TPB Technical Committee
October 2, 2015
Item #2

ITEM 7 – Information

September 16, 2015

Overview of the Draft 2015 CLRP Amendment

Staff Recommendation: Receive briefing

Issues: None

Background: The Board will be briefed on the Draft 2015 Amendment to the Constrained Long-Range Transportation Plan (CLRP), which will be released for public comment on September 10. After the 30-day comment period, the TPB will be asked to approve the 2015 CLRP Amendment at its October 21 meeting.

MEMORANDUM

TO: Transportation Planning Board

FROM: Andrew Austin, Transportation Planner

SUBJECT: Briefing on the Draft 2015 CLRP Amendment

DATE: September 10, 2015

In November 2014, the TPB released the Call for Projects for the CLRP and the FY 2015-2020 TIP. The projects submitted by each agency were approved for by the TPB for inclusion in the Air Quality Conformity Analysis in February 2015. Since then the travel demand modeling and air quality analysis has been completed and the CLRP has been found to meet the air quality requirements set forth by the EPA.

The capital improvement projects that have impacts on the capacity of the region's road and transit systems are listed in the "2015 CLRP and FY 2015-2020 TIP Air Quality Conformity Inputs" table, included in Appendix B of the Air Quality Conformity Analysis report. That table includes more than 500 projects, and highlights almost 200 changes to limits and/or completion dates for previously approved projects or new projects. Included with this memo is a summary of the major new projects and changes to existing projects, summarized below.

Summary of Major Additions and Changes to Projects in the CLRP

In the District of Columbia, DDOT proposes to add ten dedicated bike lane projects to its existing bicycle network. These projects will remove one or more lanes for vehicular traffic on approximately 9 miles of streets throughout the city. Description forms for these projects are included in Attachment A.

DDOT also proposes to remove the Benning Road Streetcar Spur project.

No new major projects are proposed this year in Maryland.

In Virginia, VDOT proposes to add two new projects on I-66. The first project, I-66 Multimodal Improvements inside the Beltway, would convert I-66 to a managed Express Lanes facility, with dynamic, congestion-based tolling in both directions during the morning and evening peak periods. This project also includes enhanced bus services, expanded bicycle and pedestrian facilities, and a widening of I-66 from N. Fairfax Drive to I-495.

The second project would reconfigure I-66 outside the Beltway between I-495 and US Route 15 to have three general-purpose lanes and two managed Express lanes in each direction. This project will also include a new high-frequency bus service and additional or expanded commuter park-and-ride lots. Description forms for these projects are included in Attachment A.

On behalf of the Virginia Department of Rail and Public Transit, VDOT proposes to implement a Bus Rapid Transit (BRT) system that would run in a dedicated Transitway along US Route 1 between Huntington Metro Station and Woodbridge. This project was included in the Air Quality Conformity inputs that were released for public comment in January of this year, but this project had not been highlighted as a "major addition" at that time due to a lack of detailed information.

At the request of Arlington County, VDOT proposes to remove the Columbia Pike Streetcar and Crystal City Streetcar projects due to the recent withdrawal of funding support for these two projects by Arlington County.

No new major additional capacity projects are proposed by WMATA at this time.

Exhibit 1 on the following pages provides a further summary of the Major Additions and Changes including maps, costs and completion dates. A complete listing of proposed additions and changes to all projects in the CLRP can be found in the 2015 CLRP and the FY 2015-2020 TIP Air Quality Conformity Inputs table, included in Appendix B of the Air Quality Conformity Analysis report. These documents can be found online at www.mwcog.org/CLRP2015.

Public Comment on the CLRP and TIP

At the September 10 meeting of the Citizens Advisory Committee, the Draft 2015 Amendment to the CLRP and FY 2015-2020 TIP was released for a 30 day public comment period, along with the Air Quality Conformity Analysis and the Performance Analysis. The comment period will close on Saturday, October 10. Interested parties may submit their comments via any of these means:

- Online at www.mwcog.org/TPBcomment
- Via email at TPBcomment@mwcog.org
- By phone at (202) 962-3262, TDD: (202) 962-3213

The TPB will be asked to approve the 2015 Amendment to the CLRP at its meeting on October 21.

Exhibit 1: Summary of Major Additions and Changes for the 2015 CLRP Amendment

District of Columbia

Dedicated Bike Lanes, Citywide

Length: 9 miles

Complete: 2015

Cost: $470,000

The District Department of Transportation (DDOT) proposes to add a series of dedicated bike lane projects that will remove one or more lanes for vehicular traffic on 10 different roadways by reducing lanes as follows:

a. 4th St. SW, M St. to P St.
4 to 2 lanes

b. 6th St. NE, Florida Ave. to K St.
2 to 1 lane

c. 7th St. NW, New York Ave. to N St.
4 to 2 lanes

d. 12th St. NW, Pennsylvania Ave. to Massachusetts Ave.
4 to 3 lanes

e. 14th St. NW, Florida Ave. to Columbia Rd.
4 to 2 lanes

f. Brentwood Pkwy. NE, 6th St./Penn St. to 9th St.
4 to 2 lanes

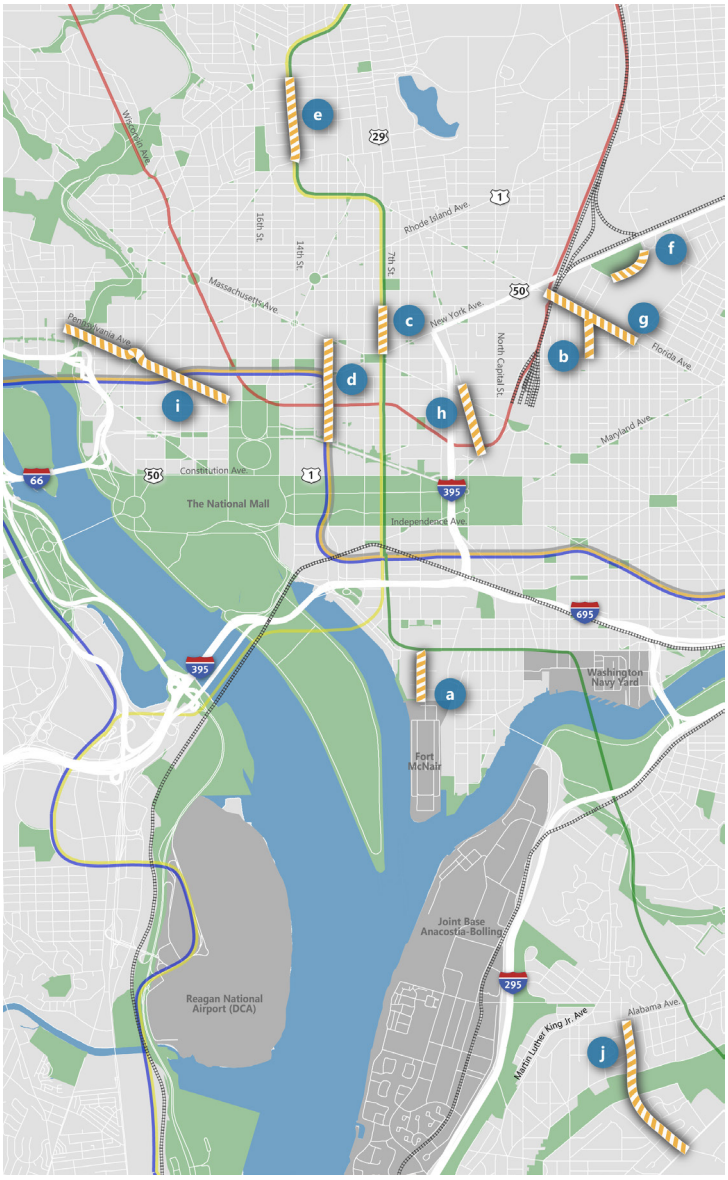
g. Florida Ave. NE, 2nd St. to West Virginia Ave.
6 to 4 or 5 lanes

h. New Jersey Ave. NW, H St. to Louisiana Ave.
4 to 2 lanes

i. Pennsylvania Ave. NW, 17th St. to 29th St.
4/6 to 2 or 4 lanes

j. Wheeler Rd. SE, Alabama Ave. to Southern Ave.
4 to 2 lanes

See description forms on pages A1-A11 of Attachment A for more information.



Remove: Benning Road Streetcar Spur

The 2014 Update to the CLRP included the addition of a streetcar spur line running from Benning Rd. along Minnesota Ave. to the Minnesota Ave. Metro Station. This project is being withdrawn from the CLRP.

