## **ITEM 15 - Action** January 16, 2008

Release for Public Comment of Project Submissions and Draft Scope of Work for the Air Quality Conformity Assessment for the 2008 CLRP and FY 2009-2014 TIP

### **Staff**

### **Recommendation:**

- " Receive briefing on the major projects submitted by the January 14, 2008 deadline for inclusion in the air quality conformity assessment, and on the draft scope of work for the assessment.
- " Release the project submissions and draft scope of work for a public comment period that will end February 15, 2008.

Issues: None

**Background:** 

At the October 17 meeting, the Board approved a revised schedule for project submissions and for the air quality conformity assessment for the 2008 Financially Constrained Long Range Transportation Plan (CLRP) and FY 2009-2014 Transportation Improvement Program (TIP). At the February 20 meeting, the Board will be asked to approve the project submissions and the scope of work for the air quality conformity assessment.

### National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

### MEMORANDUM

Item 15

January 15, 2008

**TO:** Transportation Planning Board

**FROM:** Ronald F. Kirby

**Director of Transportation Planning** 

**SUBJECT:** Proposed Significant Additions and Changes for the 2008 CLRP

and FY 2009-2014 TIP for the Air Quality Conformity Analysis

The attachment describes the proposed significant changes and additions reflected in the air quality conformity inputs for the 2008 Update to the Financially Constrained Long Range Transportation Plan (CLRP) and the FY 2009-2014 Transportation Improvement Program (TIP). Also attached is the draft Scope of Work for the Air Quality Conformity Analysis for the new CLRP and TIP.

Figure 1 shows the proposed significant additions and changes to the 2008 Update to the CLRP; descriptions of each project follow. The detailed CLRP description forms for these changes begin on page 7. Please note that significant changes are those relating to interstates, principal arterials, and other limited access parkways and roadways. Therefore, some changes will be shaded on the air quality conformity table provided in Appendix A, but not described in the significant changes listing.

Appendix A, which is bound separately, provides a table listing all projects to be included in the air quality conformity analysis for the 2008 CLRP and FY 2009-2014 TIP, with shading to highlight proposed changes from the 2007 CLRP and FY 2008-2013 TIP.

Attachment

## Significant Additions and Changes to The 2008 Update to the Financially Constrained Long-Range Transportation Plan (CLRP)



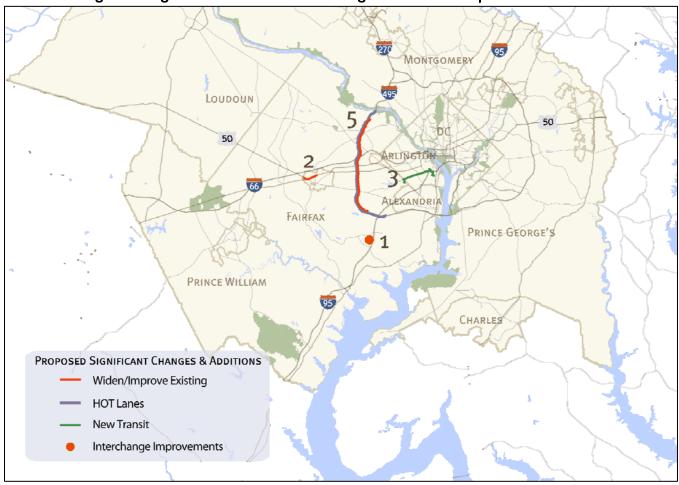


Figure 1: Significant Additions and Changes to the 2008 Update to the CLRP

### **Significant Additions to the CLRP**

- 1. Access to Ft. Belvoir Engineering Proving Grounds (EPG): I-95 and Fairfax County Parkway (BRAC)
- 2. Widen Segments of US 50 between Eaton Place and Jermantown Road Within the City of Fairfax
- 3. Columbia Pike Streetcar From Skyline to Pentagon City
- 4. Fairfax Connector Service Transit Development Plan (Not shown on map)

### Significant Changes to the CLRP

- 5. I-495 Capital Beltway HOV-HOT Lanes
- 6. I-95/395 HOV-HOT-Bus Lanes Transit Plan Revisions (Not shown on map)

### **Significant Additions to the CLRP**

## 1. Access to Ft. Belvoir Engineering Proving Grounds (EPG): I-95 and Fairfax County Parkway (BRAC)

Two projects have been proposed to meet expected demand at the Fort Belvoir EPG due to the Base Realignment and Closures (BRAC) act.

- A. I-95 Access to Fort Belvoir includes the following improvements:
  - Widen the existing ramp from southbound I-95 to the Fairfax County Parkway and EPG southern loop road with an additional barrier-separated lane, providing dedicated access to the EPG for DOD personnel only.
  - A new reversible, single-lane approach bridge from the northbound HOV/Bus/HOT lanes to the EPG's southern loop road. This connection will provide access from the northbound I-95 HOV lanes in the morning. In the evening, access will reverse to the northbound I-95 general purpose lanes and the southbound HOV lanes.

Complete: 2011, 2013 Cost: \$28.8 million Source: Federal funding

- B. Fairfax County Parkway Access to Fort Belvoir
  - A one-lane ramp from the EPG Access Road to northbound Fairfax County Parkway and a two-lane ramp from the Access Road to southbound Fairfax County Parkway. The proposed ramps will connect to the proposed interchange at Rolling Road, which is already included in the CLRP.

Complete: 2011

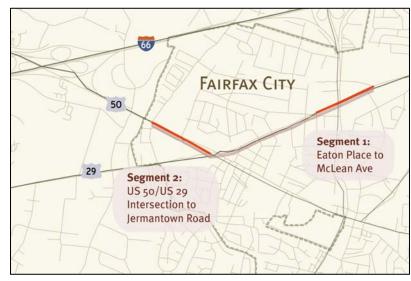
Cost: \$6.8 million
Source: Federal funding

2. Widen Segments of US 50 between Eaton Place and Jermantown Road

Within the City of Fairfax

Widen two segments of US 50 from Eaton Place to McLean Avenue and from the VA 236/VA 29 to Jermantown Road from four to five lanes. Project will also include pedestrian improvements and support the development of express shuttle service to the Vienna/Fairfax-GMU Metrorail Station and other circulator shuttle services to connect activity centers.

Length: 5 miles Complete: 2009



Cost: \$2 million Source: Local funding

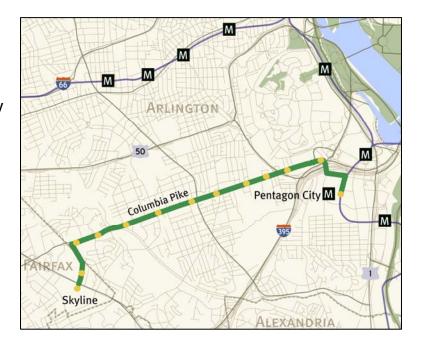
## 3. Columbia Pike Streetcar From Skyline to Pentagon City

Design, construct and operate a streetcar system running approximately 4.7 miles between Pentagon City in Arlington County and Skyline in Fairfax County. For most of the route, streetcars will travel in mixed traffic.

Length: 4.7 miles Complete: 2014

Cost: \$138.5 million

Source: State and local funding



### 4. Fairfax Connector Service Transit Development Plan

Not shown on map.

Increase bus service on priority routes and purchase 76 new Fairfax Connector buses. Expand the West Ox Bus Operations Facility to accommodate new buses and increased service. Also includes bus stop access and safety improvements identified as part of the Bus Stop Inventory and Safety Study.

Complete: 2010 Cost: \$91.9

Source: Local funding

### Significant Changes to the CLRP

The following projects are included in the 2007 CLRP, but significant changes have been proposed for the 2008 CLRP.

### 5. I-495 Capital Beltway HOV-HOT Lanes

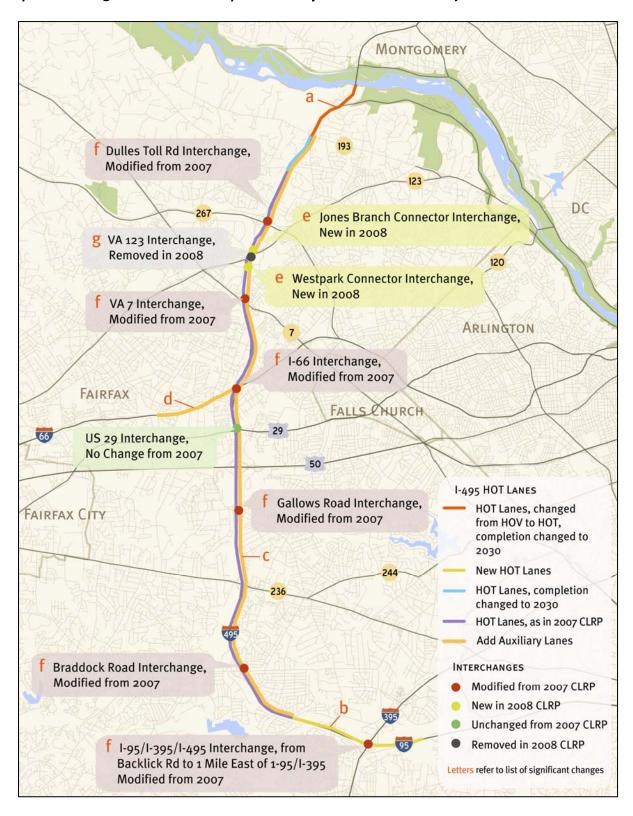
The 14 mile stretch of HOV-HOT Lanes on the Capital Beltway between Backlick Road and Old Dominion Drive is scheduled to be complete in 2013. The following changes have been proposed for the Capital Beltway HOT-HOV Lanes Project, as shown in the figure on the following page:

- a) The northern terminus of the HOT lanes will extend 2 lanes from Georgetown Pike to the American Legion Bridge. These were previously planned as HOV lanes to be complete in 2015 and are now proposed as HOT lanes to be complete in 2030. A 4 lane stretch of HOT lanes from Georgetown Pike (193) to Old Dominion Drive will be complete in 2030 instead of 2013.
- b) The southern terminus of the HOT lanes has been extended to include 2 HOT lanes from the Hemming Avenue underpass to one mile east of the I-95/395/495 Interchange. This segment is scheduled to be completed by 2013.
- c) One additional general purpose auxiliary lane from Georgetown Pike to the Hemming Avenue underpass will be added in each direction to connect the on-ramps and off-ramps between interchanges.
- d) Auxiliary lanes will be added on eastbound and westbound I-66 between the I-495 interchange and Cedar Lane (see accompanying CLRP description Form for details).
- e) Two new interchanges are planned at the westbound Jones Branch Connector and the westbound WestPark Connector.
- f) Planned HOT lane interchanges at the Dulles toll Road, VA 7, I-66, Gallows Road, Braddock Road and I-95/395 will be modified (see accompanying CLRP Description Form for details).
- g) A planned HOT lane interchange at VA 123 is being removed from the project scope.

Length: 14 miles
Complete: 2013, 2030
Cost: \$1.619 billion

Source: Federal, state, private and bond funding

### Proposed Changes to the I-495 Capital Beltway HOV-HOT Lanes Project for the 2008 CLRP



## 6. I-95/395 HOV-HOT-Bus Lanes Transit Plan Revisions Not shown on map.

The Transit Plan for the I-95/395 HOT Lanes project has been revised to reflect the results of the Transit/Transportation Demand Management (TDM) Study conducted by the Virginia Department of Rail and Public transportation (DRPT) and the Technical Advisory Committee. The following significant changes have been proposed for the Transit Plan. Full details can be found in Attachment A to the accompanying CLRP Description Form).

- The Transit/TDM plan's cost and revenue estimates has been revised from \$390 million to
   \$298 million to reflect the revised transit investment strategy for the corridor.
  - Earlier capital investments of \$76 million revised to \$137 million to reflect increased investment into transit facilities
  - Earlier operating revenues of \$314 million revised to \$161 million to reflect revised service plan, service duration and fare box recover
- Greater level of improvement/investment into transit facilities.
  - 4 new BRT stations along the corridor
  - o Improvements at 4 VRE stations platform extension and overnight storage
  - 9 new or enhanced TDM initiatives
  - o 3,750 park and ride spaces in addition to the 3,000 proposed earlier
  - 3 new/improved transit centers instead of 1 bus maintenance facility
  - o 76 new buses and 6 VRE rail cars instead of 184 new buses

### 1A. I-95 Access to Fort Belvoir Engineering Proving Grounds (BRAC) - 1 of 2

### **BASIC PROJECT INFORMATION**

- 1. Submitting Agency: FHWA Eastern Federal Lands Highway Division
- 2. Secondary Agency: Virginia Department of Transportation
- 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: <u>✓</u> System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other

6. Project Name: EGP Access to I-95 – reversible ramp from the EPG southern loop road to / from I-95.

		Prefix	Route 1	Name	Modifier
7.	Facility:			I-95 Reversible Ramp	
8.	From (_ at):			EPG Southern Loop Road	
9.	To:		I-95	NB HOV/BUS/HOT Lanes	

10. Description:

The proposed construction would include a reversible single lane approach road and structure over Backlick Road, Southbound I-95 general purpose lanes, and HOV/BUS/HOT lanes; tying into an existing slip ramp from the HOV lanes to northbound general purpose lanes. The project will provide access to the EPG from NB I-95 HOV in the AM and egress from the EPG to NB I-95 NB general purpose lanes and SB HOV lanes in the PM.

This project is being proposed as part of the nationwide BRAC activities, which calls for provision of 8,500 new Defense Department employmees within the EPG site. The proposed roadway will improve traffic flow along the Fairfax County Parkway and provide for efficient access/egress in and out of the EPG site.

The project is currently in the Preliminary Engineering phase with construction anticipated to begin in March 2010 and complete by September 2011. Funding for the project is anticipated to be provided by the Department of Defense's Defense Access Roadway Program.

- 11. Projected Completion Date: September 2011
- 12. Project Manager: Kurt Dowden
- 13. Project Manager E-Mail: Kurt.Dowden@fhwa.dot.gov
- 14. Project Information URL: N/A
- 15. Total Miles: 0.24 miles
- 16. Schematic: See attachment (EPG I-95 Reversible Ramp SLR CLRP Form Fig.pdf).
- 17. Documentation: N/A
- 18. Bicycle or Pedestrian Accommodations: <a href="Y">✓</a> Not Included; \_ Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 19. Jurisdictions:
- 20. Total cost (in Thousands): \$17,750

### 1A. I-95 Access to Ft. Belvoir EPG (BRAC) - 1 of 2

- 21. Remaining cost (in Thousands): \$17,750
- 22. Funding Sources: ✓ Federal; \_ State; \_ Local; \_ Private; \_ Bonds; \_ Other

### **SAFETEA-LU PLANNING FACTORS**

- 23. Please identify any and all planning factors that are addressed by this project:
  - ✓ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - ✓ Increase the **safety** of the transportation system for all motorized and non-motorized users.
    - a. Is this project being proposed specifically to address a safety issue? \_ Yes; ✓ No
    - b. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
  - ✓Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
  - ✓ Increase accessibility and mobility of people and freight.
  - ✓ 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.
  - <u>✓</u> Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
  - \_ Promote efficient system management and operation.
  - ✓ Emphasize the preservation of the existing transportation system.

### **ENVIRONMENTAL MITIGATION**

- 24. Have any potential mitigation activities been identified for this project? \_ Yes; ✓No
  - a. If yes, what types of mitigation activities have been identified?
    - $\_ \ Air \ Quality; \ \_ \ Floodplains; \ \_ \ Socioeconomics; \ \_ \ Geology, \ Soils \ and \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ and \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ Air \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ Air \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ Air \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ Air \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ Air \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ Air \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Soils \ Air \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Groundwater; \ Vibrations; \ \_ \ Geology, \ Groundwater; \ Vibrations; \ \_ \ Groundwater; \ Groundwater; \ Groundwater; \ Vibrations; \ \_ \ Groundwater; \ Groundwat$
    - \_ Energy; \_ Noise; \_ Surface Water; \_ Hazardous and Contaminated Materials; \_ Wetlands

### **CONGESTION MANAGEMENT INFORMATION**

- 25. Do traffic congestion conditions necessitate the proposed project? ✓ Yes; \_ No
  - a. If so, is the congestion recurring or non-recurring? ✓ Recurring; \_ Non-recurring
  - b. If the congestion is on another facility, please identify it: Fairfax County Parkway
  - c. What is the measured or estimated Level of Service on this facility? \_\_\_\_; \_ Measured; \_ Estimated
- 26. Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial? <u>✓</u> Yes; \_ No
  - a. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? \_ Yes; ✓ No
  - b. If not, please identify the criteria that exempt the project here:
    - ✓ The number of lane-miles added to the highway system by the project totals less than 1 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 will not allow motor vehicles, such as a bicycle or pedestrian facility
    - \_ The project consists of preliminary studies or engineering only, and is not funded for construction
    - \_ The project received NEPA approval on or before April 6, 1992
    - \_ The project was already under construction on or before September 30, 1997, or construction funds were already committed in the FY98-03 TIP.

## 1A. I-95 Access to Ft. Belvoir EPG (BRAC) - 1 of 2

\_ The construction costs for the project are less than \$5 million.

### **INTELLIGENT TRANSPORTATION SYSTEMS**

- 27. Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements? \_ Yes; ✓ No
- 28. If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? \_ Not Started; \_ Ongoing, not complete; \_ Complete
- 29. Under which Architecture:
  - \_ DC, Maryland or Virginia State Architecture
  - \_ WMATA Architecture
  - \_ COG/TPB Regional ITS Architecture
  - \_ Other, please specify:
- 30. Completed Date:
- 31. \_ Project is being withdrawn from the CLRP.
- 32. Withdrawn Date:
- 33. Record Creator:
- 34: Created On:
- 35. Last Updated by:
- 36. Last Updated On:
- 37. Comments

### 1B. I-95 Access to Fort Belvoir Engineering Proving Grounds (BRAC) - 2 of 2

### **BASIC PROJECT INFORMATION**

- 1. Submitting Agency: FHWA Eastern Federal Lands Highway Division
- 2. Secondary Agency: Virginia Department of Transportation
- 3. Agency Project ID:
- 4. Project Type: ✓ Interstate \_ Primary \_ Secondary \_ Urban \_ Bridge \_ Bike/Ped \_ Transit \_ CMAQ
  - \_ ITS \_ Enhancement \_ Other <u>✓</u> Federal Lands Highways Program
  - \_ Human Service Transportation Coordination \_ TERMs
- Category: 
   <u>✓</u> System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other
- 6. Project Name: SB I-95 Ramp

		Prefix	Route N	ame	Modifier
7.	Facility:			I-95 Ramp	
8.	From (_ at):		I-95	SB I-95	
9.	To:		7100	NB Fairfax County Pkwy. / EPG Southern Loop	

10. Description:

The proposed construction would include adding a lane to the existing ramp from SB I-95 to NB Fairfax County Parkway. This additional lane would be barrier separated and would provide access to the EPG southern loop road.

The proposed project will add an additional lane to the ramp from SB I-95 to NB Fairfax County Parkway. This additional lane will be barrier separated from the Parkway and will provide a dedicated lane for access to the EPG. This ramp is intended to be used only by Defense Department personnel employed at the EPG site.

This project is being proposed as part of the nationwide BRAC activities, which calls for provision of 8,500 new Defense Department employees within the EPG site. The proposed roadway will improve traffic flow along the Fairfax County Parkway and provide for efficient access to the EPG site.

The project is currently in the Preliminary Engineering phase with construction anticipated to begin in 2009 and be completed by December, 2010. Funding for the project is anticipated to be provided by the Department of Defense's Defense Access Roadway Program.

- 11. Projected Completion Date: December 2010
- 12. Project Manager: Kurt Dowden
- 13. Project Manager E-Mail: Kurt.dowden@fhwa.dot.gov
- 14. Project Information URL: N/A
- 15. Total Miles: 0.75 miles
- 16. Schematic: See attachment (EPG SB I-95 to FCP CLRP Form Fig.pdf).
- 17. Documentation: N/A

## 1B. I-95 Access to Ft. Belvoir EPG (BRAC) - 2 of 2

18. Bicycle or Pedestrian Accommodations: ✓ Not Included; \_ Included; \_ Primarily a Bike/Ped Project; \_ N/A 19. Jurisdictions: 20. Total cost (in Thousands): \$11,088 21. Remaining cost (in Thousands): \$11,088 22. Funding Sources: ✓ Federal; \_ State; \_ Local; \_ Private; \_ Bonds; \_ Other SAFETEA-LU PLANNING FACTORS 23. Please identify any and all planning factors that are addressed by this project: ✓ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency. ✓ Increase the safety of the transportation system for all motorized and non-motorized users. a. Is this project being proposed specifically to address a safety issue? \_ Yes; ✓ No b. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem: ✓Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users. ✓ Increase accessibility and mobility of people and freight. ✓ 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. \_ Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight. \_ Promote efficient system management and operation. ✓ Emphasize the preservation of the existing transportation system. **ENVIRONMENTAL MITIGATION** 24. 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** 25. Do traffic congestion conditions necessitate the proposed project? ✓ Yes; \_ No a. If so, is the congestion recurring or non-recurring? ✓ Recurring; \_ Non-recurring b. If the congestion is on another facility, please identify it: Fairfax County Parkway c. What is the measured or estimated Level of Service on this facility? \_\_\_\_; \_ Measured; \_ Estimated 26. Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial? ✓ Yes; \_ No a. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? \_ Yes; ✓ No b. If not, please identify the criteria that exempt the project here: ✓ The number of lane-miles added to the highway system by the project totals less than 1 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 will not allow motor vehicles, such as a bicycle or pedestrian facility

### 1B. I-95 Access to Ft. Belvoir EPG (BRAC) - 2 of 2

- \_ The project consists of preliminary studies or engineering only, and is not funded for construction
- \_ The project received NEPA approval on or before April 6, 1992
- \_ The project was already under construction on or before September 30, 1997, or construction funds were already committed in the FY98-03 TIP.
- \_ The construction costs for the project are less than \$5 million.

### **INTELLIGENT TRANSPORTATION SYSTEMS**

- 27. Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements? \_ Yes; ✓ No
- 28. If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? \_ Not Started; \_ Ongoing, not complete; \_ Complete
- 29. Under which Architecture:
  - \_ DC, Maryland or Virginia State Architecture
  - \_ WMATA Architecture
  - \_ COG/TPB Regional ITS Architecture
  - \_ Other, please specify:
- 30. Completed Date:
- 31. \_ Project is being withdrawn from the CLRP.
- 32. Withdrawn Date:
- 33. Record Creator:
- 34: Created On:
- 35. Last Updated by:
- 36. Last Updated On:
- 37. Comments



### 1B. Fairfax County Parkway Access to Ft. Belvoir EPG (BRAC)

### **BASIC PROJECT INFORMATION**

- 1. Submitting Agency: FHWA Eastern Federal Lands Highway Division
- 2. Secondary Agency: Virginia Department of Transportation
- 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: <u>✓</u> System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other
- 6. Project Name: Fairfax County Parkway Interchange from EPG to Fairfax County Parkway

		Prelix	Route N	iame	Modifier
7.	Facility:		7100	Fairfax County Parkway Ramps	
8.	From (_ at):			EPG Access Road	
9.	To:		7100	NB and SB Fairfax County Parkway	

10. Description:

The proposed construction would provide access to the Fairfax County Parkway from the Fort Belvoir Engineering Proving grounds. The construction would include a one-lane ramp from SB EPG Access Road to NB Fairfax County Parkway and a two-lane ramp from SB EPG Access Road to SB Fairfax County Parkway. The proposed ramps would tie into the proposed Fairfax County Parkway / Rolling Road interchange which is already included in the TPB's CLRP and Conformity. This previously proposed interchange includes access into the EPG from both directions of the Parkway.

This project is being proposed as part of the nationwide BRAC activities, which calls for provision of 8,500 new Defense Department employment within the EPG site. The proposed roadway will improve traffic flow along the Fairfax County Parkway and provide for efficient access/egress in and out of the EPG site.

The project is currently in the Preliminary Engineering phase with construction anticipated to begin in October 2009 and be completed by December 2010. Funding for the project is anticipated to be provided by the Department of Defense's Defense Access Roadway Program.

