



## **Interstate 95 Corridor Improvement Program Sussex County Board of Supervisors**

**June 21, 2012**

**Michael Estes, P.E.**

**Office of the Commissioner**

# 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



## 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

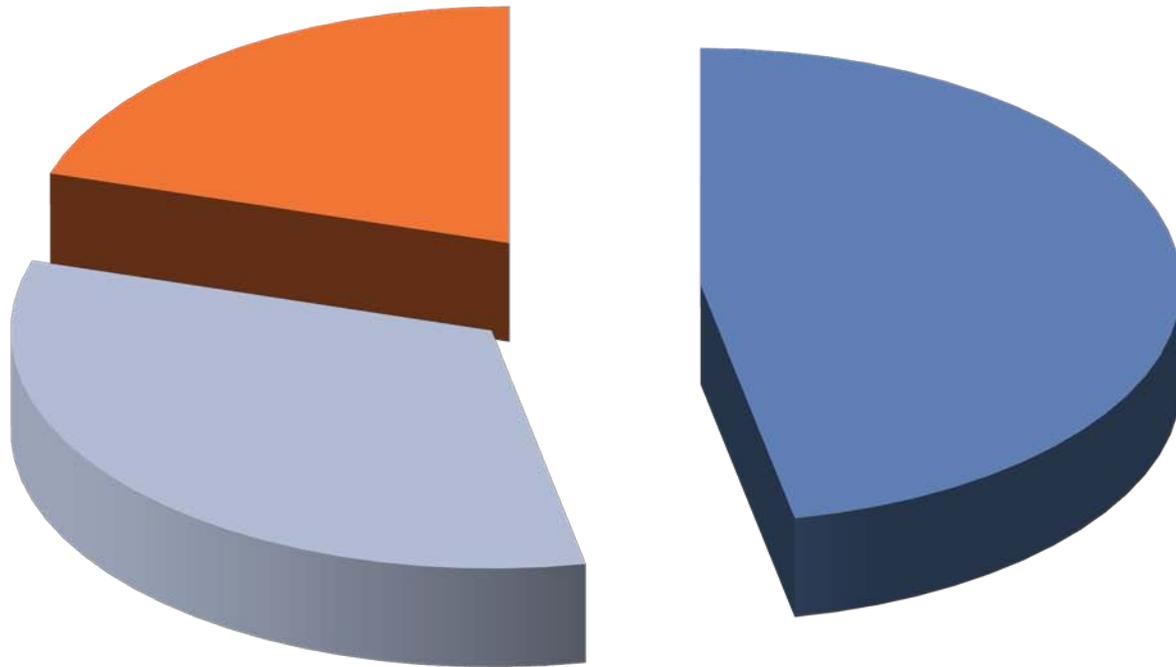
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**(\$ 9.6B)** Funding Gap



# Balanced Use of Funding

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



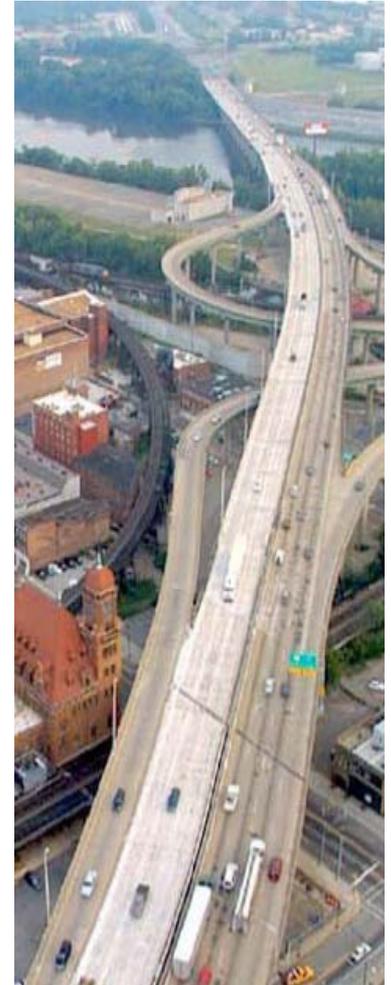
**I-95 Funding Sources**

- Six Year Improvement Program
- Operations & Maintenance
- Toll Revenue



# 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**



## Outreach & Coordination

- **Outreach & Coordination (MPOs/PDCs/Local Governments)**
  - Kick-off (February 8<sup>th</sup> Winter meeting)
  - Individual meetings with MPO & PDC staff
  - Environmental coordination letters
  - MPO Policy Board meetings
  - Regional workshops
- **Business Stakeholders**
  - Virginia Trucking Association (Briefing June 14<sup>th</sup>)
  - 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 <sup>th</sup>	June 14 <sup>th</sup>
Tri-Cities	April 12 <sup>th</sup>	June 14 <sup>th</sup>
Fredericksburg Area	April 16 <sup>th</sup>	June 18 <sup>th</sup>
National Capital Region	April 18 <sup>th</sup>	June 20 <sup>th</sup>

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



## 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.

# 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**

# 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

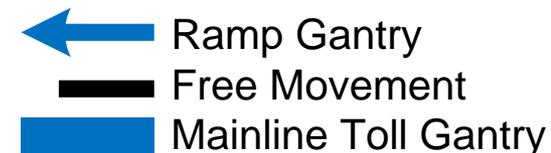
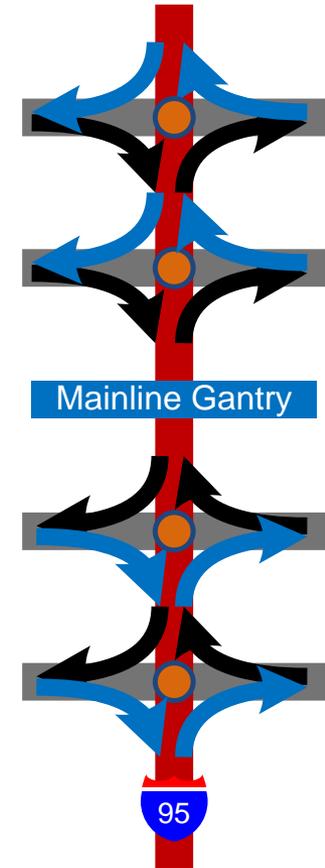
- Diversion
- Toll Rate vs Revenue
- Economic Review



# 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



# 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)

## 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**