupon bonds.⁴⁸⁹

Toll Road Investors Partnership II, L.P. Rebuttal Testimony

TRIP II presented the rebuttal testimony of **Renée N. Hamilton, Steve Weller, and David Cuneo.**

In her rebuttal testimony, **Ms. Hamilton** responded to issues raised by public witnesses in this proceeding and in the testimony filed by Staff and the County. Specifically, she addressed the following:

- The ownership structure of TRIP II and confirmed that this ownership structure, and prior changes in that structure, have not impacted TRIP II's debt obligations or the balance of the REA;
- The financial impact on TRIP II and its ability to meet its operating costs, capital expenditure requirements, debt service obligations, and have an opportunity to earn a reasonable return from the Alternate Tolls;
- TRIP II's debt obligations and the County's arguments to disregard these obligations, which have already been rejected by the Commission;
- The feasibility of implementing distance-based tolls on the Greenway under the current regulatory structure; and
- The Company's proposed expedited process for future toll increase applications.⁴⁹⁰

Ms. Hamilton sponsored the following exhibits with her rebuttal testimony:

- Exhibit RNH-1R – TRIP II Certificate of Limited Partnership.
- Exhibit RNH-2R – Trip II 2016 Distance-Based Tolling Report.⁴⁹¹

Ms. Hamilton testified the Proposed Tolls are the minimum amount that will allow TRIP II to meet its operating expenses, make required capital expenditures, pay its debt service obligations, work towards a cash flow positive position and meet its coverage ratios over the next few years, maintain its financial integrity, and provide TRIP II with the opportunity to earn a reasonable return before the end of the concession in 2056.⁴⁹²

Ms. Hamilton confirmed TRIP II considered the "public interest" when it developed the Proposed Tolls. Although a larger increase was indicated to get the Greenway to a positive cash

⁴⁸⁹ *Id.* at 406-12.

⁴⁹⁰ Ex. 32, at 1-2 (Hamilton Rebuttal). Ms. Hamilton's rebuttal testimony was filed in public and confidential versions. The confidential version is Ex. 32C.

⁴⁹¹ *Id.* at 2.

⁴⁹² *Id.* at 2-3.

flow position, TRIP II considered the impact those tolls would have on the public and did not propose that toll increase. Ms. Hamilton believes TRIP II has no option but to increase tolls.⁴⁹³

Ms. Hamilton clarified the ownership structure of TRIP II. Since it was formed in 1993, TRIP II has been a Virginia-registered limited partnership with its principal (and only) office located in Loudoun County. TRIP II's sole purpose is the operation and maintenance of the Greenway and TRIP II has no other assets other than those located in Loudoun County. TRIP II and the Greenway are part of a portfolio of roadways for which Atlas Arteria ("ALX") holds an effective economic interest. ALX is a separate legal entity from TRIP II. Ms. Hamilton explained the ownership history of TRIP II and provided a diagram illustrating the current ownership of TRIP II.⁴⁹⁴

Ms. Hamilton clarified Staff witness Elmes testimony regarding alterations in the ownership structure impacting the REA balance. She confirmed any changes in TRIP II's ownership structure have had no impact on TRIP II's level of debt or the balance of the REA.⁴⁹⁵

Although TRIP II continues to support approval of its Proposed Tolls, Ms. Hamilton testified the Alternate Tolls would comply with the requirements of Code § 56-542 D. However, the Alternate Tolls would not allow TRIP II to meet its operating costs, capital expenditure requirements, debt service obligations, or to have an opportunity to earn a reasonable return. According to Ms. Hamilton, the Alternate Tolls will at least generate *some* additional revenue to help the Company get closer to meeting its financial obligations; and while they are better than no increase at all, they are in no way a sufficient or appropriate toll increase.⁴⁹⁶

Ms. Hamilton explained TRIP II would need permission from its bond insurer to pay operating expenses, capital expenditures, and debt service payments from its reserve funds. For this reason, she believes it is critical for TRIP II to have sufficient revenues to meet its expenses. Over the longer term, she maintained the consequences for TRIP II could be dire. Ms. Hamilton believes TRIP II cannot be forced to rely on some amount of undistributed funds to meet its operating expenses, capital expenditures, and debt service payments. She acknowledged that TRIP II is not entitled to a guaranteed return. At a minimum, however, Ms. Hamilton believes TRIP II should be entitled to sufficient revenues to pay its operating expenses and have an opportunity to earn a reasonable return.⁴⁹⁷

Ms. Hamilton responded to County witness Webb's testimony that TRIP II's debt was imprudently incurred. She noted the Commission has been involved in each step as TRIP II has worked through the various challenges since the initial approval for the Greenway. She explained TRIP II's debt is long-term project financing that includes penalty terms for early termination, including sizeable make-whole premiums and/or defeasance payments. She further explained provisions of this type are very standard in long-term project finance, and protect bond financier's

⁴⁹³ *Id.* at 4-5.
⁴⁹⁴ *Id.* at 6-7.
⁴⁹⁵ *Id.* at 7-8.
⁴⁹⁶ *Id.* at 8-10.
⁴⁹⁷ *Id.* at 10-12.

investments. Ms. Hamilton confirmed all the debt on TRIP II's books is solely related to the Greenway and the majority of that debt is held by U.S. based entities.⁴⁹⁸

Ms. Hamilton responded to County witness Webb's claims that the traffic and revenue projections used when TRIP II refinanced its debt in 1998 have never materialized and were significantly overstated. She noted numerous factors have occurred since 1998 that clearly impacted any assumptions made by TRIP II, including the Great Recession and the COVID pandemic. Ms. Hamilton believes there is a direct correlation between the improvements made by Loudoun County beginning in 2005 in the free alternatives to the Greenway, and declining ridership on the Greenway since that time. Ultimately, Ms. Hamilton believes regardless of what led to the difference between TRIP II's preliminary traffic and toll projections presented to the Commission in 1998 and actual performance, this has no impact on the prudence of TRIP II's debt obligations or on its need to recover sufficient revenues to meet these obligations.⁴⁹⁹

Ms. Hamilton responded to the public witness comments on why there is no distance-based tolls on the Greenway. She explained the Greenway was not designed to charge tolls based on distance. The road was specifically designed to be a closed barrier road with tolls collected only once near the entrance or exit to the road, depending on the direction of travel. Ms. Hamilton provided a copy of a Distance-Based Tolling Report (Exhibit RNH-2R) submitted in the 2013 Investigation Case. At the time, TRIP II and VDOT agreed it was not feasible, and further detailed study would not be effective, to implement distance-based tolling, indicating:

- The Greenway was not designed for distance-based tolls;
- It would be prohibitively expensive to properly study and implement distance-based tolls; and
- Distance-based tolls would threaten the financial viability of TRIP II, result in higher tolls for some users, and/or overwhelm the capacity of the interconnection with the DTR, causing significant congestion.

Ms. Hamilton believes the conclusions in the Distance-Based Tolling Report are generally still accurate, except that two factors have changed. First, tolling technology has changed so that TRIP II would not need as much additional right-of-way at the entrance and exit ramps to install electronic toll readers. Second, TRIP II invested in adding additional lanes to the merge between the Greenway and the DTR, alleviating the bottleneck as traffic transitioned from the Greenway to the DTR. Ms. Hamilton believes TRIP II would need to invest tens of millions of dollars to implement distance-based tolls, and the financial barriers remain and have been exacerbated by the 2021 amendments to the Act. Ms. Hamilton believes the Act now explicitly forbids the Commission from providing any certainty regarding future tolls on the Greenway by limiting the Commission to approving only one year's worth of toll increases at a time.⁵⁰⁰

Lastly, Ms. Hamilton responded to the concerns raised by the County and Staff regarding the streamlined regulatory process proposed by TRIP II. TRIP II was disappointed by the positions taken by the County and Staff in opposition to its proposal. Despite their positions, TRIP II is

⁴⁹⁸ *Id.* at 13-15.

⁴⁹⁹ *Id.* at 15-26

⁵⁰⁰ *Id.* at 18-20.

nonetheless seeking such a process from the Commission or, at a minimum, guidance from the Commission on what process it finds would be appropriate to minimize the burden on the Company, Staff, and other parties, given the need for near-annual toll increase applications based on amendments to Code § 56-542. Ms. Hamilton explained the lengths to which TRIP II and Steer went to familiarize Staff with the Steer Model. Since the model is proprietary, Staff and its consultant were provided access to other files that would allow them to review and test Steer's model. TRIP II stated this is common industry practice. Despite the County's and Staff's concerns, Ms. Hamilton noted that VDOT's consultant was able to review the model in sufficient depth to provide comments to the Commission, and the information was also made available to Staff and its consultant.⁵⁰¹

Ms. Hamilton clarified TRIP II position regarding a streamlined regulatory process. She explained that rather than a new regulatory process that would completely avoid Commission review, TRIP II simply seeks a way to streamline the existing process. She suggested that under the streamlined process, the Commission, either upon its own motion or a request by Staff or a respondent, would still be able to hold a hearing if it believed one was necessary and the Commission would still be able to make adjustments to the request if it determined those adjustments were necessary. As part of this process, TRIP II stated it would make its consultants available to Staff to work collaboratively for reviewing the Company's forecasting in future applications. Ultimately, Ms. Hamilton believes TRIP II will need to file applications in relative quick succession given the changes in the Act and simply seeks to ease the burden on, and costs incurred by, all participants.⁵⁰²

In sum, while Ms. Hamilton acknowledged the Commission needs to follow the law, she also emphasized that, as a regulator, the Commission must also ensure it permits TRIP II to meet its financial obligations and to have the opportunity to earn a reasonable return. She asserted that through its Application, TRIP II is seeking tolls that will allow it to regain its financial integrity, pay its operating expenses, meet its capital expenditure requirements, pay its debt service, and have an opportunity to earn a reasonable return in the future.⁵⁰³

At the hearing, Ms. Hamilton clarified that both the 1999 and 2005 series bonds were structured so that a bond matured each year over the life of the concession. TRIP II's debt service each year includes payment of the principal and interest on the bonds that have reached maturity. Ms. Hamilton noted additional information on TRIP II's debt financing may be found in County witness Webb's Exhibit 2 and Staff witness Elmes's Appendix C.⁵⁰⁴

On cross-examination, Ms. Hamilton agreed the tolls the Commission approved in the 2019 Rate Case were not subject to the 2021 amendments to Code § 56-542. Ms. Hamilton believes the Commission must balance the impact of any change in tolls on the public interest with the impact on TRIP II's financial integrity. However, she acknowledged Code § 56-542 D provides that any tolls that fail to meet the criteria as determined by the Commission are contrary to the public

⁵⁰¹ *Id.* at 22-23.

⁵⁰² *Id.* at 23-24.

⁵⁰³ *Id.* at 25.

⁵⁰⁴ Tr. at 536-39 (Hamilton). *See*, Exs. 33 and 34.

interest, and the Commission shall not approve such toll rates. Ms. Hamilton agreed TRIP II's Proposed Tolls must meet the requirements of Code § 56-542 D.

Ms. Hamilton confirmed that TRIP II has reserve funds, but those funds have been partially depleted by debt payments the Company made in 2022 and 2023. She contended that, as a rate regulated entity, TRIP II must have tolls that realistically allow the Company to generate sufficient revenue to meet its financial obligations; and the Commission has never guaranteed any particular level of tolls or toll structure.⁵⁰⁵

Ms. Hamilton stated TRIP II has been in business since 1995; TRIP II is entitled to a reasonable return; with the exception of 2019, the Commission has approved every TRIP II request for a toll increase; TRIP II has had 30 years to earn a reasonable return; and TRIP II's last equity distribution was in 2006.⁵⁰⁶

Ms. Hamilton confirmed TRIP II's 1999 and 2005 debt refinancings were approved by the Commission, all of TRIP II debt is solely related to the Greenway, no TRIP II debt has been used by Atlas Arteria or any other entity for other assets in Atlas Arteria's portfolio, and TRIP II bears the burden of interest rate risk.⁵⁰⁷

Regarding TRIP II's inaccurate traffic projections from its debt refinancing case, Ms. Hamilton stated "[p]rojections are projections."⁵⁰⁸ She noted the Greenway still has 36,000 vehicles a day on the roadway. In this proceeding, Ms. Hamilton confirmed that TRIP II has made the best projections possible.⁵⁰⁹

Regarding the streamlined regulatory process, Ms. Hamilton stated that TRIP II wanted to work collaboratively with the Commission and other interested parties to come up with the process. The Company's intent is not to lessen regulatory scrutiny. Ms. Hamilton believes the Steer Model could be a start, but the conversation among the parties would determine the process. Ms. Hamilton confirmed TRIP II has not reached out to the County to be part of that process.⁵¹⁰

Ms. Hamilton confirmed that TRIP II is a private for profit company, TRIP II acquired the certificate for the Greenway, TRIP II acquired the certificate knowing that drivers are free to choose alternative routes to the Greenway, and TRIP II does not have an exclusive franchise over the roadways in Loudoun County.⁵¹¹

Ms. Hamilton was unsure whether TRIP II used Steer in any previous rate cases, or whether TRIP II will use Steer in any future rate cases.⁵¹²

⁵⁰⁵ *Id.* at 545-46.

⁵⁰⁶ *Id.* at 547-48.

⁵⁰⁷ *Id.* at 549-50.

⁵⁰⁸ *Id.* at 552.

⁵⁰⁹ *Id.* at 551-54.

⁵¹⁰ *Id.* at 555-57.

⁵¹¹ *Id.* at 561-62, 567.

⁵¹² *Id.* at 567-69.

In his rebuttal testimony, **Mr. Weller** responded to the direct testimony of Staff and the County related to improvements to alternative roads that impact Greenway traffic, the benefits the Greenway provides to its users, and whether the Proposed Tolls materially discourage use of the Greenway. In addition, Mr. Weller included Exhibit SW-1R, which provides a sample trip from Ashburn to Reston Town Center on the Metro Silver Line.⁵¹³

Mr. Weller provided an update on Greenway traffic through the end of 2023. He represented that the cumulative traffic through March 2023 was 28.8% lower compared to the same period in 2019. By the end of 2023, the cumulative reduction was 26.1% below 2019 levels, with the last six months being 23.8 % lower than the same period in 2019. Compared to 2022, Greenway traffic increased moderately during 2023. By comparison, DTR was 20.4% below 2019 levels through April 2023. DTR traffic remained at that level through the rest of 2023, with the last six months being 19.8% below 2019 levels.⁵¹⁴

Mr. Weller noted the testimony at the local public witness hearing where members of the Board testified that Loudoun County will invest in more transit options so that its residents can get from Point A to Point B without having to use the Greenway. He further noted the County freely admits it competes directly with the Greenway and that competition has a negative impact on Greenway traffic.⁵¹⁵

With regard to Staff's and the County's testimony regarding TRIP II's material discouragement analysis, Mr. Weller stated the Company's method of calculating material discouragement is consistent with the Act, which requires an investment-grade forward-looking analysis that includes consideration of factors like population growth and other socio-economic factors to properly assess changes in traffic. He maintained that by comparing the forecasted AADT for 2024 with the actual traffic in 2022, Steer's analysis properly considered the impacts of these additional, statutorily required factors to determine the impact of the Proposed Tolls on Greenway traffic.⁵¹⁶

Mr. Weller disagreed with County witness Webb that the Greenway's tolls are already materially discouraging Greenway traffic. He stated by definition, any user fees on a road (tolls) discourage use. Mr. Weller argued it is the improved travel times and growth in capacity on the non-tolled alternatives that is largely responsible for the decrease in traffic on the Greenway, not the toll prices.⁵¹⁷

Contrary to Staff witness Abbas's testimony, Mr. Weller confirmed the Steer Model included an analysis of the Metro Silver Line as an alternative to the Greenway. Mr. Weller's Exhibit SW-1R provides additional detail on the cost and travel time differences between the Greenway and the Metro Silver Line and demonstrates why the Silver Line is not a viable alternative to the Greenway.⁵¹⁸

⁵¹³ Ex. 35, at 1 (Weller Rebuttal). Mr. Weller's rebuttal testimony was filed in public and confidential versions. The confidential version is Ex. 35C.

⁵¹⁴ *Id.* at 2.

⁵¹⁵ *Id.* at 3.

⁵¹⁶ *Id.* at 3-4.

⁵¹⁷ *Id.* at 4-5.

⁵¹⁸ *Id.* at 5-6.

Mr. Weller disagreed with Staff witness Smith's testimony that the decrease in benefits provided to users of the Greenway constitutes an increase in cost. Mr. Weller believes there is no increase in cost. Rather, he believes there is only a reduction in the benefit relative to the cost, and that is solely a result of the upgrades and improvements in the free alternatives.⁵¹⁹

Lastly, Mr. Weller also disputed Staff witness Smith's claims that Steer's calculation of the VOT is significantly higher than USDOT guidance. Mr. Weller noted the guidance Mr. Smith cites to support his position finds that "the willingness to pay for reduced travel time varies substantially depending on the characteristics of the traveler and the context of his or her particular trip" and that for "frequent trips (e.g. commuting), people may be more aware of the time duration difference between different travel alternatives and also more able to change their activity schedules to make optimal use of the time saved."⁵²⁰ Mr. Weller believes Mr. Smith's claim that the VOT savings is more important over a ten-hour trip than a ten-minute trip is incorrect.⁵²¹

On cross-examination, Mr. Weller confirmed traffic on the Greenway through the end of 2023 was still down 26.1% relative to 2019 levels. This was based on the number of transactions in 2019 relative to the number of transactions at the end of 2023.⁵²²

Regarding TRIP II's claim that the County is competing with the Company, Mr. Weller stated this assertion is supported by the public witness testimony of Supervisor Phyllis Randall. Mr. Weller reiterated his position that improvements to the free alternatives to the Greenway have had a negative impact on traffic. Although, he has not provided any empirical evidence to support this conclusion. Mr. Weller agreed that if TRIP II's rate increase is approved there will be less traffic on the Greenway.⁵²³

Mr. Weller confirmed it is possible to include population growth in a 2024 traffic forecast and then forecast traffic levels with and without a toll increase.⁵²⁴

On redirect, Mr. Weller stated there are factors related to the free alternatives, such as road widening and the removal of signalized intersections with grade separated interchanges, that reduce the travel time benefits of the Greenway compared to the alternative routes.⁵²⁵

In his rebuttal testimony, **Mr. Cuneo** responded to: (i) the testimony of Staff witnesses Smith and Abbas; and (ii) County witnesses Roden and Webb concerning the material discouragement analysis, benefit-cost analysis, and other studies and metrics set forth in the Steer Report. Mr. Cuneo sponsored the following exhibits with his rebuttal testimony:

- Exhibit DC-1R Total Benefit Ratio;
- Exhibit DC-2R Total Benefit Cost Ratio – Alternate Tolls;

⁵¹⁹ *Id.* at 7.

⁵²⁰ Strategic Highway Research Program, "Improving Our Understanding of How Highway Congestion and Pricing Affect Travel Demand." <https://onlinepubs.trb.org/onlinepubs/shrp2/SHRP2prepubC04.pdf> at 3.

⁵²¹ Ex. 35, at 7-8 (Weller Rebuttal).

⁵²² Tr. at 573-74 (Weller).

⁵²³ *Id.* at 574-77.

⁵²⁴ *Id.* at 577.

⁵²⁵ *Id.* at 578-79.

- Exhibit DC-3R Response to Staff Discovery Request 10-124; and
- Exhibit DC-4R MWAA DTR Investment Grade Traffic and Revenue Study, Final Report December 6, 2021.⁵²⁶

Contrary to Staff witness Smith and County witness Webb, Mr. Cuneo believes the Steer Report’s inclusion of population growth is consistent with Code § 56-542 A, which requires “material discouragement” to be validated by “an investment-grade travel demand model that takes population growth into consideration.” Mr. Cuneo believes had Steer only analyzed 2024 traffic levels with and without the Proposed Tolls, its travel demand model would have inappropriately ignored population growth. In addition, he explained that if the Steer analysis only considered the impact of the tolls in 2024, the 2024 base traffic level projections utilizing the current toll rates would reflect higher traffic than in 2022 when tolls were last adjusted simply because real toll rates have decreased due to inflation rather than the proposed change in tolls for 2024.⁵²⁷

Mr. Cuneo disagreed with County witnesses Roden and Webb’s analysis of material discouragement and urged the Commission to reject their analysis. He believes Mr. Webb’s material discouragement analysis is flawed because it is not based on traffic validated by “an investment-grade travel demand model that takes population growth into consideration.”⁵²⁸ Mr. Cuneo believes Dr. Webb’s analysis is a simple calculation of elasticity that focuses on only a single year with no population growth, which is contrary to the requirement of the statute.⁵²⁹

Contrary to Staff witness Smith’s testimony regarding flawed assumptions and deviations from USDOT guidelines, Mr. Cuneo maintained the Steer Report used assumptions that are: (i) appropriate to analyze the Greenway’s benefits; (ii) consistent with analyses presented to the Commission in prior rate cases; (iii) adopt and are consistent with industry standards; and (iv) have yielded results consistent with actual traveler behavior.⁵³⁰

Regarding Staff witness Smith concerns with the VOR metric, Mr. Cuneo maintained the VOR metric was recognized as a valid consideration in both the 2013 Investigation Case and the 2019 Rate Case. In addition, Mr. Cuneo responded to Mr. Smith assertion that if the VOR were excluded, it would produce a BCR of less than one. Mr. Cuneo believes this shows the importance of including the VOR in the BCA because a BCR of less than one would indicate that no one would use the Greenway, which is obviously not the case.⁵³¹

Mr. Cuneo responded to Staff witness Smith’s concerns with Steer’s VOT metric exceeding USDOT guidance. He noted the VOTs Steer calculated and relied on are higher than those for the nation as a whole used in the USDOT guidance. Steer calculated VOTs from median household incomes in the Greenway study area following other guidance promulgated by USDOT regarding economic analysis, as opposed to guidance for discretionary grant programs. Mr. Cuneo believes

⁵²⁶ Ex. 36, at 1-2 (Cuneo Rebuttal).

⁵²⁷ *Id.* at 2-3.

⁵²⁸ Code § 56-542 A.

⁵²⁹ Ex. 36, at 3-4 (Cuneo Rebuttal).

⁵³⁰ *Id.* at 4.

⁵³¹ *Id.* at 4-5.

establishing VOTs based on median household income is a common approach for local transportation analyses.⁵³²

In responding to Staff witness Smith's testimony that Steer's VOT incorrectly assumes a linear relationship between income and willingness to pay, Mr. Cuneo explained Steer used median household income for the Greenway study area rather than trying to capture a broader distribution of income levels more generically. For this reason, Mr. Cuneo is confident that Steer's estimated VOTs are reasonable and appropriate for the Greenway study area.⁵³³

In response to Staff witness Smith's testimony that Steer over-estimated the number of daily trips taken to Dulles Airport for purposes of air travel, Mr. Cuneo stated Steer used an assumption based on the available data. Since traffic to the airport only represents 6% of trips on the Greenway, he believes the impact of employees that may use the Greenway to go to work is immaterial to Steer's analysis.⁵³⁴

In response to Staff witness Smith's testimony that Steer's VOT is inaccurate and has little value in calculating the BCA, Mr. Cuneo maintained Steer followed standard industry practices in calculating the VOTs the Steer Report relied on, and asserted the VOTs are thus both accurate and valuable inputs to Steer's BCA calculation. In addition, Mr. Cuneo clarified that the time savings on the Greenway have declined as a result of improvements to the alternative roads.⁵³⁵

Contrary to Staff witness Smith's testimony, Mr. Cuneo maintained that Steer did not intentionally exclude safety data for 2022 in its analysis because the data was not available until after the Application was filed in this case.⁵³⁶

In response to Staff witness Smith's testimony that Steer failed to follow USDOT guidance, Mr. Cuneo stated the guidance to which Mr. Smith refers is guidance for discretionary grant applications. Mr. Cuneo believes while there is some useful general guidance for conducting benefit cost analysis for transportation projects, the guidance is not directly relevant to a user benefit analysis of Greenway users. In particular, Mr. Cuneo has little confidence in Mr. Smith's calculation of the safety benefits of the Greenway in comparison to the alternate routes. He believes, as in previous cases, county-wide data should be used to generate safety comparisons for travel on other roadways.⁵³⁷

Mr. Cuneo represented his Exhibit DC-1R corrects the errors Staff identified in Steer's BCA analysis. In addition, Exhibit DC-2R is the Steer BCA for the Alternate Tolls.⁵³⁸

Mr. Cuneo addressed whether Steer's travel demand model should have analyzed the Metro Silver Line as an alternative to the Greenway. Mr. Cuneo believes analysis of the Silver Line would be time consuming and of little value. He noted the weekday ridership of 3,700 daily trips

⁵³² *Id.* at 6.