- 11. Projected Completion Date: December 2010
- 12. Project Manager: Kurt Dowden
- 13. Project Manager E-Mail: Kurt.Dowden@fhwa.dot.gov
- 14. Project Information URL: N/A
- 15. Total Miles: NB Ramp 0.40 miles; SB Ramp 0.60 miles
- 16. Schematic: See attachment (EPG FCP Ramps at Rolling Rd CLRP Form Fig.pdf)
- 17. Documentation:
- 18. Bicycle or Pedestrian Accommodations: <a href="Y"><u>√</u></a> Not Included; \_ Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 19. Jurisdictions:

# 1B. FAIRFAX COUNTY PARKWAY ACCESS TO FT. BELVOIR EPG (BRAC)

	•
20.	Total cost (in Thousands): \$6,775
21.	Remaining cost (in Thousands): \$6,775
22.	Funding Sources: ✓ Federal; _ State; _ Local; _ Private; _ Bonds; _ Other
SAI	FETEA-LU PLANNING FACTORS
23.	Please identify any and all planning factors that are addressed by this project:
	✓ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
	✓ Increase the safety of the transportation system for all motorized and non-motorized users.
	a. Is this project being proposed specifically to address a safety issue? _ Yes; ✓ No
	b. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
	✓ Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
	✓ Increase accessibility and mobility of people and freight.
	✓ 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.
	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
	_ Promote efficient system management and operation.
	$\underline{\checkmark}$ Emphasize the <b>preservation</b> of the existing transportation system.
FN	VIRONMENTAL MITIGATION
	Have any potential mitigation activities been identified for this project? _ Yes; ✓No
	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
CO	NGESTION MANAGEMENT INFORMATION
	Do traffic congestion conditions necessitate the proposed project? ✓ Yes; _ No
a.	If so, is the congestion recurring or non-recurring? ✓ Recurring; _ Non-recurring
b.	If the congestion is on another facility, please identify it:
C.	What is the measured or estimated Level of Service on this facility?; _ Measured; _ Estimated
26.	Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial? $\checkmark$ Yes; _ No
a.	If yes, does this project require a Congestion Management Documentation form under the given criteria (see <i>Call for Projects</i> document)? $\underline{\hspace{0.1in}}$ Yes; $\underline{\hspace{0.1in}}$ No
b.	If not, please identify the criteria that exempt the project here:  ✓ The number of lane-miles added to the highway system by the project totals less than 1 lane-mile
	<ul> <li>The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange</li> </ul>
	_ The project will not allow motor vehicles, such as a bicycle or pedestrian facility
	_ The project consists of preliminary studies or engineering only, and is not funded for construction

\_ The project received NEPA approval on or before April 6, 1992

# 1B. FAIRFAX COUNTY PARKWAY ACCESS TO FT. BELVOIR EPG (BRAC)

_	The project w	as already	under	construction	on on c	r before	September	30,	1997,	or o	construction	funds
	were already	committed	in the	FY98-03 T	IP.							

### **INTELLIGENT TRANSPORTATION SYSTEMS**

- 27. Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements? \_ Yes; ✓ No
- 28. If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? \_ Not Started; \_ Ongoing, not complete; \_ Complete
- 29. Under which Architecture:
  - \_ DC, Maryland or Virginia State Architecture
  - \_ WMATA Architecture
  - \_ COG/TPB Regional ITS Architecture
  - \_ Other, please specify:
- 30. Completed Date:
- 31. \_ Project is being withdrawn from the CLRP.
- 32. Withdrawn Date:
- 33. Record Creator:
- 34: Created On:
- 35. Last Updated by:
- 36. Last Updated On:
- 37. Comments

\_ The construction costs for the project are less than \$5 million.



### Widen Segments of US 50 between Eaton Place and Jermantown Road

### **BASIC PROJECT INFORMATION**

1. Sı	ubmitting	Agency:	DPW,	City	of Fairf	ax
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2. Secondary Agency: None

3. Agency Project ID:

4. Project Type: \_ Interstate  $\sqrt{\text{Primary }}$  \_ 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:

	Prefix	Route	Name	Modifier
	Rte.	50	Route 50 Corridor Multi-modal Improvements	
):			Eaton Place/Route 50/29 Intersection	
			James atoms Dond/Douts 226 Interpretion	

From (\_ at):
 To:

Facility:

7.

| Jermantown Road/Route 236 Intersection |

10. Description:

Multi-modal improvements to support the development of multi-use activity centers. Improvements will include, widening of Route 50 from the intersection of Route 50 and Eaton Place to the intersection of Route 50/236 and Jermantown Road, local roads around and within the activity centers, wider sidewalks around the activity centers, trails connecting to residential communities, express shuttle service connecting the activity centers to the Vienna/Fairfax-GMU Metrorail station, and circulator shuttles connecting the activity centers.

- 11. Projected Completion Date: 2009
- 12. Project Manager: Alexis Versoza
- 13. Project Manager E-Mail: Averzosa@fairfaxva.gov
- 14. Project Information URL:
- 15. Total Miles: Five (5)
- 16. Schematic:
- 17. Documentation:
- 18. Bicycle or Pedestrian Accommodations: \_ Not Included; √ Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 19. Jurisdictions: City of Fairfax, Virginia
- 20. Total cost (in Thousands): \$2,000
- 21. Remaining cost (in Thousands): Not applicable
- 22. Funding Sources: Federal; State; √ Local; Private; Bonds; Other

## WIDEN SEGMENTS OF US 50 BETWEEN EATON PLACE AND JERMANTOWN ROAD

### SAFETEA-LU PLANNING FACTORS

- 23. Please identify any and all planning factors that are addressed by this project:
  - √ Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - $\sqrt{}$  Increase the **safety** of the transportation system for all motorized and non-motorized users.
    - a. Is this project being proposed specifically to address a safety issue? \_ Yes; \_ No
    - b. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
  - \_ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
  - $\sqrt{\text{Increase accessibility and mobility}}$  of people and freight.
  - √ 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.
  - \_ Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
  - \_ Promote efficient system management and operation.
  - \_ Emphasize the **preservation** of the existing transportation system.

### **ENVIRONMENTAL MITIGATION**

- 24. Have any potential mitigation activities been identified for this project?  $\_$  Yes;  $\sqrt{}$  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**

- 25. Do traffic congestion conditions necessitate the proposed project? √ Yes; \_ No
  - a. If so, is the congestion recurring or non-recurring?  $\sqrt{\text{Recurring}}$ ; Non-recurring
  - b. If the congestion is on another facility, please identify it:
  - c. What is the measured or estimated Level of Service on this facility? ; Measured; Estimated
- 26. Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial?  $\sqrt{\text{Yes}}$ ; No
  - a. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? \_ Yes;  $\sqrt{No}$
  - b. If not, please identify the criteria that exempt the project here:
    - \_ The number of lane-miles added to the highway system by the project totals less than 1 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 will not allow motor vehicles, such as a bicycle or pedestrian facility
    - √ The project consists of preliminary studies or engineering only, and is not funded for construction
    - The project received NEPA approval on or before April 6, 1992
    - \_ The project was already under construction on or before September 30, 1997, or construction funds were already committed in the FY98-03 TIP.
    - \_ The construction costs for the project are less than \$5 million.

## WIDEN SEGMENTS OF US 50 BETWEEN EATON PLACE AND JERMANTOWN ROAD

### **INTELLIGENT TRANSPORTATION SYSTEMS**

- 27. Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements?  $\_$  Yes;  $\sqrt{}$  No
- 28. If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? \_ Not Started; \_ Ongoing, not complete; \_ Complete
- 29. Under which Architecture:
  - \_ DC, Maryland or Virginia State Architecture
  - \_ WMATA Architecture
  - \_ COG/TPB Regional ITS Architecture
  - \_ Other, please specify:
- 30. Completed Date:
- 31. \_ Project is being withdrawn from the CLRP.
- 32. Withdrawn Date:
- 33. Record Creator:
- 34: Created On:
- 35. Last Updated by:
- 36. Last Updated On:
- 37. Comments



### Columbia Pike Streetcar from Skyline to Pentagon City

### **BASIC PROJECT INFORMATION**

1.	Submitting	Agency:	VDOT
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2. Secondary Agency: Arlington County DPW

3. Agency Project ID: ARLO016

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

5. Category: X System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other

6. Project Name: Columbia Pike Street Cars

		Prefix	Route	Name	Modifier
7.	Facility:			Columbia Pike	
8.	From (_ at):			Skyline (Fairfax County)	
9.	To:			Pentagon City	

10. Description: Provides streetcars and stops on Columbia Pike.

This is a joint project between Fairfax and Arlington Counties along Columbia Pike to bring an enhanced form of surface transit to this heavily used transit corridor. The project consists of environmental studies, preliminary engineering, design and construction of a streetcar running approx. 4.7 miles between Pentagon City in Arlington County and Skyline in Fairfax County. The Streetcar was selected by the Board of each county in 2006 as the locally preferred alternative to provide enhanced transit and promote revitalization and redevelopment of this corridor. For most of its length, the streetcar will run in mixed traffic. It will be constructed in coordination with another project to reconstruct Columbia Pike through Arlington County with enhanced streetscape and consistent five lane cross section.

- 11. Projected Completion Date: 2014
- 12. Project Manager:
- 13. Project Manager E-Mail:
- 14. Project Information URL:
- 15. Total Miles: 4.7
- 16. Schematic:
- 17. Documentation:
- 18. Bicycle or Pedestrian Accommodations: \_ Not Included; \_ Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 19. Jurisdictions: Arlington County
- 20. Total cost (in Thousands): \$138,500
- 21. Remaining cost (in Thousands):
- 22. Funding Sources: \_ Federal; \_ State; \_ Local; \_ Private; \_ Bonds; \_ Other

### CLRP PROJECT DESCRIPTION FORM

### SAFETEA-LU PLANNING FACTORS

- 23. 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? \_ 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 and freight.
  - e. \_ 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.
  - f. \_ Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
  - g. \_ Promote efficient system management and operation.
  - h. \_ Emphasize the **preservation** of the existing transportation system.

### **ENVIRONMENTAL MITIGATION**

- 24. 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**

- 25. Do traffic congestion conditions necessitate the proposed project? \_ Yes; \_ No
  - a. If so, is the congestion recurring or non-recurring? \_ Recurring; \_ Non-recurring
  - b. If the congestion is on another facility, please identify it:
  - c. What is the measured or estimated Level of Service on this facility? \_\_\_\_; \_ Measured; \_ Estimated
- 26. Is this a capacity-increasing project on a limited access highway or other principal arterial? \_ Yes; \_ No
- a. If yes, does this project require a Congestion Management Documentation form under the given criteria (see page 34 of the *Call for Projects* document)? \_ Yes; <u>Click here to access a Congestion Management Documentation Form.</u>
- b. If not, please identify the criteria that exempt the project here:
  - \_ The number of lane-miles added to the highway system by the project totals less than 1 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 will not allow motor vehicles, such as a bicycle or pedestrian facility
  - \_ The project consists of preliminary studies or engineering only, and is not funded for construction
  - \_ The project received NEPA approval on or before April 6, 1992
  - \_ The project was already under construction on or before September 30, 1997, or construction funds were already committed in the FY98-03 TIP.
  - \_ The construction costs for the project are less than \$5 million.
  - \_ The project will not use any Federal funds in any phase of development or construction.

### **CLRP PROJECT DESCRIPTION FORM**

### **INTELLIGENT TRANSPORTATION SYSTEMS**

- 27. Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements? \_ Yes; X No
  - a. If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? \_ Not Started; \_ Ongoing, not complete; \_ Complete
  - b. Under which Architecture:
    - \_ DC, Maryland or Virginia State Architecture
    - \_ WMATA Architecture
    - \_ COG/TPB Regional ITS Architecture
    - \_ Other, please specify:
- 28. Completed Date:
- 29. \_ Project is being withdrawn from the CLRP.
- 30. Withdrawn Date:
- 31. Record Creator: John Barr
- 32: Created On: 11/1/2007
- 33. Last Updated by: Andrew Austin
- 34. Last Updated On: 1/11/2008
- 35. Comments



### Fairfax Connector Service Transit Development Plan

BAS	SIC PROJECT	<b>INFOR</b>	MATI	<u>ON</u>	
1.	Agency Project	t ID:		Secondary Agency: Fairfax	County, VA
2.	Project Type:	✓ Sys <sup>2</sup>	tem Ex	spansion; _ System Maintenance; _ Operational Program;	_ Study; _ Other
	(check all	_ Free	way; _	. Primary; _ Secondary; _ Urban; _ Bridge; 🗹 Bike/Ped; 🗹	Transit; _ CMAQ;
	that apply)	_ITS;	_ Enha	ancement; _ Other	
3.	Project Title:				
		Prefix	Route	Name	Modifier
4.	Facility:			Fairfax CONNECTOR Service Improvements	
5.	From (_ at):			Countywide	
6.	To:				
7. 8.	Jurisdiction(s) Description:	Fairfa: Impro Increa buses	x Conr veme sed b to im	nector Service Improvements including: Bus Stop, Acoustic Improvements including: Bus Stop, Acoustic Improvements identified as part of the Bus Stop Inventory and Sus service on priority routes; the Purchase of 76 new plement the increased bus service; and the expansion Facility to accommodate the increased service and necessity in the increased service and the increased service and necessity in the increased service and necessity in the increased service and necessity in the increased service and the increased service and necessity in the increased service and necessity in the increased service and necessity in the increased service and the increased service and necessity in the increased service and necessity in the increased service and the incre	Safety Study; Fairfax Connector n of the West Ox Bus
9.	Bicycle or Pede	estrian	Accon	nmodations: _ Not Included; 🗹 Included; _ Primarily a Bi	ke/Ped Project; _ N/A
10.	Total Miles: N	/A			
11.	Project Manag	er: Tor	n Blac	k 12. E-Mail: <u>Thomas.Black@</u>	Fairfaxcounty.gov
13.	Project Inform	ation L	JRL:		
14.	Projected Com	pletion	Year:	2010	
15.	Actual Comple	tion Ye	ar:	_ Project is ongoing. Year ref	ers to implementation.
16.	_ This project	t is beir	ng witl	ndrawn from the Plan as of:	
17.	Total cost (in	Thousa	nds):	\$91,901	
18.	Remaining cos	st (in Th	nousar	nds): \$91,901	
19.	Funding Source	es: _ F	edera	I; _ State; <u>✓</u> Local; _ Private; _ Bonds; _ Other	

### **CONGESTION MANAGEMENT INFORMATION**

- 20. Do traffic congestion conditions necessitate the proposed project? ✓ Yes; \_ No
- 21. If so, describe those conditions:  $\underline{\checkmark}$  Recurring congestion; \_ Non-site specific congestion;

\_ Frequent incident-related, non-recurring congestion; \_ Other

- 22. Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial? ✓ Yes; \_ No
- 23. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? ✓ Yes; \_ No
- 24. If not, please identify the criteria that exempt the project here:
  - \_ The number of lane-miles added to the highway system by the project totals less than 1 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 will not allow motor vehicles, such as a bicycle or pedestrian facility

## FAIRFAX CONNECTOR SERVICE TRANSIT DEVELOPMENT PLAN

	TAIRIAX COMMECTOR SERVICE TRANSIT BEVELOFMENT I LAN
	_ The project consists of preliminary studies or engineering only, and is not funded for construction
	_ The project received NEPA approval on or before April 6, 1992
	_ The project was already under construction on or before September 30, 1997, or construction funds were already committed in the FY98-03 TIP.
	_ The construction costs for the project are less than \$5 million.
SAI	FETEA-LU PLANNING FACTORS
25.	Please identify any and all planning factors that are addressed by this project:
	✓ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
	✓ Increase the safety of the transportation system for all motorized and non-motorized users.
	a. Is this project being proposed specifically to address a safety issue? _ Yes; ✓ No
	<ul> <li>b. Please identify issues: _ High accident location; ✓ Pedestrian safety; ✓ Other</li> <li>_ Truck or freight safety; _ Engineer-identified problem</li> </ul>
	c. Briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
	This project will improve the safety and access to the transit stops utilized by the bus passengers. Numerous stops do not have sufficient (if any at all) pedestrian facilities adjacent to them; have no waiting area or shelter; and are poorly lit. This project will address many of these safety issues.
	_ Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
	✓ Increase accessibility and mobility of people and freight.
	✓ 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.
	$\underline{\checkmark}$ Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
	✓ Promote efficient system management and operation.
	_ Emphasize the preservation of the existing transportation system.
<u>EN</u>	VIRONMENTAL MITIGATION
26.	Have any potential mitigation activities been identified for this project? _ Yes; ✓ No
27.	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
<u>IN</u>	FELLIGENT TRANSPORTATION SYSTEMS
28.	Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements? _ Yes; $\underline{\checkmark}$ No
29.	If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? _ Not Started; _ Ongoing, not complete; _ Complete
30.	Under which Architecture:
	_ DC, Maryland or Virginia State Architecture

\_ WMATA Architecture

\_ COG/TPB Regional ITS Architecture

## FAIRFAX CONNECTOR SERVICE TRANSIT DEVELOPMENT PLAN

\_ Other, please specify:

31. Other Comments



### 5. Capital Beltway (I-495) Improvements and HOV/HOT Lanes Project

### **BASIC PROJECT INFORMATION (Jan. 2008 Update)**

Submitting Agency: Virginia Department of Transportation 1.

2. Secondary Agency:

Agency Project ID: 87771 3.

Project Type: X Interstate X Primary X Secondary X Urban X Bridge X Bike/Ped \_ Transit \_ CMAQ

XITS \_ Enhancement \_ Other \_ Federal Lands Highways Program

\_ Human Service Transportation Coordination \_ TERMs

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

Project Name: Capital Beltway (I-495) Improvements and HOV/HOT Lanes Project

	Prefix	Route Name		Modifier
Facility:	I	495	Capital Beltway	
From (_ at):			Backlick Road Underpass	
To:			South of Old Georgetown Pike (VA 193)	

9.

7. 8.

### 10. Description:

The project proposes to implement most of the improvements recommended in the federally approved EIS (as amended via the 2007 Re-evaluation) for the approximately 14 mile stretch of the Capital Beltway (I 495) between Backlick Road underpass to the south and Old Georgetown Pike (VA 193) to the north. The improvements are proposed to be implemented via a joint, publicprivate partnership between the Virginia Department of Transportation and the consortium of two private sector firms, Fluor Virginia, Inc. and Transurban (USA) Development Inc. Reevaluation recommended improvements that are proposed to be implemented may be grouped under two categories: those improvements that are part of the HOV/HOT lanes project funded by the private sector and those that are not explicitly part of the HOV/HOT lanes system and funded by VDOT. A brief description of the combined set of improvements follows, with explanations of VDOT funded improvements at the appropriate places in the text.

This project is being implemented concurrently and in coordination with the implementation of two other VDOT funded projects: (1) the Springfield Interchange – Phase 8 project (between Backlick Rd. and 1 mi. east of the I-95/395/495 interchange), which is at the southern end, and the (2) Capital Beltway HOV/HOT lane project at the northern end of this project (between south of Old Georgetown Pike and the American Legion Bridge). Both of these two projects are listed as independent projects in the MPO's CLRP/Conformity documents.

This Beltway Improvements/HOV-HOT lanes project proposes to Widen I-495 (Capital Beltway) by:

- 1. Adding 4 HOV-HOT lanes, two in each direction, between the Hemming Ave. underpass at the south to South of the Old Dominion Drive overpass in the north - by 2013; at the southern end this segment will tie in with the proposed Springfield Interchange Phase 8 project and provide the I-495 HOV/HOT lanes traffic access to the HOV/BUS/HOT lanes on I-395 and I-95.
- 2. Adding 4 HOT lanes, two in each direction, between South of Old Dominion Drive and Old Georgetown Pike (VA 193) in the north – by 2030. This segment will match the previously proposed construction of 2 HOT lanes (one in each direction) between Old Georgetown Pike (VA 193) and the America Legion Bridge by 2030 and allow HOV & HOT traffic to continue

past the terminus of the HOT lanes in this project all the way up to the VA border at American Legion Bridge.

- 3. The following access points are provided with the proposed project 2013.
  - a. Braddock Road -
    - Drivers headed both west and east on Braddock Road will be able to access NB HOT
    - ii. Drivers on SB HOT will be able to access Braddock west and east
  - b. Gallows Road
    - i. Drivers headed both west and east on Gallows Road will be able to access NB HOT
    - ii. Drivers on SB HOT will be able to access Gallows Road west and east
  - c. Route 29
    - i. Drivers headed both west and east on Route 29 will be able to access SB HOT
    - ii. Drivers on NB HOT will be able to access Route 29 west and east
  - d. I-66 Interchange
    - i. Drivers on EB I-66 will be able to access NB and SB HOT
    - ii. Drivers on WB I-66 will be able to access SB HOT
    - iii. Drivers on NB HOT will be able to access EB and WB I-66
    - iv. Drivers on SB HOT will be able to access WB I-66

Additional improvements at this interchange (under UPC 56356) will include relocating the existing GP exit ramp from EB I 66 to NB I 495 GP lanes, so as to have the ramp merge with NB I 495 on the right side. Additionally, modification to other GP ramps including roadway, bridge reconstruction, sound walls, pedestrian/bicycle facilities and incidental construction such as lighting, draining, etc, within the interchange may also be included.

- e. Route 7
  - i. Drivers headed both west and east on Route 7 will be able to access SB HOT
  - ii. Drivers on NB HOT will be able to access Route 7 west and east
- f. Westpark Drive Connection
  - i. Drivers on Westpark Drive will be able to access NB and SB HOT
  - ii. Drivers on NB and SB HOT will be able to access Westpark Drive
- g. Jones Branch Drive Connection
  - i. Drivers on Jones Branch Drive will be able to access NB and SB HOT
  - ii. Drivers on NB and SB HOT will be able to access Jones Branch Drive
- h. Dulles Toll Road (DTR)
  - i. Drivers on EB DTR will be able to access SB HOT
  - ii. Drivers on NB HOT will be able to access WB DTR and Dulles Airport Access Road (DAAR)
  - iii. Drivers on SB HOT will be able to access WB DTR and DAAR
- i. Auxiliary/CD Lanes will also be included between interchanges on I-495.
- j. Other construction 'Other Construction' activities may include UPC 84742): Pavement rehabilitation along I-66 within the limits of the HOT lanes project; reconstruction of existing interchanges (other than any portion of such interchanges that will provide access to the HOT Lanes for toll-paying vehicles); roadway/bridge reconstruction; sound walls; pedestrian / bicycle facilities; and incidental construction such as lighting, drainage etc. at the following locations within the project limits: Wakefield Park Pedestrian Bridge, Little River Turnpike (Route 236), W&OD Pedestrian Bridge, Idylwood Road (Route 695), Oak Street (Route 769), and Lewinsville Road (Route 694). All of this work is anticipated to be complete by 2013.
- 4. The following improvements are anticipated by 2030.

- a. Braddock Road -
  - Drivers headed both west and east on Braddock Road will be able to access SB HOT
  - ii. Drivers on NB HOT will be able to access Braddock west and east
- b. Dulles Toll Road (DTR)
  - i. Drivers on EB DTR will be able to access NB HOT
  - ii. Drivers on SB HOT will be able to access EB DTR and Dulles Airport Access
- c. Auxiliary/CD Lanes will also be included between interchanges on I-495 and I-66. On I-66 the limits of auxiliary lanes will be as follows: along EB I-66: 2 lane CD Road between South of Gallows Rd. overpass and SB I-495 Off ramp, and 1 auxiliary lane between Cedar Lane overpass and south of Gallows Rd. overpass; along WB I-66: 2 lane CD road between on ramp from SB I-495 and south of Gallows Rd. overpass and 1 auxiliary lane between Cedar Rd. overpass and south of Gallows Rd. overpass.

### **Tolling Policy**

HOT lanes use dynamic pricing to maintain free-flowing conditions for all users, even during rush hour. The toll rates will vary throughout the day with time of day and with day of week corresponding to demand and congestion levels. Toll rates will be at its lowest when the demand and congestion levels are at its lowest. SAFETEA-LU mandates strict performance standards which are intended to ensure free-flowing conditions on the HOT lanes. The proposed HOT lanes project will include performance monitoring as an integral part of the project and ensure that the SAFETEA-LU mandated performance standards are complied with. Toll prices will be adjusted in response to the level of traffic to ensure free flowing operations on the Bus/HOV/HOT lanes. There will be no price caps on the level of tolls.

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 HOV/Bus/HOT lanes will be totally electronic. There will be no toll booths. The dynamic message signs will be supplemented by other notification/communications methods to insure all users, including transit operators, have as much advance knowledge of traffic conditions as is possible.

### **Incident Management**

The project designs will focus on the safety aspects of the facility including cross section layout (lane width and shoulders), operations and incident management. The design and operational features of the project will be integrated with and supported by a performance based, computer aided incident management system. The incident management system will provide 24/7 monitoring and surveillance of the facility and have dedicated motorists assistance equipment and personnel. This system will allow for a rapid detection of incidents that occur in the Bus/HOV/HOT lanes.

### **Financial Plan**

Construction cost for the proposed Project is estimated to be \$1,619M (in year of expenditure dollars). Funding sources for the Project includes a combination of private 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, FTU will explore all avenues of funding to ensure the lowest cost of capital for the Project.

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

- 11. Projected Completion Date: 2013
- 12. Project Manager: Theresa DeFore
- 13. Project Manager E-Mail: Theresa.DeFore@vdot.virginia.gov
- 14. Project Information URL: <a href="https://www.VirginiaDOT.org/projects/HOT\_495.asp">www.VirginiaDOT.org/projects/HOT\_495.asp</a>
- 15. Total Miles: 14 miles
- 16. Schematic: <a href="https://www.virginiadot.org/projects/resources/495access.pdf">www.virginiadot.org/projects/resources/495access.pdf</a>. and
  - www.virginiadot.org/projects/resources/TysonsEntryExitpoints.pdf.
- 17. Documentation:
- 18. Bicycle or Pedestrian Accommodations: \_ Not Included; <u>X</u> Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 19. Jurisdictions: Fairfax County
- 20. Total cost (in Thousands): \$1,619,000
- 21. Remaining cost (in Thousands):
- 22. Funding Sources: X Federal; X State; \_ Local; X Private; X Bonds; \_ Other

### SAFETEA-LU PLANNING FACTORS

- 23. Please identify any and all planning factors that are addressed by this project:
  - √\_ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - \_ Increase the **safety** of the transportation system for all motorized and non-motorized users.
    - a. Is this project being proposed specifically to address a safety issue? \_ Yes; \_ No
    - b. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
  - \_ Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
  - $\sqrt{\text{Increase accessibility and mobility of people and freight.}}$
  - √ 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.
  - √ Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
  - $\checkmark$  Promote efficient system management and operation.
  - \_ Emphasize the **preservation** of the existing transportation system.

### **ENVIRONMENTAL MITIGATION**

- 24. 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**

- 25. Do traffic congestion conditions necessitate the proposed project? ✓ Yes; \_ No
  - a. If so, is the congestion recurring or non-recurring? √ Recurring; \_ Non-recurring
  - b. If the congestion is on another facility, please identify it:
  - c. What is the measured or estimated Level of Service on this facility? \_\_\_\_; \_ Measured; \_ Estimated

- 26. Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial? 
  √ Yes; \_ No
  - a. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? 
    √ Yes; \_ No
  - b. If not, please identify the criteria that exempt the project here:
    - \_ The number of lane-miles added to the highway system by the project totals less than 1 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 will not allow motor vehicles, such as a bicycle or pedestrian facility
    - \_ The project consists of preliminary studies or engineering only, and is not funded for construction
    - \_ The project received NEPA approval on or before April 6, 1992
    - \_ The project was already under construction on or before September 30, 1997, or construction funds were already committed in the FY98-03 TIP.
    - \_ The construction costs for the project are less than \$5 million.

### **INTELLIGENT TRANSPORTATION SYSTEMS**

27. Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements? \_ Yes; √ No

This project will include various ITS elements which will be consistent with the applicable requirements of Federal Rule 940. A Rule 940 Compliance Checklist will be completed and submitted to FHWA Virginia Division (Danny Jenkins) for concurrence. A Concept of Operations has been prepared. A Project Level ITS Architecture, compliant with the VDOT Northern Region ITS Architecture, will be developed.

- 28. If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? \_ Not Started; X Ongoing, not complete; \_ Complete
- 29. Under which Architecture:
  - \_ DC, Maryland or Virginia State Architecture
  - \_ WMATA Architecture
  - \_ COG/TPB Regional ITS Architecture
  - X Other, please specify: VDOT Northern Region ITS Architecture
- 30. Completed Date:
- 31. \_ Project is being withdrawn from the CLRP.
- 32. Withdrawn Date:
- 33. Record Creator:
- 34: Created On:
- 35. Last Updated by:
- 36. Last Updated On:
- 37. Comments: Updated CLRP form submitted as part of the 2008 CLRP Update on 1/14/08.



### I-95/395 HOV/Bus/HOT Lanes Project

### BASIC PROJECT INFORMATION (Jan. 2008 Update)

1. Agency Project ID: Secondary Agency:

Project Type: <u>✓</u> System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other
 (check all <u>✓</u> Freeway; \_ Primary; \_ Secondary; <u>✓</u> Urban; \_ Bridge; \_ Bike/Ped; \_ Transit; \_ CMAQ;

that apply) \_ ITS; \_ Enhancement; \_ Other

3. Project Title: I-95 / I-395 HOV / Bus / HOT Lanes Project

4. Facility: I-95 / 395

5. From (\_ at): Eads Street, Arlington County

6. To: Route 610 (Garrisonville Road), Stafford County

No.	Route	Connection Location:	Morning connections:	Evening connections:	Type of Modification:
1	I 395	Eads Street	NB HOT Lanes to Eads Street	Eads Street to SB HOT Lanes	Expanded
2	I 395	Between South Hayes Street and Washington Blvd.	SB Express Lanes to SB general purpose lanes	SB Express Lanes to SB general purpose lanes	Deleted (to accommodate No. 1 above) <sup>1</sup>
3	I 395	VA 402 (Shirlington Circle)	NB HOT Lanes to Shirlington Circle	Shirlington Circle to SB HOT Lanes	New
4	I 395	VA 420 (Seminary Road)	NB HOT Lanes to Seminary Road	Seminary Road to SB HOT Lanes	New <sup>1</sup> (Bus only access)
5	I 95	Between VA 236 (Duke Street) and VA 648 (Edsall Road)	NB HOT Lanes to NB general purpose lanes	N/A	New
6	I 95	VA 7100 (Fairfax County Parkway)	N/A	Fairfax County Parkway to SB HOT Lanes	New
7	I 95	Between VA 7100 (Fairfax County Pkwy) and VA 638 (Pohick Road)	N/A	SB HOV Lanes to SB general purpose lanes	Deleted (to accommodate No. 6 above) <sup>1</sup>
8A	I 95	Between VA 7100 (Fairfax County Pkwy) and VA 642 (Lorton Road)	NB HOT Lanes to NB general purpose lanes	N/A	New
8B	I 95	Between VA 7100 (Fairfax County Pkwy) and VA 642 (Lorton Road)	NB HOT Lanes to new bus station, back to NB HOT lanes (Buses only)	SB HOT lanes to new bus station, back to SB HOT lanes (Buses only)	New, reversible bus-only ramp
9	I 95	Between VA 123 (Gordon Road) and VA 3000 (Prince William County Parkway)	NB HOT Lanes to NB general purpose lanes	SB HOT Lanes to SB general purpose lanes	New
10	I 95	Between VA 610 (Cardinal Drive) and US 234 (Dumfries Road)	NB HOT Lanes to NB general purpose lanes	N/A	New
11	I 95	Between US 234 (Dumfries Road) and VA 610 (Garrisonville Road)	N/A	SB HOT Lanes to SB general purpose lanes	Expanded

<sup>&</sup>lt;sup>1</sup> Integration of this proposed modification in the project design is currently under evaluation.

- 7. Jurisdiction(s): Arlington County, City of Alexandria, Fairfax County, Prince William County, Town of Dumfries, Stafford County
- 8. Description:

The region's CLRP and air quality conformity analyses have assumed adding a third HOV lane on I-395 and part of I-95 since 1994. This project was assumed to be accomplished by re-striping the existing pavement with no other modifications to access, egress, without any enhancements to transit services and or any new/improved incident management services. The project was assumed to be complete by 2010.

The HOT Lane project provides a funding mechanism for not just building the third lane, but also a comprehensive upgrade to the access/egress locations, pavement replacement within the existing right of way as needed, significant new transit services on the facility, and a dedicated, performance based, computer aided incident management system.

A private consortium led by Fluor Virginia, Inc. and Transurban (USA) Development Inc. (together "FTU") has been selected to construct this third lane on portions of I-95/395, and operate the entire three lane facility as a system of High Occupancy Vehicle/Bus/High Occupancy Toll Lanes ("HOV/Bus/HOT"). In October 2006, VDOT and FTU signed an Interim Agreement to commence development activities on the Project.

The Project entails expanding the existing reversible High Occupancy Vehicle ("HOV") lanes between Eads Street and south of the Town of Dumfries from two to three lanes, and converting the lanes to include High Occupancy Toll ("HOT"), bus and HOV traffic. New entry/exit points into and out of the HOV/Bus/HOT lanes, as listed in Items 5 and 6 above, will be added along the corridor. The design of the proposed new entry/exit points will continue to be refined through the traffic operational analysis and the environmental review ("NEPA") process.

The Project also proposes to address traffic operational issues noted with the existing HOV system. During peak pm periods, traffic traveling in a southbound ("SB") direction in the current HOV system is often congested at the point where the HOV lanes terminate and merge into the general purpose ("GP") lanes at Dumfries. This Project proposes to relieve the current congestion problem by both expanding the current merge point, and providing for the extension of lanes south of the current merge to Route 610 (Garrisonville Road) in Stafford County. Under the proposed design, vehicles exiting at Route 234 would be merged into the GP lanes north of the exit. The remaining two HOV/Bus/HOT lanes would extend south of Quantico Creek. At a point south of Quantico Creek, one of two lanes would branch off on a new, single-lane fly-over from the SB HOT lanes to the SB GP lanes. This fly-over would service vehicles exiting to Route 619 (Joplin Road) and Russell Road. The fly-over lane would merge into a newly constructed GP auxiliary lane running between the ramp and Route 619. The remaining HOT lane would continue south as a separated lane, merging into the SB GP lanes just north of Route 610 (Garrisonville Road).

The Project also proposes to make improvements at Eads Street, the proposed northern termination point (for tolling purposes) of the HOT lanes. Improvements at Eads Street would affect both am and pm peak traffic, and provide for additional lanes for HOV/Bus/HOT lane traffic exiting at Eads Street, including a ramp dedicated exclusively for use by buses exiting into/out of the Pentagon reservation. The exact configuration of the northern and southern termini will be refined through the traffic operational analysis and the NEPA process. If such refinements affect conformity, the changes would be proposed in future conformity analyses.

Access to the HOT lanes would be available to automobiles, motorcycles, light-trucks, buses and transit vehicles only. Vehicles with three or more occupants would travel on the HOT 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

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complies with the statutory requirements of the Commonwealth. Buses, transit vehicles, and emergency response vehicles would also travel on the HOT lanes for free. Other vehicles not meeting the occupancy requirement would pay a toll, using electronic toll collection equipment, at a rate that would vary by time of day, day of week and level of congestion, to insure the level of free-flow conditions as specified by Federal SAFE-TEA-LU regulations at a minimum.

The current two-lane HOV facility along I-395 and I-95 had been planned, for at least the past 14 years, to be expanded to three lanes. This planned expansion to three lanes would have utilized one of the two existing shoulders. Based on preliminary field reviews VDOT believes that a design which provides adequate shoulders on both sides of I-95, south of the Capital Beltway, and an adequate shoulder on one side on I-395 is possible. As preliminary designs are completed, these will be shared with all stake holders, including the CTB, TPB and NVTA. VDOT's design practices emphasize safety and will ensure that any design impacts on operations are adequately mitigated. It must be noted that all designs and design exceptions have to comply with the FHWA requirements and oversight.

#### Transit/TDM Plan

There are numerous transit elements integrated into this Project, including a proposed increase in bus service along the I-95/395 corridor, expansion of HOV capacity from two lanes to three lanes, an increase or expansion of access points between the HOV/Bus/HOT lanes and the general purpose lanes, and other infrastructure additions and improvements along the corridor.

The transit service plan proposed by the Project provides for additional bus services in the I-95/395 corridor in the form of new and expanded bus services. This is a preliminary transit plan that has been developed for the conformity analysis, and is based on what is reasonably expected to be funded by this Project. The Virginia Department of Rail and Public Transportation (DRPT), in cooperation with the Transit Advisory Committee ("TAC"), a group established by the VA Secretary of Transportation to facilitate coordination between the transit service providers in the corridor and the Project, has is-developeding a detailed Transit/TDM Plan. The TAC will, working with the City of Alexandria, evaluate the benefits of a bus only ramp from northbound HOV/Bus/HOT lanes to Seminary Road and recommend whether to include such a ramp in the project's final design. The consortium partners will model the scenario of reserving the new lane for buses only and the results of this analysis will be shared with the TAC. The TAC, in coordination with the state, will develop the Transit/TDM Plan (including the proposed bus only ramp at Seminary Road) and park and ride recommendations for the northern segment of the I-95/395 HOV/BUS/HOT lane project. The Commonwealth Transportation Board (CTB), the Northern Virginia Transportation Authority (NVTA) and Fredericksburg Area Metropolitan Planning Organization (FAMPO) will approve any transit/park-and-ride plans for the areas under their purview, and these will be submitted as inputs to the 2008 CLRP/Conformity update.

The proposed new and expanded bus service in the I-95/395 corridor will add about 40,000 38,000 hours of bus service in 2010, about 80,000 98,000 hours of bus service in 2020 and about 88,000 98,000 hours of bus service in 2030. Compared to the bus services assumed for the base year (2006) these additional hours of bus service represents an increase of approximately 11% in 2010, 22% 28% in 2020 and 25% 28% in 2030. These increases in bus operating hours in the corridor will be realized via addition of new routes and reducing headways of services currently assumed in the CLRP in the respective years. Compared to the bus services assumed for future years in the 2006 CLRP, the additional hours of bus service represents an increase of approximately 10% in-2010, 16% 19% in 2020 and 16% 18% in 2030.

The TAC Transit/TDM plan includes a greater level of facility improvements than that assumed in the 2007 CLRP. A new transit center is recommended at

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Massaponax along with 4 new in-line transit stations in the corridor in order to provide Bus Rapid Transit Service in the corridor. The location plans for these inline stations are being developed in consultation with the local jurisdictions and the TAC. The TAC Transit/TDM plan also include improvements to the VRE components such as purchasing 6 additional rail cars to increase 3 of the Fredericksburg trains to 8 car trains, extending the platforms at selected stations, and provision of overnight storage space in Fredericksburg by 2015. The new plan also proposes improvements to the WMATA system in the form of additional bus bays, real time transit information, traffic circulation/access/egress, and security improvements at the Pentagon and Franconia-Springfield Transit Centers. The TAC plan also includes the construction of an additional 3,700 park-and-ride spaces in the corridor, beyond the 3,000 already assumed as part of the project. The location plans for these lots are being developed in consultation with the local jurisdictions and the TAC.

The Transit/TDM plan includes funds to provide new and increased TDM services in the corridor. Programs to assist vanpools exclusively include capital assistance, vanpool driver incentives, a vanpool insurance program, and supplementing the VanStart/VanSave program in the corridor. Carpool programs which also benefit vanpool users include an enhanced Guaranteed Ride Home program, a carpool incentive program, and additional rideshare program operational support. Additional funds are recommended for increasing TDM marketing as well as providing financial incentives to increase teleworking in the corridor.

The proposed transit service plan will in 2010 reduce the CLRP maximum headways to no more than 40 minutes on all routes. Additionally the new service plan will in 2020 reduce the CLRP maximum headways to no more than 30 minutes on all routes. Also the new service plan will reduce the CLRP maximum headways to no more than 22 minutes on all routes along the L95/395 corridor and within Fairfax County, Arlington County and the City of Alexandria. The Project provides funding for capital, operating and maintenance supporting facilities of the proposed new bus service and for additional capacity for VRE. Attachment A shows the current (2006) TAC proposed bus service in the corridor, the proposed fixed facilities, and the proposed TDM elements new bus service proposed, by the Project, for 2010, 2020 and 2030.

The Project team will continue working with the TAC **to** <del>conduct</del> **complete** the planning study and **maintain** coordination between the HOV/Bus/HOT lane Project and local transit agencies and service providers.

In addition to the new bus service, the seamless, free-flowing network of the HOV/Bus/HOT lanes, park and ride lots and access points along the corridor will create the opportunity for current public, private regional/local service providers to expand their existing services, or provide new services to key activity and employment centers in the I-95/395 and I-495 corridors beyond that which is included in this Project.

Beyond the addition of the above high quality bus service and the opportunities afforded to existing transit providers through the addition of new/expanded infrastructure, the Project also proposes to provide a bus-only ramp into and out of the Pentagon at Eads Street (part of the northern terminus of the HOT lanes), a transit-only access ramp at Seminary Road in the City of Alexandria, and a reversible bus-only ramp from the HOT lanes into and out of a new bus station located adjacent to the Lorton VRE Station. A pedestrian bridge would provide access between the proposed bus station and the VRE station.

The Project also proposes to add six (6) park and ride facilities, an equivalent of 3,000 additional parking spaces, to the network of park & ride lots along the corridor. The Project has proposed one facility be located in Fairfax County, two in Prince William County, two in

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Stafford County and one in Spotsylvania County. The location plans for these lots are being developed in consultation with the local jurisdictions and the TAC. The Project also proposes to provide enhancements to several existing bus stations/stops along the corridor. The current plans for the park and ride facilities and the bus station enhancements will be assessed further **by the TAC** within the TAC's detailed Transit/TDM Plan.

Once the I-95/395 HOV lanes have been converted into HOV/Bus/HOT lanes, traffic operations will be monitored and managed such that they will continue to be classified as "fixed guideway miles" for purposes of the transit funding formulas, in accordance with FTA's final policy statement on when HOT lanes shall be classified as fixed guideway miles, published in the January 11, 2007 Federal Register (Vol. 72, pages 1366-1372) ("FTA Policy"). The current FTA Policy references the performance standards and monitoring methods it will use in determining eligibility of HOT lanes to be classified as fixed guideway miles. The proposed project will implement plans to meet these standards and follow the prescribed methodology so as to preserve the facility's current eligibility in accordance with the current FTA policy. The standards and monitoring requirements will be included in the Comprehensive Agreement. In the event that the implementation of the project fails to comply with the FTA's 2/11/07 Federal Register applicable requirements for considering HOT lanes as fixed guideway and results in loss of associated FTA revenue, the project will reimburse the current designated recipients for this lost revenue.

The project team believes initiating the enhanced transit services at the same time as the work to convert the HOV lanes into HOV/Bus/HOT lanes begins should be considered. This transit enhancement could form part of the Project's Congestion Management Plan (CMP) and would allow direct stakeholder and community outreach to promote transit services.

### **Tolling Policy**

HOT lanes use dynamic pricing to maintain free-flowing conditions for all users, even during rush hour. The toll rates will vary throughout the day with time of day and with day of week corresponding to demand and congestion levels. Toll rates will be at its lowest when the demand and congestion levels are at its lowest. The consortium has set a target speed of above 55 mph inside the Beltway and 65 mph outside the Beltway for traffic operations. These target speeds, determined through the traffic modeling completed to date, correspond to a maximum flow rate of 1,600 vehicles per hour per lane and meet the objective of maximizing travel time savings for all users, including transit. Currently the I-395/95 HOV lanes carry up to 1900 vehicles per lane per hour during some portions of the restricted period. Toll prices will be adjusted in response to the level of traffic to ensure free flowing operations on the Bus/HOV/HOT lanes. There will be no price caps on the level of tolls.

SAFETEA-LU mandates strict performance standards which are intended to ensure free-flowing conditions on the HOT lanes. The proposed HOT lanes project will include performance monitoring as an integral part of the project and ensure that the SAFETEA-LU mandated performance standards are complied with as a minimum. These requirements will be included in the Comprehensive Agreement.

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 HOV/Bus/HOT lanes will be totally electronic. There will be no toll booths. The dynamic message signs will be supplemented by other notification/communications methods to insure all users, including transit operators, have as much advance knowledge of traffic conditions as is possible.

### **Incident Management**

The project designs will focus on the safety aspects of the facility including cross section layout (lane width and shoulders), operations and incident management. The design and operational features of the project will be integrated with and supported by a performance based, computer aided incident management system. The incident management system

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will provide 24/7 monitoring and surveillance of the facility and have dedicated motorists assistance equipment and personnel. This system will allow for a rapid detection of incidents that occur in the Bus/HOV/HOT lanes. As transit is a significant component of the system, specific response procedures plans, including use of use of appropriate equipment will be in place for dealing with transit specific incidents. The Incident Management Plan developed for the project will be shared with the CTB and NVTA for their review.

#### **Schedule**

Construction for the Project is projected to begin in early 2008, with an estimated construction completion time of two and a half years. The facility is expected to enter operations in mid to late 2010. The current schedule calls for environmental review in compliance with Federal (NEPA) and state regulations. The 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

At the end of August 2006, the FHWA signed the NEPA documentation concurrence form for pursuing the environmental review for the Project, with a Categorical Exclusion as the suggested level of NEPA Document. The environmental review is currently being conducted in full accordance and compliance with Federal and state law. The NEPA guidelines require the Project to be part of a conforming CLRP prior to receiving environmental clearance. Subsequent to receiving environmental clearance on an approved scope, the Project team will pursue the final engineering design of the Project.

#### **Congestion Management Plan**

As a matter of policy, practice and a reflection the agency's commitment to safety, VDOT adopts congestion management plans for its construction projects. The congestion mitigation plan used for the Springfield Interchange project has been widely acclaimed as successful. VDOT and the consortium will similarly have a robust congestion management plan for the I-95/395 HOV/BUS/HOT lane project. The Congestion Management Plan developed for the project will be shared with the CTB, TPB and NVTA for their review.

Recognizing that the construction of this project could overlap with the construction of other significant projects, such as the Beltway HOT lanes, Dulles Corridor Rail, Widening of I-95 (between Newington and Occoquan), VDOT/VDRPT will coordinate the implementation of all of these congestion management plans under a Regional Transportation Management Plan (TMP). VDOT is in the process of recruiting a full time Regional TMP manager.

## Coordination with Other Projects in the Corridor

**BRAC Actions** 

The project team is working with the Army, the Marines, and their respective teams of consultants to coordinate the transportation project needs related to the BRAC action with the HOV/Bus/HOT Lanes Project. The proposed elements for this Project reflect the latest discussions with the Army relative to their planned transportation-related activities at the Engineering Proving Ground in Fairfax County. Close coordination with the BRAC consultants will continue as they further develop their road improvement plans, and reasonable transportation needs related to this Project are not precluded.

#### 14<sup>th</sup> Street Bridge Corridor Project

The project team will continue to coordinate with Eastern Federal Lands of FHWA ("FHWA-EFL") relative to the northern terminus of the HOV/Bus/HOT Lanes Project. FHWA-EFL is currently working on the Draft Environmental Impact Statement ("EIS") for the 14<sup>th</sup> Street Bridge Corridor Project, which is scheduled for completion in May 2008. The Steering Committee for the EIS is currently developing alternative improvement scenarios to be evaluated. VDOT, District of Columbia DOT (DDOT) and Arlington County DPW are members of the Steering Committee along with the Department of Defense and National

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Parks Service. VDOT, DDOT and Arlington County DPW all have voiced their strong support for including extension of the HOV/Bus/HOT lanes across the 14<sup>th</sup> Street Bridge as one of the alternatives to be studied. FHWA indicates that the Steering Committee will decide the final set of alternatives to be studied. FHWA's schedule anticipates beginning the analyses of the alternatives during the fall of 2007 and completing the analyses by winter of 2008. In the unlikely event that the alternative scenarios tested as part of the EIS do not include extending the HOV/Bus/HOT lanes across the 14<sup>th</sup> Street Bridge, VDOT will work with DDOT and Arlington County in determining how best such a scenario can be evaluated. More information on the 14<sup>th</sup> Street Bridge Corridor Project may be found at www.14thstreetbridgecorridoreis.com.

#### Financial Plan

Construction cost for the proposed Project is estimated to be \$492M (in year of expenditure dollars, PE-\$60M, ROW-\$4M and CN-\$428M). This estimate includes the cost of constructing the third HOV/Bus/HOT lane, all additional entry/exit connections, the nine mile southbound extension at the southern terminus, proposed park and ride lots, and enhancement to several existing bus stations/stops. Funding sources for the Project includes a combination of private 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, FTU will explore all avenues of funding to ensure the lowest cost of capital for the Project. The Project will not require Commonwealth or Federal funds for the construction component.

