

# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM BASIC PROJECT INFORMATION

- 1. Submitting Agency: **Virginia Department of Transportation**
- 2. Secondary Agency: **Virginia Department of Rail & Public Transportation**
- 3. Agency Project ID: **0066-96A-297, P101    UPC#105500,    UPC#110496**
- 4. Project Type:
  - Interstate     Primary     Secondary     Urban     Bridge     Bike/Ped
  - Transit     CMAQ     ITS     Enhancement     Other
  - Federal Lands Highways Program     Human Service Transportation Coordination
  - TERMS
- 5. Category:
  - System Expansion;     System Maintenance;     Operational Program;
  - Study;     Other
- 6. Project Name: **I-66 Corridor Improvements Project Outside the Beltway**  
Prefix Route Name Modifier
- 7. Facility: **I-66**
- 8. From: **US 15, Prince William County**
- 9. To: **I-495, Fairfax County**



## 10. Description:

The Commonwealth's I-66 Corridor Improvements Project ("Project") outside the Beltway was first submitted for the 2015 CLRP Air Quality Analysis, and a subsequent FY16 submission provided minor modifications to the project, based on the Commonwealth Transportation Board's (CTB's) selection of a Preferred Alternative on October 27, 2015. The adopted 2016 CLRP amendment that includes these modifications was approved by the TPB on November 16, 2016.

The project CTB's Preferred Alternative in the most recently adopted CLRP includes the following elements:

- Three general purpose lanes in each direction between US 15 in Haymarket and I-495 / Capital Beltway (with auxiliary lanes between interchanges where needed: between US 29 Gainesville and VA 234 Bypass / Prince William Parkway; and between US 29 Centreville and I-495 / Capital Beltway);
- Two barrier-separated managed express lanes in each direction (the existing high-occupancy vehicle (HOV) lane will be converted to an express lane and one new express lane will be added);
- A phased approach to construction that includes express lanes from Gainesville to I-495 in the first phase (opening in 2022), with the remaining portion of the corridor express lanes between Gainesville and Haymarket constructed by 2040. In addition, a typical section that provides space in the median for future transit will be phased as well, between US 15 Haymarket and US 29 Centreville;
- New or expanded commuter park and ride lots in the corridor;
- New high-frequency bus service with more predictable travel times; and
- Direct access ramps to and from the Express Lanes.

Under the P3 project development process, the Virginia Department of Transportation (the Department) has partnered with a P3 developer to design, construct, and operate the I-66 Express Lanes. Modifications for future direct access ramps to and from the Express Lanes, under two potential access option scenarios, are being considered by the P3 developer and the Department. "Access Update Option A" reflects the proposed access point configuration included in the P3 developer's technical proposal for the project. "Access Update Option B" includes the access points in Update A, plus potential additional access points that are under consideration by the P3 developer and the Department:

"Access Update Option A":

- Haymarket - west of US 15 – to / from east and west\*
- Gainesville - US 29 – for Phase 1, the eastbound entrance from the General Purpose lanes to the I-66 Express lanes and the westbound exit from the I-66 Express lanes to the General Purpose lanes are located east of US 29
- Gainesville - at University Boulevard – to / from east
- VA 234 Bypass / Prince William Parkway – to / from west\*
- Cushing Road Park and Ride Lot / VA 234 Bypass – to / from east\*
- Manassas - Balls Ford Road Park and Ride Lot – to / from east
- East of Sudley Road - I-66 mainline transition ramps to allow (i) eastbound movement from General Purpose lanes to I-66 Express lanes

and (ii) westbound movement from I-66 Express lanes to General Purpose lanes

- Centreville – VA 28 – to / from east and west (access between west and south excluded)
- Centreville – I-66 mainline transition ramps to allow all movements between I-66 General Purpose lanes and I-66 Express lanes
- Centreville – Stringfellow Road – to / from east
- Fair Oaks – Monument Drive – to / from east and west
- Fairfax – US 50 – to / from east (I-66) and northwest (US 50)
- Fairfax – VA 123 – to / from east and west
- Vienna – Vaden Drive – to / from west
- Dunn Loring – from Eastbound I-66 General Purpose lanes to Eastbound I-66 Express lanes
- I-495 interchange – all movements towards the west of the I-495 interchange are provided: (i) from northbound I-495 General Purpose lanes and I-495 Express lanes to westbound I-66 Express lanes, (ii) from southbound I-495 General Purpose lanes and I-495 Express lanes to westbound I-66 Express lanes, (iii) from eastbound I-66 Express lanes to northbound I-495 General Purpose lanes and I-495 Express lanes and (iv) from eastbound I-66 Express lanes to southbound I-495 General Purpose lanes and I-495 Express lanes