⁵³³ *Id.* at 6-7.

⁵³⁴ *Id.* at 7.

⁵³⁵ *Id.* at 8.

⁵³⁶ *Id.* at 9.

⁵³⁷ *Id.* at 9-10.

⁵³⁸ *Id.* at 10.

between mid-November 2023 and mid-February 2024 represents about 10% of the current Greenway daily trips and maintained there is little evidence to suggest the Silver Line has or will cause a mode of travel shift away from the Greenway.⁵³⁹

In response to Staff witness Abbas's assertion that Steer should recalibrate the capture model using data obtained after the COVID pandemic, Mr. Cuneo stated to do so now would be inappropriate and premature. He believes after the COVID pandemic is "complete" may be the appropriate time and incorporate it in a future application.⁵⁴⁰

Mr. Cuneo responded to Staff witness Abbas's testimony that Steer's model cannot accurately forecast actual traffic levels with lower VOTs. Mr. Cuneo believes using a model that incorporates VOTs that are 50% lower than used by Steer without changing other model parameters produces traffic forecasts that are below currently observed traffic levels and cannot accurately forecast Greenway traffic.⁵⁴¹

Mr. Cuneo responded to County witness Roden's testimony that the Steer Report relies on inconsistent VOT values. He noted the Steer Report documents both the VOTs used in the Steer Model, and the separate VOTs used as part of Steer's BCA analysis. He explained why the VOT may differ for each purpose. Mr. Cuneo explained Steer used a set of starting VOTs based on regional income levels and adjusted these as part of the capture model calibration so that the model produced forecasted traffic levels that closely matched observed levels. Mr. Cuneo believes this customization of VOTs and the capture model is important for a toll facility because it may have its own unique characteristics that can influence the VOT of travelers on the road. He stressed that model calibration is the art of best fitting multiple criteria to the observed conditions and getting the traffic levels and travel times on both the tolled and un-tolled routes to reflect observed conditions and effectively forecast responses to network changes and toll rates into the future.⁵⁴²

Mr. Cuneo responded to County witness Roden's testimony that Steer's VOTs are higher than VOT values used in other local studies and regional models. He noted that Mr. Roden did not demonstrate the VOTs he referenced are part of models that accurately forecast traffic levels on toll roads. Mr. Cuneo noted the Steer VOTs of \$32.90 for peak and \$25.60 for off-peak are similar to MWCOC's VOTs of \$29 peak and \$25 off-peak, and the latest DTR VOTs range from \$15.30 to \$35.28. Mr. Cuneo does not consider Steer's VOTs to be "much higher" than the forgoing VOTs. Since Steer's VOTs appropriately reflect income levels of users in the study area, Mr. Cuneo believes that Steer's VOR estimate is also appropriate.⁵⁴³

Mr. Cuneo responded to County witness Roden's statement that an EPB is uncommon and lacked rationale in a traffic and revenue modeling practice. He noted the MWAA 2021 DTR Traffic and Revenue Study used both a "toll road bias" and an "electronic toll collection" bias in the study. Mr. Cuneo explained if the Steer traffic demand model has not used the EPB parameter, the capture model would likely have needed higher VOTs to increase Greenway traffic levels to

⁵³⁹ *Id.* at 10-11.

⁵⁴⁰ *Id.* at 12.

⁵⁴¹ *Id.* at 12-13.

⁵⁴² *Id.* at 13-15.

⁵⁴³ *Id.* at 15-16.

observed levels. This would have caused the Steer Model to forecast a lower rate of trip reduction resulting from the Proposed Tolls.⁵⁴⁴

Mr. Cuneo responded to County witness Roden's testimony regarding toll elasticity. He stated toll elasticity is not directly relevant to this case. He explained toll elasticity was used in previous cases to estimate the change in traffic expected to occur from proposed toll rates. In this case, an investment-grade travel demand model is required to be used to produce the forecasts of traffic levels with the proposed tolls rates. Mr. Cuneo confirmed Steer used toll elasticity as a reference benchmark of its forecasts. He further confirmed that Steer's overall elasticity of -0.24 falls within the range of -0.086 to -0.354 from the DTR's latest Traffic and Revenue Study.⁵⁴⁵

Mr. Cuneo commented on County witness Roden's discussion of AECOM's modeling. He does not view the AECOM Model forecasts as credible due to their difference from actual performance. In particular, Mr. Cuneo had concerns with some of the data sources used in the AECOM Model and some of the sensitively results produced by the model.⁵⁴⁶

Mr. Cuneo addressed the comments by C&M in the VDOT Review:

- C&M stated "the overall methodology followed under TRIP II's forward-looking analysis is reasonable."⁵⁴⁷
- C&M stated Steer's "methodology could benefit from more detailed corridor-based studies."⁵⁴⁸ Mr. Cuneo disagreed with the comment. Instead of relying on preference results, which have industry recognized shortcomings, Mr. Cuneo believes the Steer Model established a capture model based on revealed behaviors of travelers in the Greenway corridor.
- C&M stated that growth in Steer's analysis "appears to lag behind the recovery assumed in the traffic forecast for 2024."⁵⁴⁹ Mr. Cuneo explained due to the removal of the toll gates on the Greenway, there was an increase in violations in 2023. When the violations are combined with transactions, 2023 traffic grew over 6%, which is higher than the 3.7% growth that C&M referred to in its statement.
- C&M commented that "[t]he study employed a unique user benefit methodology, which could potentially conflict with USDOT guidelines. However, C&M understands the rationale behind this approach."⁵⁵⁰ Mr. Cuneo noted that C&M accepted Steer's rationale behind the approach in the context of the given analysis to show user benefits.
- C&M commented that "[c]onsiderations of additional OD [origin/destination] pairs would provide a more comprehensive analysis of user benefits."⁵⁵¹ Mr. Cuneo disagreed with C&M's comment. The Steer analysis focused on the full-length trip in the BCA, as

⁵⁴⁴ *Id.* at 17-18.

⁵⁴⁵ *Id.* at 18-20.

⁵⁴⁶ *Id.* at 20-23.

⁵⁴⁷ Ex. 36, at 23 (Cuneo Rebuttal).

⁵⁴⁸ *Id.* at 24.

⁵⁴⁹ *Id.* at 25.

⁵⁵⁰ *Id.*

⁵⁵¹ *Id.* at 26

in prior cases, and the origin and destination pairs suggested by C&M represent a relatively low share of Greenway traffic.

- C&M commented “[t]he traffic split assumption utilizing county household numbers appears simplistic for estimating the value of travel time savings (VTTS).”⁵⁵² Mr. Cuneo agreed that it would be possible to calculate a refined VOT based on more detailed user information, but to do so with the approach suggested by C&M, Steer would need to receive more detailed transaction information from VDOT.
- C&M comment “[t]he method of estimating ‘Material Discouragement’ based on two different years is open to interpretation.”⁵⁵³ Mr. Cuneo explained Steer’s approach to determining material discouragement is driven by the statute’s requirement that the forward-looking analysis must include population growth. Accordingly, C&M comment that estimating material discouragement from two different years is not open to interpretation.
- C&M commented “[t]he potential traffic shift to other modes due to a toll rate increase is not being considered.”⁵⁵⁴ Mr. Cuneo believes there will be no shift in ridership from the Greenway to the Metro Silver Line.
- C&M commented “[l]oaded network comparisons show that alternative routes do not share the same recovery growth as the Dulles Greenway.”⁵⁵⁵ Mr. Cuneo stated this is correct for two reasons. First, the Greenway capture rate increases as there is more congestion on alternative routes. Second, the recovery of the Greenway traffic discussed in the Steer Report is applied to all trips that have a potential to use the Greenway.
- C&M commented “[t]here are concerns regarding the application of a capture rate model for the future proposed rate scenario.”⁵⁵⁶ Mr. Cuneo stated this is not true. The capture model is a component within the Steer network model that feeds into the highway assignment through a loop.
- C&M commented “[t]he Steer 2024 network does not reflect the Route 7 widening improvements as reported in the study.”⁵⁵⁷ Mr. Cuneo responded the Steer Model’s 2024 network includes all of the noted projects except for the Route 7 improvements in the Great Falls/Tyson area that are not scheduled to be completed until late 2024.⁵⁵⁸

Mr. Cuneo responded to County witness Webb’s assertion the VOR savings in the Steer Report are inconsistent with the other benefit categories because of an outlier in the reliability time savings calculation. He noted while the level of commuting trips in the westbound afternoon peak may be similar to those in the eastbound morning peak, the afternoon peak includes a higher level of trip activity for other trip purposes, such as shopping, school, and leisure. According to Mr. Cuneo, it is common for the afternoon peak to have more traffic and be more congested than in the morning peak.⁵⁵⁹

⁵⁵² *Id.*

⁵⁵³ *Id.* at 27.

⁵⁵⁴ *Id.*

⁵⁵⁵ *Id.* at 28.

⁵⁵⁶ *Id.*

⁵⁵⁷ *Id.*

⁵⁵⁸ *Id.* at 28-29.

⁵⁵⁹ *Id.* at 29-31.

Mr. Cuneo disagreed with County witness Webb's alternate BCA calculation. It was his understanding Dr. Webb combined information from several sources and did not account for the greater travel time savings benefit that some intermediate trips receive relative to the full-length trip. Mr. Cuneo asserted that, as a result, Dr. Webb shows negative net benefits for many trips that have large volumes of traffic, which indicates his approach underestimates the benefits. Mr. Cuneo believes users would not be using the Greenway at the levels observed.⁵⁶⁰

Lastly, Mr. Cuneo responded to County witness Webb's assertion that the BCA in the Steer Report is unreliable. Mr. Cuneo believes the Steer approach relied on an appropriate implementation of a BCA framework similar to the approach used in prior rate cases and that reflects Greenway traveler behaviors.⁵⁶¹

At the hearing, Mr. Cuneo questioned the accuracy of County witness Roden's results that a \$0.03 increase in the off-peak toll would cause a 3% decrease in traffic. In addition, Mr. Cuneo countered Mr. Roden's testimony that the Steer network file did not include improvements to Route 7. Mr. Cuneo confirmed the widening was in both Steer's 2022 and 2024 network files. In addition, Mr. Cuneo confirmed there is no difference between the EPB in the Steer Model and the DTR 2021 study. In the 2021 DTR study the EPB is a constant on the utility function of the Logit capture model that effectively offsets the toll cost, which is how the bonus is used in the Steer Model.⁵⁶²

Mr. Cuneo explained the interaction between the Steer Model and the capture model that selects whether to use the toll road or an alternative road, how traffic assignment gets loaded into the network and travel times get updated, and how congestion travel times get loaded back into the capture model. Mr. Cuneo confirmed this is industry standard.⁵⁶³

For determining VOT, Mr. Cuneo believes observed traffic behavior is superior to preference surveys because drivers do not always do what they say in a survey. In this case, he believes there is sufficient data to find drivers revealed behaviors.⁵⁶⁴

Mr. Cuneo continued to support Steer's use of one week of TomTom data in its capture model. He noted that in early 2022, the COVID Omicron variant was still disrupting traffic and maintained the week selected by Steer would be more representative of normal traffic.⁵⁶⁵

Mr. Cuneo explained TRIP II's proposal to divide its toll increase into three smaller increases spread over a year. The County and Consumer Counsel objected to TRIP II's proposal.⁵⁶⁶

Mr. Cuneo provided examples of the accuracy of Steer's traffic and revenue forecasts, including the Chesapeake Expressway and the Chesapeake Bay Bridge Tunnel.⁵⁶⁷

⁵⁶⁰ *Id.* at 31.

⁵⁶¹ *Id.* at 32.

⁵⁶² Tr. at 581-84 (Cuneo).

⁵⁶³ *Id.* at 584-85.

⁵⁶⁴ *Id.* at 585-86.

⁵⁶⁵ *Id.* at 586-87.

⁵⁶⁶ *Id.* at 587-91. *See*, Ex. 24.

⁵⁶⁷ *Id.* at 592-93.

Mr. Cuneo confirmed he was not aware of any direct request from the County or its expert witnesses to access the Steer Model or run sensitivities on the model.⁵⁶⁸

On cross-examination, Mr. Cuneo confirmed that TRIP II never provided a response to the County actually rejecting or refusing to provide the Steer Model. He agreed access to the model would have been governed by the terms of the protective ruling entered in this case.⁵⁶⁹

Mr. Cuneo explained the MWCOG model has approximately 50,000 links in its network and Steer trimmed that down to a couple thousand that were used in its model. He further explained each of those links has attributes such as the number of lanes, the freeflow speed, the capacity, and other attributes that determine how travel time adjusts based on the number of vehicles. He confirmed all of those variables feed through the Steer Model.⁵⁷⁰

Mr. Cuneo confirmed Steer was somewhat constrained by time based on TRIP II's filing schedule for the Application, and asserted Steer was unable to update the TomTom data and analyze it, and still produce a user benefit analysis. Mr. Cuneo confirmed Steer calibrated its model in this case as it has in other traffic and revenue cases.⁵⁷¹

Mr. Cuneo agreed a traffic forecast for 2024 could include population growth, and then the forecast could be used to compare the impact of a toll increase on traffic versus no toll increase.⁵⁷²

Mr. Cuneo explained how the EPB is incorporated in the 2021 DTR study. In the DTR study, it is referred to as a bias. The DTR study did not provide the actual amount of the EPB.⁵⁷³

Mr. Cuneo confirmed that in addition to a \$0.03 increase in the off-peak toll, County witness Roden's analysis also included a \$0.28 increase in peak tolls. These were AECOM's maximum toll increases that would still comply with the material discouragement criterion of no more than a 3% decrease in traffic.

Mr. Cuneo agreed with the hypothetical three-phased toll increase over one year at TRIP II's Proposed Tolls, the decline in traffic would be approximately 2.1% for each phase.⁵⁷⁴

On redirect, Mr. Cuneo laid out the process for traffic consultants to review each other's traffic and revenue reports. He confirmed the County did not request any sensitivity runs on the Steer Model.⁵⁷⁵

⁵⁶⁸ *Id.* at 595.
⁵⁶⁹ *Id.* at 596-600.
⁵⁷⁰ *Id.* at 600-02.
⁵⁷¹ *Id.* at 602-06.
⁵⁷² *Id.* at 606-08.
⁵⁷³ *Id.* at 614-16.
⁵⁷⁴ *Id.* at 618.
⁵⁷⁵ *Id.* at 621-22.

POST-HEARING BRIEFS

Post-Hearing Briefs were filed by TRIP II, the County, Consumer Counsel, and Staff.
Toll Road Investors Partnership II, L.P.

In its Post-Hearing Brief, TRIP II addressed seven issues in support of its position that the Application should be approved, including: (i) denial of TRIP II's Proposed Tolls would constitute a regulatory taking in violation of the United States and Virginia Constitutions;⁵⁷⁶ (ii) the Proposed Tolls will not materially discourage use of the roadway;⁵⁷⁷ (iii) the Proposed Tolls are reasonable to the user in relation to the benefits obtained;⁵⁷⁸ (iv) the Proposed Tolls will provide TRIP II no more than a reasonable return as determined by the Commission;⁵⁷⁹ (v) VDOT's comments support approval of TRIP II's analysis as reasonable and appropriate to make the required showing under the Act;⁵⁸⁰ (vi) the Commission has discretion to substitute tolls on the Greenway that are different than those proposed by TRIP II;⁵⁸¹ and (vii) TRIP II's proposed streamlined process is reasonable and appropriate and should be considered for future proceedings.⁵⁸²

The first issue TRIP II addressed was whether denial of its Proposed Tolls would constitute a regulatory taking in violation of the United States and Virginia Constitutions. TRIP II asserted, based on the unique facts of this case, a Commission decision that denies the Proposed Tolls requested in the Application (or sets tolls below what is requested) would result in a taking of private property for public use without just compensation, in violation of the Fifth Amendment and Fourteenth Amendment to the United States Constitution and Article I, § 11 of the Virginia Constitution. TRIP II asserted the protection of constitutional rights supersedes the statutory criteria of Code § 56-542.⁵⁸³

TRIP II asserted the Proposed Tolls are the minimum necessary to permit the Company to meet its current obligations while preserving the possibility that it may, sometime in the future, have the opportunity to earn a reasonable return on the capital invested in the Greenway. TRIP II noted neither the County nor Staff disputed this or presented any evidence to the contrary. TRIP II asserted any rate set below the Proposed Tolls would be confiscatory and deprive the Company of its fundamental right to just compensation for the use of its private property for public purposes.⁵⁸⁴

TRIP II addressed the decisions by the United States and Virginia Supreme Courts that illustrate the constitutional safeguards that protect utilities from imposition of confiscatory tolls. TRIP II noted that longstanding Supreme Court precedent has held "that the Constitution protects utilities from being limited to a charge for their property serving the public which is so 'unjust' as to be confiscatory."⁵⁸⁵

⁵⁷⁶ TRIP II Post-Hearing Brief at 11-22.

⁵⁷⁷ *Id.* at 22-35.

⁵⁷⁸ *Id.* at 35-48.

⁵⁷⁹ *Id.* at 48-50.

⁵⁸⁰ *Id.* at 50-51.

⁵⁸¹ *Id.* at 51-54.

⁵⁸² *Id.* at 54-55.

⁵⁸³ *Id.* at 11.

⁵⁸⁴ *Id.* at 11-12.

⁵⁸⁵ *Id.* at 12.

As noted by TRIP II, in *Stone v. Farmers' Loan & Trust Co.*,⁵⁸⁶ the Supreme Court established a principle that remains in effect today:

This power to regulate is not a power to destroy, and limitation is not the equivalent of confiscation. Under pretense of regulatory fares and freights, the state cannot require a railroad corporation to carry persons or property without reward, neither can it do that which in law amounts to a taking of private property without just compensation, or without due process of law.⁵⁸⁷

TRIP II noted the Supreme Court applied similar reasoning in *Covington & Lexington Turnpike Road Co. v. Sandford*.⁵⁸⁸ In that case, the Covington & Lexington Turnpike Road Company ("Turnpike Company") argued that a Kentucky statute that made it "unlawful to demand, charge, collect or receive tolls in excess of the rates specified" would result in toll revenues that would be insufficient for the Turnpike Company to meet the ordinary expenses of the road, leaving nothing to meet extraordinary expenses, and there "would be no income out of which dividends could be paid to stockholders upon the money which they invested in the stock of said road."⁵⁸⁹ The Turnpike Company argued enforcement of the statute, and the tolls it permitted, would "destroy entirely the value of the property" and result in a taking of private property without just compensation in violation of the United States and Kentucky Constitutions.⁵⁹⁰ The Supreme Court agreed:

A statute which, by its necessary operation, compels a turnpike company, when charging only such tolls as are just to the public, to submit to such further reduction of rates as will prevent it from keeping its road in proper repair and from earning any dividends whatever for stockholders, is as obnoxious to the Constitution of the United States as would be a similar statute related to the business of a railroad corporation having authority, under its charter, to collect and receive tolls for passengers and freight.⁵⁹¹

In support of its takings argument, TRIP II also relied on the Supreme Court's decisions in *Bluefield Water Works & Improvement Co. v. Public Service Commission*,⁵⁹² and *Federal Power Commission v. Hope Natural Gas Company*.⁵⁹³

In *Bluefield*, the Supreme Court held:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the county on investments

⁵⁸⁶ *Stone v. Farmers' Loan & Trust Co.*, 116 U.S. 307 (1886).

⁵⁸⁷ *Stone*, 116 U.S. at 331.

⁵⁸⁸ *Covington & Lexington Turnpike Road Co. v. Sandford*, 164 U.S. 578 (1896).

⁵⁸⁹ *Id.* at 590.

⁵⁹⁰ TRIP II Post-Hearing Brief at 12-13; *Id.* at 591.

⁵⁹¹ *Covington & Lexington Turnpike Road Co.*, 164 U.S. at 594-595.

⁵⁹² *Bluefield Water Works & Improvement Co. v. Public Service Commission*, 262 U.S. 679 (1923).

⁵⁹³ *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1944).

in other business undertakings which are attended by corresponding risks and uncertainties. . . .⁵⁹⁴

Also in *Bluefield*, the Court held a utility “has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures;” rather, the “return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.”⁵⁹⁵

In *Hope*, the Supreme Court held:

[T]he investor has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on debt and dividends on the stock.⁵⁹⁶

TRIP II argued *Hope* and *Bluefield*, taken together, established that a utility’s rates must be set high enough to: (1) allow the utility to recover its prudently incurred operating expenses; (2) provide enough revenue to meet capital costs; (3) provide investors with an opportunity to earn a return commensurate with the returns on investments of comparable risk; and (4) maintain the utility’s financial integrity and ability to attract capital on reasonable terms. TRIP II asserted that rates that fail to meet these standards “are unjust, unreasonable, and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment.”⁵⁹⁷ TRIP II further asserted when the rate set by a state in its ratemaking process provides insufficient compensation, “the State has taken the use of the utility property without paying just compensation” in violation of the Constitution.⁵⁹⁸

TRIP II asserted the federal prohibition against confiscatory takings is well recognized in Virginia law. According to TRIP II, not only is it included in the Virginia Constitution,⁵⁹⁹ the General Assembly included in the Virginia Code that “no law shall be passed for taking from a company its works or property without making to it just compensation.”⁶⁰⁰ TRIP II noted the Virginia Supreme Court has held: “[t]hat a public service corporation cannot be compelled to consume its property in public service, and thus be forced to submit to confiscation, appears to be

⁵⁹⁴ *Bluefield*, 262 U.S. at 692-693.

⁵⁹⁵ TRIP II Post-Hearing Brief at 14; *Bluefield*, 262 U.S. at 692-693; *See also, Id.* (clarifying that a “rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.”).

⁵⁹⁶ *Hope*, 320 U.S. at 603.

⁵⁹⁷ *Bluefield*, 262 U.S. at 690.

⁵⁹⁸ TRIP II Post-Hearing Brief at 15; *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 308 (1989) (citing *Covington & Lexington*, 164 U.S. at 597 (a rate is too low if it is “so unjust as to destroy the value of [the] property for all the purposes for which it was acquired”); *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U.S. 575, 585 (1942) (the “lowest reasonable rate” is one which is not confiscatory in the constitutional sense”); *Federal Power Commission v. Texaco Inc.*, 417 U.S. 380, 391-92 (1974).

⁵⁹⁹ Va. Const. art. I, § 11.

