

**ITEM 10 - Action**  
October 19, 2005

Review of Priority Areas in the Solicitation Document for the  
2005 Constrained Long Range Plan (CLRP),  
and Approval of the 2005 CLRP

**Staff**

**Recommendation:**

- Receive briefing on how the projects in CLRP and TIP address the three priority areas identified in the 2005 project solicitation document.
- Adopt Resolution R6-2006 approving the 2005 CLRP.

**Issues:**

None

**Background:**

In the January 2005 project solicitation document, the TPB highlighted three priority areas related to the TPB vision for consideration by the implementing agencies when submitting projects for the 2005 CLRP and FY 2006-2011 TIP. The priority areas are to implement more traffic signal optimization, improve regional transportation coordination for incident management, and identify how projects support the regional core and regional activity centers.

At the September 21 meeting, the Board was briefed on the status of the draft 2005 CLRP and the FY 2006-2011 TIP. The 2005 CLRP information and new TIP were also made available at [www.mwcog.org/transportation/public/](http://www.mwcog.org/transportation/public/)

# **National Capital Region Transportation Planning Board**

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3315 Fax: (202) 962-3202

October 13, 2005

## **Memorandum**

**To:** National Capital Region Transportation Planning Board

**From:** Ronald F. Kirby  
Director of Transportation Planning

**Re:** Priority Areas for the 2005 CLRP and FY 2006-2011 TIP

---

In the January 2005 project solicitation document, the TPB highlighted three priority areas related to the TPB vision for consideration by the implementing agencies when submitting projects for the CLRP and TIP. The priority areas are to implement traffic signal optimization, improve region transportation coordination, and identify how projects support the regional core and regional activity centers. This memorandum provides an overview of how the draft 2005 CLRP and FY 2006-2011 TIP address the priority areas.

1. **Implement traffic signal optimization** as stated as part of Goal 3, Strategy 3 in the TPB Vision: "Support the implementation of effective safety measures, including red light camera enforcement, skid-resistant pavements, elimination of roadside hazards, and better intersection controls", and Goal 4, Strategy 1: "Deploy technologically advanced systems to monitor and manage traffic, and to control and coordinate traffic control devices, such as traffic signals, including providing priority to transit vehicles where appropriate".
  - **Background**

In 2002, the TPB adopted a traffic signal optimization "Transportation Emissions Reduction Measure" (TERM), with the dual objectives of air quality benefits and congestion reduction.

    - "Optimization" is a traffic engineering concept whereby traffic signals (often groups of signals in corridors) are (re-)timed to reduce delay for vehicles on the roadway system while ensuring safety.
    - Engineers use a combination of traffic volume counts, in-car and in-field travel time observations, and computer analysis to determine signal timings given the complex interactions of traffic flows.
    - The results for any one driver on any one trip may not appear to be "optimal", due to traffic loads, cross-traffic, and other factors, but overall system delay should be reduced.
    - An engineering rule-of-thumb recommends checking signal timing at least every three years to respond to evolving traffic patterns and pedestrian needs.
  - **Results**

The goal for the period 2002-2005 was to increase the number of retimed traffic signals regionally by approximately 900 (out of about 4,700 total signals). In

percentage terms, this goal was to take the region from about 45% of signals optimized to about 64%.

- Reports by the transportation agencies indicated that the region exceeded this goal, increasing the number of optimized traffic signals regionally by 1,100, and reaching an optimization rate of an estimated 68% by mid-2005 as shown below.

**Regional Signal Optimization TERM Goals and Reported Results**

Total Signalized Intersections*	Optimized Intersections June 2002	Number of Signals to Be Optimized According to Original TERM Commitment		Signals Optimized as of June 2005 (Reported Actual Results)		Percentage of Signalized Intersections Optimized	
		Increment	Total	Increment	Total	Jun '02	Jun '05
4,700	2,100	900	3,000	1,100	3,200	45%	68%
*All totals approximate. Signals newly installed since 2002 not included in totals.							

- **Outlook for Future Activities**  
Numerous transportation agencies in the region are responsible for traffic signal timing and maintenance. These agencies have reported general satisfaction with the computerized tools now available to retune signals, and hope to maintain and increase their optimization efforts in the future.
- In many cases, specialist consulting firms are brought under contract to perform this work, which has aided timeliness and affordability of such activities. Most agencies also have dedicated in-house staff to support this work, as well as to support everyday technical maintenance of signals. Continued investment of resources in this area will ensure maintenance of the benefits of optimization.

2. **Further improve interagency coordination for incident management**, as stated in Goal 4, Objective 3: “Improved management of weather emergencies and major incidences” and Goal 4, Strategy 2: “Improve incident management capabilities in the region through enhanced detection technologies and improved incident response”.

- Since the 9/11 attacks, the region’s transportation agencies have made great progress in preparedness, response, and coordination during major incidents.
- In November 2004 and January 2005, the TPB endorsed actions to improve regional transportation communications and coordination during incidents and declared the creation of a regional transportation coordination program as a top priority.
- DDOT, MDOT, VDOT, and WMATA, in conjunction with the University of Maryland Center for Advanced Transportation Technology, received a \$1 million U.S. Department of Homeland Security Urban Area Security Initiative (UASI) grant to begin development of components of a regional transportation coordination program. A main focus is the provision of transportation operational information to emergency management entities and the public during emergencies. This work complements federal Intelligent Transportation Systems-funded traveler information systems development activities already underway by the University of Maryland.

- At the March 2005 TPB meeting, Congressman Jim Moran spoke to the TPB about his strong support for establishing a regional transportation coordination program. Through Congressman Moran's efforts, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorized \$2 million (\$1.6 million in federal funds) for this program.
  - In July 2005, the TPB held a special work session to review the status and potential funding sources of a regional transportation coordination program known as "CapCom."
  - On behalf of the region, DDOT engaged the Volpe National Transportation Systems Center, the U.S. Department of Transportation's research and innovative technology arm, to undertake an expert study on how best to implement a regional coordination program. The study began in September 2005, and results expected late in the year will advise the UASI and SAFETEA-LU-funded activities.
  - At the October 19, 2005 meeting, the TPB is scheduled to approve amendments to the FY 2005-2010 TIP and draft FY 2006-2011 TIP to include funding of \$400,000 per year for 5 years to initiate this regional transportation coordination. This funding includes the \$1.6 million federal grant secured by Congress Moran plus \$400,000 in matching funding provide in equal shares by DDOT, MDOT and VDOT.
  - Regular reports will be provided to the TPB over the coming months on the implementation of the program with oversight and support by DDOT, MDOT, VDOT, and WMATA.
3. **Identify how projects or proposals support the regional core and regional activity centers**, as stated in Goal 2, Strategy 4 of the Vision: "Give high priority to regional planning and funding for transportation facilities that serve the regional core and regional activity centers, including expanded rail service and transit centers where passengers can switch easily from one transportation mode to another."

#### Definition of activity centers and clusters

- At the request of the TPB, COG's Planning Directors Technical Advisory Committee (PDTAC) developed the regional activity centers as focal point for jobs, housing, and nodes for transportation linkages.
- COG and TPB adopted the activity centers in 2002.
- To simplify analysis, centers are grouped into clusters along major transportation corridors.
- PDTAC will refine the centers and clusters based on the Round 7 forecasts.
- For the current analysis, activity clusters were divided into core clusters (located in DC, Alexandria, and Arlington), and suburban clusters (located in suburban Maryland and Northern Virginia.)

#### Transportation facilities in activity clusters

- In 2002, only 11 out of 24 activity clusters had Metrorail stations
- In 2030, 16 out of 24 activity clusters will have Metrorail or light rail stations
- In both 2002 and 2030, 11 out of 24 activity clusters have commuter rail stations
- In 2002, 64 out of 83 Metrorail stations were located in activity clusters.
- In 2030, 78 out of 97 Metrorail stations and 16 out of 21 light rail stations will be located in activity clusters

#### Land use in activity clusters

- Between 2002 and 2030, households (but not jobs) will become more concentrated in activity clusters
- Although jobs and households are both forecast to increase in core clusters, the regional share of jobs and households in these clusters is forecast to decrease

#### Travel patterns in activity clusters

- In both 2002 and 2030, more than 90% of all transit commute trips go to activity clusters.
- In both 2002 and 2030, regional transit commute mode share is 16%, whereas transit commute mode share to activity clusters is just over 20%.
- 2030 transit commute mode share in core clusters (43%) is nearly five times greater than in suburban clusters (9%)
- If the transit constraint is lifted, the 2030 transit commute mode share would increase from 43% to 45% in core clusters, and from 16% to 17% regionally.
- The share of all auto commute trips that go to activity clusters is forecast to decrease slightly, from 67% in 2002 to 65% in 2030.

TPB R6-2006  
October 19, 2005

**NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD  
777 North Capitol Street, N.E.  
Washington, D.C. 20002**

**RESOLUTION APPROVING  
THE 2005 CONSTRAINED LONG RANGE  
TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION**

**WHEREAS**, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) of 1998 for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

**WHEREAS**, the Joint Planning Regulations issued October 28, 1993 by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) require that the long range transportation plan be reviewed and updated at least triennially ; and

**WHEREAS**, on September 21, 1994, the TPB adopted the first Constrained Long-Range Transportation Plan (CLRP); and

**WHEREAS**, on July 17, 1997, the TPB approved the first triennial update to the CLRP, which was published in July 1998 as the document: *1997 Update to the Financially Constrained Long-Range Transportation Plan for the National Capital Region*; and

**WHEREAS**, on October 18, 2000, the TPB approved the second triennial update to the CLRP, which was published in May 2002 as the document: *2000 Update to the Financially Constrained Long-Range Transportation Plan for the National Capital Region*; and

**WHEREAS**, on December 17, 2003, the TPB approved the third triennial update to the CLRP, which was published in October 2004 as the document: *2003 Update to the Financially Constrained Long-Range Transportation Plan for the National Capital Region*; and

**WHEREAS**, on November 17, 2004, the TPB approved the 2004 CLRP; and

**WHEREAS**, on January 19, 2005, the TPB issued a solicitation document for projects and strategies to be included in the CLRP and TIP that will meet federal planning requirements and address the goals in the TPB Vision, including three priority areas; and

**WHEREAS**, the transportation implementing agencies in the region provided submissions for the 2005 CLRP and inputs to the FY 2006-2011 TIP, and the TPB Technical Committee and the TPB reviewed the submissions at meetings in February, March and April; and

**WHEREAS**, during the development of the 2005 CLRP, the TPB public involvement process was followed, and numerous opportunities were provided for public comment: (1) At the February 10, 2005 TPB Citizens Advisory Committee (CAC) meeting, the project submissions for inclusion in the air quality conformity analysis of the 2005 and the FY 2006-2011 TIP and the air quality conformity work scope were released, and an opportunity for public comment on these submissions was provided at the beginning of the February 16, March 16 and April 20 TPB meetings; (2) At the April 20, 2005 meeting, the TPB approved a set of responses to the public comments on the project submissions for inclusion in the CLRP and TIP documents; (3) On September 15, 2005, the draft air quality conformity analysis, the draft 2005 CLRP, and the draft FY 2006-2011 TIP were released for a 30-day public comment period which closed on October 15; (4) An opportunity for public comment on these documents was provided at the beginning of the September 21 and October 19 TPB meetings; (5) The comments and staff responses to them were reviewed and accepted for inclusion in the CLRP and TIP by the TPB on October 19, 2005; and the final version of the TIP includes summaries of the comments and the responses; and

**WHEREAS**, the significant changes for the 2005 CLRP are described in Attachment A and detailed information on all of the projects in the 2005 CLRP is provided in Appendix B of the Air Quality Conformity report as adopted October 19, 2005; and

**WHEREAS**, the 2005 CLRP has been developed to meet the financial plan requirements in the Metropolitan Planning Rules and shows the consistency of the proposed projects with already available and projected sources of transportation revenues while the existing transportation system is being adequately operated and maintained; and

**WHEREAS**, in each year's update of the CLRP since 2000, the TPB has explicitly accounted for the funding uncertainties affecting the Metrorail system capacity and levels of service beyond 2005 by constraining transit ridership to or through the core area to 2005 levels; and

**WHEREAS**, as a result of the recent "Metro Matters" commitments for Metro's near-term funding, the transit ridership constraint to or through the core area was applied in the 2005 CLRP conformity analysis using 2010 ridership levels rather than 2005 levels; and

**WHEREAS**, on October 19, 2005, the TPB has determined that the 2005 CLRP conforms with the requirements of the Clean Air Act Amendments of 1990; and

**WHEREAS**, on October 19, 2005, the TPB was briefed on the attached memorandum on how the projects in the 2005 CLRP and FY 2006-2011 TIP address the three priority areas identified in its January solicitation document, including implementing more traffic signal optimization, improving regional transportation coordination for incident management, and identifying how projects support the regional core and regional

activity centers; and

**WHEREAS**, the TPB Technical Committee has recommended favorable action on the 2005 CLRPP by the Board,

**NOW, THEREFORE, BE IT RESOLVED THAT** THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD approves the 2005 Constrained Long-Range Transportation Plan for the National Capital Region, as described in Attachment A and in Appendix B of the Air Quality Conformity report.



# 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

September 15, 2005

**TO:** Transportation Planning Board

**FROM:** Ronald F. Kirby  
Director of Transportation Planning

**SUBJECT:** Significant Changes for the 2005 CLRP and FY 2006-2011 TIP

### Background

At its February 16, 2005 meeting, the Board was briefed on the submissions received from state, regional and local agencies for the 2005 CLRP and the FY 2006-2011 TIP. These submissions were released for public comment and agency review at the TPB Citizens Advisory Committee (CAC) meeting on February 10. Because additional information on the submissions was received after February 10, the Board decided that the public comment period should be extended by releasing the updated project submission information at the March 16 TPB meeting. On April 20 the TPB reviewed the public comments and approved the project submissions for inclusion in the air quality conformity analysis.

The attached document describes the final set of significant changes for the 2005 CLRP and the FY 2006-2011 TIP. Significant changes are those relating to facility types 1, 2 and 5 (interstates, principal arterials, and other limited access parkways and roadways). Table A lists the significant change projects that are inside the TPB planning area, and Table B lists a significant change project that is outside the TPB planning area but inside the MSA. Exhibit 1 maps the significant change projects that are inside the TPB planning area. Detailed description sheets for each of the projects are attached.

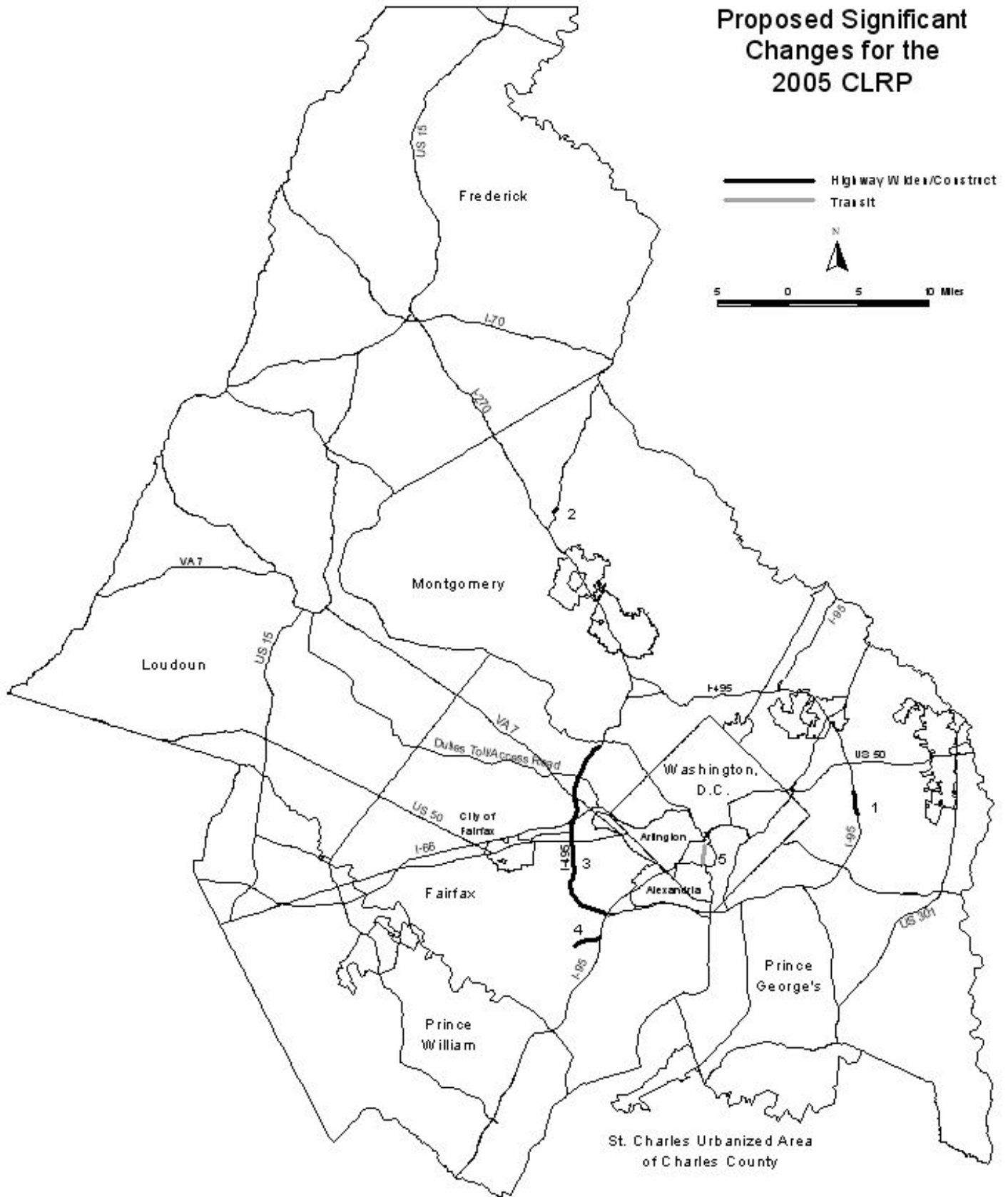
Beginning on page 23, are recently updated project description sheets and information provided by the Virginia Department of Rail and Public Transportation (VDRPT) regarding the costs and funding for Phase I of the Dulles Corridor Metrorail Project.

Two appendices to this memorandum are bound separately. Appendix A contains maps and summary descriptions of projects in the approved 2004 CLRP (as of November 17, 2004). Appendix B provides a table listing all projects to be included in

the air quality conformity analysis for the 2005 CLRP and FY 2006-2011 TIP, with shading to highlight proposed changes from the approved 2004 CLRP and FY 2005-2010 TIP.

Attachment

# Exhibit 1 Proposed Significant Changes for the 2005 CLRP



**Table A  
Significant Changes  
for the  
Air Quality Conformity Analysis  
of the  
2005 CLRP and FY2006-2011 TIP  
Projects Inside the TPB Planning Area**

ID	Agency	Improvement	Facility	From/At	To	Completion Date	Fac. Type		# Lanes	
							from	to	from	to
<b>MARYLAND</b>										
1	MDOT	Construct	I-95/I-495/Arena Drive Interchange	MD 214	MD 202	2010	1	1	8	8+2
2	MDOT	Widen	MD 27	MD 355	A 305	2006	2	2	4	6
<b>VIRGINIA</b>										
3a	VDOT	Widen/ Construct	<del>I-495 HOT</del> I-495 HOV (peak)	I-395	S. of VA 193 (Georgetown Pike)	2010 2012	1	1	8	8+4 10
3b	VDOT	Construct	I-495 HOT Lanes Interchange	Provides SB to WB, SB to EB, EB to SB, EB to NB, & NB to WB HOV to HOT or HOT to HOV movements	@ VA 267 (Dulles Toll Road)	2010	1	1	--	--
3c	VDOT	Construct	I-495 HOT Lanes Interchange	All movements	@ VA 123 (Chain Bridge Road)	2010	1	1	--	--
3d	VDOT	Construct	I-495 HOT Lanes Interchange	Provides SB to WB, WB to SB, EB to SB, NB to WB, NB to EB, & EB to NB HOV to HOT movements	@ I-66 HOV Lanes	2010	1	1	--	--
3e	VDOT	Construct	I-495 HOT Lanes Interchange	HOT movements to and from South Only	@ US 29	2010	1	1	--	--
3f	VDOT	Construct	I-495 HOT Lanes Interchange	All movements	@ VA 620 (Braddock Road)	2010	1	1	--	--
3g	VDOT	Construct	Construct ramps connecting the existing I-95 / I-395 HOV lanes on Shirley Highway to proposed HOT lanes on the Capital Beltway.	From I-95 / I-395 HOV lanes to I-495 HOT lanes		2010	1	1	--	--
4a	VDOT	Upgrade	VA 7900 (Franconia/Springfield Parkway)	VA 638 (Rolling Rd.)	VA 617 (Backlick Rd.)	2020	5	1	6+2	6+2
4b	VDOT	Construct	VA 7900 (Franconia/Springfield Parkway)	Interchange at Neuman Street		2020	1	1	--	--
5a	Arlington County	Construct	Crystal City-Potomac Yards busway (2-lane) Segment 1	Vicinity of Glebe Rd. Extended	26th St.	2006	--	--	0	2
5b	Arlington County	Construct	Crystal City-Potomac Yards busway (2-lane) Segment 2	26th St.	Crystal City Metro Station	2008	--	--	0	2
5c	Arlington County	Upgrade	Crystal City-Potomac Yards busway to BRT	Vicinity of Glebe Rd. Extended	Crystal City Metro Station	2012	--	--	0	2

**Table B  
Significant Changes  
for the  
Air Quality Conformity Analysis  
of the  
2005 CLRP and FY2006-2011 TIP  
Projects Outside the TPB Planning Area**

ID	Agency	Improvement	Facility	From/At	To	Completion Date	Fac. Type		# Lanes	
							from	to	from	to
<b>MARYLAND</b>										
1	MDOT	Construct	MD 2/4 at Lusby Southern Connector Rd.	MD 765	MD 2/4 at Lusby	2010	0	2	0	3

**2005  
CONSTRAINED LONG RANGE PLAN (CLRP)**

**#1**

Proposed Project or Action Description Form

1. Location and Jurisdiction

Facility: **I-95/I-495/ Arena Drive Interchange Inter**  
 From/At: **MD 202**  
 To: **MD 214**  
 Jurisdiction: **Prince George's County**

2. Submitting Agency: **MDOT/State Highway Administration**

ProjectType: **Interstate**  
 Agency Project ID:  
 Last Modified On: **2/3/2005**

3. Project Type and Description

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Maintenance and Operations  
 Other Action/Strategy

Description of project or action:

**Construct operational and safety improvements along I-95/I-495 from MD 214 to MD 202 including conversion of the I-95/I-495 interchange at Arena Drive from a part-time interchange to a full-time interchange to handle the existing and proposed growth in the vicinity of FedEx Field and the Largo Town Center Metro Station. Three through lanes and two local C/D (Collector Distributor) lanes along I-95/495 from south of Arena Drive Ram to North of Ramp to MD 202 will be constructed. In order to accommodate the creation of the local C/D lanes, the through lanes will be shifted onto new pavement in the existing median.**

4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
<input checked="" type="checkbox"/>		Construct	I-95/I-495/Arena Drive Interchange	MD 214	MD 202	8	8+2	2010

5. Purpose/contribution to regional goals

**Relieve congestion at the adjacent Capital Beltway interchanges at MD 202 and MD 214 in the future so that planned economic development and the Largo Largo Town Center Metro Station can be better served.**

6. Funding and Schedule Information

Cost (In Thousands): **\$29,651** Date of completion or implementation: **2010**  
 Source: **Federal, State,**  
 Cost and schedule remarks:

7. CMS Documentation

- Is this a highway capacity-increasing project on a limited access or other principal arterial highway?  Yes  No  
 If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No  
 If not, please identify the criteria that exempt the project here:

# CONSTRAINED LONG RANGE PLAN (CLRP)

Proposed Project or Action Description Form

# 2

## 1. Location and Jurisdiction

Facility: **MD 27**  
From/At: **MD 355**  
To: **A-305**  
Jurisdiction: **Montgomery County**

## 2. Submitting Agency: **MDOT/State Highway Administration**

Last Modified On: **9/15/2005**

## 3. Project Type and Description

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Illustrative Project  
 Other Action/Strategy

Description of project or action:

**Reconstruction of MD 27 to support proposed development in Clarksburg from Brink Road to Skylark Road**

## 4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
	<input type="checkbox"/>	Construct	MD 27	MD 355	A-305	4	6	2006

## 5. Purpose/contribution to regional goals

**This project addresses Goal #2. It enhances the quality of life and promotes a strong and growing economy with a mix of housing and jobs in a walkable environment.**

## 6. Funding and Schedule Information

Cost (In Thousands): **\$0** Date of completion or implementation: **2010**

Source: **Private,**

Cost and schedule remarks:

**Road improvements will be funded by the developer.**

## 7. CMS Documentation

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

If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No

If not, please identify the criteria that exempt the project here:

**2005  
CONSTRAINED LONG RANGE PLAN (CLRP)**

**#3**

Proposed Project or Action Description Form

1. Location and Jurisdiction

Facility: **I-495 HOT Lanes**  
 From/At: **I-95/395/495 (Springfield) Interchange**  
 To: **South of VA 193 (Georgetown Pike)**  
 Jurisdiction: **Fairfax County,**

2. Submitting Agency: **VDOT**

ProjectType: **Interstate**  
 Agency Project ID: **00068805**  
 Last Modified On: **1/31/2005**

3. Project Type and Description

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Maintenance and Operations  
 Other Action/Strategy

Description of project or action:

