## **ITEM 13 - Information**

March 21, 2007

Briefing on Project Submissions and Draft Scope of Work for the Air Quality Conformity Assessment for the 2007 Constrained Long Range Plan (CLRP) and FY 2008-2013 Transportation Improvement Program (TIP)

Recommendation:	Receive briefing on the major projects submitted by the February 23 deadline for inclusion in the air quality conformity assessment, and on the draft scope of work for the assessment.
Issues:	None

Ctaff

**Background:** At the January 17 meeting, the Board approved a revised schedule for project submissions and for the air quality conformity assessment for the 2007 CLRP and FY 2008-2013 TIP. The project submissions and the scope of work for the air quality conformity assessment were released for public comment at the TPB Citizens Advisory Committee (CAC) meeting on March 15. At its April 18 meeting, the Board will be briefed on comments received and recommended responses, and 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

March 15, 2007

- **TO:** Transportation Planning Board
- FROM: Ronald F. Kirby Director of Transportation Planning
- **SUBJECT:** Proposed Significant Changes for the Air Quality Conformity Analysis of the 2007 CLRP and FY 2008-2013 TIP

The attachment describes the proposed significant changes reflected in the air quality conformity inputs for the 2007 CLRP and the FY 2008-2013 TIP. Significant changes are those relating to facility types 1, 2 and 5 (interstates, principal arterials, and other limited access parkways and roadways).

Descriptions of the projects proposed for construction begin on page 1, followed by the projects proposed for study on page 5. The changes proposed to selected existing major projects are presented on page 8. The detailed CLRP description forms for these projects begin on page 9.

Appendix A, which is bound separately, provides a table listing all projects to be included in the air quality conformity analysis for the 2007 CLRP and FY 2008-2013 TIP, with shading to highlight proposed changes from the approved 2006 CLRP and FY 2007-2012 TIP.

Attachment

# PROPOSED SIGNIFICANT CHANGES TO THE 2007 CONSTRAINED LONG-RANGE PLAN

PUBLIC COMMENT RELEASE - MARCH 15, 2007

 $\bigcirc$ 

This document provides a summary of significant changes for the new 2007 Constrained Long-Range Transportation Plan (CLRP). For information on the projects that are already included in the 2006 CLRP, visit <u>http://www.mwcog.org/clrp</u>. Comments may be submitted at <u>http://mwcog.org/TPBPublicComment</u>.

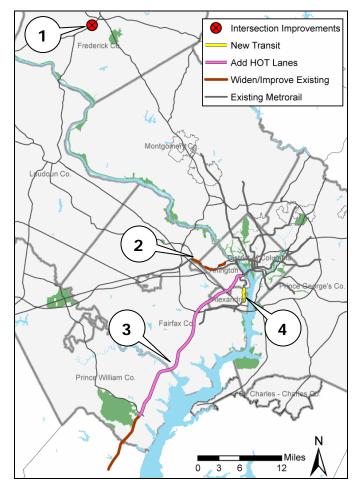
# PROJECTS PROPOSED FOR CONSTRUCTION

## MARYLAND

1. US 340 – Jefferson National Pike Interchange at Jefferson Technology Park

## VIRGINIA

- 2. I-66 Spot Improvements Westbound, Inside the Beltway
- I-95/I-395 HOT Lanes Project
  From Eads St. in Arlington County to
  Garrisonville Road (VA 610) in Stafford County
- 4. **Potomac Yard Transitway** Alexandria Segment from Four Mile Run to Braddock Road Metro Station



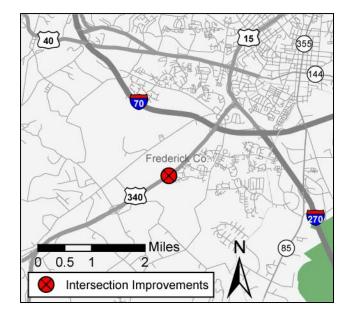


1. US 340 – Jefferson National Pike Interchange at Jefferson Technology Park

Construct a new, grade-separated interchange on US 340 to support existing and planned development at Jefferson Technology Park.

Complete:	2009
Cost:	\$11 million
Funding:	Developer

See Project Description Form on page 10 for more information.

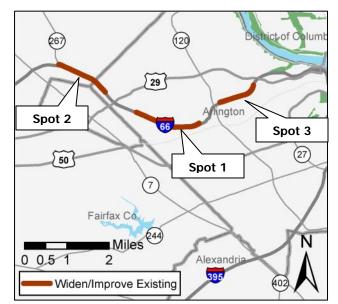


## 2. **I-66 Spot Improvements** Westbound, Inside the Beltway

Reconstruct westbound I-66, extending and connecting a series of acceleration and deceleration lanes to the following configuration:

- Spot 1 Fairfax Drive to Sycamore Street, from 2 to 3 lanes,
- Spot 2 Washington Boulevard to the Dulles Airport Access Road from 3 to 4 lanes, and
- Spot 3 Lee Highway/Spout Run to Glebe Road, from 2 to 3 lanes.

Length:4 miles (total)Complete:2013Cost:\$75.6 millionFunding:Federal, Statehttp://www.idea66.com



See Project Description Form on page 12 for more information.



3. I-95/I-395 HOT Lanes Project Eads Street to Garrisonville Road

Reconfigure the existing HOV facility between Eads Street in Arlington County and just south of the Town of Dumfries from 2 to 3 lanes. Convert HOV to High Occupancy Toll (HOT) lanes.

- HOV-3, transit and emergency response vehicles will use these lanes free of charge.
- Other vehicles may use the facility by paying an electronic toll.
- Tolls will vary based on time of day, day of week, and level of congestion in order to maintain free-flow conditions.

In the southbound direction, construct an extended transition lane and a new fly-over ramp, from the HOV/BUS/HOT lanes to ease congestion as traffic merges into the general purpose lanes. Create or modify a number of connections to the existing HOV lanes to improve access to the HOT lane system for HOV and transit users.



## Transit Service Plan

The following enhancements to transit services are included as a part of the project:

- 13 new bus routes
- Increased frequency of bus service on existing and new routes incrementally in 2010, 2020 and 2030.
- Addition of bus-only ramps in and out of the Pentagon at Eads St., an in-line bus station near the Lorton VRE station, and a bus-only access ramp at Seminary Rd.
- 6 new Park & Ride facilities with a total of 3,000 additional parking spaces.

Total capital, operating, maintenance and maintenance facility costs for the Transit Service Plan are \$390 million. The proposed transit element is likely to be refined based on the findings of a detailed Transit/TDM Plan being developed by the Transit Advisory Committee (TAC).

Length:	36 miles
Complete:	2010
Capital Cost:	\$882 million
	\$492 million – Preliminary engineering, right-of-way acquisition, and construction
	\$390 million – Transit Service Plan capital and operating costs
Funding:	Private Equity, Debt (including bonds), Tolls, Federal Transit Capital
	and Transit Farebox Revenues
http://www.	virginiadat arg/projects/ppts 1.05 1.20511071 anos con

http://www.virginiadot.org/projects/ppta-I-95\_I-395HOTLanes.asp

See Project Description Form on page 16 for more information.

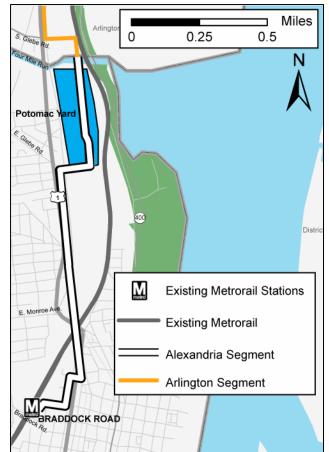


4. **Potomac Yard Transitway** Four Mile Run to Braddock Road Metro Station

Construct the Alexandria segment of a transitway from the Braddock Road Metro Station to the Potomac Yard Town Center and on to Four Mile Run where it will connect with the Arlington County segment that runs to the Pentagon.

Buses will travel on mixed-traffic lanes from the Braddock Road Metro Station to the Monroe Avenue Bridge. From Monroe Ave. to E. Glebe Rd., buses will travel on a dedicated transit rightof-way. From E. Glebe Rd. buses will serve the Potomac Yard Town Center and connect to the Arlington segment at S. Glebe Rd.

Length: 2.5 miles Complete: 2011 Cost: \$18.1 million Funding: Federal, State, Local & Private



See Project Description Form on page 27 for more information.



# PROJECTS PROPOSED FOR STUDY

## MARYLAND

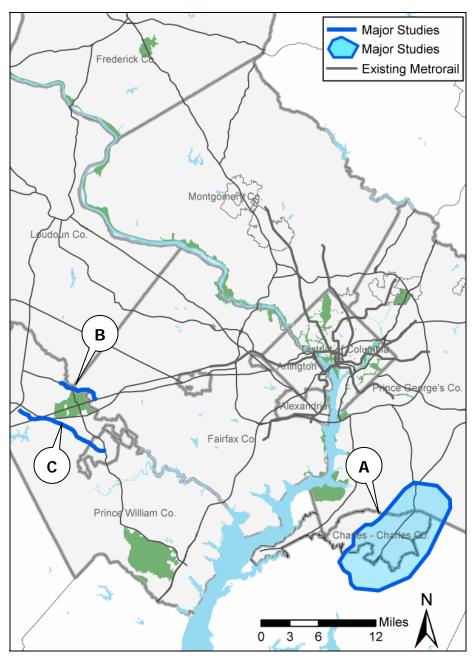
 A. US 301 – Waldorf Bypass Washington Avenue/Turkey Hill Road to North of the MD 5 Interchange at T.B.

## VIRGINIA

B. Manassas National Battlefield Bypass US 29 to the Planned Tri-County Parkway/VA 234

## C. VRE Expansion

From the City of Manassas to Gainesvile/Haymarket



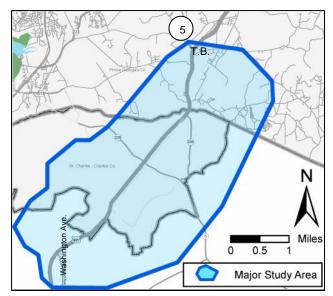


## A. US 301 – Waldorf Bypass

Washington Avenue/Turkey Hill Road to North of the MD 5 Interchange at T.B.

Study alternatives for upgrading and widening US 301 through Waldorf and/ or constructing an access-controlled bypass.

Complete:	2030			
Cost:	\$1.48 billion (Charles			
	County/TPB area)			
	\$2.78 billion (total)			
Funding: Not identified				
http://www.us301waldorf.org				



See Project Description Form on page 29 for more information.

 B. Manassas National Battlefield Bypass
 US 29 to Planned Tri-County Parkway/ Route 234

Close Routes 29 and 234 through the Manassas Battlefield Park to through traffic. Construct a bypass north of the park in the following segments:

- Segment 1 Construct a new 4lane road from US 29 east of the Park to existing VA 234 north of the Park
- Segment 2 Widen existing VA 234 from north of the Park to the proposed Tri-County Parkway/VA 234.

Segment 2 Segment 1 Manassas National Battlefield Park Manassas National Battlefield Park Existing CLRP Project Study Proposed for 2007

Length:8.9 miles (total)Complete:2020Cost:\$133 millionFunding:Not identifiedhttp://www.battlefieldbypass.com

See Project Description Form on page 31 for more information.

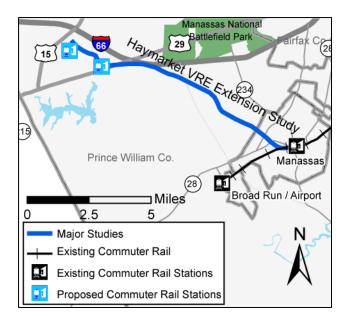


## **VRE Expansion**

City of Manassas to Gainesville and Haymarket

Preliminary engineering and environmental work to extend VRE commuter rail service to Haymarket and Gainesville

Length:11 milesComplete:2018Cost:\$280 millionFunding:Not Identified



See Project Description Form on page 33 for more information.



# CHANGES TO SELECTED EXISTING MAJOR PROJECTS

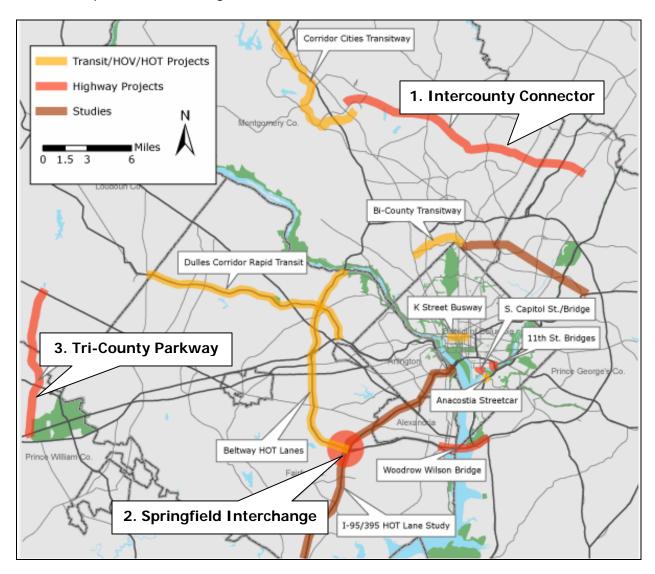
The following changes were made to three of the region's highlighted existing major projects.

## MARYLAND

1. Intercounty Connector (ICC) – Completion date changed from 2010 to 2012

## VIRGINIA

- 2. Springfield Interchange Completion date changed from 2007 to 2008
- 3. Tri-County Parkway Alignment changed (revised alignment below) and completion date changed from 2020 to 2012.





# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2030 PROJECT DESCRIPTION FORM



## Interchange at US 340 and Jefferson Tech Park

- 1. Agency: MDOT/State Highway Administration Secondary Agency:
- Project Type: X System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other
  (check all \_ Freeway; X Primary; \_ Secondary; \_ Urban; \_ Bridge; \_ Bike/Ped; \_ Transit; \_ CMAQ;
  that apply) \_ ITS; \_ Enhancement; \_ Other
- 3. Project Title: Interchange at US 340 and Jefferson Tech Park

		Prefix	Route	Name	Modifier
4.	Facility:	US	340	Jefferson National Pike	
5.	From (X at):			Jefferson Tech Park	
6.	То:				

- 7. Jurisdiction(s): Frederick County
- 8. Description: Grade-separated interchange at US 340 at mile-point 9.94.
- 9. Bicycle or Pedestrian Accommodations: \_ Not Included; X Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 10. Total Miles: N/A
- 11. Project Manager:12. E-Mail:
- 13. Project Information URL:
- 14. Projected Completion Year: 2009
- 15. Actual Completion Year: \_ Project is ongoing. Year refers to implementation.
- 16. \_ This project is being withdrawn from the Plan as of:
- 17. Total cost (in Thousands): \$11,000
- 18. Remaining cost (in Thousands):
- 19. Funding Sources: \_ Federal; \_ State; \_ Local; X Private; \_ Bonds; \_ Other

## CONGESTION MANAGEMENT INFORMATION

- 20. Do traffic congestion conditions necessitate the proposed project?  $\_$  Yes; X 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; X 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
  - \_ 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.

# CLRP PROJECT DESCRIPTION FORM Interchange at US 340 and Jefferson Tech Park

#### SAFETEA-LU PLANNING FACTORS

- 25. Please identify any and all planning factors that are addressed by this project:
  - X 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; X 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.
- X 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
- 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; X 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
  - \_ Other, please specify:

#### 31. Other Comments

# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2030 PROJECT DESCRIPTION FORM



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## Idea66 Spot Improvements Inside the Beltway

- Agency Project ID: VDOT Secondary Agency:
  Project Type: \_System Expansion; \_System Maintenance; X Operational Program; \_Study; \_Other (check all X Freeway; \_Primary; \_Secondary; X Urban; \_Bridge; X Bike/Ped; \_Transit; \_CMAQ; that apply) X ITS; \_Enhancement; \_Other
   Project Title Idea66 Spot Improvements Inside the Beltway.
- 3. Project Title Idea66 Spot Improvements Inside the Beltway

		Pret	ix Route	Name	Modifier	
4.	Facility:	I	66 WB	Spot 1 Fairfax Dr to Sycamore St	Extend accel/decel la.	
5.	From (_ at):	I	66 WB	Spot 2 Washington Blvd to Dulles Airport Access	Add accel/decel la.	
6.	To:			Connector (DAAR)		
		I	66 WB	Spot 3 Lee Hwy/Spout Run to Glebe Road	Extend accel/decel la.	

7.

## Jurisdiction(s): Arlington/Fairfax

8. Description: <u>Spot 1</u> Arlington County– Extend existing westbound acceleration / deceleration lane (1.5 miles) from Fairfax Drive on-ramp to existing deceleration lane at Sycamore Street off ramp to reduce congestion and improve safety by reducing short distance weave and merge movement.

<u>Spot 2</u> Arlington and Fairfax Counties– Add a continuous acceleration /deceleration lane from Sycamore St/Washington Blvd on ramp to existing Dulles Airport Access Ramp Rte 267 (1.6 miles).

<u>Spot 3</u> Arlington – Extend existing acceleration lane from Lee Hwy/Spout Run on-ramp to existing deceleration lane at Glebe Road off ramp to create a continuous acceleration / deceleration lane (0.9 miles).

Work on all three projects will be within existing ROW, including any required retaining and sound walls relocations or additions. All the proposed spot improvements encompass design evaluation of enforcement areas / safety pull offs, sight distance improvements, ramp metering, signing, traffic management systems, and reconstruction of the shoulder to provide for emergency evacuation.

- 9. Bicycle or Pedestrian Accommodations: \_ Not Included; X Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 10. Total Miles: Three improvements totaling approximately 4 miles
- 11. Project Manager: L&D Project Manager Jeff Daily 12. E-Mail: Jeff.Daily@VirginiaDOT.org
- 13. Project Information URL: www.virginiadot.org/projects/const-project.asp?ID=404
- 14. Projected Completion Year: 30% design plans completed 2008, 100% design plans completed 2010 or Design Build construction beginning 2010
- 15. Actual Completion Year: N/A \_\_\_\_Project is ongoing. Year refers to implementation.
- 16. his project is being withdrawn from the Plan as of: N/A
- 17. Total cost (in Thousands): Spot 1 \$31.6M (PE\$3.6M, CN \$28M), Spot 2 \$29.9M (PE \$3.4M, CN \$26.5M), Spot 3 \$14.1M (PE \$1.6M, CN \$12.5M): Total construction costs for all three improvements \$75.6M
- 18. Remaining cost (in Thousands):
- 19. Funding Sources: X Federal; X State; \_ Local; \_ Private; \_ Bonds; \_ Other

## Idea66 Spot Improvements Inside the Beltway

#### CONGESTION MANAGEMENT INFORMATION

- 20. Do traffic congestion conditions necessitate the proposed project? X Yes; \_ No
- 21. If so, describe those conditions: **X** 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; **X** No
- 23. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? \_Yes; **X** 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
    X 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.

#### SAFETEA-LU PLANNING FACTORS

- 25. Please identify any and all planning factors that are addressed by this project:
  - **X** Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - **X** 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? X Yes; \_ No
    - b. Please identify issues: \_ High accident location; \_ Pedestrian safety; \_Other

\_ Truck or freight safety; X Engineer-identified problem

c. Briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

Existing levels of congestion is exacerbated by the intense weaving and merging movements happening over a short distance along with inadequate sight distance. The recurring congestion and associated operational/safety effects poses concerns on the corridor's ability to serve as an efficient emergency evacuation route.

- **X** Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
- **X** 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.
- **X** Promote efficient system management and operation.
- \_ Emphasize the preservation of the existing transportation system.

# CLRP PROJECT DESCRIPTION FORM Idea66 Spot Improvements Inside the Beltway

#### ENVIRONMENTAL MITIGATION

- 26. Have any potential mitigation activities been identified for this project? \_ Yes; X 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

#### **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; X 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
  - \_ Other, please specify:

#### 31. Other Comments:

The National Capital Region Transportation Planning Board (TPB) in approving the preliminary engineering work for the proposed project on January 18 2006 (resolution No. TPB R11-2006), indicated six points of clarification that were to be incorporated into the study. The following notes how these points have been incorporated into the overall agency's activities.

- Coordination with the planned extension of Metrorail to Tysons so as to not preclude a third Metrorail track: VDOT is a member of the planning team working directly with VDRPT and Dulles Rail project staff on the Dulles Rail project. The proposed spot improvements on westbound I 66 do not preclude a third Metrorail track and any express bus operations. The proposed projects are interim improvements to address operational and safety issues in the near term. The long term solutions for the corridor include a detailed NEPA study comparing all modal alternatives. Funding for a long term study has yet to be identified.
- 2. Certify that project complies with NEPA: VDOT is in full compliance with all requirements of NEPA. VDOT conducted a State Environmental Review Process (SERP) to determine the level of NEPA document to recommend for completion. A Categorical Exclusion (CE) was recommended by VDOT as the NEPA document type and FHWA concurred with a CE for the spot improvements. Work on this document is underway. The public will have the opportunity to review and comment on this document at the Public Hearing to be scheduled later this year.
- 3. Clarify if all proposed construction can occur within existing right of way and adjacent parkland and Custis trail will be maintained: VDOT has verified the adequacy of the I-66 right-of-way to accommodate the spot improvements that are being designed and constructed during this phase of the study. An exhaustive review of courthouse records of deeds, titles and property plats along the corridor has been completed. The plat description and features, including property lines and corners, were verified using a project coordinate system and field instruments during an actual on-the-ground survey. The right of way boundaries were validated by a detailed land survey and the finding was that the proposed construction can occur within the existing Commonwealth right of way. Proposed construction will maintain adjacent parkland and trails.
- 4. Evaluation of HOV enforcement areas, a continuous 12-foot shoulder, signing, TMS and ramp metering has been included in the current PE work and where validated as needed will be included in the design and construction. This work includes coordination with the VA State Police to identify locations for enforcement areas, improvements to the signing and the variable message signs, and

## Idea66 Spot Improvements Inside the Beltway

redesign and upgrade of the ramp metering in the westbound direction within the project limits.

- 5. Coordination with ongoing efforts to develop a regional emergency evacuation plan: VDOT is an active participant in the state's and MWCOG's efforts in developing regional emergency coordination plans. Working with the state of Maryland, the District and MWCOG staff. the Virginia emergency coordination includes Virginia Department of Emergency Management (VDEM), Virginia Department of Transportation (VDOT), Virginia State Police (VSP) Department of Rail & Public Transportation (DRPT) American Red Cross, Department of Health Services (DHS), Department of Corrections (DOC), Department of Military Affairs (DMA), Local Jurisdictions, and National Park Service (NPS). The basic framework for an operational evacuation plan include:
  - a. Provides a basic plan that could be implemented in the interim should an event occur prior to completion of a more detailed plan.
  - b. Synchronizes the efforts of all State agencies during a major evacuation within this area.
  - c. Provides a Virginia evacuation plan to synchronize mutual supporting plans of local jurisdictions within Region VII (Northern Virginia).
  - d. Provides basic concepts which can be incorporated into plans being developed by other organizations within the NCR and the National Park Service.

The proposed spot improvements fully considers the benefits it could provide for efficient traffic movement along westbound I 66 in events of emergency as anticipated by the regional emergency plans.

6. Safety (along westbound I 66)will not be degraded: The proposed spot improvements will improve safety due to the enhanced access and egress conditions, improved signage, improved sight distance and other project evaluations and designs. Specific safety issues that will be addressed with the spot improvements include lengthening weaving and merging areas, decreasing speed fluctuations, improving level of service (LOS) to reduce "stop and go" crashes, increasing additional storage capacity for incidents on the mainline and reducing travel time for emergency responders.

# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2030 PROJECT DESCRIPTION FORM



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

- 1. Agency Project ID: Secondary Agency:
- Project Type: ✓System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other
  (check all ✓ Freeway; \_ Primary; \_ Secondary; ✓ 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 Location

New Connections / Modifications to existing connections

-						
		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>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:

# CLRP PROJECT DESCRIPTION FORM I-95 / I-395 HOV / Bus / HOT Lanes Project

Under provisions of the Virginia Public-Private Transportation Act of 1995, Fluor Virginia, Inc. and Transurban (USA) Development Inc. (together "FTU") propose to construct and operate a system of High Occupancy Vehicle/Bus/High Occupancy Toll Lanes ("HOV/Bus/HOT") on portions of I-95/395. 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 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 south 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 automobile, motorcycles, light truck, bus and transit vehicles only. Vehicles with three or more occupants would travel on the HOT lanes for free, as per current law. 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.

## Transit Service 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

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

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 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, is developing a detailed Transit/TDM Plan. This detailed Transit/TDM Plan is anticipated to be available in the fall of 2007, and will assist in refining the preliminary transit service plan. If such refinements affect conformity, the changes would be proposed in future conformity analyses.

The proposed new and expanded bus service in the I-95/395 corridor will add about 40,000 hours of bus service in 2010, about 80,000 hours of bus service in 2020 and about 88,000 hours of bus service is 2030. Compared to the bus services assumed for the base year (2006) in the CLRP these additional hours of bus service represents an increase of approximately 11% in 2010, 22% in 2020 and 25% 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, in the CLRP, for future years the additional hours of bus service represents an increase of approximately 10% in 2010, 16% in 2020 and 16% in 2030.

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 I 95/395 corridor and within Fairfax County, Arlington County and the City of Alexandria. The Project provides funding for capital, operating and maintenance facilities of the proposed new bus service proposed, by the Project, for 2010, 2020 and 2030.

The Project team will continue working with the TAC in the conduct of the planning study and 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 & 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 & 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 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 & ride facilities and the bus station enhancements will be assessed further within the TAC's detailed Transit/TDM Plan.

Once the I-95/395 HOV lanes have been converted into HOV/Bus/HOT lanes, they will still be classified as "fixed guideway miles" for purposes of the transit funding formulas, in accordance with FTA's final policy statement on when HOV lanes converted to HOT lanes

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shall be classified as fixed guideway miles, published in the January 11, 2007 Federal Register (Vol. 72, pages 1366-1372) ("FTA Policy"). The HOT lanes will be continuously monitored and continue to meet performance standards that preserve free flow traffic conditions in accordance with the FTA Policy, such that the lanes are capable of being classified as "fixed guideway miles".

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

## **Tolling Policy**

HOT lanes will remain free-flowing for all users, even during rush hour, in accordance with Federal SAFE-TEA-LU regulations. Dynamic pricing will be used to maintain these free-flow conditions. Prices will be adjusted by the time of day, by the day of the week and in response to the level of traffic. Federal requirements to insure free-flowing conditions mandate significant and continuous monitoring of traffic flow conditions on the HOT lanes. To facilitate compliance with this Federal requirement, there will be no price caps on the level of tolls. These requirements for monitoring the HOT lanes exceed any such requirements on the existing HOV lanes.

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.

## 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.

## 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

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

currently working on the Draft Environmental Impact Statement ("EIS") for the 14<sup>th</sup> Street Brdige Corridor Project, which is scheduled for completion in May 2008. The final EIS is expected to be complete by May 2009, It is expected that variations of HOV and HOT lane access across the bridge will be considered by FHWA-EFL as alternatives in their EIS. Based on the TPB's update to the 2007 CLRP, FHWA-EFL will assume the I-95/395 HOV/Bus/HOT Lanes Project as part of the pre-existing environment for the purposes of their Draft EIS. More information on the 14<sup>th</sup> Street Bridge Corridor Project may be found at <u>www.14thstreetbridgecorridoreis.com</u>.

#### **Financial Plan**

Construction cost for the proposed Project is estimated to be \$492M (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 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 \$64M. Funding is assumed to be derived, equally, from US-DOT transit capital funding program grants (including section 5308, section 5309) and a dedicated transit initiative fund provided by the project sponsor.

The operating and maintenance costs are estimated to be about \$326M, 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 current transit service plan is refined 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.

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.

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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; <u>✓</u> 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: www.virginiadot.gov
- 14. Projected Completion Year: 2010
- 15. Actual Completion Year: N/A <u>✓</u> 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 million (PE-\$60M, ROW-\$4M, Construction-\$428M, Other-\$390M)
- 18. Remaining cost (in Thousands): N/A
- 19. Funding Sources: \_ Federal; \_ State; \_ Local; <a><u>·</u> Private; <a><u>·</u> Bonds; <a>·</a> Other</a>

## CONGESTION MANAGEMENT INFORMATION

- 20. Do traffic congestion conditions necessitate the proposed project? 🖌 Yes; \_ No
- 21. If so, describe those conditions: <u>✓</u> Recurring congestion; <u>Non-site specific congestion</u>;

\_ 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?  $\checkmark$  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.