*\* Ramps implemented in ultimate phase of Preferred Alternative by 2040; all other access is part of Phase 1, constructed by 2022.*

“Access Update Option B”:

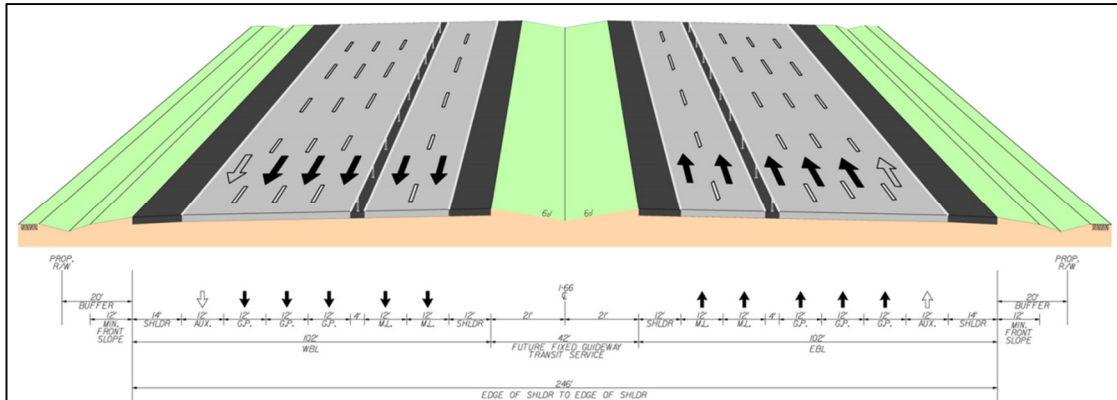
Includes all access points in Access Update Option A plus:

- *VA 234 Bypass / Prince William Parkway – to / from east*
- *Centreville – West of US29 – I-66 mainline transition ramps to allow (i) eastbound movement from I-66 Express lanes to General Purpose lanes and (ii) westbound movement from General Purpose lanes to I-66 Express lanes*
- *Fairfax – VA 286 – to west (I-66) from south (VA 286)*
- *Fairfax – US 50 – to / from east (I-66) and southeast (US 50)*
- *East of US 50 - I-66 mainline transition ramps to allow (i) eastbound movement from eastbound General Purpose lanes to I-66 Express lanes and (ii) westbound movement from I-66 Express lanes to General Purpose lanes*
- *Nutley Street - to / from east and west*

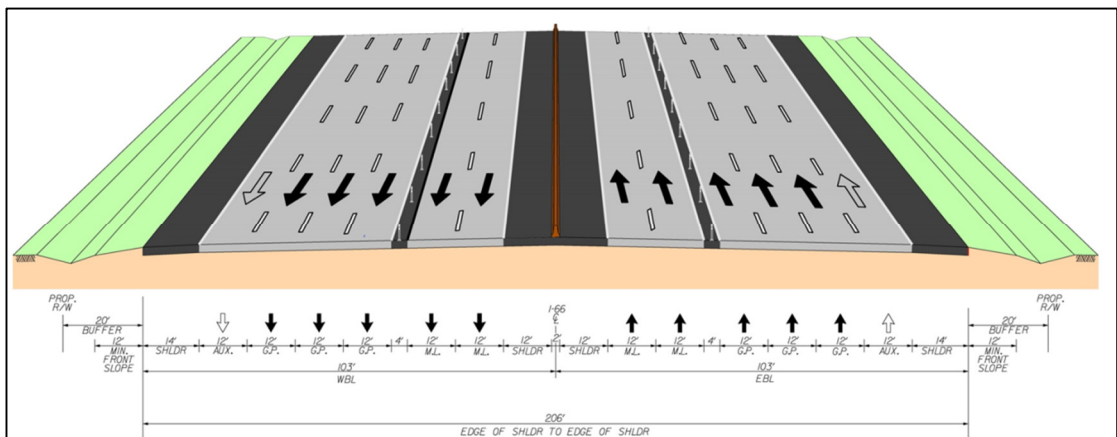
*Ramps shown under Update Option B implemented in Phase 1, by 2022.*

