

ITEM 13 - Information

June 20, 2012

Briefing on the Possible Addition of Tolling on I-95 in Virginia

Staff

Recommendation: Receive briefing on an overview of preliminary results of the recent traffic and revenue study and planned next steps.

Issues: None

Background: The Virginia Department of Transportation (VDOT) is pursuing the possible addition of tolling on the I-95 corridor (south of the City of Fredericksburg at mile marker 126) through the Federal Highway Administration's Interstate System Reconstruction and Rehabilitation Pilot Program (ISRRPP). At the April 18 meeting, the Board was briefed on an overview of the I-95 Corridor Improvement Program and how toll revenue may possibly offset safety, mobility, and system preservation needs in the corridor.



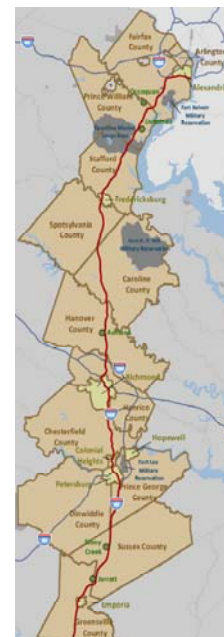
Interstate 95 Corridor Improvement Program

June 20, 2012



Virginia's Interstate 95

- Opened to Traffic in the 1950's
- 178 Miles from NC to DC
- Crosses 17 Jurisdictions
- 427 Structures
- 40% of the Interstate Traffic in Virginia
- Some of the Worst Congestion in the US
- 67 Fatal Crashes from 2008 to 2010



I-95 is a Critical Link for Virginia's Economy

- Serves 45% of Population
- Links 1.7 Million Jobs
- Connects Virginians to the World's Largest Regional Economy
- Links 8 Million Square Feet of Warehouse/Distribution Facilities
- Access to 3 International Airports
- Serves Richmond and Norfolk Ports



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I-95 Needs

80% Mainline Bridges Over 40 Years Old

67% Portion of I-95 at or above Capacity by 2035

72% Mainline Pavement in Need of Maintenance

40% Projected Increase in Travel Time by 2035

\$12.1B Projected 25-Year Need

\$ 2.5B Projected 25-Year Funding at Current Levels

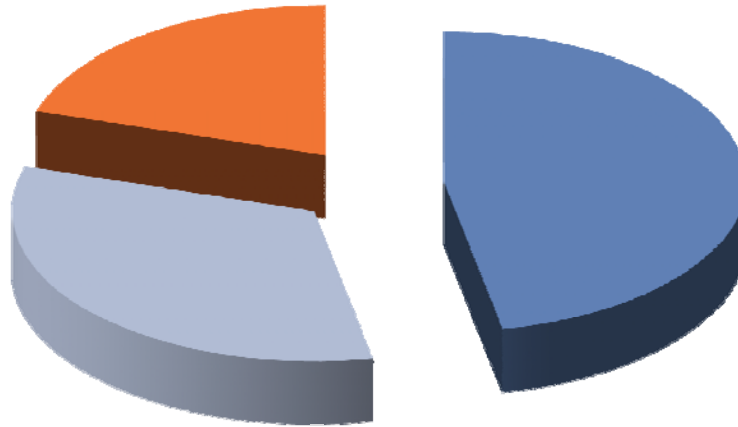
(\$ 9.6B) Funding Gap



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Balanced Use of Funding

VDOT is committed to a balanced funding approach to advancing I-95 projects.



■ Six Year

Improvement Program

I-95 Funding Sources

■ Operations & Maintenance

■ Toll Revenue

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Tolling Proposal Background

- FHWA's Interstate System Reconstruction and Rehabilitation Pilot Program (ISRRPP) permits a state to toll an interstate facility
 - Limited to three facilities in three different states
- April 2010: VDOT submitted a proposal to toll I-95
- January 2011: VDOT submitted an expression of interest
- September 2011: FHWA granted conditional provisional approval
- The toll revenue will be used to make pavement, structural, operational, capacity, and safety improvements throughout the corridor



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Outreach & Coordination

- **Outreach & Coordination (MPOs/PDCs/Local Governments)**
 - Kick-off (February 8th Winter meeting)
 - Individual meetings with MPO & PDC staff
 - Environmental coordination letters
 - MPO Policy Board meetings
 - Regional workshops
- **Business Stakeholders**
 - Virginia Trucking Association (Briefing June 14th)
 - Virginia Chamber of Commerce
 - Others
- **Continued Outreach - Public Meetings (Fall 2012)**
 - Residents
 - Businesses



Outreach & Coordination

MPO Policy Board Briefings (elected officials)	Process, Scenarios, etc.	Traffic & Revenue, Tolling strategies, etc.
Richmond Area	April 12 th	June 14 th
Tri-Cities	April 12 th	June 14 th
Fredericksburg Area	April 16 th	June 18 th
National Capital Region	April 18 th	June 20 th

MPO/Local Government Staff Workshops	Date
Southern Workshop (Petersburg)	June 4 th
Northern Workshop (Fredericksburg)	June 6 th
Richmond Area MPO Transportation Advisory Committee	June 12 th



What Toll Rates to Employ?

- If Virginia attempted to fund the entire \$9.6 B gap over 25 years by tolls alone, the toll rate required would be:
 - Utilizing two collection points, one north of Richmond and one south of Petersburg, the toll rate would be ~ **\$0.53 per mile***
 - Using a barrier system with 6 collection points, the toll rate would be ~ **\$0.27 per mile***
 - Using a closed system where all trips were charged based on actual miles traveled, the toll rate would be ~ **\$0.14 per mile**
- VDOT analyzed rates from **\$0.02 to \$0.15 per mile**
- VDOT is requesting approval to initiate tolling at a reduced rate of ~ **\$0.02 per mile**



* Note that diversion would be extremely high with rates of \$0.27 to \$0.53 per mile under these scenarios.

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Toll Scenarios Analysis

Potential Locations:

- A1: 1 Gantry System (tolling both directions)
- A2: 2 Gantry System (one toll northbound; one toll southbound)
- A3: 2 Gantry System (tolling both directions)
- B: 6 Gantry System (tolling both directions at ~ 20 mile intervals)
- C: Closed System (tolling at every interchange – ramps)
- D: Hybrid System (mainline tolling + ramp tolling)
- E: Closed System (tolling between every interchange)

How to toll? (location and # of gantries)

Factors to consider (location):

- **Traffic Characteristics**
 - Local vs long-distance
 - Truck %
- **Diversion**
 - Availability of routes for local trips
 - Ability to reduce diversion (i.e. capacity for ramp tolling)
 - Number and types of businesses in area (i.e. truck services, lodging, food services, etc.)

Factors to consider (# of gantries):

- **Implementation (ease and timeliness of construction, etc.)**
- **Cost effectiveness of up-front capital costs**
- **Operations and maintenance implications**

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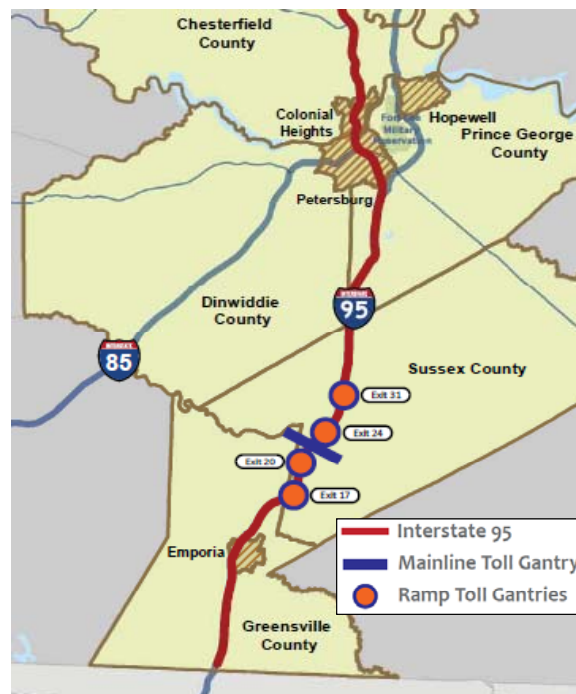
Option A-1: One Gantry System (tolling both directions)

Current Condition

- ADT 36,000
- 15% trucks
- 48% of traffic continues through mile marker 100
- Low commuter traffic
- Low local trucks
- High long-haul trucks