⁶⁰⁰ Code § 56-8.

perfectly well settled.”⁶⁰¹ The Virginia Supreme Court further addressed the “disastrous effect” of failing to allow public service companies “just and reasonable” compensation.⁶⁰² TRIP II asserted the foregoing federal and state decisions make it clear that, in setting the Company’s tolls, the Commission must consider whether the tolls it approves will in fact give TRIP II the ability to pay its expenses and have an opportunity to earn a reasonable return.⁶⁰³

TRIP II asserted that the Commission and the Virginia Supreme Court have determined, with specific application to the Company, that the constitutional takings principles discussed above have established a constitutional “floor” for Greenway tolls. According to TRIP II, this allows TRIP II the opportunity to recover, at a minimum, its prudently incurred costs and service its debt obligations.⁶⁰⁴

As further explained by TRIP II, in the 2013 Investigation Case, the Commission acknowledged that “constitutional issues arise if tolls are lowered . . . in a manner that prohibits the Company from recovering its prudently incurred operating costs and debt obligations,” and noted its factual determination that the lower tolls proposed “would not provide sufficient revenues for the Company to meet its debt obligations and could jeopardize TRIP II’s overall financial integrity.”⁶⁰⁵

TRIP II noted the Virginia Supreme Court affirmed the Commission’s decision.⁶⁰⁶ In finding no Commission error, the Court referenced that the Commission had “addressed the *fact* that constitutional issues under the ‘Takings Clause’ in the Fifth Amendment to the United States Constitution, would arise if the Greenway’s toll rates were lowered . . . ‘in a manner that prohibits [TRIP II] from recovering its prudently incurred operating costs and debt obligations.’” The Court quoted Staff’s briefing to the Hearing Examiner and the supporting case law on which it relied.⁶⁰⁷

TRIP II noted in the 2019 Rate Case, the Commission endorsed the Hearing Examiner’s finding that the “Takings Clauses under the U.S. Constitution and Virginia Constitution . . . protect TRIP II from confiscatory rates that do not allow TRIP II the opportunity to recover its costs.”⁶⁰⁸ As explained by TRIP II, the Commission denied TRIP II’s proposed peak toll increase, after determining that “increasing off-peak tolls” would be sufficient to “permit TRIP II to recover operating costs and debt obligations.”⁶⁰⁹ TRIP II asserted “it is well-settled that Greenway tolls must be set at a level sufficient to allow TRIP II to recover its prudently incurred costs and debt obligations, and the Commission should reject any attempt by the County to second-guess that conclusion.”⁶¹⁰

⁶⁰¹ *City of Portsmouth v. Va. Ry. & Power Co.*, 141 Va. 44, 51, 126 S.E. 366, 368 (1925).

⁶⁰² *Petersburg Gas Co. v. Petersburg*, 132 Va. 82, 91, 110 S.E. 533, 536 (1922) (quoting *City of Knoxville v. Knoxville Water Co.*, 212 U.S. 1, 18 (1909)).

⁶⁰³ TRIP II Post-Hearing Brief at 15-16.

⁶⁰⁴ *Id.* at 17.

⁶⁰⁵ *Id.* at 19 and n.24.

⁶⁰⁶ *Bd. of Supervisors of Loudoun Cnty. v. State Corp. Comm’n*, 292 Va. 444, 790 S.E.2d 460 (2016).

⁶⁰⁷ *Id.* at 459, 468 n.15. (Staff noted “as authority for [the] principle that utility ‘rates, fares or tolls must be high enough so a company is allowed to recover its prudently incurred operating costs; its investors can earn a reasonable return on their investment commensurate with the returns earned by other companies having comparable risk; and the financial integrity of the company is not jeopardized so it can maintain its credit and attract capital.’”).

⁶⁰⁸ 2019 Rate Case at 174-175.

⁶⁰⁹ *Id.* at 173.

⁶¹⁰ TRIP II Post-Hearing Brief at 18-19.

TRIP II asserted the Proposed Tolls are the only tolls that will allow TRIP II to generate sufficient revenue to cover its operating expenses, make necessary capital expenditures, meet its debt-service obligations, and maintain its financial integrity, to which it is constitutionally due. TRIP II further asserted neither the County nor Staff presented any evidence to the contrary. TRIP II further asserted the Proposed Tolls will not provide the Company a current opportunity to earn a reasonable return on its investment, to which it is also constitutionally due. TRIP II further asserted the Alternate Tolls will not generate the level of revenue required for the Company to meet its debt service obligations and capital expenditure requirements, nor will they provide the Company any opportunity to earn a return on its investment. If the Company is required to draw on its reserve funds to make its debt service payments, TRIP II asserted this represents “a forced contribution of additional equity investment in the Greenway without any real possibility of earning a return on the investment or any prior investment made in TRIP II.”⁶¹¹ TRIP II asserted if the Commission determines that the Act, as applied, prohibits the Commission from approving a toll increase that will allow TRIP II to generate sufficient revenue to cover operating expenses, make necessary capital expenditures, meet its debt-service obligations, maintain its financial integrity, and provide an opportunity to earn a reasonable return, then the Commission should find the Act unconstitutional as applied to TRIP II. TRIP II believes its proposed phased implementation of the proposed toll increases would give full effect to the Act while preserving its constitutional rights.⁶¹²

The second issue TRIP II addressed was whether the Proposed Tolls will materially discourage use of the roadway. TRIP II asserted the proper method to calculate material discouragement is to compare the level of Greenway traffic the last year tolls were increased (2022) with the Greenway traffic forecasted by the Steer Model for the year the tolls would be effective (2024). TRIP II asserts “this comparison is the only way to properly account for population growth and the anticipated impact of social and economic conditions in this Application.”⁶¹³ TRIP II asserted comparing the forecasted annual average daily traffic (“AADT”) for 2024 to 2022 traffic “also captures all traffic growth on the Greenway since the last toll increase, which is especially important given that the Act now prevents TRIP II from increasing tolls on an annual basis, as it has been permitted to do for the majority of the life of the Greenway.”⁶¹⁴

TRIP II asserted the County’s and Staff’s approach that compares forecasted 2024 traffic on the Greenway with and without the Proposed Tolls fails to give effect to the definition and directive embodied in the Act to consider the impact of social and economic conditions. TRIP II asserted had the General Assembly wanted the Commission to evaluate the percentage change in traffic only after isolating the impact of tolls from all other factors (as was done prior to the 2021 Amendments to the Act), it would have expressly stated as much in the Act. TRIP II asserted that the General Assembly intends only what it expressly states in the Act, which is why the Company’s calculation of material discouragement that considers population growth and the social and economic impacts in its analysis, complies with the Act.⁶¹⁵

⁶¹¹ Ex. 32, at 10-11 (Hamilton Rebuttal).

⁶¹² TRIP II Post-Hearing Brief at 19-22.

⁶¹³ TRIP II Post-Hearing Brief at 24. *See*, Ex. 6, at 13-14 (Cuneo Direct); Ex. 36, at 2-4 (Cuneo Rebuttal).

⁶¹⁴ *Id.* *See*, Ex. 6, at 13-14 (Cuneo Direct).

⁶¹⁵ *Id.* 24-25. *See*, Ex. 6, Exhibit DC-2 at 71-72 (Cuneo Direct).

TRIP II noted that the Steer Report accounted for population growth and the impacts of other factors on traffic and determined that the Proposed Tolls do not cause a decrease in traffic on the Greenway of more than three percent. The Steer Report projects that traffic on the Greenway will be 8.1% higher in 2024 than 2022 traffic levels.⁶¹⁶

TRIP II rebutted Staff's argument that the Company's material discouragement analysis may provide the Company with a "windfall."⁶¹⁷ First, TRIP II claimed Staff provided no context for what it meant by a windfall. TRIP II asserted the Proposed Tolls will only allow the Company to get close to break-even. Second, TRIP II claimed Staff's argument is unpersuasive because the Commission has *already* shown that it has the ability to adjust TRIP II's rates in response to an unprecedented event, *i.e.*, in response to the COVID pandemic.⁶¹⁸

TRIP II asserted the Steer Model is an investment-grade travel demand model that meets the requirements of the Act.⁶¹⁹ As reflected in the VDOT Review, VDOT's consultant determined that TRIP II's forward-looking analysis was reasonable.⁶²⁰ TRIP II asserted that the fact that elements of the Steer Report could have been done differently does not impact the conclusions in the VDOT Review.⁶²¹

TRIP II asserted the use of an EPB in the Steer Model is an accepted industry practice in travel demand modeling.⁶²² County witness Roden criticized the inclusion of an electronic toll bonus in the Steer Model and suggested that it could underestimate toll sensitivity.⁶²³ According to TRIP II witness Cuneo, if the Steer Model had not used the EPB, the capture model would have needed higher values of time to increase forecasted Greenway traffic to observed levels, which would have caused the Steer Model to forecast a lower rate of traffic expected to choose alternate routes because of the Proposed Tolls.⁶²⁴

TRIP II asserted the Steer Model was calibrated using the most current traffic data at the time. Staff witness Abbas recommended that the Steer Model be recalibrated based on traffic data obtained after the COVID pandemic.⁶²⁵ Since the recovery from the COVID pandemic is ongoing, TRIP II asserted this requirement should apply in a future toll rate case. TRIP II committed to using up-to-date data for its travel demand model forecasts in future cases.⁶²⁶

TRIP II confirmed the Steer Model included an analysis of the Metro Silver Line. The Silver Line is coded in the MWCOG model from which the Steer Model highway trip matrices are extracted.⁶²⁷ TRIP II witness Cuneo confirmed a feedback loop could have been included in the

⁶¹⁶ *Id.* at 26. See, Ex. 6, at 14 (Cuneo Direct).

⁶¹⁷ Ex. 19, at 12 (Smith).

⁶¹⁸ TRIP II Post-Hearing Brief at 26.

⁶¹⁹ Code § 56-542 A.

⁶²⁰ Ex. 3, at 5 (VDOT Review).

⁶²¹ TRIP II Post-hearing Brief at 27; Ex. 36, at 23 Cuneo Rebuttal).

⁶²² Tr. at 285-86 (Cuneo).

⁶²³ Ex. 8, at 10 (Roden).

⁶²⁴ TRIP II Post-Hearing Brief at 27-28; Ex. 36, at 17-18 (Cuneo Rebuttal).

⁶²⁵ Ex. 14, at 2 (Abbas).

⁶²⁶ TRIP II Post-Hearing Brief at 28.

⁶²⁷ Ex. 36, at 10-11 and Exhibit DC-3R (Cuneo Rebuttal).

MWCOG model to represent the impact of the proposed toll increases on Silver Line ridership, but it would have required significant work, additional cost, and would have yielded little benefit.⁶²⁸ TRIP II witness Weller explained that in response to a toll increase, drivers are more likely to switch to an un-tolled route as opposed to switching to another mode of transportation such as the Silver Line.⁶²⁹

TRIP II asserted direct access to the Steer Model is not necessary for the County or Staff to validate the model's traffic forecasts. TRIP II noted the industry practice for understanding and validating another party's complex traffic model and forecasts. In addition, TRIP II noted that running sensitivity analyses through the Steer Model takes considerable employee and computing power and time (to set up the model to reflect the requested sensitivity and to actually run the model itself, which takes multiple hours) and the resulting sensitivity analyses cannot be produced immediately upon request. TRIP II further noted VDOT's consultant was able to review the Steer Model and provide comments on the model. TRIP II asserted the County's claim that it made multiple requests for access to the Steer Model, or to run sensitivities of any kind, is patently untrue and misleading.⁶³⁰

TRIP II asserted the results from the AECOM Model relied on by the County cast doubt on the accuracy of its forecasts and modeling. TRIP II noted the County's consultant, AECOM, used a version of the MWCOG model to produce a subarea model using the Express Lane Time of Day ("ELToD") 4.0 software that was developed for the Florida Turnpike.⁶³¹ TRIP II questioned whether the AECOM Model was properly calibrated because County witness Roden only provided calibration results for the Main Toll Plaza, not the Main Toll Plaza and all of the exits as included in the Steer Model. For this reason, TRIP II believes the AECOM Model produces unrealistic results that call into question the accuracy of its forecasts and modeling.⁶³² TRIP II urged the Commission not to rely on the results produced by the AECOM Model.⁶³³

TRIP II asserted the Commission should give effect to the statutory text approved by the General Assembly, not individual legislators' comments regarding Code § 56-542 at a public hearing. TRIP II asserted the General Assembly speaks through the words of the statutes that it passes and are codified in the Code.⁶³⁴ TRIP II further asserted a legislator's motivations for supporting legislation does not have any bearing on how the Commission should implement a statute.⁶³⁵ TRIP II asserted that its material discouragement analysis gives effect to all parts of Code § 56-542, as amended, and allows the Commission to grant toll rate increases that, as TRIP II

⁶²⁸ Ex. 36, at 10-11 (Cuneo Rebuttal).

⁶²⁹ TRIP II Post-Hearing Brief at 29; Ex. 35, at 5-6 (Weller Rebuttal. *See also*, Ex. 36 at 10-11 (Cuneo Rebuttal).

⁶³⁰ TRIP II Post-Hearing Brief at 30-31.

⁶³¹ Ex. 8, at 15 (Roden).

⁶³² Ex. 36, at 20-21 (Cuneo Rebuttal); Tr. at 581-582 (Cuneo).

⁶³³ TRIP II Post-Hearing Brief at 31-33.

⁶³⁴ *Earley v. Landsidle*, 257 Va. 365, 369, 514 S.E.2d, 153, 155 (1999) ("The legislature's intent must be determined from the words used, unless a literal construction of the statute would yield an absurd result.").

⁶³⁵ *See, Chrysler v. Brown*, 441 U.S. 281, 312 (1979) (explaining that the remarks of a single legislator, even the sponsor, are not controlling in analyzing legislative history); *See also, National Welfare Rights Organization v. Mathews*, 533 F.2d 637, 642-43 (D.C. Cir.1976); *Castaneda-Gonzalez v. Immigration & Nat. Service*, 564 F.2d 417, 424 (D.C. Cir. 1977).

supports for purposes of this proceeding, appropriately balances the Company's constitutional rights with the public interest.⁶³⁶

The third issue TRIP II addressed was whether the Proposed Tolls are reasonable to the user in relation to the benefits obtained. TRIP II asserted the evidence in this proceeding shows that the Proposed Tolls continue to be *reasonable* in relation to the benefits of using the Greenway. TRIP II noted the Proposed Tolls are on the low end of the range of tolls charged on other roadways in the region;⁶³⁷ are significantly less than drivers would pay to use the managed toll lanes (HOV lanes) that are common throughout the Northern Virginia region;⁶³⁸ and are slightly lower than the tolls TRIP II requested for 2024 in the 2019 Rate Case.⁶³⁹

TRIP II addressed the reasonableness of its Proposed Tolls under Code § 56-542 D, which provides that any tolls approved by the Commission must be "set at a level which is reasonable to the user in relation to the benefit obtained." TRIP II noted the statute does not require that benefits *exceed* the costs, only that the cost of using the roadway must be *reasonable* in relation to the benefit obtained. As explained by TRIP II, the Commission has previously ruled that this statutory criterion does not require an absolute pass-fail test for evaluating tolls.⁶⁴⁰ In addition, the Commission has ruled that:

The statutory term 'reasonable to the user in relation to the benefit obtained' is broader than [requiring a showing of 'some type of *quantifiable* cost-effective benefit'], and it may reasonably include any number of difficult-to-quantify benefits (including reliability and 'peace of mind from driving on a well-maintained, limited access highway').⁶⁴¹

For this reason, TRIP II asserted that any determination of whether tolls comply with the statutory criterion must extend beyond the simple application of a BCA.⁶⁴²

TRIP II asserted "the 'user benefit' standard focuses on the benefits and costs to Greenway users."⁶⁴³ TRIP II asserted other factors such as costs imposed on the County or other relative benefits perceived by non-Greenway drivers are not factors in the Commission's consideration of this criterion. Additionally, TRIP II maintained the user benefit analysis "must, by necessity, use a more general approach that focuses on the average benefits realized by users of the Greenway as a group or subgroups, and not focus on any one individual user."⁶⁴⁴ TRIP II asserted that each driver is unique and so are the benefits they derive from using the Greenway. TRIP II noted

⁶³⁶ TRIP II Post-Hearing Brief at 33-35.

⁶³⁷ Ex. 4, at 22-25 (Hamilton Direct).

⁶³⁸ *Id.*

⁶³⁹ TRIP II Post-Hearing Brief at 35; Ex.2, at 8 (Application); Ex. 5, at 18-21.

⁶⁴⁰ 2013 Investigation Case at 192.

⁶⁴¹ *Id.* (emphasis in original).

⁶⁴² TRIP II Post-Hearing Brief at 36.

⁶⁴³ 2019 Rate Case, Doc. Con. Cen. No. 556297, Report of D. Mathias Roussy, Jr., Hearing Examiner at 80 n.691 (Oct. 3, 2020).

⁶⁴⁴ *Id.* at 80 (quoting Staff testimony as well as Hearing Examiner's Report and Staff Legal Brief in Case No. PUE-2013-00011).

approximately 36,000 drivers use the Greenway daily,⁶⁴⁵ instead of the free alternatives, clearly demonstrating the benefits of the Greenway.⁶⁴⁶

TRIP II asserted the evidence shows that, based on the quantifiable benefits shown in the in Steer's BCA and the qualitative benefits of using the Greenway, the Proposed Tolls are reasonable to users of the Greenway in relation to the benefits they obtain.⁶⁴⁷

TRIP II asserted that neither the County nor Staff has presented evidence to show that the Proposed Tolls are not reasonable in relation to the benefits obtained when considering both quantitative and qualitative benefits of using the Greenway. TRIP II asserted "none of evidence offered by the County or Staff reveal that the Proposed Tolls are not *reasonable* in relation to the quantified benefits, particularly after considering the additional qualitative benefits the Greenway provides."⁶⁴⁸

TRIP II asserted the fact that traffic analysts might disagree on the most appropriate measure of benefits does not change the fact that the Proposed Tolls are reasonable. TRIP II asserted the method Steer used to calculate VOT savings follows relevant USDOT guidance and is consistent with the methods used in prior rate cases to analyze Greenway benefits in the BCA.⁶⁴⁹ Steer used USDOT guidance as appropriate and deviated from those values only when local values would better reflect Greenway users rather than national averages.⁶⁵⁰ Trip II asserted this approach is consistent with USDOT guidance, which states "USDOT recognizes that in many cases, applicants may have additional local data that is appropriate or even superior for use in evaluating a given project."⁶⁵¹

TRIP II asserted the County's and Staff's criticisms of Steer's BCA analysis are unfounded and untrue. First, TRIP II noted Steer used assumptions and inputs in its BCA that follow appropriate USDOT guidance for the unique characteristics of the Greenway study area as opposed to using national averages included in the USDOT guidance.⁶⁵² Second, TRIP II asserted Staff witness Smith's testimony concerning VOR is inconsistent⁶⁵³ and concerning SB is untrue because Steer used the most current safety data available in its BCA.⁶⁵⁴ Third, TRIP II asserted, contrary to County witness Roden's claim,⁶⁵⁵ the VOT values used in the Steer Model were not inconsistent and were not manipulated to obtain a specific result.⁶⁵⁶ Fourth, TRIP II asserted, contrary to

⁶⁴⁵ Tr. at 552 (Hamilton).

⁶⁴⁶ TRIP II Post-Hearing Brief at 37-38.

⁶⁴⁷ TRIP II Post-Hearing Brief at 38-39; Ex. 6, at 4-12, Exhibit DC-2 at 49-70 (Cuneo Direct).

⁶⁴⁸ TRIP II Post-Hearing Brief at 40.

⁶⁴⁹ Ex. 6, at 6, Exhibit DC-2 at 52 (Cuneo Direct).

⁶⁵⁰ Ex. 36, at 4 (Cuneo Rebuttal).

⁶⁵¹ TRIP II Post-Hearing Brief at 41-42; Ex. 22, at 6 (USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs).

⁶⁵² Ex. 36, at 6 (Cuneo Rebuttal)

⁶⁵³ Ex. 19, at 18 (Smith).

⁶⁵⁴ *Id.* at 26-27.

⁶⁵⁵ Tr. at 313 (Roden).

⁶⁵⁶ Ex. 36, at 13-14 (Cuneo Rebuttal); Tr. at 287-89 (Cuneo).

County witness Webb's claim concerning Buffer Times,⁶⁵⁷ basic traffic patterns and commuting trips in the morning and evening are not identical.⁶⁵⁸

TRIP II asserted, even after incorporating their adjustments, neither the County's nor Staff's evidence show that the Proposed Tolls are not reasonable in relation to the benefits of driving the Greenway, especially considering that neither the County nor Staff factored qualitative benefits into their conclusions. TRIP II asserted that Staff's summary statement that TRIP II "failed" the reasonable to the user in relation benefit test when the Commission has repeatedly acknowledged it is not a pass-fail test to begin with,⁶⁵⁹ is disingenuous. TRIP II maintained this is especially true considering Staff's modified BCA values result in lower net benefits rather than any clear disparity between benefits and costs and Staff failed to consider any qualitative benefits in its analysis. TRIP II asserted the County's user benefit analysis is likewise flawed. County witness Webb's analysis shows positive net benefits until he attempted to adjust the BCA to consider distance traveled on the Greenway. TRIP II noted the Commission has found that the calculation of benefits is not "limited to a calculation dependent upon the miles traveled."⁶⁶⁰ At the hearing, Company witness Cuneo explained that in the 2019 Rate Case, the Company's BCA showed benefits based on distance as the result of "a simplifying assumption that benefits were just proportional to the distance."⁶⁶¹ Mr. Cuneo further explained this simplifying assumption is not true for all categories of benefits because VOT and VOR are very dependent on the specific trip and some short trips actually provide greater VOT savings than full length trips.⁶⁶²

TRIP II asserted any qualitative costs do not result in tolls being unreasonable to Greenway users. TRIP II further asserted to the extent there are any qualitative costs of using the Greenway, no party in this case has shown that they outweigh the qualitative benefits of using the Greenway, and certainly not the quantitative benefits of using the Greenway. In sum, TRIP II asserted there is little evidence in the record to support any finding that the Proposed Tolls are not reasonable in relation to the benefits obtained by using the Greenway. TRIP II noted over 38,000 drivers choose to use the Greenway daily, which demonstrates that thousands of drivers find some benefit to using the Greenway, regardless of whether those benefits can be quantitatively valued in a BCA.⁶⁶³

The fourth issue TRIP II addressed was whether the Proposed Tolls will provide the Company "no more than a reasonable return."⁶⁶⁴ TRIP II asserted this issue is not in dispute. As explained by TRIP II, Staff concluded in its direct testimony that, based on the financial impact the Proposed Tolls will have on TRIP II estimated 2024 cash flows, the earned rate of return under the REA, and the internal rate of return over the operating history of the Greenway, the Proposed Tolls will not provide TRIP II with more than a reasonable return.⁶⁶⁵ In addition to this finding, Staff reiterated its continued support for using the REA as a factor to determine the reasonableness of the

⁶⁵⁷ Ex. 10, at 31-33 (Webb).

⁶⁵⁸ TRIP II Post-Hearing Brief at 42-44; Ex. 36, at 29-31 (Cuneo Rebuttal).

⁶⁵⁹ 2013 Investigation Case at 192; Tr. at 425 (Smith).

⁶⁶⁰ 2013 Investigation Case at 192.

⁶⁶¹ Tr. at 296-297 (Cuneo).

⁶⁶² TRIP II Post-Hearing Brief at 45-47; Tr. at 296-297 (Cuneo).

⁶⁶³ *Id.* at 47-48.

⁶⁶⁴ Code § 56-542 D.

⁶⁶⁵ Ex. 15, at 2 (Elmes Direct).

return to TRIP II, consistent with its original purpose.⁶⁶⁶ TRIP II asserted the fact that the REA balance has grown over the years should be a surprise to no one. As recognized by TRIP II, Staff noted in 1990 that the REA could have a “huge balance” at the end of the term of the certificate.⁶⁶⁷ According to TRIP II, that it does so now is not a reason to abandon the REA as suggested by the County.⁶⁶⁸ Consistent with Staff’s assessment, TRIP II contended the REA is relevant as a means to track the returns that were authorized to investors versus the returns that have been realized by those investors.⁶⁶⁹

The fifth issue TRIP II addressed was whether the VDOT Review supports the Company’s analysis as reasonable and appropriate to make the required showing under the Act. TRIP II explained that the VDOT Review concluded:

The overall methodology followed under TRIP II’s forward-looking analysis is reasonable within the bounds of the presented data inputs and other information supporting the rate increase analysis.⁶⁷⁰

TRIP II also explained that C&M confirmed the issues raised in the VDOT Review would have little impact on the overall conclusions reached in the Steer Report.⁶⁷¹

The sixth issue TRIP II addressed was whether the Commission has the discretion to substitute tolls on the Greenway that are different than those proposed by TRIP II. TRIP II asserted this discretion includes the authority to approve other tolls, including the Alternate Tolls, assuming they meet the statutory criteria and do not infringe upon TRIP II’s constitutional rights, just as the Commission can also outright deny a request.⁶⁷² TRIP II asserted the manner in which the Proposed Tolls are implemented is also within the Commission’s discretion. TRIP II asserted the Commission has the discretion to authorize the Proposed Tolls, but to implement those tolls over a schedule that is different from that requested in the Application. According to TRIP II, as illustrated in Exhibit 24, the Commission could approve a series of three toll increases over the course of a year that, by the last toll increase, would result in the toll level requested in the Application, but each increase would fall below the 3% materially discourage use threshold.⁶⁷³

TRIP II further asserted implementing the Proposed Tolls in the manner suggested above would comport with other provisions of the Act, because the Commission is not “approv[ing] more than one year of toll rate *increases* proposed by the operator.”⁶⁷⁴ TRIP II argued that while the language of the statute limits the Commission to only approving the increases for one annual period, it does not limit the Commission to approving a single discrete toll increase within that year.