Below are two typical sections that will be implemented along the corridor. The first typical section illustrates the alternative selected by the Commonwealth Transportation Board for the Preferred Alternative. The second typical section illustrates the alternative that will be initially utilized as part of a phased construction approach, from east of US 29 Gainesville to US 29 Centreville only, under Phase 1. Once the entire project is constructed, the cross section will be reconfigured where needed to allow for future transit.

*Preferred Alternative – Flexible Barrier with Buffer & Median reserved for Future Center Transit*



*Phase 1 (Opening Year Configuration) – Flexible Barrier with Buffer and No Median Between US 29 Gainesville and US 29 Centreville*



Access to the I-66 Express Lanes will be available to automobiles, motorcycles, emergency vehicles, buses and transit vehicles, and multi-axle vehicles. A high-level preliminary assessment of multi-axle vehicles in the I-66 Express Lanes has been performed by VDOT<sup>1</sup>. Heavy-trucks with two or more trailers will not be allowed to use the I-66 Express Lanes. Vehicles with three or more occupants and motorcycles would travel on the Express Lanes for free, as per the code of the Commonwealth of Virginia and Federal law.

The facility will be operated and enforced for HOV3+ occupancy and toll payment in a manner that complies with the statutory requirements of the Commonwealth. Other vehicles not meeting the occupancy requirement of

<sup>1</sup> VDOT White Paper "Preliminary analysis of multi-axle vehicles in the I-66 Express lanes between Haymarket and the Beltway"; October 5, 2016.

3+ will pay a toll, using electronic toll collection equipment, at a rate that will vary based on congestion, to ensure free-flow conditions as specified by Federal regulations. Multi-axle vehicle toll rates are required to be not less than five times the two-axle toll rate during peak periods and not less than three times the two-axle rate during all other times.

Allowing HOV-3's to ride free is consistent with this policy change, and will also match the High Occupancy Toll lane occupancy requirement on I-495 and I-95. The Project expands the NoVA network of Express lanes by connecting to the I-495 Express Lanes Project, which also connects to the newly constructed I-95 Express Lanes.

The project includes a robust transit component, consisting of new and expanded commuter bus services providing one-seat rides between park and ride lots and major regional destinations on I-66 to complement Metrorail in the corridor. New and expanded park and ride lots are included throughout the corridor, with easy or direct access to the managed lanes. Finally, to promote and incentivize alternative modes in the corridor, new and enhanced corridor transportation demand management strategies will be included as part of the project.

Bicycle and Pedestrian accommodations in the corridor are included as part of the Preferred Alternative, and will be consistent with VDOT's Policy for Integrating Bicycle and Pedestrian Accommodations ([www.virginiadot.org/bikepedpolicy/](http://www.virginiadot.org/bikepedpolicy/)).

Project construction, operations and maintenance will be procured using Virginia's Public-Private Transportation Act (PPTA) legislation leading to the selection of a private consortium ("P3 Developer"). A comprehensive agreement will ultimately outline all of the terms and conditions of the Public-Private Partnership.

### **Tolling Policy**

Express lanes use dynamic pricing to maintain free-flowing conditions for all users, even during rush hour. The toll rates will vary throughout the day corresponding to demand and congestion levels. Toll prices will be adjusted in response to the level of traffic to ensure free flowing operations.

Dynamic message signs will provide drivers with current toll rates so they can choose whether or not to use the lanes. Toll collection on the Express Lanes will be totally electronic. There will be no toll booths. The dynamic message signs will be supplemented by other notification/communications methods to ensure all users, including transit operators, have as much advance notice of traffic conditions as is possible.

