Transform66: Growth of a Regional Express Lanes Network [update graphic]
History of I-66 Inside the Beltway

• 1959: I-66 included on National Interstate map
• 1967: Construction is delayed while Metro is planned for the median of the highway
• 1970: Lawsuit is filed to block construction of I-66, case is dismissed by district court
• 1972: US Circuit Court bars construction until a NEPA document is completed
• 1974: EIS is completed
History of I-66 Inside the Beltway

- 1975: VA preferred design is rejected by USDOT
- 1977: Coleman Decision establishing criteria for construction of I-66
- 1982: Opened to traffic as HOV-4
- 1983: HOV requirements reduced to HOV-3
- 1995: HOV requirements reduced to HOV-2
- 1999: Coleman decision effectively repealed
Studies of I-66 in Northern Virginia

- 1995-1999: Major Investment Study
- 2004-2005: Idea66
- 2012-2013: I-66 Multimodal Study
Upcoming Changes to I-66

- Transportation Planning Board at MWCOG adopted plan in 2009 to modify HOV rules on I-66 both inside and outside the Beltway
  - Increase occupancy requirements from 2 to 3
- Federal rules require ‘limiting or discontinuing’ use of HOV lanes by hybrids when lanes are degraded
  - I-66 corridor has been degraded for a number of years from Beltway to Route 234
- Bus on-shoulder pilot program underway to allow buses to bypass significant congestion points
- Spot improvements in westbound direction
  - Spot improvements #1 and #2 are open to traffic and provide additional lane along many portions of westbound I-66
Transform66: Inside the Beltway

- First major improvements proposed for I-66 Inside the Beltway in 15-20 years
- Proposed project is result of detailed multi-year study undertaken in 2011 to 2013
  - Convert I-66 to dynamic tolling during rush hours in the peak direction
  - Enhance bus service throughout the corridor
  - Support carpooling and other transportation demand management strategies
  - Widen I-66 EB from Dulles Connector Road to Ballston
Benefits of Transform66: Inside the Beltway

• Move 40,000+ more people through the corridor by 2040
• Improve travel time reliability
• Reduce congestion
• Increase travel choices for SOV drivers and transit users
• Improve travel conditions on local roads
### Transform66: Inside the Beltway Person Throughput

<table>
<thead>
<tr>
<th>Location</th>
<th>CLRP+</th>
<th>Refined Package</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beltway</td>
<td>321,522</td>
<td>359,022</td>
<td>37,500+</td>
</tr>
<tr>
<td>West of Glebe</td>
<td>462,658</td>
<td>534,835</td>
<td>72,177+</td>
</tr>
<tr>
<td>Clarendon</td>
<td>526,562</td>
<td>577,448</td>
<td>50,886+</td>
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<tr>
<td>Potomac River</td>
<td>496,015</td>
<td>510,463</td>
<td>14,448+</td>
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</tbody>
</table>
Travel Time Reliability

No-Build vs. Build
Eastbound AM Toll Period
2017 HOV-2+ rides for free

No-Build Speed Variability
HOT-2+ Reliable Speed: 45 MPH+
Congestion Reduction – HB599 Analysis

- HB599 is a Northern Virginia specific process to determine the congestion mitigation impacts of various surface transportation projects

- Northern Virginia Transportation Authority may only use funds on projects evaluated through this process

- Result of legislation sponsored by Delegate LeMunyon in 2012
Congestion Reduction – HB599 Analysis

Factors included in HB599 are as follows:

- 27.9% reduce congestion duration
- 20.3% reduce person hours of delay
- 15.4% reduce congested person hours in autos
- 11.8% reduce congested person hours in transit
- 11.5% reduce transit crowding
- 9.5% increase access to jobs within 45 minutes by car and within 60 minutes by transit
- 3.6% improve emergency mobility
Congestion Reduction – HB599 Analysis

• VDOT NoVA staff and consultants analyzed top scoring projects from first round of NVTA evaluations along with the following:
  – Transform66: Outside the Beltway
  – 8-car Metrorail trains
  – Widening I-66 EB from Dulles Connector Road to Ballston
<table>
<thead>
<tr>
<th>Project</th>
<th>HB599 Score</th>
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</thead>
<tbody>
<tr>
<td>Transform66: Outside the Beltway</td>
<td>80.4</td>
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<tr>
<td>Fairfax County Parkway widening for approximately 23 miles</td>
<td>60.3</td>
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<tr>
<td>8-car Metro trains</td>
<td>47.2</td>
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<td>Transform66: Inside the Beltway</td>
<td>31.5</td>
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<tr>
<td>Godwin Drive Extension</td>
<td>23.4</td>
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<tr>
<td>Route 7 Widening</td>
<td>20.3</td>
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<td>I-66 Inside the Beltway widening from Dulles Connector to Ballston</td>
<td>9.0</td>
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<tr>
<td>Project</td>
<td>Public Funding</td>
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<tr>
<td>---------------------------------</td>
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<tr>
<td>Transform66: Outside the Beltway</td>
<td>$600M</td>
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<tr>
<td>Fairfax County Parkway</td>
<td>$396.1M</td>
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<td>8-car Metro trains</td>
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<td>$55M (net cost is $0)</td>
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<td>$400M</td>
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<tr>
<td>Route 7 Widening</td>
<td>$300M</td>
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<tr>
<td>I-66 Inside widening</td>
<td>$100M</td>
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<tr>
<td>Project</td>
<td>599 Benefit / Cost</td>
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<tr>
<td>--------------------------------------------------</td>
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<tr>
<td>Transform66: Inside the Beltway</td>
<td>0.57</td>
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<tr>
<td>Fairfax County Parkway</td>
<td>0.15</td>
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<td>Transform66: Outside the Beltway</td>
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<tr>
<td>I-66 Inside widening</td>
<td>0.09</td>
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<tr>
<td>Route 7 widening</td>
<td>0.07</td>
</tr>
<tr>
<td>Godwin Drive Extension</td>
<td>0.06</td>
</tr>
</tbody>
</table>
Congestion Reduction – HB599 Analysis

• Reduction in person hours of delay
  – Transform66: Outside – 62,700 hours a day
  – Transform66: Inside – 26,200 hours a day
  – Widen I-66 Inside – 5,700 hours a day

• Reduction in person hours of delay per $1M
  – Transform66: Outside – 104.5 hours per $1M
  – Transform66: Inside – 476.4 hours per $1M
  – Widen I-66 Inside – 57 hours per $1M
Congestion Reduction – HB599 Analysis

- **Transform66: Inside the Beltway** significantly improves the effectiveness of **Transform66: Outside the Beltway**
  - Reduction in person hours of delay increases by ~5,000 hours a day

- **Overall Transform66: Inside the Beltway** is projected to reduce person hours of delay by 31,205 hours a day

- Reduces more than 567.3 person hours of delay per $1M in cost – more than 4X any other evaluated project
Improved Travel Choices

- Allows any single-occupant drivers to legally access I-66 during rush hours in the peak directions
  - HOV requirements have been in place since road opened to traffic in 1982
- Provides expanded local and commuter bus routes and service along I-66 corridor
  - Includes service to Loudoun, Fairfax and Prince William outside of the Beltway
- Provides support for carpooling and transportation demand management
Conditions on Local Streets

No-Build vs. Build - Eastbound AM
2017 HOV-2+ Rides for free

LEGEND
- No significant change
- Increase
- Decrease

Office of the Secretary of Transportation

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No-Build vs. Build – Westbound PM
2017 HOV-2+ Rides for free

Conditions on Local Streets

LEGEND

- No significant change
- Increase
- Decrease

Office of the SECRETARY of TRANSPORTATION
Tolling Component

• Tolls apply on weekdays during the following periods:
  – Eastbound from 5:30am to 9:30am
  – Westbound from 3:00pm to 7:00pm

• Average toll is expected to be ~$6 a trip

• Toll applies to all users except for:
  – Carpoolers meeting applicable occupancy requirements
  – Vanpools
  – Transit buses
  – Motorcycles
Project Implementation

• Agreement for 40 years between CTB and NVTC
• Implemented jointly by VDOT and NVTC
• VDOT will be responsible for:
  – Operations and maintenance
  – Tolling
  – Roadway improvements
• NVTC will be responsible for:
  – Selecting multimodal improvements
  – Ensuring compliance with law and agreement
  – Reporting on use of funds
Framework Agreement

- Estimated toll revenue in 2018 is $18M
- Estimated net toll revenue in 2018 is $8-10M and increases over time
- Provides that funds may be used for the following:
  - Cost and expenses of tolling operation and maintenance
  - Repayment of the Toll Facilities Revolving Account for the design and construction of tolling operation
  - Multimodal components selected by the Northern Virginia Transportation Commission, including financing costs (not to exceed 40% of net revenues) and operating cost of components (not to exceed 20% of net revenues)
  - Cost and expenses of widening I-66 eastbound from Dulles Connector Road to Ballston, if triggers are met
Framework Agreement

• NVTC may select multimodal improvements that:
  – Benefit the toll-paying users of I-66 inside the Beltway
  – Demonstrate the ability to move more people through the corridor
  – Serve users of I-66 inside the Beltway that reside both inside and outside the Beltway
  – Can be implemented within 5 years of funding

• Board has authority to determine whether components comply with terms of MOA and related laws

• If a component is selected in accordance with MOA then Board shall program the component
Framework Agreement

• NVTC is required to develop a process for selecting components that includes:
  – A Region-wide solicitation open to all local governments and transit operators within Planning District 8
  – Public hearings
  – An evaluation and prioritization process for component

• NVTC is required to report on the effectiveness of selected components after an initial ramp up period

• Components that under perform will be evaluated to determine actions to improve performance or redeploy assets
Framework Agreement

• Board may set aside up to 40% of net toll revenues to finance widening of I-66 eastbound between Dulles Connector Road and Ballston if evaluation finds one or both of the triggers are met

• Evaluations start at the later of 5 years after the start of tolling or 2 years after the increase in occupancy requirements

• If triggers are not met, evaluations will take place every two years until the triggers are met or the end of the MOA term
Framework Agreement

Widening triggers will be evaluated between 5am and 10am on weekdays over 180 day period

• Average vehicle operating speed eastbound on I-66 between Dulles Connector Road and Ballston does not maintain 50 mph for 90% of the time

• Average travel times increase 10% or more on the following:
  – Route 50 from I-495 to Glebe Road
  – Route 29 from I-495 to Glebe Road
  – Route 7 from I-66 to Route 50
  – Washington Boulevard from I-66 to Glebe Road
Framework Agreement

- Board retains the right to expand the hours of tolling during the term of the MOA
- VDOT will continue to provide for the existing operations and maintenance of the facility through HMOF revenues
- VDOT may suspend tolling during an emergency
Public Outreach

**Outreach Numbers**

- 12 Public Information Meetings (since 2011)
- 76 presentations to elected officials, agencies and localities (in 2015)
- 17 presentations to Chambers of Commerce, homeowners and civic associations, and other community groups (in 2015)

**Outreach and Communications Tools**

- Briefings and coordination with key stakeholders
- Project website
- Email and Electronic Marketing to stakeholder database of more than 4,500
- Proactive media outreach
Support for Transform66: Inside the Beltway

- Fairfax County Chamber of Commerce
- Loudoun County Chamber of Commerce
- Arlington County Chamber of Commerce
- Arlington County
- City of Falls Church
- Transportation Planning Board at MWCOG
Transform66: Inside the Beltway

- No formal position
  - Fairfax County
  - City of Alexandria
  - Metropolitan Washington Airports Authority

- Expressed concerns and/or opposition
  - Loudoun County
  - Prince William County
  - Fauquier County
  - City of Manassas Park
<table>
<thead>
<tr>
<th>Key Milestones</th>
<th>Begin Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public outreach</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Working Group/Technical Stakeholder Advisory Group meetings</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Design Public Hearings</td>
<td>January 25, 26, 27 2016</td>
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<tr>
<td>Group 1 Multimodal Component Selection</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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