COMMONWEALTH *of* VIRGINIA

Office of the

SECRETARY *of* TRANSPORTATION

Dulles Greenway Evaluation pursuant to HB 1500, Item 430

October 2, 2013

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DRPT
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Motor Vehicle Dealer Board
COMMONWEALTH OF VIRGINIA

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VDOT
Virginia Department of Transportation

Introduction

- Pursuant to the requirements of House Bill 1500, Item 430, the Office of Secretary of Transportation (Secretary's Office) and the Virginia Department of Transportation (VDOT) have performed an evaluation of a potential purchase of Dulles Greenway, a privately owned toll road in Northern Virginia (Dulles Greenway)
- The purpose of this presentation is to provide background on the approach, assumptions and the results of the analysis
- The key focus of the analysis was to address the two questions posed in House Bill 1500:
  - Question 1: Does the purchase price of the Dulles Greenway toll road exceed the fair market value of the asset?
  - Question 2: Can the existing toll rates be reasonably expected to pay (i) in full and when payable the debt service on any bonds or obligations issued to acquire and, if necessary, improve or upgrade the Dulles Greenway; (ii) the ongoing costs of operating and maintaining the Dulles Greenway; (iii) the costs of purchasing and installing electronic tolling equipment or other equipment for the Dulles Greenway if such equipment is determined necessary; and (iv) ongoing necessary administrative costs relating to the Dulles Greenway?

    In addition, can the tolls for the use of the Dulles Greenway be reasonably expected to result in a debt service coverage ratio of at least 1.25 for any debt of other obligations proposed to support the purchase of the facility?

Introduction

- Financing assumptions were discussed and confirmed with the Virginia Department of Treasury and the Virginia Department of General Services. Discussions on the tolling policy and tolling system with the Chairman of Loudoun County were also considered in the analysis
- In evaluating the potential purchase of Dulles Greenway, a series of assumptions were made, including toll rate schedule, user demand, financing terms, as well as capital, administrative and operating costs, which may or may not occur based on, among other things, market conditions, views of different investors and legislative actions
- This presentation is structured as follows:
  - Evaluation approach & tolling scenarios
  - Assumptions & results in relation to Question 1
  - Assumptions & results in relation to Question 2
  - Conclusions

Evaluation approach & tolling scenarios

Evaluation approach in relation to Question 1

- The approach to address Question 1 was based on the calculation of the fair market value and purchase price for Dulles Greenway. More specifically:

Fair market value of Dulles Greenway	▪ The fair market value of Dulles Greenway was estimated as the sum of:
	  ▪ the fair market value of the equity investment; plus
	  ▪ the currently outstanding debt
	▪ The fair market value of equity represents the amount that a hypothetical willing, knowledgeable and unpressured buyer could likely pay to acquire 100% of the equity holding
	▪ The fair market value of equity was estimated based on the discounted projected of distributions to equity

Purchase price of Dulles Greenway	▪ The purchase price of the Dulles Greenway was estimated as the sum of:
	  ▪ the fair market value of equity; plus
	  ▪ the cost of defeasance of the outstanding debt, net of applicable cash balances
	▪ Due to the non callable feature of several of the tranches of outstanding bonds, the debt defeasance is assumed to be prefunded through the purchase of State & Local Government Series securities (SLGS)

Evaluation approach in relation to Question 2

- The approach to address Question 2 was based on the estimation of the level of debt plus all other expenses that can be supported by the revenues accruing by the assumed toll rates for Dulles Greenway. More specifically:

Ability to pay identified expenses (i.e. affordability)	■ In order to ensure that toll revenue would be sufficient to pay identified expenses (i.e. debt service, capital improvements, on-going operations and maintenance, the cost of purchasing and installing all electronic tolling equipment by 2017 and administrative costs), the level of senior revenue bonds that could potentially be issued was sized based on: ■ the ability to pay all other expenses as well as debt service; and ■ the assumed current capital market constraints ■ For the assessment of the level of debt service that could be afforded, two bond financing scenarios were assumed: ■ senior project revenue bonds with a net revenue pledge and a single A credit rating; and ■ senior project revenue bonds with a net revenue pledge and a BBB+ credit rating A debt service coverage of greater than 1.25 was used in the analysis to obtain at least investment grade status.