MAP-21 mandates strict performance standards which are intended to ensure free-flowing conditions on the Express lanes. The proposed Express lanes

project will include performance monitoring as an integral part of the project and ensure that the MAP-21 mandated performance standards are complied with as a minimum. More specifically, the project will meet all applicable requirements of MAP-21 regarding "HOV Facility Management, Operation, Monitoring, and Enforcement" as described in Section 166 of Title 23 U.S.C., inclusive of the amendments (deletions, insertions and additions) prescribed by MAP-21 Section 1514 "HOV FACILITIES". This includes a minimum average operating speed of 45 mph for 90% of the time over a specific period of time during the peak period. The I-66 Express Lanes will have a posted speed limit of 70 mph. The general purpose lanes have posted speeds ranging from 55 mph – 65 mph throughout the corridor.

### **Schedule**

Construction of the Phase 1 Project is projected to begin in in late 2017. The facility is expected to enter operations in 2022. The remaining elements of the Preferred Alternative will be implemented by 2040.

### **Federal Environmental Review ("NEPA") Process**

The completed Tier 2 Environmental Assessment for the Preferred Alternative built upon and included a combination of concepts identified in the Tier 1 Environmental Impact Statement. It evaluated site-specific conditions and potential effects the proposed improvements would have on air quality, noise, neighborhoods, parks, recreation areas, historic properties, wetlands and streams. The Tier 2 Final Environmental Assessment was approved on June 21, 2016, and FHWA issued a Finding of No Significant Impact on June 22, 2016. A reevaluation of the approved Environmental Assessment for the proposed project modifications, in compliance with Federal (NEPA) and state regulations, is planned to be completed in late 2017.

### **Transportation Management Plan**

As a matter of policy, practice and a reflection the agency's commitment to safety, VDOT adopts Transportation Management Plans for its construction projects. Such Plans are also required by FHWA for large projects such as this initiative. The congestion mitigation plans used for projects such as the Springfield Interchange, the I-495 Express Lanes, and the I-95 Express Lanes have been very successful in managing traffic during construction. VDOT and the P3 Developer will similarly implement a robust Transportation Management Plan for this Project.

### **Coordination with Other Projects in the Corridor**

This project is being coordinated with other active projects in the corridor such as:

- Vaden Drive ramp improvements (now incorporated into I-66 project)

- Route 28 / I-66 interchange improvements (now incorporated into I-66 project)
- US 15 / I-66 interchange improvements

### **Financial Plan**

The total cost for the proposed Project is estimated to be approximately \$2 – 3 billion in year of expenditure dollars. Funding sources for the Project will include a combination of private and public equity and third party debt, including private bank loans and/or Private Activity Bonds, with TIFIA funding as a form of subordinated debt.

The P3 Developer will be fully authorized to toll the facility, which will serve to pay debt service, operating and maintenance costs, state police costs, transit costs, support for future corridor improvements and return on equity. Toll revenue will be the main source of revenue. The Commonwealth entered into a Comprehensive Agreement with the P3 Developer, authorizing the P3 Developer to raise the necessary funds to construct the Project, on December 8, 2016.

### **Stakeholder Outreach**

A Stakeholder Technical Advisory Group (STAG) has been established and meets regularly. The STAG provides the opportunity for direct engagement with various groups along the corridor, including local jurisdictions, environmental resource agencies, transit service providers, and various other agencies. Stakeholder and public outreach is a high priority for the I-66 project team. A Transit/TDM Technical Advisory Group (TTAG) has been actively engaged in project development. There have been numerous opportunities for the public to learn more about the Project, as well as provide comments, through public meetings, the project website, and community dialogs in addition to other items. The project outreach has included 2 sets of Public Information Meetings and two sets of Public Hearings. VDOT has had over 300 meetings with various stakeholders so far and this will continue throughout the duration of the project. Public Information Meetings and a Design Public Hearing are planned in 2017.

- 11. Projected Completion Year: **2022 for Phase 1 / 2040 for Preferred Alternative**
- 12. Project Manager: **Ms. Susan Shaw, P.E.**
- 13. Project Manager E-Mail: **[susan.shaw@VDOT.Virginia.gov](mailto:susan.shaw@VDOT.Virginia.gov)**
- 14. Project Information URL: **<http://www.transform66.org>**
- 15. Total Miles: **23 miles for Phase 1 / 26 miles for Preferred Alternative**
- 16. Schematic: **See figures in items 9 and 10 above, as well as attached roll maps.**

17. Documentation: **The graphics included in the response to items 9 and 10 above have been uploaded to allow a more readable version. All project documentation may be accessed electronically at: <http://outside.transform66.org/>**

