

**ITEM 8 - Action**  
January 19, 2005

Review of Comments Received, Acceptance of Recommended Responses, and Approval of the 8-Hour Air Quality Conformity Assessment of the 2004 Constrained Long Range Plan (CLRP) and FY 2005-2010 Transportation Improvement Program (TIP)

**Staff**

**Recommendation:** Receive briefing on the comments received and recommended responses, and adopt Resolution R12-2005 to accept the recommended responses for inclusion in the documentation, and to find that the 2004 CLRP and FY 2005-2010 TIP conform with the 8-hour conformity requirements of the Clean Air Act Amendments of 1990.

**Issues:** None

**Background:** The draft results of the 8-hour conformity assessment of the 2004 CLRP and FY 2005-2010 TIP were released for public comment at the Citizens Advisory Committee meeting on December 9, 2004. The 30-day public comment period on these results ended on January 9, 2005.

At the September 15 meeting, the Board was briefed on new air quality conformity requirements for the Washington region under the EPA's 8-hour ozone rule which was published in the *Federal Register* on July 1, 2004. At the October 20 meeting, the Board approved the 2010 project submissions and scope of work for the 8-hour conformity assessment of the 2004 CLRP and FY 2005-2010 TIP.

TPB R12-2005  
January 19, 2005

**METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS  
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD  
777 North Capitol Street, N.E.  
Washington, D.C. 20002**

**RESOLUTION FINDING THAT  
THE 2004 CONSTRAINED LONG RANGE PLAN AND  
THE TRANSPORTATION IMPROVEMENT PROGRAM FOR FY 2005-2010  
CONFORM WITH THE 8-HOUR OZONE STANDARD REQUIREMENTS OF THE  
CLEAN AIR ACT AMENDMENTS OF 1990**

**WHEREAS**, the National Capital Region Transportation Planning Board (TPB) has been designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia as the Metropolitan Planning Organization (MPO) for the Washington Metropolitan Area; and

**WHEREAS**, the U.S. Environmental Protection Agency (EPA), in conjunction with the U.S. Department of Transportation (DOT), under the Clean Air Act Amendments of 1990 (CAAA), issued on November 24, 1993 "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act," and followed these regulations with release of a succession of guidance documents, and published the 8-hour ozone standard conformity regulations on July 1, 2004, which taken together provide the specific criteria for TPB to make a determination of conformity of its financially Constrained Long Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP) with the state implementation plans for air quality attainment within the Metropolitan Washington non-attainment area; and

**WHEREAS**, on August 13, 2003, the Metropolitan Washington Air Quality Committee (MWAQC) approved the region's severe area ozone SIP and in September 2003 the state air agencies submitted this SIP with its associated mobile source emissions budgets to EPA; and

**WHEREAS**, in a letter to the District of Columbia, Maryland and Virginia air management agencies dated December 9, 2003, EPA determined that the mobile source emissions budgets in the updated SIP approved by MWAQC on August 13, 2003 were adequate for a conformity determination, and in the Federal Register published December 16, 2003 EPA stated that these adequacy findings were effective on December 31, 2003; and

**WHEREAS**, TPB staff developed a work program to address all procedures and requirements, including public and interagency consultation, and the work program was

released for public comment on September 15, 2004 and approved by the TPB at its October 20, 2004 meeting; and

**WHEREAS**, on December 9, 2004 the TPB released the draft results of the 8-hour ozone standard air quality conformity assessment of the 2004 CLRP and the FY 2005-2010 TIP for a 30-day public comment period and inter-agency review, and the comments and staff responses to them were reviewed and accepted for inclusion in the CLRP and TIP by the TPB on January 19, 2005; and

**WHEREAS**, the analysis reported in *8-Hour Ozone Standard Conformity Assessment , Supplement to Air Quality Conformity Assessment of the 2004 Constrained Long Range Plan and the FY 2005-2010 Transportation Improvement Program for the Washington Metropolitan Region*, dated January 12, 2005 demonstrates adherence to the approved mobile source emissions budgets, meets all regulatory, planning and interagency consultation requirements, and therefore provides the basis for a finding of conformity of the plan and program with the requirements of the CAAA; and

**WHEREAS**, in the attached letter of January 12, 2005, MWAQC has provided favorable comments on the *8-Hour Ozone Standard Conformity Assessment*, recognizing that the transportation plan analysis meets the approved mobile emissions budgets, noting that the gaps between the emissions inventories and budgets are temporary pending development of 8-hour budgets corresponding to year 2010, and urging "... the States and local governments to maintain their commitments to TERMS and other emission reduction measures, regardless of whether implementation of these measures is necessary for conformity";

**NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD** determines that the 2004 Constrained Long Range Plan and the Transportation Improvement Program for FY 2005-2010 conform with all the 8-Hour Ozone Standard requirements of the Clean Air Act Amendments of 1990.

# **Metropolitan Washington Air Quality Committee**

Suite 300, 777 North Capitol Street, N.E. Washington , D.C. 20002-4239 202-962-3358 Fax: 202-962-3203

January 12, 2005

Honorable Phil Mendelson, Chair  
National Capital Region Transportation Planning Board  
777 North Capitol Street, NE  
Washington, D.C. 20002

Dear Chair Mendelson:

The Metropolitan Washington Air Quality Committee (MWAQC) has reviewed the November 30, 2004 draft *8-hour Ozone Standard Conformity Assessment, supplement to the Air Quality Conformity Determination Of The 2004 Constrained Long Range Plan And The FY2005-2010 Transportation Improvement Program For The Washington Metropolitan Region*. We are pleased the proposed transportation plan meets the approved mobile emissions budgets set for 2005.

As allowed by EPA in the interim before 8-hour mobile budgets are developed and approved, conformity for the 8-hour ozone standard is being tested against the 1-hour ozone mobile budgets in the 2003 SIP. We note that this supplemental analysis for 2010 uses the same methods and inputs as the recently completed conformity determination for the one-hour ozone standard, except that 2010 was added as a new analysis year.

The conformity analysis indicates significant reductions in transportation emissions occurring by 2010 and beyond, creating a significant gap between the emissions budget and the estimated levels of transportation emissions. The reasons for this significant gap include: (1) the emissions budgets correspond to the 2005 attainment year for the 1-hour standard and not the attainment year for the 8-hour standard (year 2010); (2) federal emissions control measures for gas and diesel vehicles and fuels provide much of the reductions, and (3) recent improvements made to the transportation demand model. It must be noted that the gap is temporary since the existing, 1-hour standard-based emissions budgets will be replaced by new emissions budgets for the 8-hour ozone standard corresponding to year 2010. The new emission budgets to be developed in 2006 may be ready for use in evaluating transportation conformity for the 2007-2012 TIP.

As we stated in our October 27, 2004 letter to Chair Zimmerman, States and local governments are urged to maintain their commitments to TERMS and other emission reduction measures, regardless of whether implementation of these measures is currently necessary for conformity. Meeting the 8-hour ozone standard is expected to be a much more difficult effort, requiring continuation of all mobile and non-mobile emission reduction commitments, and possibly new ones in the near future.

Thank you for the opportunity to comment on the draft conformity analysis. We look forward to working closely with you on making further improvements to the region's air quality to meet the new 8-hour standard.

Sincerely,



Hon. T. Dana Kauffman, Chair  
Metropolitan Washington Air Quality Committee

## MEMORANDUM

January 12, 2005

To: Transportation Planning Board

From: Michael J. Clifford  
Systems Planning Applications Director

Subject: Comments and Responses to Comments on the 8-Hour Ozone Standard Air Quality Conformity Assessment of the 2004 Constrained Long Range Plan (CLRP) and the FY2005-2010 Transportation Improvement Program (TIP)

### INTRODUCTION

This memo: (1) transmits final summary results of the 8-hour air quality conformity assessment of the 2004 CLRP and the FY2005-2010 TIP (full report is also attached), and (2) summarizes comments received through the public comment / interagency consultation process, and responses to those comments.

### BACKGROUND

While the CLRP and TIP were subject to an air quality conformity assessment approved by the TPB on November 17, 2004, that assessment reflected requirements associated with the 1-hour ozone standard. On April 15, 2004 EPA designated the Washington, DC-MD-VA area as 'moderate' nonattainment for the 8-hour standard, and on July 1, 2004 EPA published the final rule for transportation conformity associated with the 8-hour ozone standard. (The 8-hour ozone standard, 0.08 parts per million (ppm) averaged over 8 hours, replaces the 1-hour standard of 0.12 ppm measured in hourly increments, in place since 1979.) EPA requirements include that the TPB demonstrate conformity to the new rule by June 15, 2005 or face a conformity lapse, i.e., limitations on transportation projects which may proceed toward implementation. These additional requirements, which became effective while the 1-hour conformity assessment was in mid-stream, led to this supplemental air quality analysis of the plan and program.

### METHODS

The scope of work for this analysis, approved by the TPB at its October 20, 2004 meeting, involved technical methods and criteria consistent with the 1-hour air quality

assessment. The final report includes a 2010 analysis to reflect the new attainment year for moderate areas, and the 2005, 2015, 2025 and 2030 analysis years based on the earlier 1-hour conformity work approved by the TPB on November 17, 2004. Staff executed the work tasks consistent with the latest models and methods, i.e., COG's Round 6.4A Cooperative Forecasts, TPB's Version 2.1D #50 travel demand model, and EPA's Mobile6.2 emissions factor model.

Conformity assessment criteria for the 8-hour standard provided in the July 1, 2004 final rule call for use of the existing 1-hour mobile source emissions budgets on an 'interim' basis. This interim period will continue until state air quality implementation plan (SIP) activities determine emissions reduction requirements to attain the 8-hour standard, and establish new mobile emissions budgets for inclusion in the air quality plans for meeting this 8-hour standard.

## **RESULTS**

The 8-hour conformity assessment includes the estimation of 2010 travel demand conditions and mobile source emissions along with the previous forecast year results. Exhibits 1 and 2 present volatile organic compound (VOC) and nitrogen oxide (NO<sub>x</sub>) emissions, respectively. The exhibits show that mobile emissions are well below the mobile budgets for each pollutant. Therefore, the analytical results described in this air quality assessment provide a basis for a determination by the TPB of conformity of the 2004 CLRP and the FY2005-2010 TIP with respect to 8-hour ozone requirements.

It is emphasized that the 'interim' budget test provided in this report compares 2010 emissions (and beyond) with 2005 budget levels. Emissions levels associated with attainment of the 8-hour ozone standard in the attainment year of 2010 have not yet been addressed.

## **COMMENTS / RESPONSES**

At the Citizens Advisory Committee meeting on December 9, 2004 these results were released for 30 day public comment and interagency consultation. Two comments on the report have been received and are discussed below.

1. Following a presentation of the draft report by TPB staff at the December 10, 2004 meeting of the Metropolitan Washington Air Quality Committee (MWAQC)'s Technical Advisory Committee, a member commented that transportation emissions reduction measure (TERM) benefits should be shown as a part of the emissions analysis. TPB staff responded that work to assess TERMS benefits for a 2010 analysis year was underway. That work has now been completed and summary results have been incorporated into the analysis. In the final report, Attachment E contains the full 'Tracking Sheet' tabulation of all such measures, and Exhibit 6 contains the summary results as part of the emissions

budget comparisons.

2. MWAQC provided its written comments in the attached January 12, 2005 letter. Their letter recognizes that the transportation plan analysis for 2010 meets the approved mobile emissions budgets set for 2005. The letter notes that the gaps between the transportation plan / program emissions inventories and emissions budget levels are temporary since the 1-hour ozone standard-based budgets will be replaced by new budgets for the 8-hour standard corresponding to year 2010. Finally, the letter urges maintenance of transportation agency commitments to TERMS and other emission reduction measures regardless of whether implementation is currently necessary for conformity, since meeting the 8-hour standard is expected to be a much more difficult effort.

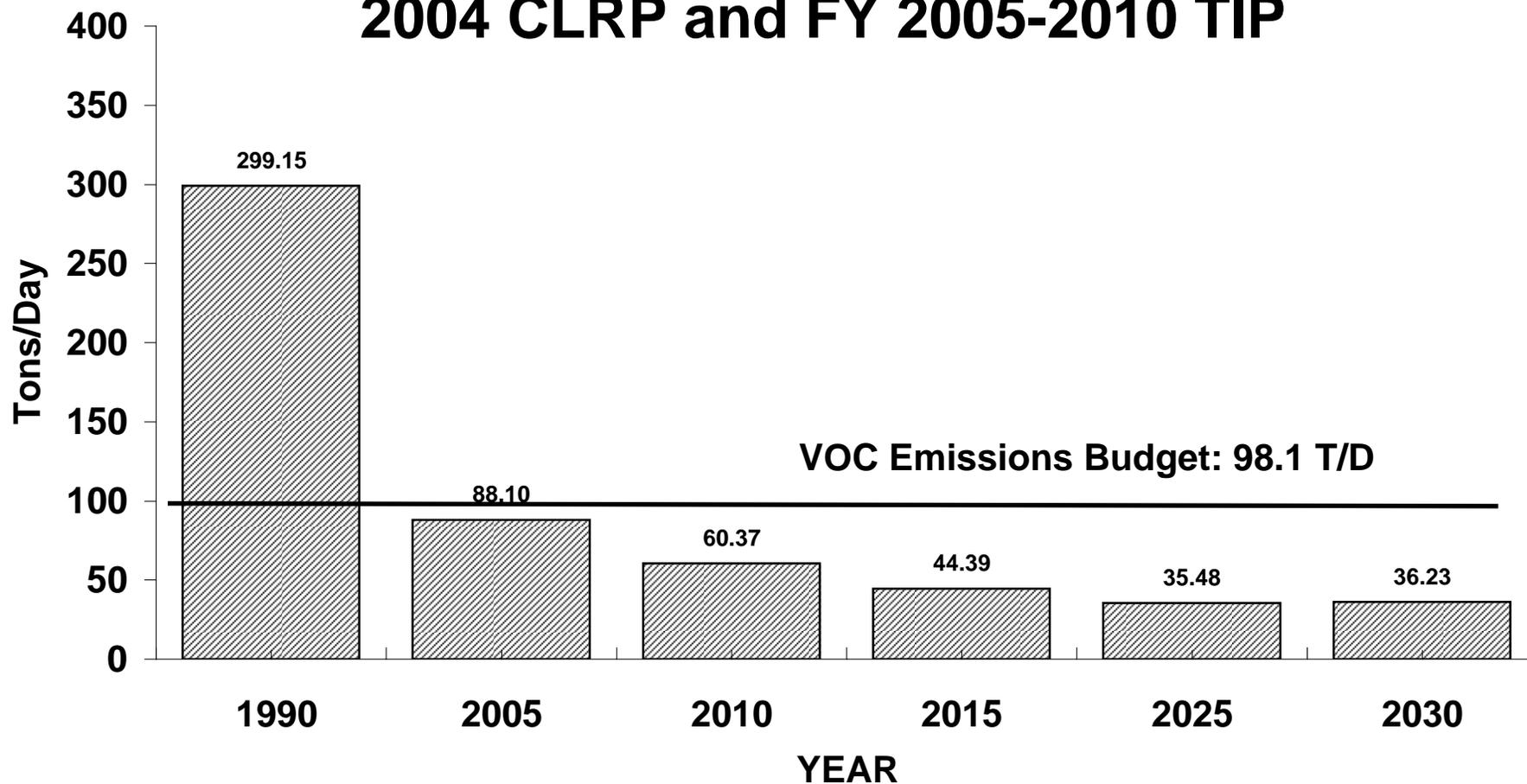
### **NEXT STEPS**

TPB approval action is scheduled for January 19, 2005. This schedule will provide for advancing the required assessment for federal action well in advance of the conformity lapse deadline of June 15, 2005.