Traffic & revenue scenarios

- The estimation of the fair market value and purchase price of Dulles Greenway under Question 1, was based on the assumption that the toll road continues to be privately owned and operated. As a result, the toll rate setting is based on revenue maximization, subject to return limitations by its regulator, the Virginia State Corporation Commission
- Two different scenarios were developed based on the probability of the revenue being realized:

Scenario	Toll Rate Setting	Probability of occurrence[1]	Tolling System	Pricing[2]
P1	Revenue Maximized	Most likely	Toll Gantries	Single Toll
P2	Revenue Maximized	Equity	Toll Gantries	Single Toll

Notes: (1) A Most likely case represents a 50% probability of occurrence. An equity case has lower probability. (2) Refers to a single toll paid irrespective of the distance travelled by the user

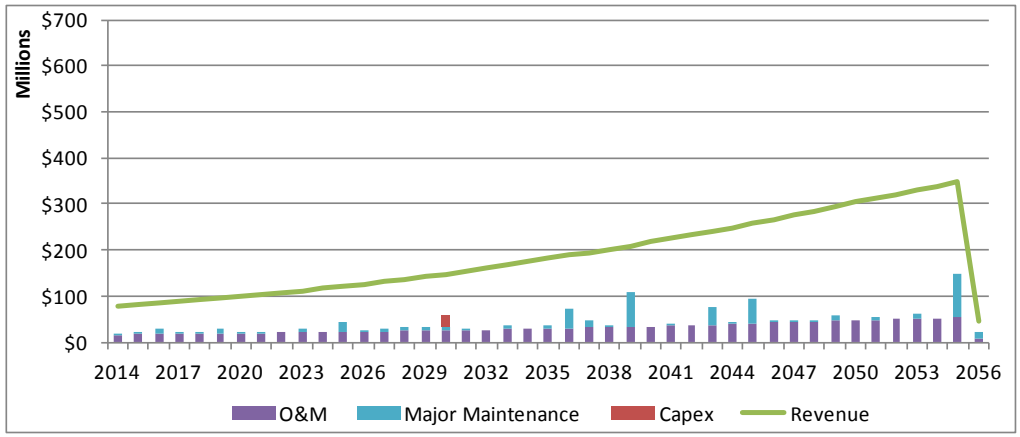
- The estimation of the level of project revenue bonds that could be supported with toll revenue under Question 2, is based on the assumption that the toll road is owned and operated by the Commonwealth of Virginia. As a result, it was assumed that the primary objective in relation to toll setting is throughput maximization. In addition, it the projections reflect the implementation of an all electronic tolling system
- Two different scenarios were developed based on the pricing system, i.e. distance based vs single toll irrespective of distance travelled:

Scenario	Toll Rate Setting	Probability of occurrence	Tolling System	Pricing
V1	Throughput Maximized	Most likely	All Electronic	Single Toll
V2	Throughput Maximized	Most likely	All Electronic	Distance Based