Exhibit 1: Summary of Major Additions and Changes for the 2015 CLRP Amendment

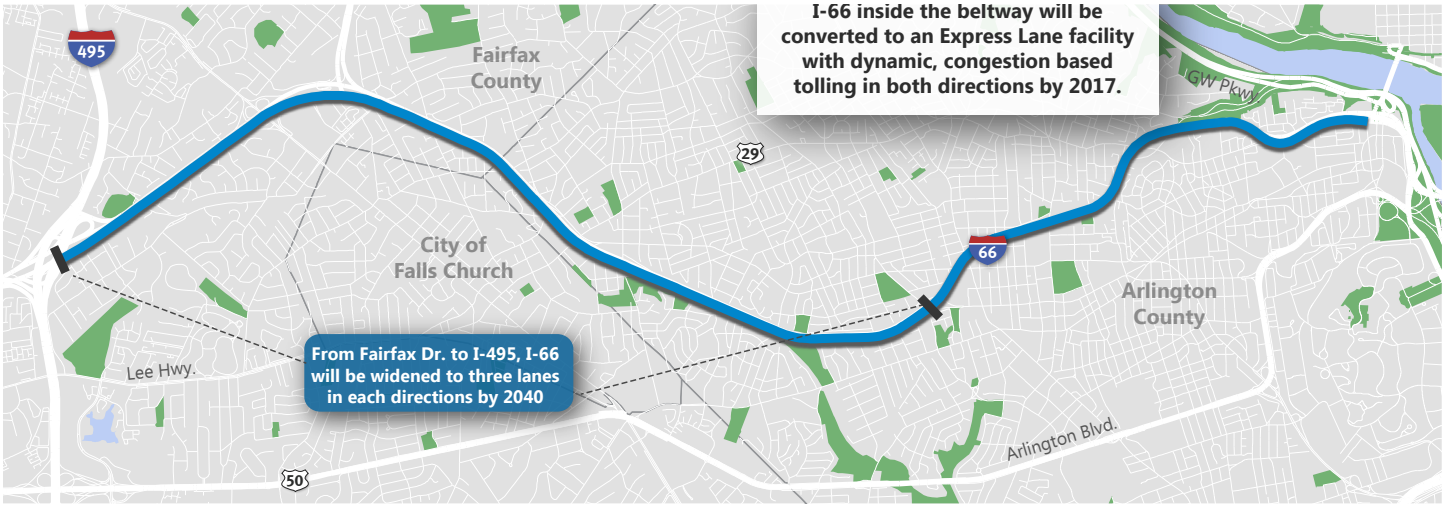
VIRGINIA

I-66 Multimodal Improvement Project, Inside the Beltway US Route 29 in Rosslyn to I-495

Length: 10 miles

Complete: 2017, 2040

Cost: $350 million



The Virginia Department of Transportation (VDOT) proposes to convert I-66 inside the Capital Beltway into a managed express lanes facility with dynamic, congestion-based tolling for all vehicles with less than three occupants, in both directions during the morning and evening peak periods. VDOT plans to implement this conversion by 2017. VDOT also proposes widening I-66 to 3 lanes in both directions between Fairfax Dr. and I-495 (and from 3 to 4 lanes on eastbound I-66 from the Dulles Toll Road to Washington Blvd.) The widening is projected to be complete by 2040.

VDOT proposes to implement a number of multimodal improvements with this project, including enhanced bus service and completion of elements of the bicycle and pedestrian network around the corridor. Tolls from the managed express lanes will be used to fund further multimodal improvements.

The currently approved CLRP includes an assumption that the existing HOV requirement on I-66 inside the Beltway would increase from 2 to 3 occupants in 2020. This proposed project would advance that requirement to 2017 inside the Beltway. The CLRP also currently includes two spot improvement projects that provide additional lanes on westbound I-66 between Westmoreland Dr./Washington Blvd. and Haycock Rd./Dulless Access Highway (complete in 2015), and between Lee Highway/Spout Run and Glebe Rd. (complete in 2020).

See the CLRP Project Description Form and supplemental materials provided by VDOT on pages A13 - A24 in Attachment A for more information.

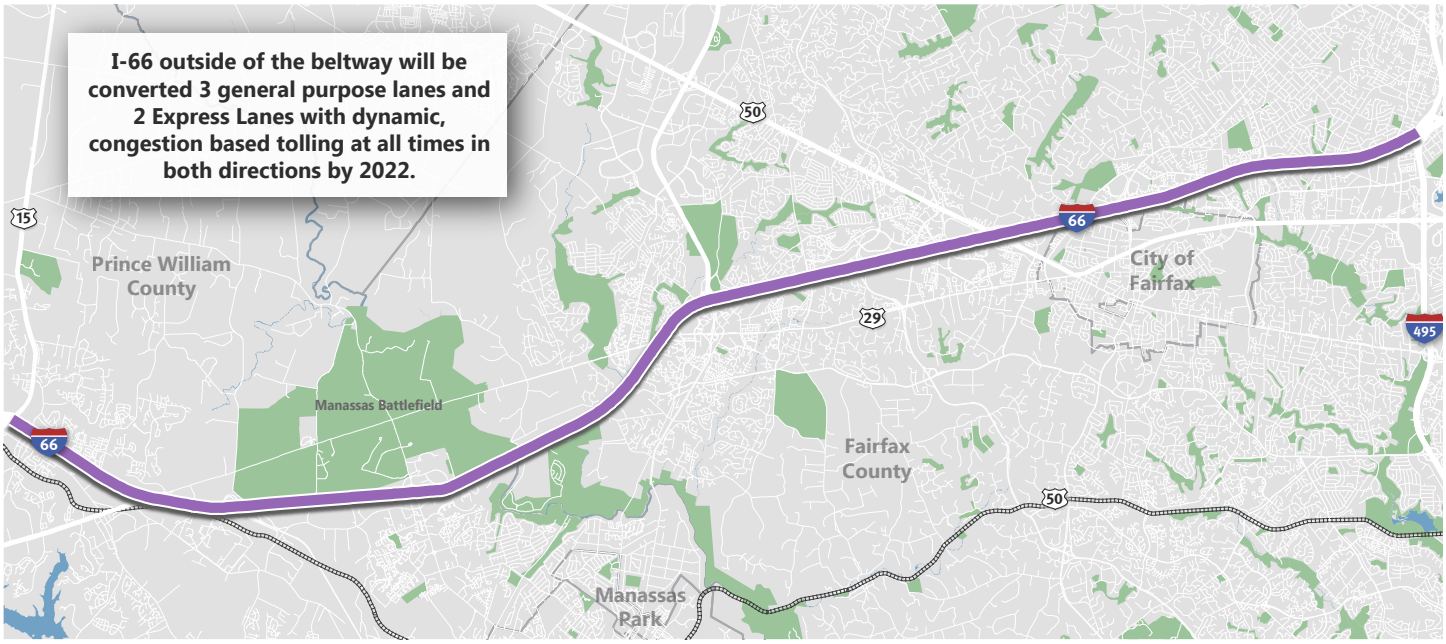
Exhibit 1: Summary of Major Additions and Changes for the 2015 CLRP Amendment

I-66 Corridor Improvements outside the Capital Beltway
I-495 to US Route 15 in Prince William County

Length: 25 miles

Complete: 2022

Cost: $2-3 billion



VDOT proposes to reconfigure I-66 outside the Capital Beltway to have two managed express lanes and three general purpose lanes in each direction. Please see the 2015 CLRP Air Quality Conformity Inputs table for further details on lane configurations. The managed express lanes would use dynamic, congestion-based tolling for vehicles with less than 3 occupants at all times to maintain free-flow conditions.

VDOT has proposed two alternative sets of access and egress points between the express lanes and the general purpose lanes. Both alternatives (A and B) are detailed in the Air Quality Conformity Inputs table and will be analyzed separately.

Multimodal aspects of the proposed project include implementation of a new high-frequency bus service and the construction of new, and expansion of existing commuter park-and-ride lots.

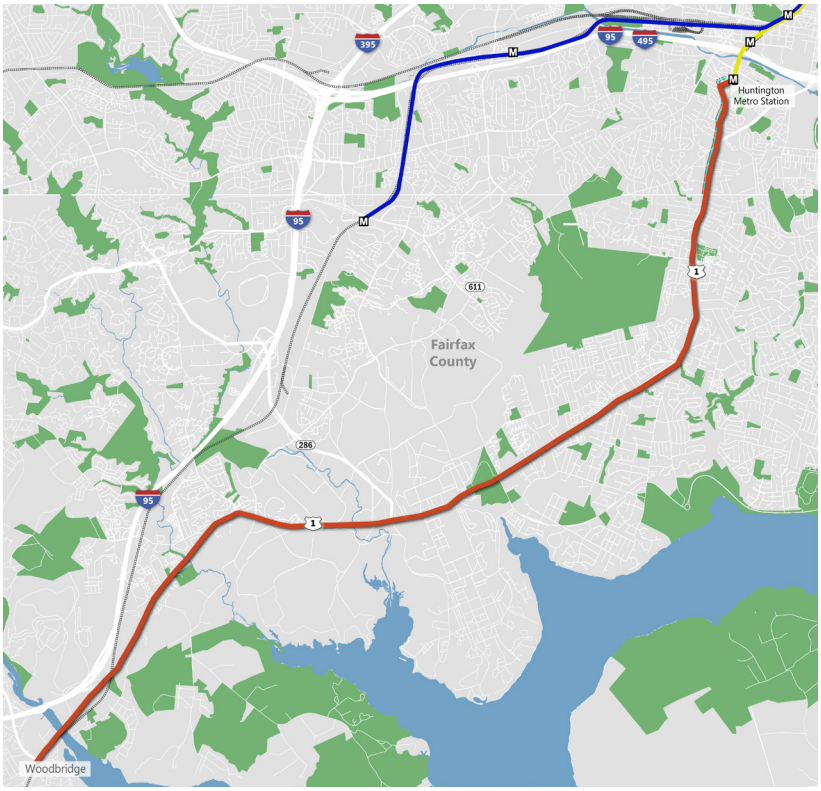
See the CLRP Project Description Form and supplemental materials provided by VDOT on pages A25 - A40 in Attachment A for more information.

Remove: Columbia Pike Streetcar and Crystal City Streetcar Projects

The Columbia Pike Streetcar project between Skyline Center and Pentagon City was added to the CLRP in 2008 and was scheduled to be complete in 2017. The Crystal City Streetcar from the Pentagon City Metro Station to Four Mile Run at the Alexandria city line was added in 2011 and was projected to be complete by 2019. Due to recent policy and funding changes in Arlington County, both projects are proposed for removal.

US 1, Richmond Highway Bus Rapid Transit
Huntington Metro Station to Woodbridge VRE Station

Length: 15 miles
Complete: 2032
Cost: $1 billion



VDOT is proposing to implement a Bus Rapid Transit (BRT) system in three phases. The first phase will run from the Huntington Metro Station via North Kings Highway to US 1, Richmond Highway where it will run on a dedicated transitway located in the median to Hybla Valley. This phase is scheduled to be complete in 2026. The second phase would extend BRT service on a dedicated, median transitway to Fort Belvoir by 2028. The third phase extends the dedicated transitway and BRT service to the Woodbridge VRE Station. This segment is expected to be complete in 2032. The project will also include a 10-foot shared use path on both sides of US Route 1.

See the CLRP Project Description Form on page A41 in Attachment A for more information.

Attachment A

Project Description Forms and Supplemental Materials

BASIC PROJECT INFORMATION

1. Submitting Agency: DDOT
2. Secondary Agency:
3. Agency Project ID:
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: **Dedicated Bike Lanes, Citywide**

	Prefix	Route	Name	Modifier
7. Facility:			See facilities and limits in description below	
8. From:				
9. To:				

10. Description:

4th Street SW from M Street to P Street

This project will reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes to two lanes with a center turn lane and bicycle lanes.
Length: 0.3 mile
Cost $10,000

6th Street NE from Florida Avenue to K Street

This project will implement recommendations from the recent Florida Ave study. It will reduce roadway capacity through the conversion of the existing roadway from two-way to one-way operation with one general purpose travel lane and two-way protected bicycle lanes on the east side of the road.
Length: 0.26 mile
Cost: $30,000

7th Street NW from New York Avenue to N Street

This project will reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes to two lanes with a center turn lane and bicycle lanes.
Length: 0.3 mile
Cost: $20,000

12th Street NW from Pennsylvania Avenue to Massachusetts Avenue

12th St is a four lane, one-way northbound road with two rush-hour restricted parking lanes. This project will reduce rush-hour roadway capacity by one lane by changing the east side rush-hour restricted parking lane to full-time parking and adding a bicycle lane.
Length: 0.64 mile
Cost $20,000

14th Street NW from Florida Avenue to Columbia Road

This project will reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes to two lanes with a center turn lane and bicycle lanes. It will connect existing bike lanes, making it the longest continuous bike lane corridor in the city.
Length: 0.52 mile
Cost: $20,000

Adams Mill Road NW from Kenyon Street to Klingle Road

Adams Mill Road has two southbound lanes and one northbound lane. This project will reduce roadway capacity through the elimination of one of the southbound lanes to provide room for the addition of 5' bicycle lanes on either side of the roadway. It will provide a bicycle connection between the National Zoo and Mount Pleasant to Klingle Road/Porter Street and neighborhoods to the west of Rock Creek Park.
Length: 0.24 mile
Cost: $10,000

Brentwood Parkway NE from 6th Street/Penn Street to 9th Street

This project will reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes to three lanes. Traffic analysis is still required to determine which lane would be eliminated. The extra space will be used for bicycle lanes on either side of the road, or a two-way protected bicycle lane on one side of the street. This will connect the 6th St NE bike lanes to the 9th St Bridge.
Length: 0.22
Cost: $10,000

New Jersey Avenue NW from H Street to Louisiana Avenue

This project will reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes to two lanes with a center turn lane and bicycle lanes.
Length: 0.45 mile
Cost: $25,000

Wheeler Road SE from Alabama Avenue to Southern Avenue

This project will reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes to two lanes with a center turn lane and bicycle lanes.
Length: 0.94 mile
Cost: $35,000

11. Projected Completion Year: 2015
12. Project Manager: Mike Goodno
13. Project Manager E-Mail: mike.goodno@dc.gov
14. Project Information URL:
15. Total Miles: 3.9
16. Schematic:
17. Documentation:
18. Jurisdictions: Washington, DC
19. Baseline Cost (in Thousands): $180 cost estimate as of 12/05/14
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
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 Regional Activity Centers**
Does this project begin or end in an Activity Center? [X] Yes ☐ No
Does this project connect two or more Activity Centers? ☐ Yes [X] No
Does this project promote non-auto travel within one or more Activity Centers? [X] Yes ☐ No

24. **Ensure System Maintenance, Preservation, and Safety**
Does this project contribute to enhanced system maintenance, preservation, or safety? ☐ Yes [X] 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 [X] No
Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists? [X] Yes ☐ No

26. **Protect and Enhance the Natural Environment**
Is this project expected to contribute to reductions in emissions of criteria pollutants? [X] Yes ☐ No
Is this project expected to contribute to reductions in emissions of greenhouse gases? [X] Yes ☐ No

27. **Support Interregional and International Travel and Commerce**
Please identify all <u>freight carrier modes</u> that this project enhances, supports, or promotes.
☐ Long-Haul Truck ☐ Local Delivery ☐ Rail ☐ Air
Please identify all <u>passenger carrier modes</u> 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.

<u>MAP-21 PLANNING FACTORS</u>

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. [X] Increase **accessibility and mobility** of people.
e. ☐ Increase accessibility and mobility of **freight.**
f. [X] 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. [X] 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 26.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:

BASIC PROJECT INFORMATION

1. Submitting Agency: District Department of Transportation
2. Secondary Agency: Policy, Planning and Sustainability Administration (PPSA)
3. Agency Project ID: ZU202A
4. Project Type: ☐ Interstate X Primary ☐ Secondary X Urban ☐ Bridge X Bike/Ped ☐ Transit ☐ CMAQ ☐ ITS X Enhancement ☐ Other ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination ☐ TERMs
5. Category: ☐ System Expansion; X System Maintenance; ☐ Operational Program; Study; ☐ Other
6. Project Name: *Florida Avenue NE, Multimodal Transportation Study*

	Prefix	Route	Name	Modifier
7. Facility:			Florida Avenue NE	
8. From (☐ at):			2nd Street, NE	
9. To:			West Virginia Avenue	

10. Description: This project is the implementation of the recommended alternative from the *Florida Avenue Multimodal Corridor Study. The corridor will be reconstructed as shown in the recommended Alternative (**attached**).* ***The reconstruction will reduce the number of lanes from six lanes to four lanes in order to improve safety for all users through dedicated left-turn lanes, bicycle facilities, wider sidewalks and shorter crossing distances, decreased curb-to-curb street width and on-street parking to promote slower auto speeds, and pedestrian-scale lighting; increases the tree canopy and green infrastructure along the corridor; and significantly improves non-auto conditions for users, particularly the large deaf community in the area.***

11. Projected Completion Year: 2022
12. Project Manager: Gabe Onyeador
13. Project Manager E-Mail: gabe.onyeador@dc.gov
14. Project Information URL: www.floridaavesafety.org
15. Total Miles: *1.25 miles*
16. Schematic: *see attached*
17. Documentation: *Final report for corridor planning study*
18. Jurisdictions: *District of Columbia ANCs 5C, 5D, 5E, 6A, 6C*
19. Baseline Cost (in Thousands): $12,000 cost estimate as of 10/20/2014
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
21. Funding Sources: X 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.

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

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

23. **Promote Regional Activity Centers**
Does this project begin or end in an Activity Center? X Yes ☐No
Does this project connect two or more Activity Centers? X Yes ☐No
Does this project promote non-auto travel within one or more Activity Centers? X Yes ☐No

24. **Ensure System Maintenance, Preservation, and Safety**
Does this project contribute to enhanced system maintenance, preservation, or safety? X 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 X No
Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists? X Yes ☐No

26. **Protect and Enhance the Natural Environment**
Is this project expected to contribute to reductions in emissions of criteria pollutants? ☐Yes X No
Is this project expected to contribute to reductions in emissions of greenhouse gases? ☐Yes X No

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

Please identify all <u>freight carrier modes</u> that this project enhances, supports, or promotes.

X Long-Haul Truck X Local Delivery ☐Rail ☐Air

Please identify all <u>passenger carrier modes</u> that this project enhances, supports, or promotes.

☐Air ☐Amtrak intercity passenger rail X 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.

The Recommended Alternative for Florida Avenue NE was developed through careful consideration of community priorities, the overall function of the roadway, and physical constraints along the corridor. The Alternative ensures adequate auto mobility on the corridor is maintained; improves safety for all users through dedicated left-turn lanes, bicycle facilities, wider sidewalks and shorter crossing distances, decreased curb-to-curb street width and on-street parking to promote slower auto speeds, and pedestrian-scale lighting; increases the tree canopy and green infrastructure along the corridor; and significantly improves non-auto conditions for users, particularly the large deaf community in the area.

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. X 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? X Yes; ☐ No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

A number of issues affect corridor safety, particularly for the non-auto community. These include high auto speeds (85th %-ile speeds approximately 10 mph higher than speed limit), long and poor crossing facilities (six-lane cross section with several uncontrolled crossing locations), inadequate sidewalk infrastructure (sidewalk on south side of corridor is approximately 4 feet wide with numerous instances with less than 2 feet of clearance), and no pedestrian-scale lighting (corridor includes high number of pedestrians walking between NoMa Metro station and Gallaudet University, particularly deaf users that must rely on amenities such as lighting to navigate street safely), and a lack of bicycle facilities on a heavy bike corridor. Intersections with high left-turning volumes experienced a high number of crashes in the 3-year data collection span, including 46 total crashes at 4th Street, 24 at 6th Street, and 24 at West Virginia Avenue. There were 15 pedestrian-related crashes (one being a fatality at 11th Street) and 13 bike-related crashes along the study corridor during the same data collection period.

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

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

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

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

ENVIRONMENTAL MITIGATION

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

b. If the answer to Question 26.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
X 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:

BASIC PROJECT INFORMATION

1. Submitting Agency: DDOT
2. Secondary Agency:
3. Agency Project ID:
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: Pennsylvania Avenue NW Protected Bicycle Lanes

	Prefix	Route	Name	Modifier
7. Facility:			Pennsylvania Avenue NW	
8. From (☐ at):			17th Street	
9. To:			29th Street	

10. Description: Pennsylvania Avenue is a four to six lane corridor with two additional parking lanes. This project will reduce roadway capacity by reducing the existing travel lanes by one to two lanes and installing protected bicycle lanes.
    - 17th to 18th Streets will be reduced from 6 to 4 lanes
    - 18th to 20th Street will be reduced from 5 to 4 lanes
    - 20th to 26th Streets will be reduced from 6 to 4 lanes
    - 26th to 28th Streets will be reduced from 5 to 4 lanes
    - 28th to 29th Streets will be reduced from 4 to 2 lanes
11. Projected Completion Year: 2015
12. Project Manager: Mike Goodno
13. Project Manager E-Mail: mike.goodno@dc.gov
14. Project Information URL:
15. Total Miles: 1.03
16. Schematic:
17. Documentation:
18. Jurisdictions: Washington, DC
19. Baseline Cost (in Thousands): 250,000 cost estimate as of 12/05/14
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
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?) [X] Yes [ ] No

23. **Promote Regional Activity Centers**
Does this project begin or end in an Activity Center? [X] Yes [ ] No
Does this project connect two or more Activity Centers? [X] Yes [ ] No
Does this project promote non-auto travel within one or more Activity Centers? [X] Yes [ ] No

24. **Ensure System Maintenance, Preservation, and Safety**
Does this project contribute to enhanced system maintenance, preservation, or safety? [ ] Yes [X] 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 [X] No
Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists? [X] Yes [ ] No

26. **Protect and Enhance the Natural Environment**
Is this project expected to contribute to reductions in emissions of criteria pollutants? [X] Yes [ ] No
Is this project expected to contribute to reductions in emissions of greenhouse gases? [X] Yes [ ] No

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

Please identify all <u>freight carrier modes</u> that this project enhances, supports, or promotes.

[ ] Long-Haul Truck [ ] Local Delivery [ ] Rail [ ] Air

Please identify all <u>passenger carrier modes</u> 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.

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. [X] Increase **accessibility and mobility** of people.

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

f. [X] 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. [X] 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 26.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:

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 and Public Transportation**

3. Agency Project ID: **UPC 97586**

4. Project Type:
X Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge **X** Bike/Ped
X Transit ☐ CMAQ ☐ ITS ☐ Enhancement ☐ Other
☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination
☐ TERMs

5. Category:
X System Expansion; ☐ System Maintenance; **X** Operational Program;
☐ Study; ☐ Other

6. Project Name: **I-66 Multimodal Improvement Project, inside the Beltway**
Prefix Route Name Modifier

7. Facility: **I-66**

8. From: **I-495, Fairfax County**

9. To: **Route 29 near Rosslyn, Arlington County**

10. Description:

The I-66 Multimodal Improvement Project (the "Project") is based on the recommendations from the June 2012 Final Report of the I-66 Multimodal Study inside the Beltway. The study team for the Multimodal Study included local, state, regional and federal stakeholders who participated in an interactive process which resulted in endorsements from these partners. The study, which built upon the 2009 Department of Rail and Public Transportation (DRPT) I-66 Transit/Transportation Demand Management (TDM) study, evaluated and recommended various multimodal improvements in the corridor that were further refined in the August 2013 Supplemental Report. The recommended improvements from the study included transit, bike/ped, TDM, integrated corridor management (ICM), tolling, and widening components, making this a truly multimodal solution for the corridor.

VDOT/DRPT is initiating an environmental assessment (NEPA) process to advance the multimodal improvements identified in the I-66 Multimodal Study. This process will assess the Project's impacts on social, cultural, economic and natural resources (such as air, noise, and water quality). The environmental process will provide opportunities for the public and stakeholders to provide comments and feedback throughout the study. In February of 2015 VDOT is beginning a comprehensive toll and revenue study to determine the expected

project revenue by year. Also during this time, VDOT will be working with corridor stakeholders, including local jurisdictional partners, to review the results of the revenue study and prioritize the list of multimodal and operational improvements. The multimodal improvements will be grouped into three categories: for Group 1, the stakeholder team will identify and evaluate **low cost** quickly implementable corridor improvements to be done **in conjunction with the tolling component**.

. Group 2 projects are expected by 2025. Group 3 multimodal projects are expected by 2040. In addition, a Stakeholder Technical Advisory Group is being established with local, state, regional and federal partners. The Project may be updated in future CLRPs in response to the environmental process, public outreach, and stakeholder input.

The tolling component of the Project will be implemented first, concurrent with the selected Group I Multi-modal improvements, and the tolls will be used to help fund the multimodal improvements in the corridor inside the Beltway. The tolling includes conversion of the existing I-66 facility inside the Capital Beltway to an Express Lanes facility with the following characteristics:

- Dynamic tolling in both directions during the peak periods only;
- HOV-3+ vehicles ride free at all times;
- Facility free to all traffic during off-peak periods;
- Consistent with current policy, heavy trucks will be prohibited.

The **transit** components include all the current improvements in the CLRP plus new priority bus routes on I-66, Route 29, and Route 50; Metrorail station improvements at Ballston and East Falls Church, and service enhancements for numerous routes in the study area inside the Beltway. Consideration will also be given to Metrorail core capacity improvements (8-car trains) that will address capacity concerns in the I-66 corridor.

For the **bicycle/pedestrian** components, the Multimodal Study identified approximately 60 capital and operating projects inside the Beltway. The Supplemental Report examined projects deemed to be the most regionally significant of the 60, based on (1) projects that can impact bicycling and walking for relatively large numbers of people and (2) projects that enhance the connectivity and functionality of the regional network. Sample projects include:

- Custis trail/W&OD trail improvements
- Fairfax Drive connector
- Arlington Boulevard trail- Glebe Rd. to City of Fairfax
- West Falls Church connector trail
- VA 7 – Tysons to Falls Church

The **TDM** elements of the Project were built on those recommended in the DRPT Transit and TDM Study of 2009, and in the 2012 Multimodal Study were grouped into high, medium and low impact, based on the ability of each measure to impact travel demand. High impact strategies included rideshare program operational support, enhanced telework, van priority access, direct transit subsidies, and enhanced employer outreach. Medium impact

strategies included vanpool driver incentives, I-66 corridor carpool startup incentives, and regionwide financial incentives. Lower impact strategies included enhanced corridor marketing, enhanced vanpool insurance pool, capital assistance for vanpools, and flexible vanpool network strategies.

The Project **ICM** recommendation also includes the addition of dynamic merge/junction control, speed harmonization, advanced parking management systems for park-and-ride lots, multimodal traveler information including travel time information by mode, and implementing signal priority for transit vehicles in the corridor.

Lastly, the environmental study will also include consideration of a later phase to **widen** I-66 from I-495 to Fairfax Drive near Ballston, as identified in the I-66 Multimodal Study. Eastbound widening includes the addition of a third through lane between I-495 and Fairfax Drive near Ballston; westbound widening includes adding a lane between the Sycamore Street off-ramp west to the Washington Blvd. on-ramp and from the Dulles Connector to I-495. The environmental study will consider this widening with a horizon year of 2040, and will also test an interim year of 2025 for this improvement.

Tolling Policy

As on the other Express Lane facilities in the region, tolls would be congestion-based. To use this section of I-66 inside the Beltway during the peak periods in either direction, motorists would have the choice of forming a 3+ carpool, taking transit, or paying a toll. Carpools of three or more persons, buses, motorcycles, and emergency response vehicles will ride free. Other vehicles not meeting the occupancy requirement will be required to pay a toll, using electronic toll collection equipment, at a rate that will vary based on the level of congestion, to ensure free-flow conditions as specified by Federal and State regulations.

The region's current Constrained Long Range Plan calls for all HOV lanes in Northern Virginia to be HOV-3+ by 2020. Allowing HOV-3 vehicles to ride free is consistent with this policy change, and will also match the occupancy requirement on I-495 and the I-95 Express Lanes. The Project provides a seamless network of Express lanes by connecting to adjacent Express facilities.

It is envisioned that VDOT will operate and maintain the facility. Toll revenues will be used to offset design, construction, operating and maintenance costs of the project. Project revenues will also provide a funding source for multimodal improvements identified in the Description section of this project.

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.

Schedule

Project development and procurement will take place in 2015, followed by construction starting in 2016. Tolling is expected to enter operations in 2017, along with the first (Group 1) multimodal improvements. The Group 2 multimodal improvements are expected by 2025. Group 3 multimodal improvements and widening are expected by 2040.

Federal Environmental Review ("NEPA") Process

Project scoping is currently underway and will result in the appropriate level of NEPA documentation in coordination with FHWA and FTA as appropriate.

Coordination with Other Projects

The Project will be coordinated closely with other initiatives such as the Active Traffic Management (ATM) project and the potential I-66 Express Lanes project outside the Beltway. The Project will also be coordinated with future improvements that may be underway in the corridor.

Financial Plan

The total baseline cost for the Project is estimated to be approximately $350M (in year of expenditure dollars). This estimate includes the cost of tolling, multimodal improvements, and roadway widening.

Stakeholder Outreach

VDOT and DRPT will work closely with Arlington County, Fairfax County, the City of Falls Church, transit providers, and other stakeholders to implement a comprehensive outreach program. The outreach program will provide the opportunity for direct engagement with various groups along the corridor, including the local political leadership, transit service providers, various other interest groups, and business and community leaders. There will also be opportunities for the public to learn more about the Project, as well as provide comments, both through the CLRP process and the NEPA process.

11. Projected Completion Year: **2017 (tolling, Group 1 multimodal), 2025 (Group 2 multimodal), 2040 (Group 3 multimodal, widening)**

12. Project Manager: **Ms Susan Shaw, P.E.**

13. Project Manager E-Mail: **susan.shaw@VDOT.Virginia.gov**

14. Project Information URL: **<to be determined>**

15. Total Miles: **10 miles (approximate)**

16. Schematic:

17. Documentation: **<to be determined>**

18. Jurisdictions: **Fairfax County, Arlington County**

19. Baseline Cost (in Thousands): **$350,000**
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY

21. Funding Sources: **X** Federal; **X** State; ☐ Local; ☐ Private; ☐ Bonds; **X** 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.

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

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

23. **Promote Dynamic Activity Centers**

Does this project begin or end in an Activity Center? **X** Yes ☐No
Does this project connect two or more Activity Centers? **X** Yes ☐No
Does this project promote non-auto travel within one or more Activity Centers? **X** Yes ☐No

24. **Ensure System Maintenance, Preservation, and Safety**
Does this project contribute to enhanced system maintenance, preservation, or safety?
X 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.)? **X** Yes ☐No

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

MAP-21 PLANNING FACTORS

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

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

b. **X** 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; **X** No
ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. **X** 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. **X** Increase **accessibility and mobility** of people.

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

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

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

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

ENVIRONMENTAL MITIGATION

30. Have any potential mitigation activities been identified for this project? ☐ Yes; **X** 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

The Environmental Process has not started yet. VDOT will assess the environmental impacts of the project as required by State and Federal law.

CONGESTION MANAGEMENT INFORMATION

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program?
X Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? **X** 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? **X** 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):

X 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:

Transit Service Enhancements for I-66 Inside the Beltway 2015 CLRP Submission (placeholder subject to change**)

Route	Change
New Outside the Beltway Services	
Rapid Bus Service from outside the Beltway: Haymarket to Arlington/DC Gainesville to Arlington/DC Manassas to Arlington/DC	Bi-directonal, all day + weekend
New Priority Bus Services	
U.S. 29 Priority Bus	Bi-directional, all day service
U.S. 50 Priority Bus – via Ballston	Bi-directional, all day service
U.S. 50 Priority Bus – via U.S. 50	Add route from Fair Lakes to D.C. core along U.S. 50
U.S. 50 Priority Bus – Tysons	Add route from Tysons Corner along U.S. 50 and Wilson Boulevard
Local Routes in Study Area:	
Metrobus 1B	Increase peak-period frequency; improve inbound runtime
Metrobus 1C	Increase peak and off-peak frequencies
Metrobus 1E	Improve runtime
Metrobus 2C	Increase peak and off-peak frequencies
Metrobus 3A	Extend routing to NVCC and East Falls Church and increase frequency
Metrobus 3E	Add reverse-peak direction service and increase peak-direction service frequency; add off-peak service
Metrobus 3T	Increase off-peak-period frequency
Metrobus 4A	Reroute to end at Seven Corners; increase frequency
Metrobus 4E	Increase peak-period frequency, improve runtime
Metrobus 4H	Improve runtime
Metrobus 10B	Increase peak-period frequency
Metrobus 15L	Increase peak-period frequency
Metrobus 22A	Increase peak-period frequency
Metrobus 23A	Increase peak-period frequency
Metrobus 23C	Increase peak-period frequency
Metrobus 25A	Increase peak and off-peak frequencies
Metrobus 25B	Increase northbound off-peak frequency and peak frequencies in both directions
Metrobus 28A	Increase peak-period frequency, improve runtime
Metrobus 28E	New route between Skyline Plaza and East Falls Church
Metrobus 38B	Increase frequency
ART	
ART 42	Increase the reverse-peak direction, peak-period frequency
ART 45	Increase peak-period frequency, improve run time
ART 52	Increase peak and off-peak frequencies
ART #75	Extend routing to Shirlington and Virginia Square; add off-peak service
ART #77	Extend to Rosslyn and increase frequency
New ART1	Add route between Arlington Hall and Crystal City
New ART2	Add route between Court House and Pentagon City

**Services subject to change based on environmental study, public outreach, and stakeholder working group inputs.

Draft 2/11/15

Congestion Management Documentation Form for Projects in the 2040 CLRP

Project Name: I-66 Inside the Beltway

1. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

a) x Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)

b) _ A Transportation Management Association is in the vicinity

c) _ Channelized or grade-separated intersection(s) or roundabouts

d) _ Reversible, turning, acceleration/deceleration, or bypass lanes

e) x High occupancy vehicle facilities or systems

f) x Transit stop (rail or bus) within a 1/2 mile radius of the project location

g) x Park-and-ride lot within a one-mile radius of the project location

h) _ Real-time surveillance/traffic device controlled by a traffic operations center

i) x Motorist assistance/hazard clearance patrols

j) _ Interconnected/coordinated traffic signal system

k) x Other in-place congestion management strategy or strategies (briefly describe below:)

Advanced traffic management system in place (ATM)

2. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

Project includes conversion of the existing HOV lanes to HOT lanes, with congestion pricing during peak periods for single and two occupant vehicles. As on the other Express Lane facilities in the region, tolls will be congestion-based. To use this section of I-66 inside the Beltway during the peak periods in either direction, motorists would have the choice of forming a 3+ carpool, taking transit, or paying a toll. Carpools of three or more persons, buses, motorcycles, and emergency response vehicles will ride free. Other vehicles not meeting the occupancy requirement will be required to pay a toll, using electronic toll collection equipment, at a rate that will vary based on the level of congestion, to ensure free-flow conditions as specified by Federal and State regulations.

The TDM elements of the Project were built on those recommended in the DRPT Transit and TDM Study of 2009, and in the 2012 I-66 Multimodal Study. In the Multimodal Study, TDM elements were grouped into high, medium and low impact, based on the ability of each measure to impact travel demand. High impact strategies included rideshare program operational support, enhanced telework, van priority access, direct transit subsidies, and enhanced employer outreach. Medium impact strategies included vanpool driver incentives, I-66 corridor carpool startup incentives, and regionwide financial incentives. Lower impact strategies included enhanced corridor marketing, enhanced vanpool insurance pool, capital assistance for vanpools, and flexible vanpool network strategies.

b. Traffic operational improvements

Congestion pricing will ensure that the lanes will operate at 45 mph or better during the peak periods in both directions.

c. Public transportation improvements

The transit components of the project include the current improvements in the CLRP plus new priority bus routes on Route 29 and Route 50; Metrorail station improvements at Ballston and East Falls Church, and bus service enhancements for numerous routes in the study area inside the Beltway. Consideration will also be given to Metrorail core capacity improvements (8-car trains) that will address capacity concerns in the I-66 corridor.

d. Intelligent Transportation Systems technologies

The Project ICM recommendation includes the addition of dynamic merge/junction control, speed harmonization, advanced parking management systems for park-and-ride lots, multimodal traveler information including travel time information by mode, and implementing signal priority for transit vehicles in the corridor.

e. Other congestion management strategies

Bicycle and Pedestrian improvements will be implemented in cooperation with the localities. For the bicycle/pedestrian components, the Multimodal Study identified approximately 60 capital and operating projects inside the Beltway. The Supplemental Report examined projects deemed to be the most regionally significant of the 60, based on (1) projects that can impact bicycling and walking for relatively large numbers of people and (2) projects that enhance the connectivity and functionality of the regional network. Sample projects include:

- Custis trail/W&OD trail improvements
- Fairfax Drive connector
- Arlington Boulevard trail- Glebe Rd. to City of Fairfax
- West Falls Church connector trail
- VA 7 – Tysons to Falls Church

f. Combinations of the above strategies

3. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

The tolling component of the project will be implemented first, concurrent with selected multimodal improvements. Following the implementation of tolling and Group 1 and 2 multimodal projects inside the Beltway, VDOT has committed to evaluate and report to TPB the effectiveness of the tolling and multimodal components, and assess the continuing necessity of widening. Such assessment shall include potential alternatives, impacts and mitigations (see TPB Resolution R14-2015, 2/18/15).

4. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

See 2a, 2b, 2c, 2d, and 2e above.

5. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

It is envisioned that VDOT will operate and maintain the facility. All toll revenues will be used within the designated corridor (and on the Dulles Access Road) to offset design, construction, operating and maintenance costs of the project, and provide a funding source for multimodal improvements identified above, including multimodal improvements that connect to, access, or are located in the corridor.

The multimodal improvements will be grouped into three categories: for Group 1, the stakeholder

team will identify and evaluate low cost quickly implementable corridor improvements to be implemented in conjunction with the tolling component. Group 2 projects are expected by 2025. Group 3 multimodal projects are expected by 2040.

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**

4. Project Type:
   X Interstate ☐ Primary ☐ Secondary ☐ Urban ☐ Bridge ☐ Bike/Ped
   X Transit ☐ CMAQ **X** ITS ☐ Enhancement ☐ Other
   ☐ Federal Lands Highways Program ☐ Human Service Transportation Coordination
   ☐ TERMs

5. Category:
   X System Expansion; ☐ System Maintenance; **X** 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**

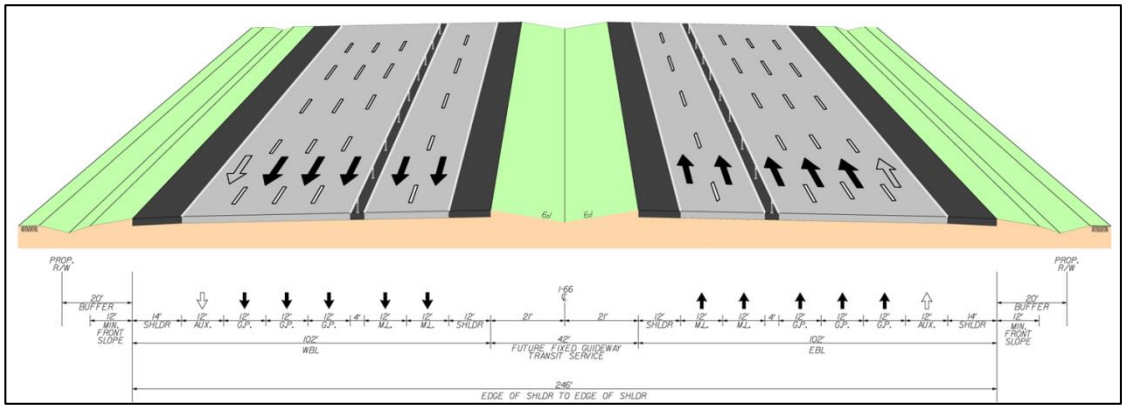
10. Description:

The Commonwealth's I-66 Corridor Improvements Project ("Project") outside the Beltway includes:

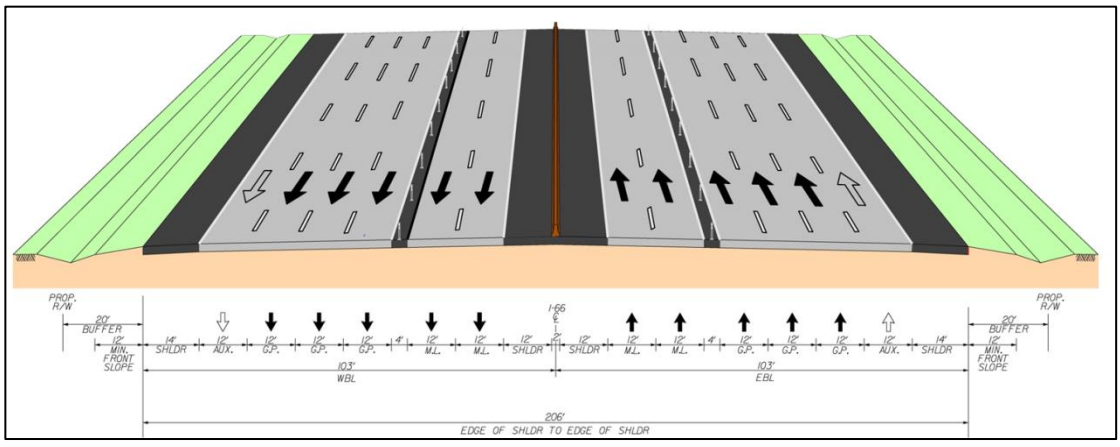
- Three general purpose lanes in each direction (with auxiliary lanes where needed);
- Two barrier-separated managed express lanes in each direction (the existing high-occupancy vehicle (HOV) lane will be converted to an express lane and one new express lane will be added);
- New high-frequency bus service with more predictable travel times;
- Direct access ramps to and from the managed lanes;
- New or expanded commuter park and ride lots in the corridor.

Below are two alternative typical sections being considered, depending on anticipated transit needs and impacts along the corridor.

Alternative 2A – Flexible Barrier with Buffer & Median reserved for Future Center Transit



Alternative 2B – Flexible Barrier with Buffer and No Median



As on the I-495 and I-95 Express Lanes, access to the I-66 Express Lanes will

be available to automobiles, motorcycles, light-trucks, emergency vehicles, buses and transit vehicles only. 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 HOV occupancy and toll payment enforced in a manner that complies with the statutory requirements of the Commonwealth**.** Other vehicles not meeting the occupancy requirement of 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.

The region's current Constrained Long Range Plan calls for all HOV lanes in Northern Virginia to be HOV-3+ by 2020. 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 495 and 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 modified commuter bus services providing one-seat rides between park and ride lots and major regional destinations, and new frequent all-day Rapid Bus service 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 (see attachments).

Bicycle and Pedestrian accommodations in the corridor are currently being developed in cooperation with the localities, and will be consistent with VDOT's Policy for Integrating Bicycle and Pedestrian Accommodations (www.virginiadot.org/**bike**ped**policy**/).

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 ("Concessionaire"). 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.

Schedule

Construction for the Project is projected to begin in 2017, with an estimated construction completion time of 4-5 years. The facility is expected to enter operations in early 2021-2022. The current schedule calls for environmental review in compliance with Federal (NEPA) and state regulations. FHWA has further conditioned environmental approval to the Project being included in a conforming Transportation Improvement Program ("TIP") and Constrained Long Range Plan ("CLRP") for construction.

Federal Environmental Review ("NEPA") Process

The Tier 2 Environmental Assessment scope builds upon and includes a combination of concepts identified in the Tier 1 Environmental Impact Statement. It will evaluate 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 environmental review is currently being conducted in full accordance and compliance with Federal and state law. FHWA is the 'Lead Agency' for the NEPA document and will provide document review / approval and issuance of FONSI at the conclusion of the process.

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 Concessionaire 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
- Active Traffic Management (ATM) project
- Route 28 / I-66 interchange improvements
- US 15 / I-66 interchange improvements
- HOV lane project from Gainesville to US 15

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 the potential for TIFIA funding as a form of subordinated debt. As the Project progresses, VDOT will explore all avenues of funding to ensure the lowest cost of capital for the Project.

The Concessionaire will be fully authorized to toll the facility, which will serve to pay debt service, operating and maintenance costs and return on equity. Toll revenue will be the main source of revenue. The Commonwealth will enter into a Comprehensive Agreement with the selected Concessionaire, which will authorize the Concessionaire to raise the necessary funds to construct the Project.

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) is also actively engaged in project development. There are 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 may be updated in future CLRPs in response to the environmental process, public outreach, and stakeholder input.

11. Projected Completion Year: **2022**

12. Project Manager: **Ms Susan Shaw, P.E.**

13. Project Manager E-Mail: **susan.shaw@VDOT.Virginia.gov**

14. Project Information URL: **http://www.transform66.org**

15. Total Miles: **25 miles**

16. Schematic: **See figures in items 9 and 10 above.**

17. Documentation: **The graphics included in the response to items 9 and 10 above will be uploaded to allow a more readable version.**

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): cost estimate as of MM/DD/YYYY

21. Funding Sources: **X** Federal; **X** State; **X** Local; **X** Private; **X** 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.

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

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

23. **Promote Dynamic Activity Centers**
Does this project begin or end in an Activity Center? **X** Yes ☐No
Does this project connect two or more Activity Centers? **X** Yes ☐No
Does this project promote non-auto travel within one or more Activity Centers? **X** Yes ☐No

24. **Ensure System Maintenance, Preservation, and Safety**
Does this project contribute to enhanced system maintenance, preservation, or safety?
X 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 **X** No

Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?
X 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? **X** Yes ☐No

27. **Support Interregional and International Travel and Commerce**
Please identify all freight carrier modes that this project enhances, supports, or promotes.
X Long-Haul Truck **X** Local Delivery ☐Rail ☐Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.
☐Air ☐Amtrak intercity passenger rail **X** 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.

MAP-21 PLANNING FACTORS

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

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

b. **X** 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? **X** Yes; ☐ No
ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c. **X** 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. **X** Increase **accessibility and mobility** of people.

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

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

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

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

ENVIRONMENTAL MITIGATION

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

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

☐ Air Quality; **X** Floodplains; **X** Socioeconomics; **X** Geology, Soils and Groundwater; ☐ Vibrations;
☐ Energy; **X** Noise; ☐ Surface Water; **X** Hazardous and Contaminated Materials; **X** Wetlands

CONGESTION MANAGEMENT INFORMATION

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program?
X Yes; ☐ No

b. If so, is the congestion recurring or non-recurring? **X** 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? **X** 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):

X 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.

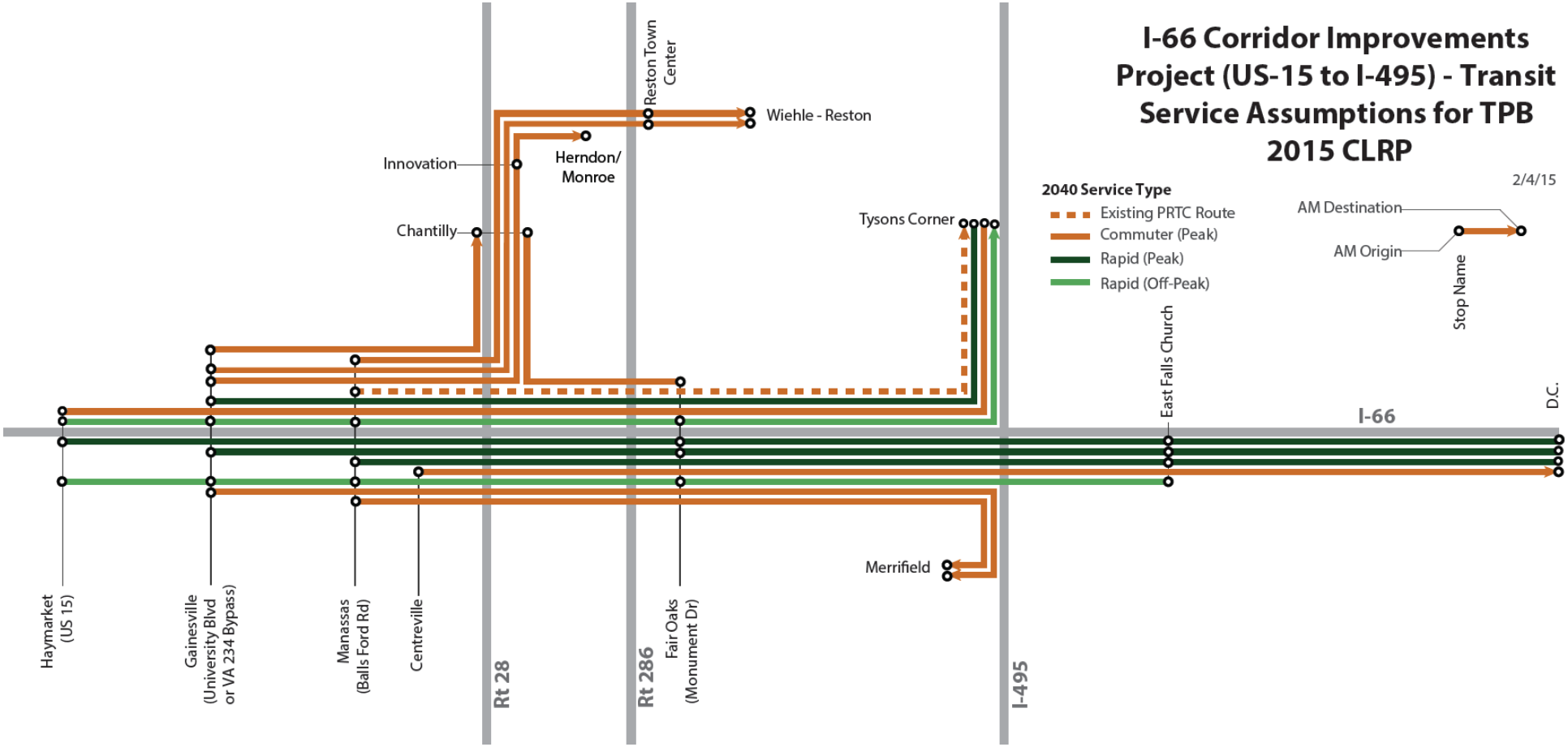
c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