Following: Exhibits 1,2  
Attached letter from MWAQC  
Attached conformity report

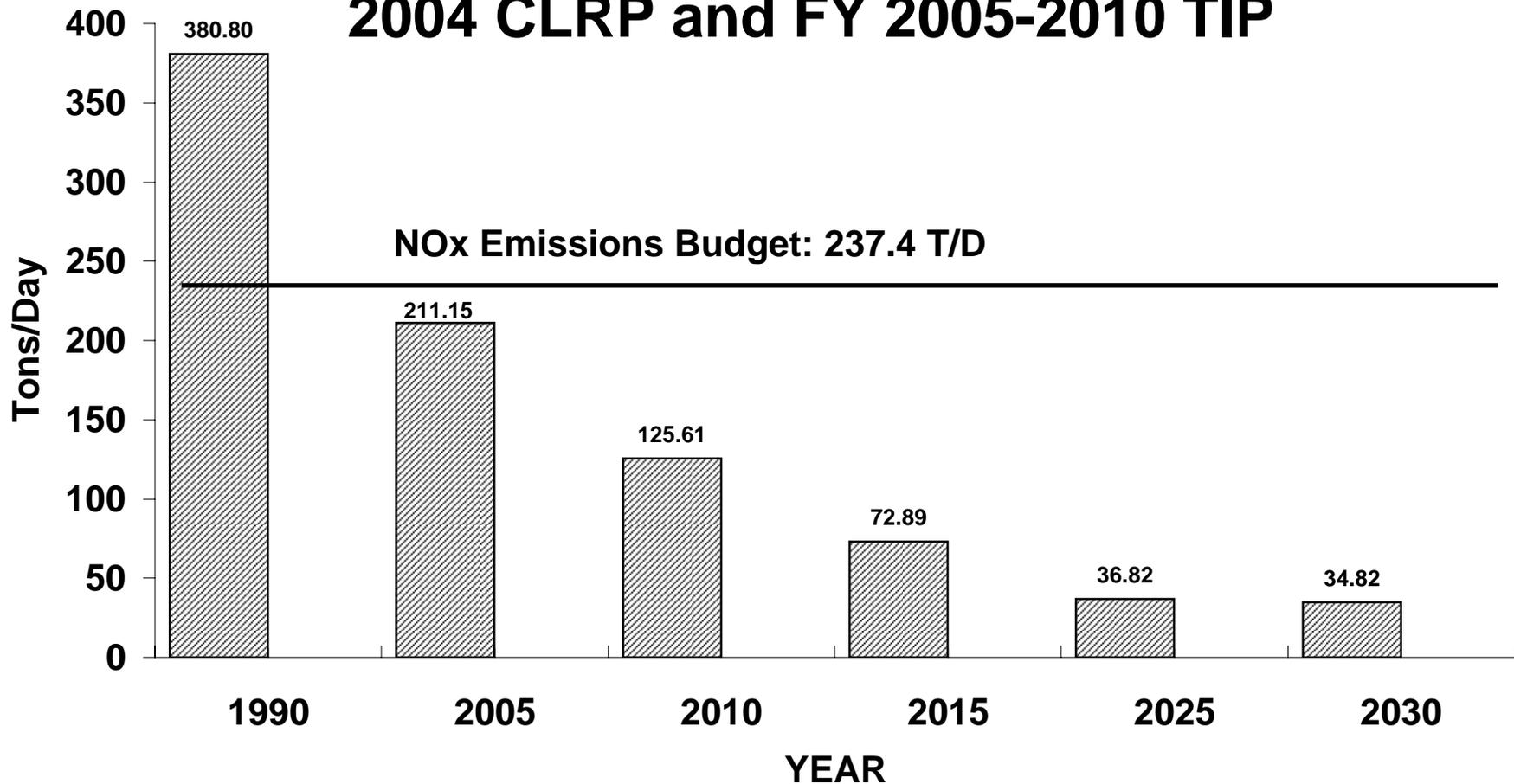
# EXHIBIT 1

## Mobile Source VOC Emissions Metropolitan Statistical Area 2004 CLRP and FY 2005-2010 TIP



# EXHIBIT 2

## Mobile Source NOx Emissions Metropolitan Statistical Area 2004 CLRP and FY 2005-2010 TIP



## **8-HOUR OZONE STANDARD CONFORMITY ASSESSMENT**

### **Supplement to the Air Quality Conformity Assessment of the 2004 Constrained Long Range Plan Amendments and FY2005-2010 Transportation Improvement Program**

#### **INTRODUCTION**

This report documents the results of the 8-hour ozone standard air quality conformity assessment of the 2004 Constrained Long Range Plan (CLRP) and the FY2005-2010 Transportation Improvement Program (TIP). This supplements the technical report, Air Quality Conformity Determination Of The 2004 Constrained Long Range Plan And The FY2005-2010 Transportation Improvement Program For The Washington Metropolitan Region (November 17, 2004), which addressed carbon monoxide and the 1-hour ozone standard. As assessment criteria for the 8-hour standard include the analysis of a 2010 forecast year in addition to the milestone years previously analyzed for the 1-hour standard (2005, 2015, 2025 and 2030), technical methods are consistent with that earlier work and documentation for this supplemental analysis simply adds the 2010 forecast year results to those obtained in the November 17, 2004 report. Specifically, the land activity, travel, emissions factor and mobile source emissions data obtained in that work are reported here together with the 2010 results to produce a comprehensive, stand-alone report for the 8-hour conformity assessment.

#### **BACKGROUND**

On April 15, 2004 the Environmental Protection Agency (EPA) designated the Washington, DC-MD-VA area “moderate” nonattainment for the 8-hour ozone standard. The 8-hour ozone standard, 0.08 parts per million (ppm), averaged over eight hours, replaces the 1-hour standard of 0.12 ppm, measured in hourly increments, that has been in place since 1979.

On July 1, 2004 the EPA published the final rule for the transportation conformity under the new 8-hour ozone standard. For the Washington, DC-MD-VA non-attainment area the 8-hour non-attainment boundary is smaller than the 1-hour boundary, since Stafford County has been removed from the Washington non-attainment area for the 8-hour standard. In these circumstances EPA's conformity rule provides an option for conducting a conformity analysis prior to the setting of new mobile budgets under the 8-hour standard; the approach allows using the existing 1-hour budgets, retaining Stafford County in both the budgets and mobile emissions estimates. The TPB, with concurrence from the Metropolitan Washington Air Quality Committee (MWAQC), opted to perform the 8-hour conformity analysis in this manner. Correspondence between the Transportation Planning Board (TPB) and MWAQC, relating to this, is included as Attachment A in this report.

The 8-hour ozone standard for a “moderate” area requires an analysis of the 2010 attainment year, in addition to the milestone years covered under the 1-hour conformity assessment. The region must demonstrate, by June 15, 2005, that the plan and program conform to the new 8-hour requirements or suffer a lapse. Because the conformity requirements for this analysis were not specified when COG/TPB staff developed the original scope of work for the air quality conformity assessment of the 2004 CLRP and the FY2005-2010 TIP, a supplemental work plan was developed and approved. This scope of work is included as Attachment B.

#### **WORK ACTIVITIES**

Technical work activities for the supplemental conformity assessment of the 2004 CLRP and FY2005-2010 TIP included the preparation of volatile organic compound (VOC) and nitrogen oxide (NOx) emissions inventories for the 2010 forecast year. Consistent with the analysis of the 2005, 2015, 2025, and 2030 forecast years in the full report, staff used the following technical inputs for this analysis: Round 6.4A Cooperative Forecasts; the Version 2.1D Travel Demand Model utilizing the new project submissions, and reflecting updated transit service and higher transit fares recently enacted by several transit operators in the region; EPA's Mobile6.2 Emissions Factor Model; and a refined Mobile Emissions Post-Processor using latest travel demand and mobile emissions planning assumptions. This report presents the results of the supplemental conformity analysis, as follows.

### **2010 Network Inputs**

Because the development of a 2010 network was not anticipated when COG/TPB staff solicited the original inputs for the 2004 CLRP and the FY2005-2010 TIP, TPB staff requested that the implementing agencies review inputs to ensure the accuracy of project completion dates for 2010. This review resulted in the development of an updated conformity table that shows projects with completion dates between 2006 and 2010. This table, shown as Attachment C, was reviewed by the TPB Technical Committee, and approved by the TPB at its October 20, 2004 meeting. The conformity analysis of the 2004 CLRP and FY2005-10 TIP (1-hour ozone standard) included tests of two different alignments (a master plan and a northern alignment) of the Intercounty Connector (ICC) in Maryland. Prior to the adoption of the CLRP / TIP by the TPB in November, MDOT selected the master plan alignment as the 'placeholder' for subsequent planning purposes (see MDOT's letter in Attachment D). Accordingly, the networks applied in this supplemental conformity assessment consisted of only the ICC master plan alignment.

### **Land Activity Forecasts**

On September 8, 2004 COG's Metropolitan Development Policy Committee approved Round 6.4A Cooperative Forecasts to be used for testing purposes in analysis of the CLRP and TIP. Consistent with the 1-hour conformity assessment, staff applied these land activity forecasts in the travel forecasting process for 2010 conditions. The Round 6.4A data reflect not only the forecast small area land use distributions throughout the Washington area, but also the latest planning assumptions for areas outside the Washington region. For example, the Baltimore land use input to Round 6.4A reflects the Baltimore Regional Transportation Board's 'Round 6' adopted figures, whereas their previous input to the COG Round 6.3 forecasts was their 'Round 5D' figures.

### **Travel Modeling Process**

Using the Version 2.1D model, COG/TPB staff prepared travel demand forecasts for each of the required forecast years. Exhibit 1 presents the geographic areas for modeling and for non-attainment reporting purposes. Exhibit 2 presents the resulting transit trips, vehicle trips, and vehicle miles traveled (VMT) results through time for each conformity analysis year. Exhibit 3 presents the VMT statistics in bar chart form, showing the 2010 estimates as well as the previously developed forecast year estimates. The chart also compares the estimates to last year's totals for each forecast year to illustrate the changes in travel demand attributable to use of the revised model. VMT values are seen to be about 6 to 7 percent lower with the latest model, consistent with the base year 2000 model validation results.

### **Emissions Factors**

COG/DTP staff, in conjunction with COG Department of Environmental Programs staff and with the consultant assistance of E.H. Pechan and Associates, developed the motor vehicle emissions factors through the use of EPA's Mobile6.2 emissions factor model. (See Appendix D of the November 17, 2004 technical report for model inputs and other details of the emissions factor development.) These rates for each pollutant, shown using Montgomery County freeway data as an illustration in Exhibits 4 and 5 for VOC and NOx, respectively, were developed following execution of the model in one mph speed increments, by jurisdiction, for each analysis year. Again, 2010 data have been added to the previous exhibits to show all milestone year results. The charts show significantly reduced rates through time, primarily due to the impacts of having cleaner vehicles in the fleet.

## **Emissions Analyses**

Staff applied the Mobile6.2 emissions factors to the travel demand forecasts to prepare mobile source emissions inventories for the 2010 forecast year. Emissions results for all milestone years are summarized in Exhibit 6 and indicate VOC and NOx emissions for network and off-network components. The network plus off-network totals for 2010 are 62.86 tons/day for VOC, and 130.76 tons/day for NOx. The table shows dramatic reductions between 2005, 2010, and 2015, and further reductions thereafter with emissions leveling off at about 35 tons per day for both pollutants. The results reflect the impact of the cleaner fleet (continuing fleet turnover) and related programs, with slowing VMT growth rates through time.

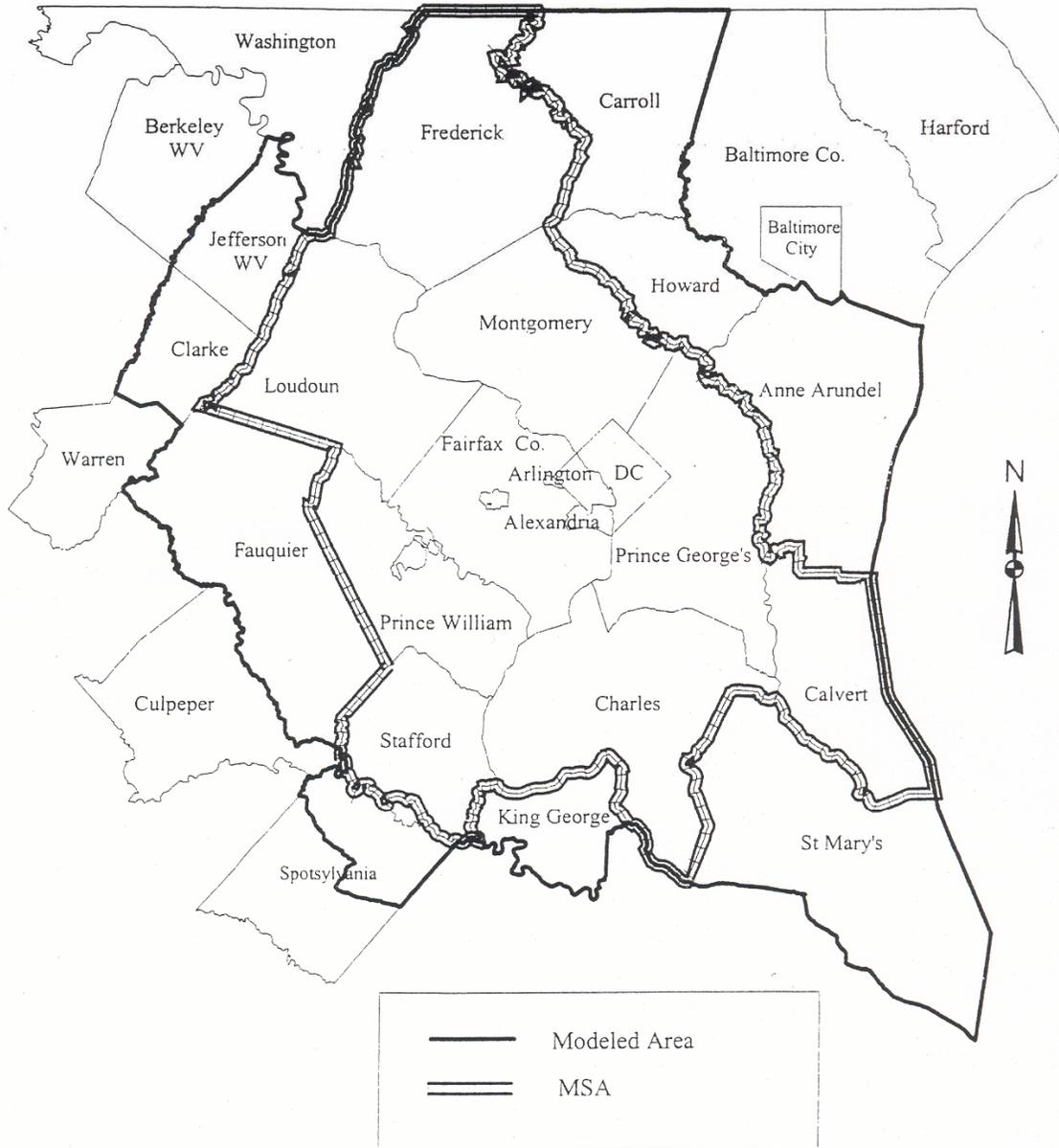
Net emissions for each forecast year are shown as the bottom line of the summary table. Emissions reductions associated with the TCMs included in the SIP for 2005 and the TERMS benefits from past planning and programming activities (documented in Attachment E) are also listed. Mobile source emissions are seen to be substantially less than the mobile budgets in 2010 (i.e., a difference of 37.73 tons/day for VOC and 111.79 tons/day for NOx), as well as in all other forecast years. Exhibits 7 and 8 present these VOC and NOx results in a graphical format. Note that the assessment criteria used in this analysis, as per EPA's July 1, 2004 final conformity rule, are based upon application of the existing 1-hour mobile source budgets on an interim basis. This interim budget test compares 2010 emissions (and beyond) with 2005 budget levels. This interim period will continue until state implementation plan activities determine emissions reduction requirements to attain the 8-hour standard, and establish new mobile emissions budgets for inclusion in the air quality plans for meeting this 8-hour standard. In recognition of the fact that estimated emissions are within the mobile source budget for each pollutant, no additional transportation emissions reduction measures are required to demonstrate conformity.

## **SUMMARY**

This report documents the technical methods and results of plan and program conformity analysis with respect to the 8-hour ozone standard. The analytical results described in this air quality assessment provide a basis for a determination by the TPB of conformity of the 2004 CLRP and the FY2005-2010 TIP, with the July 2004 transportation conformity regulations and all other requirements of the Clean Air Act Amendments of 1990.

Following: Exhibits 1-8  
Attachments A-E

EXHIBIT 1  
Washington, D.C. - Maryland - Virginia  
Modeled Area  
and  
Metropolitan Statistical Area