Items Under Further Review

- **Diversion**
- **Toll Rate vs Revenue**
- **Economic Review**

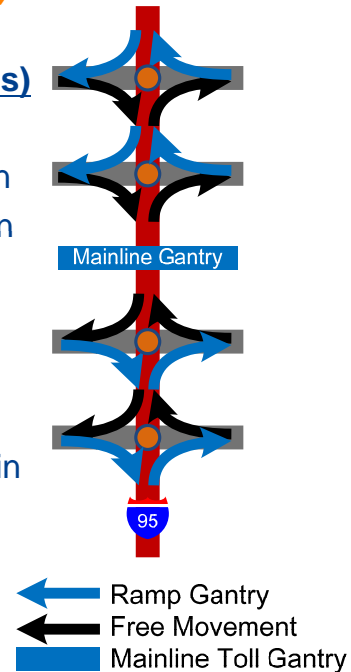


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Option A-1: One Gantry System (tolling both directions)

A-1: One Gantry System (tolling both directions)

- **Location:** Gantry Between MP 20 and MP 24
Ramp Gantries to Minimize Diversion
- **Method:** Open Road Tolling & Cash Collection
- **Rate:** \$4.00 2-Axle Mainline (~\$0.02/mile)
\$2.00 2-Axle Ramp
5-Axle Vehicle: 3X Base Rate
- **Duration:** >30 Yrs
- **Operator:** VDOT will own, operate, and maintain (option to contract)
- **Congestion Pricing:** None, Fixed Rates
- **Rate Changes:** Indexed to Inflation



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Benefits of Tolling Revenue

Gross Revenue Projections:

- **Scenario A-1** ~ \$35M - \$40M/year (gross)
- **Other Scenarios** ~ \$55M - \$160M/year (gross)

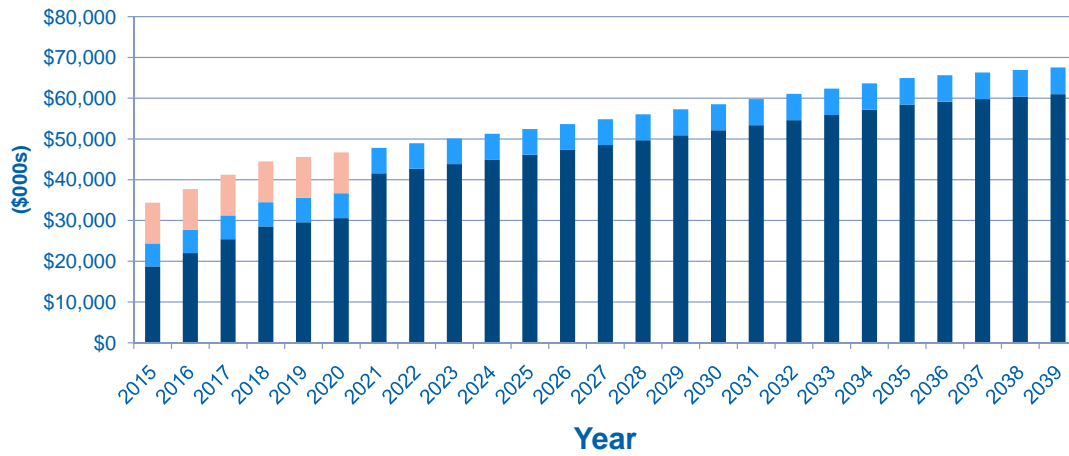
Acceleration of an identified need (SYIP, CLRP, STP, and other priorities) – Potential uses of Scenario A-1 six year revenue:

- **Safety**
 - I-95/I-64 Overlap Study – Short Term Improvements
- **Mobility/Economic Vitality**
 - I-95/I-85/460 Interchange upgrades
- **System Maintenance & Preservation**
 - Pavement Reconstruction (~ 35 Lane Miles)
 - Bridge Reconstruction (~ 4 Bridges)



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Preliminary Revenue Projections Scenario A-1



■ Net Revenue Available for Projects
 ■ Toll Collection Costs
■ Toll Facilities Capital

Preliminary Schedule

- **Jan – April 2012** **Data Collection/Analysis**
- **Feb 2012** **Vision Plan**
- **April 2012** **MPO/Locality Briefings**
- **May 2012** **Preliminary Traffic & Revenue Forecasts, tolling scenario analysis, etc.**
- **June 2012** **MPO/PDC/Locality Workshops**
- **Summer 2012** **Submit ISRRPP application to FHWA**
- **Fall 2012** **Public Hearings**
- **Winter 2012** **Execute Tolling Agreement**