**Widen I-495 (Capital Beltway) to 12 lanes by adding four high-occupancy toll (HOT) lanes (two in each direction) between the Springfield Interchange and a point just south of VA 193 (Georgetown Pike). The HOT Lanes would connect (via construction of ramps as part of a separate project) to the I-95 / I-395 HOV lanes in the vicinity of the Springfield Interchange. This would permit HOT traffic to continue northward from I-95 to Georgetown Pike, and vice versa.**

**Intermediate access would be provided directly onto the HOT lanes by separate ramps at VA 620 (Braddock Road), US 29 (Lee Highway) (to and from the south only), I-66, VA 123 (Chain Bridge Road), and the VA 267(Dulles Airport Access and Toll Road). Although the existing interchanges within this segment of I-495 may be reconfigured, access to / from the general-purpose lanes from / to the interchanging arterials and freeways will be maintained by this project.**

**Access to the HOT lanes would be available to automobile, light truck, bus and transit vehicles only. The Commonwealth Transportation Board (CTB), or the Commissioner in the course of negotiating the Comprehensive Agreement, will determine the minimum number of occupants (not less than three) required to be in a vehicle for travel on the HOT lanes without payment of a toll. Any other vehicles not meeting the occupancy requirement would pay, using electronic toll collection equipment, a toll at a rate that would vary by time of day. Buses and other transit vehicles, and emergency response vehicles would operate on the HOT lanes for free.**

**This project will be financed under Virginia's Public-Private Transportation Act (PPTA) of 1995. Financing will be arranged by a private contractor and therefore will not make use of traditional funding sources. Operations are governed by Virginia HOT Lanes laws (§ 33.1-56.1 et seq. of the Code of Virginia).**

**Existing local MetroBus, Fairfax Connector, and OmniRide routes would make use of the Beltway HOT lanes. Additional routes would also be considered. Private bus operators Quick and Martz have stated that they would probably provide regular service from the south to Tysons Corner.**

**Bicycle/pedestrian accommodations included**

4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
<input checked="" type="checkbox"/>		Widen / Constr	I-495 HOT Lanes	I-95/395/495 (Springfield) Interchange	South of VA 193 (Georgetown Pike)	8/0	8/4	2010
<input type="checkbox"/>		Construct	I-495 HOT Lanes Interchange	@ VA 267 (Dulles Toll Road)	SB to WB, SB to EB, EB to SB, & NB to WB	-	-	2010
<input type="checkbox"/>		Construct	I-495 HOT Lanes Interchange	@ VA 123 (Chain Bridge Road)	All Movements	-	-	2010
<input checked="" type="checkbox"/>		Construct	I-495 HOT Lanes Interchange	@ I-66 HOV Lanes	SB to WB, WB to SB, EB to SB, NB to WB, & EB to NB	-	-	2010
<input type="checkbox"/>		Construct	I-495 HOT Lanes Interchange	@ US 29	To and from South Only	-	-	2010
<input type="checkbox"/>		Construct	I-495 HOT Lanes Interchange	@ VA 620 (Braddock Road)	All Movements	-	-	2010

5. Purpose/contribution to regional goals

**Policy Goal 2, Strategy 4: When implemented, the Capital Beltway HOT lanes will support the regional activity centers located along I-495.**



Goal 1, Objective 1, Strategy 1; Goal 2, Objectives 3 & 5, Strategies 4 & 5; Goal 4, Objective 1 & 2 , Strategies 2 & 3; and Goal 7, Objective 2.

When implemented, the Capital Beltway HOT lanes will:

1. reduce reliance on low occupancy vehicles,
2. increase people moving capacity in the corridor,
3. encourage ridesharing,
4. provide opportunity for new transit services,
5. reduce fuel consumption,
6. improve system reliability,
7. likely to reduce emissions of certain pollutants, and
8. minimize impacts on natural resources.

6. Funding and Schedule Information

Cost (In Thousands): **\$899,000**

Date of completion or implementation: **2010**

Source: **PPTA arranged funding**

Cost and schedule remarks:

**The project is in development. The funding will be provided by a mix of non-recourse toll revenue bonds, a Federal TIFIA loan and private investors. Construction will begin in 2006 and will be completed in 2010.**

**Preliminary Engineering Costs: \$73 million**

**Right-of-Way Costs: \$8 million**

**Construction Costs: \$818 million**

- **Project finance will be arranged by a private contractor (PPTA) through issuances of non-recourse toll revenue bonds, a Federal TIFIA loan, and private investors.**
- **TIFIA is a federal loan designed to help innovative financing and does not count against the State's allocation of federal transportation funds.**
- **No local taxpayer funds are included in the local share. All local funds will be derived from non-recourse bonds backed by toll revenues and bonds from private investors.**

7. CMS Documentation

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

If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No

If not, please identify the criteria that exempt the project here:

**Capital Beltway HOT Lane Project - Draft Financial Plan  
Proposed For Inclusion in the 2005 CLRP**

<b>Project Cost (1000s of \$):</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>TOTAL</b>
Capital Cost	\$164.8	\$259.7	\$211.9	\$159.9	\$102.8	\$899.0
Debt Service - Annual element	\$0.0	\$0.0	\$9.7	\$19.4	\$19.4	\$48.5
Debt Service - Fixed component	\$175.0					\$175.0
<b>Total Capital Cost</b>	<b>\$339.8</b>	<b>\$259.7</b>	<b>\$221.6</b>	<b>\$179.3</b>	<b>\$122.2</b>	<b>\$1,122.5</b>

<b>Project Revenues (1000s of \$):</b>						
Non-recourse Bonds	\$655.0					\$655.0
TIFIA backed Bonds	\$234.0					\$234.0
Private Investments	\$135.0					\$135.0
Investment Earnings	\$15.0	\$33.0	\$22.0	\$11.0	\$4.0	\$85.0
Toll Revenues	\$0.0				\$20.6	\$20.6
<b>Total Revenue</b>	<b>\$1,039.0</b>	<b>\$33.0</b>	<b>\$22.0</b>	<b>\$11.0</b>	<b>\$24.6</b>	<b>\$1,129.6</b>

Notes:

1. Capital Cost includes funding for preliminary engineering, right-of-way and construction.
2. Debt Service - Annual element refers to interest paid on Bonds
3. Debt Service - Fixed component includes: (a) additional bond proceeds borrowed to fund interest payments until project revenues can be generated; (b) moneys set aside to fund debt service payments in the event of a revenue shortfall; (c) financing costs such as fees for underwriters, attorneys, ratings, printing etc. similar to loan closing costs.
4. Non-recourse bonds issued on the basis of revenue generated from the HOT lane operations.
5. TIFIA is a federal loan guarantee on the basis of which public bonds can be issued to raise revenue.
6. Investment earnings refers to interest earned on revenues collected but not yet utilized for the project.

**2005  
CONSTRAINED LONG RANGE PLAN (CLRP)**

**#3g**

Proposed Project or Action Description Form

1. Location and Jurisdiction

Facility: **I-495 HOV (peak)**  
 From/At: **@ I-95/395/495 Interchange**  
 To: **Phase VIII (formerly listed w/ S'field Inte**  
 Jurisdiction: **Fairfax County,**

2. Submitting Agency: **VDOT**

ProjectType: **Interstate**  
 Agency Project ID: **00014682**  
 Last Modified On: **2/2/2005**

3. Project Type and Description

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Maintenance and Operations  
 Other Action/Strategy

Description of project or action:

**Construct ramps connecting the existing I-95 / I-395 HOV lanes on Shirley Highway to proposed HOT lanes on the Capital Beltway.**  
**No bicycle/pedestrian accommodations included**

4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
	<input checked="" type="checkbox"/>	Construct	I-495 HOV (peak)	@ I-95/395/495 Interchange	Phase VIII (formerly listed w/ S'field Interch.)	-	-	2010

5. Purpose/contribution to regional goals

**Policy Goal 2, Strategy 4: When implemented, the proposed HOV ramps will support the regional activity centers located along I-495.**

**Goal 1, Objective 1, Strategy 1; Goal 2, Objectives 3 & 5, Strategies 4 & 5; Goal 4, Objective 1 & 2 , Strategies 2 & 3; and Goal 7, Objective 2.**

6. Funding and Schedule Information

Cost (In Thousands): **\$84,400**                      Date of completion or implementation: **2010**

Source: **Federal, State, Private, Bonds,**

Cost and schedule remarks:

**PE estimated at \$6,549 K. CN estimated at \$77,851 K.**

**Potential for this project to be funded / constructed as part of the I-495 / Capital Beltway HOT Lanes project.**

7. CMS Documentation

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

If yes, does this project require a CMS Documentation form under the given criteria?  Yes     No

If not, please identify the criteria that exempt the project here:

**2005  
CONSTRAINED LONG RANGE PLAN (CLRP)**

**#4**

Proposed Project or Action Description Form

1. Location and Jurisdiction

Facility: **VA 7900 (Franconia-Springfield Parkwa**  
 From/At: **VA 7100 (Fairfax County Parkway)**  
 To: **VA 2677 (Frontier Drive)**  
 Jurisdiction: **Fairfax County,**

