Washington DC Section of ITE Project Briefing

November 5, 2015

Renée Hamilton, VDOT, Deputy District Administrator
Purpose and Need

Address existing and future transportation problems

- Improve multimodal mobility along the I-66 corridor by providing diverse travel choices in a cost-effective manner
- Enhance transportation safety and travel reliability
# Project Recap

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>November 2013</td>
<td>FHWA approved Tier 1 Environmental Impact Statement with a Record of Decision</td>
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<td>July 2014</td>
<td>Launched Tier 2 Environmental Assessment and Transform 66 Outside the Beltway</td>
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<td>Jan/Feb 2015</td>
<td>Public Information Meetings</td>
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<td>May/June 2015</td>
<td><strong>NEPA Public Hearings</strong> for Draft Environmental Assessment</td>
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<td>August 2015</td>
<td>Commissioner’s Finding of Public Interest</td>
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<td>September 2015</td>
<td>Preferred Alternative and Phasing Approach: Briefings to CTB and Elected Officials, RFQ posted</td>
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<tr>
<td>October 2015</td>
<td>Public Information Meetings, Procurement underway</td>
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Outreach Results

Public Meetings, Hearings, and Outreach

- 1,400+ comments received during Public Hearing comment period
- 170+ comments received during Public Information Meetings
- 2,300+ emails and online discussion board comments received
- 4,300+ contacts in stakeholder database
- 21,000+ residences and businesses along the corridor notified of meetings and hearings by direct mail
- 160+ small group meetings
- 1,200+ attendees (combined) at the formal meetings and hearings

Design Changes

- Reductions in potential residential relocations from 35 to 11
- Elimination of major impacts to Stenwood Elementary School
- Reconfiguration of the I-495 interchange to reduce property impacts
- Refinements of design for Route 28 interchange and I-66 mainline to reduce impact to parks
- Inclusion of access points from both Alternative 2A and 2B
Developing the Preferred Alternative

Universe of Alternatives

- Mainline cross section
- Express Lanes access points
- Interchange concepts
- Park-and-ride locations
- Transit service scenarios
- TDM strategies

2 Draft Environmental Alternatives

- Technical studies
- Public and stakeholder input

Preferred Alternative

Key Features

- Reflects public input
- Combines the best elements from alternatives evaluated
- Refines concepts with new ideas to reduce impacts
- Multimodal approach
- Moves more people
- Reduces hours of congestion per day
- Reduces cut-through traffic on local roads
Preferred Alternative Elements

Two Express Lanes (convert existing HOV lane & add one lane)
- HOV-3+ and buses travel free
- Non-HOV tolled
- Congestion-based tolls (similar to other Express Lanes in region)
- Converting HOV-2+ to HOV-3+ by 2020, consistent with the region’s CLRP

Three regular lanes
- Open to all traffic
- No tolls
- Ramp-to-ramp connections between interchanges (auxiliary lanes)
- Safety, interchange and operational improvements

New transit service and other multimodal improvements
- High-frequency, fast and reliable bus service during extended peak periods
- Park-and-Ride facilities
- Transportation Demand Management (TDM) strategies
- Bicycle and pedestrian trail and improvements
Flexible barrier with buffer, median for potential future transit (with auxiliary lanes, if needed)
Project Phasing

Why Phase 1?
- Implementable by 2021
- Invests wisely
  - New construction accommodates future Metro extension
  - Makes efficient use of existing infrastructure

Elements of Phase 1
- Provides 2 Express Lanes in each direction to Gainesville (University Boulevard)
- Provides new transit service and park-and-ride facilities
- Makes safety and operational improvements at key interchanges

Future Phases
- Included in Preferred Alternative and environmental document
- Elements can be implemented to meet future demand as funding becomes available
Traffic Analysis Findings

- Preferred Alternative (2040) and Phase 1 (2025) vs. No Build Alternative:
  - Moves more people via more modes in the AM and PM peak periods
  - Reduces the duration and severity of congestion in the AM and PM peak periods
  - Improves speeds on the I-66 corridor and reduces travel times
  - Improves existing safety issues and bottlenecks
Current Traffic Patterns
Eastbound

Source: 2015 I-66 Travel Demand Model using MWCOG version 2.3 and Round 8.3 Land Use Forecasts
Move More People in the A.M. Peak Hour