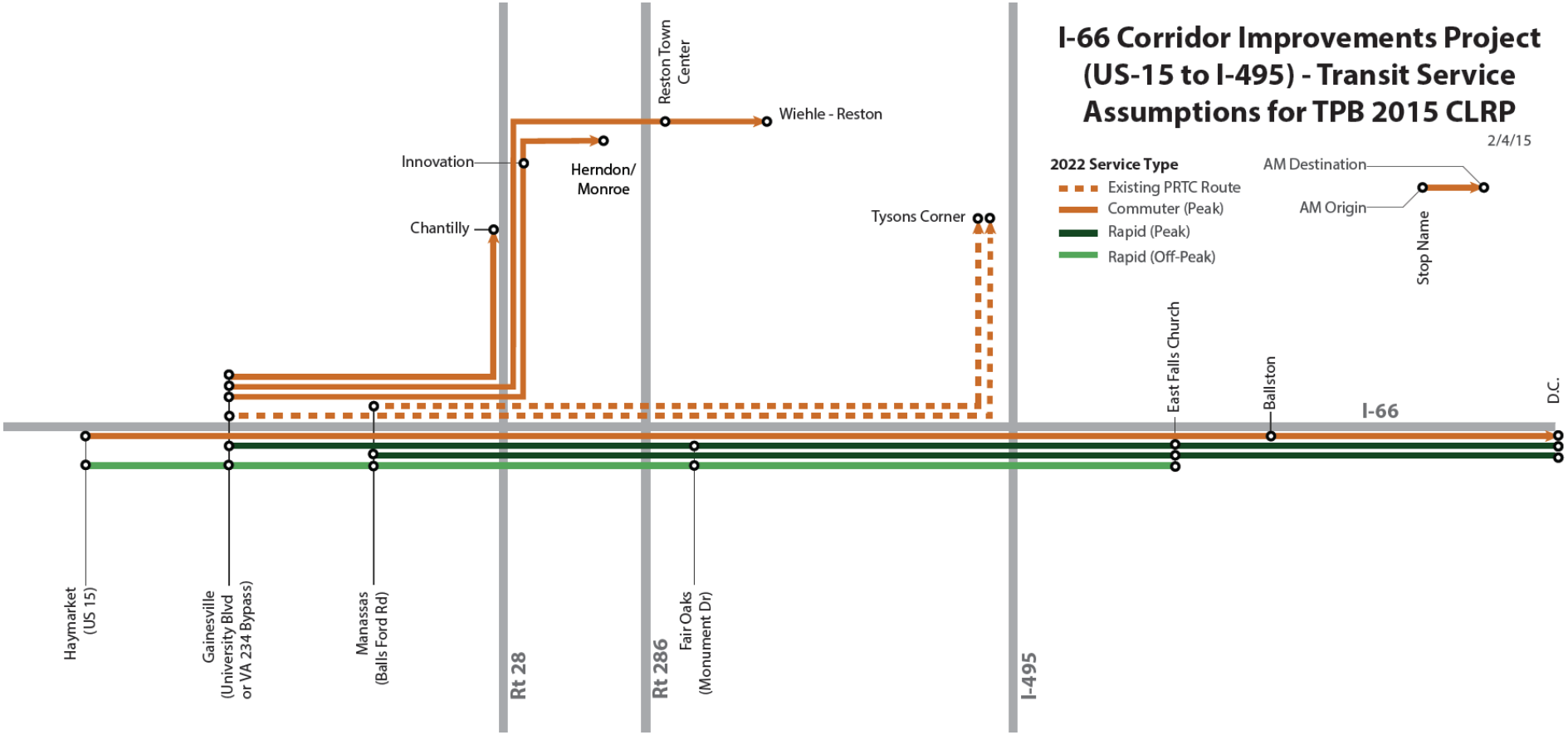
RECORD MANAGEMENT

33. Completed Year:

I-66 Corridor Improvements Project (US 15 to I-495) - Transit Service Assumptions for TPB 2015 CLRP									
Route	**New/ Existing**	**Year**	**Notes**	**Direction**	**Times**	**2022 Average Peak Frequency (minutes)**	**2022 Average Off-Peak Frequency (minutes)**	**2040 Average Peak Frequency (minutes)**	**2040 Average Off-Peak Frequency (minutes)**
Haymarket to Arlington/Downtown DC Commuter Bus	New	2022		Peak Only	Peak Only	60	-	Replaced by Rapid Bus Service	
Haymarket to Arlington/Downtown Rapid Bus	New	2040	Stop at Monument; One off-peak route serves Haymarket, Gainesville & Manassas and terminates at E. Falls Church.	Bi-directional	All-day + Weekend	-	-	30	30
Haymarket to Tysons Corner Commuter Bus	New	2040		Peak Only	Peak Only	-	-	45	-
Gainesville to East Falls Church/ Downtown DC Rapid Bus		2022	Stop at Monument; One off-peak route serves Haymarket, Gainesville & Manassas and terminates at E. Falls Church.	Bi-directional	All-day + Weekend	25	60	10	30
Gainesville to Tysons Corner Commuter Bus	*Existing*		*PRTC's Linton Hall Metro Direct*	*Peak Only*	*Peak Only*	*30*	-	*Continued operation of existing service at the discretion of PRTC with Rapid Bus in place.*	
Gainesville to Tysons Corner Rapid Bus		2040	One off-peak route serves Haymarket, Gainesville & Manassas.	Bi-directional	All-day + Weekend	-	-	25	60
Gainesville to Merrifield Commuter Bus		2040		Peak Only	Peak Only	-	-	35	-
Gainesville to Reston Commuter Bus		2022		Peak Only	Peak Only	45	-	25	-
Gainesville to Innovation/Herndon Commuter Bus		2022		Peak Only	Peak Only	60	-	30	-
Gainesville to Chantilly Commuter Bus		2022		Peak Only	Peak Only	60	-	25	-
Manassas to East Falls Church/Downtown DC Rapid Bus		2022	One off-peak route serves Haymarket, Gainesville & Manassas and terminates at E. Falls Church.	Bi-directional	All-day + Weekend	45	60	25	30
Manassas to Tysons Corner Commuter Bus	*Existing*		*PRTC's Manassas Metro Direct*	*Peak Only*	*Limited mid-day*	*30*	*60*	*30*	*60*
Manassas to Merrifield Commuter Bus		2040		Peak Only	Peak Only	-	-	45	-
Manassas to Reston Commuter Bus		2040		Peak Only	Peak Only	-	-	60	-
Centerville to Downtown DC Commuter Bus		2040		Peak Only	Peak Only	-	-	25	-
Fair Oaks to Chantilly Commuter Bus		2040		Bi-directional	Peak Only	-	-	60	-

**Existing PRTC Metro Direct services shown for informational purposes only*


I-66 Corridor Improvements Project (US-15 to I-495) - Transit Service Assumptions for TPB 2015 CLRP
2/4/15
2040 Service Type
Existing PRTC Route
Commuter (Peak)
Rapid (Peak)
Rapid (Off-Peak)
AM Destination
AM Origin
Stop Name
Reston Town Center
Wiehle - Reston
Herndon/ Monroe
Innovation
Chantilly
Tysons Corner
East Falls Church
I-66
D.C.
Haymarket (US 15)
Gainesville (University Blvd or VA 234 Bypass)
Manassas (Balls Ford Rd)
Centreville
Rt 28
Rt 286
Fair Oaks (Monument Dr)
I-495
Merrifield


I-66 Corridor Improvements Project (US-15 to I-495) - Transit Service Assumptions for TPB 2015 CLRP
2/4/15
2022 Service Type
Existing PRTC Route
Commuter (Peak)
Rapid (Peak)
Rapid (Off-Peak)
AM Destination
AM Origin
Stop Name
Reston Town Center
Wiehle - Reston
Innovation
Herndon/ Monroe
Chantilly
Tysons Corner
East Falls Church
Ballston
I-66
D.C.
Haymarket (US 15)
Gainesville (University Blvd or VA 234 Bypass)
Manassas (Balls Ford Rd)
Rt 28
Rt 286
Fair Oaks (Monument Dr)
I-495

Transit and Transportation Demand Management (TDM) Definition for I-66 Corridor Improvements Project

Introduction

A transit and transportation demand management (TDM) planning process is underway by VDOT and DRPT in coordination with the development of the I-66 Corridor Improvements Project (Project). It is anticipated that the planning will result in an I-66 Transit and TDM Implementation Plan with recommendations that will be integrated with the proposed elements of the I-66 Project. The transit/TDM recommendations will support the overall purpose and need of the Project, seeking to achieve the following objectives:

- Efficient use of public transportation infrastructure and services
- Reduction in congestion
- Increase in the availability and reliability of travel choices
- Improvement in the attractiveness, reliability, and quality of transit
- Increase in park-and-ride space supply, convenience, and availability
- Effective use of the region's developed and emerging managed lanes network including I-66, I-495, I-395, and I-95 through Integrated Corridor Management (ICM)

The following sections briefly define the primary elements of the transit and TDM Implementation Plan, which include:

- Park-and-ride facilities
- Transit services
- TDM programs

Park-and-Ride Facilities

Park-and-ride facilities are an essential part of the transit, TDM, and ICM support infrastructure in the I-66 corridor. These facilities will offer people direct access to transit services, perform a role in people's transition from one mode to another, and support carpooling, vanpooling and casual carpooling/slugging. The nature of existing and future development along the I-66 corridor is such that much of the transit demand in the corridor will be generated by park-and-ride activity and through coordinated local transit and corridor rapid bus services.

