

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



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

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

1. Agency Project ID: \_\_\_\_\_ Secondary Agency: \_\_\_\_\_
2. Project Type:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other  
(check all that apply)  Freeway;  Primary;  Secondary;  Urban;  Bridge;  Bike/Ped;  Transit;  CMAQ;  
 ITS;  Enhancement;  Other
3. Project Title: **I-95 / I-395 HOV / Bus / HOT Lanes Project**
4. Facility: I-95 / 395
5. From ( \_ at): Eads Street, Arlington County
6. To: Route 610 (Garrisonville Road), Stafford County

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

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

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

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

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

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

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

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

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

Access to the HOT lanes would be available to automobiles, motorcycles, light-trucks, buses and transit vehicles only. Vehicles with three or more occupants would travel on the HOT lanes for free, as per the code of the Commonwealth of Virginia and Federal law. The facility will be operated and HOV occupancy and toll payment enforced in a manner that

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

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

## Transit/TDM Plan

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

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

The proposed new and expanded bus service in the I-95/395 corridor will add about ~~40,000~~ **38,000** hours of bus service in 2010, about ~~80,000~~ **98,000** hours of bus service in 2020 and about ~~88,000~~ **98,000** hours of bus service in 2030. Compared to the bus services assumed for the base year (2006) these additional hours of bus service represents an increase of approximately 11% in 2010, ~~22%~~ **28%** in 2020 and ~~25%~~ **28%** in 2030. These increases in bus operating hours in the corridor will be realized via addition of new routes and reducing headways of services currently assumed in the CLRP in the respective years. Compared to the bus services assumed for future years in the **2006** CLRP, the additional hours of bus service represents an increase of approximately 10% in-2010, ~~46%~~ **19%** in 2020 and ~~46%~~ **18%** in 2030.

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

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

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

~~The proposed transit service plan will in 2010 reduce the CLRP maximum headways to no more than 40 minutes on all routes. Additionally the new service plan will in 2020 reduce the CLRP maximum headways to no more than 30 minutes on all routes. Also the new service plan will reduce the CLRP maximum headways to no more than 22 minutes on all routes along the I-95/395 corridor and within Fairfax County, Arlington County and the City of Alexandria. The Project provides funding for capital, operating and maintenance~~ **supporting** facilities of the proposed new bus service **and for additional capacity for VRE**. Attachment A shows the ~~current (2006) TAC proposed~~ bus service in the corridor, the **proposed fixed facilities**, and the **proposed TDM elements** ~~new bus service proposed, by the Project, for 2010, 2020 and 2030.~~

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

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

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

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

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

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

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

## **Tolling Policy**

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

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

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

## **Incident Management**

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

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

## **Schedule**

Construction for the Project is projected to begin in early 2008, with an estimated construction completion time of two and a half years. The facility is expected to enter operations in mid to late 2010. The current schedule calls for environmental review in compliance with Federal (NEPA) and state regulations. The FHWA has further conditioned environmental approval to the Project being included in a conforming Transportation Improvement Program ("TIP") and Constrained Long Range Plan ("CLRP") for construction.

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

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

## **Congestion Management Plan**

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

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

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

### BRAC Actions

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

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

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

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

## Financial Plan

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

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

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

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

## Stakeholder Outreach

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

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

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

9. Bicycle or Pedestrian Accommodations:  Not Included;  Included;  Primarily a Bike/Ped Project;  N/A  
Design work for the proposed Project, in accordance with VDOT's Policy for Integrating Bicycle and Pedestrian Accommodations, will be initiated with the presumption that the Project shall accommodate the bicycle and pedestrians needs, as appropriate.
10. Total Miles: 36
11. Project Manager: Larry Cloyed - VDOT
12. E-Mail: [larry.cloyed@VDOT.Virginia.gov](mailto:larry.cloyed@VDOT.Virginia.gov)
13. Project Information URL: [www.virginiadot.gov](http://www.virginiadot.gov)
14. Projected Completion Year: 2010
15. Actual Completion Year: N/A  Project is ongoing. Year refers to implementation.
16. N/A\_ This project is being withdrawn from the Plan as of:
17. Total cost (in Thousands): ~~\$882~~ **\$ 902**million (PE-\$60M, ROW-\$4M, Construction-\$428M, Other-  
**\$410M** ~~\$390M~~)
18. Remaining cost (in Thousands): N/A
19. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

## **CONGESTION MANAGEMENT INFORMATION**

20. Do traffic congestion conditions necessitate the proposed project?  Yes;  No
21. If so, describe those conditions:  Recurring congestion;  Non-site specific congestion;  
 Frequent incident-related, non-recurring congestion;  Other
22. Is this a capacity-increasing project on a limited access highway or other arterial highway of a functional class higher than minor arterial?  Yes;  No
23. If yes, does this project require a Congestion Management Documentation form under the given criteria (see *Call for Projects* document)?  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.
  - Increase the safety of the transportation system for all motorized and non-motorized users.
    - a. Is this project being proposed specifically to address a safety issue?  Yes;  No
    - b. Please identify issues:  High accident location;  Pedestrian safety;  Other  
 Truck or freight safety;  Engineer-identified problem
    - c. Briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
  - Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
  - Increase accessibility and mobility of people and freight.
  - Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
  - Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
  - Promote efficient system management and operation.
  - Emphasize the preservation of the existing transportation system.

## **ENVIRONMENTAL MITIGATION**

26. Have any potential mitigation activities been identified for this project?  Yes;  No (Currently being investigated)
27. If yes, what types of mitigation activities have been identified?
- Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater; Vibrations;
  - Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## **INTELLIGENT TRANSPORTATION SYSTEMS**

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

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

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

➤ **Total Transit/TDM Plan Cost: \$410M**

- **Capital Costs: \$165M**
- **Operating Costs: \$245M**

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

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

➤ **Funding Source: \$410M**

- **US DOT Congestion Relief Initiative: \$40M**
- **Farebox recovery from proposed new transit service: \$95M**
- **One time contribution from the project's private sector partners, dedicated for transit/TDM program: \$195M**
- **Earnings on dedicated funds from private sector: \$80M**  
(Earnings correspond to an average annual rate of return of 4% up to 20 years)

### Proposed Bus Service Addition Metrics

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

\* 2006 Service Assumption: 356,000 Annual Vehicle Hours

\*\* ~~Current~~ **2006** CLRP's 2010 Service Assumption: 395,000 Annual Vehicle Hours

~~Current~~ **2006** CLRP's 2020 Service Assumption: 505,000 Annual Vehicle Hours

~~Current~~ **2006** CLRP's 2030 Service Assumption: 538,000 Annual Vehicle Hours

- ~~Capital: \$76 million~~
  - ~~\$38 million from US DOT Transit program grants~~
  - ~~\$38 million from Project's dedicated transit initiative fund~~
- ~~Operating: \$314 million~~
  - ~~\$157 million from Fare Box Recovery (50% assumed)~~
  - ~~\$157 million from Project's toll revenues/transit initiative fund~~
- ~~Total Plan: \$390 million~~