

# National Capital Region Transportation Planning Board

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## **Item #5**

### **MEMORANDUM**

July 18, 2012

**TO:** Transportation Planning Board

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

**RE:** Additional Letters Sent/Received

The attached additional letters sent/received will be reviewed along with other letters sent/received under item #5 of the July 18<sup>th</sup> TPB agenda.

Attachment



## 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

July 17, 2012

Mr. Randy E. Mosier  
Chief, Regulations Division Development  
Maryland Department of the Environment  
1800 Washington Boulevard  
Suite 730  
Baltimore, Maryland 21230

Re: Proposed Long Range Transportation Planning Targets

In a letter to you of July 5, 2012, staff of the National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the Metropolitan Washington Region, provided comments and questions on a proposal by the Maryland Department of the Environment (MDE) to incorporate additional requirements into Chapter 26 Conformity of the Code of Maryland (COMAR). On July 13, 2012 MDE released a revised draft of this regulation. MDE is planning to hold a meeting to obtain comments from stakeholder groups on this revised draft regulation on Friday, July 20. This letter provides comments and questions prepared by TPB staff on the revised draft regulation.

In the July 5 letter, TPB staff questioned MDE's basis for proposing to incorporate reporting requirements for carbon dioxide emissions into Chapter 26 Conformity of the COMAR when these emissions are not subject to the conformity requirements of the Clean Air Act (CAA), which are the subject of Chapter 26. TPB staff also questioned MDE's proposal to set long-term planning targets for nitrogen oxide using "the emissions analyses that form the basis for mobile source emissions budgets in the last ozone State Implementation Plan (SIP) submitted to EPA" when the analyses in the last SIP submitted for the Washington region in May 2007 are now out-of-date with regard to fleet mix assumptions, the travel demand and emissions models used, and the horizon year. The revised draft regulation addresses these questions by omitting references to mobile emissions budgets established in state implementation plans. In addition, the revised draft regulation is proposed as a separate chapter under Title 26 Subtitle 11 of the COMAR, rather than as additional requirements to be incorporated into Chapter 26 Conformity.

Other comments and questions raised by TPB staff in the July 5 letter continue to be pertinent to the revised draft regulation, however. The revised draft regulation continues to include absolute numbers for long range transportation planning targets for both carbon dioxide and nitrogen oxide that are based on soon-to-be-superseded analyses. The carbon dioxide targets appear to be based on estimates developed in the TPB's "What Would It Take?" scenario analysis, which used land activity and transportation networks from the TPB's 2009 Constrained Long Range Plan (CLRP) and EPA's Mobile 6.2 emissions model. These estimates are currently being updated using the 2012 CLRP and EPA's MOVES model. The nitrogen oxide targets appear to be based on the TPB's conformity analysis for the 2011 CLRP, which will be superseded by the expected TPB approval on July 18, 2012 of the conformity report

Mr. Randy E. Mosier

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for the 2012 CLRP, which has updated inputs for land activity, transportation networks, and vehicle fleet mix.

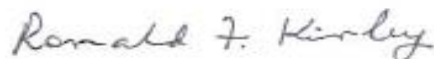
Sensitivity analyses conducted by TPB staff have shown that updated fleet mix data and the transition from EPA's Mobile 6.2 model to the MOVES model have significant impacts on the absolute numbers forecasted for both carbon dioxide and nitrogen oxide emissions. For example, the transition from Mobile 6.2 to MOVES results in increases in carbon dioxide emissions in the year 2040 of 15 percent. For nitrogen oxide the transition from the 2008 vehicle fleet mix data to the 2011 vehicle fleet mix data results in an increase in 2012 CLRP emissions in the year 2040 of 6.3 percent when using the MOVES model. The transition from Mobile 6.2 to MOVES for the 2012 CLRP results in an increase in nitrogen oxide emissions for the year 2040 of 106 percent. These significant changes in absolute numbers for both carbon dioxide and nitrogen oxide as a result of factors external to the long-range transportation planning process provide a strong case against attempting to use any such absolute numbers to define long-range targets in a state regulation.

As noted by TPB staff in the July 5 letter, the TPB is continuing to study various strategies for reducing carbon dioxide and nitrogen oxide emissions using the most recently updated data and technical methods. The TPB studies include estimates of the costs and cost-effectiveness of these various strategies, which are essential for making comparisons with emission reduction strategies in sectors other than on-road transportation. As with the EPA requirements for setting mobile emissions budgets in state implementation plans, emissions from on-road transportation sources must be considered together with emissions from all other sources in assessing consistency with overall emissions reductions goals. TPB staff suggests that MDE participate in these ongoing TPB studies, rather than trying to incorporate into state regulations long-range targets focused solely on on-road transportation and based on soon-to-be-superseded analyses.

From a procedural perspective, the MPO planning process for which the TPB is responsible is funded at an 80 percent level under federal surface transportation legislation. Work activities undertaken by TPB staff are defined in a Unified Planning Work Program (UPWP) which must be approved by the TPB and the U.S. Department of Transportation (US DOT). The TPB has voting representation from the transportation agencies of the states of Maryland and Virginia and the District of Columbia, local governments, the Washington Metropolitan Area Transit Authority (WMATA), and the Maryland and Virginia General Assemblies. All of these representatives will have to be involved in any discussion on the use of TPB resources to address goals for reducing carbon dioxide and nitrogen oxide emissions.

Thank you for considering the comments of TPB staff on this matter.

Sincerely,



Ronald F. Kirby  
Director, Department of  
Transportation Planning



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF TRANSPORTATION

4975 Alliance Drive  
Fairfax, VA 22030

GREGORY A. WHIRLEY  
COMMISSIONER

June 18, 2012

The Honorable Todd Turner  
Chairman, Metropolitan Washington Council of Governments  
2614 Kenhill Drive  
Bowie, MD 20715-2599

Dear Chairman Turner:

Attached is the Virginia Department of Transportation (VDOT) and Virginia Department of Rail and Public Transportation (VDRPT) I-66 Multimodal Study Inside the Beltway. The study was conducted to fulfill the request of Transportation Planning Board (TPB) Resolution R12-2009. Thank you for the assistance we received from your staff and the local jurisdictions throughout the current study.

Some of the major items that can be found in the executive summary and in more detail in the body of the report are:

- The planning year for this long-term study was 2040.
- The study did not analyze or validate projects already in the Constrained Long Range Plan (CLRP), but rather used them (including transition to HOV 3) as a baseline to build the longer term recommendations.
- The study does recommend a number of multimodal actions for specific bus, bicycle, and pedestrian improvements, including retaining and improving the Custis Trail. Eight-car metro trains recommended in previous studies, but not currently in the CLRP, remain essential to the long term mobility of the region. The DRPT 2009 Transit and Travel Demand Management Study recommended improvements are also necessary.
- VDOT received a request during stakeholder interviews to study bus shoulder bypass lanes on I-66 in the analysis. Instead, VDOT elected to pursue a pilot program in partnership with the localities to implement them in the corridor and record actual performance data.

The Honorable Todd Turner  
June 18, 2012  
Page 2

- The study recommends a tiered approach from near to long term improvements:
  1. Improvements already in the Constrained Long Range Plan.
  2. Transit and Travel Demand Management Improvements from the 2009 VDRPT Study and eight-car trains from the Washington Metropolitan Area Transit Authority (WMATA) Core Capacity Study.
  3. Incrementally completing components of the package of multimodal improvements recommended by this study to get the most effect for the least cost.
    - Ultimately, a third travel lane at selected locations on I-66 is shown in the study to maximize the mobility components of passenger throughput and congestion relief for the projected long-term demand.
    - The study further recommends that the use of proven design exceptions be explored for any roadway widening to enable remaining within the existing right of way.

This tiered approach is being submitted to the Commonwealth of Virginia and the Transportation Planning Board for consideration of future funding for these long range improvements. This offers an opportunity for effective improvements to be applied as constrained funds become available.

If you have detailed questions, please contact Mr. Kanathur N. Srikanth at (703) 259-2220 or [Kanathur.srikanth@vdot.virginia.gov](mailto:Kanathur.srikanth@vdot.virginia.gov).

Sincerely,



Garrett W. Moore, P.E.  
District Administrator  
Northern Virginia District

Attachment



# I-66 Multimodal Study

Inside the Beltway

## Final Report



prepared for

**Virginia Department of Transportation**

**Virginia Department of Rail and Public Transportation**

prepared by

**Cambridge Systematics, Inc.**

with

**KFH Group, Inc.**

**MCV Associates, Inc.**

**Rummel, Klepper & Kahl, LLP**

**Sharp & Company, Inc.**

**Southeastern Institute of Research, Inc.**

**Toole Design Group LLC**

June 8, 2012

**CAMBRIDGE**  
SYSTEMATICS





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# Executive Summary

The Virginia Department of Transportation (VDOT) and the Department of Rail and Public Transportation (DRPT) commissioned the I-66 Multimodal Study to address long-term multimodal needs within the I-66 corridor inside the Beltway. This study builds on the recommendations of the 2005 Idea-66 Study and the 2009 I-66 Transit/TDM Study, and fulfills the commitment made to the National Capital Regional Transportation Planning Board (TPB) in TPB Resolution R12-2009.<sup>1</sup>

The goal of the I-66 Multimodal Study was to:

*Identify a range of current and visionary multimodal and corridor management solutions (operational, transit, bike, and pedestrian, in addition to highway improvements) that can be implemented to reduce highway and transit congestion and improve overall mobility within the corridor and along major arterial roadways and bus routes within the study area.*

Building on the region's 2011 Financially Constrained Long Range Plan (CLRP), the study considered a wide range of complementary and mutually supportive multimodal improvement options, balancing the needs and priorities of users and nearby residents. A multitude of options for improvement were considered, including expanded public transportation, additional highway lane capacity, transportation demand management (TDM), high-occupancy vehicle (HOV) policies, high-occupancy/toll (HOT) policies, congestion pricing, managed lanes, integrated corridor management (ICM), and bicycle and pedestrian corridor access.

This final report provides a summary of the year-long I-66 Multimodal Study and includes recommendations and actions that address the study goals. An interim report was published in December 2011 that documents the long-term issues and needs of the corridor, the market research key findings, and the development of an evaluation methodology to formulate and assess the mobility options and multimodal mobility option packages.

## Path to Study Recommendations

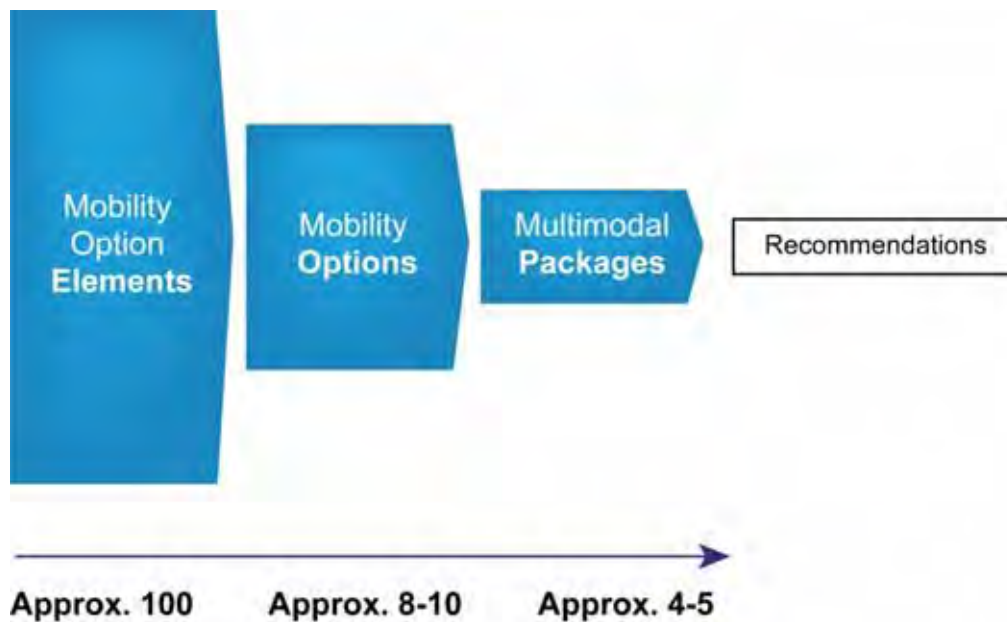
The path to developing a final set of recommendations was organized around a structured process for arriving at a set of multimodal solutions. Issues and needs germane to the study area were identified. Subsequently, an evaluation process, illustrated in Figure ES.1, provided a means to move from a starting point of numerous ideas – referred to as mobility option elements – down a path to recommendations, considering first a set of eight to ten discrete

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<sup>1</sup> National Capital Region Transportation Planning Board, Resolution on Inclusion in Air Quality Conformity Analysis of Submissions for the 2009 Constrained Long Rang Plan (CLRP) and FY 2010-2015 Transportation Improvement program (TIP). TPB Resolution R12-2009, March 18, 2009.

mobility options and then narrowing to a set of four or five multimodal mobility option packages before developing recommendations.

**Figure ES.1 Path to Recommendations**



Feedback on key study topics was provided by members of a multi-jurisdictional Participating Agency Representative Committee (PARC) on a regular basis. In addition, public input was provided through market research conducted early in the evaluation process, as well as stakeholder interviews conducted throughout the project, and public meetings held at key milestones of the study.

Technical analysis, coupled with market research, stakeholder interviews, and jurisdictional input from the PARC meetings was used throughout the evaluation process – from identifying issues and needs to selecting a package of multimodal improvements for the long-term.

## **Mobility Option Elements**

Starting with a review of past plans and studies, and proceeding with input from the market research, members of the PARC and Lead Agencies on new strategies, a comprehensive list of mobility option elements was compiled. Section 5.0 of the Interim Report describes this process and lists the more than 100 mobility elements that were examined.

## **Issues and Needs**

A systematic process, as depicted in Figure ES.2, was undertaken to identify the issues and needs associated with the I-66 corridor inside the Beltway. Section 3.0 of the Interim Report

documents this process in greater detail. This comprehensive set of transportation issues and needs within the study addressed the following conditions:

1. Westbound roadway congestion;
2. Eastbound roadway congestion (including interchange capacity constraints at the Dulles Connector Road);
3. Capacity issues at I-66/arterial interchanges;
4. Non-HOV users during HOV operation hours;
5. Orange Line Metrorail congestion;
6. Adverse impact of roadway congestion on bus service;
7. Challenges to intermodal transfers (rail, bus, bicycle, car);
8. Bottlenecks on the Washington & Old Dominion (W&OD) and Custis Trails; and
9. Limitations/gaps in bicycle and pedestrian accessibility and connectivity.

**Figure ES.2 Process to Identify Issues and Needs**



## Mobility Options

The issues and needs were mapped against potential mobility solutions to screen over 100 mobility option elements down to 11 mobility options. These solutions – or mobility options – responded directly to the defined issues and needs in the corridor. The mobility options, organized by mode and submode, are listed in Table ES.1.

**Table ES.1 Mobility Options**

<b>Name</b>	<b>Brief Description</b>
Option A – HOV Restrictions	Designate I-66 lanes in both directions as Bus/HOV during peak periods
Option B1 – I-66 Bus/HOV/HOT Lane System Option 1	Convert I-66 into an electronically tolled Bus/HOV/high occupancy/toll (HOT) roadway
Option B2 – I-66 Bus/HOV/HOT Lane System Option 2	Convert I-66 into an electronically tolled Bus/HOV/HOT roadway and add a lane in each direction
Option C1 – I-66 Capacity Enhancement Option 1	Add lane designated HOV in both directions during peak periods
Option C2 – I-66 Capacity Enhancement Option 2	Add lane in both directions; designate HOV in peak period, peak direction only
Option D – Integrated Corridor Management	Deploy ICM strategies throughout the corridor
Option E – Arterial Capacity Enhancement	Enhance U.S. 50 through application of access management principles and implementation of a bus-on-shoulder lane
Option F – Metrorail Level of Service and Capacity	Provide an alternative connection between the I-66/Dulles Connector Road Corridors and South Arlington through an interline connection between the Orange Line and Blue Line
Option G – Bus Transit Level of Service and Capacity	Implement a range of enhancements to local, commuter, and regional bus services, including bus route changes and additions throughout the study area
Option H – Transportation Demand Management	Enhance TDM strategies drawn from the I-66 Transit/TDM Study
Option I – Bicycle/Pedestrian System Enhancements	Implement a range of bicycle and pedestrian improvements of varying scales

The effectiveness of the mobility options in addressing the issues and needs was assessed using various performance measures derived from an abbreviated application of the TPB travel demand forecasting model and other off-model analytical methods. Section 2.0 of this report presents the mobility option formulation and evaluation discussion.

## Multimodal Packages

Using the detailed assessment of the mobility options and input from the PARC, project stakeholders, and the public, the mobility options were combined into four multimodal packages. These four packages (outlined in Table ES.2) were comprised of elements of previously tested mobility options with some modifications and enhancements to better address the congestion and mobility goals of the corridor. All packages include a highway and transit component, ICM solutions, TDM programs, and bicycle and pedestrian improvements.

As documented in Section 3.0 of this report, all of the multimodal packages tested included transportation projects documented in the CLRP for 2040, along with the recommended bus services and TDM measures from the 2009 DRPT I-66 Transit/TDM Study. Metrorail core capacity improvements, including 100 percent eight-car trains on the Metrorail Orange and Silver Lines, were also included as part of the 2040 Baseline scenario for all the packages. Section 3.0 of this report describes the multimodal package assessment process and results.

**Table ES.2 Recommended Multimodal Packages**

Package	Multimodal Package Elements
#1	Option B1. I-66 Bus/HOV/HOT Lane System – Option 1 Option G. Bus Transit Level of Service and Capacity Option D. Integrated Corridor Management Option H. Transportation Demand Management Option I. Bicycle/Pedestrian System Enhancements
#2	Option B2. I-66 Bus/HOV/HOT Lane System – Option 2 Option G. Bus Transit Level of Service and Capacity Option D. Integrated Corridor Management Option H. Transportation Demand Management Option I. Bicycle/Pedestrian System Enhancements
#3	Option C1. I-66 Capacity Enhancement – Option 1 Option G. Bus Transit Level of Service and Capacity Modification: Additional buses serving Rosslyn and D.C. Core (i.e., K Street) destinations Option D. Integrated Corridor Management Option H. Transportation Demand Management Option I. Bicycle/Pedestrian System Enhancements
#4	Option G. Bus Transit Level of Service and Capacity Modification: Improve bus routing and LOS; improved headways further on Priority Bus Include U.S. 50 bus-on-shoulder operation Option D. Integrated Corridor Management Option H. Transportation Demand Management Option I. Bicycle/Pedestrian System Enhancements, including complementary bicycle facility along U.S. 50

## Sensitivity Tests

The evaluation of the four multimodal packages highlighted strengths and weaknesses in each package. This led to questions about how specific changes to a package might alter the results. To address these questions, two sensitivity analyses were conducted by modifying package features and performing a full run of the travel demand forecasting model. For the first sensitivity test, Package 1 was modified to test having the HOT operations only in effect during peak periods. The second sensitivity test modified Package 3 to have the new lane operate as a Bus/HOV/HOT lane 24/7 rather than as a Bus/HOV lane in the peak periods. Section 3.12 of this report discusses this analysis in more detail.

## **Recommendations for Enhanced Mobility on I-66 Inside the Beltway**

To formulate the final set of project recommendations, the study team considered the technical analysis, the market research, the stakeholder interviews, PARC input and public comments received at the public meetings and via webpage, email, and phone line. Recommendations were organized into two categories:

- Core Recommendations that are considered top priority; and
- Package Recommendations that are derived specifically from the multimodal packages evaluated in this study.

Section 3.0 of this report provides the detailed assessment of the multimodal packages. Section 4.0 provides a more robust discussion of overall study recommendations.

### **Core Recommendations**

The first tier of recommended improvements for the I-66 corridor inside the Beltway consists of the improvements in the corridor as included in the 2011 CLRP for 2040, including spot improvements along westbound I-66, increasing the HOV occupancy restriction on I-66 from HOV 2+ to HOV 3+, completing the Silver Line Metrorail extension to Loudoun County, and implementing the Active Traffic Management element of an ICM system.

The second tier of recommended improvements include the new transit services and TDM programs recommended by the 2009 DRPT I-66 Transit/TDM Study along with components of the WMATA enhancement plan deemed necessary to address Metrorail core capacity concerns in the I-66 corridor. The I-66 Multimodal Study did not evaluate the effectiveness of these improvements independently nor did it examine the timing and phasing strategy for them. It is assumed that the region will prepare a more rigorous implementation plan for these improvements as the travel conditions in the corridor warrant.

### **Package Recommendations**

A hybrid or composite package of elements from several packages is recommended for consideration as the third tier and end-state set of multimodal improvements (joining the first and second tier articulated as core recommendations). Outlined below are the elements of the proposed hybrid package of improvements. The scope, timing, and phasing of these elements should be reassessed and/or refined in the future in response to changing demographics, travel patterns and conditions in the corridor, and/or the implementation of the core recommendations of this study. The package recommendations include:

- Completion of the elements of the bicycle and pedestrian network as detailed in Section 4.3, to enhance service as a viable alternative to motorized trip making in the corridor. Consideration should be given to the priority determination in Section 4.3 as funding becomes available.



- Full operability of an ICM system inside the Beltway as detailed in Section 4.5. These strategies maximize the use, operations, and safety of the multimodal network within the study corridor.
- Addition and enhancement to the suite of TDM programs in the corridor as detailed in Section 4.4. As funding becomes available for TDM, consideration should be given to the priority grouping established in this study for implementation.
- Implementation of the best performing transit recommendations from Multimodal Package 4. This involves examination of all the transit service improvements in Multimodal Package 4 to determine those with the highest ridership in the corridor.
- Implementation of HOT lanes on I-66, potentially during peak periods only, to: provide new travel options in the corridor; utilize available capacity on I-66; provide congestion relief on the arterials; and provide new transit services as an alternative to tolled travel.
- Addition of a third through lane on selected segment(s) of I-66, depending on the monitored traffic flow conditions and demand both on I-66 and the parallel arterials.
- Explore the full use of commonly used or proven design waivers/exceptions to enable remaining within the existing right-of-way for I-66.

## **Conclusions**

While there is significant growth forecast for Northern Virginia between now and 2040, the multimodal transportation infrastructure, programs, and services defined in this report provide the means to accommodate the forecast growth and associated travel demand. The spectrum of recommendations – both core and package – covers a range of timeframes to 2040. The timing and phasing of implementation of the recommendations will require significant consideration of funding availability, progress against core recommendations, and the quality of operations and conditions on the existing key infrastructure assets.

The implementation of the recommendations will most likely require funding beyond existing and anticipated resources that are already committed to other state and local transportation priorities. Section 5.0 of this report provides a summary of a wide array of revenue options to fund the study recommendations. They include revenue sources associated with user fees, general taxes and specialized taxes or fees. Financing options are also considered that could include private equity investment in surface transportation through Public-Private Partnerships (P3), with financing packages that combine public and private debt, equity, and public funding.

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TPB R12-2009  
March 18, 2009

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD  
777 NORTH CAPITOL STREET, N.E.,  
WASHINGTON, D.C. 20002-4239

RESOLUTION ON  
INCLUSION IN AIR QUALITY CONFORMITY ANALYSIS  
OF SUBMISSIONS FOR THE 2009 CONSTRAINED LONG RANGE PLAN (CLRP)  
AND FY 2010-2015 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

**WHEREAS**, the National Capital Region Transportation Planning Board (TPB), as the metropolitan planning organization for the Washington Metropolitan area, has the responsibility under the provisions of Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the metropolitan Area; and

**WHEREAS**, the Joint Planning Regulations issued February 14, 2007 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 every four years ; and

**WHEREAS**, the transportation plan, program and projects must be assessed for air quality conformity as required by the conformity regulations originally published by the Environmental Protection Agency in the November 24, 1993 *Federal Register* and with latest amendments published in the *Federal Register* on July 1, 2004; and

**WHEREAS**, on November 19, 2008, the TPB adopted resolution R7-2009 determining that the 2008 CLRP and the TIP for FY 2009-2014 conform with the requirements of the Clean Air Act Amendments of 1990, and on November 19, 2008 adopted resolution R8-2009 approving the 2008 CLRP and resolution R9-2009 approving the FY 2009-2014 TIP; and

**WHEREAS**, the transportation implementing agencies in the region have provided submissions for the 2009 CLRP and inputs to the FY 2010-2015 TIP, which are in response to the October 2008 solicitation document issued by the TPB, and the Technical Committee has reviewed these submissions at its meeting on January 9 and February 6, 2009; and

**WHEREAS**, at the TPB Citizens Advisory Committee(CAC) meeting on January 15, 2009 the submissions for the 2009 CLRP and FY 2010-2015 TIP were released for a 30-day public comment and interagency consultation period which ended February 14; and

**WHEREAS**, on February 18, the TPB was briefed on the project submissions for the 2009 CLRP and FY 2010-2015 TIP, the public comments received on the submissions, and the recommended responses to the public comments; and

**WHEREAS**, on February 18, the TPB voted to remove the I-66 Spot Improvements project inside the Beltway from the project submissions for the 2009 CLRP and FY 2010-2015 TIP until the completion of the multi-modal study that was requested by the TPB at its meeting on May 16, 2007, and

**WHEREAS**, the I-66 Spot Improvements project includes Section 1 (Fairfax Drive to Sycamore Street) Section 2 (Washington Boulevard to Dulles Connector), and Section 3 (Lee Highway to Glebe Road); and

**WHEREAS**, construction funding for Section 1 (Fairfax Drive to Sycamore Street) is included in the FY 2009-2014 TIP adopted by the TPB on November 19, 2008; and

**WHEREAS**, no construction funding is included for Sections 2 and 3 of the I-66 Spot Improvements project in the FY 2009-2014 TIP; and

**WHEREAS**, Virginia Secretary of Transportation Pierce Homer noted in his correspondence of May 15, 2007 to Chairman Paul Ferguson, Arlington County, a commitment to examine a wide range of modal options/alternatives including "bus, transportation demand management, HOV, congestion pricing, managed lanes, and road improvements for both I-66 and the local street network;" and

**WHEREAS**, on February 18, 2009, the TPB adopted Resolution R12-2009 which excluded the I-66 Spot Improvements project inside the Capital Beltway from the project submissions for the 2009 CLRP and FY 2010-2015 TIP; and

**WHEREAS**, the vote reflected a lack of complete information on provisions agreed upon by the Virginia Department of Transportation (VDOT) and the TPB as necessary at the time of the May 16, 2007 decision to accept the I-66 Spot Improvements into the Federal process; and

**WHEREAS**, the attached letter of February 23, 2009, from Secretary Homer to Supervisor Cathy Hudgins of Fairfax County notes that a study is funded and underway. The scope of the study as described on the Virginia Department of Rail and Transportation (VDRPT) web-site ([www.drpt.virginia.gov/activities/l66study.aspx](http://www.drpt.virginia.gov/activities/l66study.aspx)) addresses only some of the concerns for I-66 inside the Beltway, specifically bus and transportation demand management, as agreed upon in the May 15, 2007 letter (attached) from Secretary Homer to Arlington County Chair Paul Ferguson, and the results of the study are scheduled to be reported to the TPB by October 21, 2009; and

**WHEREAS**, while the current VDRPT study focuses more on the short-term needs in the corridor, VDOT and VDRPT are committed to fund and conduct studies to address long term needs of the I-66 Corridor including HOV, congestion pricing, managed lanes, and road improvements that incorporate the results of the current VDRPT study and include I-66 outside the Beltway, thus addressing the concerns in Secretary Homer's

letter of May 15, 2007; and,

**WHEREAS**, VDOT assures TPB that no further funding will be committed to the remaining I-66 Spot Improvement segments until the results of the studies are completed and the recommendations and actions that would maximize mobility in the I-66 corridor are shared with stakeholders; and

**WHEREAS**, the 2009 CLRP and the FY 2010-2015 TIP are scheduled to be released for public comment on June 11, 2009 and approved by the TPB at its July 15, 2009 meeting; and

**WHEREAS**, the submissions have been developed to meet the financial plan requirements in the Metropolitan Planning Rules and show the consistency of the proposed projects with already available and projected sources of transportation revenues;

**NOW, THEREFORE, BE IT RESOLVED THAT** the National Capital Region Transportation Planning Board (1) approves for inclusion in the air quality conformity analysis of the 2009 Constrained Long Range Plan and FY 2010-2015 TIP, the project submissions as described in the attached memorandum of February 11, 2009, including the I-66 Spot Improvements project inside the Beltway, and (2) affirms that inclusion by the TPB of funding for Sections 2 and 3 of the I-66 Spot improvements project in future Transportation Improvement Programs is conditioned on the completion of both short- and long-term multi-modal studies addressing concerns referenced in the May 2007 letter from Secretary Homer and further qualified in this resolution, as previously agreed to by the TPB; and

**BE IT FURTHER RESOLVED**, that VDOT will return to TPB with the scope and schedule of the long-term study that will build on the current study and include HOV, congestion pricing, managed lanes and road improvements and, upon completion of the study, will report final recommendations to the TPB that would maximize mobility in the corridor; and

**BE IT FURTHER RESOLVED**, that VDOT and VDRPT will begin work with Arlington and Fairfax counties and the City of Falls Church to provide enhancements on the adjacent street and trail networks, as well as capacity and access to transit, to provide for increased mobility on local road and transit networks in the I-66 Corridor by October 21, 2009.

**Adopted by the Transportation Planning Board at its regular meeting on March 18, 2009.**

RECEIVED  
FEB 25 2009



## COMMONWEALTH of VIRGINIA

Office of the Governor

Pierce R. Homer  
Secretary of Transportation

P.O. Box 1475  
Richmond, Virginia 23218

(804) 786-8032  
Fax: (804) 786-6683  
TTY: (800) 828-1120

February 23, 2009

The Honorable Catherine M. Hudgins  
Member, Fairfax County Board of Supervisors  
12000 Bowman Towne Dr.  
Reston, Virginia 20190

Dear Supervisor Hudgins:

Thank you for your inquiry about the I-66 spot improvements.

As you know from your tenure as Chair of the Transportation Planning Board, the widening of I-66 westbound from George Mason Drive to Sycamore Street is scheduled for construction late this year or early next year. Of the estimated \$37 million in project cost, nearly \$24 million derives from dedicated federal funds in the last highway authorization bill. These funds are not available for any other use.

Attached is the May 2007 correspondence from me to then-Chairman Ferguson of Arlington County explaining that, in addition to the physical improvements undertaken to I-66 inside the Beltway, the Commonwealth would undertake an evaluation of multi-modal options in the I-66 corridor. That study is currently underway, with public comment currently scheduled for April and completion later this year. A summary of the \$1.5 million scope and schedule also is attached.

Once completed, this study will become part of the larger I-66 Environmental Impact Study for I-66 outside the Beltway. We anticipate that this larger I-66 study will begin in the May/June timeframe.

Please feel free to call me with any questions.

Sincerely,

A handwritten signature in black ink that reads "Pierce R. Homer".

Pierce R. Homer

Attachments

Cc: Chairman Bulova



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May 15, 2007

Mr. Paul F. Ferguson Esq.  
2100 Clarendon Boulevard, Suite 300  
Arlington, Virginia 22201-5406

Dear Mr. Ferguson:

As you know, the I-66 Inside the Beltway Feasibility Study was completed in March of 2005 with two major recommendations: 1) to complete a series of interim improvements that could reduce congestion in the short term; and 2) to initiate multimodal studies on a wide range of long term options because no one option alone could provide complete and timely relief to the mobility and accessibility problems in the corridor.

We are moving forward with the interim improvements by including them in the draft 2007 Constrained Long Range Plan. We also plan to initiate the multimodal studies recommended previously and which you have suggested.

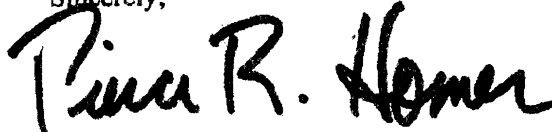
The next step is to evaluate a wide range of modal options/alternatives. A number of suggestions were made during the Idea-66 workshops that need to be examined in greater detail including bus, transportation demand management, HOV, congestion pricing, managed lanes, and road improvements for both I-66 and the local street network. The studies would undertake objective technical analyses that address both demand and operational considerations of the alternatives. Existing analyses will be used wherever possible including any long term Metrorail needs assessments.

Regional and stakeholder involvement will be provided through the Northern Virginia Transportation Authority and an appropriate work group including WMATA and the District of Columbia. The state and federal funds available for the study would be a minimum of \$1.2 million and the work would be undertaken by DRPT with the assistance of VDOT and consultants.

Mr. Paul F. Ferguson  
May 15, 2007  
Page 2

This "next step" study will be an important complement to the I-66 study outside the Beltway. We look forward to working with you and the Northern Virginia Transportation Authority on this important project.

Sincerely,



Pierce R. Homer

PRH:ah

Copy: Mr. Christopher Zimmerman  
Ms. Judy Connally  
Mr. Doug Koelemay  
Mr. David S. Ekern  
Mr. Matt Tucker  
Mr. Barbara Reese  
Mr. Dennis Morrison



## I-66 Transit/TDM Study

### **Purpose**

The purpose for the I-66 Corridor Transit/TDM improvements is to enhance mobility and reduce highway and transit congestion in the I-66 corridor.

### **Project Objectives**

The Virginia Department of Rail and Public Transportation (DRPT) initiated the I-66 Transit/Transportation Demand Management (TDM) study in the I-66 corridor (Haymarket to the District of Columbia including Route 50 and Route 29) to identify ways and means to increase travel capacity in the corridor by expanding or enhancing transit services and through transportation demand management efforts.

Project Objectives for the study include:

- Examine and recommend transit operational concepts and capital investments that would increase transit capacity in the corridor;
- Develop recommendations for enhancing transportation demand management programs and program effectiveness to reduce single-occupant vehicular travel in the corridor; and
- Develop recommendations for actions in the short and medium timeframes.

### **Need**

The existing and projected mobility and capacity deficiencies for the I-66 corridor are supported by:

- The limited interstate right-of-way;
- The extensive use of special purpose lanes and HOV ONLY operations;
- Existing use of shoulders as general purpose lanes during peak periods;
- The near capacity constraint of Metrorail service in the corridor;
- The high ridership levels on the Virginia Railway Express (VRE) commuter rail Manassas Line running parallel to I-66; and
- The overall congestion levels for all modes of travel in the corridor.

### **Scope of Work**

The scope of work for the study includes seventeen tasks that are described below. In general, the scope includes major activities such as: data collection, development and testing of transit (i.e. Bus Rapid Transit) and TDM alternatives (including park-and-ride lots) and developing cost, revenue and subsidy projections for recommended alternatives.

The study process is being led by DRPT. Input into the study occurs at multiple levels that include: public and agency participation, market research, monthly meetings with a Technical Advisory Committee (TAC) made up of operators and jurisdictional staff and briefings of regional policy boards (NVTC, NVTA and PRTC). The study is underway and is scheduled for completion in October 2009. Study recommendations will provide input into the I-66 Multi-modal Transportation Environmental Study (outside the Capital Beltway) that is scheduled to start later this year.

A more detailed breakout of the tasks with their respective completion dates follows:

Task #	Task Name	Completion Date
1	Detailed Work Program	11/25/08
2	Public/Agency Participation and Market Research	9/1/09
3	Data Collection	1/26/2009
4	TAC Committee Meetings (monthly)	10/13/2009
5	Regional Authority Meetings	10/1/09
6	Purpose and Need	4/13/09
7	Current Baseline Conditions	1/26/09
8	Market Demand Methodology and Forecasts	2/16/09
9	BRT Definition and Station Sketch Planning	3/23/09
10	Transit Alternatives Development	6/15/09
11	Sensitivity Analysis	7/27/09
12	TDM Strategies	6/29/09
13	Park and Ride Lots	6/29/09
14	Cost/Revenue/Subsidy Projections	9/21/09
15	Transit/TDM Recommendations	9/28/09
16	Potential Revenue Sources	7/27/09
17	Final Report	10/26/09