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

The Project also estimates to incur additional costs of about \$390M \$410M (in year of expenditure funds) to fund the capital, operating and maintenance expenses of the proposed transit service. Attachment B summarizes the bus service plan cost estimate. The capital cost component of this is estimated to be about \$76M\$165M. Funding is assumed to be derived, equally, from US-DOT transit capital funding program grants (including the Congestion Relief Initiative program section 5308, section 5309 and funds under the Urban Partnership program) and a dedicated transit initiative fund provided by the project sponsor.

The operating and maintenance costs are estimated to be about \$314M\$245M, including provision of maintenance facilities for the new buses. Funding for the operating and maintenance expense is assumed to be derived from the fare box of the service (approximately 50%), toll revenues and a dedicated transit initiative fund provided by the project sponsor. The above estimates of the capital and operating costs and the relative distribution of the two within the total cost may change when the TAC proposed Transit/TDM plan current transit service plan is refined as part of implementing the various components of the plan. with the advice of the TAC and the findings of its detailed Transit/TDM Plan.

#### Stakeholder Outreach

FTU, in conjunction with VDOT, has and will continue to put a great deal of effort into communicating with local stakeholders. The stakeholder outreach program provides the opportunity for direct engagement with various groups along the corridor, including all the local political leadership, transit service providers, the Transit Advisory Committee, various special interest groups, and business and community leaders. There are also opportunities for the public to learn more about the Project, as well as provide comments, both through the CLRP process and the NEPA process.

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As a prerequisite to submitting the NEPA documentation, FHWA requires the Project to conduct a series of Citizen Information Meetings and a Public Hearing. The Citizen Information Meetings are scheduled to be held in spring 2007. The dates for the meetings will be communicated to stakeholders along the corridor through various channels, including area publications, postings via the website, and direct interface with the leadership within the local jurisdictions. A date for the Public Hearing will be identified as the Project advances through the process

FTU has also conducted a series of meetings with transit stakeholders operating in the corridor. Starting in June 2006, FTU met with these operators to solicit input on how transit services in the corridor might change as a result of the addition of the HOT Lanes system. The recommendations resulting from this outreach are contained in FTU's Transit Opportunity Study, which was provided to the TAC in December. FTU maintains active participation with the TAC.

- 9. Bicycle or Pedestrian Accommodations: \_ Not Included; \_ Included; \_ Primarily a Bike/Ped Project; \_ N/A Design work for the proposed Project, in accordance with VDOT's Policy for Integrating Bicycle and Pedestrian Accommodations, will be initiated with the presumption that the Project shall accommodate the bicycle and pedestrians needs, as appropriate.
- 10. Total Miles: 36
- 11. Project Manager: Larry Cloyed VDOT 12. E-Mail: larry.cloyed@VDOT.Virginia.gov
- 13. Project Information URL: <a href="https://www.virginiadot.gov">www.virginiadot.gov</a>
- 14. Projected Completion Year: 2010
- 15. Actual Completion Year: N/A 

  ✓ Project is ongoing. Year refers to implementation.
- 16. N/A\_ This project is being withdrawn from the Plan as of:
- 17. Total cost (in Thousands): \$882 \$ 902million (PE-\$60M, ROW-\$4M, Construction-\$428M, Other-\$410M \$390M)
- 18. Remaining cost (in Thousands): N/A
- 19. Funding Sources: \_ Federal; \_ State; \_ Local; ✓ Private; ✓ Bonds; ✓ Other

## **CONGESTION MANAGEMENT INFORMATION**

- 20. Do traffic congestion conditions necessitate the proposed project? ✓ Yes; \_ No
- 21. If so, describe those conditions: ✓ Recurring congestion; \_ Non-site specific congestion;
  - \_ Frequent incident-related, non-recurring congestion; \_ Other
- 22. Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial? ✓ Yes; \_\_\_ No
- 23. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? <u>✓</u> Yes; \_ No
- 24. If not, please identify the criteria that exempt the project here:
  - \_ The number of lane-miles added to the highway system by the project totals less than 1 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 will not allow motor vehicles, such as a bicycle or pedestrian facility
  - \_ The project consists of preliminary studies or engineering only, and is not funded for construction
  - \_ The project received NEPA approval on or before April 6, 1992
  - \_ The project was already under construction on or before September 30, 1997, or construction funds were already committed in the FY98-03 TIP.
  - \_ The construction costs for the project are less than \$5 million.

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#### SAFETEA-LU PLANNING FACTORS

- 25. Please identify any and all planning factors that are addressed by this project:
  - ✓ Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - ✓ Increase the safety of the transportation system for all motorized and non-motorized users.
    - a. Is this project being proposed specifically to address a safety issue? \_ Yes; ✓ No
    - b. Please identify issues: \_ High accident location; \_ Pedestrian safety; \_ Other\_ Truck or freight safety; \_ Engineer-identified problem
    - c. Briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
  - ✓ Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
  - ✓ Increase accessibility and mobility of people and freight.
  - ✓ 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.
  - ✓ Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
  - ✓ Promote efficient system management and operation.
  - \_ Emphasize the preservation of the existing transportation system.

#### **ENVIRONMENTAL MITIGATION**

- 26. Have any potential mitigation activities been identified for this project? \_ Yes; ✓No (Currently being investigated)
- 27. 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

#### **INTELLIGENT TRANSPORTATION SYSTEMS**

- 28. Is this an Intelligent Transportation Systems (ITS) project as defined in federal law and regulation, and therefore subject to Federal Rule 940 Requirements? ✓ Yes; \_ No Although the I 95/395 HOV/BUS/HOT Lane project itself is not an ITS project, the project will include various ITS elements as part its operations and toll collection. All ITS components of the project will comply with the applicable requirements of rule 940. Should the Commonwealth be nominated as an Urban Partner under the FHWA's Urban Partnership program, ITS components of this project will be part of the Commonwealth's effort under the Urban Partnership program.
- 29. If yes, what is the status of the systems engineering analysis compliant with Federal Rule 940 for the project? \_ Not Started; ✓ \_ Ongoing, not complete; \_ Complete N/A The operations concept for the HOT lanes (HOT-OC), including the Traffic Management and Tolling systems, have been described in a draft Concept of Operations, along with a System Interface Specification that details interaction between NRO ATMS and HOT-OC. As part of the ongoing project development activities, coordination of the HOT-OC with the VDOT Northern Region Architecture and COB/TPB Regional architecture will be addressed.
- 30. Under which Architecture: N/A
  - \_ DC, Maryland or Virginia State Architecture
  - \_ WMATA Architecture
  - ✓ COG/TPB Regional ITS Architecture
  - ✓ Other, please specify: VDOT Northern Region Architecture

31. Other Comments

Jan. 10, 2008

## I 95/395 HOV/BUS/HOT LANE PROJECT: PROPOSED CORRIDOR TRANSIT/TDM PLAN FINANCIAL PLAN FOR CLRP

## Funding Summary (in year of expenditure dollars):

Total Transit/TDM Plan Cost: \$410M

Capital Costs: \$165MOperating Costs: \$245M

Capital costs includes vehicles (buses and train cars) and fixed facilities (transit centers, park-and-ride lots, rail platforms, etc.) as detailed in Appendix A. Unit cost assumptions for capital expenditures vary and are listed in Appendix A.

Operating costs varies depending on the type of service and the agency. Unit cost assumptions are listed in Appendix A.

## > Funding Source: \$410M

US DOT Congestion Relief Initiative: \$40M
 Farebox recovery from proposed new transit service: \$95M

One time contribution from the project's private

sector partners, dedicated for transit/TDM program: \$195M Earnings on dedicated funds from private sector: \$80M

 Earnings on dedicated funds from private sector:
 (Earnings correspond to an average annual rate of return of 4% up to 20 years)

## **Proposed Bus Service Addition Metrics**

Year	Increase in Annual Vehicle Hours	% Increase Over Existing Service*	% Increase Over CLRP Service Assumptions**
2010	<del>40,000</del> <b>38,000</b>	11 %	10 %
2020	<del>80,000</del> <b>98,000</b>	<del>22</del> % <b>28%</b>	<del>16</del> % <b>19%</b>
2030	<del>88,000</del> <b>98,000</b>	<del>25</del> % <b>28%</b>	<del>16</del> % <b>18%</b>

<sup>\* 2006</sup> Service Assumption: 356,000 Annual Vehicle Hours

- \*\* Current 2006 CLRP's 2010 Service Assumption: 395,000 Annual Vehicle Hours Current 2006 CLRP's 2020 Service Assumption: 505,000 Annual Vehicle Hours Current 2006 CLRP's 2030 Service Assumption: 538,000 Annual Vehicle Hours
  - Capital: \$76 million
    - \$38 million from US DOT Transit program grants
    - o \$38 million from Project's dedicated transit initiative fund
  - Operating: \$314 million
    - \$157 million from Fare Box Recovery (50 % assumed)
    - o \$157 million from Project's toll revenues/transit initiative fund
  - Total Plan: \$390 million

## AIR QUALITY CONFORMITY ASSESSMENT: 2008 CONSTRAINED LONG RANGE PLAN AMENDMENTS AND FY2009-2014 TRANSPORTATION IMPROVEMENT PROGRAM

#### SCOPE OF WORK

#### I. INTRODUCTION

Projects solicited for the 2008 Constrained Long Range Plan (CLRP) and the FY2009-2014 Transportation Improvement Program (TIP) are scheduled to be finalized at the February 20, 2008 TPB meeting. This scope of work reflects the tasks and schedule designed for the air quality conformity assessment leading to adoption of the plan and program on July 16, 2008. This work effort addresses requirements associated with attainment of the 8-hour ozone standard (volatile organic compounds (VOC) and nitrogen oxides (NOx) as ozone precursor pollutants), and fine particles (PM2.5) standards (direct particles and precursor NOx), as well as maintenance of the wintertime carbon monoxide (CO) standard.

The plan and program must meet air quality conformity regulations: (1) as originally published by the Environmental Protection Agency (EPA) in the November 24, 1993 Federal Register, and (2) as subsequently amended, most recently on March 10, 2006, and (3) as detailed in periodic FHWA / FTA and EPA guidance. These regulations specify both technical criteria and consultation procedures to follow in performing the assessment.

This scope of work provides a context in which to perform the conformity analyses and presents an outline of the work tasks required to address all regulations currently applicable.

## II. REQUIREMENTS AND APPROACH

#### **A. Criteria** (See Exhibit 1)

As described in the 1990 Clean Air Act Amendments, conformity is demonstrated if transportation plans and programs:

- 1. Are consistent with most recent estimates of mobile source emissions,
- 2. Provide expeditious implementation of TCMs, and
- 3. Contribute to annual emissions reductions.

Assessment criteria for ozone, CO, and PM2.5 are discussed below.

The 8-hour ozone SIP budgets are expected to be approved by EPA at the beginning of 2008. These new budgets will provide additional basis for the ozone season emissions budget comparison element of the conformity assessment.

The region is in maintenance for mobile source wintertime CO and, as in prior conformity assessments, is required to show that pollutant levels do not exceed the approved budget.

DC, Maryland, and Virginia state air agencies, working through the Metropolitan Washington Air Quality Committee (MWAQC), are scheduled to submit the PM2.5 SIP with budgets to EPA by April 5<sup>th</sup>, 2008. Because the timing of EPA's adequacy determination is uncertain, the PM2.5 pollutants will be assessed both by comparing the "action" scenarios to a 2002 base, as has been done in the past two conformity

assessments, and by comparing the pollutant levels to the submitted budgets, which will be the required methodology once the budgets are approved. PM2.5 emissions will be inventoried for yearly totals (instead of on a daily basis as performed for Ozone and CO).

## **B. Approach** (See Table 1 – Summary of Technical Approach)

The analytical approach is similar to that applied and documented in the air quality conformity assessment of the 2007 CLRP and the FY2008-2013 TIP. The exception is the use of the forthcoming PM2.5 budgets, as mentioned above. In addition to the highlighted elements below, explicit inputs include: a summary list of major policy and technical input assumptions, shown as Attachment A; and all transportation network elements which will be finalized at the February 20, 2008 TPB meeting.

