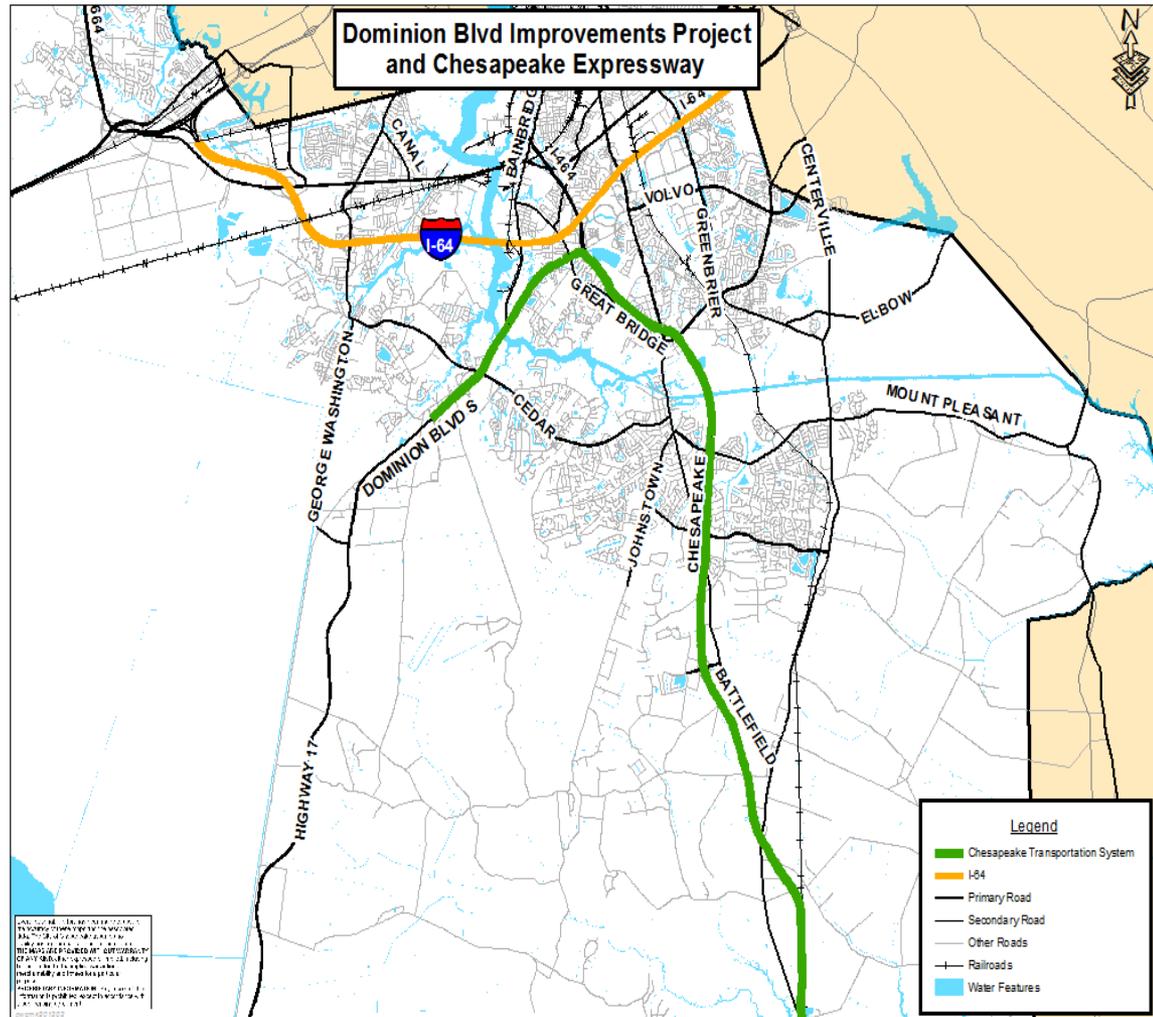


*TTFAC Hearing Regarding
Chesapeake Transportation System
June 18, 2012*

Chesapeake Transportation System

- The Chesapeake Transportation System (CTS) consists of the existing Chesapeake Expressway and the improved Dominion Boulevard
- The CTS will operate as a single facility, with operations being combined to reduce redundancy and overhead
- Tolls on the Dominion Blvd portion will not be imposed until construction is complete



Guiding Principles

The *Chesapeake Transportation System* (“*CTS*” or “*System*”) should:

- Address safety deficiencies
- Enhance mobility
- Support economic growth and vitality
- Provide infrastructure at the lowest possible public cost
- Demonstrate fiscal integrity
- Operate in a manner that covers all obligations to the FHWA, VDOT, and bond holders
- Include periodic toll rate increases for operating costs and major repairs to avoid larger, less-frequent increases

CTS: Traffic and Revenue Study

- Steer Davies Gleave (SDG), in conjunction with Michael Baker Corporation (Baker) and Economic Development and Research Group (EDRG), was engaged by the City of Chesapeake to prepare investment grade traffic and revenue forecasts for the toll system of Dominion Boulevard and the Chesapeake Expressway
- SDG developed travel demand models for Dominion Boulevard and the Chesapeake Expressway. The model development utilized:
 - traffic count data
 - travel time data
 - travel survey
 - independent land use assessment
- The Traffic and Revenue forecasts have been incorporated into the City's plan of finance for the CTS

CTS: Dominion Boulevard - Background

- U.S. Route 17/Dominion Boulevard is one of the most congested corridors in Chesapeake, and with over 33,000 vehicles per day, is one of the busiest 2-lane roads in Virginia
- The existing draw bridge opens up to 6,000 times per year
- Despite interim safety improvements, the roadway still has a high accident rate
- Following a study by the Hampton Roads Transportation Planning Organization to prioritize regional projects, the improvement of Dominion Boulevard ranked second overall but first among 153 candidate projects in terms of its ability to reduce congestion and improve safety
- Developed as a toll facility because transportation funds from other sources are lacking

CTS: Dominion Boulevard Status & Schedule

- Design: 100% plans, specifications, and estimates complete
- Right-of-way is approximately 65% complete and all residential relocations are completed. Remaining parcels to be acquired by July/August 2012.
- Permitting agencies include:
 - ✓ U.S. Army Corps of Engineers
 - ✓ Virginia Marine Resources Commission
 - ✓ Virginia Department of Environmental Quality
 - ✓ U.S. Coast Guard
- Construction Plan
 - Advertisement – July 2012
 - Construction Start – early 2013
 - Project Completion – early 2017

Dominion Blvd: Primary Sources and Uses of Funds

SOURCES OF FUNDS

(\$ in millions)

Senior Toll Revenue Bonds - Tax-exempt Current Interest Bonds	131.8
Senior Toll Revenue Bonds - Tax-exempt Capital Appreciation Bonds	96.1
Total Senior Bond Proceeds	<u>227.9</u>
Virginia Transportation Infrastructure Bank Loan	151.9
Previously Allocated Funds for Dominion Boulevard	85.8
Construction Fund Interest Earnings	2.6
Total Sources	<u>468.2</u>

USES OF FUNDS

(\$ in millions)

Total Project Costs	411.7
Toll Revenue Bonds Capitalized Interest (net deposit)	30.7
Toll Revenue Bonds Debt Service Reserve Fund	22.8
Underwriters' Discount	1.5
Other Costs of Issuance	1.5
Total Uses	<u>468.2</u>

Dominion Boulevard Traffic Characteristics

- In 2017, 71% of traffic on Dominion forecast to be two-axle E-ZPass paying \$1 each direction, increasing to 86% being two-axle E-ZPass in 2020 paying \$1.16
- New roadway eliminates bridge openings and provides interchanges at Cedar Road, relocated Bainbridge Boulevard, and Great Bridge Boulevard, thus traffic on the mainline does not stop
- Travel time savings is highest during morning and afternoon peak periods due to congestion on alternate routes
- Dominion Boulevard is forecast to “capture” between 40% - 65% of travelers between US 17 at the North Carolina border and I-464 towards Norfolk depending on time of day
- Traffic volumes expected to increase 1.5% annually

CTS Proposed Toll Rate Schedules

- In order for the Dominion Boulevard Project to be successfully financed, the ability of the Chesapeake Transportation System to meet its financial obligations in the future must be demonstrated to a number of constituents:
 - Rating Agencies and investors
 - State and Federal agencies
- Adoption of long-range toll rate schedules for the System will improve transparency and demonstrate City Council's commitment to meeting the System's financial obligations for debt, operating and maintenance costs
- City Council will retain the authority to adjust toll rates in the future, subject to compliance with the bond covenants, VTIB loan agreement, and VDOT/FHWA requirements

Dominion Boulevard Tolling Approach

- Tolls will be collected on Dominion Boulevard with 100% Open Road Tolling
- Vehicles equipped with Electronic Toll Collection (E-ZPass) will be charged a \$1 toll each direction (in 2017 dollars)
- Vehicles without E-ZPass will have their tolls collected by “video”
 - Their license plate image will be captured and they will be sent a bill for their toll
 - Initial bill will include the option to join E-ZPass
 - Toll rates will be \$2.00 higher to offset the higher cost of collection



Proposed Toll Rate Schedule, Dominion Boulevard

- Based on the proposed 2017 toll rate:

- 2-axle passenger cars pay

- \$1 each way with E-ZPass
- \$3 each way without E-ZPass



- 3-axle trucks pay

- \$1.50 each way with E-ZPass
- \$3.50 each way without E-ZPass



- 5-axle tractor trailers pay

- \$2.50 each way with E-ZPass
- \$4.50 each way without E-ZPass



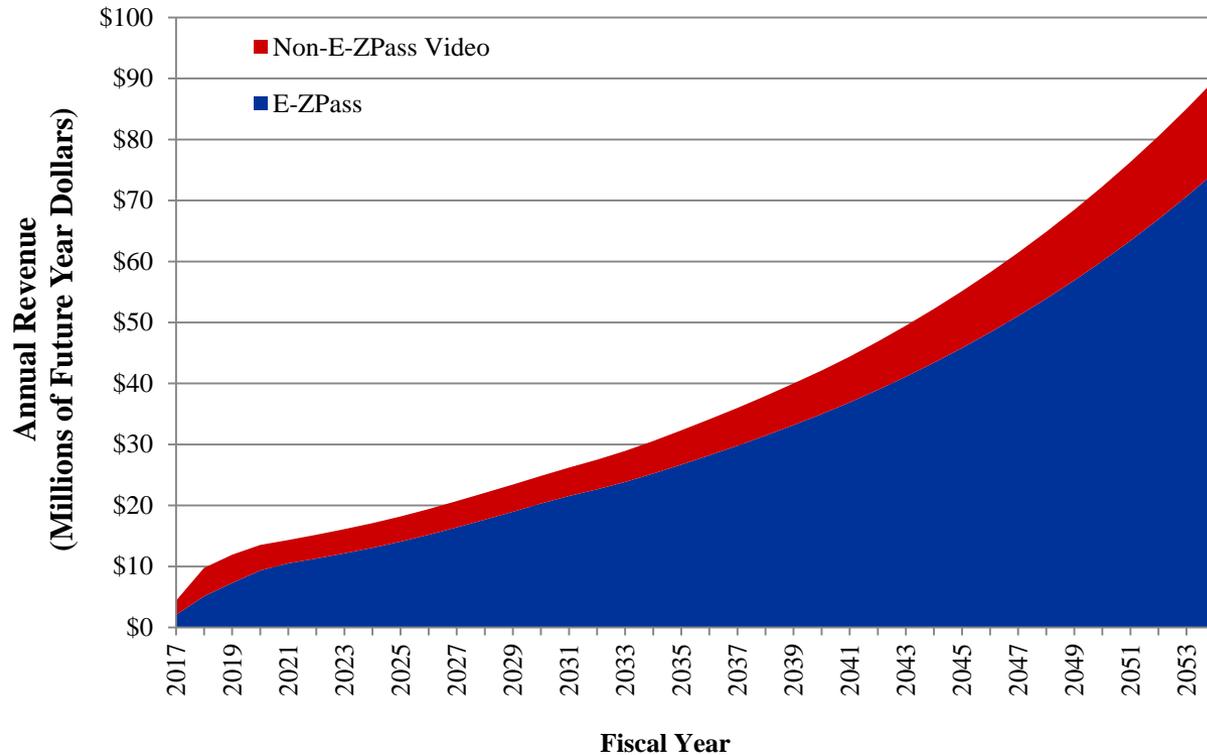
Proposed Toll Rate Schedule, Dominion Boulevard

FY Ending 6/30	E-ZPass Rate		Non-E-ZPass Rate	
	Two Axles	Each Additional Axle	Two Axles	Each Additional Axle
2017	\$1.00	\$0.50	\$3.00	\$0.50
2018	\$1.05	\$0.53	\$3.05	\$0.53
2019	\$1.10	\$0.55	\$3.10	\$0.55
2020	\$1.16	\$0.58	\$3.16	\$0.58
2021	\$1.22	\$0.61	\$3.22	\$0.61
2022	\$1.28	\$0.64	\$3.28	\$0.64
2023	\$1.34	\$0.67	\$3.34	\$0.67
2024	\$1.41	\$0.70	\$3.41	\$0.70
2025	\$1.48	\$0.74	\$3.48	\$0.74
2026	\$1.55	\$0.78	\$3.55	\$0.78
2027	\$1.63	\$0.81	\$3.63	\$0.81
2028	\$1.71	\$0.86	\$3.71	\$0.86
2029	\$1.80	\$0.90	\$3.80	\$0.90
2030	\$1.89	\$0.94	\$3.89	\$0.94
2031	\$1.98	\$0.99	\$3.98	\$0.99
2032	\$2.08	\$1.04	\$4.08	\$1.04
2033	\$2.18	\$1.09	\$4.18	\$1.09
2034	\$2.29	\$1.15	\$4.29	\$1.15
2035	\$2.41	\$1.20	\$4.41	\$1.20

- Notes:
- (1) 2-Axle E-ZPass Toll and Additional Axle Toll increase 5% each year
 - (2) Non-E-ZPass Rate is \$2.00 higher than E-ZPass Rate for all vehicles in all years
 - (3) Non-E-ZPass Tolls shall be collected via Video/License Plate recognition – no cash tolls will be collected
 - (4) Motorcycles shall be charged the 2-axle toll rates

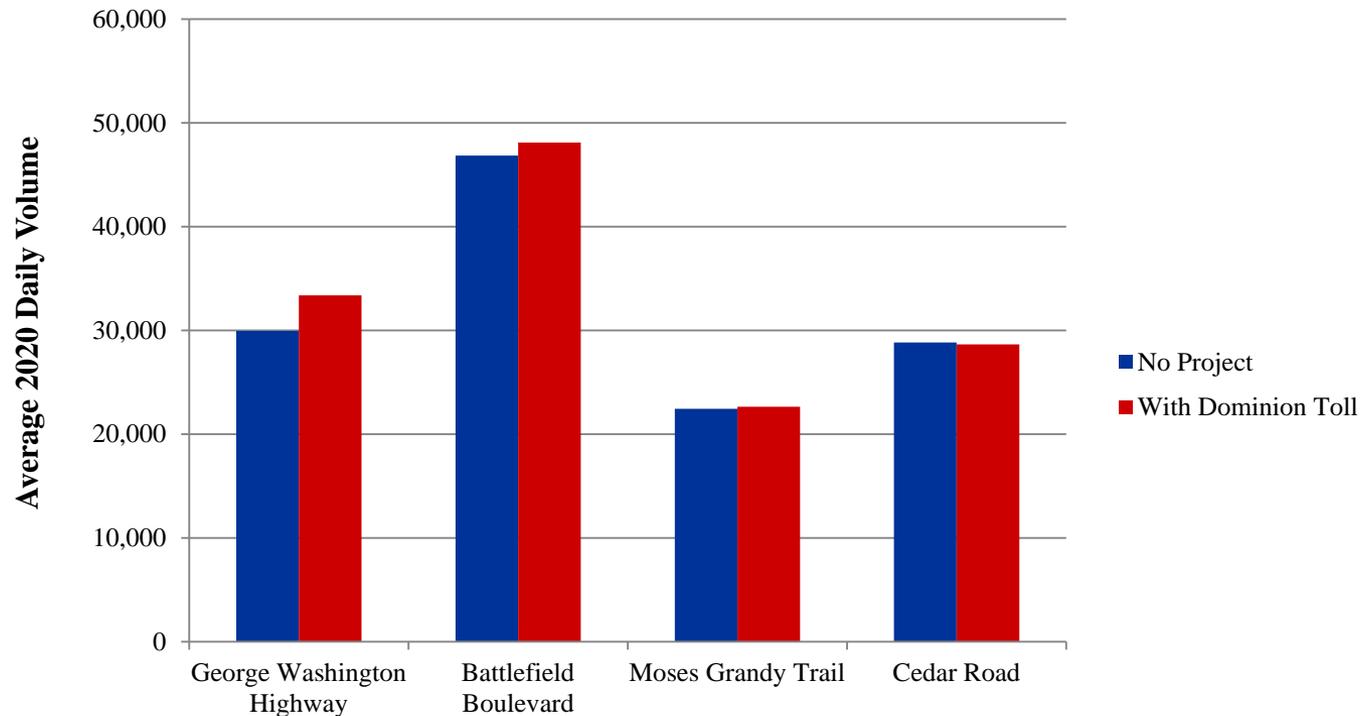
Dominion Boulevard Revenue Forecast

- Toll revenue is forecast to grow to \$32.3 million for 2035; toll rate increases 5% annually



Dominion Boulevard Projected Traffic Diversion

- The toll on Dominion causes traffic to divert to the alternate north-south routes (George Washington Highway and Battlefield Boulevard)
 - Traffic levels remain basically the same on east-west routes (Moses Grandy and Cedar)

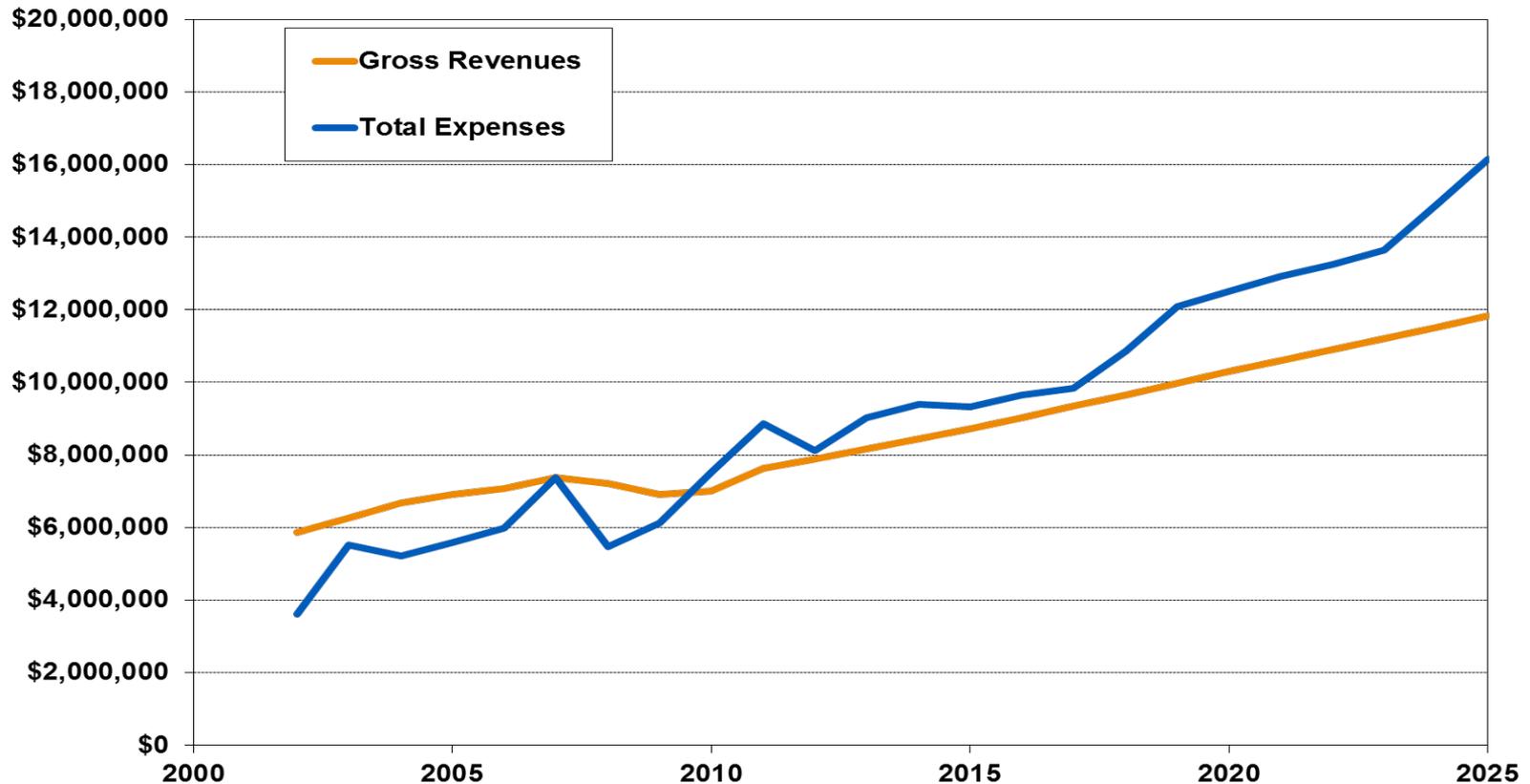


CTS: Chesapeake Expressway History

- Traffic on existing Route 168 tripled from 1970s to 1990s
- 80% of traffic was Outer Banks related
- 2-lane road carried 3 times design capacity
- Congestion affected public safety---Fire & medical response times were unacceptable
- 1993 City led grassroots & intergovernmental effort securing State and Federal Government's help
- 1999 Chesapeake Expressway funded through City, State, and Federal partnership
- New toll road opened in May 2001
- Demand exceeded initial traffic projections, resulting in the construction of auxiliary lanes in 2005
- In 2010, expenses began to exceed revenues

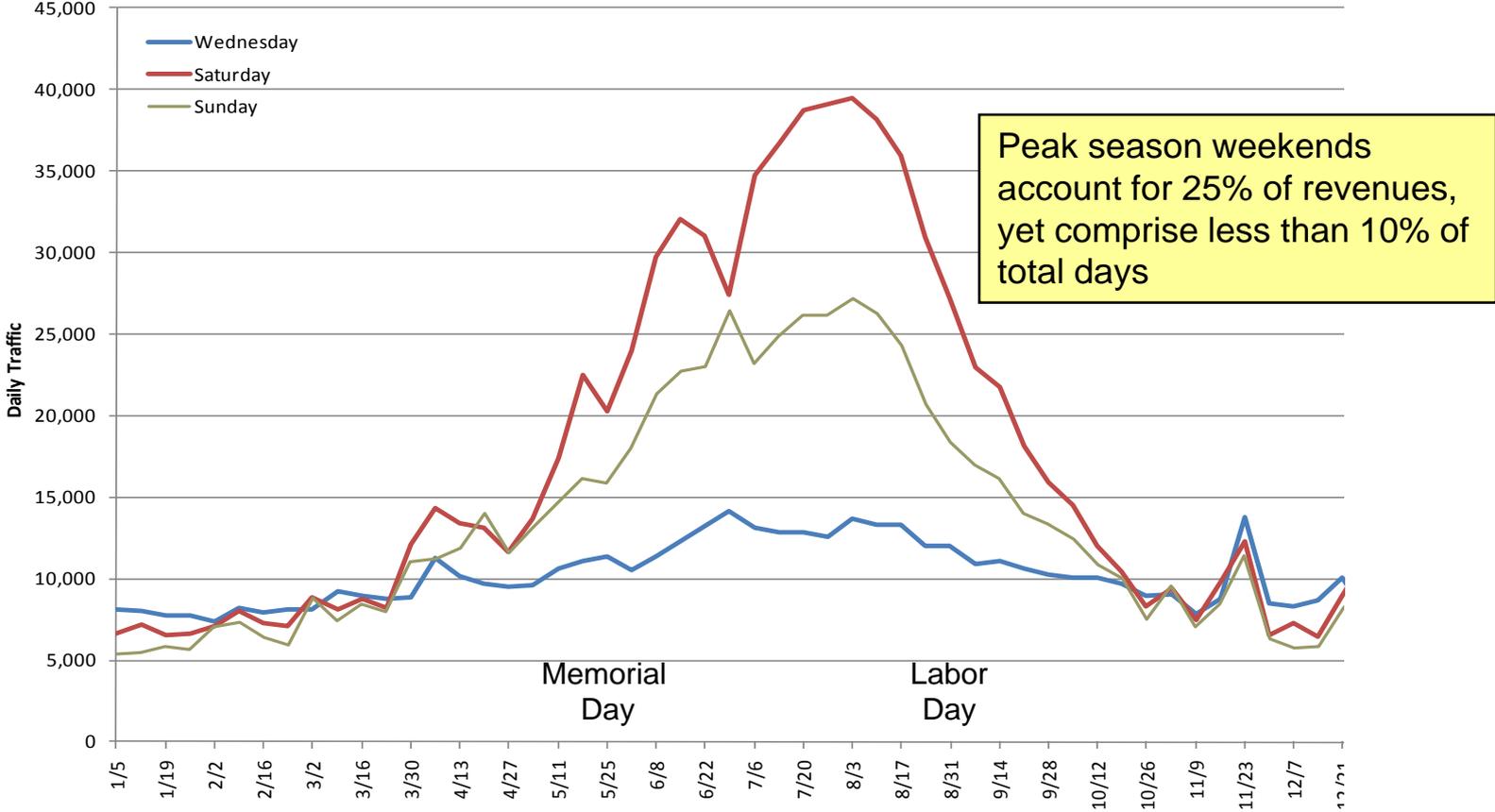
Revenues vs. Expenses

Annual Comparison of Gross Revenues and Expenses
No Toll Increase



Chesapeake Expressway - Traffic By Day of Week

- Weekend Expressway traffic is much more prone to seasonal effects than weekday traffic – season defined as the 17 week period starting the weekend before Memorial Day through the weekend after Labor Day



Source: Chesapeake Expressway toll transaction data

Chesapeake Expressway Rate Increase, 2011

- In 2011, a new Toll rate schedule was adopted for the Chesapeake Expressway in order to:
 - Provide sufficient revenue to meet operational and maintenance costs as well as debt
 - Provide funding for required Renewal and Replacement of the existing Expressway in FY 2011-2012 and beyond
 - Ensure the renewal and replacement fund has sufficient balances to address large renewal needs as the Expressway ages. Depreciation is approximately \$5M annually causing the June 30, 2010 statement to show a total net deficit of \$16M
 - Additional revenue to expedite debt retirement – i.e. bonds and VDOT
 - Enhance creditworthiness of the Bonds
 - Gradual toll rate increases are anticipated, consistent with industry standard

Chesapeake Expressway Current Toll Rate Structure

2011 Toll Structure						
	Weekday		Off-Peak Weekend		Peak Weekend	
Axles	Discount	Regular	Discount	Regular	Discount	Regular
2	\$.75	\$3.00	\$.75	\$3.00	\$.75	\$6.00
3 or more	\$2.00	\$4.00	\$2.00	\$4.00	\$2.00	\$7.00
Motorcycle	N/A	\$1.00	N/A	\$1.00	N/A	\$2.00

Note: Passenger cars (2 axle vehicles) account for 95% of current traffic

Chesapeake Expressway Total Season Traffic & Revenue, 2011

	Total Revenue and Traffic Figures							
	Traffic				Revenue			
	Weekdays	Saturdays	Sundays	Total	Weekdays	Saturdays	Sundays	Total
2011 Peak Season Results	947,268	447,728	300,522	1,695,518	\$1,918,631	\$2,472,375	\$1,545,577	\$5,936,583
2010 Peak Season Results	1,155,086	543,265	376,578	2,074,929	\$1,721,028	\$1,025,855	\$696,170	\$3,443,052
2011 Results vs. 2010	(207,818)	(95,537)	(76,056)	(379,411)	\$197,604	\$1,446,520	\$849,407	\$2,493,531
% Change from 2010	(17.99)%	(17.59)%	(20.20)%	(18.29)%	11.48%	141.01%	122.01%	72.42%
2011 Forecast	957,388	362,943	210,731	1,531,063	\$1,872,303	\$1,872,487	\$1,000,639	\$4,745,429
Variance from Forecast	(10,120)	84,785	89,791	164,455	\$46,328	\$599,888	\$544,938	\$1,191,154
% Variance from Forecast	(1.06)%	23.36%	42.61%	10.74%	2.47%	32.04%	54.46%	25.10%

- *Period of Analysis if 5/19/11 (Thursday) through 9/11/11 (Sunday) and 5/20/10 (Thursday) through 9/10/10 (Sunday)*
- *2011 and 2010 Peak Season Results compiled by BB&T Capital Markets from data provided by the City of Chesapeake*
- *2011 Forecast data provided by Steer Davies Gleave*
- *Total Period Statistics include all travel days. Suspension of Tolls During Hurricane Irene Impacted revenue for all or a portion of five travel days (8/25/11 – 8/29/11) .and comparable calendar days in 2010.*

Highlights:

- Total Expressway Revenue for the Peak Season was \$5.93 million, an increase of \$2.49 million or 72% over 2010.
- 92% of the additional revenue, or \$2.29 million, was generated on Saturdays and Sundays.
- **Total Expressway Revenue for the Peak Season exceeded the Steer Davies Gleave forecast by \$1.19 million, or 25%**
- **Nearly all of the variance from the SDG forecast can be attributed to higher-than-expected Expressway traffic on Saturdays and Sundays.**
- Total Weekday Traffic and Revenue for the period was very close to the SDG forecast.
- Based on 2010 daily data for the fourth week of August and the overall trends for 2011, the suspension of tolls during Hurricane Irene is estimated to have resulted in approximately \$320,000 of lost revenue, reducing total revenue for the Peak Season by approximately 5.3%.

Proposed Toll Rate Schedule, Chesapeake Expressway

	<u>Two Axles</u>			<u>Three or More Axles</u>		
	<u>Discount</u>	<u>Peak</u>	<u>Off-Peak</u>	<u>Discount</u>	<u>Peak</u>	<u>Off-Peak</u>
Present – 4/30/16	\$0.75	\$6.00	\$3.00	\$2.00	\$7.00	\$4.00
5/1/16 – 4/30/21	\$0.75	\$8.00	\$3.00	\$2.00	\$9.00	\$4.00
5/1/21 – 4/30/26	\$1.00	\$9.00	\$4.00	\$2.25	\$10.00	\$5.00
5/1/26 – 4/30/31	\$1.00	\$10.00	\$4.00	\$2.25	\$11.00	\$5.00
5/1/31 – 4/30/36	\$1.25	\$11.00	\$5.00	\$2.50	\$12.00	\$6.00

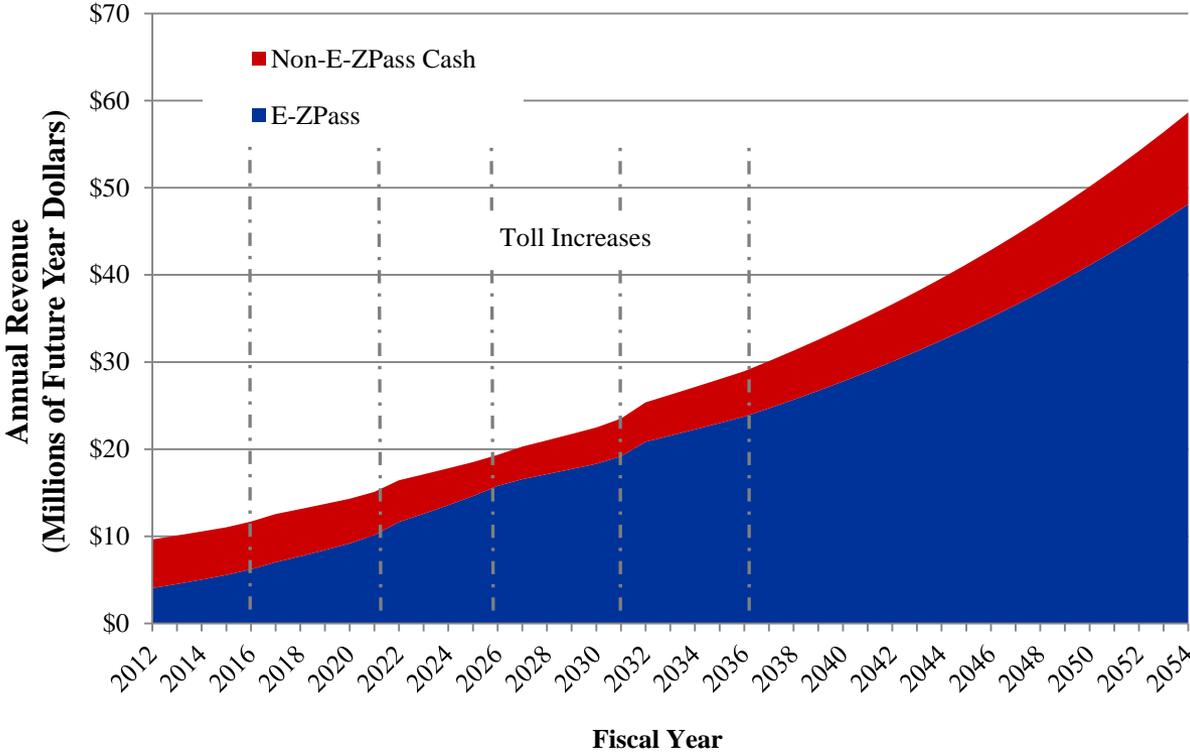
Notes: (1) Peak Tolls shall apply on Saturdays and Sundays beginning the Saturday before Memorial Day weekend through the Sunday after Labor Day weekend. Corresponding dates for 2012 are May 19th to September 9th

(2) Tolls collected via E-ZPass and cash. Only E-ZPass users enrolled in the City’s Discount Program are entitled to the Discount toll rate – all other E-ZPass users are subject to Peak and Off-Peak rates

(3) Motorcycles shall be charged one-third of the 2-axle toll rates (currently \$2.00 Peak, \$1.00 Off-Peak) and are not eligible for the discount program

Chesapeake Expressway Revenue Forecast

- Toll revenue is forecast to grow to \$28.7 million for 2035; periodic increases every 5 years to avoid larger, one-time increases



Summary

- All toll revenues of the CTS will be used solely for operations, maintenance, rehabilitation and repayment of debt.
- Toll rates are forecast to be set at the lowest possible levels that produce revenue needed to service the CTS's obligations and operate and maintain the facility.
- Traffic profiles and composition for Dominion Boulevard and Chesapeake Expressway are quite different. Given the different traffic profiles, different toll rates are proposed for the two facilities.
- Initial toll for Dominion Boulevard would have been much higher without the Virginia Transportation Infrastructure Bank loan (\$152 million) and regional funds (\$55 million) obtained through the Hampton Roads Transportation Planning Organization.
- The recommended rate structure for the Chesapeake Expressway maintains the discount rate which remains \$0.75 through 2021.
- City Council is scheduled to consider the CTS toll rate schedule on July 10th.