Morning Peak Hour Person Trips

- No HOV in AM
- No HOV in AM
- No HOV in AM

TRANSFORM 66

Multimodal Solutions - 495 to Haymarket
Afternoon Peak Hour Person Trips

- Move More People in the P.M. Peak Hour
Improve Speeds Along Corridor – Morning Peak Period

Comparison of Existing, No-Build and Build General Purpose Lanes
Improve Speeds Along Corridor – Evening Peak Period
Comparison of Existing, No-Build and Build General Purpose Lanes

Westbound Direction
Moving More People With Multimodal Solutions

- **New transit service** providing more frequent and reliable trips to major regional destinations
- **New and expanded park-and-ride facilities** with direct access to the Express Lanes
- **Travel Demand Management (TDM) strategies** making it easier and more affordable to use alternative travel options
Park-and-Ride Facilities

- **Phase 1 (2021):** Approximately 4,000 new spaces in four new/expanded facilities
- **Preferred Alternative (by 2040):** Approximately 6,500 total spaces in five new/expanded facilities
- Amenities that support transit, carpool/vanpool, and kiss-and-ride
- Direct access to the Express Lanes and convenient connections to local roadway and trail networks
Enhance bicycle network in Fairfax and Prince William Counties:
- New crossings of I-66 would better accommodate bicycle and pedestrians, connect routes
- Project provides opportunities to complete segments of regional trail network
Bicycle and Pedestrian Access Parallel to I-66

- Some segments of bike/ped network parallel to I-66 to be constructed in Fairfax and Prince William Counties
- Path cross section reduced per Fairfax County’s request to reduce impacts
Virginia Secretary of Transportation is considering publicly and privately financed options

Commonwealth proceeding with three procurement options:
- Toll Concession or **DBFOM** (Design-Build-Finance-Operate-Maintain)
- **DBOM** (Design-Build-Operate-Maintain)
- **D-B/ATC** (Design-Build with Alternative Technical Concepts)

Qualifications received October 1, 2015 from multiple teams

Conceptual financial proposals due from shortlisted teams on December 1, 2015

Preferred Delivery Method to be announced December 2015
## Key Milestones

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<td>Public Outreach</td>
<td>Ongoing</td>
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<td>Public Information Meetings</td>
<td>October 2015</td>
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<td>CTB Decision on Preferred Alternative</td>
<td>October 2015</td>
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<td>Final Environmental Document</td>
<td>December 2015</td>
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<td>Delivery Approach Decision</td>
<td>December 2015</td>
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<td>Consideration of Alternative Technical Concepts (ATCs)</td>
<td>Spring 2016</td>
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<td>Selection of Developer</td>
<td>Fall 2016</td>
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<td>Design Public Hearing</td>
<td>Early 2017</td>
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<td>Construction Start</td>
<td>2017</td>
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<td>Open to Traffic</td>
<td>2021</td>
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66 INSIDE THE BELTWAY PROJECT
Project Context

- Only Interstate in the Country limited to HOV only traffic during rush hours
- Stoplight at the end of I-66 eastbound in the District
- Deck over I-66 in Rosslyn and retaining walls constrain ability to widen I-66
- Metrorail Orange Line trains are overcrowded
Changes to I-66
Independent of this Project

- The Transportation Planning Board adopted a plan to modify HOV rules on all regional interstates including I-66 both inside and outside the Beltway
  - Increase occupancy requirements from 2 to 3 by 2020

- Federal rules require ‘limiting or discontinuing’ use of HOV lanes by hybrids when lanes are degraded (<45mph)
  - I-66 is currently degraded and has been for a number of years
Project History

- Proposed project follows a multi-year study undertaken in 2011 and completed in 2013
What are the Current Operational Issues on I-66?

- **Heavy traffic volume** – over 140,000 vehicles per day (total both directions)
- **Significant multi-hour queues**
  - Bottlenecks created by limited thru lanes, lane drops and major merge areas
- **Heavy volumes entering and exiting I-66 at the Route 267 interchange** affect traffic in both directions for extended periods
- **In the peak direction, vehicles leaving the corridor on both ends are impacted by downstream congestion**
  - Westbound PM congestion approaching I-495 impacted by I-66 congestion outside the beltway
  - Eastbound AM congestion approaching the Potomac River impacted by congestion associated with Roosevelt Bridge
What are the Current Operational Issues on I-66?

Morning Commute

Traffic Quality Rating
- Orange: Congested
- Red: Severely Congested

Source: National Capital Region Transportation Planning Board’s Traffic Quality on Metropolitan Washington Area Freeway System Spring 2014 Report
Where is Eastbound Morning Traffic Going?

