Welcome to the Public Information Meeting for the I-395 Express Lanes Northern Extension Project

The goals of this meeting are:

• To introduce the project and share information on the proposed improvements
• To provide an overview of key steps in the project development process
• To obtain your input on issues that should be considered during the development of the Environmental Assessment and supporting documentation

Project Purpose and Need

Develop a transportation solution that improves roadway conditions throughout the corridor by:

• Reducing congestion
• Providing additional travel choices
• Improving travel predictability
• Improving roadway safety
### I-395 Express Lanes Northern Extension Corridor: Section 1

<table>
<thead>
<tr>
<th>TIME PERIOD</th>
<th>PROPOSED OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM PERIOD</td>
<td>CLOSED</td>
</tr>
<tr>
<td>PM PERIOD</td>
<td>OPEN SOUTHBOUND</td>
</tr>
</tbody>
</table>

**Legend**
- **Reversible Express Lanes**
- **Existing Toll Gantry**
- **Property Lines**
- **Existing Noise Wall**

**Table**

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</tbody>
</table>
**I-395 EXPRESS LANES NORTHERN EXTENSION CORRIDOR: SECTION 2**

**TIME PERIOD** | **PROPOSED OPERATION**
--- | ---
AM PERIOD | OPEN NORTHBOUND
PM PERIOD | OPEN SOUTHBOUND

HOV ONLY AT ALL TIMES

**TIME PERIOD** | **PROPOSED OPERATION**
--- | ---
AM PERIOD | OPEN NORTHBOUND
PM PERIOD | OPEN SOUTHBOUND

LEGEND
- REVERSIBLE EXPRESS LANES
- PROPOSED TOLL GANTRY
- PROPERTY LINES
- EXISTING NOISE WALL
I-395 EXPRESS LANES NORTHERN EXTENSION CORRIDOR: SECTION 3

LEGEND
- REVERSIBLE EXPRESS LANES
- PROPOSED TOLL GANTRY
- PROPERTY LINES

TIME PERIOD | PROPOSED OPERATION
-------------|---------------------
AM PERIOD    | OPEN NORTHBOUND
PM PERIOD    | OPEN SOUTHBOUND
I-395 EXPRESS LANES NORTHERN EXTENSION CORRIDOR: SECTION 5

- Proposed improvements
- Property lines

RAMP TO BE REMOVED

RAMP FROM HOV TO REGULAR LANES

POTENTIAL NORTHERN TERMINUS IMPROVEMENTS INCLUDING SHOULDER USE

TIME PERIOD | PROPOSED OPERATION
--- | ---
AM PERIOD | OPEN NORTHBOUND
PM PERIOD | OPEN SOUTHBOUND

SEE EADS STREET INTERCHANGE CONCEPTS
TYPICAL SECTION

Existing Condition

Proposed Condition
I-395 HOV & EXPRESS LANES
ACCESS POINTS

<table>
<thead>
<tr>
<th>Access Points</th>
<th>Existing Access</th>
<th>Future Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eads Street – NB Off Ramp from HOV AM: NB from HOV lanes PM: Closed</td>
<td>Capacity and operational improvements to be evaluated as part of detailed traffic and feasibility studies</td>
</tr>
<tr>
<td></td>
<td>Eads Street – SB On Ramp to HOV AM &amp; PM: SB to HOV lanes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eads Street – NB On Ramp to HOV AM &amp; PM: NB to HOV lanes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eads Street – SB Off Ramp from HOV AM &amp; PM: SB from HOV lanes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ramp from SB HOV Lanes to SB regular lanes (south of Eads Street) AM &amp; PM: SB from HOV lanes</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Washington Boulevard – South Facing Ramp AM: NB from HOV lanes PM: SB to HOV lanes</td>
<td>AM: NB from HOT lanes PM: SB to HOT lanes</td>
</tr>
<tr>
<td>3</td>
<td>Shirlington Road – North Facing Ramp AM: NB to HOV lanes PM: SB from HOV lanes</td>
<td>AM: NB to HOT Lanes PM: SB from HOT lanes</td>
</tr>
<tr>
<td>4</td>
<td>Seminary Road – North Facing Ramp AM: NB to HOV lanes PM: SB from HOV lanes</td>
<td>AM: NB to HOT lanes PM: SB from HOT lanes</td>
</tr>
<tr>
<td>4</td>
<td>Seminary Road – South Facing Ramp AM: NB from HOV lanes PM: SB to HOV lanes</td>
<td>No change</td>
</tr>
<tr>
<td>5</td>
<td>Turkeycock Run (north of Edsall Road) Full access between HOV/HOT lanes and regular lanes</td>
<td>Full access between HOT lanes and regular lanes</td>
</tr>
</tbody>
</table>
EXPRESS LANES