2. Submitting Agency: **VDOT**

ProjectType: **Secondary Fairfax County**  
 Agency Project ID: **VSF26**  
 Last Modified On: **2/2/2005**

3. Project Type and Description

- Construction
- Transportation Emissions Reduction Measure (TERM)
- Study
- Maintenance and Operations
- Other Action/Strategy

Description of project or action:

**Upgrade to a freeway / Implement full control of access (elimination of at-grade connections (intersections and driveways)) from VA 638 (Rolling Road) to VA 617 (Backlick Road) by the construction of an interchange @ VA 1220 (Neuman Street) (replaces the existing signal-controlled intersection w/ Bonniemill Lane.)**

**Construct HOV lanes between VA 7100 (Fairfax County Parkway) and VA 2677 (Frontier Drive).**

**Implement safety and operational improvements, as necessary.**

**Reconstruct / replace bridges, as necessary.**

**Bicycle/pedestrian accommodations included**

4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
<input type="checkbox"/>	Construct	VA 7900 HOV (Franconia-Springfield Parkway)	VA 7900 HOV (Franconia-Springfield Parkway)	VA 7100 (Fairfax County Parkway)	VA 2677 (Frontier Drive)	-	2	2010
<input type="checkbox"/>	Construct/Upg	VA 7900 (Franconia-Springfield Parkway) Interchange	VA 7900 (Franconia-Springfield Parkway) @ VA 1220 (Neuman Street)		VA 638 (Rolling Road) to VA 617 (Backlick Road)	6	6	2020

5. Purpose/contribution to regional goals

**Policy Goal 2, Strategy 4: Construction of additional lanes will support the Springfield regional activity center by providing improved traffic flow and relieving congestion to and from Springfield. HOV lanes will relieve congestion on regular lanes and encourage carpooling by providing exclusive lanes for HOV users.**

6. Funding and Schedule Information

Cost (In Thousands): **\$16,000**                      Date of completion or implementation: **2010**  
 Source: **Bonds**  
 Cost and schedule remarks:

7. CMS Documentation

- Is this a highway capacity-increasing project on a limited access or other principal arterial highway  Yes  No
- If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No
- If not, please identify the criteria that exempt the project here:

# CONSTRAINED LONG RANGE PLAN (CLRP)

Proposed Project or Action Description Form

# 5

1. Location and Jurisdiction

Facility: **Potomac Yard Transit**  
 From/At: **Braddock Road Metro Station**  
 To: **Crystal City**  
 Jurisdiction: **Alexandria, Arlington County,**

2. Submitting Agency: **VDOT**

Last Modified On: **8/23/2005**

3. Project Type and Description

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Illustrative Project  
 Other Action/Strategy

Description of project or action:

**The Virginia Department of Rail and Public Transportation (VDRPT) conducted an in-depth study of the cost benefits of various transit alternatives in the Potomac Yard Corridor between Crystal City and the Monroe Avenue Bridge. The Phase I study is complete. It identified three potential transit options for the corridor.**

**Phase II will identify a recommended transit mode and design options, develop appropriate environmental documentation, perform major capital investment study, and develop funding proposals for the project. Bicycle/pedestrian accommodations included**

4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
<input checked="" type="checkbox"/>		Study	Crystal City - Potomac Yard Transit Analysis, Phase II	Planning, Design and Environmental Study of	Interim Transit Improvements	-	-	2005
<input checked="" type="checkbox"/>		Study	Crystal City - Potomac Yard Transit Analysis, Phase II	Environmental Documentation	City of Alexandria	-	-	2006
<input checked="" type="checkbox"/>		Construct	CC-PY Busway - Potomac Yard Segment 1	Arlington South Tract Development (vicinity of Glebe Road Extended)	26th Street	0	2	2006
<input type="checkbox"/>		Construct	CC-PY Busway - Crystal City Segment 2	26th Street	Crystal City Metro Station	0	2	2008
<input type="checkbox"/>		Upgrade	Jefferson Davis Corridor BRT (CC-PY Segment)	Arlington South Tract Development (vicinity of Glebe Road Extended)	Crystal City Metro Station	0	2	2012

5. Purpose/contribution to regional goals

**Policy Goal 2, Objective 4: Plan and fund a truly integrated, multi-modal transportation system in the corridor to best meet the needs of the public. Improved internal mobility with reduced reliance on the automobile within this regional activity center. Reduce congestion and improve air quality in the region.**

6. Funding and Schedule Information

Cost (In Thousands):

Date of completion or implementation: **2012**

Source: **Federal, State, Private,**

Cost and schedule remarks:

7. CMS Documentation

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

If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No

If not, please identify the criteria that exempt the project here:

**2005  
CONSTRAINED LONG RANGE PLAN (CLRP)**

#b1

Proposed Project or Action Description Form

1. Location and Jurisdiction

Facility: **MD 2/4 at Lusby Southern Connector R**  
 From/At: **MD 765**  
 To: **MD 2/4 at Lusby**  
 Jurisdiction: **Calvert County**

2. Submitting Agency: **MDOT/State Highway Administration**

ProjectType: **Primary**  
 Agency Project ID:  
 Last Modified On: **2/3/2005**

3. Project Type and Description

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Maintenance and Operations  
 Other Action/Strategy

Description of project or action:

**Develop a new east-west roadway connection from MD 765 to MD 2/4 in Lusby (0.15 mile). This project will be developed in coordination with the County's "Southern Connector Road" which will be a new two-lane roadway between MD 765 and MD 760 built by the County..**

4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
<input type="checkbox"/>	Construct		MD 2/4 at Lusby Southern Connector Road	MD 765	MD 2/4 at Lusby	0	3	2010

5. Purpose/contribution to regional goals

**This project would improve safety by providing greater intersection spacing along this portion of MD 214, a partially access-controlled roadway. It will also provide improved service to planned economic development.**

6. Funding and Schedule Information

Cost (In Thousands): **\$20,428** Date of completion or implementation: **2010**

Source: **Federal, State**

Cost and schedule remarks:

**Project is outside of MPO boundaries, but is included in CLRP for air quality confirmity purposes.**

7. CMS Documentation

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

If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No

If not, please identify the criteria that exempt the project here:

# CONSTRAINED LONG RANGE PLAN (CLRP)

## Proposed Project or Action Description Form

**1. Location and Jurisdiction**

Facility: **Intercounty Connector**  
 From/At: **I-270**  
 To: **I-95/US 1**  
 Jurisdiction: **Montgomery County, Prince George's County**

**2. Submitting Agency: MDOT/State Highway Administration**

Last Modified On: **02/07/200**

**3. Project Type and Description**

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Illustrative Project  
 Other Action/Strategy

Description of project or action:

**Construct a new east-west, multi-modal highway in Montgomery and Prince George's counties between I-270 and I-95/US 1. The project will include managed lanes with express bus service connecting to Metrorail stations, and is currently undergoing a National Environmental Policy Act study which is considering two build corridors.**

**4. Project Phasing**

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
<input checked="" type="checkbox"/>	Construct	Intercounty Connector		I-270	I-95/US 1	0	6	2010
<input checked="" type="checkbox"/>	Construct	GARVEE Bond Repayment						2025

**5. Purpose/contribution to regional goals**

**The purpose of the Intercounty Connector (ICC) project is to link existing and proposed developed areas between the I-270 and I-95/US 1 corridors within central and eastern Montgomery County and northwestern Prince George's County with a state-of-the-art, multi-modal, east-west highway that limits access and accommodates passenger and goods movement. This transportation project is intended to increase community mobility and safety; to facilitate the movement of goods and people to and from economic centers; to provide cost-effective transportation infrastructure to serve existing and future development patterns reflecting local land use planning objectives; to help restore the natural, human and cultural environments from past development impacts in the project area; and to advance homeland security.**

**6. Funding and Schedule Information**

Cost (In Thousands): **\$2,446,306** Date of completion or implementation: **2010**

Source: **Federal, State, Bonds**

Cost and schedule remarks:

**Project is in project planning and preliminary engineering phase. The current funding concept plan assumes the project will be paid for with a mix of Maryland Transportation Authority bonds, GARVEE bonds, State funds, and special federal funds. (See attached table.)**

**The cost shown in the table does not include the cost of financing.**

**7. CMS Documentation**

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

If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No

If not, please identify the criteria that exempt the project here:

# Transportation Improvement Program (TIP)

## Proposed Project or Action Description Form

FY 2005-2010

1. Agency: **MDOT/State Highway Administration**

Last Modified On: **02/07/200**

2. Location and Jurisdiction

Facility: **Intercounty Connector**  
 From/At: **I-270**  
 To: **I-95/US 1**  
 Jurisdiction: **Montgomery County, Prince George's County**

3. Description of Project or Action

**Construct a new east-west, multi-modal highway in Montgomery and Prince George's counties between I-270 and I-95/US 1. The project will include managed lanes with express bus service connecting to Metrorail stations, and is currently undergoing a National Environmental Policy Act study which is considering two build corridors. Total costs to construct the ICC are shown on this line item. The debt service associated with the GARVEE funding source is shown for informational purposes on a separate line item.**

4. Project Status

**In previous TIP, proceeding as scheduled**

5. Environmental Review

**DEIS Under preparation**

6. Funding and Schedule Information

Date of completion or implementation: **2010**

Source	FY	Amount (\$1,000s)	Phase	% Fed/State/Loc	
<b>GARVEE (AC)</b>					
	2006	\$400,000	R.O.W. Acquisition	100	0
	2008	\$400,000	Construction	100	0
	2010	\$200,000	Construction	100	0
<b>MdTA</b>					
	2004	\$3,207	R.O.W. Acquisition	0	100
	2004	\$36,793	P.E.	0	100
	2005	\$4,750	R.O.W. Acquisition	0	100
	2005	\$25,250	P.E.	0	100
	2007	\$190,059	Construction	0	100
	2007	\$14,941	R.O.W. Acquisition	0	100
	2008	\$130,000	Construction	0	100
	2009	\$572,000	Construction	0	100
	2010	\$180,000	Construction	0	100
	2011	\$90,000	Construction	0	100
<b>Special Fed.</b>					
	2005	\$250	R.O.W. Acquisition	100	0
	2006	\$9,750	R.O.W. Acquisition	100	0
	2007	\$10,000	Construction	100	0
	2008	\$10,000	Construction	100	0
	2009	\$10,000	Construction	100	0
	2010	\$10,000	Construction	100	0
<b>State</b>					
	2006	\$2,506	R.O.W. Acquisition	0	100
	2006	\$27,494	P.E.	0	100
	2007	\$17,487	R.O.W. Acquisition	0	100
	2007	\$12,513	P.E.	0	100
	2008	\$30,000	Construction	0	100
	2009	\$30,000	Construction	0	100
	2010	\$30,000	Construction	0	100



Cost and schedule remarks:

**Project is in project planning and preliminary engineering phase. The current funding concept plan assumes the project will be paid for with a mix of Maryland Transportation Authority bonds, GARVEE bonds, State funds, and special federal funds.**

**The cost shown does not include the cost of financing.**

# Transportation Improvement Program (TIP)

## Proposed Project or Action Description Form

FY 2005-2010

1. Agency: **MDOT/State Highway Administration**

Last Modified On: **02/07/200**

2. Location and Jurisdiction

Facility: **GARVEE Bond Repayment**

From/At:

To:

Jurisdiction:

3. Description of Project or Action

**Repayment of GARVEE bond proceeds used for the Intercounty Connector Project. Debt service continues for 15 years following issuance.**

4. Project Status

**In previous TIP, proceeding as scheduled**

5. Environmental Review

**N/A**

6. Funding and Schedule Information

Date of completion or implementation: **2025**

Source      FY      Amount (\$1,000s)      Phase      % Fed/State/Loc

Source	FY	Amount (\$1,000s)	Phase	% Fed/State/Loc
NHS				
	2007	\$40,000	R.O.W. Acquisition	100 0
	2008	\$40,000	R.O.W. Acquisition	100 0
	2009	\$40,000	Construction	100 0
	2009	\$40,000	R.O.W. Acquisition	100 0
	2010	\$40,000	Construction	100 0
	2010	\$40,000	R.O.W. Acquisition	100 0
	2011	\$40,000	R.O.W. Acquisition	100 0
	2011	\$60,000	Construction	100 0

Cost and schedule remarks:

**NHS funding levels will be accommodated with transfers from other funding sources (STP/IM/BR) as required.**

**ICC CONCEPTUAL FUNDING PLAN**  
(\$millions)

Components (Funding Sources)	As Presented To Transportation Task Force "Hellmann Commission" September 2003	Current Range and Likely Scenario	Comments
<b>Total Cost</b>	\$1,700	\$1,800 - \$2,100 \$300 \$2,100 - \$2,400	<ul style="list-style-type: none"> <li>- Expressed in 2004 values - nearest \$100 million</li> <li>- (Inflation adds approx. \$100 million per year; approximately \$300 million total)</li> <li>- Total - nearest \$100 million; (\$2,400 is assumed for financial planning purposes.)</li> </ul>
<b>GARVEE Bonds (Federal Funds)</b>	\$900 - \$1,000	\$1,000	<ul style="list-style-type: none"> <li>- Same as upper limit presented to Transportation Task Force</li> <li>- Future federal highway funds pay debt service</li> <li>- GARVEE bond term: 15 years</li> <li>- Maximum debt service is approx. \$100 million per year. (Ramps up to maximum level over 5-6 years.)</li> <li>- \$100 million is approx. 20% of expected average annual federal highway funding ((\$500 million + per year)</li> <li>- 20% cap on GARVEE debt service - (currently 13%)</li> <li>- MdTA issues GARVEES; no affect on State's or MDOT's debt affordability / caps</li> </ul>
<b>MdTA Bonds (MdTA revenues)</b>	\$400 - \$600 (ICC Tolls)  \$100 - \$350 (MdTA bonding)	\$1,200	<ul style="list-style-type: none"> <li>- ICC would be part of Maryland Transportation Authority's system of toll highways, bridges, tunnels.</li> <li>- Authority issues bonds backed solely by Authority revenues.</li> <li>- Toll revenues from all facilities are pooled, supporting the total system.</li> <li>- ICC tolls will assist in managing traffic as well as project financing.</li> <li>- ICC tolls expected to pay for approximately \$400 - \$600 million of project cost.</li> </ul>
<b>Pay-As-You Go (MDOT - TTF)</b>	\$50 - \$300	\$150	<ul style="list-style-type: none"> <li>- Within range presented to Transportation Task Force</li> </ul>
<b>Pay-As-You-Go (Special Fed. Funds)</b>	\$10 - \$50	\$50	<ul style="list-style-type: none"> <li>- No change from range presented to Transportation Task Force</li> <li>- Funds authorized or appropriated directly for ICC</li> </ul>



**MARYLAND  
TRANSPORTATION  
AUTHORITY**

Robert L. Ehrlich, Jr.  
Governor

Michael S. Steele  
Lt. Governor

Robert L. Flanagan  
Chairman

Louise P. Hoblitzell  
Walter E. Woodford, Jr., P.E.  
John B. Norris, Jr., P.E.  
Rev. Dr. William C. Calhoun, Sr.  
Andrew N. Barrow  
Susan M. Affleck Bauer, Esq.

Trent M. Kittleman  
Executive Secretary

2310 Broening Highway  
Suite 150  
Baltimore MD 21224  
410-537-1000  
410-537-1090 (fax)  
410-355-7024 (TTY)  
1-866-713-1596

e-mail: [mdta@mdtransportationauthority.com](mailto:mdta@mdtransportationauthority.com)

[www.mdtransportationauthority.com](http://www.mdtransportationauthority.com)



February 4, 2005

The Honorable Phil Mendelson, Chairman  
National Capital Region Transportation Planning Board  
Metropolitan Washington Council of Governments  
777 North Capitol Street, N.E.; Suite 300  
Washington, D.C. 20002-4290

Attention: Mr. Ronald F. Kirby

Dear Sirs:

In addition to issuing GARVEES for the Intercounty Connector Project (ICC), the Maryland Transportation Authority (Authority) will fund approximately \$1.24 billion of project costs (including \$1.12 billion in the FY 2005 –FY 2010 period). This funding will be provided from Authority toll revenue bonds (and potentially cash), supported by Authority revenues (primarily toll revenues). The funding for the ICC is included in the Authority's FY 2005-2010 capital program, which includes an additional \$1.61 billion in other Authority projects.

With recent toll increases and a proven revenue stream, the Authority is able to undertake its capital program obligations including the ICC. Annual Authority revenues are projected to be \$292 million in FY 2005 and \$301 million in FY 2006. The Authority has been conservative in its use of debt and adheres to strict financial goals and standards, including those imposed in its trust agreement and bond indentures. The Authority's goal is to maintain cash reserves approximately equal to annual toll revenues, and a coverage factor of net revenues being two times annual debt service.

In 2004, the Authority received its highest-ever bond ratings, including Aa3 (Moody's Investors Service) and AA- (Fitch Ratings). The A+ rating from Standard and Poors was unchanged. These ratings took into consideration the Authority's intent to undertake the ICC project.

The Authority was established by the Maryland General Assembly as an independent state agency in 1971. It consists of six members appointed by the Governor with the advice and consent of the State Senate. Each member serves a three-year term. Maryland's Secretary of Transportation serves as the Authority's chairman.

Pursuant to the enabling legislation, the Authority is responsible for the construction, operation, maintenance and repair of revenue-producing transportation facilities projects. All existing highway toll facilities in

Maryland are owned, operated and maintained by the Authority, which has the exclusive right to levy tolls within the State. Current toll facilities include:

- John F. Kennedy Memorial Highway (I-95);
- Thomas Hatem Memorial Bridge (US 40);
- Fort McHenry Tunnel (I-95);
- Baltimore Harbor Tunnel (I-895);
- Francis Scott Key Bridge (MD 695);
- William Preston Lane Jr. Memorial (Bay) Bridge (US 50/301); and
- Governor Harry W. Nice Memorial Bridge (US 301).

The Intercounty Connector will be the Authority's eighth toll facility.

Acting on behalf of the Department, the Authority has various powers and duties relating to the supervision, financing, construction, operation, maintenance and repair of transportation facilities projects. In addition to its existing transportation facilities projects, the Authority may authorize the acquisition, financing, or construction of any other projects for transportation facilities, including airport, highway, port, rail and transit facilities, as "transportation facilities projects." The Authority is empowered to finance the cost of transportation facilities projects by the issuance and sale of revenue bonds, notes, or other obligations.

If additional information is needed, please do not hesitate to contact me.

Sincerely,



Trent M. Kittleman  
Executive Secretary

## CONSTRAINED LONG RANGE PLAN (CLRP)

### Proposed Project or Action Description Form

1. Location and Jurisdiction

Facility: **Dulles Corridor Metrorail Project**  
 From/At: **East Falls Church Metrorail Station**  
 To: **Route 772 (Loudoun County)**  
 Jurisdiction: **Fairfax County, Loudoun County,**

2. Submitting Agency: **VDRPT**

Last Modified On: **9/8/2005**

3. Project Type and Description

- Construction  Study  
 Transportation Emissions Reduction Measure (TERM)  Illustrative Project  
 Other Action/Strategy

Description of project or action:

**The project is a 23.1 mile extension of the existing Metrorail system from the Orange Line in Fairfax County through Tysons Corner to Washington Dulles International Airport and Route 772 in Loudoun County. Most of the extension would be constructed in the median of the Dulles Airport Access Road and Dulles Connector Road, but the alignment would also directly serve Tysons Corner and Dulles Airport. The extension would include 11 new Metrorail stations, a rail yard site on Dulles Airport property, and an expansion of the existing rail yard at West Falls Church. Four of the new stations would be located within Tysons Corner. Construction of the project would occur in two phases.**

**Bicycle/pedestrian accommodations included**

4. Project Phasing

Project ID	In TIP	Improvement	Facility	From	To	# Lane		Completion Date
						From	To	
<input type="checkbox"/>		Incorporate	Dulles Corridor - BRT Elements into the Express Bus Service in the Corridor	East Falls Church Metrorail Station	Route 772	-	-	2002
<input type="checkbox"/>		Study	Dulles Corridor Rapid Transit - NEPA	East Falls Church Metrorail Station	Route 772	-	-	2005
<input checked="" type="checkbox"/>		Construct	Dulles Corridor Metrorail Project - Phase 1	East Falls Church Metrorail Station	Wiehle Avenue	-	-	2011
<input type="checkbox"/>		Construct	Dulles Corridor Metrorail Project - Phase 2	Wiehle Avenue	Route 772	-	-	2015

5. Purpose/contribution to regional goals

**This project contributes to all regional goals identified in the Policy Element of the Transportation Plan for the National Capital Region including: Transportation and Land Development objectives of concentrating development in transportation corridors and encouraging transit-friendly site design at subregional centers; Transportation, Environmental & Energy objectives of compliance with Clean Air Act amendments, reducing SOV travel, reducing congestion and improving traffic flow, reducing transit travel time; providing better access to regional opportunities for transit-dependent persons, and meeting ADA requirements. The project also contributes to interregional transportation and transportation system objectives by creating a multi-modal transportation link to Dulles International Airport, expanding enhancing cost-effective transit alternatives, developing intermodal facilities with Metrobus, local bus systems, and VRE, and providing park and ride facilities. This project contributes to the region's goal for congestion management by applying ITS technologies to an existing transportation system.**

6. Funding and Schedule Information

Cost (In Thousands): **\$3,704,100**

Date of completion or implementation: **2015**

Source: **Federal, State, Local,**

Cost and schedule remarks:

**Phase 1: \$1.84 Billion**  
**Phase 2: \$1.864 Billion**  
**Total: \$3.704 Billion**

**Sources of capital funding: Federal Transit Administration Section 5309 - \$1,852 million (50%); Commonwealth of Virginia - \$926 million (25%); Local (Fairfax County, Loudoun County, MWAA) - \$926 million (25%)**

**\*Phase 1 figures updated according to the "Dulles Corridor Metrorail Project: FY07 New Starts Update - Project Financial Plan and Supporting Documentation" released August 2005.**

7. CMS Documentation

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

If yes, does this project require a CMS Documentation form under the given criteria?  Yes  No

If not, please identify the criteria that exempt the project here:



# COMMONWEALTH of VIRGINIA

KAREN J. RAE  
DIRECTOR

DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION  
DULLES CORRIDOR METRORAIL PROJECT  
1595 SPRING HILL ROAD, SUITE 600  
VIENNA, VIRGINIA 22182-2228

(703) 288-5900  
FAX (703) 288-5902  
VIRGINIA RELAY CENTER  
1-800-828-1120 (TDD)

September 6, 2005

Mr. Ronald Kirby  
Director, Department of Transportation Planning  
Metropolitan Washington Council of Governments  
777 North Capitol Street NE, Suite 300  
Washington, D.C. 20002

Subject: Dulles Corridor Metrorail Project  
Updated Financial Plan

Letter No.: 11111-000-T05-GAMO-00094; WBS Nos. RT00.00.4.5 & RT00.00.7.1

Dear Mr. Kirby:

Attached for your information is a copy of the *Project Financial Plan and Supporting Documentation* for the Dulles Corridor Metrorail Project – Wiehle Avenue Extension recently submitted to the Federal Transit Administration as part of its annual review of New Starts projects.

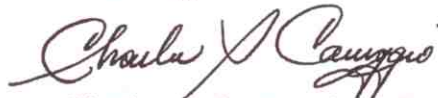
The attached financial plan only addresses the initial phase of the Project (from the Orange Line to Wiehle Avenue) and is based on the current preliminary engineering cost estimate. The cost and schedule information included in this plan should be incorporated into future updates of the region's Constrained Long-Range Plan and Transportation Improvement Program. Updated cost and schedule information for the Project's second phase (from Wiehle Avenue to Route 772 in Loudoun County) will be available early next year.



Mr. Ronald Kirby  
Letter No.: 11111-000-T05-GAMO-00094  
September 6, 2005

If you have any questions, please contact me at (703) 288-5919 or Karl Rohrer at (703) 288-5924 or via e-mail at [karl.rohrer@dullesmetro.com](mailto:karl.rohrer@dullesmetro.com).

Sincerely,



Charles S. Carnaggio, P.E.  
Dulles Corridor Metrorail Project  
Project Director

KAR/CSS/kc

Enclosure

cc: B. Glenn, FTA Washington Metropolitan Office (w/o enclosure)  
D. Weeks, FTA Headquarters (w/o enclosure)  
P. Kampf, FTA Region III (w/o enclosure)  
K. Rohrer, DRPT (w/o enclosure)  
D. Korzym, WMATA (w/o enclosure)  
T. Harrington, WMATA (w/o enclosure)