18. Jurisdictions: **Fairfax County, Prince William County**

19. Baseline Cost (in Thousands): **\$2,000,000 - \$3,000,000 (approximately 2 to 3 \$billion) combined public & private cost estimate as of 11/10/2014**

20. Amended Cost (in Thousands): **\$2,400,000 (Phase 1) / approximately \$3,100,000 (Preferred Alternatives) - combined public & private cost as of 2/23/2017**

21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

### **Regional Policy Framework**

#### **22. Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

Single Driver  Carpool/HOV  Metrorail  Commuter Rail  Streetcar/Light Rail  
 BRT  Express/Commuter bus  Metrobus  Local Bus  Bicycling  Walking  Other

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)  Yes  No

#### **23. Promote Dynamic Activity Centers**

Does this project begin or end in an Activity Center?  Yes  No

Does this project connect two or more Activity Centers?  Yes  No

Does this project promote non-auto travel within one or more Activity Centers?  Yes  No

#### **24. Ensure System Maintenance, Preservation, and Safety**

Does this project contribute to enhanced system maintenance, preservation, or safety?

Yes  No

#### **25. Maximize Operational Effectiveness and Safety**

Does this project reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?  Yes  No

Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

Yes  No

#### **26. Protect and Enhance the Natural Environment**

Is this project expected to contribute to reductions in emissions of criteria pollutants and/or greenhouse gases?  Yes  No

#### **27. Support Interregional and International Travel and Commerce**

Please identify all freight carrier modes that this project enhances, supports, or promotes.

Long-Haul Truck  Local Delivery  Rail  Air



Please identify all passenger carrier modes that this project enhances, supports, or promotes.

Air  Amtrak intercity passenger rail  Intercity bus

## 28. Additional Policy Framework

In the box below, please provide any additional information that describes how this project further supports or advances these and other regional goals.

VDOT and DRPT's Transforming I-66 Outside the Beltway project addresses several RTPP goals, as noted above. The project will be particularly effective in helping the Region achieve RTPP Goal # 1: **Provide a Comprehensive Range of Transportation Options.** This innovative project will combine capacity improvements with managed lanes, congestion pricing, intelligent transportation systems, new transit services, ride-sharing, new and expanded park and ride lots and bicycle and pedestrian facilities improvements to expand the range of transportation alternatives available to travelers. Moreover, the project is being designed to reserve opportunities for future westward extension of Metrorail or other high quality transit services. The project addresses the four major problems cited in Goal Statement #1: roadway congestion, transit crowding, inadequate bus service, and unsafe walking and biking.

The Preferred Alternative, as approved by the Commonwealth Transportation Board, is the culmination of a process that began with the development of the *Draft Tier1 Environmental Impact Statement* for I-66 Outside the Beltway. This document concluded that there was not a "single mode" solution to the problems associated with I-66. Adding enough freeway lanes to insure reliable travel was not feasible, while it was determined that the mix of modes, strategies and technologies embodied in what became the Preferred Alternative would provide improved and expanded travel opportunities.

## MAP-21 PLANNING FACTORS

29. Please identify any and all planning factors that are addressed by this project:

a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.

- i. Is this project being proposed specifically to address a safety issue? Yes;  No
- ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d.  Increase **accessibility and mobility** of people.

e.  Increase accessibility and mobility of **freight**.

f.  Protect and enhance the **environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h.  Promote efficient system **management and operation**.

i.  Emphasize the **preservation** of the existing transportation system.

## ENVIRONMENTAL MITIGATION

30. Have any potential mitigation activities been identified for this project?  Yes;  No

a. If yes, what types of mitigation activities have been identified?

Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;

Vibrations;

Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## CONGESTION MANAGEMENT INFORMATION

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program?

Yes;  No

b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

The number of lane-miles added to the highway system by the project totals less than one lane-mile

The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

- The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
- The project consists of preliminary studies or engineering only, and is not funded for construction
- The construction costs for the project are less than \$10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, [click here](#) to open a blank Congestion Management Documentation Form.

## **RECORD MANAGEMENT**

33. Completed Year:

34.  Project is being withdrawn from the CLRP.

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On:

38. Last Updated by:

39. Last Updated On:

40. Comments: