

ITEM 8 – Action
December 19, 2012

Approval of an Additional Air Quality Conformity Analysis to Respond to the EPA Redesignation of the Washington Region under the 2008 Ozone National Ambient Air Quality Standards (NAAQS)

Staff Recommendation: Adopt Resolution R5-2013 to approve the air quality conformity assessment.

Issues: None

Background: On May 21, 2012, EPA issued the final designation for the 2008 Ozone National Ambient Air Quality Standards (NAAQS), with the Washington Metropolitan Area designated as marginal nonattainment. This designation requires a new air quality conformity analysis of the Washington region's 2012 CLRP and FY 2013-2018 TIP that will include the region's new 2015 attainment year. On November 15 the assessment was released for a 30-day public comment period that ended on December 15. At its November 28 meeting, the Board was briefed on the draft 2015 forecast year air quality conformity assessment of the 2012 CLRP and FY2013-2018 TIP.

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

**RESOLUTION FINDING THAT THE 2012 CONSTRAINED LONG RANGE PLAN AND
FY2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM, INCLUDING THE
2015 ATTAINMENT YEAR, CONFORM WITH THE 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, over the years, subsequently amended these regulations and provided additional guidance, 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 (SIPs) for air quality attainment within the Metropolitan Washington non-attainment area; and

WHEREAS, on May 21, 2012 EPA designated the Washington, DC-MD-VA region as a marginal non-attainment area for the 2008 ozone National Ambient Air Quality Standards (NAAQS), and with that designation required an air quality conformity analysis of the region's current CLRP and TIP, including the 2015 attainment year; and

WHEREAS, on July 18, 2012 the TPB approved an air quality conformity analysis of the current 2012 CLRP and FY2013-2018 TIP, which is reported in *Air Quality Conformity Determination of the 2012 Constrained Long Range Plan and the FY2013-2018 Transportation Improvement Program for the Washington Metropolitan Region*, dated July 18, 2012; and

WHEREAS, updating the air quality conformity analysis of the 2012 CLRP and TIP approved by the TPB on July 18, 2012 with the inclusion of the 2015 attainment year, will meet the requirements associated with the redesignation; and

WHEREAS, a work program to update the air quality conformity analysis was developed to

address all procedures and requirements associated with the new designation, including public and interagency consultation, and the work program was released for public comment on September 13th and approved by the TPB at its October 17, 2012 meeting; and

WHEREAS, on November 15, 2012, the draft results of the update of the Air Quality Conformity Determination of the 2012 CLRP and the FY2013-2018 TIP including the 2015 attainment year were released for a 30-day public comment period and inter-agency review; and

WHEREAS, the analysis reported in *Air Quality Conformity Update of the 2012 Constrained Long Range Plan and the FY2013-2018 Transportation Improvement Program for the Washington Metropolitan Region*, dated December 19, 2012, which includes the 2015 attainment year, demonstrates adherence to all mobile source emissions budgets for volatile organic compounds, nitrogen oxides, and carbon monoxide, and demonstrates that PM2.5 emissions meet the requirement that such emissions are not greater than 2002 levels, meets all regulatory, planning and interagency consultation requirements, and therefore provides the basis for a finding of conformity of the plan with the requirements of the CAAA; and

WHEREAS, in the attached letter of December 5, 2012, the Metropolitan Washington Air Quality Committee (MWAQC) has provided favorable comments on the update to the Air Quality Conformity Determination of the 2012 Constrained Long Range Plan and FY2013-2018 Transportation Improvement Program for the Washington Metropolitan Region;

NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD determines that the 2012 Constrained Long Range Plan and the FY2013-2018 Transportation Improvement Program, including the 2015 attainment year, conform to all 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

December 5, 2012

Honorable Todd M. Turner, Chair
National Capital Region Transportation Planning Board
777 North Capitol Street, NE
Washington, D.C. 20002

Dear Chair Turner:

Thank you for providing an opportunity to the Metropolitan Washington Air Quality Committee (MWAQC) to comment on the Air Quality Conformity Update for the 2012 Constrained Long Range Plan (CLRP) and the FY2013-2018 Transportation Improvement Program (TIP). MWAQC understands that this additional analysis to include the milestone year 2015 is being performed to meet the requirements of the 2008 ozone national ambient air quality standard (NAAQS).

MWAQC has reviewed the draft Air Quality Conformity assessment and is pleased to find that the proposed transportation plans meet the interim base year 2002 emissions tests for the PM_{2.5} annual standard and the approved motor vehicle emissions budgets for the 8-hour ozone and carbon monoxide standards for the year 2015. The attainment year for the Washington, DC-MD-VA marginal ozone nonattainment region for the 2008 ozone NAAQS is 2015.

As noted in the previous comment letter to the National Capital Region Transportation Planning Board (TPB) on July 11, 2012, MWAQC understands the need for new federal emission control programs such as Tier 3 to reduce emissions from future fleets. We encourage TPB's continued investment in public transit, ride-sharing and transit-oriented development to mitigate future growth in vehicle miles traveled (VMT). We also strongly urge TPB to maintain its commitments to Transportation Emission Reduction Measures (TERMs) and other emission reduction measures. These efforts are essential to meet the current air quality standards and potentially more stringent ozone and fine particle standards expected in the future. We look forward to working with TPB on updated mobile budgets related to stricter EPA air quality standards if it should become necessary in the future.

We commend TPB for your contribution to air quality improvement efforts and look forward to working with you to further improve the region's air quality.

Thank you again for the opportunity to comment on the draft conformity analysis.

Sincerely,



Hon. Phil Mendelson, Chair
Metropolitan Washington Air Quality Committee

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

MEMORANDUM

December 13, 2012

To: Transportation Planning Board

**From: Jane Posey
Senior Transportation Engineer**

**Subject: Air Quality Conformity Update for the 2012 Constrained Long Range Plan (CLRP)
and the FY2013-2018 Transportation Improvement Program (TIP)**

BACKGROUND

EPA's final rule designating nonattainment areas for the 2008 ozone national ambient air quality standards (NAAQS) was published in the *Federal Register* on May 21, 2012 and was effective July 20, 2012. The Washington, DC-MD-VA region has been designated as a marginal non-attainment area. The attainment date for the 2008 ozone NAAQS for marginal non-attainment areas is December 31, 2015. All non-attainment areas must make a conformity determination within one year of the effective date of the initial non-attainment designation.

The current long range plan for the region is the 2012 CLRP. The Transportation Planning Board (TPB) approved a conformity analysis of the 2012 CLRP in July. Forecast years included: 2007, 2017, 2020, 2030, and 2040. Since there are no input changes to that analysis, it is not necessary to rerun all of the forecast years for the conformity determination required for the 2008 ozone NAAQS. However there is a requirement to complete an analysis of the 2015 attainment year. This report includes the data for all forecast years, including 2015, and represents a complete conformity analysis update of the 2012 CLRP.

INTRODUCTION

This memo documents summary results of the updated air quality conformity assessment of the 2012 CLRP and FY2013-2018 TIP with respect to the following pollutants:

- **Ozone Season Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx).** In May, 2007 the Metropolitan Washington Air Quality Committee (MWAQC) adopted the 8-hour Ozone State Implementation Plan (SIP) which included Mobile Budgets. On September 4, 2009, EPA found adequate the 2008 Reasonable Further Progress (RFP) budgets from that SIP. Once a SIP with budgets has been submitted and EPA finds those budgets adequate or approves the SIP, the budgets must be used for all conformity analysis until new budgets are approved, even if new NAAQS are set. The RFP budget for VOC is 70.8 tons/day, and for NOx is 159.8 tons/day.
- **Fine Particles (PM_{2.5}).** In 2008 MWAQC approved a SIP to achieve the 1997 National Ambient Air Quality Standards (NAAQS) for PM_{2.5} that included mobile budgets. EPA never approved those budgets. On January 12, 2009, EPA determined that the region had attained the 1997 PM_{2.5} NAAQS and issued a clean data determination for the area. In early 2012 Virginia,

Maryland, and the District of Columbia withdrew the SIP updates, including the mobile budgets. The withdrawal letters are included as Attachment A. In the absence of approved mobile budgets, EPA allows for an assessment that shows emissions in forecast year scenarios are no greater than those in a 2002 base. This criterion was established and applied, with the concurrence of MWAQC, in prior PM_{2.5} conformity assessments.

- **Wintertime Carbon Monoxide (CO).** The region is in maintenance for mobile source wintertime CO, and is required to show that pollutants do not exceed the approved budget of 1671.5 tons/day.

The analysis shows that mobile emissions are well within the mobile budgets for ozone season VOC and NOx, as well as wintertime CO, and are well below the 2002 base year levels for the PM2.5 pollutants.

The results, based upon analyses contained in the technical report, Air Quality Conformity Update Of The 2012 Constrained Long Range Plan and FY2012-2018 Transportation Improvement Program For The Washington Metropolitan Region, will be released for public comment and interagency consultation on November 15, 2012. The public comment period will end on December 15, 2012.

TECHNICAL INPUTS

The Transportation Planning Board (TPB) approved the scope of work for the update to the conformity analysis of the 2012 CLRP and FY2013-2018 TIP on October 17, 2012. It approved the project submissions for this analysis on February 15, 2012.

Key technical inputs to the analysis include:

- Round 8.1 Cooperative Land Activity Forecasts
- The Version 2.3 Travel Demand Model including a 3722 Transportation Analysis Zones (TAZ) area system and updated transit service
- 2012 CLRP and FY2013-2018 TIP Project Submissions
- 2011 Vehicle Registration Data
- EPA's Mobile6.2 Emissions Factor Model.

WORK ACTIVITIES

Staff prepared inventories for each pollutant for six forecast years (2007, 2015, 2017, 2020, 2030 and 2040). Ozone season pollutants (VOC and NOx) and wintertime CO are inventoried for average weekday conditions, and precursor NOx and direct PM_{2.5} are inventoried to reflect emissions on a yearly total basis. Staff applied seasonal adjustment factors to convert daily travel (annual average weekday traffic or AAWDT) to annual values.

These inventories address a primary conformity assessment criterion to demonstrate that emissions associated with the plan do not exceed the approved budgets.

Land Activity Forecasts

The COG Board approved the draft Round 8.1 Cooperative Forecasts for use in the air quality conformity analysis of the 2012 CLRP and FY2013-2018 TIP in February, 2012. The forecasts reflect both the small area land use distributions throughout the Washington region, and also the latest planning assumptions for areas that are outside the Washington region. Attachment B shows a summary of the Round 8.1 data.

Travel Modeling Process

Staff prepared travel demand forecasts for each of the analysis years using the Version 2.3 travel demand model. Exhibit 1 presents the geographic areas for travel modeling and for emissions reporting for each pollutant. Exhibit 2 presents the resulting average weekday transit trips, vehicle trips, and vehicle miles traveled (VMT) results through time for each conformity analysis year, for the full modeled area.

Emissions Factors

Staff developed emissions factors using EPA's MOBILE6.2 emissions model. This year's rates include 2011 VIN data. Emissions rates for each pollutant – shown illustratively for Fairfax County in Exhibits 3 and 4 -- were developed following execution of the model in one mph speed increments, by jurisdiction, for each analysis year. The chart shows significantly reduced rates through time, primarily due to the impacts of having cleaner fuel and vehicles in the fleet. Exhibit 5 presents direct PM_{2.5} emissions rates through time for each of the three seasons; data are arrayed in a bar chart since these emissions rates do not vary by vehicle speed.

Mobile Emissions Inventories

Ozone Season and Wintertime CO – Daily Emissions

The average annual weekday travel forecasts (AAWDT) generated by the travel demand model were adjusted, using a 1.03 ozone season factor or a 0.96 winter season factor, to develop seasonally appropriate VMT estimates. Staff then applied the appropriate Mobile6.2 emissions factors to the travel demand forecasts to prepare mobile source emissions inventories for each forecast year. These emissions results for ozone season pollutants are summarized in Exhibits 6 and 7 and indicate total VOC and NOx emissions for each analysis year. The charts show dramatic reductions throughout the period. Historical emissions reductions from the Clean Air Act amendments 1990 base have been well documented in the past. 2040 VOC and NOx emissions represent about 14 percent and 9 percent, respectively, of their 1990 levels. The results reflect the impact of the cleaner fuel / fleet and related programs.

PM_{2.5} – Yearly Emissions

To develop the yearly total PM_{2.5} emissions, travel and emissions were estimated by applying (three) seasonal factors to the primary travel data, followed by applying emissions rates for each of the seasons, and summarizing to obtain yearly totals. Direct PM_{2.5} and precursor NOx emissions are shown in Exhibits 8 and 9. The emissions reductions through time are largely attributable to Tier II vehicle standards, cleaner fuels, and the heavy duty engine rule.

2012 CLRP Emissions Inventories vs. Budgets

Exhibits 6-9 display net emissions for each forecast year. The charts show that emissions are within the mobile budgets for ozone season pollutants, and are not greater than 2002 levels for fine particles pollutants, for all forecast years. Wintertime CO emissions (contained in a full technical report but not summarized here) are also within the CO emissions budget.

Net Emissions Analysis

The emissions inventory data contained in Exhibits 6-9 reflect total mobile source network and off-network emissions. However, there are also emissions benefits associated with certain other transportation programs and projects. These benefits, estimated on an off-line basis, are also creditable in conformity analyses. Attachment C represents a summary table of these transportation emissions reduction measures, or TERMs, which have been previously planned or programmed by the TPB. They are arrayed in a ‘Tracking Sheet’ format to document the implementation status of each, with part A of the table documenting ozone season and part B documenting PM_{2.5} pollutants. The result of these measures, shown as the bottom line for each section of the table, amounts to additional reductions available for each of the pollutants. The benefits of these projects are not included at this time in the conformity analysis summary tables, but are available, if needed, to offset future emissions. Combining the emissions results in Exhibits 6-9 with the additional reductions from TERMs would further improve the emissions margins for each pollutant.

COMMENTS / RESPONSE TO COMMENTS

Comment: The Metropolitan Washington Air Quality Committee (MWAQC) provided written comment in its December 25, 2012 letter. The letter notes that the conformity update of 2012 CLRP and FY2013-2018 TIP meets all mobile source emissions test requirements. The Committee encourages the TPB’s continued investment in VMT reducing projects and strategies. It urges the TPB to maintain its commitments to TERMs and other emissions reduction measures, and suggests that these efforts are essential for meeting future more stringent air quality standards. It commends the TPB for its contribution to clean air.

Response: The TPB appreciates MWAQC’s recognition that the updated air quality conformity analysis of the 2012 CLRP and FY2013-2018 TIP meets all of the required emissions tests. The TPB agrees with MWAQC on the need for continued investment in public transit, ridesharing, and other programs to reduce VMT and single occupant driver trips. The TPB supports maintenance of commitments to TERMs and other emissions reduction measures.

SUMMARY

The analytical results described in this air quality assessment provide a basis for a determination by the TPB of conformity of the 2012 CLRP and FY2013-2018 TIP.

Following: Exhibits 1- 9
 Attachments A - C

EXHIBIT 1

Washington, D.C.- Maryland - Virginia Planning Areas

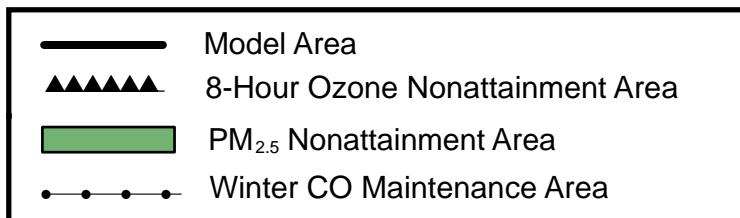
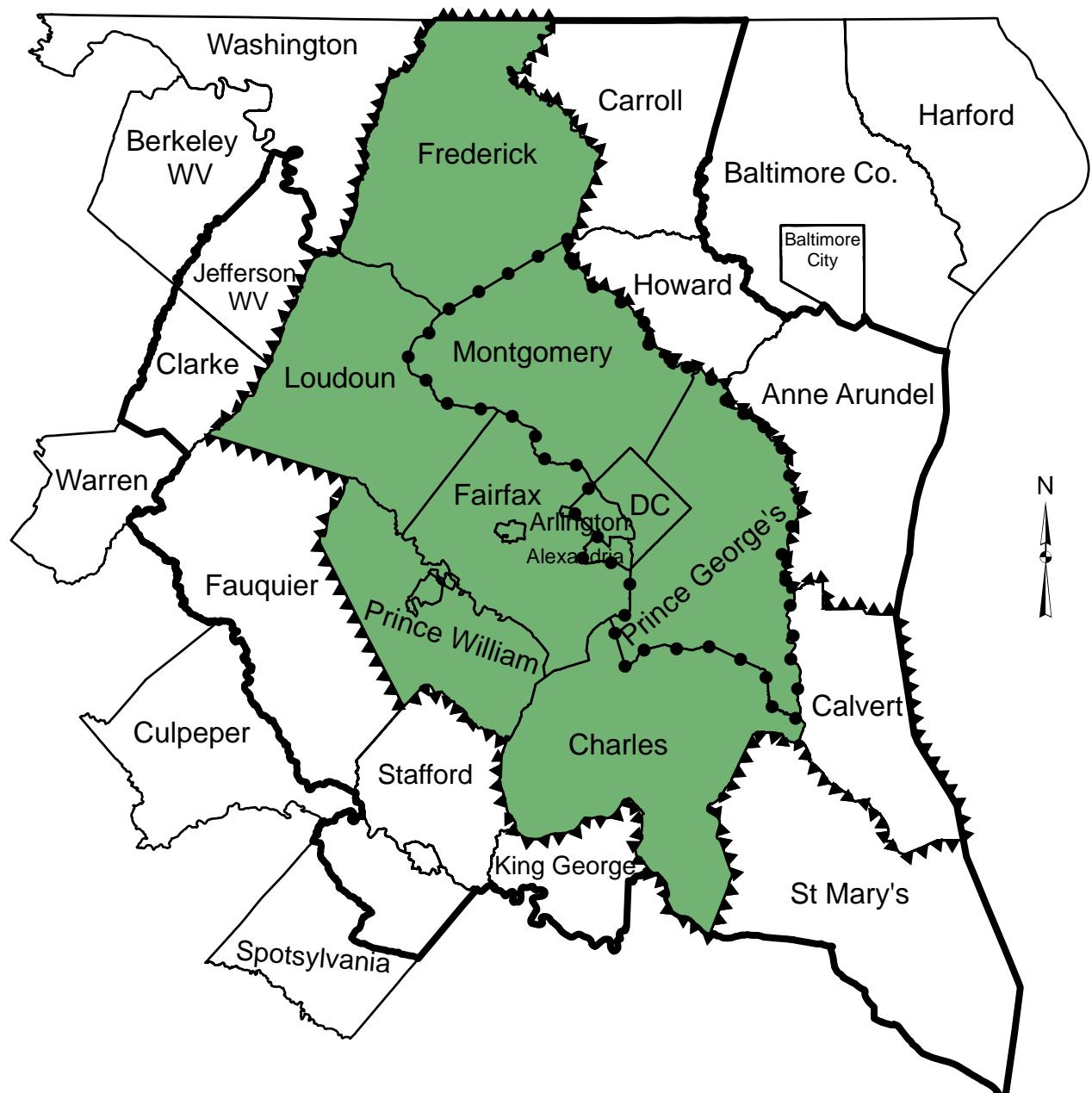


EXHIBIT 2

AIR QUALITY CONFORMITY UPDATE
Travel Demand Summary
Modeled Area Trips and Vehicle Miles Traveled (000's)
Average Weekday Traffic (AWDT)

	<u>2002</u>	<u>2007</u>	<u>2015</u>	<u>2017</u>	<u>2020</u>	<u>2030</u>	<u>2040</u>
Transit Trips	1,092.5	1,158.5	1,295.1	1,361.8	1,425.7	1,542.0	1,628.4
Vehicle Trips	14,822.9	15,867.8	17,225.6	17,539.8	18,087.9	19,830.0	21,116.6
VMT	149,388.9	159,299.0	171,523.1	174,806.1	180,153.7	200,136.4	212,923.6

Adjustment Factors to Convert AAWDT to Appropriate Season:

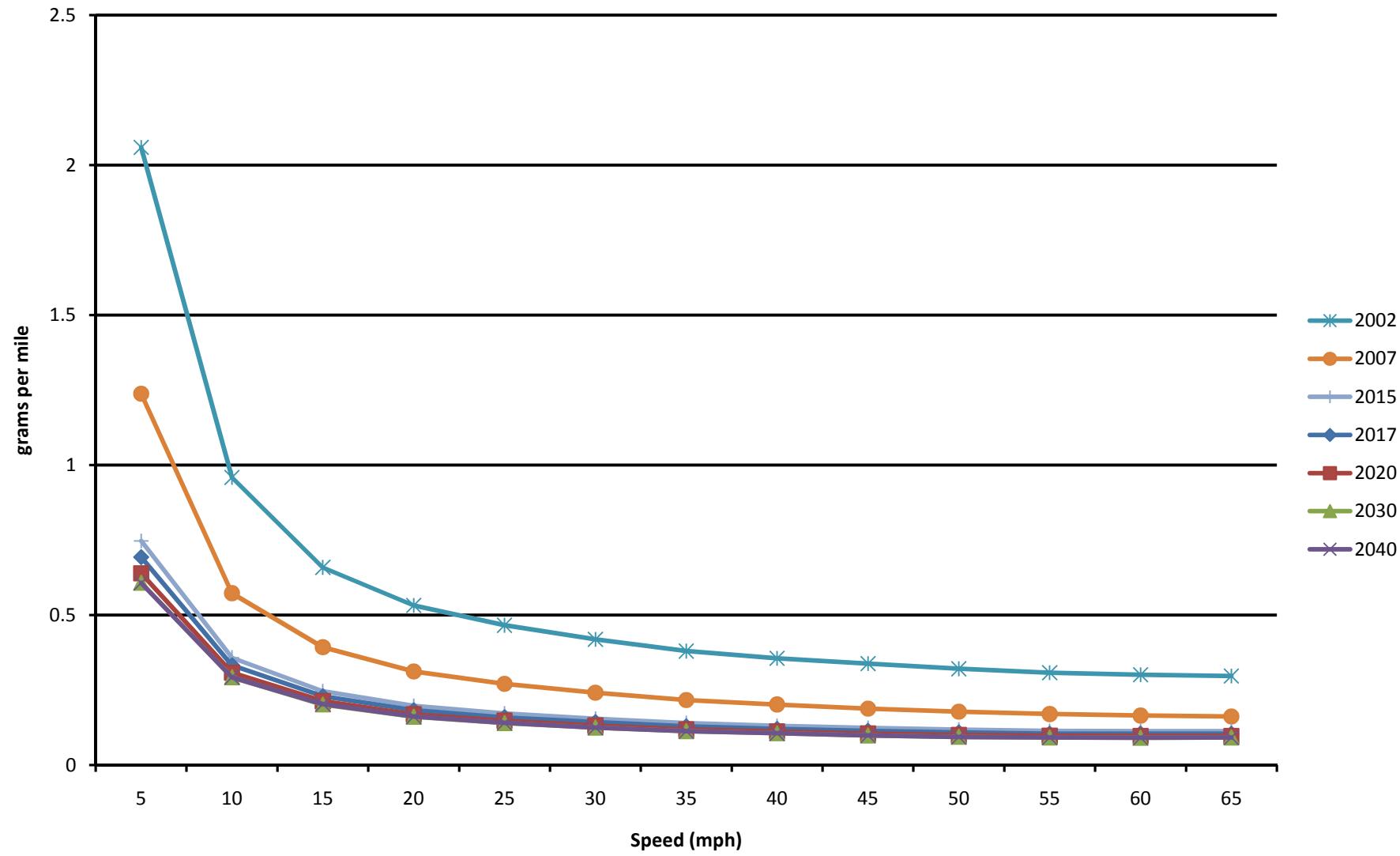
Ozone Season AWDT: 1.03

Winter Season AWDT: 0.96

PM2.5 Annual:

Season (ADT)		Factor
Season 1 (Jan- Apr)		0.9177
Season 2 (May- Sept)		0.9751
Season 3 (Oct- Dec)		0.9212

AIR QUALITY CONFORMITY UPDATE
VOC COMPOSITE MOBILE6.2 FREEWAY RUNNING EMISSION RATES FOR
FAIRFAX COUNTY (2012 CLRP)



AIR QUALITY CONFORMITY UPDATE
NOx COMPOSITE MOBILE6.2 FREEWAY RUNNING EMISSION RATES FOR
FAIRFAX COUNTY (2012 CLRP)

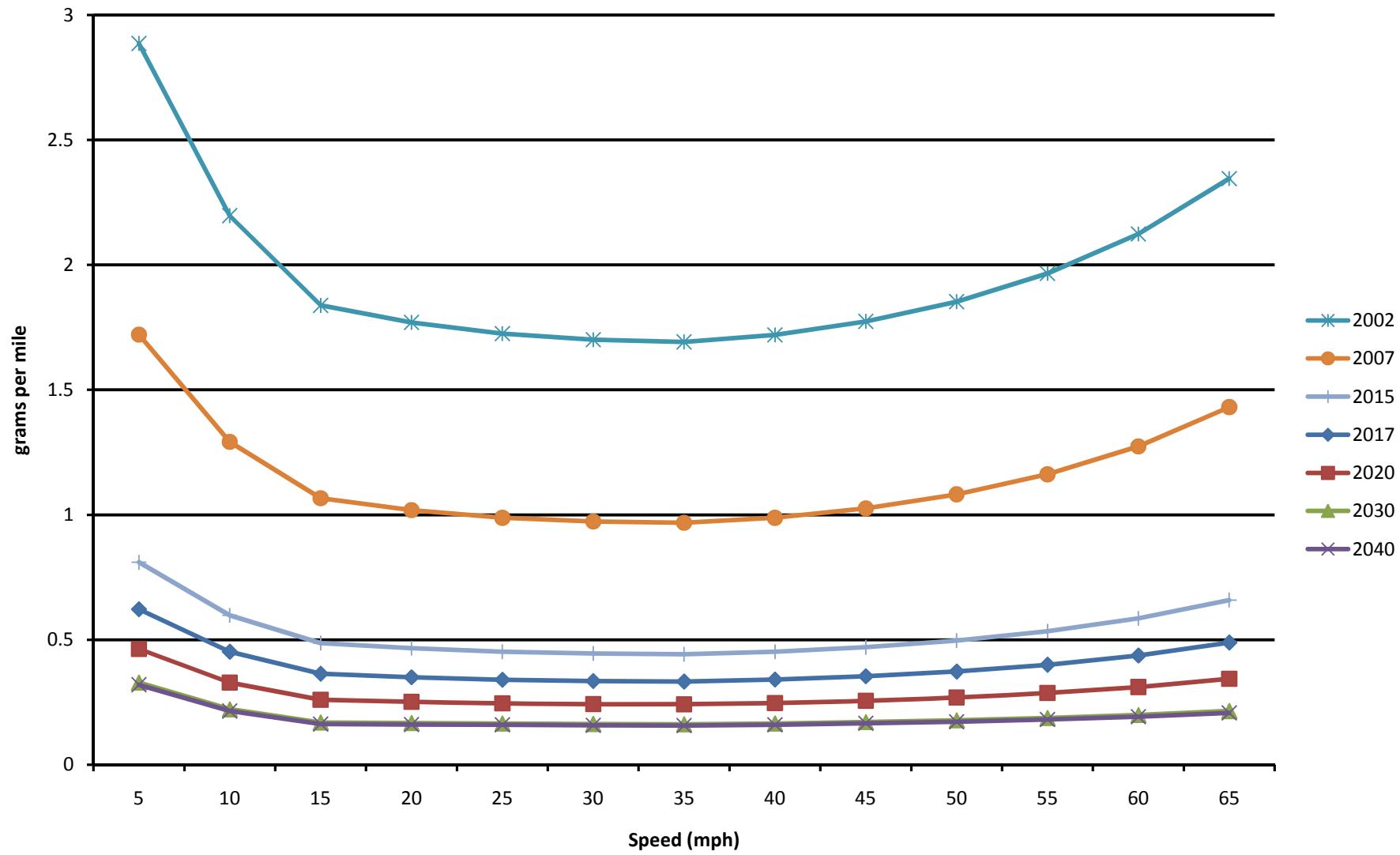


Exhibit 5
AIR QUALITY CONFORMITY UPDATE
DIRECT PM_{2.5} EMISSION RATES FOR FAIRFAX COUNTY
(MAJOR ROADS NETWORK)

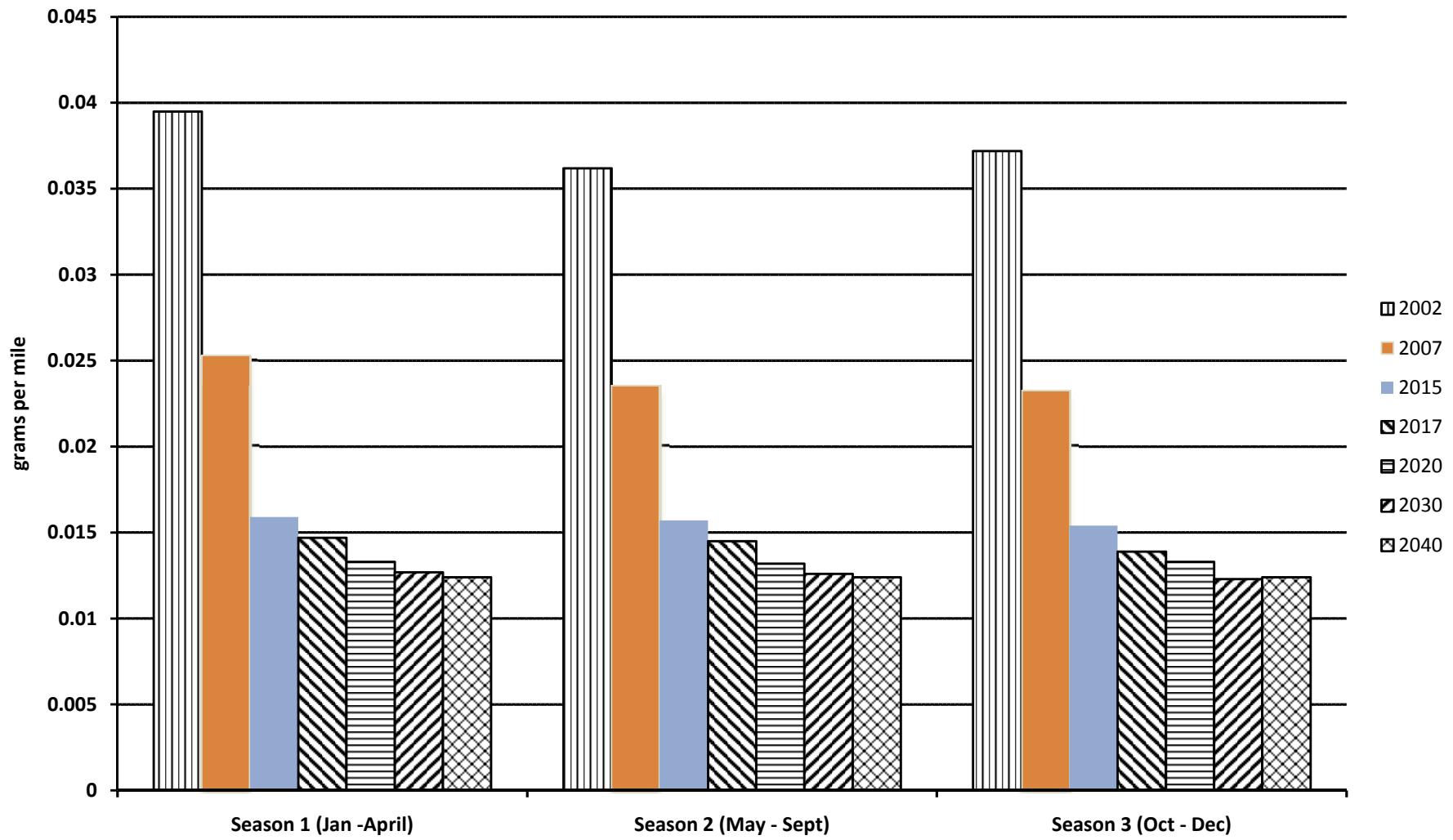


EXHIBIT 6

AIR QUALITY CONFORMITY UPDATE

Mobile Source VOC Emissions

for the 8-Hour Ozone Nonattainment Area

2012 CLRP & FY 2013-2018 TIP

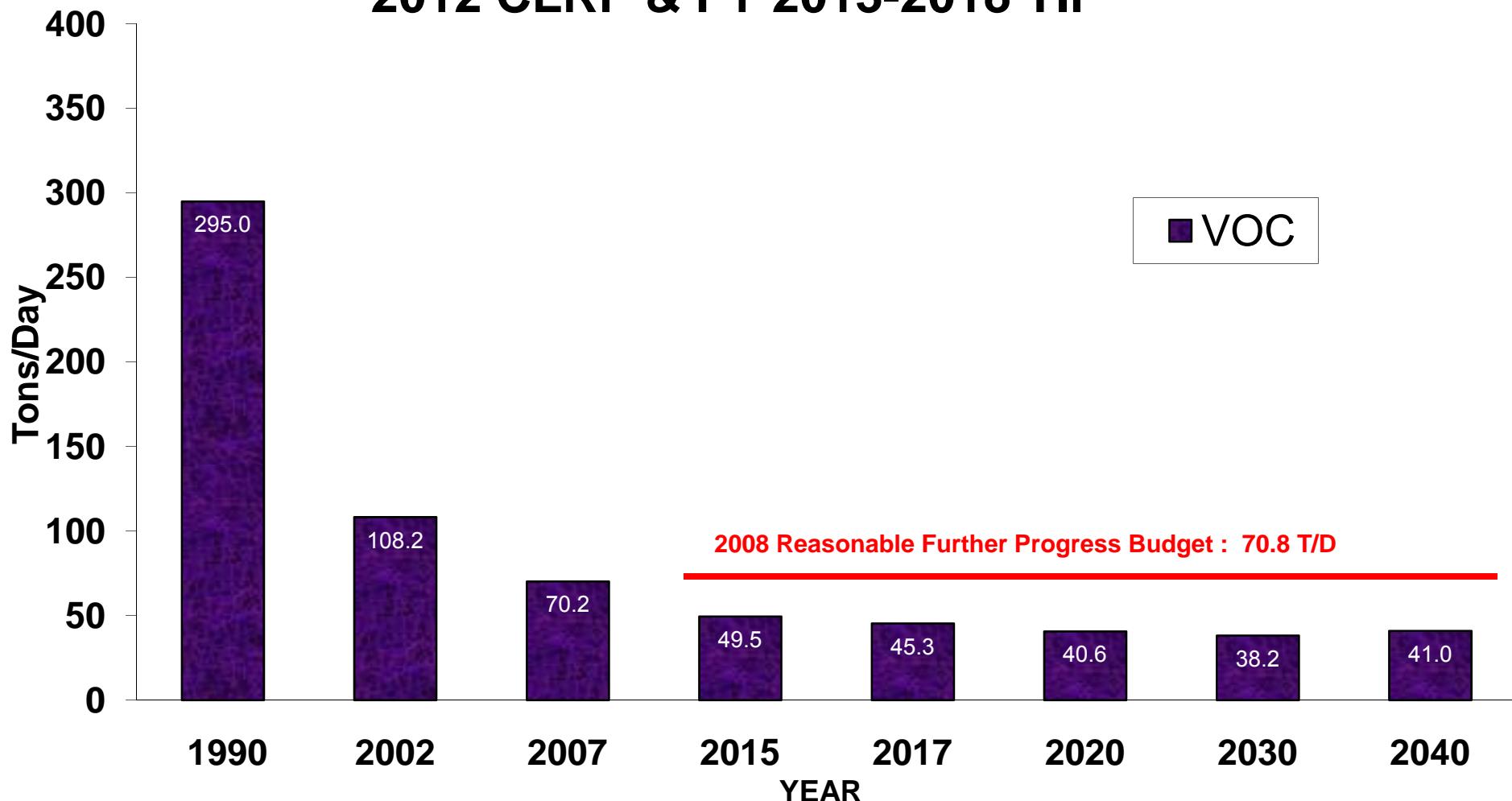


EXHIBIT 7

AIR QUALITY CONFORMITY UPDATE

Mobile Source NOx Emissions for the 8-Hour Ozone Nonattainment Area 2012 CLRP & FY2013-2018 TIP

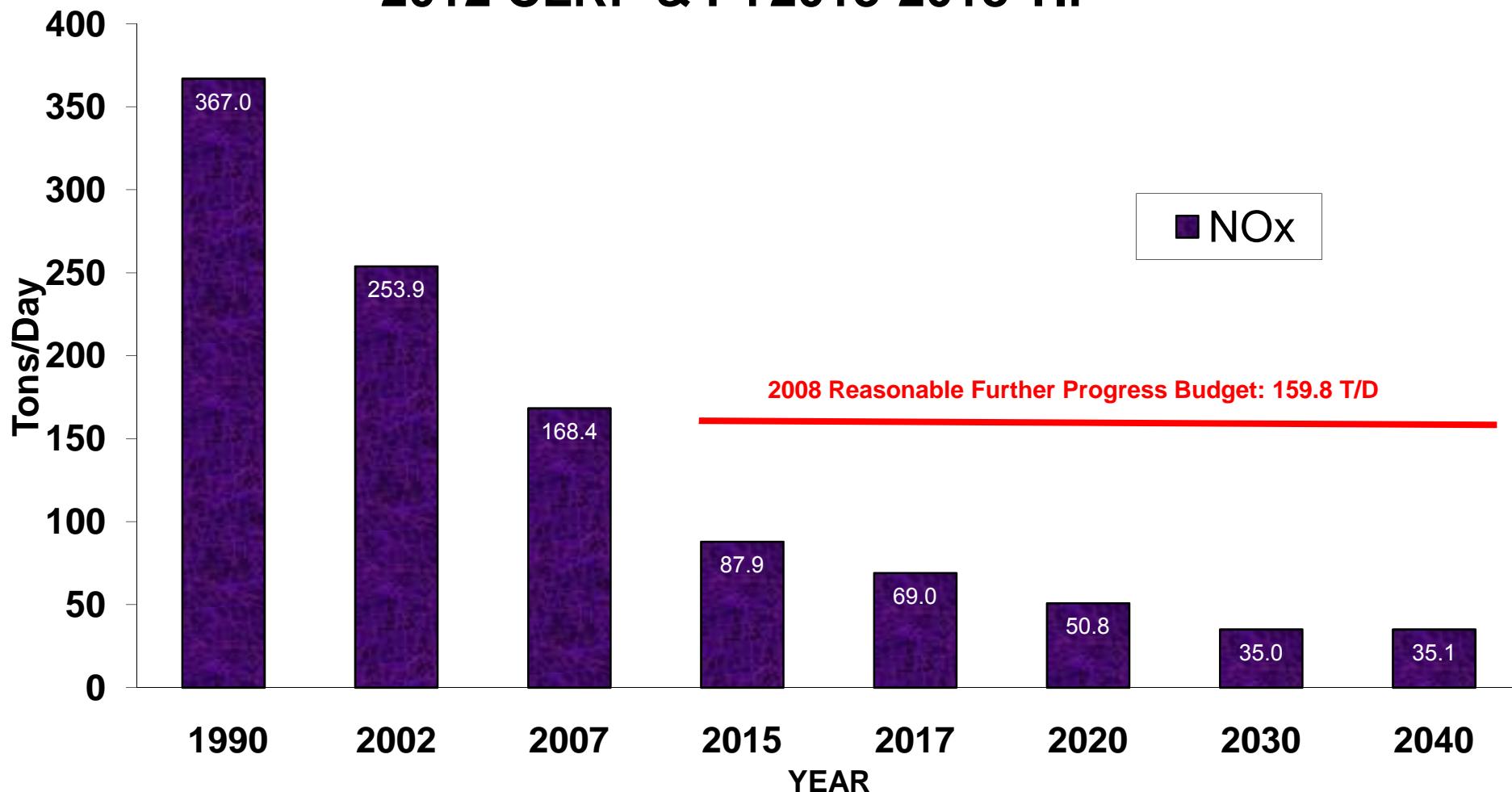


EXHIBIT 8

AIR QUALITY CONFORMITY UPDATE

Mobile Source Emissions

PM_{2.5} Precursor: NOx

(tons/year in thousands)

2012 CLRP & FY2013-2018 TIP

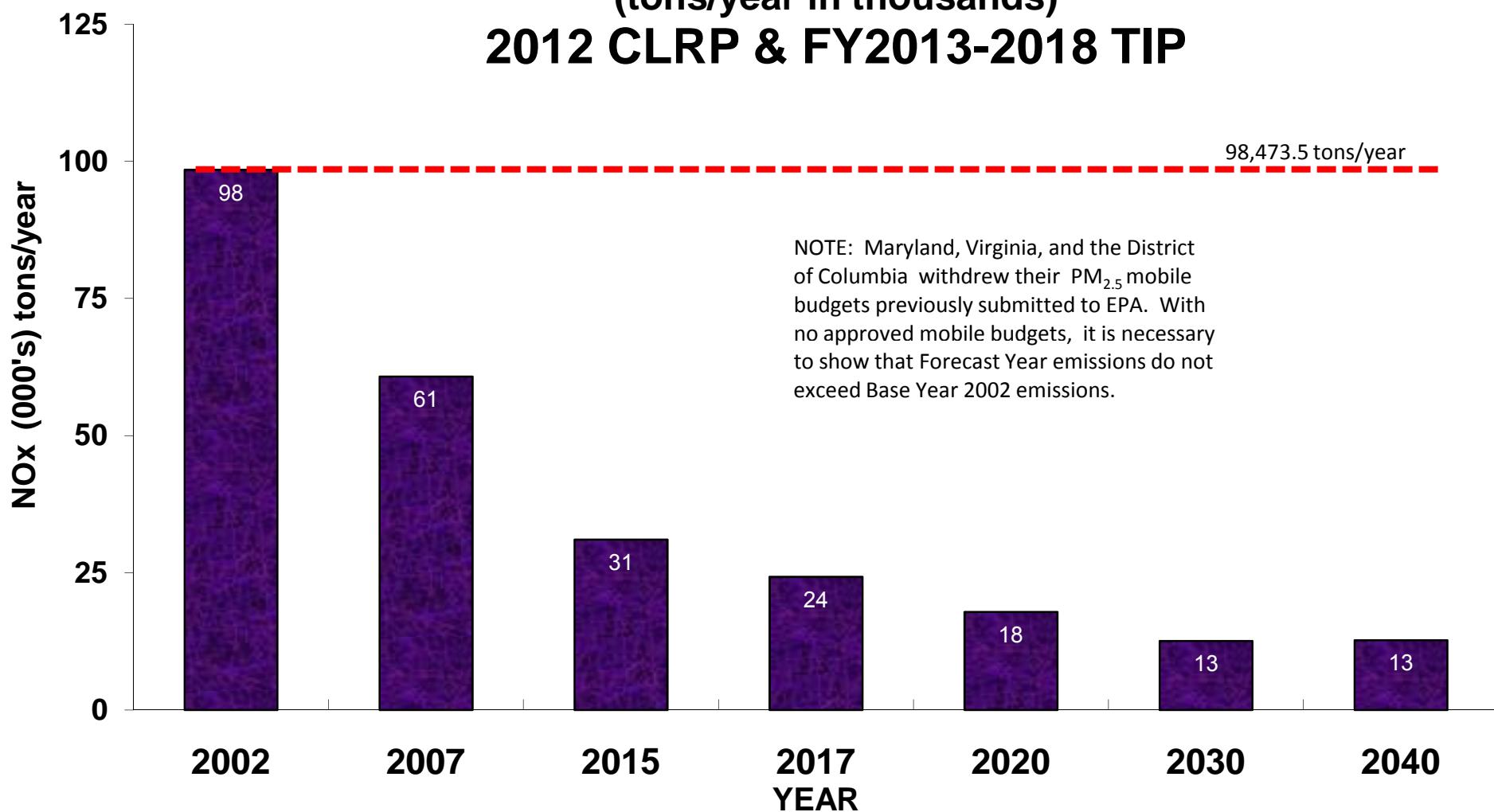
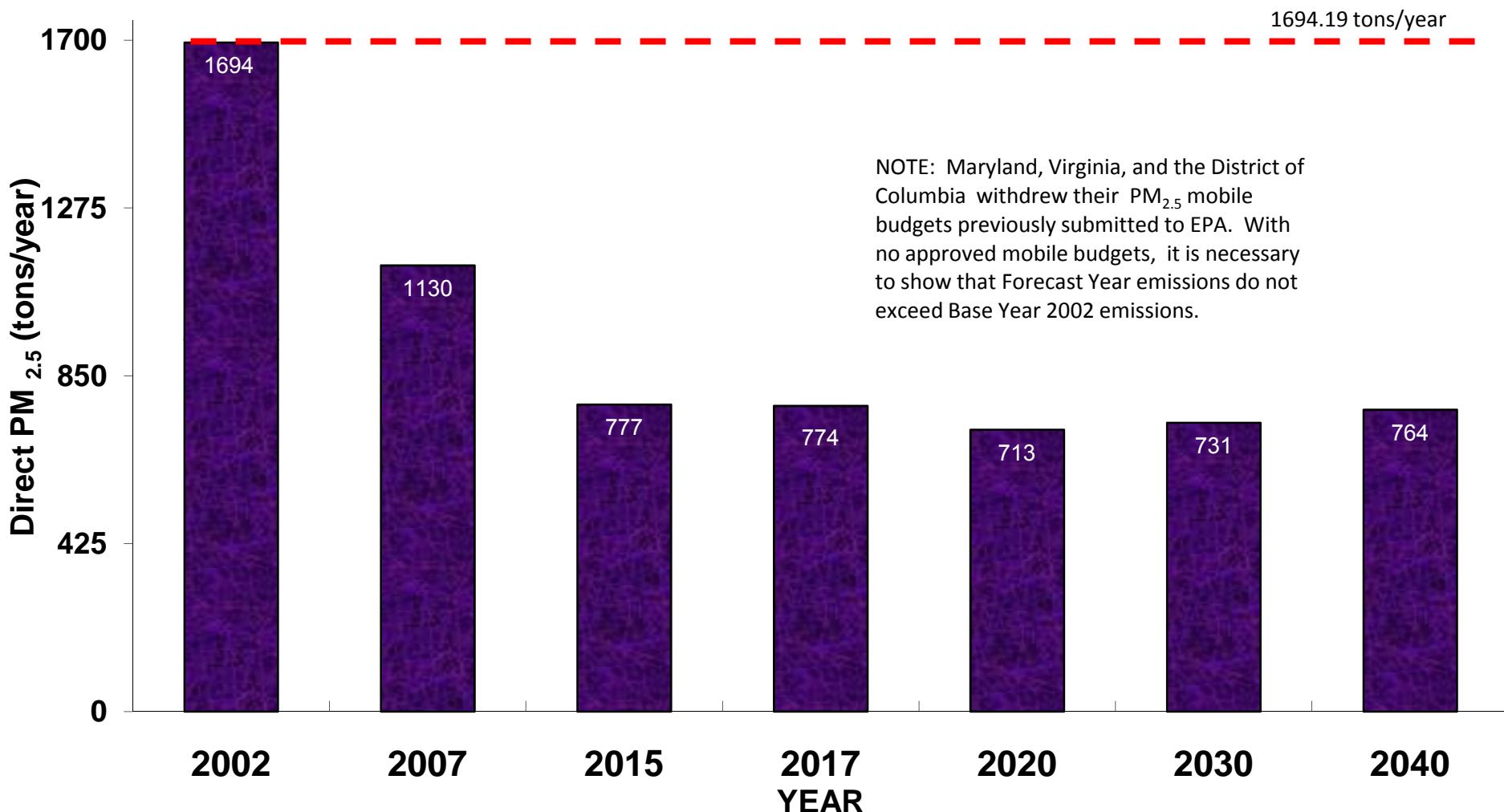


EXHIBIT 9
AIR QUALITY CONFORMITY UPDATE
Mobile Source Emissions
Direct PM_{2.5}
(tons/year)
2012 CLRP & FY2013-2018 TIP



ATTACHMENT A



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax (804) 698-4500 TDD (804) 698-4021

www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

JAN 23 2012

Ms. Diana Esher, Director
Air Protection Division (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Reference: Withdrawal of the
Virginia Portion of 1997 PM_{2.5}
NAAQS Attainment SIP Revision
for the Washington DC-MD-VA
Nonattainment Area

Dear Ms. Esher:

On April 4, 2008, Virginia officially requested approval of a revision to the Commonwealth of Virginia State Implementation Plan (SIP). The revision demonstrated the improvements made to the air quality in the Washington DC-MD-VA Nonattainment Area and the efforts taken to achieve the 1997 national ambient air quality standards (NAAQS) for PM_{2.5} by 2009. This SIP revision for the Washington DC-MD-VA area included (i) the attainment plan, (ii) analysis of reasonably available control measures, (iii) attainment demonstration, (iv) contingency plans for failure to attain the air quality standard, (v) mobile source budgets, and (vi) the base year 2002 air pollutant emissions inventory.

Air quality has significantly improved in the Washington DC-MD-VA area. On January 12, 2009 (74 FR 1146), EPA determined that the area had attained the NAAQS and issued a clean data determination for the area. This determination suspended the requirements for the Commonwealth to submit attainment demonstrations and associated reasonably available control measures, reasonable further progress plans, contingency measures, and other planning SIPs related to attainment of the NAAQS in the area. The purpose of this letter is to withdraw these portions of the April 4, 2008 submittal. Specifically, the Commonwealth hereby withdraws the (i) attainment plan, (ii) analysis of reasonably available control measures, (iii) attainment

Ms. Diana Esher

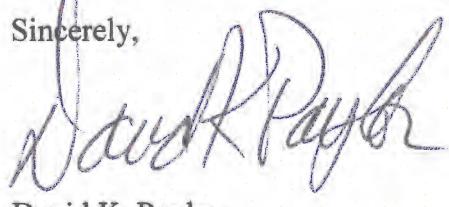
Page 2

demonstration, (iv) contingency plans for failure to attain the air quality standard, and (v) mobile source budgets, all of which were submitted on April 4, 2008. To ensure that Virginia has met the requirements of § 172(c)(3) regarding inventory submittals, the Commonwealth is not requesting the withdrawal of the base year 2002 air pollutant emissions inventory, which comprised Chapter 3 and Appendix B of the April 4, 2008 document.

As a related matter, Virginia, in cooperation with the District of Columbia, Maryland, and the Metropolitan Washington Council of Governments, is developing a redesignation request and maintenance plan for the Washington DC-MD-VA area with respect to the 1997 PM_{2.5} NAAQS. This request and plan, which will contain mobile vehicle emissions budgets developed using MOVES2010, is expected to be ready for final submittal to EPA in 2012.

If you have any questions or need additional information, please let us know.

Sincerely,



David K. Paylor

DKP\kgs

TEMPLATES\SIP-REG\REG00w
SIP\NONATTN PLANS\2012\NVAPMw-SIP.DOC



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

FEB 29 2012

Mr. Shawn M. Garvin
Regional Administrator
U.S. Environmental Protection Agency, Region III
1650 Arch Street (3RA00)
Philadelphia, PA 19103-2029

Dear Mr. Garvin:

On April 3, 2008, Maryland officially requested EPA approval of the following state implementation plan (SIP) revision:

Maryland State Implementation Plan (SIP) for Fine Particle (PM_{2.5}) Standard and 2002 Base Year Inventory for the Washington DC-MD-VA Nonattainment Area

The plan revision demonstrated the improvements made to the air quality in the Washington DC-MD-VA Nonattainment Area (“the Area”) and the efforts taken to achieve the 1997 national ambient air quality standard (NAAQS) for PM_{2.5} by 2009. This SIP revision for the Washington DC-MD-VA area included: (i) the attainment plan; (ii) an analysis of reasonably available control measures; (iii) an attainment demonstration; (iv) contingency plans for failure to attain the air quality standard; (v) mobile source budgets; and (vi) the base year 2002 air pollutant emissions inventory.

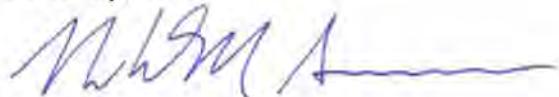
Air quality has significantly improved in the Washington DC-MD-VA area. On January 12, 2009 (74 FR 1146), EPA determined that the Area had attained the NAAQS and issued a clean data determination for the Area. This determination suspended the requirements for Maryland to submit attainment demonstrations and associated reasonably available control measures, reasonable further progress plans, contingency measures, and other planning SIPs related to attainment of the NAAQS in the Area. The purpose of this letter is to withdraw these portions of the April 3, 2008 submittal.

Specifically, the State of Maryland hereby withdraws: (i) the attainment plan; (ii) the analysis of reasonably available control measures; (iii) the attainment demonstration; (iv) the contingency plans for failure to attain the air quality standard; and (v) the mobile source budgets, all of which were submitted on April 3, 2008. To ensure that Maryland has met the requirements of Section 172(c)(3) of the Clean Air Act regarding inventory submittals, the State is not requesting the withdrawal of the base year 2002 air pollutant emissions inventory, which comprises Chapter 3 and Appendix B of the original April 3, 2008 SIP submission.

On a related matter, Maryland, in cooperation with the District of Columbia, Virginia, and the Metropolitan Washington Council of Governments, is developing a redesignation request and maintenance plan for the Washington DC-MD-VA area with respect to the 1997 PM_{2.5} NAAQS. This request and plan, which will contain mobile vehicle emissions budgets developed using MOVES2010, is expected to be ready for final submittal to EPA in 2012.

If you have any questions regarding these matters or require additional information, please contact Mr. George (Tad) S. Aburn, Jr., Director of the Air and Radiation Management Administration at 410-537-3255, or by email, at gaburn@mde.state.md.us.

Sincerely,



Secretary

cc: Diana Esher, Director, Air Protection Division, EPA Region III
George (Tad) S. Aburn, Jr., Director, Air and Radiation Management Administration

GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment



Office of the Director

February 6, 2012

Shawn M. Garvin
Regional Administrator
U.S. Environmental Protection Agency
Region III (Mail Code: 3RA00)
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Subject: Withdrawal of the District of Columbia Portion of 1997 PM_{2.5} NAAQS
Attainment SIP Revision for the Washington DC-MD-VA Nonattainment Area

Dear Mr. Garvin:

On April 2, 2008, the District of Columbia submitted a revision to its State Implementation Plan (SIP) for attaining the 1997 national ambient air quality standards (NAAQS) for PM_{2.5} and requested U.S. Environmental Protection Agency's (EPA) approval. The revision demonstrated the anticipated improvements to the air quality in the Washington DC-MD-VA Nonattainment Area and the efforts being taken to achieve the 1997 PM_{2.5} NAAQS by 2009. The April 2, 2008, SIP revision for the Washington DC-MD-VA area included (i) the attainment plan, (ii) analysis of reasonably available control measures, (iii) attainment demonstration, (iv) contingency plans for failure to attain the air quality standard, (v) mobile source budgets, and (vi) the base year 2002 air pollutant emissions inventory.

Air quality has significantly improved in the Washington DC-MD-VA area. On January 12, 2009, EPA issued a clean data determination for the area (74 FR 1146). The clean data determination suspended the requirements for the District of Columbia to submit attainment demonstrations and associated reasonably available control measures, reasonable further progress plans, contingency measures, and other SIPs related to attainment of the 1997 PM_{2.5} NAAQS in the area. The purpose of this letter is to withdraw those portions of the April 2, 2008, submittal. Specifically, the District of Columbia hereby withdraws the (i) attainment plan, (ii) analysis of reasonably available control measures, (iii) attainment demonstration, (iv) contingency plans for failure to attain the air quality standard, and (v) mobile source budgets, all of which were submitted on April 2, 2008. To ensure that the District of Columbia has met the requirements of § 172(c)(3) of the Clean Air Act regarding emissions inventory submittals, the District of Columbia is not requesting the withdrawal of the base year 2002 air pollutant emissions inventory, which comprised Chapter 3 and Appendix B of the SIP revision documents submitted on April 2, 2008.

As a related matter, the District of Columbia, in partnership with Virginia, Maryland, and the Metropolitan Washington Air Quality Committee, is developing a redesignation request and a maintenance plan for the Washington DC-MD-VA area with respect to the 1997 PM_{2.5} NAAQS. This request and plan, which will contain mobile vehicle emissions budgets developed using MOVES2010, is expected to be ready for final submittal to EPA in 2012.

Should you have any questions or require additional information, please contact me at (202) 535-2615, or Ms. Cecily Beall, Associate Director for the Air Quality Division, at (202) 535-2626.

Sincerely,



Christophe A.G. Tulou
Director

cc: Diana Esher, Director, Air Protection Division, EPA Region 3
Cecily Beall, Associate Director, Air Quality Division, DDOE

ATTACHMENT B

AIR QUALITY CONFORMITY UPDATE HOUSEHOLD DATA

MSA:	2007	2015	2017	2020	2030	2040	2040/2007
D.C.	258726	287617	291838	298115	318252	339889	1.31
MONTGOMERY	352913	376536	384816	397237	436202	461469	1.31
PR.GEORGES	301540	323364	328583	336404	359878	379317	1.26
ARLINGTON	94543	105611	107838	111190	116788	119761	1.27
ALEXANDRIA	67041	71520	73485	76426	83831	92155	1.37
FAIRFAX	393784	417325	426728	440826	478759	500832	1.27
LOUDOUN	94321	117839	123843	132843	154159	162971	1.73
PR. WILLIAM	140727	166083	172975	183321	210450	229944	1.63
FREDERICK	81614	87487	89590	92740	107686	119564	1.46
CHARLES	48845	57528	60235	64299	75847	85901	1.76
STAFFORD	37504	49584	52701	57388	73383	87679	2.34
CALVERT	30760	34298	34991	36027	38348	40301	1.31
SUBTOTAL	1,902,318	2,094,792	2,147,623	2,226,816	2,453,583	2,619,783	1.38
ADDITIONAL COUNTIES:							
HOWARD	103132	117700	120864	125600	135486	137773	1.34
ANNE ARUNDEL	196402	210888	213647	217782	229371	234332	1.19
CARROLL	60279	65691	67260	69614	76111	81464	1.35
FREDERICKSBURG (VA) &N. SPOTSYLVANIA	40347	49994	52447	56137	68763	79050	1.96
CLARKE&JEFFERSON	24873	29615	30840	32679	40562	49835	2.00
FAUQUIER	24731	30982	32882	35730	47502	63154	2.55
K. GEORGE	7912	9800	10371	11228	14358	17125	2.16
ST. MARY'S	36573	44443	46408	49352	58143	66509	1.82
SUBTOTAL	494,249	559,113	574,719	598,122	670,296	729,242	1.48
TOTAL	2,396,567	2,653,905	2,722,342	2,824,938	3,123,879	3,349,025	1.40

SOURCE:

MWCOG Round 8.1 Cooperative Forecasts

BMC Round 7-C Cooperative Forecasts

GWRC/FAMPO Regional Demographic Control Forecasts for 2035 CLRP, June 2008

Tri-County Council for Southern Maryland data for Calvert, Charles and St. Mary's

AIR QUALITY CONFORMITY UPDATE EMPLOYMENT DATA

MSA:	2007	2015	2017	2020	2030	2040	2040/2007
D.C.	763530	812947	834060	865726	929641	982647	1.29
MONTGOMERY	504045	541995	559355	585363	684284	737364	1.46
PR.GEORGES	345777	356958	365324	377879	427514	497652	1.44
ARLINGTON	206400	247135	258626	275862	302588	308376	1.49
ALEXANDRIA	105870	116274	118783	122551	142738	155012	1.46
FAIRFAX	655611	722244	747569	785619	875216	935411	1.43
LOUDOUN	132849	167565	183113	206465	257212	285449	2.15
PR. WILLIAM	141076	163423	172538	186215	230047	278151	1.97
FREDERICK	86542	99386	101182	103862	109755	114907	1.33
CHARLES	60039	68439	69758	71731	77537	83138	1.38
STAFFORD	40114	52220	54328	57505	70172	84144	2.10
CALVERT	33512	41059	42422	44457	47159	48955	1.46
SUBTOTAL	3,075,365	3,389,645	3,507,058	3,683,235	4,153,863	4,511,206	1.47
ADDITIONAL COUNTIES:							
HOWARD	155565	181143	186679	194977	221168	231902	1.49
ANNE ARUNDEL	278707	309853	317528	329042	358320	370904	1.33
CARROLL	63773	69619	70099	70813	72456	74090	1.16
FREDERICKSBURG (VA) & N. SPOTSYLVANIA	61620	81897	84827	89210	103673	119691	1.94
CLARKE & JEFFERSON	26062	30827	32017	33800	39225	45298	1.74
FAUQUIER	25422	30501	32604	35762	43360	52578	2.07
K. GEORGE	10519	17805	18431	19370	22501	25740	2.45
ST. MARY'S	56173	64083	65350	67268	71969	75862	1.35
SUBTOTAL	677,841	785,728	807,535	840,242	932,672	996,065	1.47
TOTAL	3,753,206	4,175,373	4,314,593	4,523,477	5,086,535	5,507,271	1.47

SOURCE:

MWCOG Round 8.1 Cooperative Forecasts

BMC Round 7-C Cooperative Forecasts

GWRC/FAMPO Regional Demographic Control Forecasts for 2035 CLRP, June 2008

Tri-County Council for Southern Maryland data for Calvert, Charles and St. Mary's

NOTE: Includes Census Adjustment

ATTACHMENT C

TERM TRACKING SHEET
TRANSPORTATION EMISSION REDUCTION MEASURES
Part A - Daily Ozone Precursor Emissions

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

NOs	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS			ORIGINAL COMPLETION DATE	ACTUAL COMPLETION DATE	TONS/DAY REDUCTION										Project Category*	
				FULL	SCALED-BACK	UNDER-WAY			2015		2017		2020		2030		2040			
				REM					VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX		
198	2003-08	WMATA	60 Engine Replacement (MY 1992 & 1993 MY buses)	X			2004	2004	0.0107	0.0507	0.0098	0.0414							SP	
199	2003-08	WMATA	Car Sharing Program	X			2005	2004	0.0006	0.0012	0.0006	0.0010	0.0005	0.0007	0.0004	0.0006	0.0004	0.0006	C	
200	2003-08	WMATA	Bikes Racks on WMATA Buses in VA (372 Bike Racks)	X			2005	2004	0.0010	0.0013	0.0009	0.0010	0.0007	0.0007	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		0.004	0.009	0.004	0.007	0.0055	0.0133					SP	
203	2003-08	MDOT	Replace 55 Montgomery County 10 yr. old buses w/ new CNG buses			X	2005	Ongoing	0.0358	0.1094	0.0325	0.0893	0.0459	0.1628					SP	
204	2003-08	MDOT	Neighborhood Bus Shuttle (5 circulator routes)			X	2005		0.006	0.008	0.005	0.007	0.0043	0.0047	0.0038	0.0039	0.0038	0.0039	C	
205	2003-08	MDOT	New Surface Parking at Transit Centers (500 spaces)		X	2005	2005	0.0021	0.0040	0.0019	0.0033	0.0015	0.0023	0.0013	0.0019	0.0013	0.0019	0.0019	C	
206	2003-08	MDOT	Additional Bike Lockers at Metro-Stations			X	2005		0.0106	0.0139	0.0096	0.0114	0.0075	0.0080	0.0067	0.0067	0.0067	0.0066	C	
207	2003-08	MDOT	Bike Facilities at PnR Lots or other similar location			X	2005	2005	0.0075	0.0111	0.0068	0.0090	0.0053	0.0064	0.0048	0.0053	0.0047	0.0053	C	
208	2003-08	MDOT	CNG Fueling Stations			X	2005		0.0989	0.0786	0.0898	0.0642							SP	
209	2003-08	MDOT	Gas cap replacements (ROP Credit)			X	2005		N/A	N/A	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A	N/A		SP	
211	2003-08	MDOT	External Bicycle Racks on WMATA Buses (486 MD buses)	X			2005	2002	0.0011	0.0015	0.0010	0.0012	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	C (TCM)	
212	2003-08	MDOT	Bike \ Pedestrian Trail - Anacostia River Walk			X	2005	Ongoing	0.0005	0.0003	0.0004	0.0003	0.0003	0.0002	0.0003	0.0001	0.0003	0.0001	C	
213	2003-08	MDOT	Transit Prioritization - Queue Jumps			X	2005		0.002	0.002	0.002	0.002	0.0018	0.0014	0.0016	0.0012	0.0016	0.0012	C	
214	2003-08	MDOT	Commuter Choice Benefit/Tax Credit - Marketing Expansion	X			2005	Ongoing	0.0438	0.0574	0.0398	0.0469	0.0311	0.0330	0.0279	0.0274	0.0277	0.0273	C	
215	2003-08	MDOT	Improvements to Pedestrian Access in TOD areas (4 locations)			X	2005	Ongoing	0.0048	0.0058	0.0043	0.0047	0.0034	0.0033	0.0030	0.0028	0.0030	0.0028	C	
216	2003-08	MDOT	Telecommuting Expansion ¹	X			2005	Ongoing	0.0517	0.0807	0.0470	0.0659	0.0367	0.0464	0.0330	0.0385	0.0327	0.0384	C	
217	2003-08	MDOT	Replace older Diesel Engine in Public Sector vehicles			X	2005		0.0185	0.0873	0.0168	0.0713							H	
218	2003-08	VDOT	MV-92 Telecommuting Program - Expanded ¹	X			2005	2005	0.0553	0.0862	0.0502	0.0704	0.0392	0.0496	0.0352	0.0411	0.0350	0.0410	C	
219	2003-08	VDOT	MV-123 Employer Outreach for Public Sector Employees	X			2005	2003	0.0123	0.0158	0.0111	0.0129	0.0087	0.0091	0.0078	0.0076	0.0078	0.0075	C	
220	2003-08	REGION	Signal System Optimization	X			2005	2005	0.3174	0.0762	0.3174	0.0762	0.2509	0.0475	0.2252	0.0324	0.2194	0.0310	TR	
221	2007-12	MDOT	Two P & R Lots in Frederick County (99 spaces)	X			2007	2008	0.0007	0.0011	0.0006	0.0009	0.0005	0.0007	0.0005	0.0005	0.0004	0.0005	C	
222	2007-12	MDOT	MDOT P & R Lots at US 340 (66-99 spaces, Frederick Co.)	X			2007	2007												
223	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. (37 spaces)	X			2008	2008	0.0005	0.0009	0.0005	0.0007	0.0004	0.0005	0.0003	0.0004	0.0003	0.0004		
224	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. - expansion (39 spaces)			X	2011	2011												
225	2008-13	MDOT	MCG/MDOT P & R Lots at I 70 & MD 355 (100 spaces)			X	2010	2010	0.0007	0.0011	0.0006	0.0009	0.0005	0.0007	0.0005	0.0006	0.0005	0.0006		
226	2008-13	MDOT	MCG/MDOT P & R Lots at I 270 & MD 80 (164 spaces)	X			2009	2009	0.0011	0.0019	0.0010	0.0015	0.0008	0.0011	0.0007	0.0009	0.0007	0.0009		
227	2008-13	MDOT	MDOT Sygol System Reviewing			X	2010	on-going												
228	2008-13	MDOT	MDOT Takoma Langley Transit Center			X	2012	2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
									Available Emissions Credits	1.960	3.292	1.810	2.707	1.483	1.167	1.335	0.800	1.322	0.796	

TRANSPORTATION EMISSION REDUCTION MEASURES (CLRP Projects Only)
Part A - Daily Ozone Precursor Emissions

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

NOs	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS			PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	TONS/DAY REDUCTION								Project Category				
				FULL	SCALED-BACK	UNDER-WAY			2015		2017		2020		2030						
									VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx					
221	1995-00 TIP	REGION	M-24 Speed Limit Adherence	X			2010		-0.0058	0.1838	-0.0053	0.1501	-0.0021	0.1206	0.0005	0.0377	0.0005	0.0376	TR		
222	1996-01 TIP	MGC	Rock Spring Park Pedestrian Amenities			X			0.0008	0.0027	0.0007	0.0022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-		
223	1996-01 TIP	MGC	Olney Transit Center Park and Ride				2015		0.0016	0.0054	0.0014	0.0044	0.0009	0.0030	0.0003	0.0007	0.0003	0.0007	C		
224	1996-01 TIP	MGC	Damascus Park and Ride					2003	0.0008	0.0027	0.0007	0.0022	0.0004	0.0015	0.0001	0.0003	0.0001	0.0003	C		
225	1996-01 TIP	DC	M-103 Taxicab Replacement (DC)			X	2015		0.0000	0.0000	0.0000	0.0000	0.1745	0.3000	0.3490	0.6000	0.3467	0.5984	H		
226	STADIUM ANALYSIS		M-103 Taxicab Replacement (MD)			X	2008		0.0000	0.0000	0.0000	0.0000	0.1560	0.2400	0.1560	0.2400	0.1550	0.2394	H		
227	1997-02 TIP	MDOT	Shady Grove West Transit Center Park and Ride			X			0.0000	0.0067	0.0000	0.0055	0.0000	0.0038	0.0000	0.0009	0.0000	0.0009	C		
228	1997-02 TIP	MGC	Olney Transit Center Park and Ride				2015		0.0000	0.0000	0.0000	0.0000	0.0004	0.0012	0.0003	0.0007	0.0003	0.0007	C		
229	1997-02 TIP	MGC	White Oak Park and Ride				2008		0.0000	0.0134	0.0000	0.0110	0.0000	0.0076	0.0000	0.0017	0.0000	0.0017	C		
230	1997-02 TIP	MGC	Damascus Park and Ride					2003	0.0000	0.0000	0.0000	0.0000	0.0002	0.0005	0.0001	0.0003	0.0001	0.0003	C		
231	1997-02 TIP	MGC	Four Corners Transit Center				2015		0.0000	0.0007	0.0000	0.0005	0.0000	0.0004	0.0000	0.0001	0.0000	0.0001	C		
232	1997-02 TIP	MGC	Burtonsville Transit Center			X			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-		
233	1997-02 TIP	MGC	Silver Spring Transit Access						0.0000	0.0007	0.0000	0.0005	0.0000	0.0003	0.0000	0.0002	0.0000	0.0002	C		
234	1997-02 TIP	MGC	Shady Grove Parking Construction					2003	0.0039	0.0128	0.0035	0.0104	0.0021	0.0072	0.0007	0.0017	0.0007	0.0017	C		
CLRP TOTAL									0.0004	0.2194	0.0004	0.1792	0.0019	0.1424	0.0022	0.0434	0.0021	0.0432			
CLRP + TIP TOTAL									1.960	3.511	1.811	2.886	1.485	1.310	1.337	0.843	1.324	0.840			

DEFINITIONS: Project Numbers implemented fully prior to 2000 were removed from the TERM Tracking Sheet

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

**REMOVED
projects**

- Emissions credits are not counted in total available emissions credits
- 1 Line items 218, 216, 179, 92 are all credited as part of M-92 Regional Telecommute Support TERM, line item # 75
- 2 Line item 108 & 219 credits are taken only for year 2010

TERM TRACKING SHEET
AIR QUALITY CONFORMITY UPDATE
TRANSPORTATION EMISSION REDUCTION MEASURES
Part B - Yearly PM_{2.5} and Precursor NOx Emissions

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

NOs	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL COMPLETION DATE	ACTUAL COMPLETION DATE	TONS/YEAR REDUCTION								Project Category *		
				FULL	SCALED-	UNDER-	REM			2015		2017		2020		2030		Project Category *		
										PM _{2.5}	Precursor NOx	PM _{2.5}	Precursor NOx	PM _{2.5}	Precursor NOx	PM _{2.5}	Precursor NOx			
202	2003-08	MDOT	Fleet Replacement (state auto fleet, gas to hybrid, 250 vehicles)				X	2005		0.0497	0.9214	0.0492	0.7446	0.0492	0.5155			SP		
203	2003-08	MDOT	Replace 55 Montgomery County 10 yr. old buses w/ new CNG buses			X		2005	Ongoing	0.6078	11.2788	0.6024	9.1145	0.6024	6.3103			SP		
204	2003-08	MDOT	Neighborhood Bus Shuttle (5 circulator routes)				X	2005		0.0831	1.5336	0.0824	1.2393	0.0824	0.8580	0.0824	0.7126	0.0824	0.5914	C
205	2003-08	MDOT	New Surface Parking at Transit Centers (500 spaces)			X		2005	2005	0.0440	0.7416	0.0436	0.5993	0.0436	0.4143	0.0436	0.3488	0.0436	0.2895	C
206	2003-08	MDOT	Additional Bike Lockers at Metro-Stations				X	2005		0.1407	2.6246	0.1395	2.1210	0.1395	1.4685	0.1395	1.2179	0.1395	1.0107	C
207	2003-08	MDOT	Bike Facilities at PnR Lots or other similar location			X		2005	2005	0.1154	2.0730	0.1144	1.6752	0.1144	1.1592	0.1144	0.9667	0.1144	0.8023	C
208	2003-08	MDOT	CNG Fueling Stations				X	2005										SP		
209	2003-08	MDOT	Gas cap replacements (ROP Credit)				X	2005		N/A	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A	SP		
211	2003-08	MDOT	External Bicycle Racks on WMATA Buses (486 MD buses)	X				2005	2002	0.0149	0.2781	0.0148	0.2247	0.0148	0.1556	0.0148	0.1290	0.0148	0.1071	C (TCM)
212	2003-08	MDOT	Bike \ Pedestrian Trail - Anacostia River Walk			X		2005	Ongoing	0.0022	0.0603	0.0022	0.0487	0.0022	0.0339	0.0022	0.0268	0.0022	0.0223	C
213	2003-08	MDOT	Transit Prioritization - Queue Jumps				X	2005		0.0227	0.4735	0.0225	0.3827	0.0225	0.2654	0.0225	0.2168	0.0225	0.1799	C
214	2003-08	MDOT	Commuter Choice Benefit/Tax Credit - Marketing Expansion	X				2005	Ongoing	0.5782	10.8048	0.5732	8.7314	0.5732	6.0457	0.5732	5.0126	0.5732	4.1601	C
215	2003-08	MDOT	Improvements to Pedestrian Access in TOD areas (4 locations)			X		2005	Ongoing	0.0572	1.0973	0.0567	0.8868	0.0567	0.6142	0.0567	0.5074	0.0567	0.4211	C
216	2003-08	MDOT	Telecommuting Expansion ¹	X				2005	Ongoing	0.8541	15.1122	0.8466	12.2123	0.8466	8.4488	0.8466	7.0611	0.8466	5.8602	C
217	2003-08	MDOT	Replace older Diesel Engine in Public Sector vehicles				X	2005										H		
218	2003-08	VDOT	MV-92 Telecommuting Program - Expanded ¹	X				2005	2005	0.9121	16.1390	0.9041	13.0421	0.9041	9.0228	0.9041	7.5408	0.9041	6.2584	C
219	2003-08	VDOT	MV-123 Employer Outreach for Public Sector Employees ²	X				2005	2003	0.1588	2.9825	0.1574	2.4102	0.1574	1.6690	0.1574	1.3828	0.1574	1.1476	C
220	2003-08	REGION	Signal System Optimization	X				2005	2005	1.0154	18.8425	1.0065	15.2268	1.0065	10.5421	1.0065	8.7492	1.0065	7.2612	TR
221	2007-12	MDOT	Two P & R Lots in Frederick County (99 spaces)	X				2007	2008	0.0122	0.2129	0.0121	0.1720	0.0086	0.0831	0.0086	0.0709	0.0086	0.0589	C
222	2007-12	MDOT	MDOT P & R Lots at US 340 (66-99 spaces, Frederick Co.)	X				2007	2007											
223	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. (37 spaces)	X				2008	2008	0.0094	0.1634	0.0093	0.1321	0.0093	0.0913	0.0093	0.0765	0.0093	0.0635	
224	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. - expansion (39 spaces)			X		2011	2011											
225	2008-13	MDOT	MCG/MDOT P & R Lots at I 70 & MD 355 (100 spaces)			X		2010	2010	0.0124	0.2150	0.0123	0.1738	0.0123	0.1202	0.0123	0.1007	0.0123	0.0836	
226	2008-13	MDOT	MCG/MDOT P & R Lots at I 270 & MD 80 (164 spaces)	X				2009	2009	0.0203	0.3526	0.0201	0.2850	0.0201	0.1971	0.0201	0.1652	0.0201	0.1371	
227	2008-13	MDOT	MDOT Sygial System Reviewing				X	2010	on-going											
228	2008-13	MDOT	MDOT Takoma Langley Transit Center				X	2012	2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
			Available Emissions Credits					17.811	389.360	17.655	314.694	15.744	198.753	15.141	159.918	15.141	132.721			

TERM TRACKING SHEET
AIR QUALITY CONFORMITY UPDATE
TRANSPORTATION EMISSION REDUCTION MEASURES (CLRP Projects Only)
Part B - Yearly PM_{2.5} and Precursor NOx Emissions

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

NOs	TIP		PROJECT	IMPLEMENTATION STATUS		PROJECTED COMPLETION	ACTUAL COMPLETION	TONS/YEAR REDUCTION								Project						
				CREDITED	AGENCY	FULL	BACK	UNDER-WAY	REM	DATE	DATE	2015		2017		2020		2030				
												PM _{2.5}	Precursor NOx									
221	1995-00 TIP	REGION	M-24 Speed Limit Adherence							2010		1.8635	34.5809	1.8471	27.9451	2.1072	22.0719	0.7941	6.9030	0.7941	5.7290	TR
222	1996-01 TIP	MGC	Rock Spring Park Pedestrian Amenities					X				0.0272	0.5056	0.0270	0.4086	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-
223	1996-01 TIP	MGC	Olney Transit Center Park and Ride							2015		0.0545	1.0113	0.0540	0.8172	0.0531	0.5559	0.0147	0.1279	0.0147	0.1062	C
224	1996-01 TIP	MGC	Damascus Park and Ride								2003	0.0272	0.5056	0.0270	0.4086	0.0265	0.2780	0.0074	0.0640	0.0074	0.0531	C
225	1996-01 TIP	DC	M-103 Taxicab Replacement (DC)			X				2015		0.0000	0.0000	0.0000	0.0000	5.2412	54.8984	12.6415	109.8936	12.6415	91.2039	H
226	STADIUM ANALYSIS		M-103 Taxicab Replacement (MD)			X				2008		0.0000	0.0000	0.0000	0.0000	4.1929	43.9187	5.0566	43.9574	5.0566	36.4816	H
227	1997-02 TIP	MDOT	Shady Grove West Transit Center Park and Ride			X						0.0681	1.2641	0.0675	1.0215	0.0663	0.6949	0.0184	0.1599	0.0184	0.1327	C
228	1997-02 TIP	MGC	Olney Transit Center Park and Ride							2015		0.0000	0.0000	0.0000	0.0000	0.0218	0.2280	0.0147	0.1279	0.0147	0.1062	C
229	1997-02 TIP	MGC	White Oak Park and Ride							2008		0.1362	2.5282	0.1350	2.0430	0.1327	1.3898	0.0368	0.3199	0.0368	0.2655	C
230	1997-02 TIP	MGC	Damascus Park and Ride								2003	0.0000	0.0000	0.0000	0.0000	0.0082	0.0855	0.0055	0.0480	0.0055	0.0398	C
231	1997-02 TIP	MGC	Four Corners Transit Center							2015		0.0068	0.1264	0.0068	0.1022	0.0066	0.0695	0.0018	0.0160	0.0018	0.0133	C
232	1997-02 TIP	MGC	Burtonsville Transit Center			X						0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-
233	1997-02 TIP	MGC	Silver Spring Transit Access									0.0068	0.1264	0.0068	0.1022	0.0054	0.0570	0.0037	0.0320	0.0037	0.0265	C
234	1997-02 TIP	MGC	Shady Grove Parking Construction								2003	0.1294	2.4018	0.1283	1.9409	0.1261	1.3204	0.0350	0.3039	0.0350	0.2522	C
CLRP TOTAL												0.3610	41.2806	0.3579	33.3591	0.3804	26.0561	0.1196	7.9425	0.1196	6.5917	
CLRP + TIP TOTAL												18.172	430.641	18.013	348.053	16.124	224.809	15.261	167.861	15.261	139.313	

DEFINITIONS: Project Numbers implemented fully prior to 2000 were removed from the TERM Tracking Sheet

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

REMOVED

projects Emissions credits are not counted in total available emissions credits

1 Line items 218, 216, 179, 92 are all credited as part of M-92 Regional Telecommute Support TERM, line item # 75

2 Line item 108 & 219 credits are taken only for year 2010