⁶⁶⁶ *Id.* at 15.

⁶⁶⁷ Ex. 16, at 9 (1990 Staff Report).

⁶⁶⁸ *See, e.g.*, Ex. 10, at 45-46 (Webb).

⁶⁶⁹ TRIP II Post-Hearing Brief at 48-50; Tr. at 392 (Elmes).

⁶⁷⁰ Ex. 3, at 12 (VDOT Review).

⁶⁷¹ *Id.* at 6, 12.

⁶⁷² 2019 Rate Case at 174 (The Commission declined to approve tolls proposed by TRIP II that it nevertheless found met the statutory criteria.).

⁶⁷³ TRIP II Post-Hearing Brief at 52-53.

⁶⁷⁴ Code § 56-542 D.

TRIP II noted the General Assembly’s use of the plural form of “increase” confirms as much, a key point acknowledged in the evidentiary hearing.⁶⁷⁵

The final issue TRIP II addressed was whether TRIP II’s proposed streamlined process is reasonable and appropriate for future proceedings. TRIP II explained that it will require steady toll increases over time to, at a minimum, cover its costs and maintain its financial integrity and to begin to have the opportunity to provide a reasonable return to investors at some point in the future.⁶⁷⁶ To that end, TRIP II proposed a collaborative process to streamline the regulatory approval of a proposed rate increase. TRIP II was disappointed that the County and Staff flatly rejected its offer.⁶⁷⁷ TRIP II indicated that it remains willing and ready to work with the Commission, Staff, and any party that desires to engage in collaborative discussions to develop a framework and format for future rate increase applications that will permit a full review by the Commission and minimize the cost and time requirement for all interested parties.⁶⁷⁸

In conclusion, TRIP II requested that the Hearing Examiner find that the Proposed Tolls in the Application meet the requirements of Code § 56-542 D and recommend that the Commission approve the Proposed Tolls for implementation on the Greenway immediately following issuance of the Final Order in this proceeding.⁶⁷⁹

Board of Supervisors of Loudoun County

In its Post-Hearing Brief, the County set forth the legal standard, in addition to the requirements of Code § 56-542 D, for Commission review of TRIP II’s Proposed Tolls. In addition, the County addressed seven issues in support of its position that TRIP II’s Application should be denied in its entirety, including: (i) TRIP II’s Application fails to meet the most basic requirements of Code § 56-542;⁶⁸⁰ (ii) the Proposed Tolls are not reasonable to the user in relation to the benefit obtained;⁶⁸¹ (iii) the Proposed Tolls will materially discourage use of the Greenway;⁶⁸² (iv) the REA should not be used to determine whether the Proposed Tolls allow TRIP II no more than a reasonable return;⁶⁸³ (v) TRIP II is not guaranteed recovery of its debt service costs;⁶⁸⁴ (vi) TRIP II’s incremental rate proposal is not properly before the Commission;⁶⁸⁵ and (vii) the United States and Virginia Constitutions do not guarantee TRIP II’s financial solvency.⁶⁸⁶

⁶⁷⁵ TRIP II Post-Hearing Brief at 51-54; Tr. at 274 (“the key language in the statute is toll rate *increases*”) (emphasis added).

⁶⁷⁶ Ex. 2, at 7-8; Ex. 4, at 20 (Hamilton Direct).

⁶⁷⁷ Ex. 32, at 22 (Hamilton Rebuttal).

⁶⁷⁸ TRIP II Post-Hearing Brief at 54-55.

⁶⁷⁹ *Id.* at 56.

⁶⁸⁰ County Post-Hearing Brief at 8-21.

⁶⁸¹ *Id.* at 21-27.

⁶⁸² *Id.* at 27-31.

⁶⁸³ *Id.* at 32-33.

⁶⁸⁴ *Id.* at 33-36.

⁶⁸⁵ *Id.* at 36-38.

⁶⁸⁶ *Id.* at 39-48.

The County noted that TRIP II, as “the party seeking to disturb the status quo,” bears the three-tiered burden of proof.⁶⁸⁷ TRIP II must first persuade the Commission by a preponderance of the evidence that its factual assertions are true.⁶⁸⁸ Next, TRIP II must convince the Commission that those proven facts satisfy the criteria of Code § 56-542 D.⁶⁸⁹ Finally, TRIP II must “convince the Commission to exercise its may-approve (not shall-approve) discretion to grant the relief requested.”⁶⁹⁰ The County noted the distinction between may-approve and shall-approve authority is important. The County highlighted regarding another statute administered by the Commission, the Supreme Court of Virginia has held “[m]ay’ presupposes that the Commission also ‘may not,’ and . . . [the Court is] not tempted to repurpose ‘may’ as a polite form of ‘shall.’”⁶⁹¹ The County noted that “even if the Commission determines that TRIP II has presented sufficient evidence to satisfy the three criteria of [Code § 56-542 D], the Commission is not obligated to approve the Application, nor authorize any rate increase at all.”⁶⁹²

The County began its Post-Hearing Brief by urging the Commission to deny TRIP II’s Application because it fails to satisfy even the most basic requirements of Code § 56-542 for four independently sufficient reasons relating to material discouragement: (i) TRIP II’s Application does not analyze whether the proposed toll rates materially discourage use of the Greenway;⁶⁹³ (ii) TRIP II’s material discouragement analysis is not forward-looking;⁶⁹⁴ (iii) TRIP II’s material discouragement analysis does not even purport to analyze traffic impacts attributable to the toll rate charged;⁶⁹⁵ and (iv) the Commission should deny the application because neither the Commission nor any party can validate the Steer Model.⁶⁹⁶

The County emphasized that TRIP II’s Application purports to analyze whether the proposed toll rate *increase* will materially discourage use of the Greenway, instead of proving that the toll rate *charged* will not materially discourage use of the Greenway. The County noted in 2021, the General Assembly defined “materially discourage use” for the first time.⁶⁹⁷ It means:

to cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic *attributable to the toll rate charged* as validated by (i) an investment-grade travel demand model that takes population growth into consideration or (ii) in the case of an investigation into current toll rates, an actual traffic study that takes population growth into consideration.⁶⁹⁸

⁶⁸⁷ *Wal-Mart Stores East, LP v. State Corp. Comm’n*, 299 Va. 57, 73, 844 S.E.2d 676, 684 (2020).

⁶⁸⁸ *Id.*

⁶⁸⁹ *Id.*

⁶⁹⁰ *Wal-Mart Stores East, LP*, 229 Va. at 14, 844 S.E.2d at 684. *See also, Bd. of Supervisors of Loudoun Cnty. v. State Corp. Comm’n*, 292 Va. 444, 454, 790 S.E.2d 460, 465 (2016) (“As we recently explained, in construing statutes this Court ‘will apply the ordinary meaning of the word ‘may,’ which is ‘permission, importing discretion,’ where, as here, no ‘contrary legislative intention plainly appears.’” (internal citations omitted)).

⁶⁹¹ *Wal-Mart Stores East, LP*, 229 Va. at 70, 844 S.E.2d at 682.

⁶⁹² County Post-Hearing Brief at 7-8.

⁶⁹³ *Id.* at 8-12.

⁶⁹⁴ *Id.* at 12-13.

⁶⁹⁵ *Id.* at 13-14.

⁶⁹⁶ *Id.* at 14-21.

⁶⁹⁷ 2021 Va. Acts chs. 349, 350.

⁶⁹⁸ Code § 56-542 A (emphasis added).

Based on the clear and unambiguous language used by the General Assembly, the County believes material discouragement must be calculated based on the toll rate charged, not simply the toll rate increase. The County believes this conclusion is bolstered by the fact that the General Assembly used the term “toll rate increases” elsewhere in Code § 56-542 D.⁶⁹⁹ The County argued it is “‘presume[d] that the legislature chose, with care, the specific words of the statute’ and that ‘[t]he act of choosing carefully some words necessarily implies others are omitted with equal care.’”⁷⁰⁰ The County argued because the General Assembly used the term “toll rate increase” in Code § 56-542 D and “toll rate charged” in Code § 56-542 A, the Commission cannot interpret these phrases to mean the same thing. Because TRIP II’s Application does not even attempt to analyze whether the proposed toll *rates* will materially discourage use of the Greenway, but instead purports to analyze whether the proposed toll *rate increase* materially discourages use of the Greenway, the County urged the Commission to deny TRIP II’s Application in its entirety.⁷⁰¹

The County also asserted TRIP II must submit a *forward-looking analysis* that demonstrates the Proposed Tolls, on their own, are not likely to materially discourage use of the Greenway. The County noted that TRIP II would have the Commission conclude that an approximately 40% increase in peak tolls to \$8.10 and an approximately 22% increase in off-peak tolls to \$6.40 will cause Greenway traffic to *increase* by 8.1%, a conclusion that defies logic and basic economic theory. The County noted that to reach this conclusion, TRIP II compared projected 2024 traffic with the proposed toll rate increase to actual AADT for calendar year 2022, the last year the Greenway implemented a toll increase.⁷⁰² The County asserted TRIP II’s comparison of 2024 traffic levels with the proposed toll rate increase to 2022 AADT is, inherently, a *backward-looking* analysis, a conclusion with which TRIP II witness Weller agreed, not a *forward-looking* analysis required by Code § 56-542 D.⁷⁰³ Because TRIP II admitted that its material discouragement analysis is *backward-looking* rather than *forward-looking*, and the County claimed there is no basis in the statute for its deviation and urged the Commission to reject TRIP II’s Application.⁷⁰⁴

The County further asserted TRIP II’s material discouragement analysis fails to analyze whether the Proposed Tolls, on their own, materially discourage use of the Greenway. The County argued TRIP II’s analysis “conflates multiple factors responsible for changes in traffic between 2022 and 2024 and presents biased results that are essentially meaningless to testing whether the proposed toll increases materially discourages use of the Greenway.”⁷⁰⁵ The County claimed this “improperly combines the impact of the proposed toll increases with other variables that change between 2022 and 2024, such as population growth, employment growth, and COVID-19 recovery.”⁷⁰⁶ The County asserted TRIP II’s analysis was flawed because the analysis combined multiple variables that each independently impact traffic. The County urged the Commission to

⁶⁹⁹ “Notwithstanding any other provision of law, the Commission shall not approve more than one year of toll rate increases proposed by the operator.” Code § 56-542 D.

⁷⁰⁰ *Va. Elec. & Power Co. v. State Corp. Comm’n*, 300 Va. 153, 163, 861 S.E.2d 47, 52 (2021) (citations omitted).

⁷⁰¹ County Post-Hearing Brief at 9-12.

⁷⁰² Ex. 2, at 13 (Application). *See also, e.g.*, Ex. 6 at 13-14 (Cuneo Direct); Ex. 5 at 22 (Weller Direct).

⁷⁰³ Tr. at 268-269 (Weller).

⁷⁰⁴ County Post-Hearing Brief at 13.

⁷⁰⁵ Ex. 10, at 7 (Webb).

⁷⁰⁶ *Id.* at 14.

reject TRIP II's Application for failing to analyze whether the Proposed Tolls, on their own, materially discourage use of the Greenway.⁷⁰⁷

The County asserted the Commission should deny the Application because neither the Commission nor any party can validate the Steer Model. The County noted that Code § 56-542 A requires "material discourage use" to be validated by "an investment-grade travel demand model that takes population growth into consideration[.]" To meet this requirement, TRIP II engaged Steer to develop a travel demand model that is purportedly specific to the Greenway. The County noted that TRIP II never objected to at least three formal discovery requests from the County and Staff to provide access to the Steer Model. When TRIP II sought to introduce the testimony of TRIP II witness Cuneo and the Steer Report that rely on the undisclosed Steer Model, the County objected to their admission into evidence. The Hearing Examiner denied the objection⁷⁰⁸ and later explained that "the appropriate remedy" to TRIP II's failure to provide access to the Steer Model "would have been to have filed a motion to compel."⁷⁰⁹

The County argued three reasons why it disagrees with the Hearing Examiner's ruling. First, the County asserted discovery in this proceeding was generally to be conducted "in accordance with Part IV of the Commission's Rules of Practice and Procedure ("Rules of Practice"), 5 VAC 5-20-240[.] *et seq.*"⁷¹⁰ Rule 260 specifies that "[Staff] and any party in a formal proceeding before the [C]ommission . . . may serve written interrogatories or requests for production of documents upon a party, to be answered by the party served, or if the party served is an entity, by an officer or agent of the entity, who *shall* furnish to the [Staff] or requesting party information as is known."⁷¹¹ The producing party may object to any interrogatory or document request, but "*shall* identify the interrogatory or document request to which the objection is raised, and *shall* state with specificity the basis and supporting legal theory for the objection."⁷¹² Then "[u]pon motion promptly made and accompanied by a copy of the interrogatory or document request and the response or objection that is subject to the motion, the [C]ommission will rule upon the validity of the objection; the objection otherwise will be considered sustained."⁷¹³ The County asserted that TRIP II never objected to producing the Steer Model in response to at least three formal discovery requests.⁷¹⁴

Second, the County asserted, even if TRIP II had properly and timely objected to the interrogatories seeking access to the Steer Model, that still would not have shifted the burden to the County to file a motion to compel. The County cited paragraph 13 of the Hearing Examiner's Protective Ruling entered in this proceeding. The County asserted that instead of following the protective rules that it asked for and the Hearing Examiner adopted, TRIP II unilaterally elected to withhold the Steer Model and did not explain why until it submitted its rebuttal testimony.⁷¹⁵ The County further asserted TRIP II did not propose, and the Protective Ruling does not allow, TRIP II

⁷⁰⁷ County Post-Hearing Brief at 13-14.

⁷⁰⁸ Tr. at 278.

⁷⁰⁹ *Id.* at 473.

⁷¹⁰ Order for Notice and Hearing at 13-14 (Aug. 7, 2023).

⁷¹¹ 5 VAC 5-20-260 (emphasis added).

⁷¹² 5 VAC 5-20-260 (emphasis added).

⁷¹³ *Id.*

⁷¹⁴ County Post-Hearing Brief at 15-17.

⁷¹⁵ Tr. at 599-600 (Cuneo).

to treat the Steer Model as extraordinarily sensitive information unless and until the Commission or Hearing Examiner approves such treatment.⁷¹⁶

Third, the County asserted that this is the first opportunity to apply the definition of “materially discourage use” and the Steer Model’s analysis produced results that were illogical and defy basic economic theory. The County maintained that for this reason, it was important for Staff and the parties to have an adequate opportunity to review the subtleties of the Steer Model. The County asserted that because Code § 56-542 A requires that TRIP II’s material discouragement analysis must be validated by an investment-grade travel demand model and TRIP II failed to provide the model for validation and testing, in direct contravention of the Order for Notice and Hearing, the Commission’s Rules, and the Protective Ruling, the Commission should deny the Application in its entirety.⁷¹⁷

The second issue the County addressed was whether the Proposed Tolls are reasonable to the user in relation to the benefit obtained. The County asserted the obvious flaws in TRIP II’s analysis are enough to demonstrate that TRIP II failed to meet the standard required by Code § 56-542 D. First, the County noted that VOT, VOC, and SB savings have all declined since the 2019 Rate Case, but VOR savings have increased dramatically.⁷¹⁸ The County noted the Steer Report neither acknowledges nor explains this dramatic increase, which is “particularly striking given that VOR savings comprise a substantial part of the purported benefits associate with using the Greenway.”⁷¹⁹ County witness Webb identified that a key input to the reliability calculation was a single week of TomTom data from October 2022. Dr. Webb questioned the use of one week of data and identified an anomaly relating to Buffer Time in the data.⁷²⁰ Related to VOR, the County identified where the Steer Report used an inaccurate and overinflated VOT, resulting in an “unreasonably high” reliability savings calculation.⁷²¹ Lastly, the County asserted that if quantitative and qualitative benefits are considered in the BCA, then quantitative and qualitative costs also have to be considered. The County asserted that it has invested more than \$1 billion in recent years to improve access to the Greenway in order to facilitate its use,⁷²² but none of those costs are factored into the Greenway’s BCA and those costs are ultimately passed to the County’s taxpayers whether they use the Greenway or not.⁷²³

The County asserted TRIP II’s user benefit analysis failed to analyze the benefits to users who travel only a partial distance on the Greenway. The County noted that only 30% of Greenway trips are full-length, while the remaining 70% are “shorter trips generally to and from the Ashburn

⁷¹⁶ County Post-Hearing Brief at 17-20.

⁷¹⁷ *Id.* at 20-21. Alternatively, the County requested that the Commission could schedule additional proceedings to resolve whether and how much access the parties should have to the Steer Model, and to receive additional testimony thereon. *Id.* at n.66.

⁷¹⁸ Ex. 10, at 27-28 (Webb).

⁷¹⁹ *Id.* at 28. *See also*, Ex. 19, at 16 (Smith) (“[VOR] represents more than 55% of the value of taking the [Greenway] estimated by Steer in the BCA analysis for peak trips for all trip types.”) (footnote omitted).

⁷²⁰ Tr. at 352-353 (Webb).

⁷²¹ Ex. 19, at 22-23, 25 (Smith). *See also*, Ex. 10, at 24 (Webb) (describing the broad aggregate measures used to calculate the value of time); Ex. 8, at 6, 12 (Roden) (“Specifically, Steer reported inconsistent VOT values in its model and user benefit; calculations . . . The overestimated VOT values also inappropriately inflate the VOR.”); Tr. at 312-317 (Roden).

⁷²² Tr. at 510-511 (Kroboth).

⁷²³ County Post-Hearing Brief at 22-25.

area.”⁷²⁴ The County highlighted that TRIP II’s BCA analyzed the benefits for those who travel the entire Greenway, but completely ignored those who travel a partial distance. The County asserted this flaw in TRIP II’s analysis prevents the BCA from accurately capturing the disproportionate cost imposed on drivers who travel shorter distances. According to the County’s own analysis, the vast majority of trips will result in a negative benefit.⁷²⁵ The County aggregated the trips and this produced a *de minimis* benefit for eastbound trips of \$0.12, which County witness Webb cautioned a small change in any of the underlying assumptions would cause the benefit to become negative.⁷²⁶ When Dr. Webb updated the VOR in his analysis, his calculations demonstrated that “TRIP II fails to provide a positive net benefit to users of the Greenway under the proposed toll increases.”⁷²⁷

The third issue the County addressed was whether the Proposed Tolls will materially discourage use of the roadway. The County asserted that the Commission need not undertake any substantive analysis of material discouragement because TRIP II’s analysis fails to meet the requirements of Code § 56-542. However, if the Commission disagrees with the County on this point, the County also maintained the material discouragement analysis presented by TRIP II is a backward-looking analysis that uses flawed inputs, which concluded that use of the Greenway will increase by 8.1% with the proposed toll increases. By contrast, the County claimed County witness Roden presented a forward-looking analysis using a 2024 forecast year that demonstrates that the Proposed Tolls will result in a decrease of traffic up to 24%, which far exceeds the 3% limitation in Code § 56-542.⁷²⁸ In addition, Mr. Roden analyzed 2022 traffic levels comparing the existing toll rates and the proposed toll rates and found that Greenway traffic would decline by 9%.⁷²⁹ Thus, even if the Commission disagrees that TRIP II’s material discouragement analysis fails to comply with Code § 56-542, the County maintained the evidence in the record demonstrates that the Proposed Tolls will materially discourage use of the Greenway.⁷³⁰

The fourth issue the County addressed was whether the REA should be used to determine whether the Proposed Tolls allow TRIP II no more than a reasonable return. The County noted that TRIP II relies on the REA to show that the Application satisfies third prong of Code § 56-542 D – that the Proposed Tolls will provide no more than a reasonable return. The County asserted the REA is not an appropriate method to determine whether this test has been satisfied. The REA balance compounds every year, and as of December 31, 2023, was \$12.71 billion.⁷³¹ Beyond incentivizing poor financial management, the County asserted the REA had no practical relevance in calculating tolls because it would authorize a grossly inflated toll rate.⁷³²

The fifth issue the County addressed was whether TRIP II is guaranteed recovery of its debt service costs. The County noted that in support of its argument that the proposed toll increases will provide no more than a reasonable return, TRIP II highlighted its substantial debt service costs.⁷³³

⁷²⁴ Ex. 5, at 13 (Weller).

⁷²⁵ Ex. 10, at 35 (Webb).

⁷²⁶ *Id.* at 35-37.

⁷²⁷ *Id.* at 39-40.

⁷²⁸ Ex. 8, at 24 (Roden).

⁷²⁹ *Id.*

⁷³⁰ County Post-Hearing Brief at 27-31.

⁷³¹ Ex. 4, at 31 (Hamilton Direct).

⁷³² County Post-Hearing Brief at 32-33.

⁷³³ Ex. 2, at 14-15 (Application); Ex. 4, at 11-12, 14 (Hamilton Direct).

The County asserted that in both of TRIP II's refinancing cases, the Commission made it clear that approval of the refinancings did not guarantee any particular level of tolls or toll structure.⁷³⁴ The County noted that Commission approvals of the 1998 and 2004 refinancings were based on materially inaccurate traffic and toll rate projections presented by TRIP II. For example, in the 1998 Refinancing Case, TRIP II represented to the Commission that its traffic volume in 2023 would be approximately 128,000 trips per day,⁷³⁵ rather than the 36,000 or fewer trips per day projected by TRIP II in this case.⁷³⁶ The County asserted "[t]he Commission is not in the business of issuing blank checks to companies it regulates to perpetually recover costs that grossly exceed the anticipated costs to ratepayers (*i.e.*, Greenway drivers), and it should not do so here."⁷³⁷ The County further asserted that "TRIP II must bear the burden of its voluntarily assumed business risks."⁷³⁸

The sixth issue the County addresses was whether TRIP II's incremental rate increase proposal is properly before the Commission. The County explained that on the final day of the evidentiary hearing, TRIP II, for the first time, offered an Incremental Rate Increase Proposal ("Incremental Proposal").⁷³⁹ If approved, the Incremental Proposal would authorize TRIP II to increase toll rates from current levels to the proposed maximum levels through three separate rate increases over 12 months. Both the County and Consumer Counsel objected to the admission of the Incremental Proposal, but the objections were overruled. The County noted that the Incremental Proposal was not in TRIP II's Application, was not noticed to the public, and does not comply with the requirements of Code § 56-542. For these reasons, the County urged the Commission to reject the Incremental Proposal.⁷⁴⁰

The last issue the County addressed was whether the United States and Virginia Constitutions guarantee TRIP II's financial solvency. The County prefaced its argument that even before deciding whether denial of the requested toll increases will result in an unconstitutional taking, the Commission can and should deny the Application and direct TRIP II to file an application that complies with the basic requirements of Code § 56-542.⁷⁴¹

The County asserted that TRIP II cannot satisfy the heavy burden of establishing that Code § 56-542 D is unconstitutional. If the Commission decides that it must address TRIP II's argument that the United States and Virginia Constitutions entitle the Company to the requested toll increases, even if the proposed toll increases fail to satisfy the criteria of Code § 56-542 D, then TRIP II has to overcome a heavy burden, according to the County.⁷⁴² The County noted the Commission has recognized that:

⁷³⁴ *Application of Toll Road Investors Partnership, II, L.P., For approval of refinancing*, Case No. PUF-1998-00025, 1998 S.C.C. Ann. Rep. 454, Order Approving Refinancing (Nov. 24, 1998) ("1998 Bond Refinancing Case"); *Application of Toll Road Investors Partnership II, L.P., For Approval of Refinancing*, Case No. PUF-2001-00017, 2004 S.C.C. Ann. Rep. 543, Order Approving Refinancing (Nov. 19, 2004) ("2004 Bond Refinancing Case").

⁷³⁵ Ex. 10, at 49 (Webb).

⁷³⁶ *Id.*

⁷³⁷ County Post-Hearing Brief at 36.

⁷³⁸ *Id.* at 33-36.

⁷³⁹ Tr. at 587-591 (Cuneo). *See also*, Ex. 24.

⁷⁴⁰ County Post-Hearing Brief at 36-38.

⁷⁴¹ *Id.* at 39.

⁷⁴² *See, e.g.*, Ex. 2, at 8-9 (Application); Tr. at 162-164.

The Supreme Court of Virginia has ruled repeatedly that the single most compelling presumption in Virginia law is the presumption in favor of the constitutionality of statutes enacted by the General Assembly. The Court has described the Commonwealth's presumption in favor of constitutionality as so strong that it requires a challenger to show that the alleged unconstitutionality is "so plain as to leave *no doubt* on the subject. *To doubt is to affirm [the statute's] constitutionality.* There is no such thing as a doubtful constitutional statute. Every presumption is in its favor, and there is no stronger presumption known to the law." Furthermore, the unconstitutionality of a statute must be "clear and palpable," and, thus, the "Court must resolve *any reasonable doubt regarding a statute's constitutionality in favor of its validity.*"

As the Supreme Court has repeatedly made clear, *any* reasonable doubts – any close calls, in the vernacular – *must* be resolved in favor of a statute's constitutionality. [TRIP II] carries the burden of overcoming the Commonwealth's strongest of legal presumptions.⁷⁴³

In other words, the County emphasized that in deference to the General Assembly's "broad legislative authority, [the Supreme Court has] repeatedly said that a statute will be upheld as constitutional unless it is 'plainly repugnant' to some provision of the Virginia or Federal Constitutions."⁷⁴⁴

The County asserted as a general proposition, the United States and Virginia Constitutions *may* protect TPIP II, *at most*, from a major *decrease* in toll rates. The County further asserted TRIP II will not suffer an unconstitutional taking if the Commission denies the proposed toll increases. The County noted the Commission has never definitively ruled whether TRIP II is entitled to *any* toll increase necessary to maintain financial solvency even if the proposed toll rates do not satisfy the criteria of Code § 56-542 D. Relying on *Federal Power Comm'n v. Hope Natural Gas Co.* and *Market Street Railway Co. v. Railroad Comm'n of State of California*,⁷⁴⁵ the County asserted that neither the United States or Virginia Constitutions require the Commission to relieve companies for the consequences of business decisions and risks they voluntarily undertake.⁷⁴⁶

The County asserted that it is well settled law the "fixing of 'just and reasonable [] rates involves a balancing of the investor and consumer interests."⁷⁴⁷ Furthermore, the County noted that with respect to another toll road, the United States Supreme Court has held that:

⁷⁴³ *Petition of the Old Dominion Committee for Fair Utility Rates v. Appalachian Power Company, For a Declaratory Judgment and an Order Requiring Biennial Review Filings*, Case No. PUE-2016-00010, Final Order at 4-5 (July 1, 2016), *aff'd* at *Old Dominion Comm. For Fair Util. Rates v. State Corp. Comm'n*, 294 Va. 168, 803 S.E.2d 758 (2017) (internal citations omitted) (emphasis added in Commission's Final Order).

⁷⁴⁴ *Old Dominion*, 294 Va. at 178, 803 S.E. 2d at 763.

⁷⁴⁵ *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 604 (1944); *Market St. Ry. Co. v. Railroad Comm'n of State of Cal.*, 324 U.S. 548, 566 (1945).

⁷⁴⁶ County Post-Hearing Brief at 40-41.

⁷⁴⁷ *Hope Natural Gas Co.*, 320 U.S. at 603. *See also, e.g., Permian Basin Area Rate Cases*, 390 U.S. 747, 770 (1968) (same); *Duquesne Light Co. v. Barasch*, 488 U.S. 399, 316 (1989) ("The Constitution within broad limits leaves the States free to decide what ratesetting methodology best meets their needs in balancing the interests of the utility and the public.").

[w]hen the question arises whether the legislature has exceeded its constitutional power in prescribing rates to be charged by a corporation controlling a public highway, stockholders are not the only persons whose rights or interests are to be considered. The rights of the public are not to be ignored. It is alleged here that the rates prescribed are unreasonable and unjust to the company and its stockholders. But that involves an inquiry as to what is reasonable and just for the public. If the establishing of new lines of transportation should cause a diminution in the number of those who need to use a turnpike road, and, consequently, a diminution in the tolls collected, that is not, in itself, a sufficient reason why the corporation operating the road should be allowed to maintain rates that would be unjust to those who must or do use its property . . . If a corporation cannot maintain such a highway and earn dividends for stockholders, it is a misfortune for it and them which the [C]onstitution does not require to be remedied by imposing unjust burdens upon the public.⁷⁴⁸

The County asserted, in other words, “if the toll rates charged are unreasonable to the public, the toll operator is *not* constitutionally entitled to those toll rates, even if it cannot maintain its road or earn a return for investors.”⁷⁴⁹

The County asserted the General Assembly satisfied constitutional requirements by balancing competing interests and identifying the conditions upon which just and reasonable rates must be determined by the Commission pursuant to Code § 56-542 D. In support, the County noted it “cannot seriously be contended that the Constitution prevents state legislatures from giving specific instructions to their utility commissions. We have never doubted that state legislatures are competent bodies to set utility rates.”⁷⁵⁰ The County also emphasized that state regulators “must be free, within limitations imposed by pertinent constitutional and statutory commands, to devise methods of regulation capable of equitably reconciling diverse and conflicting interests.”⁷⁵¹ The County asserted the General Assembly provided the Commission with specific guidance on how to balance TRIP II’s interest with those of the public.⁷⁵²

The County asserted the General Assembly provided the Commission with discretion to determine *how* to measure TRIP II’s toll rates against the statutory criteria, and assuming the rates satisfy the criteria, the Commission has broad discretion to set the actual toll rates. However, “[a]ny proposed toll rates that fail to meet [the three statutory criteria] as determined by the Commission are contrary to the public interest, and the Commission shall not approve such toll rates.”⁷⁵³ The County noted that “if the proposed toll rates fail to meet just *one* criterion of [Code § 56-542 D], the General Assembly unequivocally determined that such toll rates are not in the public interest. Because TRIP II’s Proposed Tolls fail to satisfy [Code § 56-542 D], TRIP II is not constitutionally entitled to such rates.”⁷⁵⁴

⁷⁴⁸ *Covington & Lexington Turnpike Road Co. v. Sandford*, 164 U.S. 578, 596-97 (1896) (The Court held that legislation that would reduce toll rates was an unlawful taking because such reduced rates would not allow the turnpike operator enough revenues to even maintain the road.).

⁷⁴⁹ County Post-Hearing Brief at 42-43.

⁷⁵⁰ *Duquesne Light Co.*, 488 U.S. at 313.

⁷⁵¹ *Id.* at 313-314 (quoting *Permian Basin Area Rate Cases*, 390 U.S. at 767) (emphasis in original).

⁷⁵² County Post-Hearing Brief at 43.

⁷⁵³ Code § 56-542 D.

⁷⁵⁴ County Post-Hearing Brief at 44.

In sum, the County asserted “the Commission is not in the business of shielding the companies it regulates from their own unwise decisions and rescuing them from financial failure. If TRIP II cannot propose toll rates that satisfy the three criteria of [Code § 56-542 D], any balancing required here overwhelmingly tips in favor of the public, which adamantly opposes the Application.”⁷⁵⁵ The County urged the Commission to reject any argument that TRIP II is constitutionally entitled to toll rates that allow it to remain financially solvent, even though those rates do not satisfy the three criteria of Code § 56-542 D.⁷⁵⁶

The County further asserted TRIP II has not adequately shown that its financial integrity is imminently at risk. The County asserted even if TRIP II were potentially entitled to the Proposed Tolls to maintain its financial integrity (which it is not), the Company has not provided enough information to validate that its financial integrity is imminently threatened and the information it has provided shows that threats to its financial integrity are remote, at best.⁷⁵⁷ The County noted that general representations of potential risk to a regulated entity’s solvency are insufficient to support a regulatory takings claim.⁷⁵⁸ The County asserted the burden is on TRIP II to prove that the Commission’s refusal to approve the Application will subject the Company to a real and imminent threat of financial insolvency. TRIP II has not done so here, and as a result, the Commission should reject TRIP II’s argument that it is constitutionally entitled to the requested toll increases.⁷⁵⁹

In conclusion, the County asserted that TRIP II has to blame itself for its current financial condition. The County maintained TRIP II made financial decisions based on grossly inaccurate traffic projections and toll revenues, and over the intervening years, it has not addressed the discrepancies between the projections and economic reality. Although Loudoun County’s population has increased significantly over the last 30 years, the County asserted the vast majority of drivers would rather sit in traffic than use the Greenway. Despite the opportunity to address its financial situation over the years, the County contended TRIP II now demands a 40% increase in peak toll rates and a 22% increase in off-peak toll rates to save itself from the consequences of its own actions and inactions. The County asserted “the Commission simply cannot suspend economic reality and create a market for the Greenway at prices that drivers will not bear.”⁷⁶⁰ The County urged the Commission not to burden the drivers of the Greenway with TRIP II’s bad business decisions.⁷⁶¹

⁷⁵⁵ *Id.* at 46.

⁷⁵⁶ *Id.*

⁷⁵⁷ *See*, Confidential County Post-Hearing Brief at 46-47.

⁷⁵⁸ *Mo. PSC v. FERC*, 337 F.3d 1066, 1073 (D.C. Cir. 2003) (While the lender “*could* foreclose on [the pipeline company’s] facilities” and the pipeline company “*could* be forced into bankruptcy and *potentially* out of business,” the court concluded these concerns were too speculative and unaccompanied by any measure of likelihood. *Id.* at 1073-74 (quotations and citations omitted) (emphasis in original)).

⁷⁵⁹ County Post-Hearing Brief at 46-48.

⁷⁶⁰ *Id.* at 49.

⁷⁶¹ *Id.* at 48-49.

Consumer Counsel

In its Post-Hearing Brief, Consumer Counsel addressed three issues. First, Consumer Counsel contended the maximum tolls proposed by TRIP II fail to meet the statutory standard for approval.⁷⁶² In Consumer Counsel’s assessment, a proper comparison of traffic levels with and without the proposed toll increases shows that the Proposed Tolls would “materially discourage use of the roadway by the public.”⁷⁶³ In addition, Consumer Counsel claimed TRIP II failed to establish in this proceeding that its Proposed Tolls would be “reasonable to the user in relation to the benefit obtained.”⁷⁶⁴ Second, Consumer Counsel maintained there is no justification for the Company’s extraordinary proposal of a streamlined approval process for future toll rate increases.⁷⁶⁵ Third, Consumer Counsel acknowledged constitutional takings doctrine may affect the Commission’s analysis and ultimate determination in this case.⁷⁶⁶

Consumer Counsel cited the standard for Commission review of TRIP II’s Proposed Tolls. Consumer Counsel noted that in the 2013 Investigation Case, the Commission interpreted the cost-benefit prong of the Act’s standard for approval as “not requir[ing] an absolute pass-fail test, where the toll must show some type of *quantifiable* cost-effective benefit.”⁷⁶⁷ Rather, the Commission concluded that this component of the standard is “broader than that, and it may reasonably include any number of difficult-to-quantify benefits (including reliability and ‘peace of mind from driving on a well maintained, limited access highway’).”⁷⁶⁸

Consumer Counsel noted the second prong, whether the Proposed Tolls will materially discourage use, is a bright-line rule under law. As explained by Consumer Counsel, in the 2021 Special Session I, the General Assembly explicitly defined “[m]aterially discourage use” to mean:

To cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic attributable to the toll rate charged as validated by (i) an investment-grade travel demand model that takes population growth into consideration or (ii) in the case of an investigation into current toll rates, an actual traffic study that takes population growth into consideration.⁷⁶⁹

Consumer Counsel asserted if the Proposed Tolls result in a decrease in traffic of three percent, or more, the Proposed Tolls are *per se* “contrary to the public interest, and the Commission shall not approve” them.⁷⁷⁰

⁷⁶² Consumer Counsel Post-Hearing Brief at 5.

⁷⁶³ *Id.* at 6.

⁷⁶⁴ *Id.* at 9.

⁷⁶⁵ *Id.* at 13.

⁷⁶⁶ *Id.* at 15.

⁷⁶⁷ 2013 Investigation Case at 192.

⁷⁶⁸ *Id.* In the 2013 Investigation Case, the Commission did not address whether difficult-to-quantify costs should also be considered in its cost-benefit analysis.

⁷⁶⁹ 2021 Va. Acts chs. 349, 350.

⁷⁷⁰ Consumer Counsel Post-Hearing Brief at 5-6.

Consumer Counsel described TRIP II's material discouragement analysis as "fatally plagued by a nonsensical approach to comparing traffic with and without the proposed increases."⁷⁷¹ As recognized by Consumer Counsel, TRIP II compared forecasted traffic levels in 2024 with 2022 traffic levels that immediately followed the Company's most recent toll increase. Consumer Counsel agreed with Staff that TRIP II's analysis is a "net impact analysis of *all factors* impacting toll road usage, including traffic volume recovery post-COVID."⁷⁷² Consumer Counsel recognized that, in effect, TRIP II's "methodology inappropriately introduces a positive projected increase in [Greenway] traffic post-COVID that obscures the negative impact to traffic on the [Greenway] attributable *solely* to the toll increase."⁷⁷³ Consumer Counsel argued if "materially discourage use" means "to cause a decrease in traffic of three or more percentage points,"⁷⁷⁴ then the test is limited to whether the level of tolls under consideration – exclusive of other factors – will cause such a decrease in traffic.⁷⁷⁵

In sum, Consumer Counsel believes "the record is clear that a proper comparison of 2024 traffic levels with and without the proposed toll rate increases will show a 6.3% decrease in traffic – clearly 'three or more percentage points' – on account of the implementation of the proposed toll rates."⁷⁷⁶ Consumer Counsel argued the Proposed Tolls exceed Code § 56-542's material discouragement limitation and the Commission may not authorize their substitution in place of current toll rates.⁷⁷⁷

Consumer Counsel also raised concerns with the Steer Report's BCA. Consumer Counsel noted that TRIP II requested an increase in its toll rates; therefore, the Company bears the evidentiary burden of showing that its proposed rates will be "reasonable to the user in relation to the benefit obtained." Consumer Counsel further noted that the County and Staff have put forth evidence relating to the Steer Report that certain factors in the BCA analysis may have been inflated resulting in greater apparent benefits from using the Greenway.⁷⁷⁸

⁷⁷¹ *Id.* at 6.

⁷⁷² Ex. 19, at 11 (Smith); *See also*, Ex. 10, at 14 (Webb) ("By using 2022 as the base year, TRIP II's material discouragement analysis offsets the effect of the proposed toll increases with traffic demand caused by other factors.").

⁷⁷³ Ex. 19, at 11 (Smith).

⁷⁷⁴ Code § 56-542 A.

⁷⁷⁵ Consumer Counsel Post-Hearing Brief at 7-8. Consumer Counsel also found little merit in TRIP II's argument that using 2022 as a base year allows inflation to be considered. Consumer Counsel found no mention of "inflation" in Code § 56-542 D and accepted TRIP II's admission that the Company's analysis included other factors besides the impact of the toll rate increase on traffic volumes on the Greenway. *Id.* at 8.

⁷⁷⁶ Ex. 6, Ex. DC-2 at 73-74 (Cuneo Direct); Ex. 10 at 15 (Webb); Ex. 19 at 10 (Smith).

⁷⁷⁷ Consumer Counsel Post-Hearing Brief at 9.

⁷⁷⁸ *Id.* at 9-10.

In particular, Consumer Counsel noted there is evidence that VOT,⁷⁷⁹ VOR,⁷⁸⁰ VOC,⁷⁸¹ and SB savings⁷⁸² may be overstated.⁷⁸³

Considering the issues with the Steer Report BCA highlighted by the County and Staff, Consumer Counsel argued TRIP II has not carried its burden of showing that its Proposed Tolls are “reasonable to the user in relation to the benefit obtained.” If the Commission concludes similarly, Consumer Counsel asserted the Proposed Tolls cannot be approved under Code § 56-542 D.⁷⁸⁴

Regarding TRIP II’s proposal for a streamlined approval process in future cases, Consumer Counsel urged the Commission to reject this proposal. Consumer Counsel noted the statute is clear: “[t]he Commission shall . . . have the power, and be charged with the duties of reviewing and approving or denying the application, of supervising and controlling the operator in the performance of its duties under [the Act], and of correcting any abuse in the performance of the operator’s public duties.”⁷⁸⁵ In addition, specific to toll rates, “[t]he Commission also shall have the duty and authority to approve or revise the toll rates charged by the operator,” with its review guided by the statute. Consumer Counsel argued the Commission cannot empower its Staff or VDOT to make a determination expressly reserved to the Commission by the General Assembly.⁷⁸⁶

Consumer Counsel next addressed the constitutional argument raised by TRIP II. Consumer Counsel noted that, at the hearing, TRIP II stated that “the fact that the Commission is setting rates for the Greenway under the provisions of the [Act], does not absolve the Commission from considering whether this basic constitutional right [to just compensation for the public use of its private property] is being met.”⁷⁸⁷ The Company further stated that any determination other than approval of the Proposed Tolls “will not provide just compensation to TRIP II for submitting its private property for a public use in contravention of both the [Fifth] [A]mendment to the [U.S.]

⁷⁷⁹ Ex. 19 at 20-22 (Smith); *See also*, Ex. 8, at 8-9 (noting that “[d]ata from prior studies shows that VOT growth becomes much slower as income increases” and arguing that therefore “the factor used to calculate the VOT based on income should be smaller at higher income levels.”). The Steer Report assumed a linear relationship between income and willingness to pay, as well as a linear relationship with trip length or duration. The Steer Report also assumed that all traffic going to Dulles Airport was for air travel, which places a higher value on VOT than commuting/personal trips, without accounting for airport employees, vendors, or others that may work in the area. *Id.*

⁷⁸⁰ Ex. 19, at 23-24 (Smith); Ex. 8, at 10 (Roden); Ex. 10, at 27-29 (Webb). The issues related to VOT are magnified in the VOR savings metric because VOR is “largely a function of the VOT.” *Id.*

⁷⁸¹ *Id.* at 25-26. *See also*, 2019 Rate Case, Doc. Con. Cen. No. 556297, Report of D. Mathias Roussy, Jr., Hearing Examiner at 74 (Oct. 13, 2020) (The Hearing Examiner found that fixed costs should be excluded from the calculation of VOC.).

⁷⁸² Ex. 19, at 25-27 (Smith). Mr. Smith identified two areas in which the Steer Report differed from USDOT guidance with respect to SB: using nine years of accident data rather than the most recent three to seven years, and using Greenway-specific accident data for the Greenway but county-wide accident data for the alternative routes, instead of accident data specific to the alternative routes. *Id.*

⁷⁸³ Consumer Counsel Post-Hearing Brief at 11-12.

⁷⁸⁴ *Id.* at 12.

⁷⁸⁵ Code § 56-542 B.

⁷⁸⁶ Consumer Counsel Brief at 13-15. In particular, Consumer Counsel noted that: (i) the cost-benefit analysis is not pass-fail but requires a balancing of the quantitative and qualitative benefits of the Greenway and TRIP II has not explained how Staff and VDOT are to undertake this review; and (ii) this proceeding has shown the importance of public hearings regarding proposed increases in toll rates on the Greenway. *Id.* at 14-15

⁷⁸⁷ Tr. at 163 (Billler).

[C]onstitution as applicable to Virginia through the 14th [A]mendment and Section 11 of Article [I] of the Virginia [C]onstitution.”⁷⁸⁸

Consumer Counsel agreed generally with the conclusion reached by the Hearing Examiner in his report in the 2019 Rate Case that: “rate regulated companies appear to have a general – though not absolute – constitutional right to rates that provide such companies with the opportunity to recover their costs, including cost of capital.”⁷⁸⁹ The Hearing Examiner further concluded however, “[n]o constitutional guarantee to any specific revenues or return exists.” Consumer Counsel noted that in the 2013 Investigation Case, the Commission agreed with Staff’s reasoning that “constitutional issues arise if tolls are lowered . . . in a manner that prohibits the Company from recovering its prudently incurred operating and debt obligations.”⁷⁹⁰ Consumer Counsel asserted the determination required under the Act “may implicate constitutional principles under certain factual scenarios.”⁷⁹¹

In conclusion, Consumer Counsel asserted that TRIP II’s Proposed Tolls fail to meet the statutory standard for approval under the Act. In addition, the Commission should reject TRIP II’s proposed streamlined approval process, as plainly contrary to law.⁷⁹²

Commission Staff

In its Post-Hearing Brief, Staff addressed five issues: (i) whether TRIP II’s BCA is flawed and insufficient to prove that the Proposed Tolls would be reasonable to the user in relation to the benefit obtained;⁷⁹³ (ii) whether TRIP II’s Proposed Tolls would materially discourage use of the Greenway by the public;⁷⁹⁴ (iii) whether the Proposed Tolls would provide TRIP II with no more than a reasonable return;⁷⁹⁵ (iv) whether the Commission should at this time deny TRIP II’s request

⁷⁸⁸ Consumer Counsel Post-Hearing Brief at 15; *Id.* at 169-70.

⁷⁸⁹ 2019 Rate Case, Doc. Con. Cen. No. 556297, Report of D. Mathias Roussy, Jr., Hearing Examiner at 95 (citing *Stone v. Farmers’ Loan & Tr. Co.*, 116 U.S. 307, 331 (1886) (“Under pretense of regulating fares and freights, the state cannot require a railroad corporation to carry persons or property without reward; neither can it do that which in law amounts to a taking of private property for public use without just compensation, or without due process of law.”); *Covington & Lexington Tpk. Rd. Co. v. Sandford*, 164 U.S. 578, 594-595 (1896) (“The cases to which we have referred related to the power of the legislature over rates to be collected by railroad corporations. But the principles announced in them are equally applicable, in like circumstances, to corporations engaged under legislative authority in maintaining turnpike roads for the use of which tolls are exacted. Turnpike roads established by a corporation, under authority of law, are public highways, and the right to exact tolls from those using them comes from the state creating the corporation. . . . And the exercise of that right may be controlled by legislative authority to the same extent that similar rights, connected with the construction and management of railroads by corporations, may be controlled. A statute which, by its necessary operation, compels a turnpike company, when charging only such tolls as are just to the public, to submit to such further reduction of rates as will prevent it from keeping its road in proper repair, and from earning any dividends whatever for stockholders, is as obnoxious to the constitution of the United States as would be a similar statute relating to the business of a railroad corporation having authority, under its charter, to collect and receive tolls for passengers and freight.”)). The Commission did not rule upon the Hearing Examiner Report’s constitutional analysis in the 2019 Rate Case Order.

⁷⁹⁰ 2013 Investigation Case, 2015 S.C.C. Ann. Rep. at 193 n.26 (citing Staff’s Legal Memorandum at 17-19).

⁷⁹¹ Consumer Counsel Post-Hearing Brief at 16-17.

⁷⁹² *Id.* at 17.

⁷⁹³ Staff Post-Hearing Brief at 3-9.

⁷⁹⁴ *Id.* at 9-12.

⁷⁹⁵ *Id.* at 12-13.

for a streamlined process to review tolls in future proceedings;⁷⁹⁶ and (v) whether the Staff's recommended tolls would be constitutional.⁷⁹⁷

The first issue Staff addressed was whether TRIP II's BCA is flawed and insufficient to prove that the Proposed Tolls would be reasonable to the user in relation to the benefit obtained. Staff identified a number of concerns with TRIP II's BCA and recommended changes to the VOT, VOR, VOC, and SB savings.⁷⁹⁸ Staff considered USDOT guidance as the primary source for deriving benefits.⁷⁹⁹ Specifically, Staff reduced the estimated volume of traffic attributable to air travel by normalizing the airport traffic data for purposes of determining VOT.⁸⁰⁰ Staff adjusted the VOR reliability ratio to 1.2 for all trip types.⁸⁰¹ Staff removed the fixed costs from the VOC calculation.⁸⁰² For SB savings, Staff compared the Greenway to Alternate Route 1 using crash data from 2018 through 2021 and Screenline data provided by the Company to estimate traffic volume and vehicle miles traveled on Alternate Route 1.⁸⁰³ Staff's adjustments resulted in a weighted average BCR of 0.98.⁸⁰⁴ According to Staff, this, on its face, appears insufficient to prove that TRIP II's Proposed Tolls would be reasonable to the user in relation to the benefit obtained.⁸⁰⁵

The second issue Staff addressed was whether TRIP II's Proposed Tolls would materially discourage use of the Greenway by the public. Staff noted that Code § 56-542 D provides, in part, that the Commission may order substituted for any toll being charged by TRIP II, a toll which is set at a level which will not materially discourage use of the roadway by the public. As recognized by Staff, Code § 56-542 A defines "materially discourage use" as:

to cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic attributable to the toll rate charged as validated by (i) an investment-grade travel demand model that takes population growth into consideration or (ii) in the case of an investigation into current toll rates, an actual traffic study that takes population growth into consideration.

Staff noted TRIP II ran its traffic demand model with three sets of toll rates: the current toll rates, the proposed toll rates, and the alternate toll rates.⁸⁰⁶ As required by the Code, TRIP II compared its 2024 traffic levels at current rates to its 2024 traffic levels at its proposed rates and this resulted in a 6.3% decline in usage for the Greenway.⁸⁰⁷ Staff asserted the Proposed Tolls materially discourage use of the Greenway because the reduction in traffic attributable to the proposed toll increases is greater than 3.0%. Furthermore, Staff recognized that the projected 2024 traffic levels at the Company's Alternate Tolls as compared to the projected 2024 traffic levels at

⁷⁹⁶ *Id.* at 13.

⁷⁹⁷ *Id.* at 14-16.

⁷⁹⁸ Ex. 19, at 20 (Smith).

⁷⁹⁹ *Id.*

⁸⁰⁰ Staff Post-Hearing Brief at 4-6. *See*, Ex. 19, at 20-22, 29 (Smith).

⁸⁰¹ *Id.* at 6-7. *See*, Ex. 19, at 15, 23-25, 29-30 (Smith).

⁸⁰² *Id.* at 7. *See*, Ex. 19, at 15, 23-25, 29-30 (Smith).

⁸⁰³ *Id.* at 8-9. *See*, Ex. 19, at 26-28, 30 (Smith).

⁸⁰⁴ A benefit-cost ratio of less than 1 indicates that the costs of using the Greenway exceed the benefits.

⁸⁰⁵ Staff Post-Hearing Brief at 3-4.

⁸⁰⁶ Ex. 19, at 10 (Smith).

⁸⁰⁷ *Id.*

current tolls only resulted in a decrease of 2.8% in Greenway usage,⁸⁰⁸ which appears to satisfy the 3.0% statutory limit.⁸⁰⁹

Staff objected to TRIP II's method of comparing 2022 traffic levels after its last rate increase to forecasted 2024 traffic levels. Staff asserted the plain language of Code § 56-542 A requires a decrease in traffic of three or more percentage points based on a change in traffic attributable to the toll rate charged – not a change in traffic attributable to COVID pandemic recovery. Staff asserted TRIP II's analysis presents a net impact analysis of all factors that might impact Greenway usage, including post-COVID traffic recovery. Staff further asserted TRIP II's analysis obscures the negative impact of the toll increase on the Greenway to justify a higher toll rate. Staff asserted its analysis results in the Proposed Tolls themselves discouraging 6.3% of potential travelers from using the Greenway, irrespective of the total level of traffic that materializes in 2024.⁸¹⁰

The third issue Staff addressed was whether the Proposed Tolls would provide TRIP II with no more than a reasonable return. Staff agreed under all three potential scenarios in this case (maintaining current tolls, alternate toll increase, or proposed toll increase), the Company would earn no more than a reasonable return.⁸¹¹ Accordingly, Staff is satisfied that the tolls do not violate Code § 56-542 D.⁸¹² In addition, Staff believes the REA is relevant as means of tracking the returns that were authorized by the Commission versus the returns that have been realized by the investors.⁸¹³ Accordingly, Staff believes the REA should still be tracked and included in conjunction with the internal rate of return (“IRR”) analysis in future TRIP II rate proceedings.⁸¹⁴

The fourth issue Staff addressed was whether the Commission should at this time deny TRIP II's request for a streamlined process to review tolls in future proceedings. Staff urged the Commission to deny at this time the Company's request for a streamlined process to review its tolls in future proceedings. Staff noted while the overall methodology of the Steer Model may be reasonable, the reliability of the model's results is questionable due to Staff's inability to gain access to the model to determine its specific calibration and structure.⁸¹⁵ Staff was unable to verify several key components of the model including whether all planned area developments were considered, unable to examine the Origin-Destination matrices used in the reduced scope model, and unable to examine how roadway improvement projects were implemented in the model, to name a few.⁸¹⁶ Staff asserted that TRIP II's proposal is premature, and as Staff gains an understanding of the Steer Model in future cases, it might be appropriate to revisit TRIP II's proposal at that time.⁸¹⁷

⁸⁰⁸ *Id.*

⁸⁰⁹ Staff Post-Hearing Brief at 10.

⁸¹⁰ *Id.* at 10-12.

⁸¹¹ Ex. 15, at 2 (Elmes).

⁸¹² *Id.*

⁸¹³ Tr. at 392 (Elmes).

⁸¹⁴ Staff Post-Hearing Brief at 12-13.

⁸¹⁵ Ex. 19, at 33 (Smith).

⁸¹⁶ Ex. 14, at 4 (Abbas).

⁸¹⁷ Staff Post-Hearing Brief at 13.

The final issue Staff addressed was whether Staff's recommended tolls would be constitutional. To pass constitutional muster, Staff asserted private property shall not be taken for public use, without just compensation.⁸¹⁸ Staff noted to satisfy these concerns, rates must: (i) allow TRIP II to recover its prudently incurred operating expenses; (ii) generate a return on TRIP II's investor-supplied capital commensurate with returns on investments in other enterprises having comparable risk; and (iii) assume that TRIP II's financial integrity is not jeopardized so it can maintain its credit and attract capital.⁸¹⁹

Although the Company's Alternate Tolls may satisfy the Code, Staff noted those rates would require TRIP II to dip further into its reserves to meet its debt obligations, while providing no return for investors. Accordingly, Staff believes the Alternate Tolls may fail Constitutional muster. However, under all the scenarios that are properly before the Commission in this case, Staff asserted none are likely to allow the Company to meet its entire debt service obligations with current operating cash flows.⁸²⁰ Staff further asserted that TRIP II has built up reserve funds totaling \$205.8 million that will allow the Company to meet its current debt service obligations.⁸²¹

Staff asserted none of the rates properly before the Commission in this case would allow TRIP II to earn a return for its investors. Staff noted that TRIP II has admitted that its Proposed Tolls will only "place it back on a path . . . to have an opportunity to earn a return."⁸²² Staff contends that the Alternate Tolls would serve the same purpose.⁸²³

Lastly, Staff asserted that the Company has acknowledged it has reserve funds available to meet its financial obligations.⁸²⁴ If the Commission follows Staff's recommendation in this case, and either denies TRIP II's Application or approves the Alternate Tolls, which are the only two options that meet the requirements of Code § 56-542 D, Staff asserted that the Company has demonstrated its ability to meet all financial obligations in its recent past, and the Company has the ability to continue requesting rate increases from the Commission in the future.⁸²⁵

In conclusion, Staff noted this is the first case in which the definition of "materially discourage use" is to be applied. Staff represented that it applied this provision and determined that TRIP II's Proposed Tolls violate the new statutory definition. If the Commission determines that amounts less than the Company's proposed toll increases are constitutional, Staff stands by its recommendation that the Alternate Tolls should be approved.⁸²⁶

⁸¹⁸ U.S. Const. amend. V; Va. Const. art. I, sec. 11.

⁸¹⁹ Case No. PUE-2013-00011, Legal Memorandum of the State Corporation Commission Staff, Doc. Con. Cen. No. 130720016, at 17 (Jul. 9, 2013). *See also, Bd. of Supervisors of Loudoun Cnty. v. State Corp. Comm'n*, 292 Va. 444, 459, 790 S.E.2d 460, 468 (2016); *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 603, 64 S.Ct. 281, 288 (1944); *Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n*, 262 U.S. 679, 692-93, 43 S.Ct. 675, 679 (1923); *Stone v. Farmers' Loan & Trust Co.*, 116 U.S. 307, 331, 6 S.Ct. 334 (1886); *City of Portsmouth v. Virginia Ry. & Power Co.*, 141 Va. 44, 51, 126 S.E. 366, 368 (1925).

⁸²⁰ Ex. 18, at 2 (Armstrong).

⁸²¹ *Id.*, Appendix A at 6.

⁸²² Ex. 2, at 9 (Application).

⁸²³ Staff Post-Hearing Brief at 15-16.

⁸²⁴ Tr. at 545 (Hamilton).

⁸²⁵ Staff Post-Hearing Brief at 16.

⁸²⁶ *Id.*

DISCUSSION

Code of Virginia

Code § 56-542 B establishes the Commission's regulatory jurisdiction over the Greenway. The statute provides in part:

The Commission shall have the power to regulate the operator under this title as a public service corporation. The Commission shall also have the power, and be charged with the duties of reviewing and approving or denying the application, of supervising and controlling the operator in the performance of its duties under this chapter and title, and of correcting any abuse in the performance of the operator's public duties.

Code § 56-542 D provides the Commission's authority over setting rates for the Greenway.

The statute further provides:

The Commission also shall have the duty and authority to approve or revise the toll rates charged by the operator. Initial rates shall be approved if they appear reasonable to the user in relation to the benefit obtained, not likely to materially discourage use of the roadway, and provide the operator no more than a reasonable return as determined by the Commission. Thereafter, the Commission, upon application, complaint or its own initiative, and after investigation, may order substituted for any toll being charged by the operator, *a toll which is set at a level which is reasonable to the user in relation to the benefit obtained and which will not materially discourage use of the roadway by the public and which will provide the operator no more than a reasonable return as determined by the Commission. Any proposed toll rates that fail to meet these criteria as determined by the Commission are contrary to the public interest, and the Commission shall not approve such toll rates.* (emphasis added).

Any application to increase toll rates shall include a forward-looking analysis that demonstrates that the proposed toll rates will be reasonable to the user in relation to the benefit obtained, not likely to materially discourage use of the roadway, and provide the operator no more than a reasonable return. Such forward-looking analysis shall include reasonable projections of anticipated traffic levels, including the impact of social and economic conditions anticipated during the time period that the proposed toll rates would be in effect. The Department shall review and provide comments upon the analysis to the Commission. Notwithstanding any other provision of law, the Commission shall not approve more than one year of toll rate increases proposed by the operator. (emphasis added).

As used above, Code § 56-542 A defines the term "materially discourage use" to mean:

to cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic attributable to the toll rate charged as validated by (i) an investment-grade travel demand model that takes population growth

into consideration or (ii) in the case of an investigation into current toll rates, an actual traffic study that takes population growth into consideration.

The Application

In the 2019 Rate Case, TRIP II requested a series of increases in both the maximum peak and off-peak tolls on the Greenway over the next five-year period. In its April 26, 2021 Final Order, the Commission found that there was “evidence in this record to support the conclusion that the three criteria quoted above [Code § 56-542 D] have been met for approval of certain peak and off-peak toll increases.”⁸²⁷ The Commission further stated “[i]n exercising our ‘may’ discretion under Code § 56-542 D, the Commission finds that *peak* tolls should not be increased at this time due to the changes and uncertainty brought about by the COVID-19, as extensively addressed in the instant record.”⁸²⁸ The Commission further found that:

there are offsetting considerations to support the exercise of the Commission’s ‘may’ discretion in a different manner for approval of *off-peak* toll increases. There is evidence in this record showing that it is reasonable to reduce the differential between peak and off-peak tolls. In addition, the Supreme Court of Virginia has affirmed the Commission’s authority to consider the Company’s cost recovery in exercising our discretion under this statute; in consideration thereof, we agree with Staff’s expert accounting witness that increasing off-peak tolls in this manner would permit TRIP II to recover operating costs and debt obligations. Finally, the Commission has not disregarded COVID-related changes and uncertainty in exercising our discretion herein for off-peak tolls, and indeed, has found that such consideration supports limiting approval of off-peak increases resulting from this proceeding to the proposed increases for 2021 and 2022 only.⁸²⁹

The 2019 Rate Case resulted in a peak toll for two-axle vehicles of \$5.80 and an off-peak toll of \$5.25.⁸³⁰

In its Application, TRIP II asserted the combination of the inability to get the rate relief requested in the 2019 Rate Case, and the effects of the COVID pandemic on traffic volumes on the Greenway, have had a significant impact on the Company’s revenues and cash flow.⁸³¹ Since 2019, TRIP II has had to draw down its reserves on two occasions to make debt service payments because of insufficient revenues to cover those payments. TRIP II anticipates that it will have to do so again in February 2024.⁸³² TRIP II believes denial of a significant toll increase in this case will have significant negative financial consequences for the Company and will deny the Company the opportunity to earn a reasonable return on its investment.⁸³³ TRIP II requested approval to increase

⁸²⁷ 2019 Rate Case at 174.

⁸²⁸ *Id.* (citations omitted) (emphasis in original).

⁸²⁹ *Id.* at 175 (citations omitted) (emphasis in original).

⁸³⁰ Ex. 2, at 5 (Application).

⁸³¹ *Id.* at 6.

⁸³² *Id.* at 14-15.

⁸³³ *Id.* at 6.

the maximum peak and off-peak tolls to be effective January 1, 2024, or upon issuance of a final order in this case.⁸³⁴

TRIP II asserted “the Proposed Tolls are the minimum necessary to permit [the Company] to meet its financial obligations and to reach a point in the future where it will be able to have the opportunity to earn a reasonable return on the capital invested in the Greenway consistent with TRIP II’s rights under the U.S. and Virginia Constitutions.”⁸³⁵ TRIP II further asserted the Proposed Tolls will not allow the Company to earn a return in the 2024 rate year but will allow the Company to approach a cash flow neutral position. TRIP II anticipates additional toll increases in the future will be required to provide a reasonable return to its investors.⁸³⁶

TRIP II asserted the Proposed Tolls meet all of the requirements of Code § 56-542 D and should be approved by the Commission.⁸³⁷ In particular, TRIP II asserted the Proposed Tolls are “reasonable to the user in relation to the benefit obtained.” The BCA performed by Steer calculated the difference between the toll cost of using the Greenway and the incremental quantifiable benefits users realize from using Greenway such as VOT, VOR, VOC, and SB. Based on Steer’s analysis and the BCA, TRIP II asserted the Greenway provides quantifiable benefits across all four categories of benefits.⁸³⁸ TRIP II also asserted the Greenway offers its users numerous qualitative benefits that are not captured in the quantitative analysis such peace of mind, an increased sense of safety, and additional enjoyment from driving on a limited access highway with no traffic signals.⁸³⁹

TRIP II further asserted Steer’s forward-looking analysis has demonstrated the Proposed Tolls “do not materially discourage use of the Greenway by the public.”⁸⁴⁰ To assess material discouragement, the Steer Model estimated the AADT on the Greenway during 2024 with the Proposed Tolls in place and compared that forecasted AADT to the actual AADT for calendar year 2022, the last year the Greenway implemented a toll increase. TRIP II asserted by comparing the forecasted AADT for 2024 with the actual traffic in 2022, the Steer Model properly considers the impacts of additional factors, such as traffic growth, to determine the impact of the Proposed Tolls on the Greenway’s traffic levels.⁸⁴¹

TRIP II asserted the Proposed Tolls “will provide the operator no more than a reasonable return.”⁸⁴² TRIP II asserted that the investors in the Greenway have not received any return on the investment they made to acquire, construct, and maintain the Greenway, let alone a reasonable rate of return. TRIP II further asserted the Proposed Tolls are necessary for the Company to meet its debt service coverage requirements, which is the largest annual expenditure for the Company. Even

⁸³⁴ *Id.* at 8, 16.

⁸³⁵ *Id.* at 8-9; TRIP II expressly reserved the right (1) to challenge, based on TRIP II’s constitutional rights, any finding in this proceeding that denies TRIP II’s proposed toll increases or approves lower tolls and (2) to raise arguments related to TRIP II’s constitutional right to compensatory tolls during the course of this proceeding. *Id.* at n14.

⁸³⁶ *Id.* at 9.

⁸³⁷ *Id.*

⁸³⁸ *Id.* at 10-11.

⁸³⁹ *Id.* at 11-12.

⁸⁴⁰ *Id.* at 12.

⁸⁴¹ *Id.* at 13-14.

⁸⁴² *Id.* at 14.

if the Proposed Tolls are approved, TRIP II asserted the Company is expected to generate insufficient revenues in the 2024 rate year to be cash flow neutral.⁸⁴³

Lastly, TRIP II proposed that the Commission authorize a streamlined process to consider and approve future increases under Code § 56-542 D to reduce the lag between increases in the tolls on the Greenway. TRIP II asserted this will minimize each toll increase and provide the Company with the opportunity to generate sufficient revenues to meet its financial obligations and have the opportunity to earn a reasonable return in the future.⁸⁴⁴

The Issues

1. *Whether the Proposed Tolls are reasonable to the user in relation to the benefit obtained?*

The longstanding precedent at the Commission has been to evaluate whether drivers, as a group (as opposed to individual user classes such as personal travel, business travel, airport trips, or truck trips) derive positive benefits from using the Greenway. In the 2013 Investigation Case, TRIP II stated “the standard to be applied” when considering the first requirement of Code § 56-542 D “should be whether, on balance for all users of the Greenway, the tolls charged are reasonable to the benefit obtained.”⁸⁴⁵ In that case, Staff agreed with TRIP II that an analysis of costs and benefits of using the Greenway cannot reasonably be determined based upon individual users but, instead: “must, by necessity, use a more general approach that focuses on the average benefits realized by users of the Greenway as a group or subgroups, and not focus on any one individual user.”⁸⁴⁶ In the 2013 Investigation Case, the Commission opined:

[T]he statute does not require an absolute pass-fail test, where the toll must show some type of *quantifiable* cost-effective benefit. The statutory term ‘reasonable to the user in relation to the benefit obtained’ is broader than that, and it may reasonably include any number of difficult-to-quantify benefits (including reliability and ‘peace of mind from driving on a well maintained, limited access highway’).⁸⁴⁷

It is within these well-settled parameters that it must be decided whether TRIP II’s Proposed Tolls are reasonable to the user in relation to the benefit obtained.

Steer developed the BCA for TRIP II to satisfy this criterion of Code § 56-542 D. Steer followed USDOT guidance in developing the BCA. The BCA provides a systematic framework for qualifying and evaluating the expected benefits and costs of the proposed changes in the Greenway’s tolls. The BCA looked at: (i) VOT; (ii) VOR; (iii) VOC; and (iv) SB savings for several classes of users, which included: personal travel; business travel; airport trips; and truck

⁸⁴³ *Id.* at 14-16.

⁸⁴⁴ *Id.* at 16.

⁸⁴⁵ 2013 Investigation Case, April 30th Company Memo at 9. *See*, 2013 Investigation Case, Doc. Con. Cen. No. 478577, Report of A. Ann Berkebile, Hearing Examiner at 56, n.107.

⁸⁴⁶ *Id.*, July 9th Staff Memo at 8. *See*, 2013 Investigation Case, Doc. Con. Cen. No. 478577, Report of A. Ann Berkebile, Hearing Examiner at 57, n.112.

⁸⁴⁷ 2013 Investigation Case at 192, Order Concluding Investigation (Sept. 4, 2015) (emphasis in original).

trips. To quantify the Greenway's benefits, the BCA compared the Greenway to alternative routes, in particular Routes 7 and 28.⁸⁴⁸

TRIP II witness Cuneo explained how VOT was calculated for personal travel, business travel and truck travel. Steer measured VOR by estimating the additional time travelers plan to offset potential delays. Although USDOT guidance does not provide specific recommendations on how to measure VOR, certain reliability metrics have been developed and recommend that Buffer Time be included. Buffer Time is estimated as the difference between planning (95th percentile) and average (mean) observed travel time. Steer concluded that both the Greenway's lower congestion and higher posted speed limits provide users with VOT and VOR savings on their trips at all times of the day when compared to alternative routes. Steer concluded the VOC are lower for users of the Greenway compared to the Composite Alternative Route 2 because the non-stop option offered by the Greenway results in reduced vehicle wear and tear and more efficient fuel consumption. However, the Greenway had a slightly higher VOC relative to Alternative Route 1 due to the Greenway's higher travel speed causing higher fuel consumption. Steer calculated the SB by comparing vehicle accident rates on the Greenway with vehicle accident rates in Loudoun County. Steer concluded that the Greenway provides SB savings to users by reducing the likelihood of fatalities, injuries, and property damage from vehicle crashes due to lower rates of accidents or levels of each accident's severity.⁸⁴⁹

The results of the Steer Report indicated, relative to Routes 7 and 28, all auto users of the Greenway accrued positive benefits that are greater than the toll rate during peak travel times, and during off-peak travel times business travel and airport trips accrued positive benefits and for personal travel the benefits were negative, with the cost exceeding the benefits. For truck trips, the costs exceeded the benefits for both peak and off-peak travel times. The Steer Report determined that combining for all travelers and time periods, the Greenway provided a positive BCR of 1.15 relative to Routes 7 and 28. The Steer Report did not capture qualitative benefits of driving on the Greenway such as peace of mind from driving on a well-maintained limited access roadway, an increased sense of safety from driving on a road with limited truck traffic, and driving on a road with no traffic signals.⁸⁵⁰

The Steer Report BCA analyzed full trips on the Greenway; it did not analyze the benefits and costs of partial trips on the Greenway. TRIP II witness Cuneo stated that such an analysis would have been more involved to develop and to do it properly. Mr. Cuneo was unaware of any requirement that would have prohibited Steer from doing a partial trip BCA. In the 2019 Rate Case, the BCA addressed both full and partial trips. Mr. Cuneo believes the consultant in that case made a simplifying assumption that the benefits for partial trips were proportional to the distance.⁸⁵¹

Based on the Steer Report, TRIP II witness Cuneo opined that TRIP II's Proposed Tolls are reasonable to the user in relation to the benefit obtained.⁸⁵²

⁸⁴⁸ Ex. 6, at 4-5 (Cuneo Direct).

⁸⁴⁹ *Id.* at 5-10.

⁸⁵⁰ *Id.* at 11-12.

⁸⁵¹ Tr. at 296-98, 305-06 (Cuneo).

⁸⁵² Ex. 6, at 12 (Cuneo Direct).

Both the County and Staff raised a number of concerns with TRIP II's BCA for the Greenway.