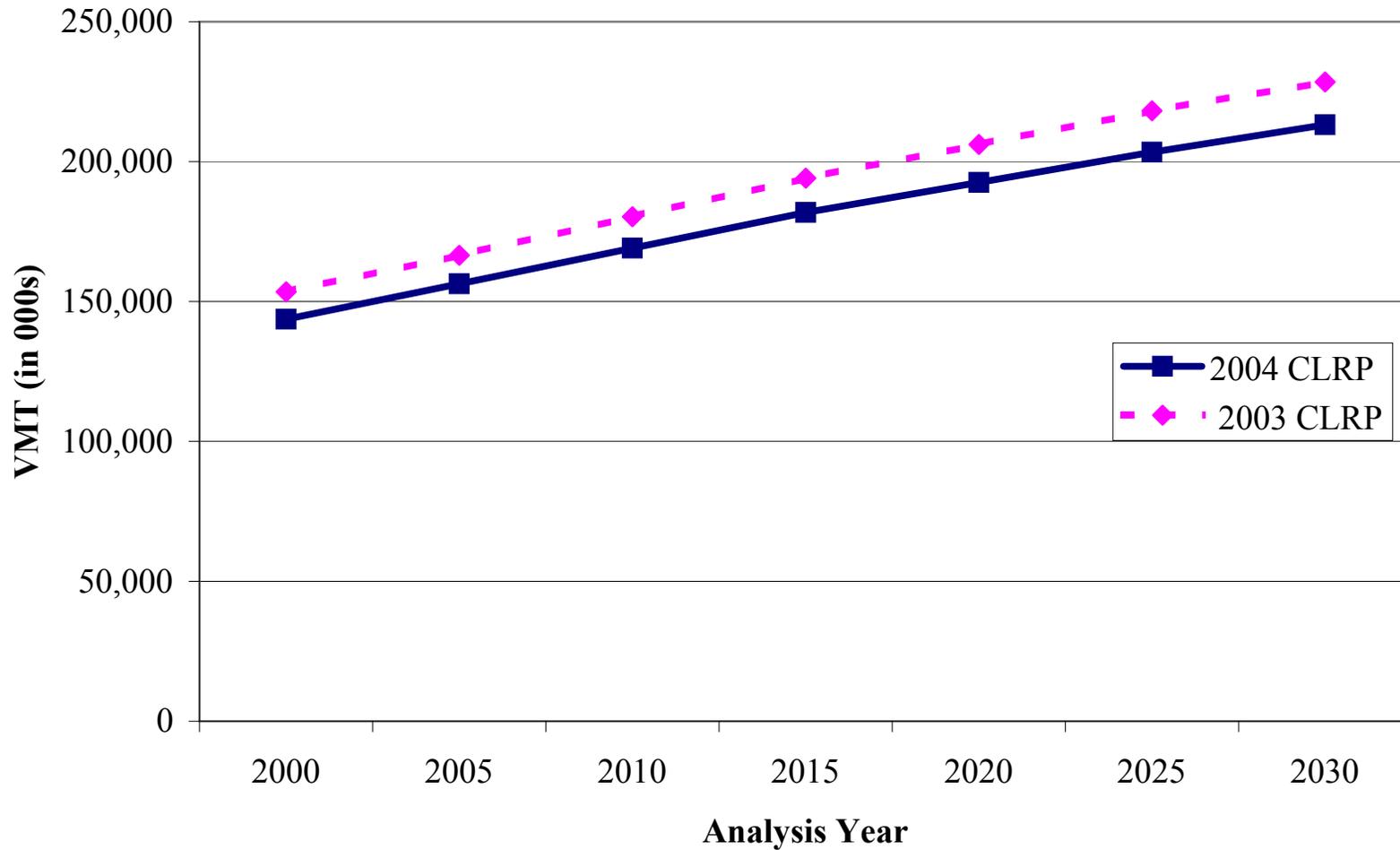


**Exhibit 2**  
**Travel Demand Summary**  
**Modeled Area Trips and Vehicle Miles Traveled (000's)**

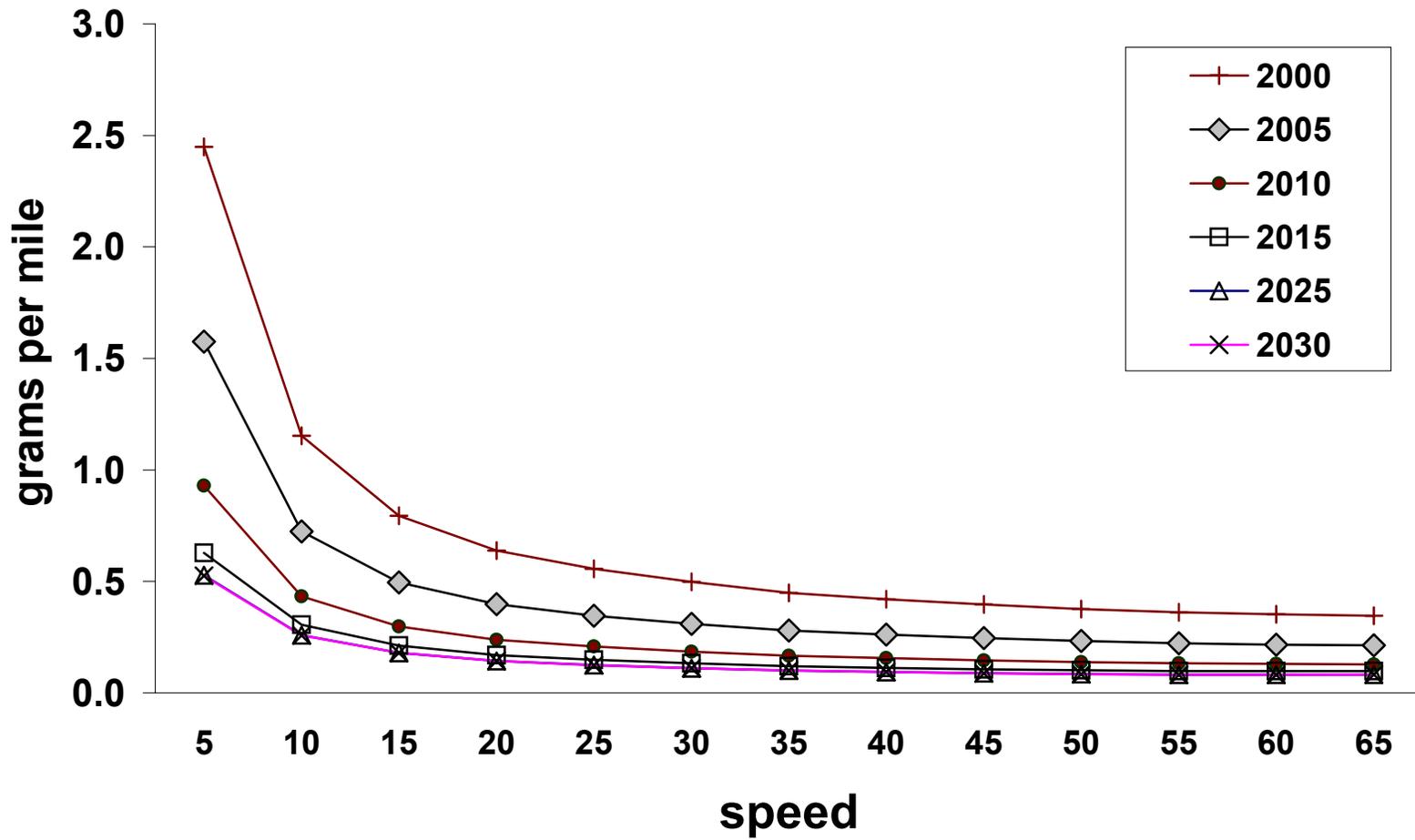
	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2025</u>	<u>2030</u>
<b>Transit Trips</b>	937.9	1,004.2	1,124.3	1,199.4	1,211.6
<b>Vehicle Trips</b>	20,603.3	22,235.0	23,509.3	25,801.7	26,802.0
<b>VMT</b>	156,286.3	169,294.6	181,797.9	203,344.6	213,139.5

### Exhibit 3

Comparison of Daily VMT by Analysis Year in Air Quality Conformity Analysis:  
2003 CLRP Vs. 2004 CLRP in the Modeled Area

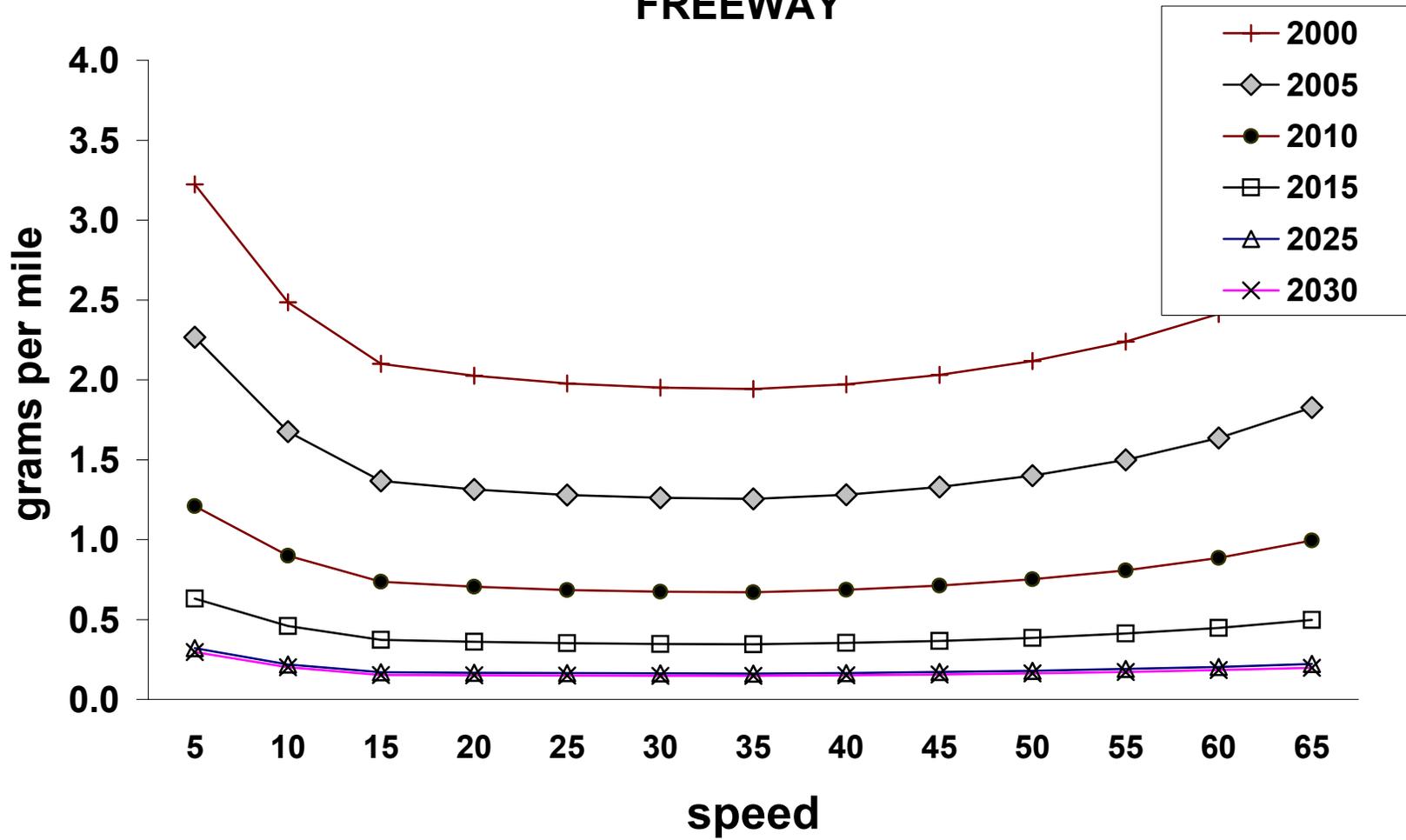


### Exhibit 4 TOTAL 2000-2030 VOC COMPOSITE MOBILE6.2 RUNNING EMISSION RATES FOR MONTGOMERY COUNTY FREEWAY



Note: 2000 data developed using Mobile 6

### Exhibit 5 TOTAL 2000-2030 NO<sub>x</sub> COMPOSITE MOBILE6.2 RUNNING EMISSION RATES FOR MONTGOMERY COUNTY FREEWAY



Note: 2000 data developed using Mobile 6.

**EXHIBIT 6**  
**AIR QUALITY CONFORMITY**  
**Summary Table - MSA**  
**Mobile Emissions Inventories**  
**for 2004 CLRP and FY 2005-2010 TIP**  
**(Tons/Day)**

	2005		2010		2015		2025		2030	
	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx
<b>I Network</b>										
Start	17.64	11.09	11.07	6.89	8.14	4.69	6.56	2.61	6.49	2.40
Running	40.85	186.11	26.66	109.77	20.28	60.34	18.51	31.07	19.05	29.44
Soak	11.45	-----	9.56	-----	5.97	-----	3.85	-----	3.95	-----
<b>II Off-Network</b>										
Diurnal	2.82	-----	2.06	-----	1.27	-----	0.71	-----	0.75	-----
Resting Loss	10.56	-----	7.97	-----	4.66	-----	2.19	-----	2.28	-----
Local Roads	6.79	9.16	4.48	5.63	3.25	3.40	2.96	2.14	3.03	2.10
School Buses	0.38	5.49	0.28	3.76	0.21	1.82	0.16	0.27	0.17	0.27
Transit Buses	0.27	5.55	0.12	3.86	0.12	2.05	0.12	0.35	0.12	0.25
Auto Access	1.00	1.43	0.67	0.85	0.51	0.57	0.43	0.39	0.40	0.36
<b>Total</b>	<b>91.77</b>	<b>218.83</b>	<b>62.86</b>	<b>130.76</b>	<b>44.39</b>	<b>72.89</b>	<b>35.48</b>	<b>36.82</b>	<b>36.23</b>	<b>34.82</b>

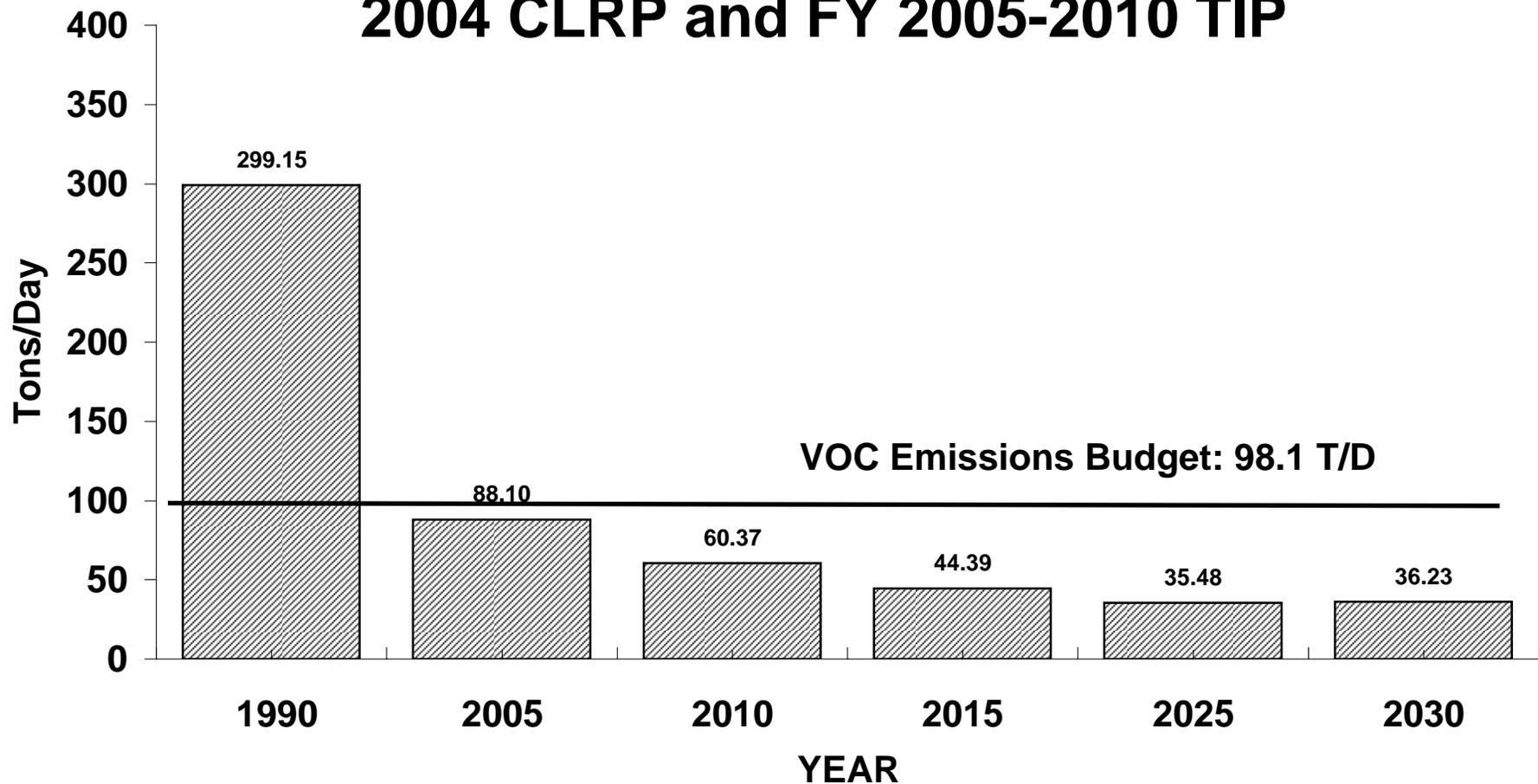
TCMs	-0.30	-0.70	-0.20	-0.49
TERMs	-3.37	-6.98	-2.29	-4.66
Net Emissions	88.10	211.15	60.37	125.61

Mobile Emissions Budgets:	98.10	237.40	98.10	237.40
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Budget Adherence Margin:	10.00	26.25	37.73	111.79
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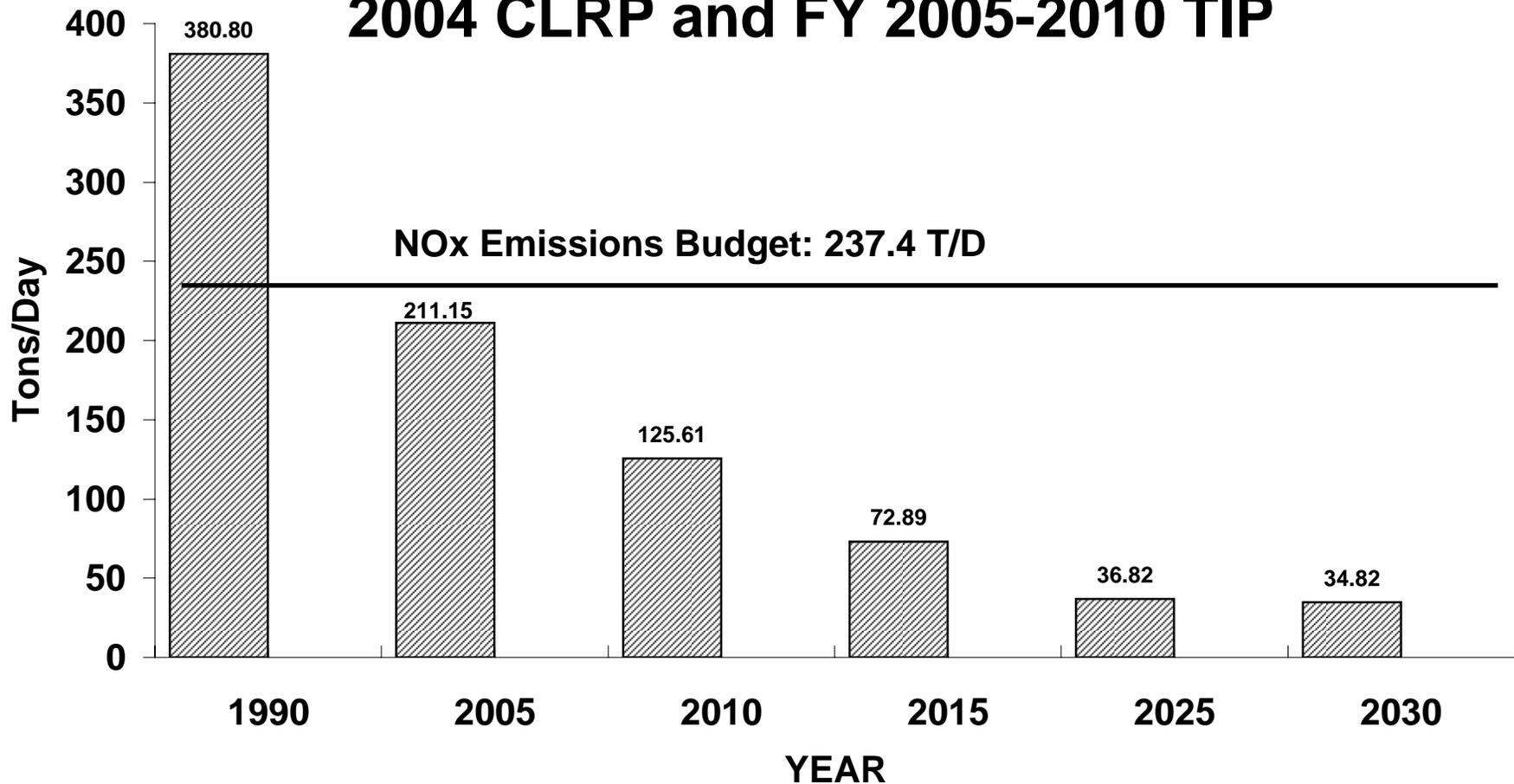
# EXHIBIT 7

## Mobile Source VOC Emissions Metropolitan Statistical Area 2004 CLRP and FY 2005-2010 TIP



# EXHIBIT 8

## Mobile Source NOx Emissions Metropolitan Statistical Area 2004 CLRP and FY 2005-2010 TIP



# **ATTACHMENT A**

September 15, 2004

The Honorable Thomas Dernoga  
Chairman  
Metropolitan Washington Air Quality Committee (MWAQC)  
Metropolitan Washington Council of Governments  
777 N. Capitol Street, N.E.  
Washington, D.C. 20002

Dear Mr. Dernoga:

As you are aware, the final rule regarding air quality conformity requirements for the 8-hour ozone standard was published in the July 1, 2004 Federal Register. These new regulations affect the air quality conformity planning responsibilities of the National Capital Region Transportation Planning Board (TPB). Specifically, the TPB must demonstrate that its plans and programs adhere to conformity requirements with respect to the new standards by June 15, 2005 or face a conformity lapse. These requirements include the use of an interim emissions budget test for milestone analysis years, including 2010, the new attainment date for the 8-hour standard.