## 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.
  - $\checkmark$  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; <a></a> 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:

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- ✓ Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
- $\checkmark$  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

- 26. Have any potential mitigation activities been identified for this project? \_ Yes; <u>√</u>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? <u>✓</u> Yes; \_ No (Although the I 95/395 HOV/BUS/HOT Lane project itself is not an ITS project, the operations and toll collection components of the project are assumed to be considered as ITS).
- 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

#### I 95/395 HOV/BUS/HOT LANE PROJECT: PROPOSED CORRIDOR BUS SERVICE PLAN DETAILS FOR CLRP & CONFORMITY

No.	Origin	Destination	2006	2010	2020	2030
			Base	НОТ	НОТ	НОТ
EXISTING ROUTES:			Hdwy	Hdwy	Hdwy	Hdwy
			in Min.	in Min.	in Min.	in Min.
1	PENTAGON STA	LANDMARK(LINC-QUANTRELL)	60	40	30	22
2	SOUTHERN TOWERS	PENTAGON STA	30	30	30	22
3	PARK CENTER	PENTAGON STA	20	20	20	20
4	PENTAGON STA	SOUTHERN TOWERS	30	30	30	22
5	SOUTHERN TOWERS	PENTAGON STA	7	7	7	7
6	PENTAGON STA	LANDMARK(LINC-QUANTRELL)	60	40	30	22
7	PENTAGON STA	LANDMARK(LINC-QUANTRELL)	60	40	30	22
8	PENTAGON STA	PARK CENTER	20	20	20	20
9	LANDMARK(LINC-QUANTRELL)	PENTAGON STA	8	8	8	8
10	LINCOLNIA (SOUTHLAND&WINGATE)	PENTAGON STA	15	15	15	15
11	PENTAGON STA	QUAKER LN. & OSAGE ST.	20	20	20	20
12	SEMINARY RD. & LIBRARY LANE	PENTAGON	20	20	20	20
13	QUAKER LANE & OSAGE ST.	PENTAGON	20	20	20	20
14	QUAKER LANE & OSAGE ST.	PENTAGON	10	10	10	10
15	ANNANDALE	PENTAGON STA	30	30	30	30
16	PENTAGON STA	SHIRLINGTON	30	30	30	22
22	WEST SPRINGFIELD	PENTAGON STA	30	30	30	30
23	PENTAGON STA	ROLLING VALLEY MALL	30	30	30	30
24	OAK LTHR/BURKE CTR PKWY	PENTAGON STA	30	30	30	30
25	LANDMARK(STEVE&WHIT W/B)	PENTAGON STA	30	30	30	22
26	LANDMARK(STEVE&WHIT W/B)	PENTAGON STA	15	15	15	15
27	PENTAGON STA	LANDMARK(STEVE&WHIT W/B)	30	30	30	22
28	PENTAGON STA	LANDMARK(6295 EDSALL RD)	30	30	30	22
29	BALLSTON STA	PENTAGON STA	20	20	20	20
30	PENTAGON STA	BALLSTON STA	20	20	20	20
31	BALLSTON STA	PENTAGON STA	20	20	20	20
32	NOVA-ALEXANDRIA	PENTAGON STA	60	40	30	22
33	N. EARLY ST & BRADDOCK RD.	PENTAGON STA	20	20	20	20
34	PENTAGON STA	SKYLINE (SEMINARY RD & G.MASON)	30	30	30	22
35	SKYLINE (SEMINARY RD & G.MASON)	PENTAGON STA	20	20	20	20
36	PENTAGON STA	NOVA-ANNANDALE	30	30	30	30
37	AMERICANA DR & HERITAGE	PENTAGON STA	12	12	12	12
38	HERITAGE & DONNYBROOK	PENTAGON STA	15	15	15	15
39	NOVA-ANNANDALE	PENTAGON STA	30	30	30	30
40	PENTAGON CITY METRO	PENTAGON CITY METRO	15	15	15	15
41	28TH & QUINCY ST.	PENTAGON CITY METRO	60	40	30	22
42	SPRINGFIELD METRO	HUNTINGTON METRO	30	30	30	30
43	HUNTINGTON METRO	SPRINGFIELD METRO	30	30	30	30
44	KING & FAIRFAX STREETS	PENTAGON METRO	20	20	20	20
45	PENTAGON METRO	KING & FAIRFAX STREETS	20	20	20	20
46	KING & FAIRFAX STREETS	PENTAGON METRO	30	30	30	30
47	PENTAGON METRO	HUNTINGTON TOWERS	15	15	15	15
48	CHALFONTE & GUNSTON	PENTAGON METRO	60	40	30	30
49	SPRINGFIELD METRO	PENTAGON METRO	15	15	15	15
50	PENTAGON METRO	SPRINGFIELD METRO	15	15	15	15
50 51	DALE CITY PNR	INDEPENDENCE&7TH ST	60	40	30	30
52	LINDENDALE PNR	21ST & VA AVE (STATE DEPT)	12	12	12	12
52 53	LINDENDALE PNR	12TH & OLD JEFF DAVIS	20	20	20	20
53 54	LINDENDALE PNR	SCAP & MALCOLM X (BOLLING AFB)	30	30	30	30
54 55	FESTIVAL AT OLD BRIDGE	21ST & VA AVE (STATE DEPT)	20	20	20	20
55 56	FESTIVAL AT OLD BRIDGE	12TH & OLD JEFF DAVIS	30	30	30	30
56 57	SAVANAH & MINNIEVILLE RD	9TH & D STREETS NW. (GSA/HUD)	30	30	30	30
57		STICD STREETS NW. (USA/TUD)	30	50	50	50

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#### I 95/395 HOV/BUS/HOT LANE PROJECT: PROPOSED CORRIDOR BUS SERVICE PLAN DETAILS FOR CLRP & CONFORMITY

No.	Origin	Destination	2006	2010	2020	2030
			Base	НОТ	HOT	HOT
EXIS	TING ROUTES:		Hdwy	Hdwy	Hdwy	Hdwy
			in Min.	in Min.	in Min.	in Min.
58	CARDINAL DR & BONNIEVILLE	21ST & VA AVE (STATE DEPT)	30	30	30	30
59	PFITZNER STADIUM PNR	FFX. DR 7 N. TAYLOR (BALLSTON)	30	30	30	30
60	QUANTICO WOODS/FOX LAIR	9TH & D STREETS NW. (GSA/HUD)	30	30	30	30
61	TRIANGLE (WENDY'S)	21ST & C ST (STATE DEPT)	60	40	30	30
62	RT 17 PNR (STAFF)	NAVY YARD	60	40	30	30
63	RT 208 PNR (SPOTS)	PENTAGON - CRYSTAL CITY	60	40	30	30
64	RT 17 PNR (STAFF)	CRYSTAL CITY	60	40	30	30
65	RT 17 PNR (STAFF)	ARLINGTON CEMETARY	60	40	30	30
66	RT 630 PNR	MARK CENTER (COLUMBIA PIKE)	60	40	30	30
67	RT 3 PNR (SPOTS)	9TH & H STREET NW	60	40	30	30
68	RT 630 PNR	CRYSTAL CITY	60	40	30	30
69	RT 3 PNR (SPOTS)	NORTH CAPITOL & E ST	60	40	30	30
70	RT 610 PNR	12TH & INDEPENDENCE AVE SW	60	40	30	30
71	RT 3 PNR (SPOTS)	14TH&INDEPENDENCE	60	40	30	30
72	RT 3 PNR (SPOTS)	14TH&INDEPENDENCE	60	40	30	30
73	RT 208 PNR (SPOTS)	14TH&INDEPENDENCE	60	40	30	30
74	RT 208 PNR (SPOTS)	14TH&INDEPENDENCE	60	40	30	30
75	RT 3 PNR (SPOTS)	14TH&INDEPENDENCE	60	40	30	30

#### **NEW / MODIFIED ROUTES:\***

\* New routes assumed in the CLRP originally assumed for 2030.

1	Bethesda	McLean Bible Church via Tysons	NA	NA	15	15
2	McLean Bible Church	Bethesda via Tysons	NA	NA	15	15
3	Lakeforest Mall	McLean Bible Church via Tysons	NA	NA	15	15
4	McLean Bible Church	Lake Forest Mall via Tysons	NA	NA	15	15
5	Pentagon	Kings Park West	20	20	20	15
6	George Mason University	Pentagon	30	20	20	15
7	Kings Park West	Pentagon	20	20	20	15
8	Kings Park West	Pentagon	30	20	20	15
9	Kings Park West	Pentagon	30	20	20	15
10	Dale City PNR	Tysons Central		30	15	10
11	Stafford (US 1 & VA 630) Tysons Central		NA	20	10	8
12	Franconia Springfield Metro	Tysons Central	NA	NA	15	15
13	Huntington Metro	Tysons Central	NA	NA	15	15
14	Fair Oaks	Landmark Shopping Center	NA	NA	20	15
15	Fair Oaks	Franconia Springfield Metro	NA	NA	20	15
16	Annandale	Idale Tysons Central		NA	15	15
17	Chantilly	Tysons Central		NA	15	15
18	Fredericksburg	Tysons Central	NA	NA	15	15

TOTAL OPERATIONAL HOURS OF BUS SERVICE: (In Thousands)					
Total Additional Operational Hours Of Bus Service Proposed: (Over 2006 Baseline - In Thousands)					
Total Additional Operational Hours Of Bus Service Proposed: (Over CLRP - In Thousands)					

#### Summary of Proposed Bus Service Plan:

#### In 2010: Add 40,000 additional operational hours of bus service in the I 95/395 Corridor

Reduce maximum headways to 40 minutes on all existing routes.

Maintain 2006 headways for all other routes with lower headways.

#### In 2020: Add 80,000 additional operational hours of bus service in the I 95/395 Corridor \*

Reduce maximum headways to 30 minutes on existing routes.

#### In 2030: Add 277,000 additional operational hours of bus service in the I 95/395 Corridor\*

Reduce maximum headways to 30 minutes for existing routes and to 22 minutes for new routes with termini in Fairfax County, Arlington County and the City of Alexandria.

\* Incremental service improvements occur every 5 years.



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

## **Proposed Bus Service Addition Metrics**

Year Increase in Year Annual Bus Service Hours		% Increase Over Existing Service*	% Increase Over CLRP Service Assumptions**
2010	40,000	11 %	10 %
2020	80,000	22 %	16 %
2030	88,000	25 %	16 %

- \* 2006 Service Assumption: 356,000 Annual Vehicle Hours
- \*\* Current CLRP's 2010 Service Assumption: 395,000 Annual Bus Hours Current CLRP's 2020 Service Assumption: 505,000 Annual Bus Hours Current CLRP's 2030 Service Assumption: 538,000 Annual Bus Hours

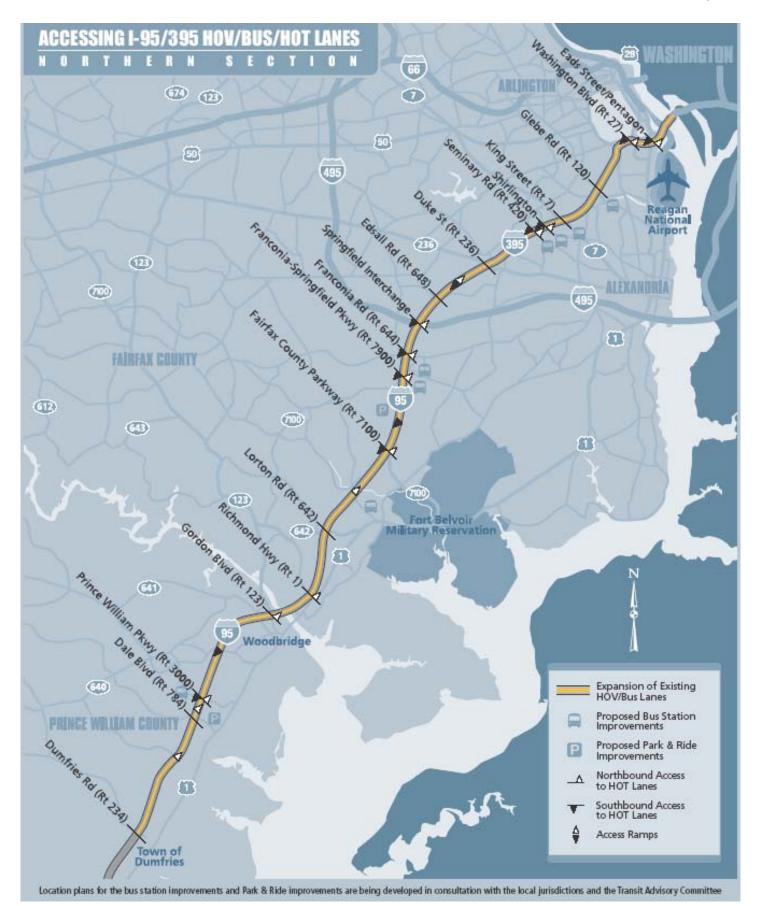
## Costs assumptions (for new service proposed by the project)

- The above new services equates to the following improvements
  - o Capital: 184 new/replacement Clean Fuel Buses
  - Operating: 3.1 million vehicle hours
  - New/expanded facility for 54 new buses
- The following unit rates were used (based on 2007 dollars)
  - Capital: New Clean Fuel Bus cost \$350,000 per bus.
  - Operating: \$105.39 per vehicle hour (WMATA's 2004 NTD plus maintenance facilities cost)

## Funding Summary

- Capital: \$64 million
  - \$32 million from US DOT Transit program grants
  - o \$32 million from Project's dedicated transit initiative fund
- Operating: \$ 326 million
  - \$163 million from Fare Box Recovery (50 % assumed)
  - \$163 million from Project's toll revenues/transit initiative fund
- Total Plan: \$391 million

I-95/I-395 HOT Lanes Project



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# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2030 PROJECT DESCRIPTION FORM



## Potomac Yard Transitway – Alexandria Segment

- Agency Project ID: Secondary Agency:
  Project Type: <u>X</u> System Expansion; \_ System Maintenance; \_ Operational Program; \_ Study; \_ Other (check all \_ Freeway; \_ Primary; \_ Secondary; \_ Urban; \_ Bridge; \_ Bike/Ped; <u>X</u> Transit; \_ CMAQ; that apply) \_ ITS; \_ Enhancement; \_ Other
- 3. Project Title: Potomac Yard Transitway

		Prefix	Route	Name	Modifier
4.	Facility:			Construct a transitway in the Route 1 Corridor	
5.	From (_ at):			Braddock Road Metro Station	
6.	To:			Four Mile Run (Alexandria) Pentagon (Arlington)	

7. Jurisdiction(s): Alexandria, Arlington County

8. Description: The City of Alexandria, together with Arlington County, is developing a transitway to travel from the Braddock Road Metro station to the Pentagon. Stations, amenities, travelways, and vehicles will need to be acquired to implement this service in the U.S. 1 Corridor, from the Braddock Road Metro to Four Mile Run in Alexandria, with the service progressing north to the Pentagon in Arlington County.

- 9. Bicycle or Pedestrian Accommodations: \_ Not Included; X Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 10. Total Miles: 2.5 Alexandria 2.5 Arlington County
- 11. Project Manager: Jim Maslanka 12. E-Mail: Jim.Maslanka@Alexandriava.gov
- 13. Project Information URL:
- 14. Projected Completion Year: 2011
- 15. Actual Completion Year: \_ Project is ongoing. Year refers to implementation.
- 16. \_ This project is being withdrawn from the Plan as of:
- 17. Total cost (in Thousands): \$18.1 Million
- 18. Remaining cost (in Thousands):
- 19. Funding Sources: <u>X</u>Federal; <u>X</u> State; <u>X</u> Local; <u>X</u> Private; <u>Bonds;</u> Other

## CONGESTION MANAGEMENT INFORMATION

- 20. Do traffic congestion conditions necessitate the proposed project? <u>X</u> 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; X\_ No Only increase in capacity is for transit vehicles.
- 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
  - \_ 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

## Potomac Yard Transitway – Alexandria Segment

- 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.

## SAFETEA-LU PLANNING FACTORS

- 25. Please identify any and all planning factors that are addressed by this project:
  - $\underline{X}$  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.
  - X Increase accessibility and mobility of people and freight.
  - X Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
  - $\underline{X}$  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; X\_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

## 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; X\_ 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
  - \_ Other, please specify:
- 31. Other Comments:

# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2030 PROJECT DESCRIPTION FORM



## US 301 Waldorf Bypass Study

- Agency Project ID: Secondary Agency:
  Project Type: \_\_System Expansion; \_\_System Maintenance; \_\_Operational Program; X Study; \_\_Other (check all \_\_Freeway; X Primary; \_\_Secondary; \_\_Urban; \_\_Bridge; \_\_Bike/Ped; \_\_Transit; \_\_CMAQ; that apply) \_\_ITS; \_\_Enhancement; \_\_Other
- 3. Project Title: US 301 Waldorf Bypass

		Prefix Ro	oute Name		Modifier
4.	Facility:	US	301	Waldorf Bypass	
5.	From (_ at):			Washington Avenue/Turkey Hill Road	
6.	To:	MD/US	5/301		Interchange at T.B.

- 7. Jurisdiction(s): Prince George's County, Charles County
- 8. Description: Examine alternatives to upgrade and widen US 301 through Waldorf and/or construct an access controlled bypass of Waldorf from Turkey Hill Road/Washington Avenue in Charles County to north of the US 301/MD 5 interchange at T.B. in Prince George's County.
- 9. Bicycle or Pedestrian Accommodations: \_ Not Included; \_ Included; \_ Primarily a Bike/Ped Project; X N/A
- 10. Total Miles:
- 11. Project Manager: 12. E-Mail:
- 13. Project Information URL: <u>http://www.us301waldorf.org</u>
- 14. Projected Completion Year: 2030
- 15. Actual Completion Year: \_ Project is ongoing. Year refers to implementation.
- 16. \_ This project is being withdrawn from the Plan as of:
- 17. Total cost (in Thousands): \$1,485,679
- 18. Remaining cost (in Thousands):
- 19. Funding Sources: X Federal; X 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; X 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
  - \_ 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.

# CLRP PROJECT DESCRIPTION FORM US 301 Waldorf Bypass Study

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

#### SAFETEA-LU PLANNING FACTORS

- 25. Please identify any and all planning factors that are addressed by this project:
  - **X** Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - X 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; X 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.
  - **X** 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; X 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

#### 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; X 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
  - \_ Other, please specify:
- 31. Other Comments: This portion of Charles County is in the TPB plannng area. This project costs \$1.48 billion. The source project costs \$2.78 billion.

# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2030 PROJECT DESCRIPTION FORM



## Manassas National Battlefield Bypass

- 1. Agency Project ID: Secondary Agency: Project Type: \_\_\_\_\_ System Expansion; \_\_\_\_ System Maintenance; \_\_\_ Operational Program; X Study; \_\_\_ Other 2. \_ Freeway; X Primary; \_ Secondary; \_ Urban; \_ Bridge; \_ Bike/Ped; \_ Transit; \_ CMAQ; (check all that apply) \_ ITS; \_ Enhancement; \_ Other Project Title: Manassas National Battlefield Bypass 3. Route Name Prefix Modifier Facility: 4. US 29 Manassas National Battlefield Bypass From (\_ at): 5. US 29 West of Centreville
- 7. Jurisdiction(s): Prince William and Fairfax Counties

29

US

- 8. Description: Close Routes 29 and 234 through the Manassas National Battlefield Park to through traffic and provide alternative means to accommodate the traffic displaced due to these closings. The preferred alternative, in the draft environmental impact statement, proposes a four lane bypass in three segments. These segments are described in item 31 below.
- 9. Bicycle or Pedestrian Accommodations: \_ Not Included; X Included; \_ Primarily a Bike/Ped Project; \_ N/A
- 10. Total Miles: 8.9 miles

To:

6.

11. Project Manager: Jack Van Dop 12. E-Mail: jack.j.vandop@fhwa.dot.gov

East of Gainesville, via VA 234

- 13. Project Information URL: http://www.battlefieldbypass.com
- 14. Projected Completion Year: 2020
- 15. Actual Completion Year:
- 16. \_ This project is being withdrawn from the Plan as of:
- 17. Total cost: \$133 million
- 18. Remaining cost (in Thousands):
- 19. Funding Sources: X Federal; \_ State; \_ Local; \_ Private; \_ Bonds; \_ Other

#### CONGESTION MANAGEMENT INFORMATION

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

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

\_ Project is ongoing. Year refers to implementation.

- 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; X No
- 23. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)? X 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

## Manassas National Battlefield Bypass

#### 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.
  - **X** 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; X 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.
  - **X** Increase accessibility and mobility of people and freight.
  - **X** Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
  - \_ 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? X 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

## X National Park Presesrvation and Use

#### 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; X 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
  - \_ Other, please specify:
- 31. Other Comments: This project will join with the planned Tri-County Parkway and Route 234 North that are already included in the CLRP. Cost for Segment 1: \$85 million, Cost for Segment 2: \$48 million.

# **FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2030 PROJECT DESCRIPTION FORM**



Modifier

## VRE Expansion from Manassas to Gainesville and Haymarket

- Agency Project ID: VRE Secondary Agency: 1.
- 2. Project Type: \_\_\_\_\_ System Expansion; \_\_\_ System Maintenance; \_\_ Operational Program; X Study; \_\_ Other (check all \_ Freeway; \_ Primary; \_ Secondary; \_ Urban; \_ Bridge; \_ Bike/Ped; X Transit; X CMAQ; \_ ITS; \_ Enhancement; \_ Other that apply)
- Project Title: 3. **VRE Gainesville/Haymarket Expansion**

Prefix Route Name

- 4.
- Facility: **Rail Lines** 5. From (\_ at): **City of Manassas VRE Station** To: 6. Gainesville/Haymarket
- Jurisdiction(s): Prince William County 7.
- 8. Description: Project would extend VRE commuter rail service to Haymarket. The initial phase is for preliminary engineering and environmental work.
- 9. Bicycle or Pedestrian Accommodations: \_ Not Included; \_ Included; \_ Primarily a Bike/Ped Project; X N/A
- 10. Total Miles: 11 Miles from Manassas to Haymarket
- 11. Project Manager: Sirel Mouchantaf 12. E-Mail:
- 13. Project Information URL: www.vre.org
- 14. Projected Completion Year: 2018
- 15. Actual Completion Year: Project is ongoing. Year refers to implementation.
- 16. \_ This project is being withdrawn from the Plan as of:
- 17. Total cost (in Thousands): \$280,600 K
- 18. Remaining cost (in Thousands): \$278,000 K
- 19. Funding Sources: X Federal; X State; X Local; X Private; Bonds; Other

## CONGESTION MANAGEMENT INFORMATION

- 20. Do traffic congestion conditions necessitate the proposed project? \_ Yes; X 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; X 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
  - \_ 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.

## VRE Expansion from Manassas to Gainesville and Haymarket

#### SAFETEA-LU PLANNING FACTORS

- 25. Please identify any and all planning factors that are addressed by this project:
  - **X** 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.
  - X Increase accessibility and mobility of people and freight.
  - **X** Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
  - **X** 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; X 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

## 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; X 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
  - \_ Other, please specify:

## 31. Other Comments

## AIR QUALITY CONFORMITY ASSESSMENT: 2007 CONSTRAINED LONG RANGE PLAN AMENDMENTS AND FY2008-2013 TRANSPORTATION IMPROVEMENT PROGRAM

#### **SCOPE OF WORK**

## I. INTRODUCTION

Projects solicited for the 2007 Constrained Long Range Plan (CLRP) and the FY2008-2013 Transportation Improvement Program (TIP) are scheduled to be finalized at the April 18, 2007 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 November 21, 2007. This work effort addresses requirements associated with attainment of the 1-hour and 8-hour ozone standards (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.

DC, Maryland, and Virginia state air agencies, working through the Metropolitan Washington Air Quality Committee (MWAQC), are scheduled to submit 8-hour ozone SIP budgets to EPA by June 15, 2007. These new budgets will provide the 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.

Criteria and procedures for demonstrating conformity with respect to PM2.5 in the interim period before SIPs are filed differ from ozone or wintertime carbon monoxide assessments in that there are no existing budgets which can be applied. In this case EPA allows for an assessment that shows emissions in "action" scenarios are no greater than those in a 2002 base. This criterion was established and applied, with the concurrence of MWAQC, in the past PM2.5 conformity assessments. Emissions will be inventoried for yearly totals instead of on a daily basis.

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

The analytical approach is similar to that applied and documented in the October 18, 2006 air quality conformity assessment of the 2006 CLRP and the FY2007-2012 TIP. Exceptions are the use of the forthcoming 8-hour ozone budgets, as mentioned above, and the use of the updated travel demand model, Version 2.2. 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 April 18, 2007 TPB meeting.

	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	Budget not yet set - Use Reductions from base 2002 inventory	
Emissions Analysis Time-frame:	Daily	Daily	Annual	
Geography:	1-hour ozone area (MSA) 8-hour ozone area (MSA less Stafford)	DC, Arl., Alex., Mont., Pr. Geo.	MSA less Stafford and Calvert counties	
Network Inputs:	Regionally significant projects			
Land Activity:	Round 7.1			
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.			

## **TABLE 1 – Summary of Technical Approach**

## 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 April 18, 2007)
  - 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 2008, 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
  - 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 2008 travel and emissions estimates
  - Execute travel demand modeling
  - Develop and apply Mobile6.2 emission factors (ozone)
  - Calculate emissions (daily for ozone season VOC and NOx for ozone standard requirements)
- 6. Prepare 2009 travel and emissions estimates
  - Tasks as in year 2008 analysis
- 7. 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)
- 8. 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)
- 9. Prepare 2030 travel and emissions estimates
  - Tasks as in year 2020 analysis
- 10. 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 October 18, 2006 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 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 November 21, 2007.

# Exhibit 1

## Conformity Criteria

All Actions at all times:

Sec. 93.110 Sec. 93.111 Sec. 93.112	Latest planning assumptions. Latest emissions model. Consultation.			
Transportation Plan: Sec. 93.113(b)	TCMs.			
Sec. 93.118 and/or Sec. 93.119	Emissions budget and /or Interim 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 Pl	an 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.

# Exhibit 2



Schedule for the 2007 Financially Constrained Long-Range Plan (CLRP) and FY 2008 – 2013 Transportation Improvement Program (TIP)

January 2007	Transportation Agencies Begin Submitting Project Information through On-Line Database
February 23, 2007	<u>DEADLINE:</u> Transportation Agencies Complete On-Line Project Submissions
March 2, 2007	Technical Committee reviews Plan and TIP Project Submissions and draft Scope of Work for the Air Quality Conformity Assessment
March15, 2007	Plan and TIP Project Submissions and draft Scope of Work Released for Public Comment at the Citizens Advisory Committee (CAC)
*March 21, 2007	TPB Briefed on Project Submissions and draft Scope of Work
April 14, 2007	Public Comment Period Ends
*April 18, 2007	TPB Reviews Public Comments and is asked to Approve Project Submissions and draft Scope of Work
*September 19, 2007	TPB Receives Status Report on the Draft Plan, TIP and Conformity Assessment
October 11, 2007	Draft Plan, TIP and Conformity Assessment Released for Public Comment at Citizens Advisory Committee (CAC)
*October 17, 2007TPB B	riefed on the Draft Plan, TIP and Conformity Assessment
November 12, 2007	Public Comment Period Ends
*November 21, 2007	TPB Reviews Public Comments and Responses to Comments, and is Presented the Draft Plan, TIP and Conformity Assessment for Adoption

\*TPB Meeting

## WORK SCOPE ATTACHMENT A

## POLICY AND TECHNICAL INPUT ASSUMPTIONS AIR QUALITY CONFORMITY ANALYSIS OF 2007 CLRP AND FY2008-2013 TIP

## 1. Land Activity

Round 7.1 Cooperative Forecasts

## 2. Policy and Project Inputs

- Highway, HOV and transit projects and operating parameters
- Financially constrained project submissions to be advanced by the TPB on 4/18/2007
- 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
  - Update emissions factors methods originally developed and applied in the 2006 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 latest seasonal traffic adjustments and above emissions factors
  - Offline emissions analyses
- 6. Conformity Assessment Criteria
  - Emissions budgets for ozone precursors and wintertime CO
  - EPA conformity regulations stating the transportation conformity rule amendments for PM2.5 requirements to demonstrate emissions are no greater than a 2002 base case.
  - Analysis years: 2008, 2009, 2010, 2020, and 2030