The County asserted that a review of the "most high-level and obvious flaws" in Steer's BCA analysis demonstrates that TRIP II failed to prove that the Proposed Tolls are reasonable to the user in relation to the benefit obtained.⁸⁵³ County witness Webb testified that VOT, VOC, and SB savings have fallen since the 2019 Rate Case. In that case, TRIP II submitted a BCA with the four same benefit categories used in the Steer Report. A comparison of the two BCAs shows that the amount of time savings for peak times on the Greenway has fallen from 9 minutes to about 5.6 minutes. For off-peak times, the time savings has fallen from approximately 5.4 minutes to 3.2 minutes. Dr. Webb confirmed there have been similar declines in VOC and SB savings.⁸⁵⁴ However, Dr. Webb noted that VOR savings was the only metric that increased in the Steer Report since 2019. VOR increased from \$3.59 in the 2019 Rate Case to \$8.74 in the Steer Report, an increase of 143%. Dr. Webb noted the Steer Report does not explain the dramatic increase, which he finds surprising since VOR savings comprises a substantial part of the benefits associated with using the Greenway.⁸⁵⁵ Dr. Webb identified an anomaly in the data resulting from Steer using just one week of TomTom data from October 2022 to perform its VOR analysis, rather than an entire year of TomTom data used in the 2019 Rate Case to determine VOR savings.⁸⁵⁶ Both County witnesses Webb and Roden noted Steer's VOR savings relies on an inaccurate and overinflated VOT, which resulted in an "unreasonably high" VOR savings calculation.⁸⁵⁷

Based on its review of TRIP II's BCA analysis, and the flaws associated with that analysis, the County asserted TRIP II failed to prove that the Proposed Tolls are reasonable to the user in relation to the benefit obtained, as required by Code § 56-542 D.⁸⁵⁸

The County asserted there is a separate basis for the Commission to find that the Proposed Tolls are not reasonable to the user in relation to the benefit obtained. The County asserted TRIP II's BCA failed to analyze the benefit to *all* users of the Greenway.⁸⁵⁹ The County noted that only 30% of the Greenway trips are full-length, while 70% are "shorter trips generally to and from the Ashburn area."⁸⁶⁰ The County further noted TRIP II's BCA only analyzes the benefits for those who travel the entire Greenway, while ignoring completely those who travel a partial distance. County witness Webb believes this failure prevents the BCA from accurately capturing the disproportionate cost imposed on drivers who travel shorter distances.⁸⁶¹ To demonstrate how inclusion of *all* drivers would impact the BCA, Dr. Webb prepared an updated distance-based benefit calculation similar to the one in the 2019 Rate Case. The results showed, even using Steer's

⁸⁵³ County Post-Hearing Brief at 21-22.

⁸⁵⁴ Ex. 10, 23-28 (Webb Direct).

⁸⁵⁵ *Id.* at 27-32.

⁸⁵⁶ *Id.*; Tr. at 352-54 (Webb).

⁸⁵⁷ Ex. 10, at 24 (describing the broad aggregate measures used to calculate VOT); Ex.8, at 6-10, 12 (Roden Direct) ("Specifically, Steer reported inconsistent VOT values in its model and user benefit; calculations . . . The overestimated VOT values also inappropriately inflate the VOR."); Tr. at 312-17 (Roden).

⁸⁵⁸ County Post-Hearing Brief at 24-25.

⁸⁵⁹ *Id.* at 25.

⁸⁶⁰ Ex. 5, at 13 (Weller Direct).

⁸⁶¹ Ex. 10, at 35 (Webb Direct).

flawed inputs, the vast majority of the trips resulted in a negative benefit.⁸⁶² Once the trips were aggregated, the result was a *de minimis* benefit of \$0.12 for eastbound trips and \$0.60 for west bound trips, which would become negative with a small change in any of the assumptions.⁸⁶³ Dr. Webb adjusted Steer's inflated VOR savings downward, and his calculations demonstrated that the Greenway fails to provide a positive net benefit to users under TRIP II's proposed toll increases.⁸⁶⁴

As part of its review of TRIP II's BCA, Staff also identified a number of concerns with Steer's BCA analysis and that certain values used in the analysis might be overstated. With respect to VOT, TRIP II's BCA assumed that 100% of the traffic going to Dulles Airport was for air travel, which places a higher value on VOT, as compared to personal or business travel.⁸⁶⁵ Staff established this assumption was erroneous and adjusted the estimated volume of traffic attributed to air travel.⁸⁶⁶ Staff further questioned TRIP II's use of one-week of traffic data to Dulles Airport, which represented 106% of the airport's monthly average traffic.⁸⁶⁷ Staff normalized the airport traffic data with the same method used to adjust the September 2022 Dulles Airport travel data to its yearly average.⁸⁶⁸

In the Company's BCA, VOR equals the VOT for that trip type multiplied by an assumed reliability factor of 1.5.⁸⁶⁹ Staff noted that USDOT does not recommend a specific value for VOR but because VOR is a function of VOT, inflated VOT results are magnified in VOR savings.⁸⁷⁰ In the 2019 Rate Case, Staff supported a VOR factor of 1.2. In that case, it was determined that a factor of 1.2 was sufficiently within the high end of the estimated range to evaluate the VOR for the Greenway.⁸⁷¹ The Commission adopted the 1.2 VOR factor.⁸⁷² Staff also found TRIP II's VOR for truck trips on the Greenway to be unreasonably high.⁸⁷³ As a result, Staff adjusted TRIP II's VOR to 1.2 for all trip types.⁸⁷⁴

For the VOC, Staff noted that USDOT guidance recommends not including fixed costs in calculating the VOC savings in the BCA.⁸⁷⁵ TRIP II included fixed costs in its BCA.⁸⁷⁶ Staff noted other issues with TRIP II's application of VOC that would overstate the results.⁸⁷⁷ In the 2019 Rate

⁸⁶² *Id.*

⁸⁶³ *Id.* at 35-37.

⁸⁶⁴ *Id.* at 38.

⁸⁶⁵ Ex. 19, at 21-22 (Smith Direct).

⁸⁶⁶ *Id.*

⁸⁶⁷ *Id.*

⁸⁶⁸ Ex. 19, at 21-22, 29 (Smith Direct).

⁸⁶⁹ *Id.* at 15.

⁸⁷⁰ *Id.* at 23-24.

⁸⁷¹ *Id.* at 23-25, 29.

⁸⁷² *Id.* at 24.

⁸⁷³ *Id.* at 24-25.

⁸⁷⁴ *Id.* at 29.

⁸⁷⁵ *Id.* at 25.

⁸⁷⁶ *Id.*

⁸⁷⁷ *Id.* at 25-26.

case, fixed costs were excluded from VOC savings in the BCA.⁸⁷⁸ To address its concerns, Staff removed fixed costs from the VOC calculation in this case.⁸⁷⁹

For the SB, Staff noted TRIP II's SB methodology did not directly compare the Greenway to the alternative routes, instead it compared the Greenway to county-wide accident data.⁸⁸⁰ For this reason, Staff could not agree that the Greenway offers any greater safety benefits than the alternate routes.⁸⁸¹ Staff performed its own analysis of the Greenway's SB to Alternate Route 1, which more closely compares accident rates on the Greenway to accident rates on Alternate Route 1 per total miles traveled.⁸⁸² Staff compared the Greenway to Alternate Route 1 using crash data from 2018 through 2021, and used the Screenline data provided by TRIP II to estimate the volume of traffic and vehicle miles traveled on Alternate Route 1. Staff then calculated the SB savings of the BCA using those adjusted values.⁸⁸³ Staff's revisions reduced the SB savings of the BCA from \$2.96 to \$0.50.⁸⁸⁴

Staff's adjustments resulted in a reduction in the VOR's contribution to the weighted average BCA from \$3.56 to \$2.85.⁸⁸⁵ Staff compared the Greenway's accident costs to Alternate Route 1 accident cost per 100 million vehicle miles and this reduced the SB savings of the BCA from \$2.96 to \$0.50. Staff's BCA adjustments resulted in a weighted average BCR of 0.98.⁸⁸⁶ According to Staff, a BCR of less than 1 indicates that TRIP II has not proven that its Proposed Tolls would be reasonable to the user in relation to the benefit obtained.⁸⁸⁷

TRIP II's BCA analyzed the benefits and costs of using the Greenway for full-length trips, which only represents 30% of the total trips on the Greenway. A reasonable inference that may be drawn from TRIP II's evidence is that, for the other 70% of the Greenway's users who drive partial trips, the costs of using the Greenway exceed the benefits. TRIP II did not attempt to analyze the benefits and costs associated with partial trips on the Greenway.⁸⁸⁸

As I interpret the Commission's precedent, the reasonable to the user in relation to the benefit obtained criteria requires that TRIP II show that a simple majority of the users (greater than 50% of all users) of the Greenway derive positive benefits by paying the Proposed Tolls and using the Greenway. TRIP II's evidence only showed that, at most, 30% of the drivers might derive positive benefits. Since TRIP II's evidence fails to show that at least a simple majority of the users

⁸⁷⁸ *Id.*

⁸⁷⁹ *Id.* at 29.

⁸⁸⁰ *Id.* at 27.

⁸⁸¹ *Id.*

⁸⁸² *Id.* at 27-28.

⁸⁸³ *Id.* at 29.

⁸⁸⁴ *Id.* at 30.

⁸⁸⁵ *Id.*

⁸⁸⁶ Ex. 21 (Staff BCA Changes Summary). A BCA of less than 1.0 indicates that the costs exceed the benefits of using the Greenway, without the consideration of qualitative benefits or qualitative costs.

⁸⁸⁷ Staff Post-Hearing Brief at 3-4.

⁸⁸⁸ Tr. at 296-98, 305-06 (Cuneo). In the 2019 Rate Case, the BCA analyzed full-length and partial trips and found that in the aggregate the proposed toll rates produced positive benefits. *See*, 2019 Rate Case, Doc. Con. Cen. No. 556297, Report of D. Mathias Roussy, Jr., Hearing Examiner at 97 (Oct. 13, 2020).

might derive positive benefits by paying the Proposed Tolls and using the Greenway, I find that TRIP II failed to prove by a preponderance of the evidence that its proposed toll increases are reasonable to the user in relation to the benefit obtained, as required by Code § 56-542 D. Since TRIP II's Proposed Tolls fail the first criteria in Code § 56-542 D, the Act requires that the Commission deny TRIP II's Application.

If the Commission finds that TRIP II's BCA satisfies its initial burden of proof by showing that a majority of drivers derive positive benefits from paying the Proposed Tolls and using the Greenway, TRIP II's BCA still does not prove that TRIP II's proposed toll increases meet the reasonable to the user in relation to the benefit obtained criteria of Code § 56-542 D. The record shows the values used in TRIP II's BCA for VOT, VOR, VOC, and SB savings are overstated and this results in an overstated BCR. I find Staff's adjustments to TRIP II's BCA are reasonable and are supported by the evidence. In particular, TRIP II's VOT overstated the amount of traffic going to Dulles Airport for air travel; TRIP II's VOR relied on a factor of 1.5, when a factor of 1.2 was found reasonable in the 2019 Rate Case and TRIP II provided no compelling evidence why the factor should be increased; TRIP II's VOC included fixed costs that were excluded in the 2019 Rate Case and TRIP II provided no compelling evidence why fixed costs should be included in VOC savings; and TRIP II's SB savings compared the safety benefits of the Greenway to Loudoun County generally, when the proper comparison should have been to the alternate routes. Staff's reasonable adjustments to TRIP II's BCA produced a weighted average net benefit of 0.98, which indicates that the costs exceed the benefits of using the Greenway, without the consideration of qualitative benefits or qualitative costs.

The Steer Report did not capture qualitative benefits of driving on the Greenway such as peace of mind from driving on a well-maintained limited access roadway, an increased sense of safety from driving on a road with limited truck traffic, and driving on a road with no traffic signals.⁸⁸⁹ If the Commission considers qualitative benefits, the County asserted that the Commission must also consider the Greenway's qualitative costs that the roadway is more remote than alternative roads, has less consistent safety features such as lights and guardrails, has less access to convenience features such as stores and restaurants, and overall cost.⁸⁹⁰ I find there has been no evidentiary showing in this case that the qualitative benefits outweigh the qualitative costs of using the Greenway.

Considering that TRIP II's BCA, after adjustment, produced a BCR of 0.98, I find that TRIP II failed to prove by a preponderance of the evidence that its proposed toll increases are reasonable to the to the user in relation to the benefit obtained, as required by Code § 56-542 D. Since TRIP II's Proposed Tolls fail again the first criteria in Code § 56-542 D, the Act requires that the Commission deny TRIP II's Application.

2. *Whether the Proposed Tolls will materially discourage use of the roadway by the public?*

As documented in the Steer Report, TRIP II asserted its Proposed Tolls meet the 3% material discouragement requirement in the Act because the Steer Model forecasts traffic to be

⁸⁸⁹ Ex. 6, 11-12 (Cuneo Direct).

⁸⁹⁰ Ex. 10, at 41-42 (Webb Direct).

8.1% higher in 2024 following the proposed toll increases, than AADT in 2022, the year of the last toll increase.⁸⁹¹

TRIP II demonstrated the results in the chart below.⁸⁹²

Toll Plaza	2022	2024 Proposed Rates	
	Traffic	Traffic	% Change
Mainline Plaza	27,950	30,432	8.9%
Old Ox Rd (Rt. 606)	2,386	2,333	-2.2%
Loudoun County Pkwy (Rt. 607)	736	832	13.0%
Ryan Rd (Rt. 772)	1,031	1,177	14.1%
Claiborne Pkwy (Rt. 901)	658	695	5.7%
Belmont Ridge Rd (Rt. 659)	722	769	6.6%
Shreve Mill Rd	135	114	-15.4%
Total	33,618	36,352	8.1%

Company witness Cuneo explained how the Steer Model was developed using the MWCOG regional travel demand model. The MWCOG model is the primary tool used for transportation planning in the Washington D.C. metropolitan area. Steer extracted a subarea from the MWCOG model to form its own model. Steer refined its model relationships to produce traffic forecasts that accurately represented observed traffic along the Greenway and nearby locations.⁸⁹³ The Steer Model analyzed multiple factors as part of developing the Steer Report, including: (i) reviewing the existing conditions on the Greenway and the nearby road network; (ii) reviewing and analyzing data sets of Greenway transactions and toll rates, study area traffic levels, origin-destination trip patterns, and travel times; (iii) reviewing population, employment, and household income levels; and (iv) reviewing and analyzing the Greenway’s traffic patterns and the roadway’s recovery from the COVID pandemic. The Steer Model included the social and economic conditions anticipated during the time period that the Proposed Tolls would be in effect. The model compared the forecasted 2024 traffic levels against the 2022 traffic levels to assess whether the Proposed Tolls meet the material discouragement requirement in the Act.⁸⁹⁴

Steer verified the reasonableness of the Steer Model’s forecasts through an extensive model validation and a review of the toll elasticities implied by the model’s traffic forecasts. For the model validation, Steer verified that the forecasted traffic levels and travel times for the base year closely matched the observed levels along the Greenway and key alternatives. Company witness Cuneo confirmed with the Proposed Tolls, overall transactions on the Greenway increase by 8.1% over the observed 2022 levels, which, in his assessment, indicates that the growth associated with population and employment and the recovery from the COVID pandemic more than offset the traffic lost due to higher toll levels.⁸⁹⁵

In the VDOT Review, C&M reviewed TRIP II’s forward-looking rate-benefit analysis and commented whether the analysis demonstrates that the proposed toll rate charge “will materially discourage use of the roadway,” as defined in Code § 56-542 D. C&M found: (i) TRIP II’s

⁸⁹¹ Ex. 6, at 14 (Cuneo Direct).

⁸⁹² *Id.*

⁸⁹³ *Id.* at 15-16.

⁸⁹⁴ *Id.* at 3.

⁸⁹⁵ *Id.* at 17.

methodology for the roadway use analysis to be simplistic, “relying on generic assumptions and limited corridor-specific studies;” (ii) based on the observed traffic for recent months, “the growth rate thus far appears to lag behind the recovery assumed in the traffic forecast for 2024;” and (iii) “addressing the material discouragement clause by comparing traffic levels from two years is an arguable approach.”⁸⁹⁶ C&M found the overall methodology used by TRIP II “under the roadway use analysis reasonable within the bounds of the presented data inputs.”⁸⁹⁷

Regarding its third comment above, C&M provided additional comments concerning TRIP II’s roadway use analysis. C&M commented TRIP II’s method of estimating “material discouragement” based on two different years is open to interpretation. C&M noted that the wording in the statute “takes population growth into consideration” is open to interpretation. C&M explained “evaluating traffic volumes in 2024 (with a toll increase) versus 2022 (observed toll rate), may have implications regarding material discouragement evaluation.” Considering its concerns with the language of Code § 56-542, C&M was unable to comment further on this aspect of TRIP II’s analysis.⁸⁹⁸

County witnesses Roden and Webb each performed a material discouragement analysis of TRIP II’s Proposed Tolls.

County witness Roden and his firm AECOM performed a 2024 Analysis to look at TRIP II’s proposed 2024 toll increase based on traffic conditions in Loudoun County, population and employment growth, transportation network capacity improvements, and the proposed toll rates. AECOM’s analysis with the proposed 2024 toll rates showed a significant decrease in traffic levels on the Greenway in 2024. Applying the proposed toll rates to projected 2024 traffic levels, the number of average weekday transactions decreased by 23% relative to existing toll rates from around 43,700 to 33,500. Compared to 2022, the average weekday transactions decreased from around 37,000 under the existing toll rate to 33,500 under the proposed 2024 toll rate, a 9% decrease. To understand these findings, AECOM ran a series of toll sensitivity tests to gauge how much traffic on the Greenway would change at different toll rates. The results are shown in Mr. Roden’s Figure 5.⁸⁹⁹ In both the 2022 and 2024 traffic scenarios, the number of average weekday transactions declines significantly as toll rates increase. Using the proposed 2024 toll rates, traffic revenue also declined under both 2022 and 2024 traffic scenarios relative to current toll rates.⁹⁰⁰ In sum, Mr. Roden considers Steer’s material discouragement analysis, which compares 2024 forecasted traffic with 2022 actual traffic to determine the effect of the proposed rate increase, not to be legitimate.⁹⁰¹

County witness Webb explained the flaw in TRIP II’s material discouragement analysis. The analysis fails to properly isolate the interaction between the variables it purports to analyze (toll increase vs. traffic impact) from other variables that could impact traffic. Dr. Webb noted the point is illustrated in the Steer Report’s findings that after a 40% increase in peak tolls and a 22%

⁸⁹⁶ Ex. 3, at 7 (VDOT Review).

⁸⁹⁷ *Id.*

⁸⁹⁸ *Id.* at 8.

⁸⁹⁹ Ex. 8, at 24 (Roden Direct).

⁹⁰⁰ *Id.* at 20-24.

⁹⁰¹ Tr. at 330-331 (Roden).

increase in off-peak tolls, daily traffic on the Greenway will increase by 8.1%. Dr. Webb explained that basic economic theory provides that demand curves slope down, meaning that an increase in price will cause a decrease in the quantity demanded, in this case traffic on the Greenway. He believes failure to isolate the variables conflates multiple factors that could contribute to a particular outcome.⁹⁰²

County witness Webb testified before the Commission can authorize an operator to raise toll rates, the Act requires the operator to show that the proposed toll rates do not materially discourage use of the roadway, or “cause a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic *attributable to the toll rate charged*.”⁹⁰³ Dr. Webb explained Steer analyzed material discouragement based on the change in the traffic but it did not look at the change in the traffic attributable to *just* the increase in the toll rate charged. Because it compared 2024 projected traffic to 2022 actual traffic, Steer combined multiple variables responsible for changes in traffic between those two years. As a result, the Commission cannot determine if, and to what degree, the Proposed Tolls materially discourage traffic on the Greenway. Accordingly, Dr. Webb believes TRIP II’s analysis does not meet the requirement set forth in the Act and should be rejected. Dr. Webb believes his position is supported by the VDOT Review which stated that “[e]valuating traffic volumes in 2024 (with a toll increase) versus 2022 (observed toll rate), as opposed to the same year 2024 (with and without a toll increase), may have implications regarding material discouragement evaluation.”⁹⁰⁴

County witness Webb explained the impact of using 2022 traffic data as the base year in the calculation of material discouragement. By using 2022 as the base year, TRIP II’s material discouragement analysis offsets the effect of the proposed toll increases with traffic demand caused by other factors such as population growth, employment growth, and COVID pandemic recovery. In addition, TRIP II’s data showed that traffic on the Greenway was abnormally low in 2022, which further biased the results of its material discouragement analysis.⁹⁰⁵

County witness Webb proposed an alternative material discouragement analysis. He recommended that the percentage change in traffic be measured based on a 2024 forecast year without the increase in tolls, and a 2024 forecast year with the increase in tolls. He explained this isolates the independent variable being tested (*i.e.*, the Proposed Tolls) and normalizes all other independent variables to reflect the 2024 forecast levels (*e.g.*, population, employment, and COVID pandemic recovery). As required by the Act, this analysis focuses solely on the impact of the change in toll rates on traffic levels on the Greenway. Dr. Webb explained Steer made this calculation in its report but did not report the results. The Steer Report showed that daily traffic decreased 6.3% from 2024 under the “Base Rates” assumption (*i.e.*, current rates) to 2024 under the “Proposed Rates” assumption. Dr. Webb prepared a table similar to Table 6-5 in the Steer Report showing the results below:⁹⁰⁶

⁹⁰² Ex. 10, at 10-11 (Webb Direct).

⁹⁰³ Code § 56-542 A, D (emphasis added).

⁹⁰⁴ Ex. 3, at 8 (VDOT Review); Ex. 10, at 10-13 (Webb Direct).

⁹⁰⁵ Ex. 10, at 13-14 (Webb Direct).

⁹⁰⁶ *Id.* at 14-16.

Comparison of 2024 Traffic with and without Proposed Tolls			
Toll Plaza	2024 Base Rates Traffic /1	2024 Proposed Rates Traffic /2	% Change
Mainline Plaza	32,361	30,432	-6.0%
Old Ox Rd (Rte 606)	2,511	2,333	-7.1%
Loudoun County Pkwy (Rte 607)	909	832	-8.5%
Ryan Rd (Rte 772)	1,280	1,177	-8.0%
Claiborne Pkwy (Rte 901)	781	695	-11.0%
Belmont Ridge Rd (Rte 659)	821	769	-6.3%
Shreve Mill Rd	134	114	-14.9%
Total	38,797	36,352	-6.3%

/1 Source: Exhibit DC-2, Steer Report at 73, Table 6-3, Estimated 2024 Average Daily Transactions by Toll Plaza, Base Rates, 2-way Total

/2 Source: Exhibit DC-2, Steer Report at 75, Table 6-5, 2024 Proposed Rates Traffic

County witness Webb explained the 6.3% decrease in 2024 traffic caused by the Proposed Tolls indicates that the tolls materially discourage use of the Greenway. The Act defines material discouragement as “a decrease in traffic of three or more percentage points based on either a change in potential toll road users or a change in traffic attributable to the toll rate charged.”⁹⁰⁷ Dr. Webb observed a decrease of 6.3% is more than twice the 3% threshold in the Act.⁹⁰⁸

Based on model runs performed by AECOM that corrected for data errors in the Steer Report, County witness Webb opined that the proposed 2024 toll increase will reduce traffic on the Greenway by approximately 23% in 2024, which is more than 7.5 times higher than the 3% threshold for material discouragement in the Act.⁹⁰⁹

Staff also questioned TRIP II’s material discouragement analysis. Staff witness Smith noted the Act requires TRIP II to evaluate the proposed toll increases’ impact on Greenway ridership in a forward-looking analysis using an investment grade travel demand model that takes into consideration changes in population. The statute includes a “pass-fail” evaluation where a reduction in Greenway traffic of 3% or more, attributable to the toll rate, constitutes a failure. Steer ran its model with three sets of toll rates: current toll rates, proposed toll rates, and the alternate toll rates. Mr. Smith noted the “but-for” case comparison between the current toll rates and the proposed toll rates resulted in a 6.3% lower rate of toll road usage at the proposed toll rates, which constitutes a failure of the requirement that limits the reduction in usage attributable to the toll increase to less than 3%. The model run of the alternate toll rates (\$6.45 peak and \$5.85 off-peak) passed the statutory requirement with a 2.8% reduction in ridership.⁹¹⁰

Staff witness Smith voiced Staff’s concerns regarding the Steer Model and certain assumptions used in the model. In particular, Staff questioned the comparison between actual 2022

⁹⁰⁷ Code § 56-542 A.

⁹⁰⁸ Ex. 10, at 16-17 (Webb Direct).

⁹⁰⁹ *Id.* at 18-19.

⁹¹⁰ Ex. 19, at 9-10 (Smith Direct).

traffic levels on the Greenway, and the model's projected 2024 traffic levels with the proposed toll rate increase. Mr. Smith noted the material discouragement of less than 3% is tied to *the toll rate increase and its impact*. The Company presented an analysis that is a net impact analysis of *all factors* impacting toll road usage, including traffic volume recovery post-COVID. As a result, the model produces a higher than permissible toll rate because it introduces a projected increase in Greenway traffic post-COVID that obscures the negative impact to traffic on the Greenway attributable *solely* to the toll increase.⁹¹¹ Mr. Smith further noted that using unforeseen negative economic events that may lower traffic volumes for the base year could create an opportunity for TRIP II to inappropriately increase toll rates on the Greenway by offsetting the impact of a toll increase by artificially inflating traffic volumes.⁹¹²

I agree with the County and Staff that TRIP II's material discouragement analysis is seriously flawed and does not comply with Code § 56-542. The analysis conflates other factors, such as employment growth and the post-COVID recovery in traffic, to offset the impact of the proposed toll increases. TRIP II's analysis defies basic economic theory – an increase in price results in a decrease in the amount demanded. There is absolutely no way that the implementation of the proposed toll increases will result in an 8.1% increase in Greenway traffic. After having read over 900 written comments submitted in this case, it is the understatement of the year to say that Greenway riders are vehemently opposed to any toll increase and they would rather drive out of their way or sit in traffic on one of the free alternatives than pay TRIP II's Proposed Tolls. With the average peak travel time savings on weekdays down to 4.3 minutes in the morning eastbound peak hour and 7 minutes westbound afternoon peak hour,⁹¹³ drivers will not have to sit in traffic for long to make up the cost of the tolls on the Greenway. I find the proper material discouragement analysis should compare forecasted 2024 traffic, which includes population growth and other socio-economic factors, with and without the proposed toll increases, which results in a decrease in traffic of 6.3% and a failure of the statutory material discourage use criteria. Since TRIP II's Proposed Tolls fail the material discourage use criteria in Code § 56-542, the Act requires that the Commission deny TRIP II's Application.

As an alternative, the Commission may exercise its discretion to approve substitute toll rates that comply with the material discouragement test. The Alternate Tolls (\$6.45 peak and \$5.85 off-peak) pass that test and are therefore not contrary to the public interest. However, TRIP II has taken the position that anything less than its Proposed Tolls would be confiscatory and violate the United States and Virginia Constitutions. As an alternative, TRIP II proposed at the hearing that its proposed toll increases be implemented in three stages throughout a one-year period to comply with the statutory requirement that "the Commission shall not approve more than one year of toll rate increases proposed by the operator."⁹¹⁴ Both the County and Consumer Counsel objected to TRIP II's Incremental Proposal, as not properly before the Commission. While the Commission has broad discretion, the exercise of that discretion in the manner proposed by TRIP II appears, in my view, to conflict with the clear intention of the General Assembly when it defined "materially discourage use" in Code § 56-542 A. Since TRIP II has rejected the Alternate Tolls as

⁹¹¹ *Id.* at 10-11.

⁹¹² *Id.* at 12.

⁹¹³ Ex. 5, at 12-13 (Weller Direct).

⁹¹⁴ Code § 56-542 D.

confiscatory, I recommend that the Commission not exercise its discretion to establish toll rates that comply with the Act.

3. *Whether the Proposed Tolls will provide the operator no more than a reasonable return as determined by the Commission?*

TRIP II asserted the Proposed Tolls will provide the Company no more than a reasonable return and will provide the opportunity to earn a reasonable return in the future. The Proposed Tolls will reduce the Company revenue deficit but will not produce a positive rate of return.⁹¹⁵

The financial impact of the Proposed Tolls is included in Company witness Hamilton's Confidential Exhibit RNH-1 under three different scenarios, including: (i) negative annual traffic growth of 2.50%; (ii) annual traffic growth of 0.00%; and (iii) positive annual traffic growth of 2.50%. Under the positive traffic growth scenario, the revenue from the Proposed Tolls falls over \$2 million short of break-even cash flow, would not be expected to generate any return on equity, but would allow TRIP II to cover its operating costs and debt service payments. Additionally, the Company would not be able to cover all of its capital expenses in 2024 or meet the coverage test ratios under its bonds to make a distribution to its equity investors. For these reasons, TRIP II believes the Proposed Tolls will provide *no more* than a reasonable return, since they provide the Company no return at all.⁹¹⁶

TRIP II believes the Proposed Tolls are a first step in a series of future toll increases that it believes are required to enable the Company to meet its debt service obligations and generate a reasonable return in the future. TRIP II believes multiple toll increases are necessary to place the Company on firm financial footing so that it can cover its increasing debt service obligations and provide a return *of* the investment that was made to construct the Greenway by equity investors and a return *on* that investment.⁹¹⁷

Staff concluded that the Proposed Tolls for the Greenway will provide TRIP II with no more than a reasonable return, based on: (i) the forward-looking financial impact of the Proposed Tolls on estimated 2024 cash flows; (ii) the earned rate of return under the REA; and (iii) the internal rate of return over the operating history of the Greenway.⁹¹⁸

Staff evaluated the Company's forecast of 2024 results under three scenarios: (i) based on maintaining the current tolls; (ii) based on the Company's Alternate Tolls; and (iii) based on the Company's Proposed Tolls. Staff concluded that the Proposed Tolls for the Greenway will provide TRIP II with no more than a reasonable return. Staff determined under each scenario TRIP II is expected to have negative net cash flow. Based on TRIP II's traffic modeling assumptions, the Company's forecasted net cash flow is negative under any scenario in 2024.⁹¹⁹

⁹¹⁵ Ex. 4, at 27-28 (Hamilton Direct).

⁹¹⁶ *Id.* at 29-30.

⁹¹⁷ *Id.* at 30-31.

⁹¹⁸ Ex. 15, at 21 (Elmes Direct).

⁹¹⁹ Ex. 18C, Appendix B at B-1 to B-2 (Armstrong Confidential Direct).

The unrefuted evidence is that the Proposed Tolls will provide TRIP II no more than a reasonable return. In fact, the evidence shows that TRIP II will earn no return in 2024 if the Commission approves the Proposed Tolls. Accordingly, I find the Proposed Tolls will provide TRIP II with no more than a reasonable return.

4. *Whether the Commission should approve TRIP II's proposed streamlined regulatory process?*

In the direct testimony of Company witness Hamilton, TRIP II proposed a process to ease the regulatory burden on the Company. TRIP II asserted that it must file multiple rate increases over the next several years to reach a point where it is earning a reasonable return. TRIP II proposed that the Commission approve the Company's methodology and inputs used in this proceeding, and approve a streamlined process to review the Company's tolls in future proceedings.⁹²⁰ If Staff and VDOT determined that the Company appropriately updated the inputs to the Steer Model, and based on those updates, the proposed tolls continue to meet the statutory tests consistent with the Commission's prior orders, TRIP II could implement its proposed tolls on a specific date after public notice of the increases and without a full evidentiary hearing before the Commission. If TRIP II determined that revisions are required in its methodology or inputs to the Steer Model, the Company would explain those revisions in its application. The Commission would then have the option of allowing the Company's application to proceed through the streamlined process or order additional proceedings on the Company's application.⁹²¹

Staff responded to TRIP II's proposed streamlined regulatory process in the direct testimony of Staff witness Smith. Mr. Smith raised two concerns with TRIP II's proposal. First, he noted in its proposal, TRIP II seems to suggest that VDOT and Staff have the authority to independently determine whether the Company's future proposed tolls meet the requirements of Code § 56-542 D, and that they can also independently determine whether the proposed tolls comply with past Commission orders. Mr. Smith noted it is unclear whether the Commission under the current statutory framework could defer its decision-making authority to Staff. He further noted it is similarly unclear what authority VDOT has to make similar determinations that are currently under Commission jurisdiction. Staff's position is that a litigated proceeding remains the appropriate venue for determining TRIP II's toll rates.⁹²²

Second, Mr. Smith voiced Staff's concerns with its ability to review the inputs and methodologies employed in the Steer Model. He asserted Staff must be able to understand the methodology and inputs used in the model, in high enough resolution, to make a determination whether the modeling is sound, the inputs are valid, and the model is correctly calibrated. The same would apply to any future traffic demand model used by TRIP II if the Company retained a different traffic consultant.⁹²³

Mr. Smith explained Staff's difficulty with understanding the Steer Model. While the overall methodology of the Steer Model may be reasonable, Staff witness Abbas noted the

⁹²⁰ Ex. 4, at 21 (Hamilton Direct).

⁹²¹ *Id.*

⁹²² Ex. 19, at 31-32 (Smith Direct).

⁹²³ *Id.* at 32.

reliability of the model's results may be questionable due to the inability to determine the model's specific structure and calibration. For this reason, Mr. Smith believes the results produced by the Steer Model are questionable.⁹²⁴

Mr. Smith described Staff's efforts through discovery to understand the Steer Model.⁹²⁵ An agreement was reached in which Steer agreed to provide Staff with the input files used in the network model, the capture model, the econometric model, and the time-series model. TRIP II included in the response to Staff Interrogatory No. 2-56 a narrative description of how Steer prepared and calibrated the models and the outputs of the four models.⁹²⁶ Staff retained Dr. Abbas to review the Steer Model and the inputs to that model.⁹²⁷ Dr. Abbas secured the necessary software to run the network model files supplied by Steer, but Steer continued to refuse access to Steer Model since it was proprietary, and although Dr. Abbas teaches at Virginia Tech, he also consults on traffic matters and Steer raised competitive concerns.⁹²⁸ Through informal conversations with Steer, Steer advised Staff that the general course of business in the traffic modeling industry was to run sensitivities on travel demand models to verify the model's results. Thereafter, Staff served discovery requesting several sensitivities be run on the Steer Model. TRIP II objected to providing any of the sensitivity runs. Through further discussions with Steer, Steer confirmed that it could only provide some of the sensitivity runs requested by Staff. As a result, Dr. Abbas was only able to incorporate limited results from these sensitivity runs in his testimony and report.⁹²⁹

Mr. Smith described the difficulty Staff would have with an expedited proceeding. First, Staff believes the Steer Model's performance over time needs to be tracked to build a record of accuracy. Second, the Greenway's longstanding history of inaccurate forecasts of traffic causes some concern for Staff with accepting a model and methods that have not yet produced any verifiable results or has a proven track record of success. Third, Staff views TRIP II's request as one-sided. The Company would retain the ability to make its own updates to the Steer Model whenever it saw fit, but the Staff and the Commission would be limited in their ability to understand the model or make updates to the model.⁹³⁰

In her rebuttal testimony, Ms. Hamilton responded to the concerns raised by the County and Staff regarding the streamlined regulatory process proposed by TRIP II. TRIP II was disappointed by the positions taken by the County and Staff in opposition to its proposal. Despite their positions, TRIP II is nonetheless seeking such a process from the Commission or, at a minimum, guidance from the Commission on what process it finds would be appropriate to minimize the burden on the Company, Staff, and other parties, given the need for near-annual toll increase applications based on amendments to Code § 56-542. Ms. Hamilton explained the lengths to which TRIP II and Steer went to familiarize Staff with the Steer Model. Since the model is proprietary, Staff and its consultant were provided access to other files that would allow them to review and test Steer's model. TRIP II stated this is common industry practice. Despite the County's and Staff's concerns,

⁹²⁴ *Id.* at 33.

⁹²⁵ Steer considers its traffic demand model to be proprietary intellectual property. *See*, Ex. 19, at 34.

⁹²⁶ Ex. 19, at 33 (Smith Direct); *See*, Attachment SES-1, Company's Response to Staff Interrogatory No. 02-56.

⁹²⁷ *Id.* at 33-34.

⁹²⁸ *Id.* at 34.

⁹²⁹ *Id.* at 34-35.

⁹³⁰ *Id.* at 37-38.

Ms. Hamilton noted that VDOT's consultant was able to review the model in sufficient depth to provide comments to the Commission, the same information was made available to Staff and its consultant.⁹³¹

Ms. Hamilton clarified TRIP II's position regarding its proposed streamlined regulatory process. Rather than a new regulatory process that would completely avoid Commission review, TRIP II simply seeks a way to streamline the existing process. The Commission, either upon its own motion or a request by Staff or a respondent, would still be able to hold a hearing if it believed one was necessary and the Commission would still be able to make adjustments to the request if it determined those adjustments were necessary. As part of this process, TRIP II stated it would make its consultants available to Staff to work collaboratively for reviewing the Company's forecasting in future applications. Ultimately, Ms. Hamilton believes TRIP II will need to file applications in relative quick succession given the changes in Code § 56-542 and simply seeks to ease the burden on, and costs incurred by, all participants.⁹³²

I agree with the legal analysis in Consumer Counsel's Post-Hearing Brief that the Commission does not have the authority to delegate its regulatory responsibilities to Staff and VDOT; those regulatory responsibilities are expressly reserved to the Commission by the General Assembly.⁹³³

The question then becomes whether there are ways to reduce the level of litigiousness within the confines of a Commission proceeding. Mostly, this revolves around the use of the Steer Model, and determining appropriate inputs to the model. Going forward, TRIP II will need to determine it will continue to use Steer as its traffic consultant. In the last three cases before the Commission, TRIP II has used three different traffic consultants. As noted by Staff, the parties need to gain some familiarity with the Steer Model, and if TRIP II is not going to retain Steer as its traffic consultant, then any effort to streamline the process before the Commission would be pointless and the Commission should just reject TRIP II's proposal.

As for the Steer Model, how the model operates is proprietary; however, the inputs used in the model are not proprietary. After hearing this case, I conclude the one area that could streamline the process is having the traffic consultants reach a consensus on the basic parameters of the forward-looking analysis and the basic inputs used in the Steer Model. Although C&M, VDOT's traffic consultant, found the overall methodology followed in TRIP II's forward-looking analysis was reasonable, C&M was critical of a number of aspects of the analysis, particularly where the analysis deviated from USDOT guidance, deviated from industry standards, or where the analysis could benefit from more detailed corridor-based studies. If TRIP II is serious about streamlining the process, it should at a minimum agree to implement the recommendations in the VDOT Review.

There are other areas of the Steer Model that would benefit from collaboration among the traffic consultants. For example, there was conflicting evidence in this case regarding what roads were or were not included in the network model, and what road improvements were or were not

⁹³¹ Ex. 32, at 22-23 (Hamilton Rebuttal).

⁹³² *Id.* at 23-24.

⁹³³ Consumer Counsel Post-Hearing Brief at 13-15.

included in the model. In addition, there was conflicting evidence regarding whether the Metro Silver Line was modeled as an alternative to the Greenway, particularly for those commuters going from Ashburn to downtown Washington D.C. Regarding Steer's BCA analysis, issues were raised concerning the calculation of VOT, VOR, VOC, and SB savings that could be resolved through discussions among the traffic consultants.

At a minimum, I recommend that the Commission consider the establishment of a working group of interested parties to look at ways to streamline the process before the Commission, in particular the use of the Steer Model, and report back to the Commission the earlier of one year or the Company's next rate case. As an alternative, TRIP II may wish to consider the suggestion offered by Loudoun County Supervisor Koran Saines and propose rates that mirror the DTR. In accordance with this proposal, whenever the DTR raises its rates, the Greenway would raise its rates accordingly. This would reduce TRIP II's regulatory expense by avoiding the cost of having to prepare its own investment grade travel demand model and reduce the public opposition to the Greenway's rate increases. TRIP II could rely on the investment grade travel demand model prepared for the DTR, since the Greenway has, since its inception, been considered the DTRE, and the Greenway would implement rate increases already found to be reasonable for the DTR.⁹³⁴

5. *Whether the Reinvested Earnings Account should be used to determine whether the Proposed Tolls allow TRIP II no more than a reasonable return?*

In its Post-Hearing Brief, the County addressed whether the REA should be used to determine whether the Proposed Tolls allow TRIP II no more than a reasonable return. The County noted that TRIP II relies on the REA to show that the Application satisfies the third prong of Code § 56-542 D – that the Proposed Tolls will provide no more than a reasonable return. The County asserted the REA is not an appropriate method to determine whether this test has been satisfied. The REA balance compounds every year, and as of December 31, 2023, was \$12.71 billion.⁹³⁵ Beyond incentivizing poor financial management, the County asserted the REA had no practical relevance in calculating tolls because it would authorize a grossly inflated toll rate.⁹³⁶

The REA is an off-books mechanism designed to capture the difference between the Company's allowed return and the amounts earned by equity investors. The REA was proposed by the Company's external consultants and approved in Case No. PUA-1990-00013.⁹³⁷ Additionally, the Commission has continued to find the REA to be a reasonable tool to track distributions and to provide an assessment of the ROE, without guaranteeing the ROE.⁹³⁸

Since the Greenway's inception, the parties recognized that the Greenway would likely generate losses in its early years due to the gradual development of traffic. The REA recognizes that relatively high returns would be required in the later years of the Greenway's life to adequately compensate equity investors for the losses incurred in the earlier years. TRIP II's predecessor, TRCV, was advised by its external consultants that recognition of the project's unique risk profile

⁹³⁴ Tr. at 12-15 (Saines).

⁹³⁵ Ex. 4, at 31 (Hamilton Direct).

⁹³⁶ County Post-Hearing Brief at 32-33.

⁹³⁷ 1990 Certificate Case.

⁹³⁸ Ex. 15, at 9 and Appendix A (Elmes Direct).

by regulators was needed to ensure TRCV's ability to secure financing for the roadway. Staff concurred with TRCV and stated, "Investors will not commit capital without assurances that the rate making process will recognize the absence of a cash return in the early years. . . ." ⁹³⁹ When the Commission approved the REA, it acknowledged the unique risks faced by the Greenway, and committed to a fair way to track TRIP II's returns over the life of the Greenway through the REA. ⁹⁴⁰

Initial projections indicated that the REA balance would reach \$405.6 million on December 31, 2022, which was anticipated to be highest point of the REA balance, with subsequent equity distributions gradually drawing the REA balance down to zero throughout the remaining original concession period. Additionally, initial projections indicated that distributions to equity investors would begin in 1998 and continue through 2036. ⁹⁴¹

As of December 31, 2023, the REA balance was \$12.71 billion. Staff agreed with TRIP II that this balance will almost certainly never be materially recovered. ⁹⁴² Staff identified the reasons for the significant growth in the REA, including, among other things, the compounding effect of the REA, the default on the original financing, the refinancings in 1999 and 2005, new lender requirements for equity distributions and the establishment of reserve accounts, the Great Recession and the COVID pandemic, and continued under-performance of the Greenway. ⁹⁴³ This has led Staff to recommend that the REA be supplemented with an additional way to monitor returns to facilitate the determination whether the proposed toll rates will result in no more than a reasonable return over the operating life of the Greenway. ⁹⁴⁴

Staff assessed the continued relevance of the REA. Staff assumed an annual revenue increase of 5% through 2056, the end of the current concession period, which amounted to approximately \$7.8 billion. If the REA were to continue to compound through 2056, without any distributions or contributions, the balance would be approximately \$962.6 billion. Based on its sheer size, Staff believes this may create some confusion. ⁹⁴⁵

Staff continues to accept consideration of the REA to determine whether proposed toll rates will result in more than a reasonable return. However, Staff believes the REA should be supplemented with an additional financial measure to assess the reasonableness of TRIP II's returns over the operating life of the Greenway. Staff believes this supplemental measure may improve the monitoring of TRIP II's equity returns while still allowing TRIP II's equity investors an opportunity to both recover their investments and a reasonable return thereon. ⁹⁴⁶

Staff proposed an internal rate of return analysis using the equity contribution and distribution cash flow presented in REA to arrive at an average allowed return, ⁹⁴⁷ which is shown

⁹³⁹ 1990 Certificate Case, Staff Report, Part B, Division of Economic Research and Development at 8, April 17, 1990.

⁹⁴⁰ Ex. 15, at 9-10 (Elmes Direct). *See*, 1990 Certificate Case at 199.

⁹⁴¹ *Id.* at 10-11, n.23.

⁹⁴² *Id.* at 11. *See*, Ex. 4, at 33 (Hamilton Direct).

⁹⁴³ *Id.* at 13-14.

⁹⁴⁴ *Id.* at 11.

⁹⁴⁵ *Id.* at 14-15.

⁹⁴⁶ *Id.* at 15.

⁹⁴⁷ Staff's approach is identical to the approach used by TRIP II. *See*, Ex. 4, at 34-35, Exhibit RNH-4 (Hamilton Direct).

in Staff witness Elmes's Table F below:

Table F
ROE Financial Measurement Options
1993 - 2023

Internal Rate of Return	Average Allowed ROE	Currently Authorized ROE
-3.5%	17.7%	14.0%

As the table shows, the IRR results are below the average allowed ROE as well as the currently authorized ROE. Based on the Company's original projections for the operation of the REA, the average allowed return would have been the average return earned over the life of the Greenway. The average allowed return would change annually as an additional year of the currently authorized ROE is added to the calculation. Based on Staff's methodology for calculating the average allowed return, TRIP II's terminal average annual return will be 15.76%.⁹⁴⁸

Rather than abandon the REA wholesale as advocated by the County, I find Staff's average allowed return methodology will permit the Commission to continue to track returns that were authorized to investors versus returns that have been realized by those investors, and at the same time, determine whether future proposed toll rates allow TRIP II no more than a reasonable return. Accordingly I recommend the Commission adopt Staff's average allowed return methodology.

6. *Whether to address the Constitutional question raised in this case?*

I concluded I need not reach TRIP II's constitutional argument in support of its Proposed Tolls because, as explained above, I find TRIP II failed to establish the Proposed Tolls meet the statutory criteria set forth in Code § 56-542. However, because the constitutional issue has been addressed on brief, I recognize that the Commission has sufficient information before it to address this issue if it finds it appropriate to do so.

FINDINGS AND RECOMMENDATIONS

Based on the evidence received in this case, and for the reasons set forth above, I find that:

- (1) TRIP II failed to prove by a preponderance of the evidence that its proposed toll increases are reasonable to the user in relation to the benefit obtained, as required by Code § 56-542 D;
- (2) Staff's adjustments to TRIP II's BCA are reasonable and are supported by the evidence;
- (3) There has been no showing in this case that the qualitative benefits outweigh the qualitative costs of using the Greenway;

⁹⁴⁸ Ex. 15, at 15-16, n.34, n.35 (Elmes Direct).

- (4) The proper material discouragement analysis should compare forecasted 2024 traffic, which includes population growth and other socio-economic factors, with and without the proposed toll increases, which results in a decrease in traffic of 6.3% and a failure of the material discourage use criterion in Code § 56-542;
- (5) The Proposed Tolls will provide TRIP II with no more than a reasonable return;
- (6) Since TRIP II has rejected the Alternate Tolls as confiscatory, the Commission should not exercise its discretion to establish toll rates that comply with the Act;
- (7) Staff's average allowed return methodology will permit the Commission to continue to track returns that were authorized to investors versus returns that have been realized by those investors, and at the same time, determine whether future proposed toll rates allow TRIP II no more than a reasonable return;
- (8) The Commission should consider the establishment of a working group of interested parties to look at ways to streamline the process before the Commission, in particular the use of the Steer Model, and report back to the Commission the earlier of one year or the Company's next rate case; and
- (9) The Commission should adopt Staff's average allowed return methodology for use with the REA.

I therefore **RECOMMEND** the Commission enter an order that:

- (1) **ADOPTS** the findings and recommendations contained in this Report;
- (2) **DENIES** TRIP II's Application for an increase in toll rates on the Greenway; and
- (3) **DISMISSES** this case from the Commission's docket of active cases.

COMMENTS

The parties are advised that, pursuant to Rule 5 VAC 5-20-120 C of the Commission's Rules of Practice and § 12.1-31 of the Code, any comments to this Report must be filed on or before June 5, 2024. To promote administrative efficiency, the parties are encouraged to file electronically in accordance with Rule 5 VAC 5-20-140 of the Rules of Practice. If not filed electronically, an original and fifteen (15) copies must be submitted in writing to the Clerk of the Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been served by electronic mail to all counsel of record and any such party not represented by counsel.

Respectfully submitted,

Michael D. Thomas

Michael D. Thomas
Senior Hearing Examiner

The Clerk of the Commission is requested to send a copy of this Report to all persons on the official Service List in this matter. The Service List is available from the Clerk of the Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, VA 23219.