For the Washington, DC-MD-VA nonattainment area, the 8-hour nonattainment boundary is smaller than the 1-hour boundary, since Stafford County has been removed from the Washington nonattainment area for the 8-hour standard. In these circumstances, EPA's conformity rule provides two options for conducting a conformity analysis prior to the setting of new mobile budgets under the 8-hour standard: use of revised 1-hour budgets, removing Stafford County emissions from the 1-hour budgets and mobile emissions estimates (option 1); or use of the existing 1-hour budgets, retaining Stafford County in both the budgets and mobile emissions estimates (option 2).

In response to EPA's new requirements, the TPB has prepared two items for public comment and interagency consultation:

1. A scope of work for performing the 8-hour conformity assessment (see Enclosure 1. 8-Hour Ozone Standard Conformity Assessment, Scope Of Work), and
2. A listing of 2010 project elements (see Enclosure 2. 2004 CLRP and FY2005-2010 TIP Air Quality Conformity Inputs).

As noted in the work scope, TPB recommends use of the existing MWAQC 1-hour

budgets, retaining Stafford County in both the budgets and emissions estimates (option 2). These 1-hour budgets are associated with the results of MWAQC's latest nonattainment planning for the Washington region as a severe nonattainment area under the 1-hour standard. As the budget levels include Stafford County, the second fastest growing county in the region, the option 2 budget comparison test represents the more stringent of the two tests, consistent with the latest technical methods applied in developing the region's emissions picture. Use of these 1-hour budget levels would also enable the analysis to be accomplished in less calendar time, which is important to the region given the one year time frame for completing the analysis, including all federal approvals, by June 15, 2005.

The TPB is currently undertaking a conformity assessment using the 1-hour ozone and winter carbon monoxide criteria for the 2004 CLRP and FY2005-2010 TIP, with a draft report scheduled for October 1, 2004 and TPB action scheduled for November 17, 2004. The proposed 8-hour work scope is a supplement to the ongoing 1-hour conformity analysis. As noted in the work scope schedule, the supplemental analysis is to be undertaken immediately following the 1-hour analysis, with a draft report scheduled for December 15, 2004 and TPB action on January 19, 2005. This schedule is designed to permit the TPB and subsequent federal approvals to occur well in advance of the June 15, 2005 deadline, so that the region may avoid a conformity lapse.

The TPB would appreciate MWAQC's review and comment on the enclosed scope of work and listing of 2010 project elements. The TPB looks forward to a continuing close working relationship with MWAQC in meeting these important conformity requirements related to the 8-hour ozone standard.

Sincerely yours,

Christopher Zimmerman  
Chairman  
National Capital Region Transportation Planning Board

Enclosures (2)

# Metropolitan Washington Air Quality Committee

Suite 300, 777 North Capitol Street, N.E. Washington , D.C. 20002-4239 202-962-3358 Fax: 202-962-3203

October 13, 2004

Honorable Christopher Zimmerman, Chair  
National Capital Region Transportation Planning Board  
777 North Capitol Street, NE  
Washington, D.C. 20002

Dear Chair Zimmerman:

The Metropolitan Washington Council of Governments Air Quality Committee (MWAQC) has received your letter of September 15, 2004 and we appreciate the opportunity to provide comments on 8-hour ozone standard conformity assessment scope of work.

In July EPA released its 8-hour ozone transportation conformity guidance, outlining options for areas like the Washington, DC-MD-VA nonattainment area that have existing mobile budgets for the one-hour ozone standard. The region is required to conduct an 8-hour conformity determination by June 15, 2005 or face a conformity lapse.

The Washington, DC-MD-VA nonattainment area for the 8-hour ozone standard is smaller than the area for the one-hour standard because Stafford County, Virginia is no longer included. TPB's preferred option for conducting the 8-hour conformity assessment is to use the existing one-hour mobile emissions budgets, keeping Stafford County in the budgets and in the mobile emissions estimates for all analysis years. MWAQC agrees with TPB to use the existing one-hour mobile budgets for the transitional 8-hour conformity. We agree that removing Stafford County from the analysis would be difficult considering resources and limited time required to complete the work.

MWAQC is pleased to note that TPB has begun the work of collecting the information needed to code the 2010 network to accommodate the new milestone year for the 8-hour analysis. As currently planned, the TPB will first complete the 1-hour determination in November. Then, in January, TPB will complete the 8-hour conformity determination with a new analysis for 2010.

Thank you for the opportunity to comment on the 8-hour ozone conformity assessment scope of work. We look forward to working closely with you on making further improvements to the region's air quality to meet the new 8-hour standard.

Sincerely,



Thomas Dernoga  
Chairman  
Metropolitan Washington Air Quality Committee

# **ATTACHMENT B**

## 8-HOUR OZONE STANDARD CONFORMITY ASSESSMENT

### SCOPE OF WORK

#### Supplement to the Air Quality Conformity Assessment of the 2004 Constrained Long Range Plan Amendments and FY2005-2010 Transportation Improvement Program

#### I. INTRODUCTION

On April 15, 2004 the Environmental Protection Agency (EPA) designated 474 counties that exceeded the health-based standards for 8-hour ozone as non-attainment areas. The 8-hour ozone standard, 0.08 parts per million (ppm), averaged over eight hours, replaces the 1-hour standard of 0.12 ppm, measured in hourly increments, that has been in place since 1979. The EPA classified each ozone non-attainment area based on the severity of its ozone problem. The agency created five areas of classification: marginal, moderate, serious, severe, and extreme. The Washington, DC-MD-VA area was designated moderate. Areas with a classification of moderate must achieve attainment status by June 15, 2010. Non-attainment areas are required to submit to EPA a state implementation plan (SIP) to define the expected method for reducing the ozone level in the air and emissions of ozone precursors.

On July 1, 2004 the EPA published the final rule for the transportation conformity under the new 8-hour ozone standard. There are four potential scenarios into which each non-attainment area can be categorized: *Scenario 1*- Areas where the 8-hour ozone area boundary is exactly the same as the 1-hour ozone area boundary; *Scenario 2*- Areas where the 8-hour boundary is smaller than the 1-hour boundary, (*i.e.*, the 8-hour area is completely within the 1-hour area); *Scenario 3*- Areas where the 8-hour boundary is larger than the 1-hour boundary (*i.e.*, the 1-hour area is completely within the 8-hour area); and *Scenario 4*- Areas where the 8-hour boundary partially overlaps the 1-hour area boundary. The Washington DC-MD-VA non-attainment area falls under *Scenario 2*, with Stafford County in the 1-hour boundary, but not in the 8-hour boundary.

In *Scenario 2* areas, conformity must generally be shown using one of the following two versions of the budget test: *Option 1*- Use revised 1-hour budgets for the 8-hour area, removing the extra areas' (for this region, Stafford County) emissions from budgets and from updated CLRP/TIP emissions estimates, *Option 2* – Use the existing 1-hour budgets for the 1-hour area, retaining all (including Stafford County) emissions in both the budgets and the updated CLRP/TIP emissions. The consultation process must determine the choice between *Option 1* and *Option 2*. Staff recommends *Option 2* because Stafford County is the second fastest growing county in the region, so *Option 2* is the more stringent test. Additionally, less calendar time is needed for *Option 2* than for *Option 1* because there would be no need to develop revised budgets and emissions that exclude Stafford County.

For either *Option*, the 8-hour ozone standard for a “moderate” area requires an analysis of the 2010 attainment year. The region must demonstrate that the plan and program conform to the new 8-hour requirements by June 15, 2005 or suffer a lapse. Because the conformity requirements for this analysis were not specified when COG/TPB staff developed the original scope of work for the air quality conformity assessment of the 2004 Constrained Long Range Plan (CLRP) and the FY2005-2010 Transportation Improvement Program (TIP), a supplemental work plan is necessary.

This scope of work presents an outline of the work tasks to address the conformity requirements of the 8-hour ozone standards; it supplements the ongoing work activities directed at the 1-hour standards to ensure that all requirements are addressed in performing the Air Quality Conformity Assessment of the 2004 CLRP and FY2005-2010 TIP.

## II. REQUIREMENTS AND APPROACH

### A. Criteria (See Exhibit 1)

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

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

**B. Approach** The analytical approach is similar to that applied and documented in the development of the Washington area’s severe area ozone SIP. In addition to the highlighted elements below, explicit inputs include: a summary list of major policy and technical input assumptions, shown as Attachment A; and all transportation network elements which were finalized at the April 21, 2004 TPB meeting and supplemented, in September, 2004, to clarify completion dates for a 2010 forecast year.

1. The use of *Option 2* (retaining Stafford County in both budgets and emissions estimates).
2. Regionally significant projects
3. Round 6.4A Cooperative Forecasts
4. Expanded cordon (2191 zone) networks and model set (Methodology as described in the Metropolitan Washington Council of Governments, COG/TPB Travel

Forecasting Model, Version 2.1/TP+, Release D, Report. Refinements to Version 2.1 Release C addressed in Version 2.1 Release D include:

- use of updated toll analysis methods
  - updated speed / capacity tables
  - revised volume delay function for freeways
  - minimized model adjustment factors
  - bus speed / highway congestion relationships
  - speed feedback revisions to ensure consistency of travel speeds throughout the process
5. MOBILE6.2 model emission factors, consistent with the procedures utilized to establish the latest VOC and NOx mobile source emissions budgets within the severe area SIP
  6. Refinements developed as part of the SIP include: use of 2002 vehicle registration data for all jurisdictions; updated VMT mix procedures using national trends in vehicle fleet characteristics together with local data on light duty versus heavy duty vehicle use; updated databases for public transit and school buses, park and ride lot use, and travel on local roads; and post-processor estimation
  7. VOC and NOx emissions budgets
  8. MSA-based geography

### **III. CONSULTATION**

1. Execute TPB consultation procedures as outlined in the consultation procedures report adopted by the TPB on May 20, 1998.
2. Participate in meetings of MWAQC, its Technical Advisory Committee and its Conformity Subcommittee to discuss the scope of work activities, TERM development process, and other elements as needed; discuss at TPB meetings or forums, as needed, the following milestones:
  - Project solicitation
  - Scope of work
  - TERM proposals
  - Project submissions: documentation and comments
  - Analysis of TERMS, list of mitigation measures
  - Conformity assessment: documentation and comments
  - Process: comments and responses

#### **IV. WORK TASKS**

1. Receive clarification of project completion dates in the 2004 CLRP / FY2005-2010 TIP conformity table to ascertain that inputs for the 2010 forecast year network are appropriate.
  - No change to previously defined forecast year networks (2005, 2015, 2025, 2030)
2. Utilize Round 6.4A Cooperative Forecasts
  - Households by auto ownership, population and employment
  - Zonal data files
3. Utilize 1990 and 2002 base conditions developed in the severe area SIP process; utilize 2005, 2015, 2025, and 2030 conditions developed in the 1-hour ozone conformity assessment of the 2004 CLRP and FY2005-2010 TIP.
4. Prepare 2010 highway and transit networks
  - Update highway database
  - Update GIS highway network
  - Filter database to create 2010 highway network
  - Rebuild network for modeling
  - Update / edit transit files
5. Prepare 2010 ozone attainment year travel and emissions estimates
  - Execute travel demand modeling
  - Perform transit “capacity constraint” procedures
  - Apply Mobile6.2 emission factors based upon 2004 CLRP work
  - Calculate emissions
6. Analyze results of above technical analysis
  - Reductions from 1990 and 2002 base
  - VOC and NOx emissions budgets
  - With review by the Travel Management Subcommittee, the Technical Committee and the TPB, identify and recommend additional measures should the plan or program fail any test and incorporate
7. Assess conformity and document results in a report
  - Document methods
  - Draft conformity report
  - Forward to technical committees and policy committees
  - Make available for public and interagency consultation

- Receive comments
- Address comments and present to TPB for action
- Finalize report and forward to FHWA, FTA and EPA

## **V. SCHEDULE**

The schedule for the execution of these work activities is shown in Exhibit 2, attached. This schedule shows the adoption of the 8-hour conformity determination by the TPB in January, which allows sufficient time for distribution, review and final approval by federal agencies in order to meet the June 15, 2005 deadline for avoiding a conformity lapse.

# Exhibit 1

## Conformity Criteria

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### All Actions at all times:

Sec. 93.110	Latest planning assumptions.
Sec. 93.111	Latest emissions model.
Sec. 93.112	Consultation.

### Transportation Plan:

Sec. 93.113(b)	TCMs.
Sec. 93.118 or Sec. 93.119	Emissions budget or Emission reduction.

### TIP:

Sec. 93.113(c)	TCMs.
Sec. 93.118 or Sec. 93.119	Emissions budget or Emission reduction.

### Project (From a Conforming Plan and TIP):

Sec. 93.114	Currently conforming plan and TIP.
Sec. 93.115	Project from a conforming plan and TIP.
Sec. 93.116	CO and PM10 hot spots.
Sec. 93.117	PM10 control measures.

### Project (Not From a Conforming Plan and TIP):

Sec. 93.113(d)	TCMs.
Sec. 93.114	Currently conforming plan and TIP.
Sec. 93.116	CO and PM10 hot spots.
Sec. 93.117	PM10 control measures.

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

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

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

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

### **Sec. 93.112 Criteria and procedures: Consultation.**

Conformity must be determined according to the consultation procedures in this subpart and in

the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450.

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

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

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

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

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

The project must come from a conforming plan and program.

**Sec. 93.116 Criteria and procedures: Localized CO and PM10 violations (hot spots).**

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

**Sec. 93.117 Criteria and procedures: Compliance with PM10 control measures.**

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

**NOTE:** See EPA's August 15, 1997 conformity regulations for the full text associated with each section's requirements.

Exhibit 2

**PROPOSED 8-HOUR OZONE STANDARD SUPPLEMENT TO  
THE YEAR 2004 CLRP AND FY 2005-2010 TIP  
AIR QUALITY CONFORMITY SCHEDULE**

September 3, 2004	TPB Technical Committee Reviews Draft Work Scope and Conformity Project Input Table
*September 15, 2004	TPB Releases Draft Work Scope and Project Inputs for Public Comment and Inter-Agency Review
*October 20, 2004	TPB Reviews Public Comments, Approves Draft Scope of Work and Project Submissions for Inclusion in the 8-Hour Air Quality Conformity Analysis
*December 15, 2004	TPB Receives Briefing on, and Releases Draft 8-Hour Air Quality Conformity Determination for Public Comment and Inter-Agency Review
*January 19, 2005	TPB Reviews Public Comments on Draft Document, Approves Responses to Comments, and Adopts the 8-Hour Air Quality Conformity Determination

\*TPB Meeting

**POLICY AND TECHNICAL INPUT ASSUMPTIONS  
8-HOUR OZONE STANDARD CONFORMITY ASSESSMENT**

1. Land Activity

- Round 6.4A Cooperative Forecasts

2. Policy and Project Inputs

- Highway, HOV and transit projects and operating parameters
- Financially constrained project submissions advanced by the TPB on 4/21/2004, and supplemented, in September, 2004, to clarify completion dates for a 2010 forecast year.

3. Travel Demand Modeling Methods

- 'Version 2.1 D' Travel Model
- I-66 (inside the beltway) at HOV-3 in 2010
- Transit "capacity constraint" procedures

4. Emission Factors

- Emission factors methods as developed and applied in the SIP and in the 2004 CLRP conformity process: MOBILE6.2, 2002 registration data, VMT mix specific to each analysis year
- Enhanced I/M in DC, MD, and VA, using state-specified standards

5. Emissions Modeling Methods / Credits

- Updated post-processor methods as developed in the 1-hour 2004 CLRP
- Offline emissions analyses

6. Conformity Assessment Criteria

- 8/15/97 EPA regulations (as modified by the 3/2/99 court decision and subsequent guidance), including 1/1/95 technical requirements, and 7/01/04 EPA regulations stating the transportation conformity rule amendments for the new 8-hour ozone standards; use of severe area SIP mobile source emissions budgets
- Analysis years: 2005, 2010, 2015, 2025, 2030

# **ATTACHMENT C**

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Highway and HOV)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Facility		Lanes		Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
							from	to	from	to			
<b>District of Columbia</b>													
DCDOT		Construct		Klingle Road Reconstruction	Porter Street	Woodley Road						2007	Yes
DCDOT		Construct		Minnesota Ave. NE ext.	Sheriff Rd	Meade St. N.E.						2009	Yes
<b>Maryland</b>													
<b>MDOT Freeway</b>													
MDSHA	MI4	Widen	Approved	I-70 - Phases 2B, 2C, 2D, 3 and 4	Mount Phillip Road	MD 144FA	1	1	4	6	No	2010	Yes
MDSHA	MI1k	Construct	Approved	I-95/I-495 (Capital Beltway)	Branch Avenue Metro Access		1	1	8	8	No	2010	Yes
MDSHA	VA	Widen	Approved	I-95/I-495 Woodrow Wilson Bridge	MD 210 Interchange	Virginia Line	1	1	6	12	Yes	2008	Yes
MDSHA	MI1m	Construct	Pending	I-95/I-495/Arena Drive Interchange	MD 214	MD 202	1	1	8	8	No	2010	Yes
MDSHA	MP12	Construct	Pending	Intercounty Connector	I-270	I-95 / US 1	0	1	0	6	No	2010	Yes
<b>MDOT Primary</b>													
MDSHA	MP9	Widen	Pending	MD 2/4	south of MD 765	north of Stoakley Road	2	2	4	6+2	No	2010	No
MDSHA		Construct	Approved	MD 4 (Pennsylvania Avenue)	Interchanges at Westphalia Rd., Suitland Pkwy., Dower		2	5	4	4	No	2010	Yes
MDSHA	MP3a	Upgrade/W	Approved	MD 4	MD 223	I-95/I-495	2	5	4	6	No	2010	No
MDSHA	MP4k	Construct	Approved	MD 5 Relocated at Hughesville	End of divided highway south of Hughesville	End of divided highway north of Hughesville	0	5	0	4	No	2010	No
MDSHA		Construct	pending	US 15 Catocctin Mountain Highway	MD 26 Liberty Road		2	2	4	4	No	2010	Yes
MDSHA		Upgrade	approved	US 29 (Columbia Pike)	Briggs Chaney Road		2	5	6	6	Yes	2006	Yes
MDSHA		Construct	pending	MD 75 Relocated	I-270	e. of MD 355	0	3	4	4	No	2010	Yes
<b>MDOT Secondary</b>													

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Highway and HOV)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Facility		Lanes		Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
							from	to	from	to			
MDSHA	MS6b	Widen	Approved	MD 124 (Woodfield Road)	Midcounty Highway	Warfield Road	2	2	2	6	No	2010	Yes
MDSHA	MS30	Widen/Con	Approved	MD 414 Extended	MD 210	I-295	0	2	0	4	Yes	2008	Yes
MDSHA	MS18h	Widen	Approved	MD 450 (Annapolis Road)	MD 193	Stonybrook Drive	2	2	2	4/6	Yes	2006	Yes
MDSHA	MS20c	Construct	Approved	MD 475 (East Street Extended)	South Street	proposed Monocacy Boulevard	0	3	0	4	No	2010	Yes
<b>Montgomery County</b>													
Mont.Co.	nrs	Construct		Burtonsville Access Rd.	MD 198	School Success Rd.	0	4	0	2		2010	Yes
Mont.Co.				Century Blvd./Crystal Rock Loop	existing Century Blvd.	Crystal Rock Drive		3		4	No	2010	No
Mont.Co.		Construct		Chapman Avenue	Randolph Road	Old Georgetown Road	0	3	0	2	No	2010	No
Mont.Co.	MC38a	Construct		Citadel Avenue Extended	dead end of existing road south of Marinelli Road	Nicholson Lane	0		0		No	2006	Yes
Mont.Co.	MC5c	Widen		Father Hurley/ Ridge Rd.	I-270	existing MD 27	2	2	4	6	no	2010	No
Mont.Co.	MC7a	Widen		Goshen Rd. Fac. Planning	Odenhal Avenue.	Warfield Road	3	3	2	4	no	2010	No
Mont.Co.	MC41	Widen		Longdraft Road	MD 124	MD 117	3	3	2	4	No	2010	No
Mont.Co.		Study		M-83 (with MD 118 Ext. and Middlebrook Rd. Ext. widening projects below)	MD 27 (Ridge Road)	Montgomery Village Avenue	0	2	0	4-6	No	2006 for study	No
Mont.Co.	MC15	Construct	N/A	Montrose Parkway West	Montrose Road (Tower Oaks Blvd.)	old' Old Georgetown Road	0	2	0	4	No	2010	No
Mont.Co.	MC30	Construct		Nebel St Extended	Randolph Rd	Bou Ave/Chapman Ave	0	3	0	4		2007	Yes
Mont.Co.	MC28	Construct	N/A	Stringtown Rd. Ext.	I270/ MD 121 int.	existing Stringtown Rd. @ MD 355	0	3	0	4	No	2007	Yes
Mont.Co.	MC22			Valley Park Dr.	e.of MD 27	exist. Valley Park Dr.						2006	Yes

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Highway and HOV)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Facility		Lanes		Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
							from	to	from	to			
Mont.Co.	MC13	Construct		Woodfield Rd. ( MD 124 Ext.)	1200' North of MD 108	MD 27	0	2	0	2		2007	Yes
<b>Prince Georges County</b>													
PG Co.	PGS6	Widen	N/A	Ammendale/Virginia Manor Road	I-95	west of US 1	3	3	2	6	Yes	2006	Yes
PG Co.	PGS74b	Construct	N/A	Bell Station Road	Annapolis Road (MD 450)	Church Road	0	4	0	4	Yes	2006	No
PG Co.	PGS75	Widen	N/A	Berry Road	Livingston Road	Accokeek Road (MD 373)	4	4	2	4	No	2010	No
PG Co.	PGS76	Widen	N/A	Briggs Chaney Road	Montgomery County line	Old Gunpowder Road	4	4	2	4	Yes	2010	No
PG Co.	PGS16b	Construct	N/A	Campus Way North Extended	south of Lottsford Road	Evarts Drive	0	4	0	4	No	2010	No
PG Co.	PGS17	Widen	N/A	Cherry Hill Road	Montgomery County line	Baltimore Avenue (US 1)	3	3	2	4	No	2006	Yes
PG Co.	PGS34a	Widen	N/A	Hill Road	Central Avenue (MD 214)	ML King Jr Highway (MD 704)	4	4	2	4	No	2010	Yes
PG Co.	PGS88	Construct	N/A	Iverson St. Extended	Wheeler Road	19th Avenue	0	4	0	4	No	2010	Yes
PG Co.	PGS40a	Widen	N/A	Lottsford Road	Landover Road (MD 202)	Enterprise Road (MD 193)	3	3	2	4	No	2006	Yes
PG Co.		Construct	N/A	National Harbor Main Circulation Roads	I-95/I-295 Interchange	Waterfront Parcel, National Harbor	0	4	0	4/6		2007	Yes
PG Co.	PGS52	Widen	N/A	Oxon Hill Road	Fort Foote Rd - North	MD 210	4	4	2	4	No	2010	Yes
PG Co.		Construct		Regency Parkway/ Regency Lane	Regency Lane	Hil-Mar Drive	0	4	0	4		2007	Yes
PG Co.	PGS56a	Widen	Approved	Ritchie Road/Forestville Road	Alberta Drive	MD 4 Pennsylvania Avenue	4	4	2	4	Yes	2009	Yes
PG Co.	PGS62a	Widen	N/A	Suitland Road	Allentown Road (MD 337)	Suitland Parkway	3	3	2	4	No	2009	Yes
PG Co.	PGS42	Widen	N/A	Woodyard Road (MD 223)	Rosaryville Road	Dower House Road	2	2	2	4	No	2007	No
PG Co.	PGS42b	Construct	N/A	Woodyard Road Relocated (MD 223)	Piscataway Creek	Livingston Road	0	3	0	2	No	2010	No

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Highway and HOV)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Facility		Lanes		Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
							from	to	from	to			
<b>Frederick County</b>													
Fred.Co.	FS2	Construct	N/A	Monocacy Blvd	Hughes Ford Rd.	Gas House Pike	0	3	0	4	Yes	2006	No
<b>Anne Arundel County</b>													
<b>Carroll County</b>													
BMC	CA3A	Construct	N/A	Hampstead Bypass (MD 30)	Wolf Hill Dr	Brodbeck Rd		2	0	2		2007	
BMC	nrs	Reconstruct	N/A	MD 140 (reconstruct bridge)	MD 97 (north)	MD 27		1				2006	
<b>Howard County</b>													
BMC	HW20	Widen	N/A	Dorsey Run Rd	MD 175	MD 32		4	2	4		2010	
BMC	nrs	Construct	N/A	Dorsey Run Rd	MD 103	MD 175		4	0	2		2010	
BMC	nrs	Construct	N/A	Loop Road (new interchange)	@ MD 216 West							2006	
BMC	nrs	Construct	N/A	Loop Road (new interchange)	@ MD 216 East							2006	
BMC	HW8b	Widen	N/A	MD 216	West of US 29	Sanner Road		3	2	4		2010	
BMC	nrs	Construct	N/A	North Ridge Road	Carts Court	Rogers Ave and Town&County Blvd to US 40			-	2		2010	
BMC	HW11b	Widen	N/A	Rodgers Avenue	US 40	Courthouse Drive		3	2	4		2010	
<b>Virginia</b>													
<b>VDOT Freeway</b>													
VDOT	VI3b	Restripe	PCE-1	I-395 HOV (3 lanes total)	I-95	DC	1	1	2	3	No	2010	No
VDOT	VI1c	Widen	CE-4	I-66 HOV during peak	VA 234 (Prince Wm. Pkwy)	VA 234 Business (Sudley Rd.)	1	1	4	8	yes	2006	No

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Highway and HOV)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Facility		Lanes		Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
							from	to	from	to			
VDOT	VI1ca	Widen	CE-4	I-66 HOV during peak (5 lanes eb)	US 29 (Gainesville)	VA 234 (Prince William Parkway)	1	1	4	9	no	2010	Yes
VDOT	VI2p	Widen	CE-1	I-95 (provide 4th lane)	Newington	VA 123	1	1	6	8	No	2010	Yes
VDOT	VI2k	Widen	SEIS-2	I-95 (Wilson Bridge and approaches)	US 1	MD 210	1	1	6	12	yes	2009	Yes
VDOT	VI2l	Restripe	PCE-1	I-95 HOV (3 total)	Quantico Creek	I-495	1	1	2	3	no	2010	No
VDOT	VI2ab	Reconstruct	Pending	I-95 Interchange	@ VA 642 (Lorton Road)		1	1	-	-	No	2010	No
VDOT	VI2c	Reconstruct	approved	I-95/395/495 Interchange			1	1	-	-	Yes	2007	Yes
VDOT	MW1	Widen	Pending	Dulles Airport Access Road	Dulles Airport	VA 123	1	1	4	6	No	2010	No
VDOT	VP21e	Widen	N/A	Dulles Greenway	VA7/15 Bypass	Goose Creek Bridge	1	1	4	6	No	2006	No
<b>VDOT Primary</b>													
VDOT	nrs	Reconstruct	Pending	US 1	@ VA 619 (Joplin Road)	USMC HERITAGE CENTER ACCESS	-	-	-	-	No	2007	Yes
VDOT	VP1o	Widen	Approved	US 1 (Neabsco Creek Bridge)	VA 610 (Neabsco Road)	VA 638 (Neabsco Mills Road)	2	2	4	6	No	2009	yes
VDOT	VP1p	Widen	Pending	US 1 (part of 1/123 interchange)	Occoquan Rd.	Annapolis Way	2	2	4	6	No	2008	No
VDOT	nrs	Reconstruct	Pending	US 1 Interchange	@ Russell Road		1	1	-	-	No	2010	No
VDOT	VP2ma	Widen	Pending	VA 7	Rolling Holly Drive	Reston Parkway	2	2	4	6	No	2009	Yes
VDOT	nrs	Reconstruct	Pending	VA 7	@ VA 711 (Williams Gap Road)		2	2	4	4	No	2006	Yes
VDOT	nrs	Reconstruct	Pending	VA 9	@ VA 662 (Clarks Gap Road)		3	3	-	-	No	2006	Yes
VDOT	VP4fa	Widen	N/A	US 15 (James Madison Highway)	I-66	VA 234	2	2	2	4	No	2006	Yes
VDOT	nrs	Reconstruct	N/A	US 15 (James Monroe Highway)	Whites Ferry Rd.	Lucketts Road	3	3	2	2	No	2006	Yes

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Highway and HOV)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Facility		Lanes		Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
							from	to	from	to			
VDOT	nrs	Reconstruct	N/A	US 15 (James Monroe Highway)	Lucketts Road	Maryland State Line	3	3	2	2	No	2006	No
VDOT	nrs	Reconstruct	N/A	US 15 (James Monroe Highway)	Village of Lucketts	Vicinity of VA 662	3	3	2	2	No	2006	No
VDOT	nrs	Reconstruct	Pending	VA 27 Interchange	@ VA 244 (Columbia Pike)		-	-	-	-	No	2010	No
VDOT	nrs	Recons/Wid	Pending	VA 28	Bridge over Broad Run	Replace / Widen to ultimate width	3	3	2	6	No	2007	Yes
VDOT	VP6ea	Widen/Upgr	N/A	VA 28	Dulles Toll Rd.	VA 606 (Old Ox Rd.)	2	1	6	6	No	2008	No
VDOT	VP6eb	Construct		VA 28 Interchange	@ VA 209 (Innovation Ave.)		-	-	-	-	No	2008	No
VDOT	VP6v	Construct	N/A	VA 28 PPTA (Phase I) Interchange	@ VA 668 (McLearen Road)	SASM Interchange to VA 668 upgrade	2	1	6	6	No	2006	No
VDOT	VP6w	Construct	N/A	VA 28 PPTA (Phase I) Interchange	@ Sterling Boulevard	VA 606 to VA 625 upgrade	2	1	6	6	No	2006	No
VDOT	nrs	Construct	Pending	US 50 Traffic Circle	@ US 15 (Gilbert's Corner)		-	-	-	-	No	2010	Yes
VDOT	VP8q	Widen	Pending	US 50	VA 659 Relocated	VA 742 (Poland Rd.)	2	2	4/5	6	No	2010	No
VDOT	nrs	Reconstruct	Pending	US 50 Interchange	@ VA 120 (Glebe Road)		-	-	-	-	No	2010	No
VDOT	nrs	Reconstruct	Pending	US 50 Interchange	@ VA 27 (Washington Blvd.) @ Courthouse Road / 10th Street		-	-	-	-	No	2010	No
VDOT	VP8o	Reconstruct	Pending	US 50 Interchange			-	-	-	-	No	2007	Yes
VDOT	VP10ob	Widen	Pending	VA 123 (Dolley Madison Blvd.)	DTR Ramps	VA 694 (Great Falls St.)	2	2	4	6	No	2010	No
VDOT	nrs	Construct	Approved	VA 123 Interchange	@ US 1		-	-	-	-	No	2008	Yes
VDOT	VP10g	Widen	Pending	VA 123	Route 1	Horner Road	2	2	4	6	No	2008	No
VDOT	VP10l	Widen	Pending	VA 123 (Occoquan River Bridge)	South Approach	VA 772 North	2	2	2	6	yes	2006	Yes
VDOT	VP12b	Widen	Approved	VA 234 (Dumfries Road)	Country Club Dr.	Eclipse Dr.	2	2	2	4	No	2006	Yes

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Highway and HOV)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Facility		Lanes		Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
							from	to	from	to			
VDOT	VP12a	Widen	Pending	VA 234 (Dumfries Road)	Eclipse Dr.	Snowfall Dr.	2	2	2	4	Yes	2006	Yes
VDOT	VP12l	Widen	Approved	VA 234 (Dumfries Road)	VA 234 Bypass (at Limstrong, VA 649)	SCL of Manassas		2	2	4	No	2010	No
VDOT	VP12o	Construct	Pending	VA 234 (Manassas Bypass)	I-66	Loudoun County Line	-	2	-	4	No	2010	No
VDOT	nrs	Reconstruct	Pending	VA 236 (intersection/spot improvements)	Pickett Road	Lake Drive	2	2	4	4	No	2008	Yes
VDOT	nrs	Reconstruct	Pending	VA 236 EB	@ VA 620 (Braddock Road)		-	-	-	-	No	2006	Yes
VDOT	nrs	Reconstruct	Pending	VA 236 WB	@ VA 620 (Braddock Road)		-	-	-	-	No	2006	Yes
<b>VDOT Urban</b>													
VDOT	VU28c	Construct	Developer	Battlefield Parkway	Dulles Greenway	Sycolin Road	0	2	0	4	No	2006	No
VDOT	VU28d	Widen/upg	Pending	Battlefield Parkway / Lawson Rd.	Sycolin Road	Kincaid Boulevard	4	2	2	4	No	2010	Yes
VDOT	VU28da	Construct	Pending	Battlefield Parkway	Kincaid Boulevard	Route 7	0	2	0	4	No	2010	Yes
VDOT	VU28f	Construct	Pending	Battlefield Parkway	Fort Evans Road	Edwards Ferry Road	0	2	0	4	No	2010	No
VDOT	VU28a	Study	Pending	Battlefield Parkway	US 15 south of Leesburg	US 15 Bypass North	0	2	0	4/6	not coded	2010	No
VDOT	nrs	Construct	Pending	George Mason Blvd.	Univer. Dr @ Armstrong St.	Univ. Dr. @ Parking Entr.	0	4	0	2	No	2009	Yes
VDOT	VU35b	Construct	N/A	Mill Road Extension	Telegraph Rd.	DMV complex	-	3	-	2	No	2008	Yes
VDOT	VU30a	Widen	Pending	South Elden Street/Centreville Road	Worldgate Drive	Herndon Parkway	2	2	4	6	No	2006	Yes
VDOT	VU32	Widen	Pending	US 15 (South King Street)	Evergreen Mill Road	SCL of Leesburg	3	2	2	4	No	2007	Yes
VDOT	nrs	Construct	Approved	VA 28 Overpass & Interchg.	Overpass Norfolk-Southern RR B line	Interchange w/Wellington Rd.	2	2	4	4	No	2008	Yes
VDOT	VU6b	Widen	Approved	US 29 (Lee Highway)	Chain Bridge Road	Eaton Place	2	2	4	6	No	2010	Yes

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							from	to	from	to			
VDOT	VU29	Construct	Approved	VA 123 (Chain Bridge Road)	US 50	I-66	2	2	5	6	No	2010	Yes
VDOT	VU45	Widen	Approved	VA 234 (Dumfries Road)	South Corporate Limits	Hastings Drive	3	3	2	4	No	2010	No
VDOT	nrs	Widen	N/A	VA 234 (Sudley Road) 3rd NB lane	Dorsey Circle	Godwin Dr.	2	2	4	5	No	2006	No
VDOT	VU48b	Widen	Pending	Wellington Road	Godwin Drive	VA 28 (Nokesville Road)	3	3	2	4	No	2008	Yes
<b>Arlington Secondary</b>													
VDOT	AR26	Widen	Pending	N. Pershing Dr.	George Mason Dr.	VA 120	3	3	2	4	No	2010	No
VDOT	AR5a	Reconstruct	Pending	VA 244 (Columbia Pike)	Oakland St.	Washington Blvd.	2	2	4	4	No	2010	No
VDOT	AR19c	Reconstruct	Pending	Wilson Blvd.	N. Quincy	Washington Blvd.	2	2	4	4	No	2010	No
<b>Fairfax Secondary</b>													
VDOT	VSF2a	Widen	Pending	VA 608 (West Ox Road)	VA 6558 (Penderbrook Drive)	VA 6985 (Ox Trail)	3	3	2	4	No	2008	Yes
VDOT	VSF10e	Widen	Pending	VA 638 (Rolling Road)	VA 5297 (DeLong Dr.)	VA 6922 (Odell Street) / Fairfax County Parkway	3	3	2	4	No	2010	No
VDOT	FFX11a	Widen	Pending	VA 645 (Stringfellow Rd.)	US 50	VA 7100 (Fairfax County Parkway)	3	3	2	4	No	2010	No
VDOT	VSF18b	Widen	N/A	VA 657 (Centreville Road)	VA 8390 (Metrotech Dr.)	VA 668 (McLearen Road)	3	3	2	4	No	2008	No
VDOT	VSF18h	Widen	Pending	VA 657 (Centreville Road)	VA 608 (West Ox Rd)	VA 608 (Frying Pan Rd)	3	3	2	4	No	2009	Yes
VDOT	FFX17b	Widen	Pending	VA 666 (Monroe St.)	VA 665 (Fox Mill)	Herndon	3	3	2	6	No	2010	No
VDOT	VSF36	Relocate	N/A	VA 675 (Sunset Hills Rd.)	West of Edlin School	VA 675 (Crowell Road)	3	3	4	4	No	2010	No
VDOT	VSF24	Widen	N/A	VA 684 (Spring Hill Road)	VA 7 (Leesburg Pike)	VA 6034 (International Drive)	3	3	2	4	No	2007	Yes
VDOT	VSF25e	Widen	Pending	VA 7100 (Fairfax Co Pkwy HOV)	Rugby Rd.	US 50	2	2	4	4+2	No	2010	No

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							from	to	from	to			
VDOT	VSF25y	Upgrade/W	Pending	VA 7100 (Fairfax Co Pkwy HOV)	US 50	VA 7735 (Fair Lakes Pkwy)	2	5	4	4+2	No	2010	No
VDOT	VSF25z	Upgrade/W	Pending	VA 7100 (Fairfax Co Pkwy HOV)	VA 7735 (Fair Lakes Pkwy)	I-66	2	5	6	6+2	No	2010	No
VDOT	VSF25n	Construct	Approved	VA 7100 (Fairfax County Parkway)	VA 4600 (Fullerton Road)	VA 7900 (Franconia-Springfield Parkway)	0	1	0	6	No	2007	Yes
VDOT		Construct	Pending	VA 7100 Interchange	@ VA 7735 (Fair Lakes Pkwy) &	Monument Drive	2	5	-	-	No	2010	Yes
VDOT	VSF39	Widen	Pending	VA 7735 (Fair Lakes Pkwy) (3rd EB Lane)	VA 7100	Fair Lakes Circle	3	3	4	5	No	2010	No
VDOT	VSF26	Construct	Pending	VA 7900 HOV (Franconia-Springfield Parkway)	VA 7100 (Fairfax County Parkway)	VA 2677 (Frontier Drive)	5	5	-	2	No	2010	No
VDOT	FFX24c	Widen	Pending	VA 8460 (Stonecroft Blvd.)	VA 661 (Old Lee Rd.)	Willard Rd.	3	3	4	6	No	2010	No
<b>Loudoun Secondary</b>													
VDOT	VSL51	Construct	Pending	Atlantic Boulevard	VA 625 (Church Road)	VA 7	-	3	-	4	No	2008	No
VDOT	VSL10c	Construct	Pending	VA 607 (Loudoun County Pkwy)	VA 606 / VA 842	VA 772 / VA 607	-	3	-	4	No	2010	No
VDOT	VSL10ba	Widen	Pending	VA 607 (Loudoun County Pkwy)	VA 625 (Waxpool Road)	W&OD Trail	3	3	4	6	No	2010	No
VDOT	VSL10bb	Widen/Up grade	Pending	VA 607 (Loudoun County Pkwy)	W&OD Trail	Redskin Park Drive	4	3	2	6	No	2010	No
VDOT	VSL10bc	Widen/Up grade	Pending	VA 607 (Loudoun County Pkwy) (dirt road)	Redskin Park Drive	Gloucester Parkway	4	3	2	6	No	2010	No
VDOT	VSL10bd	Widen/Up grade	Pending	VA 607 (Loudoun County Pkwy)	Gloucester Parkway	VA 7	4	3	2	4	No	2007	No
VDOT	VSL12	Widen	Pending	VA 625 (Church Rd.)	VA 28	VA 637	3	3	2	4	Yes	2006	Yes
VDOT	VSL42	Widen/Up grade	Approved	VA 634 (Lockridge/Moran Road)	VA 606 (Old Ox Road)	Randolph Drive	4	3	2	4	No	2010	No
VDOT	VSL4d	Widen/Up grade	Pending	VA 659 (Belmont Ridge Road)	VA 659 Relocated	National Rec. & Park Ent.	4	3	2	4	No	2010	No
VDOT	VSL4e	Widen/Up grade	N/A	VA 659 (Gum Spring Rd.)	VA 620 (Braddock Road)	US 50	4	3	2	4	No	2006	No

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							from	to	from	to			
VDOT	VSL4f	Widen/Up grade	Pending	VA 659 (Gum Spring Rd.)	Prince William County Line	VA 620 (Braddock Road)	4	3	2	4	No	2010	No
VDOT	VSL40a	Widen	N/A	VA 901 (Claiborne Parkway)	VA 640 (Ashburn Farm Road)	W&OD Trail	4	3	2	4	No	2007	No
VDOT	VSL40b	Construct	N/A	VA 901 (Claiborne Parkway)	W&OD Trail	VA 7	0	3	0	4	No	2010	No
VDOT	nrs	Construct	Pending	VA 868 (Davis Dr.)	VA 606 (Old Ox Road)	VA 625 (Church Road)	-	4	-	4	No	2007	Yes
VDOT	VSL46	Construct	Pending	VA 1036 (Pacific Boulevard)	VA 606 (Old Ox Road)	Gloucester Parkway	-	3	-	4	No	2010	Yes
VDOT	VSL47	Widen/Up grade	N/A	River Creek Parkway	Riverside Parkway	VA 773 (Edwards Ferry Road)	4	3	2	4	No	2007	No
VDOT	VSL50	Widen/Up grade	Pending	VA 773 (Fort Evans Road)	Leesburg Town Limits	River Creek Parkway	4	3	2	4	No	2007	No
<b>Prince William Secondary</b>													
VDOT	VSP49b	Construct	Pending	Heathcote Boulevard	VA 676 (Catharpin Road)	US 15 (James Madison Highway)	0	3	0	4	No	2010	No
VDOT	VSP49	Construct	Pending	Heathcote Boulevard	US 29	VA 676 (Catharpin Road)	0	3	0	4	No	2010	No
VDOT	VSP54	Construct	N/A	North/South Road at Innovation	VA 840 (University Blvd.)	VA 674 (Wellington Road)/VA 660 (Bethlehem Road)	0	3	0	4	No	2010	Yes
VDOT	VSP39	Widen	Pending	Russell Road	I-95	Dunlap Avenue	4	3	2	4	No	2010	No
VDOT	VSP46b	Construct	Pending	VA 1566 (Sudley Manor Drive Extension)	VA 619 (Linton Hall Road)	VA 234 Bypass	0	4	0	4	No	2007	Yes
VDOT	VSP46	Construct	Pending	VA 1566 (Sudley Manor Drive Extension)	VA 234 Bypass	Chatsworth Drive	0	4	0	4	No	2007	No
VDOT	VSP2a	Widen/Up grade	Approved	VA 619 (Linton Hall Road)	US 29 (Lee Highway)	VA 675 (Glenkirk Road)	4	3	2	6	No	2006	Yes
VDOT	VSP2e	Widen/Up grade	Approved	VA 619 (Linton Hall Road)	VA 621 (Devlin Road)	VA 1566 (Sudley Manor Dr.)	4	3	2	4	No	2008	Yes
VDOT	VSP2b	Widen/Up grade	Approved	VA 619 (Linton Hall Road)	VA 675 (Glenkirk Road)	VA 621 (Devlin Road)	4	3	2	4	No	2006	No
VDOT	VSP3a	Widen/Up grade	N/A	VA 621 (Balls Ford Road)	VA 234 (Sudley Road)	Bethlehem Road	4	3	2	4	No	2010	No

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VDOT	VSP3b	Widen/Up grade	N/A	VA 621 (Balls Ford Road)	Bethlehem Road	VA 234 Bypass	4	3	2	4	No	2010	No
VDOT	VSP40a	Construct	Pending	VA 635 (Cherry Hill VRE Access Road)	US 1	Future VRE Station site	0	4	0	2	No	2007	Yes
VDOT	VSP5d	Widen	Pending	VA 640 (Minnieville Road)	VA 610 (Cardinal Drive)	VA 643 (Spriggs Road)	3	3	2	4	No	2006	Yes
VDOT	VSP15c	Widen	Pending	VA 640 (Minnieville Road)	VA 849 (Caton Hill Road)	VA 641 (Old Bridge Road)	3	3	2	4	No	2010	Yes
VDOT	Widen/Up grade	Widen	Pending	VA 784 (Rippon Boulevard Extension)	US 1 (Jefferson Davis Highway)	Rippon VRE Station	4	3	2	4	No	2010	No
VDOT	VSP56a	Construct	Pending	VA 840 (University Blvd.)	VA 674 (Wellington Road)	US 29 @ Ent. to Conway Robinson MSF	0	3	0	4	No	2006	Yes
<b>FAMPO</b>													
FAMPO	FAP5d	Widen		US 1	I-95	1 mile so. Of US 17 Bypass	2	2	4	6	No	2010	No
FAMPO	FAP6c	Widen		US 17 Bypass	I-95	Village Parkway	2	2	4	6	No	2010	No
FAMPO	FAS23a	Construct	Pending	VA 208 Bypass (Spotsylvania)	West of Ta River	East of Po River	0	3	0	2	ROW	2009	Yes
FAMPO	FAS23b	Construct	Pending	VA 208 Bypass (Spotsylvania)	East of Po River	West of Ni River	0	3	0	4	ROW	2007	Yes
FAMPO	nrs	Realign & Widen	EA compt	VA 208	Ni River	Po River			2	4	Yes	2010	Yes
<b>STAFFORD COUNTY SECONDARY</b>													
FAMPO	FAS7a	Widen	Compl.	VA 607	VA 626	VA 218	4	4	2	4	Yes	2006	Yes
FAMPO	FAS3c	Widen		VA 610 (Garrisonville Rd.)	VA 610 (existing 4 lane section)	VA 643	4	4	2	4	Yes	2008	Yes
FAMPO	FAS3da	Widen		VA 610 (Garrisonville Rd.)	US 1	VA 684 (Mine Rd.)	4	3	6	8	No	2008	Yes
FAMPO	FAS8	Reconstruct		VA 624	US 1	VA 626	4	4	2	4	No	2010	No
FAMPO	FAS5b	Widen		VA 630 (Courthouse Rd)	I-95	VA 648	4	4	2	4	No	2010	yes

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							from	to	from	to			
<b>SPOTSYLVANIA COUNTY SECONDARY</b>													
FAMPO	FAS22	Widen		VA 3 (Spotsylvania)	VA 1112	VA 626	2	2	4	6	No	2010	No
FAMPO	FAS18b	Widen		VA 620 (Harrison Rd)	I-95	US 1 Business			2	4	No	2010	Yes
FAMPO	FAS19	Widen		VA 636 (Hood Dr.)	US 1	VA 208	4	4	2	4	No	2010	
FAMPO	FAS20c	Widen		VA 639 (Bragg Rd.)	VA 618	VA 3	4	4	2	4	No	2008	Yes

**2004 CLRP AND FY2005-2010 TIP AIR QUALITY CONFORMITY INPUTS  
PROJECTS WITH COMPLETION DATES BETWEEN 2006 AND 2010  
(Transit)**

Agency	Project ID	Improv.	Environ. Review	Facility	From	To	Under Const. or ROW acquired?	Complt. Date or Status	In TIP?
<b><i>District of Columbia</i></b>									
DCDOT		Reconstruct		K St. Busway	Mt. Vernon Sq./7th St. NW	Wash.Circle / 23rd St. NW		2008	
<b><i>Maryland</i></b>									
MTA		Construct		Southern MD Commuter Bus Initiative	Park-and-Ride lots and increase bus service	in the MD 5 corridor		2010	Yes
MDOT		Implement		ICC Corridor Bus Service Improvements				2010	
<b><i>Montgomery County</i></b>									
Mont.Co.				Norbeck Road Park and Ride	Norbeck Road at Georgia Avenue			2010	Yes
Mont.Co.				Randolph Road Bus Enhancement				2010	No
<b><i>Virginia</i></b>									
VDOT		Constru	Pending	Park-and-Ride Lot	VA 7900 (F-S Pkwy.) PnR	@ Backlick Road North	No	2006	Yes
VRE		Constru	Pending	VRE - Cherry Hill Commuter Rail Station	Cherry Hill	Prince William County	No	2006	Yes
VRE		Impleme	Pending	Service Improvements (Reduce Headways)	Fredericksburg and Manassas lines		No	2010	No

# ATTACHMENT D



**Maryland Department of Transportation**  
The Secretary's Office

**Robert L. Ehrlich, Jr.**  
Governor

**Michael S. Steele**  
Lt. Governor

**Robert L. Flanagan**  
Secretary

**James F. Ports, Jr.**  
Deputy Secretary

November 10, 2004

The Honorable Christopher Zimmerman  
Chairman  
National Capital Region Transportation Planning Board  
Metropolitan Washington Council of Governments  
777 North Capitol Street, N.E., Suite 300  
Washington D.C. 20002-4239

Dear ~~Chairman~~ <sup>Chris</sup> Zimmerman:

As you are aware, the Maryland Department of Transportation (MDOT) requested that conformity analysis be performed on two different Constraint Long Range Plans (CLRP). The only difference between the two CLRPs was the alignment corridor for the Intercountry Connector (ICC) project.

Now that the analysis is complete, MDOT requests that TPB proceed with the CLRP that includes Corridor 1, Master Plan alignment, as a placeholder for the ICC, since the analysis generally demonstrated higher emission levels and therefore represented a "worst case" for air quality conformity purposes.

Thank you for your cooperation during this process. If you have any questions or concerns, please do not hesitate to contact Mr. Ron Spalding, Manager, Regional Planning and Programming at 410-865-1284, toll free at 1-888-714-1313 or by email [rspalding@mdot.state.md.us](mailto:rspalding@mdot.state.md.us).

Sincerely,

Marsha J. Kaiser, Director  
Office of Planning & Capital Programming

cc: The Honorable Robert L. Flanagan, Secretary, MDOT  
Mr. James F. Ports, Jr., Deputy Secretary, MDOT  
Mr. Ron Spalding, Manager, Regional Planning and Programming, MDOT  
TPB members

# **ATTACHMENT E**

## **Memorandum**

DATE: January 5, 2005

TO: TPB Technical Committee

FROM: Daivamani Sivasailam  
Department of Transportation Planning

SUBJECT: TERM Tracking Sheet for the 8-hour (ozone standard) conformity analysis of the 2004 Constrained Long Range Plan (CLRP) and FY 2005-2010 Transportation Improvement Program (TIP)

Attached is the TERM Tracking Sheet from the November 2004 conformity determination, updated to show the estimated benefits for analysis year 2010, the attainment year for the 8-hour ozone standard. This update was necessary since the previous version of the tracking sheet showed benefits for only the years 2005, 2015, 2025, and 2030. Factors were developed for each project, depending on whether the TERM is a commuter TERM or a Traffic Stream TERM, to scale the 2005 benefits to 2010 conditions. The table summary shows benefits of 2.5 tons/day of VOC and 5.1 tons/day of NOx.

This updated TERM Tracking Sheet will also be included in the solicitation document for the 2005 CLRP and FY 2006-2011 TIP; reports will be requested from the implementing agencies to identify the implementation status of each project. Based on these reports additional updates will be prepared in Spring 2005, for use in the conformity assessment of the 2005 CLRP and FY 2006-2011 TIP.

Attachment

**TERM TRACKING SHEET - CURRENT MEASURES**  
**IMPLEMENTATION: YEAR 2000 AND LATER**  
**Credits are taken in Air Quality Conformity Analysis FY 2005-10**

\* Project Category: TR - Traffic Stream, C - Commute, H - Heavy Duty Vehicles (Engine Technology), SP- Specific Vehicle Type, TCM - Transportation Control Measures

NOs	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL COMPLETION DATE	ACTUAL COMPLETION DATE	TONS/DAY REDUCTION CREDITED										Project Category *
					FULL	SCALED-BACK	UNDER-WAY	REM			2005		2010		2015		2025		2030		
											VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	
9	X	1994-99	MDOT	Park & Ride Lot - MD 210/ MD 373	X				2000	2003	0.001	0.003	0.0006	0.0014	0.0005	0.0013	0.0004	0.0006	0.0004	0.0006	C
19		1994-99	PRTC	VRE Woodbridge Parking Expansion (add 500 spaces)	X					2002-2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
20	X	1994-99	ALEX	King St. Metrorail access improvements			X			2002, '04, '05	0.0018	0.0026	0.0011	0.0014	0.0009	0.0013	0.0008	0.0009	0.0008	0.0009	C
38	X	1995-00	MDOT	Signal Systems - MD 85 Executive Way to MD 355	X				1996	Pre 2000			0.0000	0.0000					0.0000	0.0000	TR
39	X	1995-00	MDOT	Signal Systems - MD 355 .I-70 ramps to Grove Rd.	X				1996	n/a			0.0000	0.0000					0.0000	0.0000	TR
44		1995-00	MDOT	Signal Systems - MD 410, 62nd Ave. to Riverdale Rd.			X		1996	2002			0.0000	0.0000					0.0000	0.0000	TR
48	X	1995-00	MDOT	MARC Replacement Coaches	X				1999	2004	0.001	0.003	0.0006	0.0014	0.0009	0.0027	0.0012	0.0019	0.0012	0.0018	C (TCM)
49	X	1995-00	MDOT	MARC Expansion Coaches	X				1999	2004	0.008	0.024	0.0051	0.0132	0.0074	0.0242	0.0055	0.0153	0.0054	0.0145	C (TCM)
51	X	1995-00	VDOT	Alexandria Telecommuting Pilot Program	X					2000 & 2001			0.0000	0.0000							C
52	X	1995-00	VDOT	Fairfax County Bus Shelter (Fairfax Co. TDM program)			X		2000	2001			0.0000	0.0000							C
54	X	1995-00	VDOT	City of Fairfax Bus Shelters			X		1999	2004	0.0000	0.0009	0.0000	0.0005	0.0000	0.0004	0.0000	0.0000	0.0000	0.0000	C (TCM)
56	X	1995-00	VDOT	Cherry Hill VRE Access			X			2007	0.0065	0.0206	0.0040	0.0113	0.0033	0.0090	0.0024	0.0050	0.0023	0.0047	C (TCM)
58	X	1995-00	WMATA	Bus Replacement (172 buses)	X				1998	1998	0.0690	0.2520	0.0690	0.2520	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP (TCM)
59	X	1995-00	MCG	Shady Grove West Park and Ride			X		2010		0.0000	0.0000	0.0000	0.0000	0.0000	0.0045	0.0000	0.0031	0.0000	0.0030	C
60	X	1995-00	MCG	White Oak Park and Ride			X		2010		0.0000	0.0000	0.0000	0.0000	0.0000	0.0090	0.0000	0.0062	0.0000	0.0059	C
61	X	1995-00	MCG	Bicycle Facilities			X		FY99		0.0028	0.0017	0.0017	0.0009	0.0014	0.0009	0.0012	0.0006	0.0012	0.0006	C
62	X	1995-00	MCG	Pedestrian Facilities to Metrorail			X				0.0046	0.0069	0.0028	0.0038	0.0019	0.0031	0.0016	0.0022	0.0015	0.0021	C
63	X	1995-00	MDOT	MARC Replacement Coaches	X				1999	2004	0.0037	0.0103	0.0023	0.0057	0.0033	0.0099	0.0031	0.0062	0.0031	0.0059	C
64	X	1995-00	MDOT	MARC Expansion Coaches	X				1999	2004	0.0296	0.0894	0.0182	0.0490	0.0284	0.0636	0.0287	0.0508	0.0283	0.0482	C (TCM)
66	X	1995-00	VDOT	Commuter Lots - District Wide			X		varies	1995, 2000	0.0102	0.0284	0.0062	0.0156	0.0065	0.0193	0.0063	0.0165	0.0062	0.0157	C
67	X	1995-00	VDOT	I-66 and Stringfellow Rd. Park and Ride	X				2000	2000 end	0.0092	0.0172	0.0057	0.0094	0.0047	0.0090	0.0039	0.0062	0.0039	0.0059	C
68	X	1995-00	VDOT	Lake Ridge Park and Ride (now called Tacketts Mill lot)	X					1999/2000	0.0000	0.0086	0.0000	0.0047	0.0000	0.0045	0.0000	0.0031	0.0000	0.0030	C
69	X	1995-00	VDOT	Bicycle Trails and Facilities			X		varies	varies	0.0018	0.0146	0.0011	0.0080	0.0093	0.0076	0.0075	0.0056	0.0074	0.0053	C
70	X	1995-00	VDOT	Improved Access to Metrorail Stations			X		varies	2000-2010	0.0005	0.0009	0.0003	0.0005	0.0005	0.0009	0.0004	0.0006	0.0004	0.0006	C
71	X	1995-00	VDOT	I-66 HOV access at Monument Dr.	X					1997	0.0092	0.0172	0.0057	0.0094	0.0047	0.0090	0.0004	0.0062	0.0004	0.0059	C
72		1995-00	DC	Bicycle Facilities		X					0.0222	0.0172	0.0136	0.0094	0.0116	0.0094	0.0094	0.0069	0.0093	0.0065	C
73	X	1995-00	REGION	COG Regional Ridesharing Support	X					on-going	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C
74	X	1995-00	REGION	M-47 Integrated Ridesharing	X					on-going	0.0431	0.0897	0.0265	0.0492	0.0180	0.0295	0.0141	0.0180	0.0139	0.0172	C
75	X	1995-00	REGION	M-92 Telecommuting Support	X					on-going	0.2886	0.6135	0.1775	0.3364	0.1794	0.3002	0.1788	0.2327	0.1889	0.2374	C

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					FULL	SCALED-BACK	UNDER-WAY	REM			2005		2010		2015		2025		2030				
											VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX			
77		1996-01	VDOT	Duke Street Pedestrian Bridge					2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	
79	X	1996-01	VDOT	Fairfax County Bus Shelters (30 shelters with project #85)			X		1999	Summer 2001	0.0018	0.0026	0.0011	0.0014	0.0009	0.0013	0.0008	0.0009	0.0008	0.0009	0.0008	0.0009	C
81	X	1996-01	VDOT	Arlington County Metrocheck Program	X				1997	1997 Onwards	0.0018	0.0026	0.0011	0.0014	0.0010	0.0030	0.0010	0.0030	0.0004	0.0009	0.0004	0.0009	C
82	X	1996-01	VDOT	Old Dominion Drive Bike Trail			X		2000	2004	0.0009	0.0009	0.0006	0.0005	0.0005	0.0004	0.0004	0.0003	0.0004	0.0003	0.0004	0.0003	C
83	X	1996-01	WMATA	Bus Replacement (see line 58, above)	X					1998	Credit taken in line 58, above										SP		
85	X	1996-01	VDOT	Fairfax County Bus Shelters (30 shelters with project #79)			X		1999	2001	0.0009	0.0009	0.0006	0.0005	0.0005	0.0013	0.0004	0.0009	0.0004	0.0009	0.0004	0.0009	C
90	X	1996-01	REGION	M-47c Employer Outreach / Guaranteed Ride Home	X					on-going	0.5595	1.0434	0.3440	0.5721	0.2347	0.3449	0.1807	0.2095	0.1777	0.1989	0.1777	0.1989	C
91	X	1996-01	REGION	M-70a Bicycle Parking			X		1999		0.0065	0.0060	0.0040	0.0033	0.0047	0.0045	0.0039	0.0031	0.0039	0.0030	0.0039	0.0030	C
92	X			M-92 Telecommuting Support	Combined with item #75																		C
95	X	1997-02	MCG	Germantown Transit Center			X		2004		0.0046	0.0163	0.0028	0.0090	0.0023	0.0085	0.0020	0.0056	0.0019	0.0053	0.0019	0.0053	C (TCM)
102	X	1997-02	PG	Prince George's County Bus Replacement	X				1998	1998	0.0030	0.0090	0.0030	0.0090	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP (TCM)
106	X	1997-02	VDOT	PRTC Employer Commuting Outreach Program	X					1977 on-going	0.0018	0.0004	0.0011	0.0002	0.0009	0.0000	0.0008	0.0000	0.0008	0.0000	0.0008	0.0000	C
107	X	1997-02	VDOT	PRTC Multimodal Strategic Marketing Implementation Plan	X					1977 on-going	0.0000	0.0004	0.0000	0.0002	0.0000	0.0004	0.0000	0.0003	0.0000	0.0003	0.0000	0.0003	C
108	X	1997-02	MDOT	M-103 Taxicab Replacement in Maryland			X		1999	on-going	0.0797	0.2675	0.0797	0.2675	0.1453	0.2155	0.1228	0.1498	0.3120	0.4810	0.3120	0.4810	SP
109	X	1997-02	REGION	M-70b Employer Outreach for Bicycles	X				1998	on going	0.0011	0.0013	0.0007	0.0007	0.0005	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	C
110	X	1997-02	VDOT	M-77b Vanpool Incentive Programs in Virginia			X		1999	delayed	n/a	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	C
111	X	1998-03	WMATA	Bus Replacement (108 buses)	X				1999	1999	0.0450	0.1617	0.0450	0.1617	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP
112	X	1998-03	MCG	Montgomery County Bus Replacement	X						0.0080	0.0270	0.0080	0.0270	0.0020	0.0070	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP
113	X	1998-03	PG	Prince George's County Bus Replacement	X				1998	1998	0.0010	0.0020	0.0010	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP
114	X	1998-03	FDC	Frederick County Bus Replacement	X						0.0010	0.0000	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP
117	X	1998-03	VDOT	Arlington County Four Mile Run Bike Trail			X		1999	delayed	0.0009	0.0009	0.0006	0.0005	0.0005	0.0004	0.0004	0.0003	0.0004	0.0003	0.0004	0.0003	C
118	X	1998-03	VDOT	Northern Virginia Turn Bays	X				2000	1998	0.0009	0.0015	0.0006	0.0008	0.0009	0.0007	0.0008	0.0004	0.0008	0.0004	0.0008	0.0003	TR
119	X	1998-03	VDOT	Fairfax City Bus Replacement			X		2001	2003	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	SP
121	X	1998-03	WMATA	WMATA Bus Replacement (252 buses)	X				2001	2001	0.1060	0.3860	0.1060	0.3860	0.0900	0.3420	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP
122	X	97 & 98 TIP	REGION	M-101a Mass Marketing Campaign (Consumer)			X			Underway	0.1191	0.2119	0.0732	0.1162	0.1015	0.1594	0.0980	0.1069	0.0752	0.0807	0.0752	0.0807	C
123	X	1999-04	MDOT	Various Park and Ride Lots (I-270/MD124, 450 & I-170/MD-75, 54 spaces)	X				2001/1999	2001	0.0074	0.0310	0.0045	0.0170	0.0047	0.0188	0.0039	0.0143	0.0039	0.0136	0.0039	0.0136	C
124	X	1999-04	MDOT	Signal Systems (197/MD-198, MD-382 TO US-301, US301)	X				2000	2002	0.0110	-0.0030	0.0070	-0.0017	0.0061	-0.0021	0.0080	-0.0015	0.0079	-0.0014	0.0079	-0.0014	TR
125	X	1999-04	VDOT	Transit Center at 7 Corners	X				2002		0.0009	0.0017	0.0006	0.0009	0.0005	0.0009	0.0004	0.0006	0.0004	0.0006	0.0004	0.0006	C

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					FULL	SCALED-BACK	UNDER-WAY	REM			2005		2010		2015		2025		2030							
											VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX						
126	X	1999-04	VDOT	Falls Church Clean Diesel Bus Service	X				2000	2003	0.0040	0.0050	0.0040	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	SP
127		1999-04	VDOT	VA 234 Bike Trail			X		2001	2007	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C
128	X	1999-04	VDOT	PRTC Ridesharing	X				on-going	2000 ongoing	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C
130	X	1996-01	VDOT	M-14: I-66 Feeder Bus Fare Buy Down	X					1998 onward	0.0231	0.0473	0.0142	0.0259	0.0102	0.0206	0.0083	0.0131	0.0081	0.0124						C
131	X	2000-05	MDOT	Various park and Ride Lots	x				2002	2003	0.0064	0.0280	0.0039	0.0153	0.0043	0.0175	0.0038	0.0140	0.0038	0.0119						C
132	X	2000-05	MDOT	Signal Systems	X				Varies	on-going	0.0028	0.0000	0.0017	0.0000	0.0012	0.0000	0.0007	0.0000	0.0007	0.0000	0.0007	0.0000	0.0000	0.0000	0.0000	TR
133	X	2000-05	VDOT	450 Spaces at Gambrill/Hoopes Rds. Park and Ride			X		2002	2004	0.0065	0.0155	0.0040	0.0085	0.0028	0.0069	0.0022	0.0043	0.0021	0.0041						C
134	X	2000-05	VDOT	300 Spaces at Backlick Rd			X		2003	2006	0.0046	0.0112	0.0028	0.0061	0.0021	0.0049	0.0015	0.0031	0.0015	0.0030						C
135	X	2000-05	VDOT	Accotink-Gateway Connector Trail			X		2002	2005	0.0065	0.0086	0.0040	0.0047	0.0028	0.0038	0.0019	0.0021	0.0018	0.0020						C
136	X	2000-05	VDOT	Columbia Pike Trail			X		2000	2001, 2005	0.0055	0.0069	0.0034	0.0038	0.0023	0.0029	0.0015	0.0016	0.0014	0.0015						C
137	X	2000-05	VDOT	Lee Highway trail			X		2000	2005	0.0028	0.0034	0.0017	0.0019	0.0012	0.0016	0.0006	0.0008	0.0006	0.0008						C
138	X	2000-05	VDOT	Arlington Bus Shelter Improvements			X		2005	2005	0.0009	0.0009	0.0006	0.0005	0.0005	0.0004	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	C
139	X	2000-05	VDOT	Pentagon Metrostation Improvements	X					2003	0.0074	0.0146	0.0045	0.0080	0.0033	0.0063	0.0022	0.0035	0.0022	0.0033						C
140	X	2000-05	MDOT	East/West Intersection Improvements			x		2005	2006 Expect.	0.0379	0.0215	0.0233	0.0118	0.0640	0.0327	0.0874	0.0355	0.0859	0.0337						C
141	X	2001-06	Feds	Federal Transit/Ridesharing subsidy	X				on-going		0.0942	0.1642	0.0579	0.0901	0.0386	0.0555	0.0291	0.0330	0.0286	0.0313						C
142	X	2002-07	WMATA	100 CNG buses	X				2002		0.0000	0.1358	0.0000	0.1358	0.0000	0.1358										SP (TCM)
143	X	2002-07	WMATA	ULSD with CRT filters			X		on-going		0.2100	0.0000	0.2100	0.0000	0.4300	0.0000	0.4300	0.0000	0.4300	0.0000	0.4300	0.0000	0.4300	0.0000	0.4300	H (TCM)
144	X	2003-08	DC	Replace 23 12 Taxicabs with CNG cabs			X		2005	2006	0.0089	0.0157	0.0089	0.0157												H
145	X	2003-08	DC	D.C. Incident Response & Traffic Management System	x				2005	2004	0.0254	0.0746	0.0161	0.0414	-	0.0341	-	0.0185	-	0.0168						TR
146	X	2003-08	DC	Bicycle Lane in D. C. (35 Mile) *			X		2005	2006	0.0154	0.0153	0.0094	0.0084	0.0065	0.0053	0.0047	0.0031	0.0046	0.0029						C (TCM)
147	X	2003-08	DC	Bicycle Racks in D. C. (500) *	x				2005	2004	0.0021	0.0017	0.0013	0.0009	0.0009	0.0006	0.0006	0.0003	0.0006	0.0003	0.0006	0.0003	0.0006	0.0003	0.0003	C (TCM)
148	X	2003-08	DC	External Bicycle Racks on WMATA Buses in D. C. (600) *	x				2005	2003	0.0031	0.0056	0.0019	0.0031	0.0013	0.0019	0.0010	0.0011	0.0010	0.0011	0.0010	0.0011	0.0010	0.0011	0.0011	C (TCM)
149	X	2003-08	DC	CNG Rental Cars (18) *				x	2005		0.0000	0.0002	0.0000	0.0002												SP
150	X	2003-08	DC	Sidewalks in D.C. (\$ 5 million)	x				2005	2004	0.0578	0.1008	0.0355	0.0552	0.0243	0.0334	0.0185	0.0202	0.0182	0.0192						C
151	X	2003-08	DC	CNG Refuse Haulers (2) *	x				2005	2004	0.0001	0.0020	0.0001	0.0020	0.0001	0.0020										H (TCM)
152	X	2003-08	DC	Circulator /Feeder Bus Routes	x				2005	2003	0.0211	0.0363	0.0129	0.0199	0.0089	0.0121	0.0067	0.0073	0.0066	0.0069						C
153	X	2003-08	MDOT	Commuter Tax Credit			x		2005	n/a	0.1262	0.2219	0.0776	0.1217	0.0530	0.0736	0.0405	0.0445	0.0398	0.0422						C
155	X	2003-08	MDOT	Employer Vanpool Program (WWB)				x	2005		0.0030	0.0075	0.0018	0.0041												C