Assumptions & results in relation to question 1

Revenue and cost assumptions

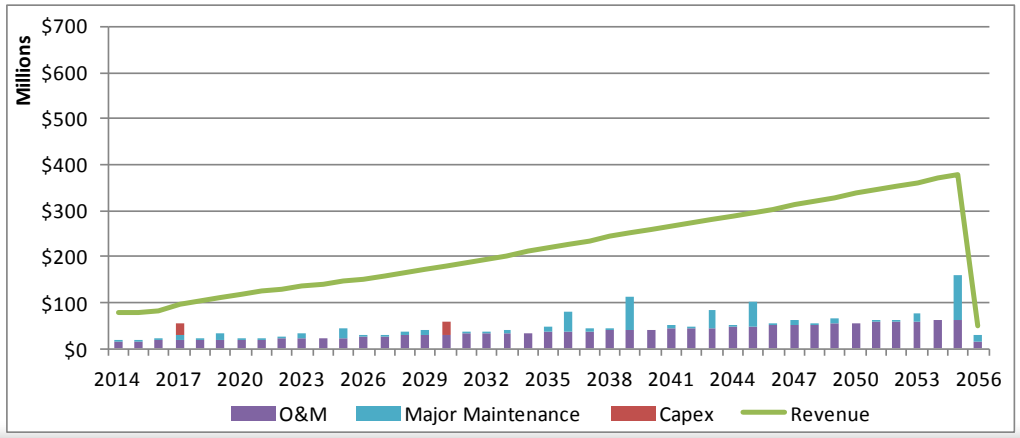
Scenario P1



Results ($ Millions)	Nominal	NPV @ 7%[1]
Revenue	$8,030.0	$1,805.8
O&M	($1,329.7)	($322.5)
Major Maintenance	($485.7)	($99.8)
Capital Expenditure	($27.6)	($8.7)

Notes: (1) Discount rate for the estimation of present value (PV)

Scenario P2



Results ($ Millions)	Nominal	NPV @ 7%
Revenue	$9,262.7	$2,089.2
O&M	($1,552.6)	($358.8)
Major Maintenance	($511.7)	($104.1)
Capital Expenditure	($51.0)	($26.6)

Fair market value analysis results

- The calculation of the fair market value of the equity is based on the projected cash flows available to the equity investors, discounted at 14% rate. The discount rate matches the currently approved equity return by the Virginia State Corporation Commission that acts as a regulator for the Dulles Greenway
- In order to determine the fair market value of Dulles Greenway, the fair market value of equity was added to TRIP II's outstanding debt to determine the Fair Market Value of Dulles Greenway
- For the purposes of this evaluation, the amount of outstanding debt was not reduced by the available cash reserves, as that cash is used for the funding of future project expenditure
- The fair market value was estimated as of December 31, 2013
- The range of results for the fair market value analysis reflects the two different traffic and revenue scenarios

Amounts in $ millions	**Lower end of range based on Scenario P1**	**Higher end of range based on Scenario P2**
Fair Market Value of Equity	$149.2	$231.1
Outstanding Debt	$1,019.2	$1,019.2
Fair Market Value of Dulles Greenway	**$1,168.4**	**$1,250.3**

Purchase price analysis results

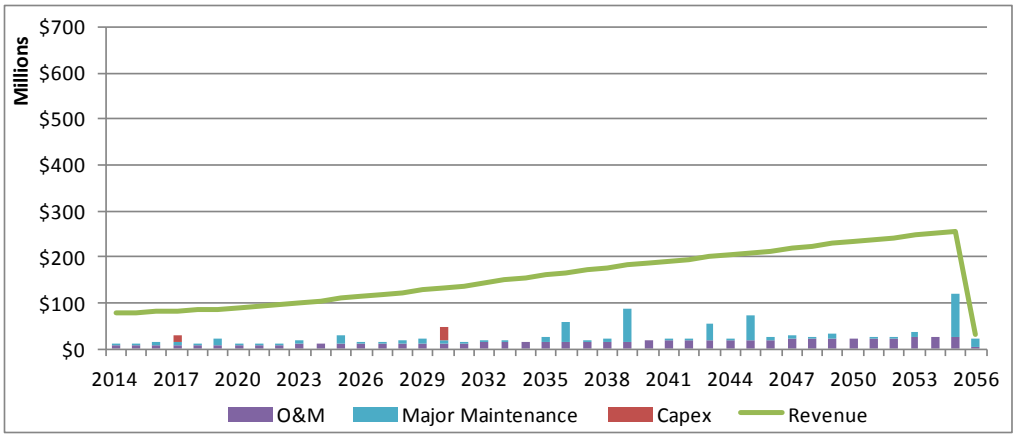
- The purchase price for Dulles Greenway has been calculated as the sum of:
  - the fair market value of equity; and
  - the cost of debt defeasance – estimated amount that a buyer interested in buying also the debt of TRIP II would need to pay to redeem TRIP II's outstanding bonds; and
  - other cash available – net cash balances after the release of the existing debt service reserve funds and the funding of the new reserve funds and costs of issuance
- The defeasance cost reflects the estimated amount of SLGS that would have to be purchased to prefund the redemption of the TRIP II debt. Due to the non-callable and make whole features of the different tranches of debt and the current lower interest rates compared with the agreed interest rates, the cost of defeasance is higher than the outstanding amount. The prefunding amount assumes that an early redemption based on a specified schedule (rather than final maturity) per TRIP II's projections will be possible
- The range of results primarily reflects the two different traffic and revenue scenarios:

Amounts in $ millions	**Lower end of range based on Scenario P1**	**Higher end of range based on Scenario P2**
Defeasance of Outstanding Debt	$1,514.3	$1,514.3
Fair Market Value of Equity	$149.2	$231.1
Other Cash Available	($25.9)	($19.8)
Purchase Price of Dulles Greenway	**$1,637.6**	**$1,725.5**

Assumptions & results in relation to question 2

Revenue and cost assumptions

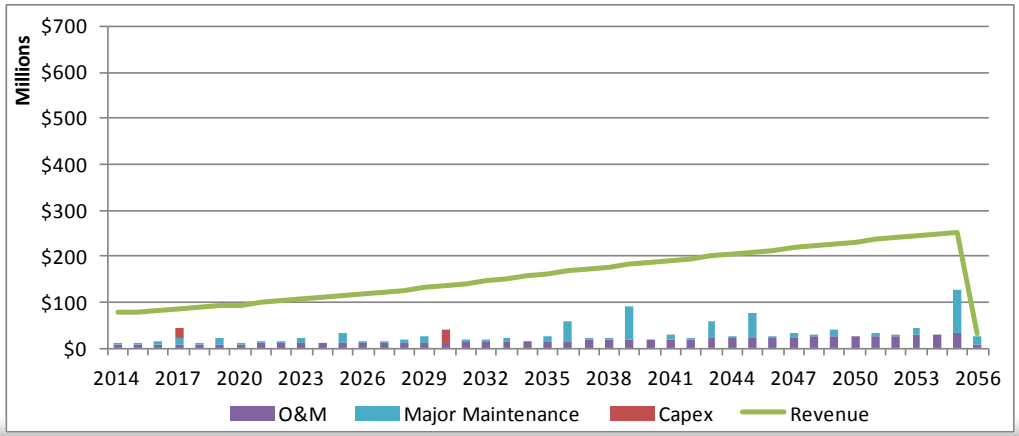
Scenario V1



Results ($ Millions)	Nominal	PV @ 7%[1]
Revenue	$6,711.2	$1,598.8
O&M	($654.4)	($157.6)
Major Maintenance	($470.1)	($92.8)
Capital Expenditure	($41.4)	($19.2)

Notes: (1) Discount rate for the estimation of present value

Scenario V2



Results ($ Millions)	Nominal	NPV @ 7%
Revenue	$6,767.1	$1,631.4
O&M	($724.5)	($169.2)
Major Maintenance	($511.7)	($104.1)
Capital Expenditure	($51.0)	($26.6)

Financing structure assumptions

- For the purposes of estimating the amount of debt that can be issued, two high level financing structures were developed based on different credit rating scenarios:

Description	Higher Credit Rating	Lower Credit Rating
Credit Rating	Senior Lien: A/A2	Senior Lien: BBB+/Baa1
Tenor	35 years	35 years
Base Interest Rate	MMD yield curve	MMD yield curve
Credit Spread	100 – 175bps	175 – 275bps
Debt Service	Sculpted to level coverage	Sculpted to level coverage
Minimum Debt Service Coverage	1.75x	1.50x
Debt Security	Net Dulles Greenway revenue pledge / Non-recourse	Net Dulles Greenway revenue pledge / Non-recourse
Tax Basis	Tax – exempt	Tax – exempt
Maximum % of Capital Appreciation Bonds	20%	20%

Funding waterfall

- The table below presents the cash waterfall assumed for the funding of the project expenses identified in House Bill 1500. The estimation of the amount of debt that can be raised was based on the projected net revenue (i.e. toll revenue minus operating and administrative costs)

Toll Revenue
Operating and Administrative Costs
Net Revenue
Debt Interest Payment
Debt Principal Repayments
Cash Available After Debt Service
Major Maintenance
Capital Improvements
Residual Cash

Bond proceeds

- The estimated bond proceeds reflect the amount of debt that could be raised to fund up front expenses while:
  - meeting the financing structure limitations; and
  - paying all expenses (i) - (iv) identified in House Bill 1500 according to the assumed funding waterfall
- The table below provides the estimated level of bond proceeds that could be raised under the two different traffic and revenue scenarios and two different credit rating scenarios:

Amounts in $ millions	**Scenario V1**		**Scenario V2**	
Credit Rating	**A**	**BBB+**	**A**	**BBB+**
Bond Proceeds (investment grade)	$978.5	$1,002.8	$996.2	$1,022.1

- Due to the application of cover ratios of 1.5 - 1.75, there is substantial residual cash, after payment of any expenses that are paid after debt service. This cash is not assumed to be leveraged to raise additional funds upfront, in order to obtain investment grade ratings

Funding of identified expenses

- The proceeds of the bond issuance are used for the purchase of the equity holding and the defeasance of the outstanding debt
- Operating and administrative expenses are already reflected in the size of the bond, while the remaining expenses, i.e. major maintenance and capital improvements are assumed to be funded with cash available after debt service
- The results indicate that, under the investment grade financing structures assumed, the bond proceeds would not be sufficient to fund the cost of purchasing Dulles Greenway. This means that more bonds would have to be issued, resulting in a higher debt service and inability to fully fund expenses (i)-(v) under Question 2.

Amounts in $ millions	**Lower End of Range**	**Higher End of Range**
Bond Proceeds (investment grade)	$1,022.1	$978.5
Purchase Price for Dulles Greenway	($1,637.6)	($1,725.5)
Upfront Funding Shortfall	**($615.5)**	**($747.0)**

Conclusion

Evaluation conclusion

- In conclusion, the assessment of the potential purchase of Dulles Greenway indicates that the conditions set out in House Bill 1500 cannot be met as:
  1. the purchase price of between $1,638 - $1,726 million would exceed the fair market value of between $1,168 – 1,250 million, primarily due to the cost of prefunding the defeasance of the outstanding debt
  2. the toll revenues would not sufficient to meet obligations (i) - (iv) provided in Question 2. In fact, the Commonwealth could have to raise funds of between $615 - $747 million in addition to the Dulles Greenway acquisition revenue bonds in order to enter into a transaction

     A debt service coverage of greater than 1.25 was used in the analysis to obtain at least investment grade status
- The evaluation also indicates that substantial residual cash could be generated under the scenarios that the Commonwealth of Virginia is issuing revenue bonds to purchase Dulles Greenway. Leveraging this residual cash flow would most likely require either the issuance of subordinated debt of a lower credit quality (sub investment grade) or the use of the credit capacity of the Transportation Trust Fund or the pledge of the full faith and credit of the Commonwealth of Virginia.