Given the role of park-and-ride facilities in the corridor, it is anticipated that the Transit and TDM Implementation Plan will recommend an increase in the number of these facilities and in the supply of parking in the corridor. The plan will also likely recommend improved amenities at park-and-ride facilities, as well as more direct access between the facilities and I-66. The following locations are currently being recommended for proposed park-and-ride lots as part of the I-66 Project:

- Haymarket, west of the I-66/Route 15 interchange (new facility)
- Gainesville, off of University Boulevard (new facility)
- Route 234 Bypass (Cushing Road), east of the I-66 interchange (expansion of existing facility)
- Balls Ford Road, west of Route 234 Business (new facility)
- Stringfellow Road (expansion of existing facility, currently underway by Fairfax County)
- Monument Drive/Fairfax Corner (new facility, likely structured parking)
- Vienna Metrorail Station (possible improvements of access to existing facility)

It is anticipated that the I-66 Transit/TDM Implementation Plan will recommend the following services and amenities at the existing proposed park-and-ride facilities:

- Park-and-ride parking for privately-owned vehicles
- Real-time parking availability information
- Kiss-and-ride accommodation
- Dedicated space for transit operations (bus bays and station/stop facilities)
- Waiting area for buses (shelters, sidewalk, plaza area, etc.)
- Waiting/queuing area for casual carpooling/slugging (depending on anticipated demand)
- Pick-up space for vehicles picking up/dropping off casual carpoolers/sluggers
- Lighting (at bus stations and in lots)
- Static and real-time transit service information
- Landscaping
- Pedestrian walkways
- Bicycle racks, lockers, and/or shelters
- Interconnecting transit service (e.g., local feeder services and rapid bus service on I-66)
- Direct or nearly direct access to/from I-66 managed lanes via new ramps
- Multimodal access from arterial street network (including pedestrian and bicycle access)

Working in coordination with VDOT operations of the corridor, including intelligent transportation system (ITS) elements of the I-66 Corridor Improvements Project, transit and TDM recommendations for park-and-ride facilities will also likely include the development of infrastructure to support the provision of real-time information about park-and-ride facility utilization and transit service information and vanpool and carpool matching to travelers utilizing ICM applications (possibly a mixture of publically-provided information and private applications).

Transit Services

It is anticipated that a combination of existing local and new or expanded corridor-focused transit services will serve weekday and weekend peak and off-peak hour demand intersecting with and along the I-66 corridor. The I-66 Transit/TDM Implementation Plan will likely introduce a new I-66 rapid bus service that will increase service efficiency and effectiveness, while increasing its convenience and utility for many trip purposes and travel periods. The Implementation Plan will also consider increased commuter bus service that will offer peak period service. The transit and TDM plan recommends a mixture of the following transit services:

- **Commuter Bus Services:** Services focused on one-seat rides. The Transit and TDM Implementation Plan will likely recommend strategic routes and other commuter service in the corridor to enhance connectivity to major destinations in DC, Arlington, Vienna, Merrifield, Tysons, Fair Lakes, Reston, Herndon, Centreville, and Manassas. The plan will likely encourage service and facility coordination with these services to enable operators to take advantage of new park-and-ride facilities and their improved access to the corridor.

- **I-66 Rapid Bus Service (RBS):** Service specifically for the I-66 corridor operating as a bus extension/compliment of the Metrorail Orange Line. It is anticipated that the I-66 RBS will operate on several route patterns to offer frequent headways and all-day service to and from key park-and-ride lots (with direct ramp access to/from managed lanes). RBS will operate in the managed lanes with the intention of providing users more daily, reliable rides to and from their destinations.

TDM Programs

TDM programs at several levels of investment and market penetration will likely be recommended as a part of the pending I-66 Transit and TDM Implementation Plan. TDM programs will be designed to complement and support transit facility, infrastructure, and service recommendations. TDM recommendations will be focused on increasing the number, convenience, and effectiveness of travel choices in the I-66 corridor, as well as on managing travel demand during construction and post construction. TDM recommendations will include the following strategies:

- Carpool formation assistance and incentives
- Vanpool formation assistance and incentives
- Employer and destination outreach, services and information
- Home-based outreach
- Promotion of transit, vanpooling and carpooling
- Enhancement of web-based and mobile app ridematching service
- Support for casual carpooling (slugging)

Summary

The current I-66 Transit and TDM planning by VDOT and DRPT will complement the development of the I-66 Corridor Improvements Project. It is anticipated that the planning will be completed in mid-2015 with the primary outcome being an I-66 Transit and TDM Implementation Plan. The plan will include recommendations to be integrated with the proposed I-66 Project, such as park-and-ride lot locations and sizes, enhancement and expansion of transit services, and implementation of TDM programs.

Congestion Management Documentation Form for Projects in the 2040 CLRP

Project Name: I-66 Outside the Beltway – 3/26/15 draft

1. Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:

a) x Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)

b) x A Transportation Management Association is in the vicinity

c) _ Channelized or grade-separated intersection(s) or roundabouts

d) _ Reversible, turning, acceleration/deceleration, or bypass lanes

e) x High occupancy vehicle facilities or systems

f) x Transit stop (rail or bus) within a 1/2 mile radius of the project location

g) x Park-and-ride lot within a one-mile radius of the project location

h) _ Real-time surveillance/traffic device controlled by a traffic operations center

i) x Motorist assistance/hazard clearance patrols

j) _ Interconnected/coordinated traffic signal system

k) x Other in-place congestion management strategy or strategies (briefly describe below:)

Advanced traffic management system (ATM)

2. List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

a. Transportation demand management measures, including growth management and congestion pricing

The project includes the addition of one HOV/HOT lane in each direction combined with the existing HOV lanes to provide two barrier-separated managed HOT express lanes in each direction, which will be tolled (congestion priced) for single and two occupant vehicles. HOV-3+ and transit vehicles will travel on the express lanes for free.

New and expanded park and ride lots are included throughout the corridor, with easy or direct access to the managed lanes. New and enhanced TDM strategies will be included as part of the project, and will include the following strategies: Carpool formation assistance and incentives, vanpool formation assistance and incentives, employer outreach, TEM program promotion, enhancement of web-based and mobile app ridematching services, and support for casual carpooling. Bicycle and Pedestrian accommodations are current being developed in the corridor, in cooperation with the localities.

b. Traffic operational improvements

Congestion pricing will insure that the express lanes will operate at 45 mph or better throughout the day.

c. Public transportation improvements

The project includes a robust transit component, consisting of new and modified commuter bus services providing one-seat rides between park and ride lots and major regional destinations, and new frequent all-day Rapid bus service on I-66 to complement Metrorail in the corridor.

d. Intelligent Transportation Systems technologies

Real-time transit and park and ride information in corridor; new applications for vanpool and

carpool matching in the corridor.

e. Other congestion management strategies

f. Combinations of the above strategies

3. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.

The corridor currently is served by an HOV lane in each direction, Metrorail's Orange Line service, an advanced traffic management system, and numerous TDM strategies. The current multimodal services in the corridor do not alleviate the congested conditions experienced on a daily basis, both on the roadway, the HOV lane, and the Orange Line. Increasing the HOV capacity and converting the express lanes to HOT will facilitate transit service, HOV trips, and others willing to pay a fee for a faster trip. This could also reduce congestion in the existing general purpose lanes.

4. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.

See 2a, 2b, 2c and 2d above.

5. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.

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 the potential for TIFIA funding as a form of subordinated debt. The implementation schedule is to be determined. Strategies will be monitored by the implementing agencies, and modified as needed.

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

BASIC PROJECT INFORMATION

1. Submitting Agency: Fairfax County
2. Secondary Agency: VDRPT
3. Agency Project ID:
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: US 1 Bus Rapid Transit from Huntington Metro Station to Woodbridge VRE Station

	Prefix	Route	Name	Modifier
7. Facility:	US	1	Richmond Highway	BRT
8. From:			North Kings Highway/Huntington Metro Station	
9. To:			Woodbridge VRE Station	

10. Description: Phase 1: BRT will operate in dedicated median lanes in Fairfax County between Huntington Metro Station and an interim terminal at Hybla Valley (complete 2026).

    Phase 2: BRT will operate in dedicated median lanes in Fairfax County between Huntington Metro Station and an interim terminal at Fort Belvoir (complete 2028).

    Phase 3: BRT will operate in dedicated median lanes in Fairfax County and in mixed traffic in Prince William County between Huntington Metro Station and Woodbridge VRE Station (complete 2032).
11. Projected Completion Year: 2032
12. Project Manager:
13. Project Manager E-Mail:
14. Project Information URL:
15. Total Miles: 15
16. Schematic:
17. Documentation:
18. Jurisdictions: Fairfax County, Prince William County
19. Baseline Cost (in Thousands): $1 billion cost estimate as of 01/29/2015
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
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 Regional 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? ☑Yes ☐No
Is this project expected to contribute to reductions in emissions of greenhouse gases? ☑Yes ☐No

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

Please identify all <u>freight carrier modes</u> that this project enhances, supports, or promotes.

☐Long-Haul Truck ☐Local Delivery ☐Rail ☐Air

Please identify all <u>passenger carrier modes</u> 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.

<u>MAP-21 PLANNING FACTORS</u>

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 26.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: