



# HAMPTON ROADS TOLL FEASIBILITY STUDY

Work-in-Progress  
Presentation #6



# Current Feasibility Analysis

## Effect of Using Reduced Tolls

# Project Packages

## Package #1

**Hampton Roads Third  
Crossing<sup>1</sup>**

**Midtown Tunnel & MLK<sup>2</sup>**

**Southeastern Parkway  
and Greenbelt**

**Route 460**

## Package #2

**Hampton Roads Bridge  
& Tunnel (HRCS Alt.1)<sup>3</sup>**

**Midtown Tunnel & MLK<sup>2</sup>**

**Southeastern Parkway  
and Greenbelt**

**Route 460**

1 – Tolls on projects plus James River Bridge and Hampton Roads Bridge-Tunnel

2 – Tolls on projects plus Downtown Tunnel

3 – Tolls on projects plus James River Bridge and Monitor Merrimac Bridge-Tunnel

# Funding Summary

- **Project Toll Revenues**
- **Existing Facilities Toll Revenues**
- **Primary, NHS & RSTP Funding**
- **Tax Revenue**

# Toll Values

	Unimproved Facilities									
	Project		James River Bridge		Monitor Merrimac Bridge Tunnel		Hampton Roads Bridge Tunnel		Downtown Tunnel	
	Max	Reduced	Max	Reduced	Max	Reduced	Max	Reduced	Max	Reduced
Third Crossing (20 mi. <sup>1</sup> )	\$0.15/mi	\$0.06/mi.	\$1.40	\$0.80	\$1.40	\$0.80	\$1.40	\$0.80	-	-
HRBT (12 mi.)	\$0.16/mi	\$0.08/mi	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55	-	-
Midtown Tunnel (1 mi.)	\$1.50/mi	\$0.61/mi.	-	-	-	-	-	-	\$1.60	\$0.65
MLK Extension (0.6 mi.)	\$0.20/mi	\$0.20/mi.	-	-	-	-	-	-		
SE Parkway (18 mi.)	\$0.07/mi.	\$0.07/mi.	-	-	-	-	-	-	-	-
Dominion Boulevard (3 mi.)	\$0.83/mi.	\$0.07/mi.	-	-	-	-	-	-	-	-
Oak Grove Connector (2 mi.)	\$0.56/mi.	\$0.07/mi.	-	-	-	-	-	-	-	-
US 460 (50 mi.)	\$0.11/mi.	\$0.02/mi.	-	-	-	-	-	-	-	-

1 - Bowers Hill to Hampton Coliseum

- **“Project” toll values per mile**
- **Off-Peak Tolls in Year 2004 dollars**

# Traffic Impacts

Location	No Project		Project Package #1						Project Package #2					
	Demand	LOS	Revenue-Maximized Tolls			Reduced Tolls			Revenue-Maximized Tolls			Reduced Tolls		
			Demand	Toll	LOS	Demand	Toll	LOS	Demand	Toll	LOS	Demand	Toll	LOS
<b>MMMBT</b>	66,000	D	44,000	\$0.15/mi.	A	82,000	\$0.06/mi.	B	58,000	\$0.55	C	49,000	\$0.55	B/C
<b>HRBT</b>	101,000	F	67,000	\$1.40	D	67,000	\$0.80	D	64,000	0.16/mi.	B	88,000	0.08/mi.	B/C
<b>James River Bridge</b>	41,000	A/B	19,000	\$1.40	A	24,000	\$0.80	A	29,000	\$0.55	A	29,000	\$0.55	A
<b>Midtown Tunnel</b>	54,000	F	25,000	\$1.50	A	42,000	\$0.61	B	25,000	\$1.50	A	42,000	\$0.61	B
<b>Downtown Tunnel</b>	120,000	F	45,000	\$1.60	B	77,000	\$0.65	E	45,000	\$1.60	B	77,000	\$0.65	E
<b>SE Parkway &amp; Greenbelt</b>														
Dominion Boulevard	40,000	F	26,000	\$0.83/mi.	A	73,000	0.07/mi.	E	26,000	\$0.83/mi.	A	73,000	0.07/mi.	E
Oak Grove Connector	73,000	E/F	40,000	\$0.56/mi.	B	77,000	0.07/mi.	C	40,000	\$0.56/mi.	B	77,000	0.07/mi.	C
Great Bridge-VA Beach	N/A	N/A	35,000	\$0.07/mi.	A	43,000	0.07/mi.	B	35,000	\$0.07/mi.	A	43,000	0.07/mi.	B
<b>US 460</b>	N/A	N/A	21,000	\$0.11/mi.	A	38,000	0.02/mi.	B	21,000	\$0.11/mi.	A	38,000	0.02/mi.	B

Reflects 2026 demand; off-peak tolls in Year 2004 US dollars

# Capital Sources & Cost Summary Table

## Revenue-Maximized Tolls

<u>Project</u>	<u>YOE Total Cost</u>	<u>Additional Funding (2)</u>	<u>Prelim Design &amp; Eng. (1)</u>	<u>Total Bond/ Loan Funds</u>	<u>Funding Deficit</u>	<u>Construction Start Date</u>	<u>Toll Revenue Start Date</u>
Third Crossing*	\$4,152,400,000	\$193,500,000	\$81,000,000	\$2,805,000,000	\$1,153,900,000	2006	2006
HRBT*	\$1,845,500,000	\$116,300,000	\$36,000,000	\$1,729,200,000	-	2006	2006
Midtown Tunnel*	\$548,800,000	\$251,100,000	\$12,600,000	\$297,700,000	-	2009	2009
SE Parkway & Greenbelt	\$1,116,713,000	\$520,000,000	\$17,940,000	\$598,046,436	\$319,856,997	2010	2017
US 460	\$1,468,263,967	\$321,000,000	\$26,820,000	\$454,236,584	\$875,555,209	2010	2018
1. P/E costs are estimated to be 3% of non-inflated Project Costs							
2. Toll revenues from unimproved roadways (only part of these funds are scheduled in the construction period; the remainder used to increase bond capacity)							
For SE Parkway & Greenbelt and US 460 funding sources are Primary , NHS or RSTP							

\* Includes tolls on parallel routes

# Capital Sources & Cost Summary Table

## Reduced Tolls

<u>Project</u>	<u>YOE Total Cost</u>	<u>Additional Funding (2)</u>	<u>Prelim Design &amp; Eng. (1)</u>	<u>Total Bond/ Loan Funds</u>	<u>Funding Deficit</u>	<u>Construction Start Date</u>	<u>Toll Revenue Start Date</u>
Third Crossing*	\$4,152,400,000	\$45,809,158	\$81,000,000	\$785,000,000	\$ 3,321,562,283	2006	2006
HRBT*	\$1,845,500,000	\$88,458,623	\$36,000,000	\$950,000,000	\$ 807,040,035	2006	2006
Midtown Tunnel*	\$548,800,000	\$144,776,235	\$12,600,000	\$404,885,834	\$ -	2009	2009
SE Parkway & Greenbelt	\$1,116,713,000	\$520,000,000	\$17,940,000	\$275,000,000	\$ 471,713,000	2010	2017
US 460	\$1,468,263,967	\$321,000,000	\$26,820,000	\$310,000,000	\$ 1,037,263,967	2010	2018
1. P/E costs are estimated to be 3% of non-inflated Project Costs							
2. Toll revenues from unimproved roadways (only part of these funds are scheduled in the construction period; the remainder used to increase bond capacity)							
For SE Parkway & Greenbelt and US 460 funding sources are Primary , NHS or RSTP							

\* Includes tolls on parallel routes



# Toll Revenue Yield by Project

PROJECTS	% COVERAGE OF COSTS	
	Revenue-Maximized Tolls	Reduced Tolls
Third Crossing (w/ Parallel Tolls)	72%	20%
HRBT (w/ Parallel Tolls)	100%	56%
Midtown Tunnel (w/ Parallel Tolls)	270%	125%
SE Parkway & Greenbelt <sup>1</sup>	71%	58%
US 460 <sup>2</sup>	40%	29%

1 - NHS and RSTP funds (\$520M) included in revenue

2 - NHS and Primary funds (\$321M) included in revenue

# Tax Revenue Requirements

	Toll	Project Package 1	Project Package 2
Annual Revenue Required (2005 \$'s)	Max	\$140,700,000	\$40,700,000
	Reduced	\$202,700,000	\$106,700,000
Gas Tax (cents/gal)	Max	13.15	3.80
	Reduced	18.94	9.97
Sales Tax (percent)	Max	0.94%	0.27%
	Reduced	1.35%	0.71%

Gas Tax: 1 cent gas tax estimated to generate \$10,700,000 in 2005

Sales Tax: 1/2 pct. sales tax estimated to generate \$75,000,000 in 2005

Annual tax growth rate estimated to be 4.5%

Taxes assumed to be in place through final bond maturity