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											VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	
156	X	2003-08	MDOT	Green Line Link			x		2005	n/a	0.0041	0.0085	0.0025	0.0047	0.0017	0.0028	0.0013	0.0017	0.0013	0.0016	C
157	X	2003-08	MDOT	Park & Ride Lots - Southern Maryland *			x		2005	2003/2005	0.0080	0.0197	0.0049	0.0108	0.0033	0.0064	0.0027	0.0040	0.0026	0.0038	C
158	X	2003-08	MDOT	Prince George's County- Bus Exp			x		2005	n/a	0.0578	0.1191	0.0356	0.0653	0.0242	0.0392	0.0189	0.0239	0.0186	0.0228	C
159	X	2003-08	MDOT	MTA - Bus Service Expansion			x		2005	n/a	0.0131	0.0285	0.0080	0.0156	0.0055	0.0093	0.0043	0.0057	0.0042	0.0054	C
160	X	2003-08	MDOT	Ride- On - Super Discount			x		2005	n/a	0.0015	0.0026	0.0009	0.0014	0.0006	0.0009	0.0005	0.0005	0.0005	0.0005	C
161	X	2003-08	Regional	Regional Traveler Information Systems			X		2005		0.1596	0.9730	0.1012	0.5401	0.0816	0.4451	0.0697	0.2418	0.0686	0.2195	TR
162	X	2003-08	MDOT	Universal Transportation Access (MD + WMATA)			x		2005	n/a	0.0259	0.0452	0.0159	0.0248	0.0109	0.0150	0.0083	0.0091	0.0082	0.0086	C
163	X	2003-08	MCG	Construction of 1300 additional Parking Spaces at Grosvenor Metro Garage	x				2004		0.0074	0.0189	0.0045	0.0104	0.0030	0.0062	0.0025	0.0038	0.0025	0.0036	C (TCM)
164	X	2003-08	MCG	Bethesda Shuttle Bus Services	x				2004		0.0050	0.0087	0.0031	0.0047	0.0021	0.0029	0.0016	0.0017	0.0016	0.0016	C
165	X	2003-08	MCG	External Bicycle Racks on Ride-On Buses in Montgomery County	x				2004		0.0010	0.0017	0.0006	0.0010	0.0004	0.0006	0.0003	0.0004	0.0003	0.0003	C
166	X	2003-08	MCG	New CNG Powered Light Duty Vehicle fleet in the County	x				2004		0.0000	0.0001	0.0000	0.0001							SP
167	X	2003-08	MCG	Free Bus Service on Selected Routes on I-270	x				2004		0.0017	0.0030	0.0011	0.0016	0.0007	0.0010	0.0006	0.0006	0.0005	0.0006	C
168	X	2003-08	MCG	Annual Sidewalk Program	x				2004		0.0275	0.0480	0.0169	0.0263	0.0116	0.0159	0.0088	0.0096	0.0087	0.0091	C
169	X	2003-08	MDOT	Bethesda Breeze/International Express Metrobus			x		2005	n/a	0.0060	0.0097	0.0037	0.0053	0.0025	0.0032	0.0019	0.0019	0.0019	0.0018	C
170	X	2003-08	MDOT	Bethesda-8, Silver Spring Downtown Dasher and Prince Georges Co. Shuttles at 3 PNR lot			x		2005	n/a	0.0142	0.0189	0.0087	0.0104	0.0060	0.0064	0.0044	0.0038	0.0043	0.0036	C
171	X	2003-08	MDOT	Proposed Transportation Management District in Montgomery County (Rockville and Gaithersburg)				X	2005	n/a	0.0093	0.0142	0.0057	0.0078	0.0039	0.0047	0.0029	0.0028	0.0029	0.0027	C
172	X	2003-08	MDOT	Sidewalks (Bikes/Pedestrian) at / near Rail Stations	x				2005	2002	0.0150	0.0267	0.0092	0.0146	0.0063	0.0088	0.0048	0.0054	0.0047	0.0051	C
173	X	2003-08	MDOT	Neighborhood Sidewalks Improvements (Bike/Pedestrian)	X				2005	2004	0.0052	0.0030	0.0032	0.0016	0.0023	0.0011	0.0016	0.0006	0.0015	0.0005	C
174	X	2003-08	MDOT	Neighborhood Conservation Program - Neighborhood Sidewalks Improvements (Bikes/Pedestrian)		X			2005	n/a	0.0046	0.0026	0.0028	0.0014	0.0020	0.0010	0.0014	0.0005	0.0013	0.0005	C
175	X	2003-08	MDOT	Maryland bus Transit Service Expansion	X				2005	2004	0.0228	0.0586	0.0140	0.0321	0.0094	0.0191	0.0077	0.0118	0.0076	0.0112	C
176	X	2003-08	VDOT	Universal Transportation Access Program			X		2005	2005	0.0019	0.0034	0.0012	0.0019	0.0008	0.0011	0.0006	0.0007	0.0006	0.0006	C
177	X	2003-08	VDOT	Interactive Rideshare & Kiosk Initiative			X		2005		0.0006	0.0013	0.0004	0.0007	0.0003	0.0004	0.0002	0.0003	0.0002	0.0002	C
178	X	2003-08	VDOT	Mobile Commuter Stores			X		2005		0.0035	0.0071	0.0021	0.0039	0.0014	0.0023	0.0011	0.0014	0.0011	0.0014	C
179	X	2003-08	VDOT	Telework Incentive Program (Telework VA)				X	2005	2001	0.0012	0.0022	0.0007	0.0012	0.0005	0.0007	0.0004	0.0004	0.0004	0.0004	C
180	X	2003-08	VDOT	Commuter Choice			X		2005		0.0015	0.0025	0.0010	0.0014	0.0007	0.0008	0.0005	0.0005	0.0005	0.0005	C
181	X	2003-08	VDOT	Employer Shuttle Services			X		2005		0.0184	0.0301	0.0113	0.0165	0.0077	0.0100	0.0058	0.0060	0.0057	0.0057	C
184	X	2003-08	VDOT	Van Start / Van Save			X		2005	till 2006	0.0022	0.0047	0.0014	0.0026							C
185	X	2003-08	VDOT	Metro Shuttle Bus			X		2005	1999-2005	0.0019	0.0047	0.0012	0.0026	0.0008	0.0015	0.0006	0.0009	0.0006	0.0009	C

**TERM TRACKING SHEET - CURRENT MEASURES**  
**IMPLEMENTATION: YEAR 2000 AND LATER**  
**Credits are taken in Air Quality Conformity Analysis FY 2005-10**

\* Project Category: TR - Traffic Stream, C - Commute, H - Heavy Duty Vehicles (Engine Technology), SP- Specific Vehicle Type, TCM - Transportation Control Measures

NOs	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL COMPLETION DATE	ACTUAL COMPLETION DATE	TONS/DAY REDUCTION CREDITED										Project Category *
					FULL	SCALED-BACK	UNDER-WAY	REM			2005		2010		2015		2025		2030		
											VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	
187	X	2003-08	VDOT	VRE Mid-Day Train Service	X				2005	2002	0.0025	0.0053	0.0016	0.0029	0.0011	0.0017	0.0008	0.0011	0.0008	0.0010	C
190	X	2003-08	VDOT	Employer Vanpool Program (Bridge deck)			X		2005	2004 - 2008	0.0015	0.0034	0.0009	0.0019							C
191	X	2003-08	VDOT	Town of Leesburg P&R Lot			X		2005	2004	0.0031	0.0071	0.0019	0.0039	0.0013	0.0023	0.0010	0.0014	0.0010	0.0014	C
192	X	2003-08	VDOT	District-wide P&R Lots	X		X		2005	2001-2005	0.0182	0.0406	0.0112	0.0222	0.0076	0.0133	0.0060	0.0082	0.0059	0.0078	C
193	X	2003-08	VDOT	Additional Parking at 4 Metro stations			X		2005	2001, 2005	0.0235	0.0604	0.0144	0.0331	0.0097	0.0197	0.0079	0.0122	0.0078	0.0116	C
196	X	2003-08	WMATA	64 CNG Buses (Purchased in 2001)	X				2005	2004	0.0021	0.0870	0.0021	0.0870	0.0021	0.0870					SP (TCM)
197	X	2003-08	WMATA	250 CNG Buses (175 buses by Dec. 2004; 75 buses by mid 2006)			X		2005	2004-2006	0.0083	0.3400	0.0083	0.3400	0.0083	0.3400					SP
198	X	2003-08	WMATA	60 Engine Replacement (MY 1992 & 1993 MY buses)	X				2004	2004	0.0138	0.0755	0.0138	0.0755	0.0138	0.0755					SP
199	X	2003-08	WMATA	Car Sharing Program	X				2005	2004	0.0013	0.0033	0.0008	0.0018	0.0005	0.0011	0.0004	0.0007	0.0004	0.0006	C
200	X	2003-08	WMATA	Bikes Racks on WMATA Buses in VA (372 Bike Racks)	X				2005	2004	0.0020	0.0035	0.0012	0.0019	0.0008	0.0012	0.0006	0.0007	0.0006	0.0007	C (TCM)
202		2003-08	MDOT	Fleet Replacement (state auto fleet, gas to hybrid, 250 vehicles)				x	2005		0.0055	0.013	0.0055	0.0133	0.0055	0.013					SP
203	X	2003-08	MDOT	Replace 55 Montgomery County 10 yr. old buses w/ new CNG buses			x		2005	n/a		0.2861	0.0000	0.2861		0.2861					SP
204		2003-08	MDOT	Neighborhood Bus Shuttle (5 circulator routes)				x	2005		0.0121	0.0221	0.0074	0.0121	0.0051	0.007	0.00	0.004	0.0038	0.0042	C
205	X	2003-08	MDOT	New Surface Parking at Transit Centers (500 spaces)			x		2005	n/a	0.0042	0.0108	0.0026	0.0059	0.0017	0.0035	0.0014	0.0022	0.0014	0.0021	C
206	X	2003-08	MDOT	Additional Bike Lockers at Metro-Stations				x	2005	n/a	0.0213	0.0379	0.0131	0.0208	0.0090	0.0125	0.0068	0.0076	0.0067	0.0072	C
207	X	2003-08	MDOT	Bike Facilities at PnR Lots or other similar location			x		2005	n/a	0.0150	0.0300	0.0092	0.0165	0.0063	0.0099	0.0049	0.0060	0.0048	0.0057	C
208	X	2003-08	MDOT	CNG Fueling Stations				x	2005	n/a	0.1270	0.1170	0.1270	0.1170							SP
209		2003-08	MDOT	Gas cap replacements (ROP Credit)				x	2005		N/A	N/A	N/A	N/A		-		-		-	SP
210		2003-08	MDOT	Gas can turnover (ROP Credit)				x	2005		N/A	N/A	N/A	N/A		-		-		-	SP
211	X	2003-08	MDOT	External Bicycle Racks on WMATA Buses (486 MD buses)	x				2005	2002	0.0023	0.0040	0.0014	0.0022	0.0009	0.0013	0.0007	0.0008	0.0007	0.0008	C (TCM)
212	X	2003-08	MDOT	Bike \ Pedestrian Trail - Anacostia River Walk			X		2005	n/a	0.0009	0.0008	0.0006	0.0005	0.0004	0.0003	0.0003	0.0002	0.0003	0.0002	C
213		2003-08	MDOT	Transit Prioritization - Queue Jumps				x	2005		0.0050	0.0068	0.0031	0.0037	0.0021	0.002	0.002	0.001	0.0015	0.0013	C
214	X	2003-08	MDOT	Commuter Choice Benefit/Tax Credit - Marketing Expansion			x		2005	n/a	0.0881	0.1559	0.0542	0.0855	0.0370	0.0517	0.0283	0.0313	0.0278	0.0297	C
215	X	2003-08	MDOT	Improvements to Pedestrian Access in TOD areas (4 locations)			x		2005	n/a	0.0096	0.0158	0.0059	0.0087	0.0040	0.0053	0.0031	0.0032	0.0030	0.0030	C
216	X	2003-08	MDOT	Telecommuting Expansion				X	2005	n/a	0.1041	0.2192	0.0640	0.1202	0.0435	0.0721	0.0341	0.0441	0.0336	0.0419	C
217	X	2003-08	MDOT	Replace older Diesel Engine in Public Sector vehicles				x	2005	n/a	0.0237	0.1300	0.0237	0.1300	0.0237	0.1300					H
218	X	2003-08	VDOT	MV-92 Telecommuting Program - Expanded <sup>1</sup>				X	2005	2003	0.1112	0.2341	0.0684	0.1283	0.0464	0.0769	0.0365	0.0471	0.0359	0.0447	C
219	X	2003-08	VDOT	MV-123 Employer Outreach for Public Sector Employees <sup>1</sup>				X	2005	2003	0.0247	0.0430	0.0152	0.0236	0.0104	0.0143	0.0079	0.0086	0.0078	0.0082	C
220	X	2003-08	REGION	Signal System Optimization			X		2005	2005	0.6737	0.2720	0.4272	0.1510	0.3447	0.1244	0.2945	0.0676	0.2896	0.0613	TR
<b>Available Emissions Credits</b>											<b>3.670</b>	<b>7.680</b>	<b>2.489</b>	<b>5.147</b>	<b>2.164</b>	<b>3.704</b>	<b>1.832</b>	<b>1.562</b>	<b>1.991</b>	<b>1.800</b>	

## TRANSPORTATION EMISSION REDUCTION MEASURES (CLRP Projects Only)

Credited in Air Quality Conformity Analyses (calendar years 1993-2004)  
(TRACKING SHEET)

Project Category: TR - Traffic Stream, C - Commute, H - Engine Technology (Heavy Duty Vehicles), SP- Specific Vehicle Type

ID	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				PROJECTED	ACTUAL	TONS/DAY REDUCTION CREDITED						Project Category
					FULL	SCALED-BACK	UNDER-WAY	REMOVED	COMPLETION	COMPLETION	2015		2025		2030		
									DATE	DATE	VOC	NOX	VOC	NOX	VOC	NOX	
221	X	1995-00 TIP	REGION	M-24 Speed Limit Adherence							0.1129	0.8376	0.1285	0.5905	0.0495	0.1828	TR
222		1996-01 TIP	MGC	Rock Spring Park Pedestrian Amenities				X			0.0010	0.0040	n/a	n/a	n/a	n/a	-
223	X	1996-01 TIP	MGC	Olney Transit Center Park and Ride							0.0009	0.0036	0.0008	0.0025	0.0003	0.0007	C
224	X	1996-01 TIP	MGC	Damascus Park and Ride							0.0005	0.0018	0.0004	0.0012	0.0001	0.0003	C
225	X	1996-01 TIP	DC	M-103 Taxicab Replacement									0.3490	0.6000	0.3490	0.6000	H
226	X	STADIUM ANALYSIS		Taxicab Replacement									0.1560	0.2400	0.1560	0.2400	H
227	X	1997-02 TIP	MDOT	Shady Grove West Transit Center Park and Ride							0.0000	0.0045	0.0000	0.0031	0.0000	0.0009	C
228	X	1997-02 TIP	MGC	Olney Transit Center Park and Ride									0.0008	0.0025	0.0003	0.0007	C
229	X	1997-02 TIP	MGC	White Oak Park and Ride							0.0000	0.0090	0.0000	0.0062	0.0000	0.0017	C
230	X	1997-02 TIP	MGC	Damascus Park and Ride									0.0004	0.0009	0.0001	0.0003	C
231	X	1997-02 TIP	MGC	Four Corners Transit Center							0.0000	0.0004	0.0000	0.0003	0.0000	0.0001	C
232		1997-02 TIP	MGC	Burtonsville Transit Center				X					n/a	n/a	n/a	n/a	-
233	X	1997-02 TIP	MGC	Silver Spring Transit Access										0.0006		0.0002	C
234	X	1997-02 TIP	MGC	Shady Grove Parking Construction							0.0023	0.0085	0.0020	0.0059	0.0007	0.0017	C

<b>PLAN TOTAL</b>											0.117	0.865	0.638	1.454	0.556	1.029
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<b>GRAND TOTAL (Current Measures-past 2000 + plan)</b>											2.281	4.569	2.470	3.016	2.547	2.829
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Note: 2010 Emissions benefit estimated using ratios between 2005 and 2010 emissions factors

**DEFINITIONS:**

CREDIT TAKEN ( X means emissions reduction credits taken):

- TIP - Emissions credits are taken for projects being implemented, according to the progress reporting schedules provided by the implementing agencies (contained in Appendix L). No credit has been taken for projects in which only some components of the measure have been implemented. (The status of these projects will be reassessed next year).
- CLRP - Credit is taken for each of these elements of the CLRP, according to the schedule provided by the implementing agency.

IMPLEMENTATION STATUS:

- FULL = project is completed as planned at the time of analysis.
- SCALED BACK = project is completed, but at a different level than assumed at the time of analysis (i.e., purchased 50 buses instead of 100)
- UNDERWAY = project is not complete, but is close enough that credit may be taken (i.e., under construction, NOT just out for bid)
- REMOVED = project no longer expected to be implemented or constructed

COMPLETION DATE:

- PROJECTED = project completion date originally expected (i.e., at time of emissions analysis)
- ACTUAL = actual year project was open for use, or expected to be open for use if under construction

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- Reflects instances where emissions reductions previously credited are no longer appropriate to the indicated forecast year, due to schedule slippage.
- Delayed - Project Delayed