Destination– AM Eastbound, East of Route 267
(Reference Point: ★)

Downtown 
Washington, DC

Arlington

Falls Church

Alexandria

Fairfax County

11%
33%
38%
6%
7% (Other)
5%

Investing in Multimodal Solutions
What are the Project Features?

- **Tolling**
  - Convert I-66 to dynamically-priced toll lanes in the peak direction during weekday rush hours
  - Toll prices will change depending on traffic volumes to manage demand for the lanes and ensure a more reliable trip

- **Multimodal**
  - Enhanced bus service throughout the corridor
  - Better access to Metro
  - New bicycle and pedestrian access
  - Roadway improvements on local roads

- **Future widening**
  - Evaluation of the need for Eastbound widening
    - I-66 East from Dulles Connector Road to Ballston
What are the Project Benefits?

- Move more people – up to 40,000 more people per day by 2040 – and enhance connectivity for the I-66 Corridor
- Enhance transit service
- Provide revenue stream support to multimodal components on I-66 and complementary corridors adjacent to I-66
- Provide more travel choices for single-occupancy vehicles
- Improve reliability for all travelers
- Promote a carpool culture and commitment to multimodalism
- Create opportunities for improved level of service on parallel routes
- Provide seamless connectivity to the region’s 40+ miles of express lanes
How the Tolls Will Work?

- Toll prices will change depending on traffic volumes to manage the demand for the lanes and ensure a faster and more reliable trip.

When toll collection begins in 2017:
- Toll period will be 4-hours in length during AM and PM commuting periods in the peak direction (5:30am-9:30am; 3:00pm-7:00pm)
- High Occupancy Vehicle (HOV)-3+ will be FREE
  - VDOT considering allowing HOV-2 ride for FREE for first few years
- Single-occupant vehicle (SOV) drivers will have option to pay a toll and use the lanes during rush-hours
- Lanes will remain FREE to all traffic during off-peak periods
- Hybrids and Dulles Airport travelers not exempt from toll
- Motorcycles and emergency response vehicles exempt from toll
- Heavy trucks prohibited from lanes during rush hours

By 2021:
- HOV-3+ will travel for free as adopted in the Regional Transportation Plan
How Are Parallel Roadways Impacted By the Project?

Traffic Volume Changes (2017 Eastbound AM)

**LEGEND**

- **White**: No significant change
- **Orange**: Increase
- **Blue**: Decrease

**HOV-2+ Rides for free**
Agreement for 40 years between Commonwealth of Virginia and NVTC

Implemented jointly by VDOT and NVTC

VDOT will:
- Manage the design, construction, maintenance, operations of I-66 tolls, and potential future widening

Northern Virginia Transportation Commission (NVTC) will:
- Plan and select multimodal improvements, in accordance with applicable laws and terms of agreement;
- Issue grants to and coordinate with agencies to ensure efficient delivery of selected projects; and
- Monitor effectiveness of projects and report to VDOT.
Project Selection

- **Project eligibility:**
  - Increase person throughput in the I-66 corridor
  - Provide benefit to toll-payers
  - Ready to implement

- **Eligible project applicants:**
  - All NVTC Members
  - Prince William County, Manassas and Manassas Park
  - Transit agencies operating in the I-66 Corridor
# Upcoming Project Milestones

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<th>Key Milestones</th>
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<td>Public outreach</td>
<td>Ongoing</td>
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<td>Working Group/Technical Stakeholder Advisory Group meetings</td>
<td>Ongoing</td>
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<tr>
<td>Toll and revenue study</td>
<td>Spring 2015</td>
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<td>Group multimodal solutions according to implementation schedule</td>
<td>Spring 2015</td>
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<td>Toll system design</td>
<td>Summer 2015</td>
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<td>Framework agreement</td>
<td>Fall 2015</td>
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<tr>
<td>Public Information Meetings</td>
<td>October 2015</td>
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<td>Environmental Review</td>
<td>October 2015</td>
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<tr>
<td>Design Public Hearing</td>
<td>January 2016</td>
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<td>Group 1 multimodal solutions selection/implementation</td>
<td>Spring 2016</td>
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<tr>
<td>Tolling construction Start</td>
<td>Summer 2016</td>
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<tr>
<td>Begin Tolling</td>
<td>Summer 2017</td>
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Transform66.org