## **WIEHLE AVENUE EXTENSION**

### **Preliminary Financial Plan**

---

*Prepared by*

**Virginia Department of Rail and Public Transportation**

*in cooperation with*

**Washington Metropolitan Area Transit Authority**

*and*

**Fairfax County, Virginia**

**August 2005**

## TABLE OF CONTENTS

1	INTRODUCTION .....	3
1.1	Project Sponsors and Funding Partners .....	3
1.1.1	Federal Transit Administration .....	4
1.1.2	Commonwealth of Virginia .....	5
1.1.3	Fairfax County .....	5
1.1.4	Washington Metropolitan Area Transit Authority .....	6
1.2	Project Description .....	6
1.2.1	Project Status .....	8
1.2.2	Project Implementation Schedule .....	8
1.3	Summary of Financial Plan and Implementation Strategy .....	8
	Capital Funding .....	8
1.3.1	Operating Funding .....	9
1.3.2	Design-Build Implementation .....	9
1.4	Regional Economic Conditions .....	10
1.5	Transportation Investment in the Region .....	10
1.6	Previous Investments in the Dulles Corridor .....	11
2	CAPITAL PLAN .....	12
2.1	Capital Cost estimate .....	12
2.1.1	Cost Escalation .....	13
2.2	Capital Funding Sources .....	15
2.2.1	Federal Transit Administration Section 5309 Funds .....	15
2.2.2	Commonwealth of Virginia .....	16
2.2.3	TIFIA Program Loan .....	20
2.2.4	Fairfax County Dulles Rail Transportation Improvement District .....	21
2.2.5	Fairfax County Alternative Funding Sources .....	23
2.3	Capital Funding Approach .....	23
2.3.1	Capital Funding Management .....	24
2.4	Capital Financing Plan .....	24
2.4.1	Financing Tools .....	24
2.4.2	Funding Shortfalls .....	25
2.4.3	Preliminary Financial Plan Assumptions .....	25
3	OPERATING PLAN .....	29
3.1	Operating Revenues .....	29
3.1.1	Passenger Fare Revenues .....	29
3.1.2	Other System Revenues .....	29
3.1.3	Federal Funds .....	31
3.1.4	Commonwealth of Virginia Funds .....	31
3.2	Operating and Maintenance Costs .....	32
3.3	Agency-Wide Operating Plan .....	32
3.3.2	Operating Cost and Revenue Risk .....	37
3.4	WMATA Capital Improvement Program .....	37
3.5	Funding Shortfalls .....	40
<b>A</b>	<b>APPENDIX: SENSITIVITY ANALYSIS OF CAPITAL FINANCING PLAN</b>	

## LIST OF TABLES

<u>Name</u>	<u>Page Number</u>
Table 1-1: Project Implementation – Upcoming Milestones.....	7
Table 2-1: Capital Cost Estimate and Schedule: Wiehle Avenue Extension .....	13
Table 2-2: Sources of Capital Funding: Wiehle Avenue Extension .....	14
Table 2-3: Summary of Federal Funds .....	15
Table 2-4: Dulles Toll Road Revenues and Expenditures – Current Toll Structure .....	18
Table 2-5: Current Commonwealth Transportation Board Debt .....	20
Table 2-6: Sources and Uses of Funds: Wiehle Avenue Extension .....	26
Table 2-7: Preliminary Capital Financing Plan: Wiehle Avenue Extension .....	27
Table 3-1: Projected Ridership and Farebox Revenue .....	29
Table 3-2: WMATA Systemwide Operating Plan .....	32
Table 3-3: WMATA Systemwide Projected Service Levels and Operating and Maintenance Expenses .....	32
Table 3-4: Compact Member Incremental Subsidy Requirements for the Wiehle Avenue Extension .....	36
Table 3-5: WMATA Capital Improvement Program, FY 2005 – 2010 .....	38
Table A-1: Results of Sensitivity Analysis .....	42

# 1 INTRODUCTION

---

The Virginia Department of Rail and Public Transportation (DRPT), in cooperation with the Washington Metropolitan Area Transit Authority (WMATA) and local jurisdictions, is planning to construct a new rapid rail transit system in the fast growing Dulles Corridor located in Northern Virginia outside Washington, D.C. The Dulles Corridor Metrorail Project (the Project) consists of a 23.1-mile extension of the region's existing Metrorail system, 11 new stations, a rail yard site on Washington Dulles International Airport (Dulles Airport) property, and an expansion of the existing rail yard at West Falls Church.

Due to Federal funding limitations and the timing of local funding availability, DRPT intends to construct the Project in two major phases. The Wiehle Avenue Extension (Phase 1) would complete the first segment of the planned extension from the existing Metrorail Orange Line to Wiehle Avenue in Reston, Virginia. The Route 772/Dulles Airport Extension (Phase 2) would complete the remainder of the locally preferred alternative (LPA) to Route 772 in Loudoun County, Virginia.

Over the past three years, DRPT and its local funding partners have developed a workable, comprehensive financial plan for the Project. Funding sources for both the Project's capital and operating plans have been identified and initial funding commitments have been secured. Several administrative or legislative actions necessary to appropriate or program funding for the Project have also been completed.

**This preliminary Financial Plan (Plan) describes the Project's ongoing financial planning activities and progress made to date in identifying the funding sources necessary to complete construction of Phase 1 of the Dulles Corridor Metrorail Project.** The Plan has been prepared in accordance with the FTA's *Guidance for Transit Financial Plans* (June 2000). The remainder of this preliminary Financial Plan includes the following sections:

- An overview of the Project sponsors and funding partners; current Project status and planned implementation schedule; and a summary of the plan (Sections 1.2 – 1.4);
- Details on the Project's capital financing plan, including cost estimates, funding sources, cost allocation among the funding partners, and proposed financing techniques. (Chapter 2); and
- A description of the Project's operating funding plan, including estimated operating costs, operating subsidy funding sources and allocation, and an assessment of the long-term effects on the WMATA capital and operating budgets (Chapter 3).

## 1.1 PROJECT SPONSORS AND FUNDING PARTNERS

Two elements of the planned implementation approach for the Project are unique and affect the structure of the Financial Plan. As described in Section 1.2, different public agencies will be responsible for the two major elements of the Plan. DRPT will be the lead agency for capital funding and general oversight of the capital construction program. WMATA will operate the system and be the lead agency for ongoing operating and maintenance funding. Second, DRPT intends to use the Virginia Public-Private Transportation Act and a design-build approach to implement the Project. This financial structure is necessary because of the structure and policies of WMATA, the region's mass transit agency.

**Table 2-1  
CAPITAL COST ESTIMATE AND SCHEDULE –WIEHLE AVENUE EXTENSION (Thousands YOE Dollars)**

FTA Standard Cost Category	Total	6/30/05 & Prior <sup>1</sup>	7/1/05 - 9/30/05	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Guideway and Track Elements	\$405,118	-	-	\$230	\$70,662	\$166,547	\$135,679	\$32,000	-	-	-	-
Stations, Stops, Terminals, Intermodal	\$288,409	-	-	\$11,312	\$65,545	\$87,929	\$77,977	\$45,646	-	-	-	-
Yards, Shops, Admin/Support Facilities	\$12,040	-	-	-	\$1,494	\$4,096	\$3,773	\$1,759	\$919	-	-	-
Sitework and Special Conditions	\$106,375	-	-	\$2,457	\$24,140	\$33,763	\$31,151	\$14,864	-	-	-	-
Systems	\$159,564	-	-	\$78,494	\$81,070	-	-	-	-	-	-	-
ROW, Land, Existing Improvements	\$265,513	-	-	\$488	\$12,871	\$91,989	\$94,629	\$64,914	\$622	-	-	-
Vehicles <sup>2</sup>	\$198,336	-	-	-	\$1,581	\$23,713	\$26,936	\$22,336	\$104,456	\$12,831	\$4,167	\$2,316
Soft Costs <sup>3</sup>	\$255,827	\$24,115	\$4,959	\$72,304	\$41,811	\$30,945	\$31,833	\$32,747	\$17,114	-	-	-
Contingency <sup>4</sup>	\$93,692			\$1,260	\$15,192	\$33,419	\$29,844	\$13,842	\$134	-	-	-
Financing <sup>5</sup>	\$55,234						\$7,750	\$12,746	\$12,389	\$11,632	\$7,402	\$3,316
<b>Total Project Costs<sup>6</sup></b>	<b>\$1,840,108</b>	<b>\$24,115</b>	<b>\$4,959</b>	<b>\$166,544</b>	<b>\$314,365</b>	<b>\$472,402</b>	<b>\$439,572</b>	<b>\$240,852</b>	<b>\$135,634</b>	<b>\$24,463</b>	<b>\$11,569</b>	<b>\$5,632</b>

Notes:

1. Costs may differ from the 50% Preliminary Engineering cost estimate presented in the August 15, 2005 New Starts update. "6/30/05 & Prior" includes actual expenditures up to June 30, 2005, and "7/1/05 – 9/30/05" includes estimated expenditures for the remainder of FY 2005. Fiscal Year (FY) runs October 1 to September 30.
2. *Vehicles* costs in 2014 include projected expenditures in 2016, which include manufacturer withholding payments that are released upon final acceptance of vehicles. These funds would be obligated in FY 2014.
3. *Soft Costs* include preliminary engineering, final design, construction management, project management, owner administration, FTA and other agency coordination, insurance, and project start-up and testing.
4. *Contingency* costs are unallocated contingency, and include allowances for change orders.
5. Estimated financing costs include total interest charges on \$265M in FRANS between FY09-FY14. Assumes an interest rate of 4.65% and 5% for underwriting fees and issuance costs.
6. Costs shown are preliminary and subject to change based on the results of Preliminary Engineering, design-build negotiations, federal approvals and funding availability. Internal totals may not equal due to rounding.