How They Work

- Carpools (HOV-3), buses and motorcycles travel toll-free
- Drivers traveling alone or with one passenger have an option to pay a toll for a faster trip, even during rush hours
- Dynamic tolls adjust based on real-time traffic to keep drivers moving – tolls maintain highway speeds and ensure federally required performance standards
- Current toll prices are displayed on signs before entry points
- E-ZPass is required for all drivers – HOV-3 travels free with E-ZPass Flex
- Rules of the road and tolls are in effect at all times
- Regular lanes remain free of charge at all times

**EXPRESS LANES OPERATIONS CENTER**
- Real-time data is collected
- Information is analyzed and a toll is calculated and displayed on the pricing signs
- The pricing ensures free-flowing travel speeds

**TOLL PRICES**
- On-road technology collects data to price specific trips
- As traffic increases, toll prices increase to manage demand
- Toll prices adjust as often as every 15 minutes

**MANAGING TRAFFIC**
- There are federal requirements to maintain minimum travel speeds and therefore there is no maximum toll rate
- Dynamic tolls help to ensure requirements are met
- Tolls during off-peak hours cover operating and maintenance costs

**SENSORS**
- Sensors will be located approximately every 1/3 mile
- Sensors measure traffic volumes, speeds and how crowded the lanes are

**EXPRESS LANES**
**REGULAR LANES**
# Noise Analysis Process

**Identify noise receptors**
- Identify Common Noise Environments (CNE) (typically within 500 feet of the highway)
- Identify noise sensitive receptors within each CNE

**Perform noise modeling**
- Develop noise models of existing and future roadway conditions using computer modeling (incorporates roadway design, traffic volumes and speed, receptors, topography, and ground type)
- Validate model with noise measurements data
- Compute existing, no-build and build design-year sound levels

**Identify impacts (is noise mitigation warranted?)**
- Approach or exceed Federal Highway Administration (FHWA) noise abatement criteria (e.g. 67 dB(A) for residences, parks, schools) or,
- 10 decibel increase above existing

**Design and assess mitigation (typically noise walls)**

<table>
<thead>
<tr>
<th>Is the wall feasible?</th>
<th>Is the wall reasonable?</th>
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<tbody>
<tr>
<td>· Does it work acoustically (do 50% or more of the impacted receptors receive a 5 dB(A) or more noise reduction)</td>
<td>· Cost-effectiveness (1,600 maximum square feet or less per benefited receptor)</td>
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<tr>
<td>· Can it be constructed (e.g. are there safety, drainage, utilities, maintenance issues)</td>
<td>· Design goal (7 decibels of noise reduction at 1 impacted receptor)</td>
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**Perform noise measurements at representative receptors along the corridor**

**Present noise study results and preliminary noise wall locations at public meetings**

**Finalize noise barrier designs once the road has received design approval**

**Obtain VDOT Chief Engineer approval**

**Obtain FHWA concurrence**

**Solicit public input from benefited property owners and renters**

**Incorporate approved noise wall(s) into the final road design construction plans**
## SCHEDULE

### TASKS

<table>
<thead>
<tr>
<th>TASK</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
<td>Begin NEPA - Environmental Assessment</td>
<td>January</td>
<td></td>
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<tr>
<td>Begin Transit / TDM Study</td>
<td>April</td>
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<tr>
<td>Public Information Meetings</td>
<td>April 11 &amp; 13</td>
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<tr>
<td>Public Hearing</td>
<td>September</td>
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<tr>
<td>Final NEPA Decision</td>
<td>December</td>
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<tr>
<td>Final Transit / TDM Study</td>
<td>December</td>
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<tr>
<td>Construction</td>
<td></td>
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<td>Spring</td>
<td>Summer</td>
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### Timeline

- **2016**: Begin NEPA - Environmental Assessment, Begin Transit / TDM Study, Public Information Meetings, Public Hearing, Final NEPA Decision, Final Transit / TDM Study
- **2017**: Final Financial Agreement, Project Completion
- **2018**: WE ARE HERE
- **2019**: Summer
I-95/I-395 TRANSIT/TRANSPORTATION DEMAND MANAGEMENT (TDM) STUDY

• Guaranteed annual transit payment from new I-395 Express Lane toll revenues to the Commonwealth for multimodal improvements along the I-95 and I-395 corridors

• Virginia Department of Rail and Public Transportation is leading a Transit and Transportation Demand Management (TDM) study in coordination with:
  - Arlington, Fairfax, Prince William and Stafford Counties
  - City of Alexandria
  - Northern Virginia Transportation Commission
  - Potomac and Rappahannock Transportation Commission

• Study area extends from Eads Street at the Pentagon to southern terminus of I-95 Express Lanes in Stafford County and will include parallel commuting corridors and routes, and modes of transportation

• Study will identify transit services and TDM program enhancements that can be funded by the annual transit investment payments

• Eligible projects for funding will increase mobility and move more people along I-95 and I-395 and benefit toll payers in the I-395 corridor. Projects may include:
  - New bus and rail service
  - Park and ride lots
  - TDM program enhancements

• Focused stakeholder engagement will begin in April 2016 and will involve existing transit service providers and TDM providers

Key Milestones

Begin Transit / TDM Study
April 2016

Begin Stakeholder Engagement
April 2016

Draft Transit / TDM Study
November 2016

Final Transit / TDM Study
December 2016
EADS STREET ALTERNATIVES

Eads Street Interchange Challenges

- Balancing the needs of all transportation users including transit vehicles, pedestrians, and HOVs
- Managing traffic between regular lanes and Express Lanes in a congested and constrained area with limited opportunities for expansion
- Maintaining free-flowing and safe traffic operations on Express Lanes at terminus and approaching Eads Street interchange

Concept Development and Study Process

2008 / 2009: Ten concepts considered to address Eads Street / Northern Terminus challenges

2014 - present: Four concepts evaluated

Next Step: Interchange Modification Report will conduct traffic analyses to refine concepts and include a detailed engineering and operational assessment to recommend a preferred alternative

Single Reversible Ramp

- Single reversible ramp from Express Lanes to Eads Street widened to three lanes at Eads Street
- Retains all existing movements
- Requires reconstruction of I-395 HOV bridges over Fern Street and potentially Eads Street
- Significant disruption to traffic during bridge reconstruction

Dedicated Bus Lane and Right Turns

- Dedicated bus lane from Express Lanes to Eads Street/Pentagon
- Directs all traffic (excluding buses) to Army Navy Drive and Fern Street to access Pentagon
- Results in additional congestion on the off-ramp to Eads Street
- Increases pedestrian/vehicle conflicts along Army-Navy Drive

Diverging Diamond Interchange

- Simplifies ramp movements and traffic signal phasing and reduces turning conflicts; may be confusing to unfamiliar drivers
- Retains all existing movements
- Restricted area does not accommodate an optimal diverging diamond interchange configuration
- May require reconstruction of I-395 HOV bridge over Eads Street resulting in significant disruption to traffic during bridge reconstruction

Dual Reversible Ramps (Preferred Concept)

- Increases capacity to and from Eads Street by dividing traffic between two ramps (Pentagon and Army Navy Drive)
- Uses existing infrastructure thereby reducing construction impacts
- Eliminates southbound ramp from Express Lanes to regular lanes (south of Eads Street) to improve merging and weaving operations on both the Express Lanes and regular lanes
- Access to southbound I-395 regular lanes provided via Hayes Street/Army Navy Drive, Washington Boulevard/Columbia Pike and Boundary Channel Drive
The Comprehensive Agreement executed in 2012 with 95 Express Lanes, LLC (95 Express) contemplated the potential future development of the extension of the I-95 Express Lanes along the I-395 corridor.

In November 2015, VDOT and 95 Express signed a Development Framework Agreement.

Agreement Terms
- Improvements to be built largely within VDOT’s existing right of way
- VDOT and 95 Express will work together to finalize the scope, finance plan and agreement
- 95 Express will provide a long-term transit investment through annual transit payments for the Agreement term (2087)

Project Scope
- Convert the two existing reversible High Occupancy Vehicle (HOV) lanes to High Occupancy Toll (HOT) lanes; construct an additional HOT lane (Total = 3 HOT Lanes)
- Install an Active Traffic Management System
- Install signage and toll systems
- Provide noise walls
- Provide improved connections between the proposed I-395 Express Lanes and Eads Street
- Conduct transit/transportation demand management (TDM) study

VDOT Responsibilities
- Planning/Environmental Approvals
  - Inclusion in MWCOG Transportation Planning Board’s Constrained Long Range Plan (CLRPP)
  - Public Outreach
  - Environmental Assessment and supporting technical studies
  - Preliminary Noise Wall Work
- Interchange Modification Report (IMR)
- Federal, State and Local Agency Coordination
- Transit/TDM Study (conducted by DRPT)

95 Express Responsibilities
- Preliminary Engineering and Design
- Cost Estimating
- Finance Plan
- Design-Build Procurement
- Community Outreach
- Construction and Operation of the I-395 Express Lanes