TABLE 1 – Summary of Technical Approach

	Ozone	Wintertime CO	PM2.5	
Pollutant:	VOC, NOx	со	Direct particles, Precursor NOx	
Budget:	Existing 1-hour ozone budgets & new 8-hour ozone budgets	Approved wintertime CO emissions budget	Reductions from base 2002 inventory & comparison to new budgets	
Emissions Analysis Time-frame:	Daily	Daily	Annual	
Geography:	1-hour ozone non-attainment area 8-hour ozone non-attainment area (1-hr. area less Stafford)	DC, Arl., Alex., Mont., Pr. Geo.	1-hr. area less Stafford and Calvert counties	
Network Inputs:	Regionally significant projects			
Land Activity:	Round 7.1 (including minor amendments, if any)			
Modeled Area:	Expanded Cordon (2191 zone)			
Travel Demand Model:	Version 2.2			
Mobile Model:	MOBILE6.2 emissions factors, consistent with the procedures utilized to establish the VOC and NOx mobile source emissions budgets	MOBILE6.2 Consistent with procedures used to establish the budget	MOBILE6.2  'Seasonal' approach	
Emissions Factor Refinements:	Refinements developed as part of the recent SIP development and conformity assessments include: use of 2005 vehicle registration data for all jurisdictions; use of hourly temperatures, relative humidity, barometric pressure and NOx rebuild effects.			

## III. CONSULTATION

- 1. Execute TPB consultation procedures (as outlined in the consultation procedures report adopted by the TPB on May 20, 1998).
- 2. Participate in meetings of MWAQC, its Technical Advisory Committee and its Conformity Subcommittee to discuss the scope of work activities, TERM development process, and other elements as needed; discuss at TPB meetings or forums, as needed, the following milestones:
  - CLRP / TIP Call for Projects

- Scope of work
- TERM proposals
- Project submissions: documentation and comments
- Analysis of TERMs, list of mitigation measures
- Conformity assessment: documentation and comments
- Process: comments and responses

#### IV. WORK TASKS

- 1. Receive project inputs from programming agencies and organize into conformity documentation listings (endorsement of financially constrained project submissions scheduled for February 20, 2008)
  - Project type, limits, NEPA approval, etc.
  - Phasing with respect to forecast years
  - Transit operating parameters, e.g. schedules, service, fares
  - Action scenarios
- 2. Utilize Round 7.1 Cooperative Forecasts
  - Households by auto ownership, population and employment
  - Zonal data files
- 3. Prepare forecast year highway, HOV, and transit networks
  - Update GIS highway database
  - Filter database to create 2009, 2010, 2020, and 2030 highway networks
  - Rebuild networks for modeling
  - Update / edit transit files
  - Update fares, as necessary
- 4. Prepare 2002 travel, emissions factors and emissions estimates, if necessary
  - Execute travel demand modeling
  - Develop Mobile6.2 emission factors (ozone)
  - Calculate emissions (daily for ozone season VOC and NOx; yearly for PM2.5 direct particles and precursor NOx)
- 5. Prepare 2009 travel and emissions estimates
  - Execute travel demand modeling presumably
  - Develop and apply Mobile6.2 emission factors (ozone)
  - Calculate emissions (daily for ozone season VOC and NOx for ozone standard requirements)
- 6. Prepare 2010 travel and emissions estimates
  - Execute travel demand modeling
  - Develop Mobile6.2 emission factors (ozone)
  - Calculate emissions (daily for ozone season VOC and NOx for ozone standard requirements; daily for winter CO; yearly for PM2.5 direct particles and precursor NOx)

- 7. Prepare 2020 travel and emissions estimates
  - Tasks as in year 2010 analysis
  - Apply "transit constraint" using 2010 levels (unless additional funding is identified to enable removal of peak period capacity constraints in the core part of the Metrorail system)
- 8. Prepare 2030 travel and emissions estimates
  - Tasks as in year 2020 analysis
- 9. Identify extent to which TIP and plan provide for expeditious implementation of TCMs contained in ozone state implementation plans and emissions mitigation requirements of previous TIP and CLRP commitments (TERMs)
  - In the CLRP / TIP Call for Projects document staff identified previous TCM and TERM commitments and requested a status report from the implementing agencies
  - Staff will review these reports as they are received and update the TERM tracking sheet that was included in the January 16, 2008 air quality conformity report
  - The status reports and the updated TERM tracking sheet will be included in the air quality conformity report.
- 11. Coordinate / analyze emissions reductions associated with CMAQ and similar projects
  - Obtain project-specific emissions reductions from programming agencies
  - Summarize daily ozone season VOC and NOx reductions for each milestone year
  - Analyze current TERMs for yearly direct PM2.5 and precursor NOx PM2.5 pollutant reductions; explore additional TERMS
  - With oversight from the Travel Management Subcommittee, as needed, propose and analyze additional measures for their emissions benefits, costs, cost effectiveness, and other evaluation criteria
- 12. Analyze results of above technical analysis
  - Reductions from 1990 (ozone season VOC and NOx and winter CO) and 2002 base (ozone season VOC and NOx, winter CO, and PM2.5)
  - 1-hour and 8-hour ozone season VOC and NOx budgets, direct PM2.5 and precursor NOx budgets, and winter CO emissions budgets
  - With oversight from the Travel Management Subcommittee, the Technical Committee and the TPB, identify and recommend additional measures should the plan or program fail any test and incorporate measures into the plan
- 13. Assess conformity and document results in a report
  - Document methods
  - Draft conformity report
  - Forward to technical committees, policy committees
  - Make available for public and interagency consultation
  - Receive comments
  - Address comments and present to TPB for action
  - Finalize report and forward to FHWA, FTA and EPA

#### V. SCHEDULE

The schedule for the execution of these work activities is contained within the air quality conformity schedule in Exhibit 2. The time line shows completion of the analytical tasks, preparation of a draft report, public and interagency review, response to comments and action by the TPB on July 16, 2008.

## Exhibit 1

### Conformity Criteria

#### All Actions at all times:

Sec. 93.110 Latest planning assumptions. Sec. 93.111 Latest emissions model.

Sec. 93.112 Consultation.

Transportation Plan:

Sec. 93.113(b) TCMs.

Sec. 93.118 and/or Emissions budget and /or Interim

Sec. 93.119 emissions.

TIP:

Sec. 93.113(c) TCMs.

Sec. 93.118 and/or Emissions budget and /or Interim

Sec. 93.119 emissions.

Project (From a Conforming Plan and TIP):

Sec. 93.114 Currently conforming plan and TIP.
Sec. 93.115 Project from a conforming plan and TIP.

Sec. 93.116 CO, PM10, and PM2.5 hot spots. Sec. 93.117 PM10 and PM2.5 control measures.

Project (Not From a Conforming Plan and TIP):

Sec. 93.113(d) TCMs.

Sec. 93.114 Currently conforming plan and TIP. Sec. 93.116 CO, PM10, and PM2.5 hot spots. Sec. 93.117 PM10 and PM2.5 control measures. Sec. 93.118 and/or Emissions budget and/or Interim

Sec. 93.119 emissions

## Sec. 93.110 Criteria and procedures: Latest planning assumptions.

The conformity determination must be based upon the most recent planning assumptions in force at the time of the conformity determination.

## Sec. 93.111 Criteria and procedures: Latest emissions model.

The conformity determination must be based on the latest emission estimation model available.

## Sec. 93.112 Criteria and procedures: Consultation.

Conformity must be determined according to the consultation procedures in this subpart and in the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450.

## Sec. 93.113 Criteria and procedures: Timely implementation of TCMs.

The transportation plan, TIP, or any FHWA/FTA project which is not from a conforming plan and TIP must provide for the timely implementation of TCMs from the applicable implementation plan.

## Sec. 93.114 Criteria and procedures: Currently conforming transportation plan and TIP.

There must be a currently conforming transportation plan and currently conforming TIP at the time of project approval.

## Sec. 93.115 Criteria and procedures: Projects from a plan and TIP.

The project must come from a conforming plan and program.

## Sec. 93.116 Criteria and procedures: Localized CO, PM10, and PM2.5 violations (hot spots).

The FHWA/FTA project must not cause or contribute to any new localized CO, PM10, and/or PM2.5 violations or increase the frequency or severity of any existing CO, PM10, and /or PM2.5 violations in CO, PM10, and PM2.5 nonattainment and maintenance areas.

## Sec. 93.117 Criteria and procedures: Compliance with PM10 and PM2.5 control measures.

The FHWA/FTA project must comply with PM10 and PM2.5 control measures in the applicable implementation plan.

## Sec. 93.118 Criteria and procedures: Motor vehicle emissions budget

The transportation plan, TIP, and projects must be consistent with the motor vehicle emissions budget(s).

## Sec. 93.119 Criteria and procedures: Interim emissions in areas without motor vehicle budgets

The FHWA/FTA project must satisfy the interim emissions test(s).

**NOTE:** See EPA's conformity regulations for the full text associated with each section's requirements.



# Schedule for the 2008 Financially Constrained Long-Range Transportation Plan (CLRP) and FY 2009 – 2014 Transportation Improvement Program (TIP)

*October 17, 2007	TPB Releases Final Call for Projects Transportation Agencies Begin Submitting Project Information through On-Line Database
January 4, 2008	Transportation Agencies submit draft On-Line Project Submissions. Technical Committee reviews draft Plan and TIP Project Submissions and draft Scope of Work for the Air Quality Conformity Assessment
January 11, 2008	<u>DEADLINE</u> : Plan and TIP Project Submissions and draft Scope of Work finalized for transmittal to TPB
*January 16, 2008	Plan and TIP Project Submissions and draft Scope of Work Released for Public Comment
February 15, 2008	Public Comment Period Ends
*February 20, 2008	TPB Reviews Public Comments and is asked to Approve Project Submissions and draft Scope of Work
April 25, 2008	<u>DEADLINE:</u> Transportation Agencies Complete TIP Project Submissions and finalize Congestion Management Documentation Forms (where needed) and CLRP Forms <sup>1</sup> . (Submissions must not impact conformity inputs; note that the deadline for conformity inputs was January 11, 2008).
May 15, 2008	TPB Citizen Advisory Committee hosts a public meeting on the Draft TIP.
*May 21, 2008	TPB Receives Status Report on the Draft Plan, TIP and Conformity Assessment
June 12, 2008	Draft Plan, TIP and Conformity Assessment Released for Public Comment at Citizens Advisory Committee (CAC)
*June 18, 2008	TPB Briefed on the Draft Plan, TIP and Conformity Assessment
July 12, 2008	Public Comment Period Ends
*July 16, 2008	TPB Reviews Public Comments and Responses to Comments, and is Presented the Draft Plan, TIP and Conformity Assessment for Adoption
TPR Meeting	

\*TPB Meeting

<sup>&</sup>lt;sup>1</sup> By this date, the CLRP forms must include information on the Planning Factors, Environmental Mitigation, Congestion Management Information, and Intelligent Transportation Systems; separate Congestion Management Documentation Forms (where needed) must also be finalized.

#### WORK SCOPE ATTACHMENT A

## POLICY AND TECHNICAL INPUT ASSUMPTIONS AIR QUALITY CONFORMITY ANALYSIS OF 2008 CLRP AND FY2009-2014 TIP

## 1. Land Activity

- Round 7.1 Cooperative Forecasts (including minor amendments, if any)

## 2. Policy and Project Inputs

- Highway, HOV and transit projects and operating parameters
- Financially constrained project submissions to be advanced by the TPB on 2/20/2008

## 3. Travel Demand Modeling Methods

- Version 2.2 Travel Model
- All HOV facilities at HOV-3 in 2010
- Transit "capacity constraint" procedures (2010 constrains later years)

#### 4. Emissions Factors

- Use emissions factors methods originally developed and applied in the 2007 CLRP conformity process: MOBILE6.2, 2005 registration data, VMT mix specific to each analysis year
- Refinements based upon new methods developed for SIP analysis
- Seasonal PM2.5 factors for total directly emitted particles and precursor NOx
- No oxygenated fuels assumed for wintertime carbon monoxide conditions

## 5. Emissions Modeling Methods / Credits

- Updated post-processor methods to reflect EPA guidance associated with Mobile6.2 model release updates for local road speed profiles in rural areas
- Yearly PM2.5 emissions (total PM2.5 and precursor NOx) using seasonal traffic adjustments and above emissions factors
- Offline emissions analyses

## 6. Conformity Assessment Criteria

- Emissions budgets for ozone precursors, PM2.5 pollutants, and wintertime CO
- Analysis years: 2009, 2010, 2020, and 2030