

ITEM 9 – Action
November 16, 2011

Approval of Air Quality Conformity Determination for
the 2011 CLRP

Staff Recommendation: Adopt Resolution R5-2012 finding that the 2011 CLRP conforms with the requirements of the Clean Air Act Amendments of 1990.

Issues: None

Background: At the October 19 meeting, the Board was briefed on the air quality conformity analysis for the 2011 CLRP. On October 13, the draft 2011 CLRP and associated conformity analyses were released for public comment.

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

**RESOLUTION FINDING THAT THE 2011 CONSTRAINED LONG RANGE PLAN
CONFORMS 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) with the state implementation plans for air quality attainment within the Metropolitan Washington non-attainment area; and

WHEREAS, a work program was developed to address all procedures and requirements, including public and interagency consultation, and the work program was released for public comment on February 10 and approved by the TPB at its March 16, 2011 meeting; and

WHEREAS, on March 16, 2011, the TPB approved the projects submitted for inclusion in the air quality conformity assessment for the 2011 CLRP; and

WHEREAS, in each year's update of the CLRP between 2000 and 2011, the TPB has explicitly accounted for the funding uncertainties affecting the Metrorail system capacity and levels of service beyond 2005 by constraining transit ridership to or through the core area; and

WHEREAS, after accounting for the "Metro Matters" commitments for Metro's near-term funding and the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) legislation and state matching, the transit ridership constraint to or through the core area was applied in the both the 2010 CLRP and 2011 CLRP conformity analyses using 2020

ridership levels for 2030 and 2040; and

WHEREAS, on October 11, 2011, the draft results of the Air Quality Conformity Determination of the 2011 CLRP were released for a 30-day public comment period and inter-agency review; and

WHEREAS, the analysis reported in *Air Quality Conformity Determination of the 2011 Constrained Long Range Plan for the Washington Metropolitan Region*, dated November 16, 2011, demonstrates adherence to all mobile source emissions budgets for volatile organic compounds, nitrogen oxides, carbon monoxide and fine particle emissions (PM2.5), 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 November 9, 2011, the Metropolitan Washington Air Quality Committee (MWAQC) has provided favorable comments on the Air Quality Conformity Determination of the 2011 Constrained Long Range Plan for the Washington Metropolitan Region;

NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD determines that the 2011 Constrained Long Range Plan conforms 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

November 9, 2011

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

Dear Chair Bowser:

The Metropolitan Washington Air Quality Committee (MWAQC) has reviewed the Draft Air Quality Conformity Assessment for the 2011 CLRP. The analysis demonstrates the proposed transportation plan meets the interim emissions tests for the PM_{2.5} annual standard and the approved motor vehicle emissions budgets for the ozone standard.

Conformity of the estimated emissions from the 2011 CLRP is being tested for the 8-hour ozone standard against the 2008 8-hour ozone reasonable further progress (RFP) mobile budgets contained in the region's submitted ozone SIP. The 2008 Reasonable Further Progress (RFP) motor vehicle budget became effective on September 21, 2009. For PM_{2.5}, the revised air quality the conformity analyses passes the "build no greater than 2002" interim emissions test the region had previously selected.

We commend the National Capital Region Transportation Planning Board (TPB) for its contribution to clean air through compliance with the proposed motor vehicle emissions attainment budgets in the 8-hour ozone SIP and the annual PM_{2.5} SIP submitted to EPA in 2007 and 2008. This commitment is consistent with the region's air quality attainment plan and vital to the region's progress toward attainment and maintenance of these standards.

As you are aware, the EPA will soon release implementation guidance for the new 2008 ozone National Ambient Air Quality Standards (NAAQS) for 8-hour ozone of 75 ppb. EPA and the states are currently working to finalize area designations for the region. Based on current air quality monitoring data, the region will be designated nonattainment for the new standard. When the region is designated as a nonattainment area under these tighter new standards additional emission reductions will be needed across all sectors to meet these new more stringent standards. Through our interagency consultation process, we will need to explore development of a new lower motor vehicle emission budget to meet the new lower ozone standard. While we support EPA's proposal to extend the grace period for mandatory use of the new MOVES model for conformity, we look forward to working with you in the coming year to continue to transition to the new model and to begin to develop new proposed motor vehicle emission budgets using MOVES.

Additionally, through the Ozone Transport Commission, Maryland, Virginia and the District of Columbia are urging EPA for new federal emission control programs to provide new approaches to reducing emissions in our future fleets. MWAQC also supports the need for new federal emission control programs and encourages continued investment in public transit, ride-sharing and transit-

oriented development to enhance and expand such systems and programs to reduce future growth in single occupant vehicular trips and vehicle miles traveled. We also continue to strongly urge state and local governments to maintain their commitments to Transportation Emission Reduction Measures (TERMs) and other emission reduction measures to advance meeting the new tighter ozone and particulate matter standards as soon as possible. Now that the region has attained the PM_{2.5} standard and is seeking redesignation, the region may avoid future nonattainment designations as the federal standards are reviewed by using a proactive approach.

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.

Sincerely,

A handwritten signature in black ink that reads "Redella Pepper". The signature is written in a cursive, flowing style with a large initial "R".

Redella Pepper, 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

November 16, 2011

To: Transportation Planning Board

**From: Jane Posey
Senior Transportation Engineer**

Subject: Air Quality Conformity Assessment for the 2011 Update of the Constrained Long Range Plan (CLRP)

INTRODUCTION

This memo documents summary results of the air quality conformity assessment of the 2011 CLRP with respect to the following pollutants:

- **Ozone Season Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x).** Ozone season pollutants must not exceed EPA approved totals from the Metropolitan Washington Air Quality Committee's (MWAQC's) Motor Vehicle Emissions Budgets (MVEBs) from the 8-hour Ozone State Implementation Plan (SIP). MWAQC adopted the 8-hour ozone SIP in May, 2007, and on September 4, 2009, EPA found adequate the 2008 Reasonable Further Progress (RFP) budgets, and stated that the Metropolitan Washington region must use these budgets for future conformity determinations for the 8-hour ozone standard. The RFP budget for VOC is 70.8 tons/day, and for NO_x is 159.8 tons/day. Ozone season pollutants will no longer be assessed against 1-hour ozone budgets.
- **Fine Particles (PM_{2.5}).** In the absence of approved budgets EPA, allows for an assessment that shows emissions in "action" 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 NO_x, as well as wintertime CO, and are well below the 2002 base year levels for the PM_{2.5} pollutants.

The results, based upon analyses contained in the technical report, [Air Quality Conformity Determination Of The 2011 Constrained Long Range Plan For The Washington Metropolitan](#)

Region, were released for public comment and interagency consultation on October 13, 2011. The public comment period ended on November 12, 2011.

BACKGROUND

The Transportation Planning Board (TPB) approved the scope of work and the project submissions for the 2011 CLRP air quality conformity analysis on March 16, 2011.

Key technical inputs to the analysis include:

- Round 8.0a Cooperative Land Activity Forecasts
- The Version 2.3 Travel Demand Model including a 3722 Transportation Analysis Zones (TAZ) area system and updated transit service
- New Project Submissions
- 2008 Vehicle Registration Data
- EPA's Mobile6.2 Emissions Factor Model.

WORK ACTIVITIES

Staff prepared inventories for each pollutant for five forecast years (2002, 2016, 2020, 2030 and 2040). Ozone season pollutants (VOC and NO_x) and wintertime CO are inventoried for average weekday conditions, and precursor NO_x 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. In anticipation of possible emissions increases associated with implementation of the plan, staff (in conjunction with the TPB Technical Committee and its Travel Management Subcommittee) conducted parallel analyses of committed and potential new transportation emissions reduction measures (TERM)s, and documented emissions benefits for each analysis year.

Plan Amendments

Attachment A lists the major changes to the conformity project inputs since the 2010 CLRP.

Land Activity Forecasts

The COG Board approved Round 8.0 Cooperative Forecasts in November, 2010. 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. When the Baltimore Metropolitan Council recently updated its land use data, COG included those data in a new round of cooperative forecasts, Round 8.0a. The new data were used for the conformity analysis of the 2011 CLRP. Attachment B shows a summary of the Round 8.0a data.

Travel Modeling Process

The new Version 2.3 travel demand model was used for the first time in an air quality conformity analysis. The model includes a finer-grain zone system (3722 instead of 2191 TAZs) and a more detailed street base than that of the Version 2.2 model. Staff completely re-calibrated and re-validated the new model using the 2007/2008 household survey, numerous on-board transit surveys, 2007 Highway Performance Monitoring System (HPMS) traffic count data, and 2007 American Community Survey (ACS) data. The new model, reviewed extensively by the Travel Forecasting Subcommittee, contains numerous upgrades and additional technical parameters, enabling an improved analysis of travel in the region. For more information, review the December 2010 presentation to the TPB Technical Committee, or the Version 2.3 model documentation, both of which are located on the COG website.

In addition, in this air quality conformity assessment the definition of what constitutes a “regionally significant” project was changed. In the past, any project that changed any link in the regional highway or transit network was considered “regionally significant”. The new definition maintains the same threshold for “regional significant” as in the past, but accounts for the finer-grain zone system and more detailed street base. Attachment C contains a technical memo about regional significance.

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. 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 NO_x 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 NO_x emissions represent about 13 percent and less than

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 NO_x 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.

2011 CLRP Emissions Inventories vs. Budgets

Exhibits 6-9 display net emissions in comparison to emissions budgets for each forecast year. The charts show that emissions are within the mobile budgets (including budgets not yet approved by EPA) for each pollutant, for all forecast years. Wintertime CO emissions (contained in a full technical report but not summarized here) are also within the CO emissions budget.

Exhibits 8 and 9 show that both direct PM_{2.5} and precursor NO_x emissions are much lower than base year 2002 conditions and are within the proposed mobile budgets, for all forecast years, satisfying this additional conformity assessment criterion for PM_{2.5}.

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 D 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 summary result of these measures, shown as the bottom line for each section of the table, amounts to additional reductions in each of the pollutants. Only those projects which have been affirmed by the implementing agency as having been completed, or are on a realistic schedule towards implementation, are being credited in this emissions analysis. 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 November 9, 2011 letter. Their letter notes that the proposed CLRP meets all mobile source emissions tests for conformity. They commend the TPB for its compliance with the proposed 8-hour ozone and annual PM_{2.5} budgets. The Committee points out that EPA will soon release guidance for the new, more stringent, 2008 ozone National Ambient Air Quality Standards (NAAQS). With these new standards, additional emission reductions will be needed across all sectors, and MWAQC expects to explore the development of a “new lower motor vehicle emission budget to meet the new lower ozone standard”. The Committee supports EPA’s proposed extension of the grace period for the mandatory use of the MOVES model. They support the need for new

federal emission control programs, and encourage continued investment in systems and programs that will reduce growth in single occupancy vehicle trips and vehicle miles traveled. They strongly urge state and local governments to maintain their commitments to TERMS and other emissions reduction measures.

Response: The TPB appreciates MWAQC's recognition that the air quality conformity analysis demonstrates that the 2011 CLRP meets all of the required emissions tests. The TPB agrees with MWAQC on the need for new federal emissions control programs, as well as 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 2011 CLRP.

Following: Exhibits 1- 9
Attachments A - D

EXHIBIT 1

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

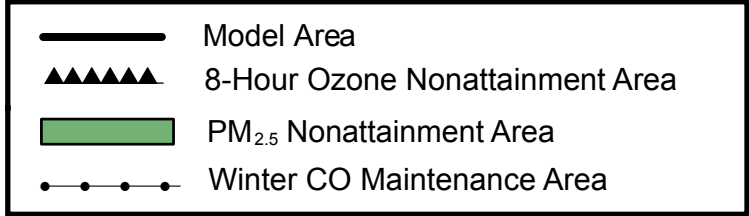
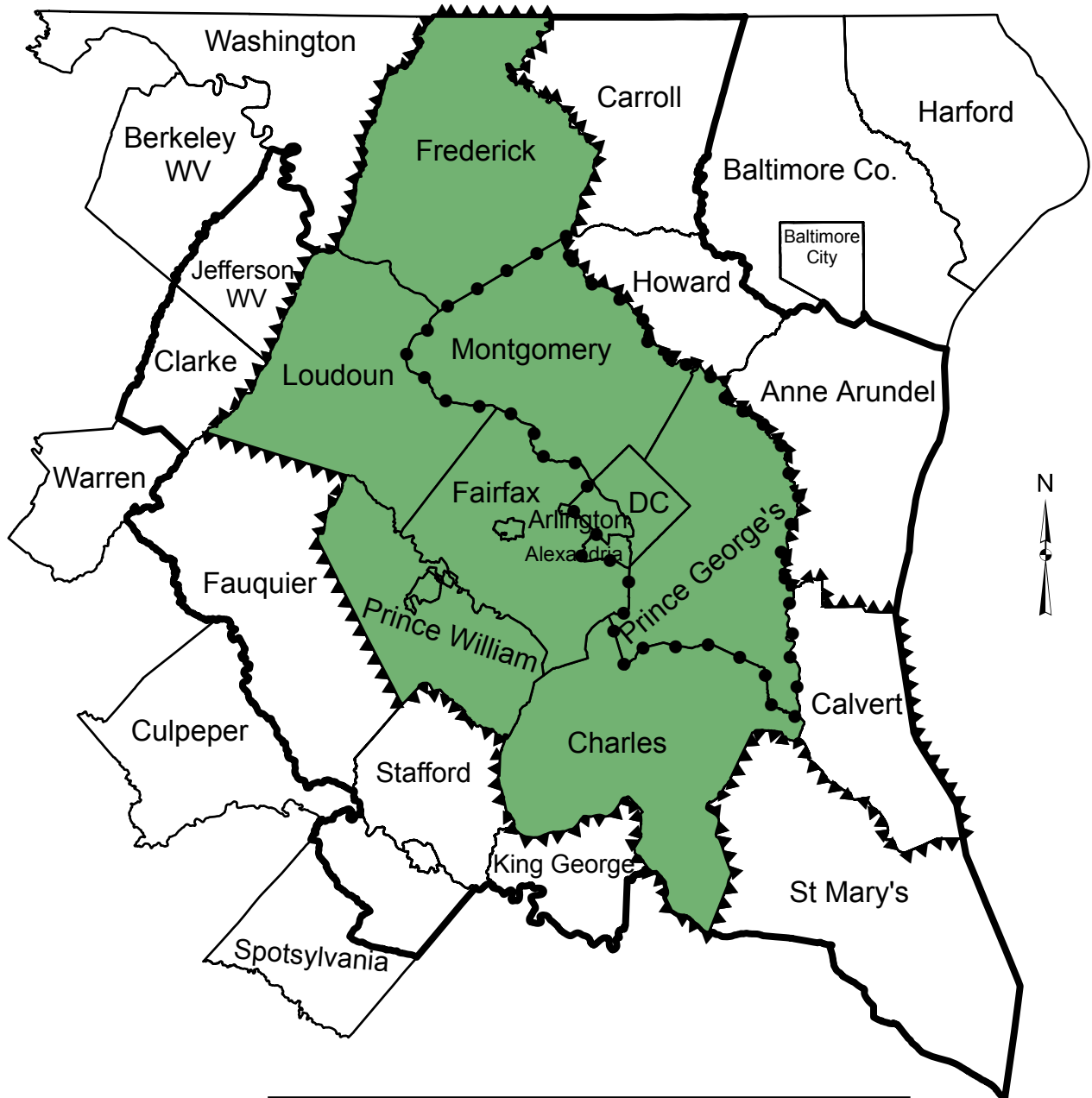


Exhibit 2
Travel Demand Summary
Modeled Area Trips and Vehicle Miles Traveled (000's)
Average Weekday Traffic (AWDT)

	<u>2002</u>	<u>2016</u>	<u>2020</u>	<u>2030</u>	<u>2040</u>
Transit Trips	1,092.5	1,295.3	1,383.8	1,490.3	1,576.9
Vehicle Trips	14,822.9	17,524.1	18,240.9	19,862.7	21,168.8
VMT	149,388.9	176,980.1	184,427.4	201,999.8	217,182.4

Adjustment Factors to Convert AAWDT to Appropriate Season:

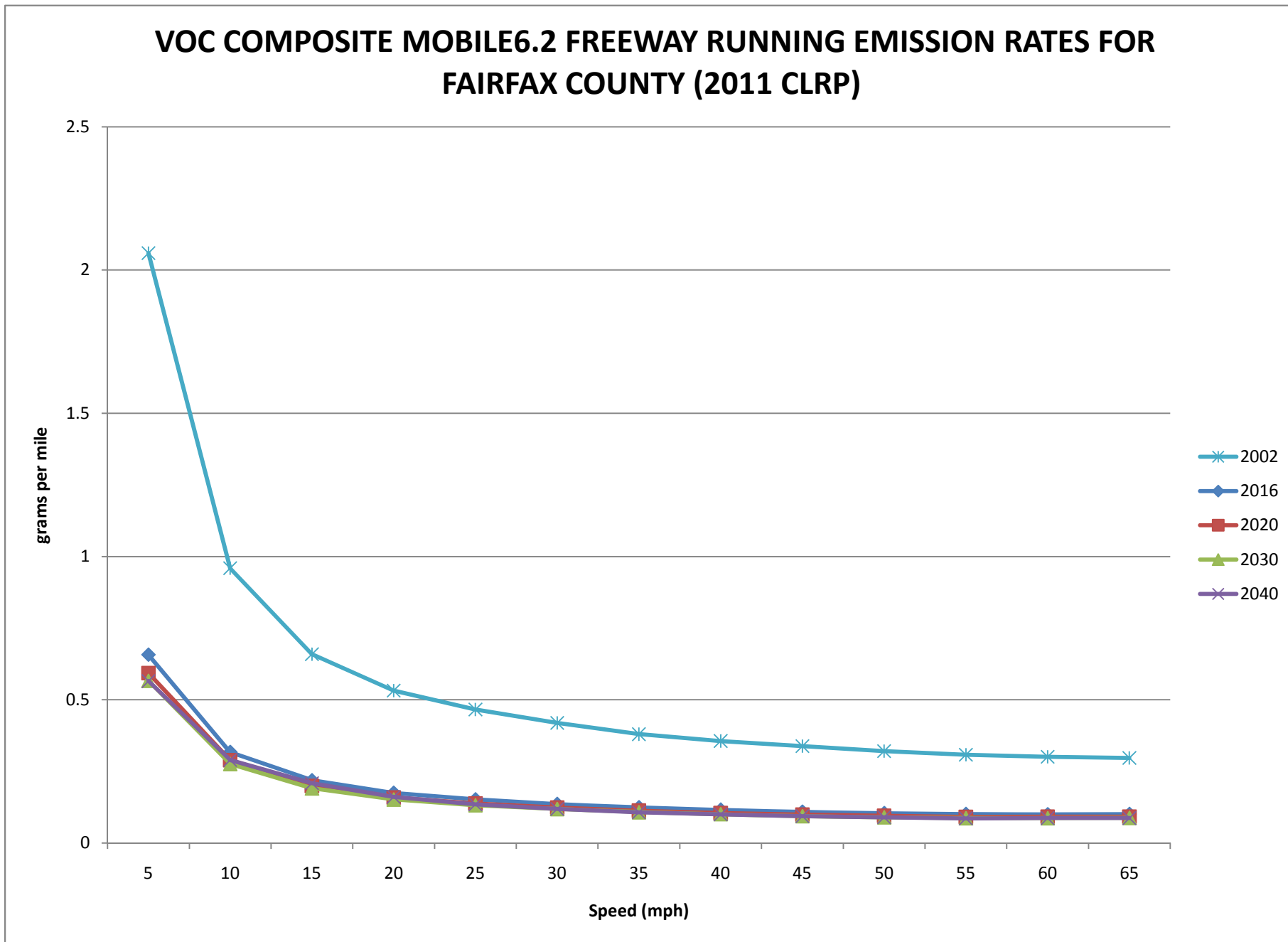
Ozone Season AWDT: 1.03

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

NOTE: AWDT reflects a five day average
ADT reflects a seven day average



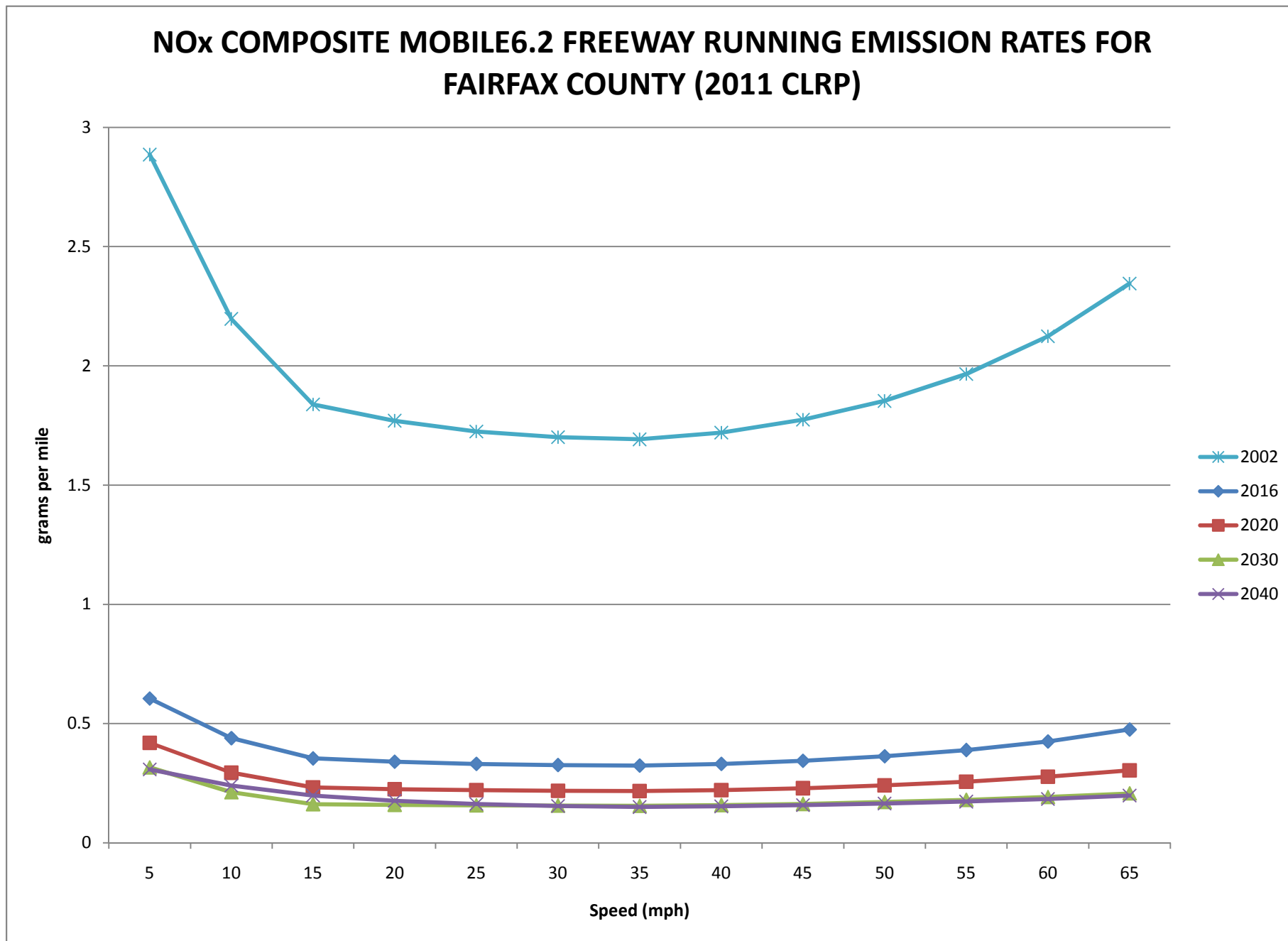


Exhibit 5 DIRECT PM_{2.5} EMISSION RATES FOR FAIRFAX COUNTY (MAJOR ROADS NETWORK)

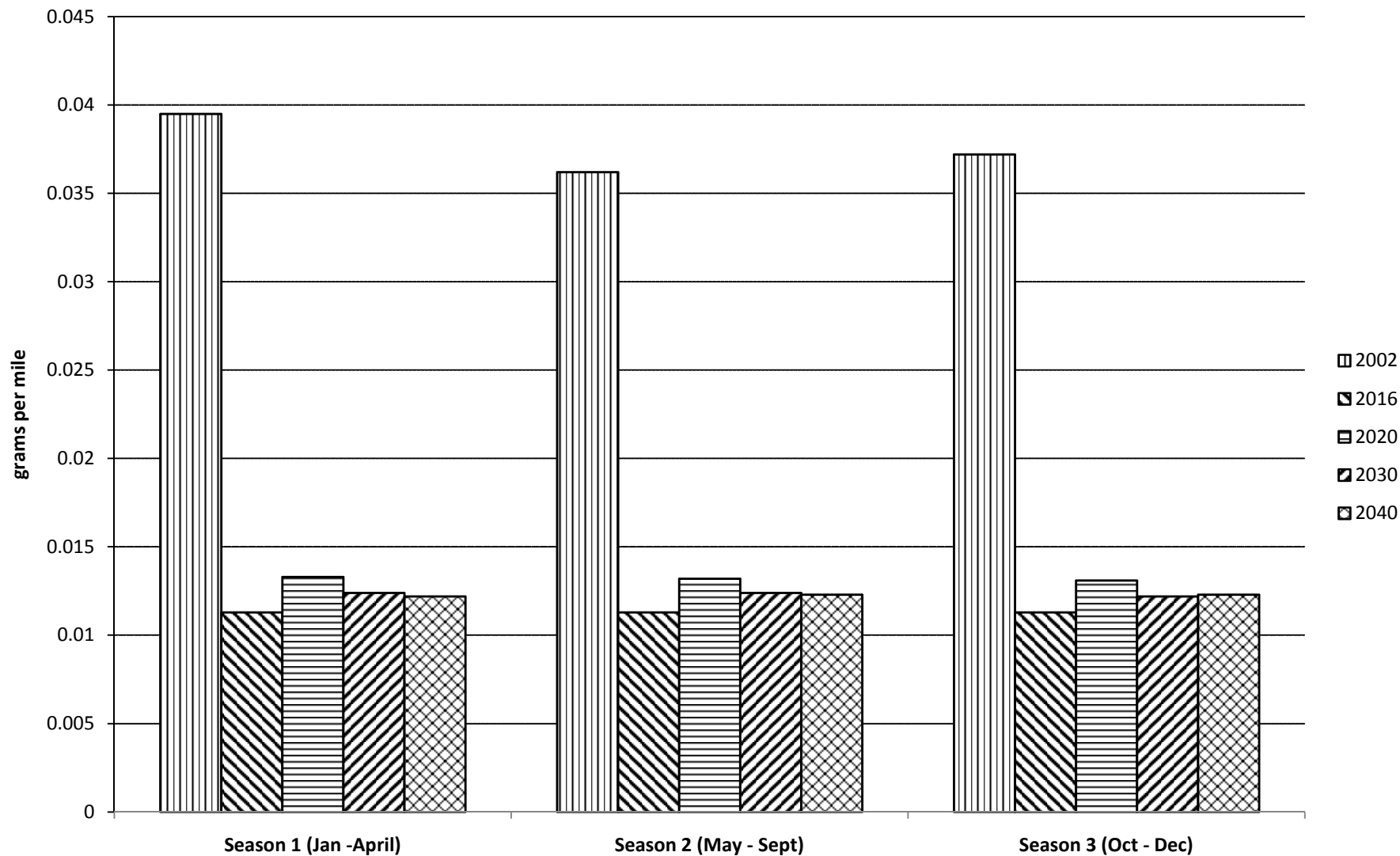


EXHIBIT 6

Mobile Source VOC Emissions for the 8-Hour Ozone Nonattainment Area 2011 CLRP

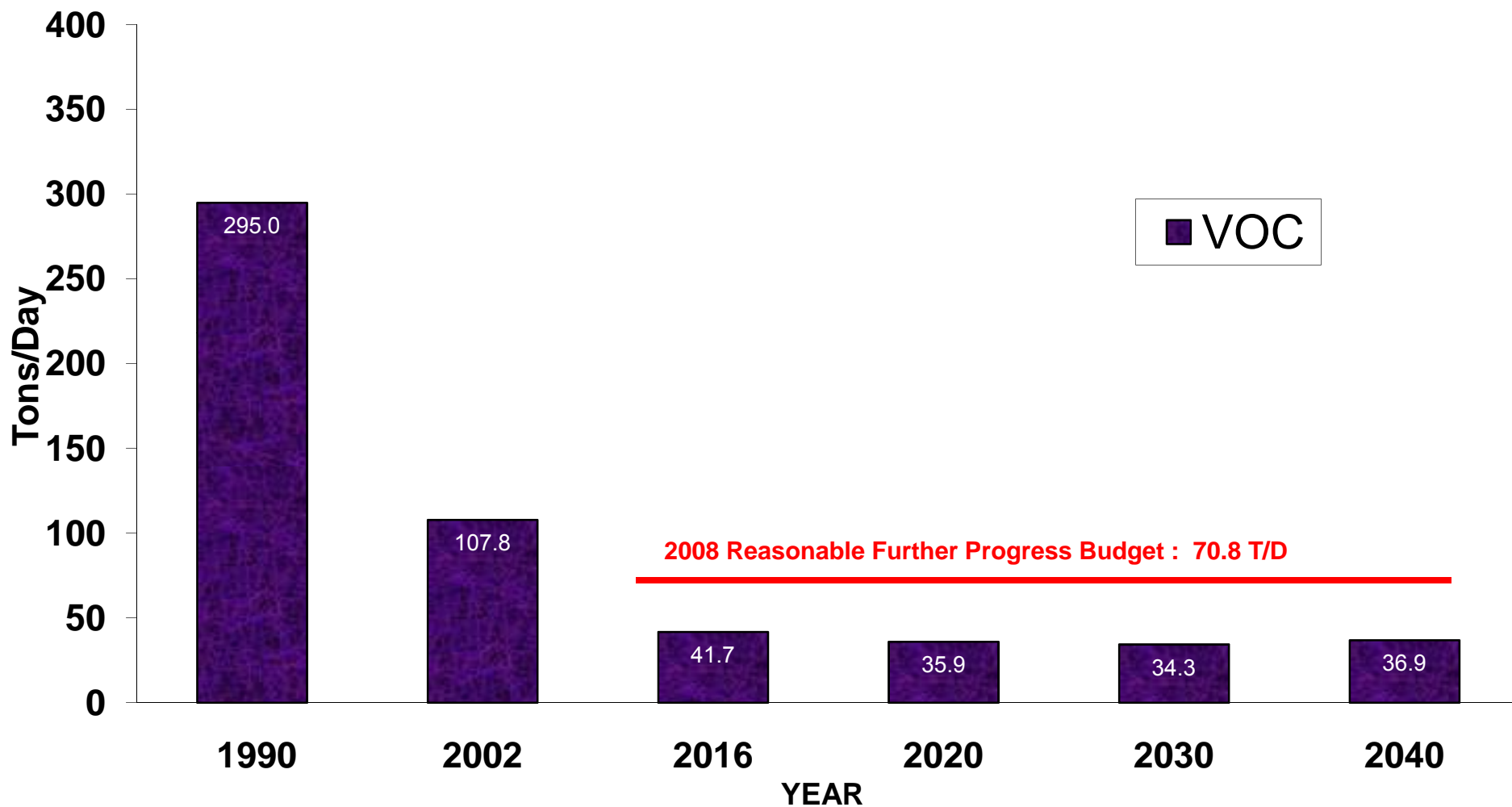


EXHIBIT 7

Mobile Source NOx Emissions for the 8-Hour Ozone Nonattainment Area 2011 CLRP

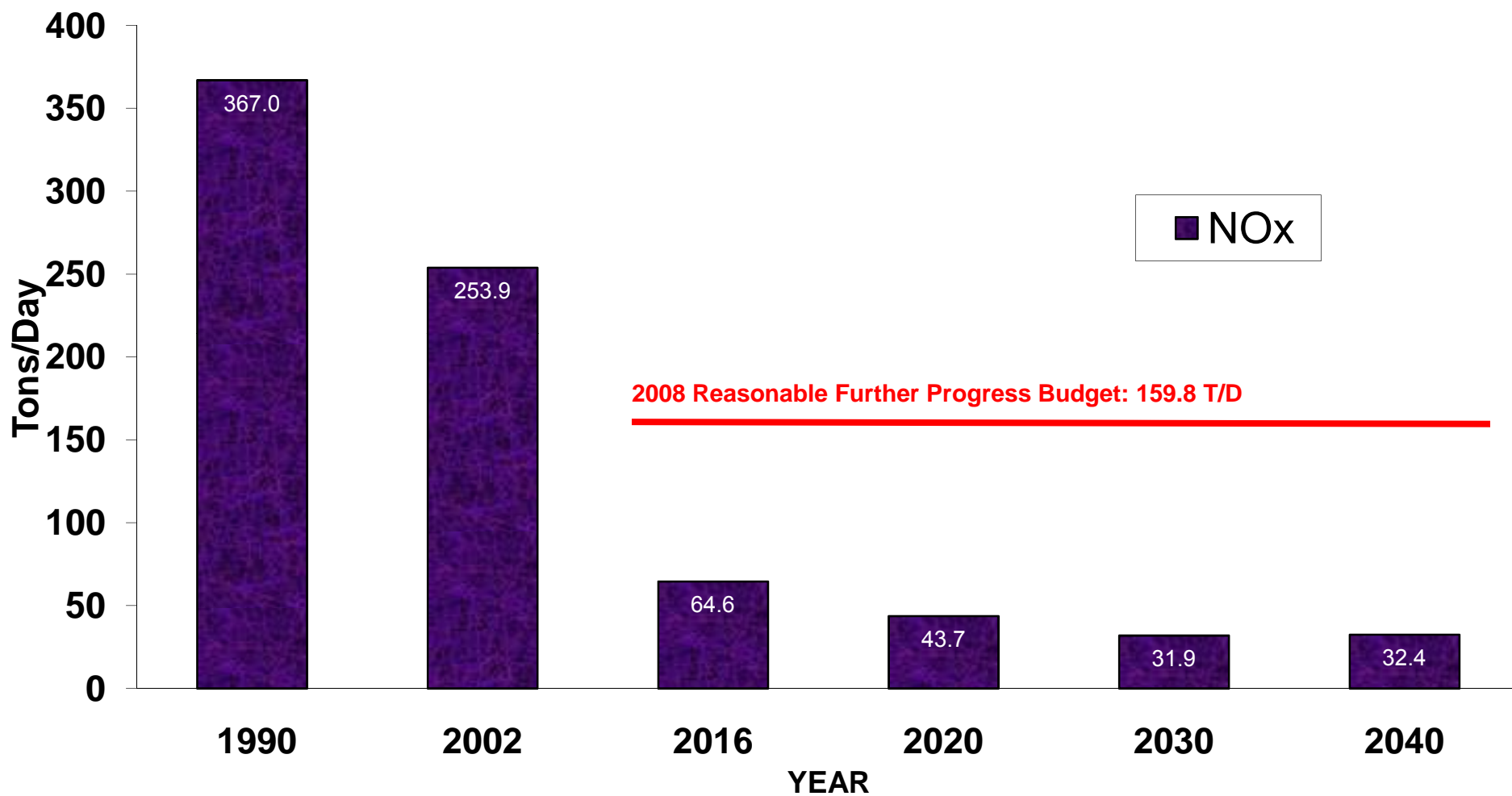


EXHIBIT 8

Mobile Source Emissions

2011 CLRP Precursor NOx

NOTE: The PM_{2.5} budgets have been submitted to EPA, but have not yet been deemed adequate for use in conformity. The region adheres to these budgets, even though it is not yet required.

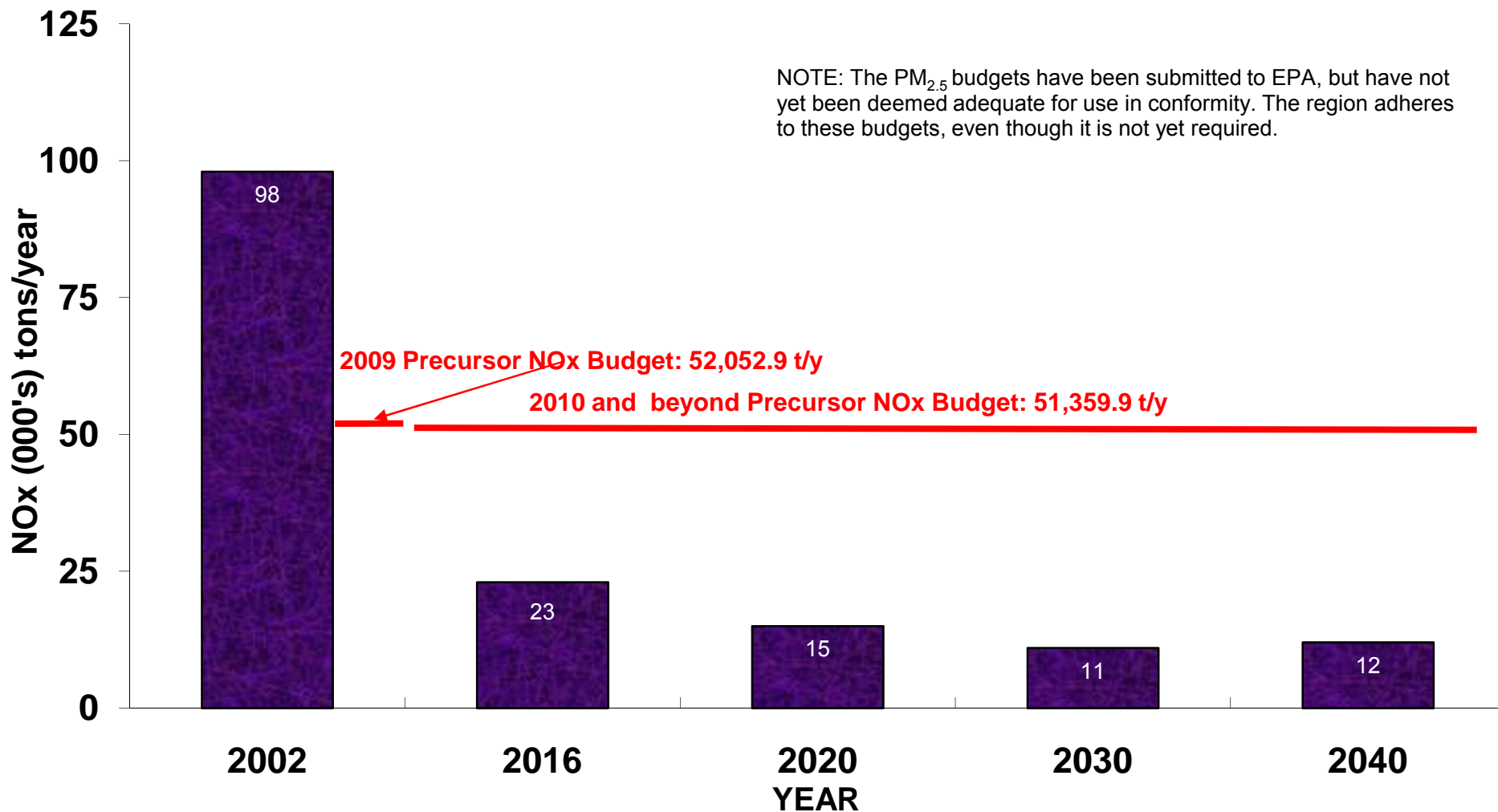
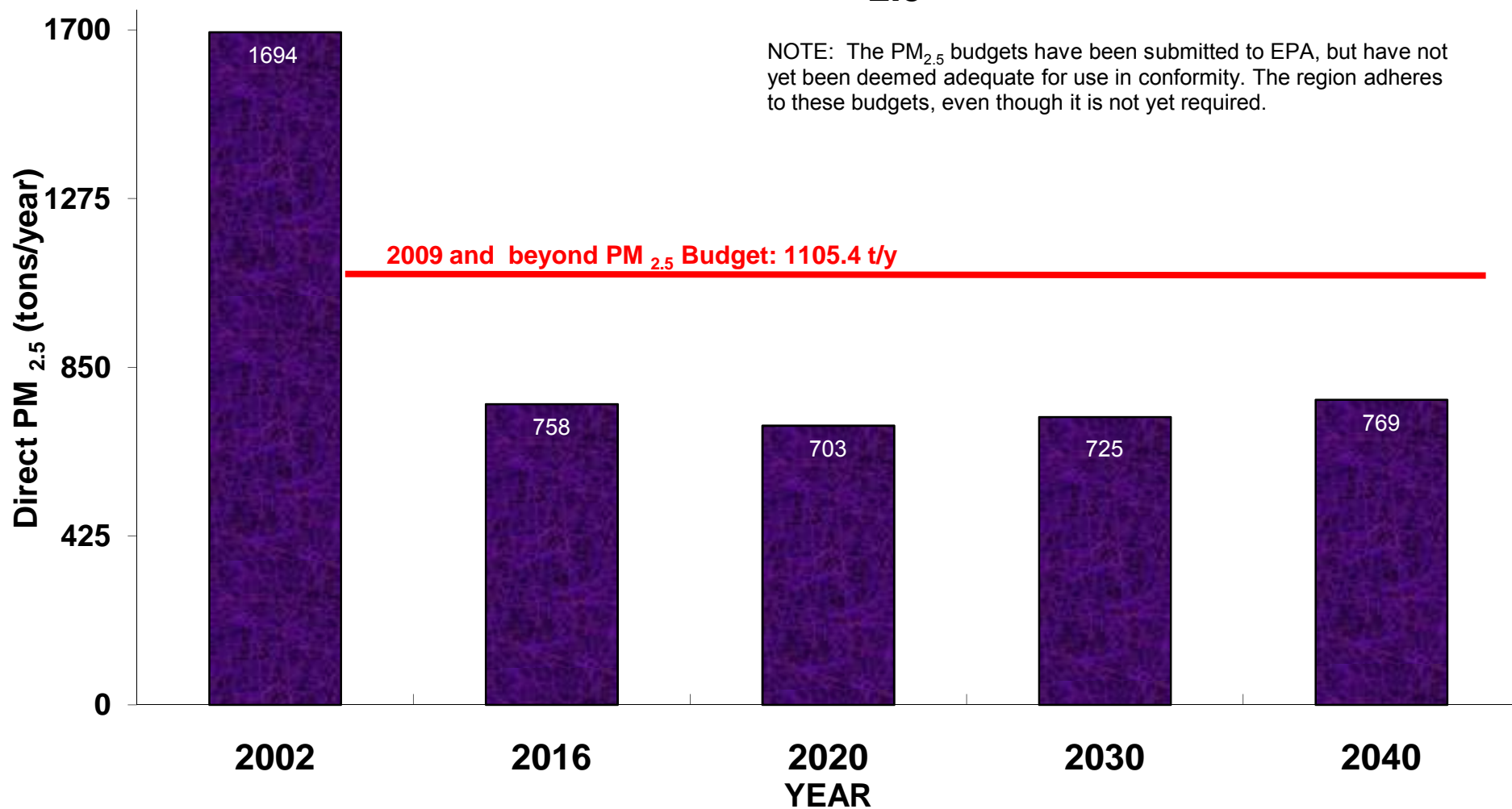


EXHIBIT 9

Mobile Source Emissions

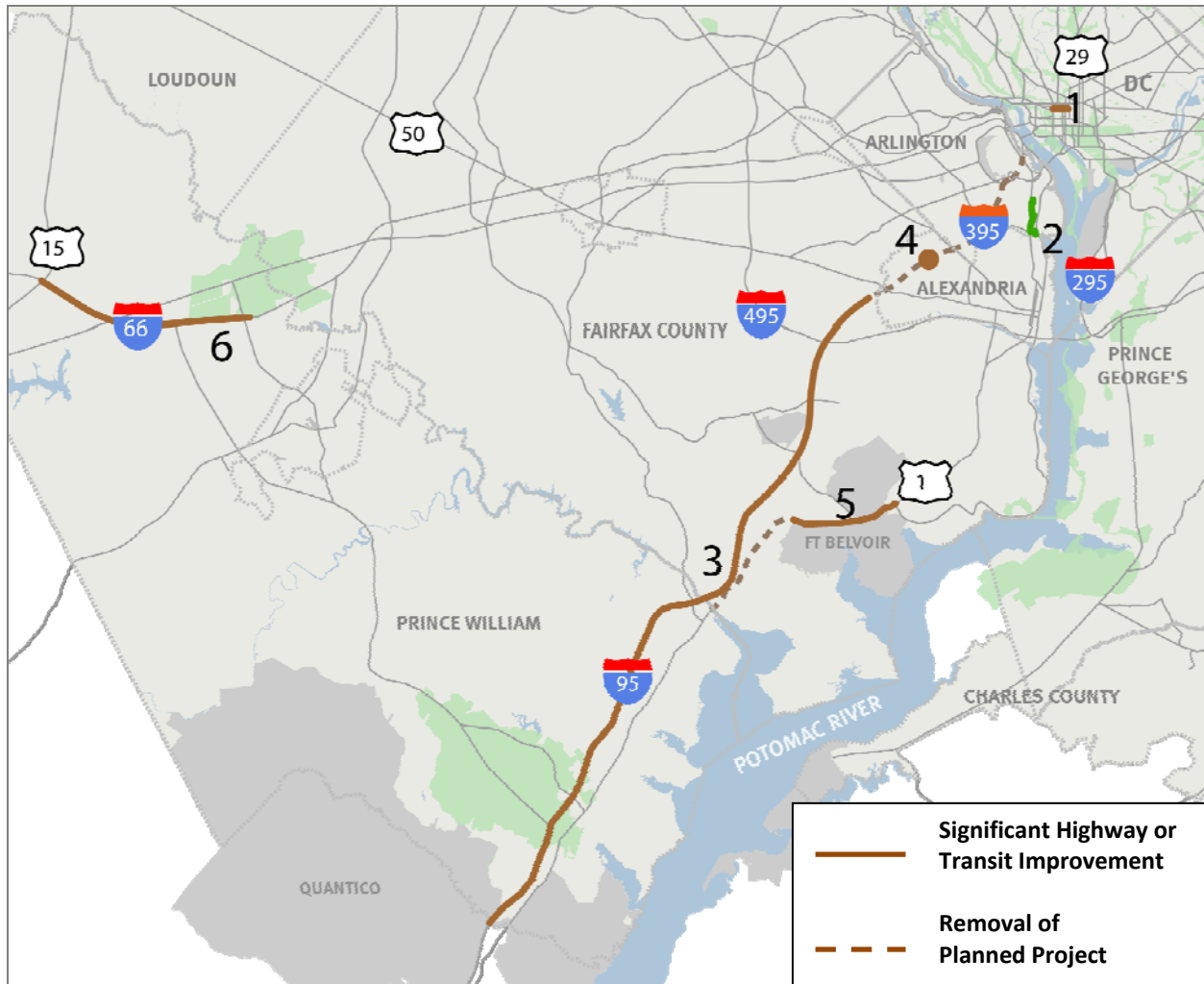
2011 CLRP

Direct PM_{2.5}



ATTACHMENT A

Significant Additions and Changes to The 2011 Update to the Financially Constrained Long-Range Transportation Plan



Significant Additions and Changes to the CLRP

1. H STREET, NW PEAK PERIOD BUS-ONLY LANE
2. CRYSTAL CITY – POTOMAC YARD STREETCAR
3. I-395/I-95 HOV AND HOT LANES PROJECT LIMIT CHANGES *
4. I-395 HOV LANES REVERSIBLE RAMP FROM/TO SEMINARY ROAD*
5. WIDENING OF US 1 PROJECT LIMIT CHANGE
6. WIDEN I-66 GENERAL PURPOSE AND HOV LANES*

* These projects were approved as amendments to the 2010 Update to the CLRP on July 18, 2011.

DISTRICT OF COLUMBIA

1. H Street, NW Peak Period Bus-Only Lane from 17th St. to New York Ave.

H Street NW is one-way, running eastbound between 17th Street and New York Avenue. Parking restrictions are in effect on both sides of the street during morning (7:00 – 9:30 a.m.) and evening (4:00 – 6:30 p.m.) peak periods, allowing for five lanes of traffic. This project proposes to use one of those five lanes as a bus-only lane during the peak periods.

Complete: 2012
Length: 0.5 mile
Cost: \$250,000
Funding: Local



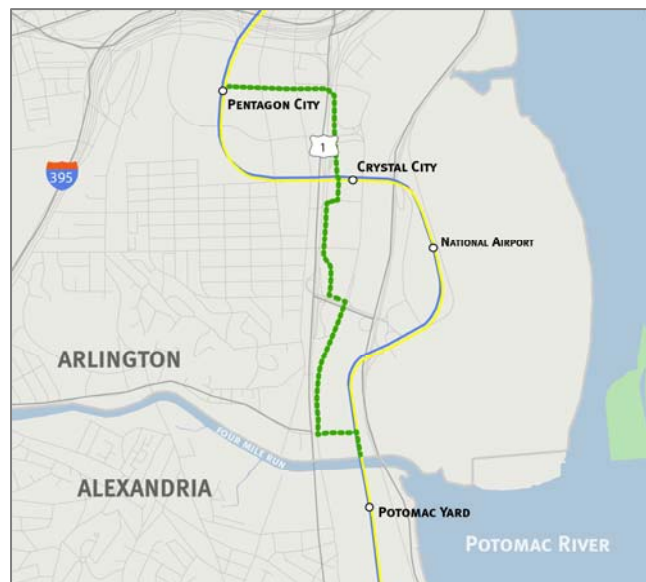
See the project description in Attachment A for more information.

VIRGINIA

2. Crystal City – Potomac Yard Streetcar in Arlington County

This project will construct and operate a streetcar system that runs parallel to US 1 (Jefferson Davis Highway) from the Pentagon City Metro station to Four Mile Run at the city limit of Alexandria. The CLRP currently includes an exclusive bus transitway project along most of the same route that is scheduled to open in 2013. The streetcar system will replace the bus service in 2018.

Complete: 2018
Length: 2.25 miles
Cost: \$160 million
Funding: Federal, state and local

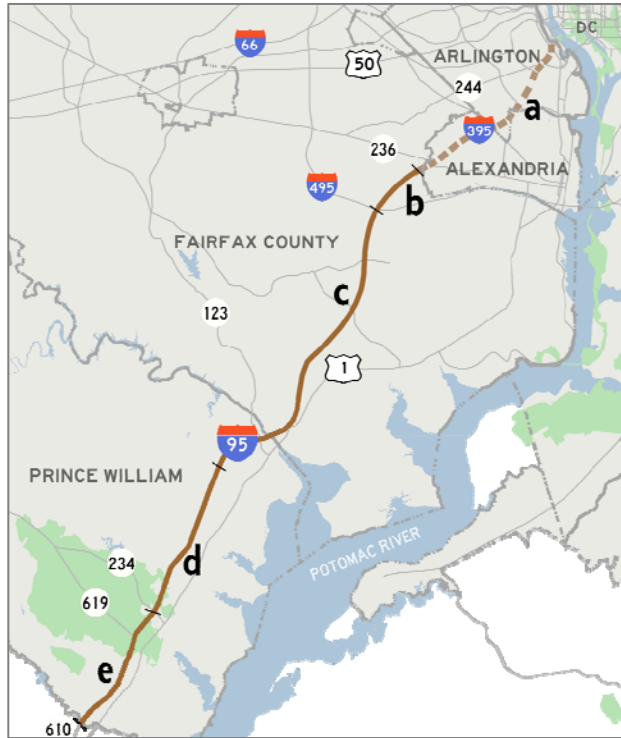


See the project description in Attachment A for more information.

The completion date of the Potomac Yard Metro Station is also being advanced from 2030 to 2017.

3. I-395/I-95 HOV and HOT Lanes from 2 miles north of I-495 to VA 610

This project is currently included in the CLRP as a system of High-Occupancy Toll, or HOT lanes between Eads Street in Arlington County and VA 610 (Garrisonville Road) in Stafford County. HOT lanes will be available to HOV-3, transit and emergency response vehicles free of charge. Other vehicles may use the facility by paying an electronic toll. Tolls will vary based on time of day, day of week, and level of congestion in order to maintain free-flow conditions. VDOT is proposing to reconfigure the project, including the elimination of the implementation of HOT lanes on I-395 inside the Capital Beltway. The changes are summarized in the table below:



Map Index	Current CLRP Project Includes	VDOT Proposed Change to Current CLRP Project	Description of Proposed Configuration
a	3 HOT Lanes	2 HOV Lanes	Eliminate the implementation of HOT lanes on I-395 inside the Capital Beltway
b	3 HOT Lanes	3 HOT Lanes (no change)	Widen the existing HOV facility from 2 to 3 lanes on I-395 from I-495 (Capital Beltway) to approximately 2 miles north, in the vicinity of Turkeycock Run and convert to HOT lanes
c	3 HOT Lanes	3 HOT Lanes	Widen the existing HOV facility from 2 to 3 lanes on I-95 from I-495 to VA 3000, Prince William Parkway and convert to HOT lanes
d	3 HOT Lanes	2 HOT Lanes	Convert the existing 2-lane HOV facility from VA 3000, Prince William Parkway to VA 234 (Dumfries Road) into HOT lanes
e	2 HOT Lanes	2 HOT Lanes (no change)	Construct 2 new HOT lanes from VA 234 (Dumfries Rd.) to VA 610 (Garrisonville Rd.)
f	2 HOT Lanes	2 HOT Lanes (no change)	Two HOT lanes will continue 10 miles south to the VA 17/US 1 Massaponax exit in Spotsylvania County. This portion of the project is outside the TPB's planning area and will be coordinated with the Fredericksburg area MPO (FAMPO).

I-395/I-95 HOV and HOT Lanes (continued)

Transit Service Plan

At this time, VDOT is also proposing to remove the elements of the transit service plan that had previously been included in the CLRP as a part of the I-95/I-395 HOV/Bus/HOT Lanes project. VDOT is working with local jurisdictions and transit agencies to develop a revised set of transit and transportation demand management (TDM) improvements for the corridor. These transit and TDM measures will be proposed as a separate project for inclusion in the CLRP at a later date. Please see the table that follows the CLRP project description form in Attachment A for a full listing of the elements from transit service plan being removed.

Complete: 2015
Length: 27 miles (not including southern portion from VA 610 to VA17/US 1)
Cost: \$1.01 billion
Funding: Federal, state, local and private

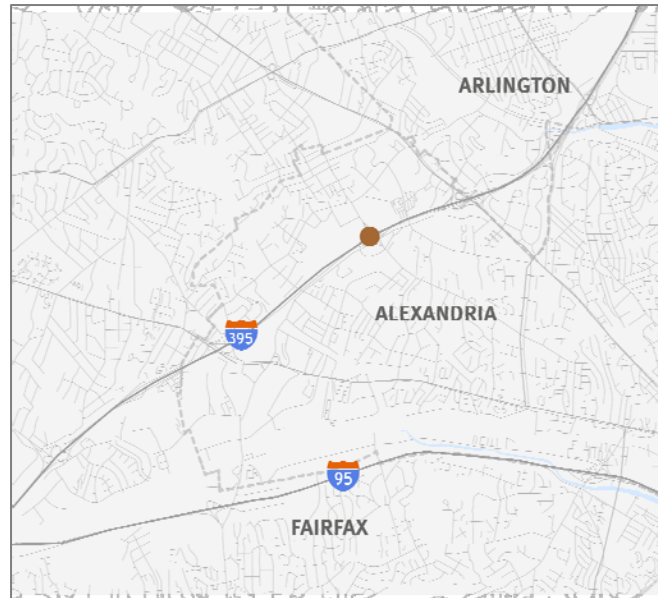
See the project description in Attachment A for more information.

Note: This project was included as an amendment to the CLRP on July 18, 2011.

4. I-395 HOV Lanes Reversible Ramp from/to Seminary Road

VDOT is proposing to construct a new reversible on/off ramp that connects Seminary Road and the I-395 HOV lanes to and from the south. This project adds HOV and transit access to accommodate the expected increase in travel generated by Department of Defense employees at the nearby Mark Center.

Complete: 2015
Cost: \$80 million
Funding: Federal and state



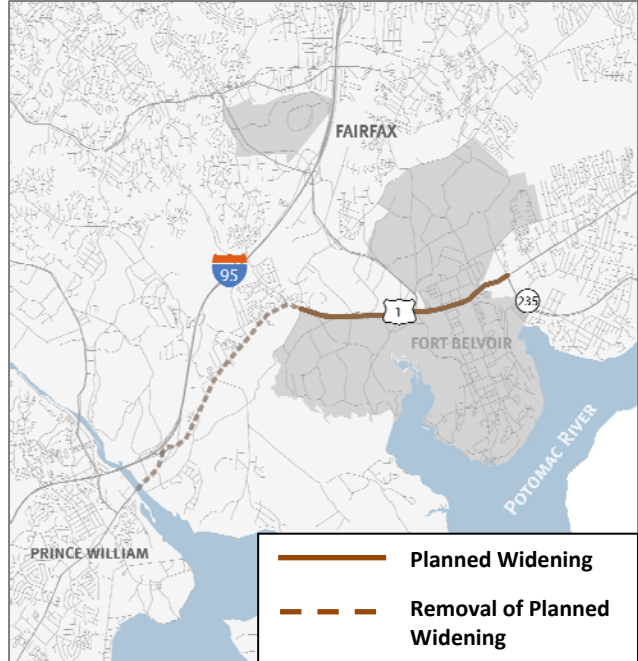
See the project description in Attachment A for more information.

Note: This project was included as an amendment to the CLRP on July 18, 2011.

5. Widening of US 1 – Project Limit Change from VA 235 South to VA 611

This project is currently included in the CLRP as a widening of US 1 (Richmond Highway) from 4 to 6 lanes from VA 235 South (Mt. Vernon Memorial Highway) to the Occoquan River/Prince William County Line. VDOT is proposing to remove approximately 4 miles of widening from the southern end of the project and change the southern limit to VA 611 (Telegraph Road).

Complete: 2020
Length: 3.5 miles
Funding: Federal and state

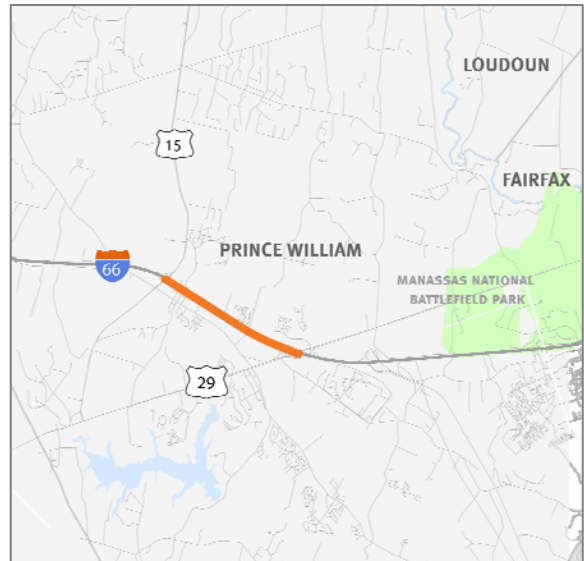


See the project description in Attachment A for more information.

6. Widen I-66 General Purpose and HOV Lanes from US 15 to US 29 (near Gainesville)

This project is currently included in the CLRP as a widening to construct HOV Lanes on I-66 between US 15 (James Madison Highway) and US 29 (Lee Highway) in Gainesville. VDOT is proposing to also add an additional general purpose lane in each direction to I-66 within the same limits. The completion date of the project is advancing from 2020 to 2018.

Length: 2.5 miles
Complete: 2018
Cost: \$131.9 million
Funding: Federal



See the project description in Attachment A for more information.

Note: This project was included as an amendment to the CLRP on July 18, 2011.

ATTACHMENT B

HOUSEHOLD DATA

MSA:	2002	2016	2020	2030	2040	2040/2002
D.C.	250368	289210	296765	317235	338980	1.35
MONTGOMERY	333721	381202	398000	438000	463000	1.39
PR.GEORGES	293125	321489	331066	348806	360110	1.23
ARLINGTON	89022	109350	114382	121341	124207	1.40
ALEXANDRIA	63658	69544	73678	82884	90555	1.42
FAIRFAX	373857	423440	442272	479839	502041	1.34
LOUDOUN	70936	115614	127409	150209	158299	2.23
PR. WILLIAM	120216	175818	188801	214454	231495	1.93
FREDERICK	73839	97562	104139	123125	147529	2.00
CHARLES	43963	58877	64299	75847	85901	1.95
STAFFORD	31991	53467	59037	72712	86205	2.69
CALVERT	27231	34648	36027	38348	40301	1.48
SUBTOTAL	1,771,927	2,130,221	2,235,875	2,462,800	2,628,623	1.48
ADDITIONAL COUNTIES:						
HOWARD	94669	119279	125600	135486	137773	1.46
ANNE ARUNDEL	184157	212270	217782	229371	234332	1.27
CARROLL	55264	66475	69614	76111	81464	1.47
FREDERICKSBURG (VA)	8372	11852	12462	13971	15469	1.85
JEFFERSON	17015	23743	25957	33075	41527	2.44
N. SPOTSYLVANIA	26738	44243	48536	58796	68631	2.57
FAUQUIER	21446	31932	35730	47502	63154	2.94
CLARKE	5162	6483	6722	7487	8308	1.61
K. GEORGE	6698	10358	11411	14030	16659	2.49
ST. MARY'S	32358	45406	49352	58143	66509	2.06
SUBTOTAL	451,879	572,041	603,166	673,972	733,826	1.62
TOTAL	2,223,806	2,702,262	2,839,041	3,136,772	3,362,449	1.51

SOURCE:

MWCOG Round 8.0a 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

EMPLOYMENT DATA

MSA:	2002	2016	2020	2030	2040	2040/2002
D.C.	746305	831978	868256	923988	977163	1.31
MONTGOMERY	483874	548995	585000	673000	723000	1.49
PR.GEORGES	342830	372836	383635	419635	474635	1.38
ARLINGTON	187611	223332	243835	268606	281120	1.50
ALEXANDRIA	95861	118958	124115	142257	160447	1.67
FAIRFAX	624887	738102	788508	863803	917484	1.47
LOUDOUN	104548	175340	206458	257195	285415	2.73
PR. WILLIAM	127700	171087	188769	232597	280697	2.20
FREDERICK	106624	152823	158278	167257	175109	1.64
CHARLES	48557	69099	71731	77537	83138	1.71
STAFFORD	32668	49828	54627	65101	74224	2.27
CALVERT	26637	41736	44457	47159	48955	1.84
SUBTOTAL	2,928,102	3,494,114	3,717,669	4,138,135	4,481,387	1.53
ADDITIONAL COUNTIES:						
HOWARD	140776	183911	194977	221168	231902	1.65
ANNE ARUNDEL	260720	313692	329042	358320	370904	1.42
CARROLL	57356	69854	70813	72456	74090	1.29
FREDERICKSBURG (VA)	23746	32013	34848	41034	46360	1.95
JEFFERSON	17010	24093	26115	30675	35780	2.10
N. SPOTSYLVANIA	29775	39756	43578	51966	59240	1.99
FAUQUIER	22308	31551	35762	43360	52578	2.36
CLARKE	6077	7328	7685	8550	9518	1.57
K. GEORGE	9345	11732	13150	16390	19339	2.07
ST. MARY'S	49613	64715	67268	71969	75862	1.53
SUBTOTAL	616,726	778,645	823,238	915,888	975,573	1.58
TOTAL	3,544,828	4,272,759	4,540,907	5,054,023	5,456,960	1.54

SOURCE:

MWCOG Round 8.0a 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

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

October 6, 2011

MEMORANDUM

TO: TPB Technical Committee

FROM: Jane A. Posey
Transportation Engineer

SUBJECT: Defining Regional Significance for Conformity

Transportation projects that are defined as “regionally significant” must be included in an air quality conformity analysis before they may be included in the Constrained Long Range Plan (CLRP) or Transportation Improvement Program (TIP). Currently, any project that changes a link in the regional highway or transit network is considered “regionally significant”. With the recent development of a finer-grain zone system, including a more detailed street base and splitting of links to add new connectors to zone centroids, it is necessary to redefine “regionally significant” in order to maintain the same threshold for “regionally significant” as in the past conformity procedures. The conformity regulations define regional significance as follows:

Regionally significant project means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area’s transportation network, including at a minimum all principal arterial highways and all fixed-guideway transit facilities that offer an alternative to regional highway travel.

The following proposed new definition of a “regionally significant” project has been developed to meet the requirements of the conformity regulations while maintaining the same threshold for “regional significance” as in past conformity procedures:

- 1) Any project on a facility that is included in the coded regional network that adds or removes at least one continuous vehicular lane from one major road to the next, or adds a new access/egress location or capacity; or
- 2) Any transit project that adds or modifies fixed-guideway transit facilities (heavy rail, light rail, streetcar, bus rapid transit)

The new definition will be used for all future air quality conformity analysis, starting with the conformity analysis of the 2011 CLRP.

ATTACHMENT D

**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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL AC COMPLETION DATE	TUAL COMPLETION DATE	2005-2040																								Project Category *	
					FULL	SCALED-BACK	UNDER-WAY	REM			2005		2008		2009		2010		2015		2016		2020		2030		2040									
											VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	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	0.0016	0.0006	0.0014	0.0006	0.0014	0.0005	0.0013	0.0004	0.0007	0.0003	0.0005	0.0003	0.0005	0.0003	0.0005	C							
19	X	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	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					2006	0.0018	0.0026	0.0013	0.0016	0.0012	0.0014	0.0012	0.0014	0.0009	0.0013	0.0008	0.0007	0.0007	0.0005	0.0006	0.0005	0.0006	0.0005	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	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	TR							
44	X	1995-00	MDOT	Signal Systems - MD 410, 62nd Ave. to Riverdale Rd.	X				1996	2002			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	TR							
48	X	1995-00	MDOT	MARC Replacement Coaches	X				1999	2004	0.001	0.003	0.0006	0.0016	0.0006	0.0014	0.0006	0.0014	0.0009	0.0027	0.0004	0.0007	0.0003	0.0005	0.0003	0.0005	0.0003	0.0005	C (TCM)							
49	X	1995-00	MDOT	MARC Expansion Coaches	X				1999	2004	0.008	0.024	0.0058	0.0148	0.0054	0.0133	0.0053	0.0132	0.0074	0.0242	0.0035	0.0069	0.0029	0.0051	0.0026	0.0042	0.0026	0.0042	C (TCM)							
51	X	1995-00	VDOT	Alexandria Telecommuting Pilot Program	X					2000 & 2001			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							
52	X	1995-00	VDOT	Fairfax County Bus Shelter (Fairfax Co. TDM program)			X		2000	2001			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							
54	X	1995-00	VDOT	City of Fairfax Bus Shelters	X				1999	2004	0.0000	0.0009	0.0000	0.0005	0.0000	0.0005	0.0000	0.0005	0.0000	0.0004	0.0000	0.0002	0.0000	0.0002	0.0000	0.0002	0.0000	0.0002	0.0002	C (TCM)						
56	X	1995-00	VDOT	Cherry Hill VRE Access			X			Jul-08	0.0065	0.0206	-	-	0.0042	0.0114	0.0041	0.0113	0.0033	0.0090	0.0028	0.0059	0.0023	0.0044	0.0020	0.0036	0.0020	0.0036	C (TCM)							
58	X	1995-00	WMATA	Bus Replacement (172 buses)	X				1998	1998	0.0690	0.2520	0.0690	0.2520	0.0690	0.2520	0.0690	0.2520	0.0000	0.0000	0.0461	0.1323				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	0.0000	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C							
60	X	1995-00	MCG	White Oak Park and Ride			X		2010		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	0.0000	0.0000	0.0000	C							
61	X	1995-00	MCG	Bicycle Facilities			X		FY99		0.0028	0.0017	0.0019	0.0011	0.0018	0.0009	0.0018	0.0009	0.0014	0.0009	0.0012	0.0005	0.0010	0.0004	0.0009	0.0003	0.0009	0.0003	C							
62	X	1995-00	MCG	Pedestrian Facilities to Metrorail			X				0.0046	0.0069	0.0032	0.0042	0.0030	0.0038	0.0029	0.0038	0.0019	0.0031	0.0020	0.0020	0.0016	0.0015	0.0015	0.0012	0.0015	0.0012	C							
63	X	1995-00	MDOT	MARC Replacement Coaches	X				1999	2004	0.0037	0.0103	0.0026	0.0063	0.0024	0.0057	0.0024	0.0057	0.0033	0.0099	0.0016	0.0030	0.0013	0.0022	0.0012	0.0018	0.0012	0.0018	C							
64	X	1995-00	MDOT	MARC Expansion Coaches	X				1999	2004	0.0296	0.0894	0.0206	0.0550	0.0191	0.0494	0.0189	0.0490	0.0284	0.0636	0.0126	0.0257	0.0104	0.0189	0.0094	0.0157	0.0093	0.0157	C (TCM)							
66	X	1995-00	VDOT	Commuter Lots - District Wide	X				varies	1995-2001	0.0102	0.0284	0.0071	0.0174	0.0066	0.0157	0.0065	0.0156	0.0065	0.0193	0.0043	0.0082	0.0036	0.0060	0.0032	0.0050	0.0032	0.0050	C							
67	X	1995-00	VDOT	I-66 and Stringfellow Rd. Park and Ride	X				2000	2000 end	0.0092	0.0172	0.0065	0.0106	0.0060	0.0095	0.0059	0.0094	0.0047	0.0090	0.0039	0.0050	0.0033	0.0036	0.0029	0.0030	0.0029	0.0030	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	0.0053	0.0000	0.0047	0.0000	0.0047	0.0000	0.0045	0.0000	0.0025	0.0000	0.0018	0.0000	0.0015	0.0000	0.0015	C							
69	X	1995-00	VDOT	Bicycle Trails and Facilities (Arlington & Fairfax Co - 7 locations)			X		varies	2010-12	0.0018	0.0146	0.0013	0.0090	0.0012	0.0081	0.0012	0.0080	0.0093	0.0076	0.0008	0.0042	0.0007	0.0031	0.0006	0.0026	0.0006	0.0026	C							
70	X	1995-00	VDOT	Improved Access to Metrorail Stations (VRE 2 Stn)			X		varies	2000-2012	0.0005	0.0009	0.0002	0.0003	0.0001	0.0002	0.0003	0.0005	0.0005	0.0009	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0001	0.0002	C							
71	X	1995-00	VDOT	I-66 HOV access at Monument Dr.	X					1997	0.0092	0.0172	0.0065	0.0106	0.0060	0.0095	0.0029	0.0047	0.0047	0.0090	0.0020	0.0025	0.0033	0.0036	0.0029	0.0030	0.0029	0.0030	C							
72	X	1995-00	DC	Bicycle Facilities	X						0.0222	0.0172	0.0155	0.0106	0.0143	0.0095	0.0141	0.0094	0.0116	0.0094	0.0095	0.0050	0.0078	0.0036	0.0070	0.0030	0.0070	0.0030	C							
73	X	1995-00	REGION	COG Regional Ridesharing Support	X				on-going		0.0000	0.0000	0.0799	0.1474	0.1393	0.2550	0.1380	0.2534	0.0000	0.0000	0.0926	0.1325	0.0778	0.0980	0.0710	0.0818	0.0705	0.0816	C							
74	X	1995-00	REGION	M-47 Integrated Ridesharing	X				on-going		0.0431	0.0897	0.0429	0.0778	0.0503	0.0890	0.0498	0.0884	0.0180	0.0295	0.0333	0.0463	0.0279	0.0342	0.0254	0.0285	0.0252	0.0284	C							
75	X	1995-00	REGION	M-92 Telecommuting Support	X				on-going		0.2886	0.6135	0.0714	0.1222	0.1162	0.1891	0.1147	0.1878	0.1794	0.3002	0.0768	0.0985	0.0639	0.0726	0.0576	0.0603	0.0572	0.0602	C							
77		1996-01	VDOT	Duke Street Pedestrian Bridge	X				2005	2007	n/a	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 2000	0.0018	0.0026	0.0013	0.0016	0.0012	0.0014	0.0012	0.0014	0.0009	0.0013	0.0008	0.0007	0.0007	0.0005	0.0006	0.0005	0.0006	0.0005	C							
81	X	1996-01	VDOT	Arlington County Metrocheck Program	X				1997	1997 Onwards	0.0018	0.0026	0.0013	0.0016	0.0012	0.0014	0.0012	0.0014	0.0010	0.0030	0.0008	0.0007	0.0007	0.0005	0.0006	0.0005	0.0006	0.0005	C							
82	X	1996-01	VDOT	Old Dominion Drive Bike Trail			X		2000	2010-11	0.0009	0.0009			0.0006	0.0005	0.0006	0.0005	0.0005	0.0004	0.0004	0.0002	0.0003	0.0002	0.0003	0.0002	0.0002	0.0002	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	0.0006	0.0005	0.0006	0.0005	0.0005	0.0013	0.0004	0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0002	C					
90	X	1996-01	REGION	M-47c Employer Outreach / Guaranteed Ride Home	X				on-going		0.5595	1.0434	0.5491	0.9096	0.3443	0.5499	0.3398	0.5461	0.2347	0.3449	0.2274	0.2865	0.1887	0.2111	0.1698	0.1753	0.1687	0.1748	C							
91	X	1996-01	REGION	M-70a Bicycle Parking			X		1999		0.0065	0.0060	0.0045	0.0037	0.0042	0.0033	0.0041	0.0033	0.0047	0.0045	0.0028	0.0017	0.0023	0.0013	0.0020	0.0011	0.0020	0.0011	C							
92	X			M-92 Telecommuting Support ¹							Combined with item #75																									C
95	X	1997-02	MCG	Germantown Transit Center	X				2005		0.0046	0.0163	0.0032	0.0100	0.0030	0.0090	0.0029	0.0090	0.0023	0.0085	0.0020	0.0047	0.0016	0.0035	0.0015	0.0029	0.0015	0.0029	C (TCM)							
102	X	1997-02	PG	Prince George's County Bus Replacement																																

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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL AC COMPLETION DATE	TUAL COMPLETION DATE	2005		2008		2009		2010		2015		2016		2020		2030		2040		Project Category *			
					FULL	SCALED-BACK	UNDER-WAY	REM			VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX		VOC	NOX	
114	X	1998-03	FDC	Frederick County Bus Replacement	X					2000	0.0000	0.0010	0.0000	0.0010	0.0000	0.0010	0.0000	0.0010	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	SP
117	X	1998-03	VDOT	Arlington County Four Mile Run Bike Trail	X				1999	2009	0.0009	0.0009	-	-	-	-	0.0006	0.0005	0.0005	0.0004	0.0004	0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0002	C	
118	X	1998-03	VDOT	Northern Virginia Turn Bays	X				2000	1998	0.0009	0.0015	0.0007	0.0011	0.0006	0.0009	0.0006	0.0009	0.0009	0.0009	0.0004	0.0004	0.0005	0.0003	0.0003	0.0003	0.0002	0.0003	0.0002	0.0003	0.0002	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	0.1060	0.3860	0.1060	0.3860	0.0900	0.3420	0.0709	0.2027									SP	
122	X	97 & 98 TIP	REGION	M-101a Mass Marketing Campaign (Consumer)				X		2005	0.1191	0.2119	0.0434	0.0721	0.0175	0.0310	0.0173	0.0308	0.1015	0.1594	0.0116	0.0161	0.0097	0.0119	0.0088	0.0099	0.0088	0.0099	0.0088	0.0099	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	0.0052	0.0190	0.0048	0.0171	0.0047	0.0170	0.0047	0.0188	0.0032	0.0089	0.0026	0.0066	0.0023	0.0054	0.0023	0.0054	0.0023	0.0054	C	
124	X	1999-04	MDOT	Signal Systems (197/MD-198, MD-382 TO US-301, US301)	X				2000	2002	0.0110	-0.0030	0.0080	-0.0021	0.0074	-0.0019	0.0073	-0.0018	0.0061	-0.0021	0.0049	-0.0009	0.0041	-0.0005	0.0037	-0.0004	0.0037	-0.0003	-0.0003	0.0037	TR	
125	X	1999-04	VDOT	Transit Center at 7 Corners	X				2002	2001	0.0009	0.0017	0.0006	0.0011	0.0004	0.0009	0.0006	0.0009	0.0005	0.0009	0.0004	0.0005	0.0003	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	C
126	X	1999-04	VDOT	Falls Church Clean Diesel Bus Service	X				2000	2003	0.0040	0.0050	0.0040	0.0050	0.0040	0.0050	0.0040	0.0050	0.0000	0.0000	0.0027	0.0026									SP	
127	X	1999-04	VDOT	VA 234 Bike Trail			X		2001	2010	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	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	0.0000	0.0000	0.0000	0.0000	0.0000	C	
130	X	1998-01	VDOT	M-14, I-66 Feeder Bus Fare Buy Down	X				1998 onward	2003	0.0231	0.0473	0.0161	0.0291	0.0149	0.0261	0.0147	0.0259	0.0102	0.0206	0.0099	0.0136	0.0082	0.0100	0.0073	0.0083	0.0073	0.0083	0.0073	0.0083	C	
131	X	2000-05	MDOT	Various park and Ride Lots	X				2002	2003	0.0064	0.0280	0.0045	0.0172	0.0041	0.0154	0.0041	0.0153	0.0043	0.0175	0.0027	0.0080	0.0023	0.0059	0.0020	0.0049	0.0020	0.0049	0.0020	0.0049	C	
132	X	2000-05	MDOT	Signal Systems	X				Varies	on-going	0.0028	0.0000	0.0020	0.0000	0.0018	0.0000	0.0018	0.0000	0.0012	0.0000	0.0012	0.0000	0.0016	0.0000	0.0009	0.0000	0.0009	0.0000	0.0000	0.0009	TR	
133	X	2000-05	VDOT	250 Spaces at Gambrell/Hoopes Rds. Park and Ride	X				2002	2004	0.0065	0.0155	0.0045	0.0095	0.0042	0.0085	0.0041	0.0085	0.0028	0.0069	0.0028	0.0045	0.0023	0.0033	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	C	
134	X	2000-05	VDOT	300 Spaces at Backlick Rd	X				2003	2007	0.0046	0.0112	0.0032	0.0069	0.0030	0.0062	0.0029	0.0061	0.0021	0.0049	0.0020	0.0032	0.0016	0.0024	0.0015	0.0020	0.0015	0.0020	0.0015	0.0020	C	
135	X	2000-05	VDOT	Accotink-Gateway Connector Trail	X				2002	2005	0.0065	0.0086	0.0045	0.0053	0.0042	0.0047	0.0041	0.0047	0.0028	0.0038	0.0028	0.0025	0.0023	0.0018	0.0020	0.0015	0.0020	0.0015	0.0020	0.0015	C	
136	X	2000-05	VDOT	Columbia Pike Trail	X				2000	2009	0.0055	0.0069					0.0035	0.0038	0.0023	0.0029	0.0024	0.0020	0.0020	0.0015	0.0018	0.0012	0.0017	0.0012	0.0012	C		
137	X	2000-05	VDOT	Lee Highway trail	X				2000	2007	0.0028	0.0034	0.0019	0.0021	0.0018	0.0019	0.0018	0.0019	0.0012	0.0016	0.0012	0.0010	0.0010	0.0007	0.0009	0.0006	0.0009	0.0006	0.0006	C		
138	X	2000-05	VDOT	Arlington Bus Shelter Improvements	X				2005	2005	0.0009	0.0009	0.0006	0.0005	0.0006	0.0005	0.0006	0.0005	0.0005	0.0004	0.0004	0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0002	0.0003	0.0002	C	
139	X	2000-05	VDOT	Pentagon Metrostation Improvements	X				2003	2003	0.0074	0.0146	0.0052	0.0090	0.0048	0.0081	0.0047	0.0080	0.0033	0.0063	0.0032	0.0042	0.0026	0.0031	0.0023	0.0026	0.0023	0.0023	0.0026	C		
140	X	2000-05	MDOT	East/West Intersection Improvements			X		2005	2005	0.0379	0.0215	0.0265	0.0132	0.0245	0.0119	0.0242	0.0118	0.0640	0.0327	0.0162	0.0062	0.0134	0.0046	0.0120	0.0038	0.0119	0.0038	0.0119	0.0038	C	
141	X	2001-06	Feds	Federal Transit/Ridesharing subsidy	X				on-going	2006	0.0942	0.1642	0.0658	0.1010	0.0610	0.0907	0.0601	0.0900	0.0386	0.0555	0.0402	0.0473	0.0333	0.0348	0.0298	0.0288	0.0296	0.0288	0.0288	C		
142	X	2002-07	WMATA	100 CNG buses	X				2002		0.0000	0.1358	0.0000	0.1358	0.0000	0.1358	0.0000	0.1358	0.0000	0.1358	0.0000	0.0713								SP (TCM)		
143	X	2002-07	WMATA	ULSD with CRT filters	X				2006	Jun-06	0.2100	0.0000	0.2100	0.0000	0.2100	0.0000	0.2100	0.0000	0.4300	0.0000	0.1404	0.0000	0.4300	0.0000	0.4300	0.0000	0.4300	0.0000	0.4271	0.0000	H (TCM)	
144		2003-08	DC	Replace 22 12 Taxicabs with CNG cabs			X		2005	2006	0.0089	0.0157	0.0089	0.0157	0.0089	0.0157	0.0089	0.0157		0.0059	0.0082									H		
145	X	2003-08	DC	D.C.Incident Response & TrafficManagement System	X				2005	2004	0.0254	0.0746	0.0183	0.0520	0.0170	0.0468	0.0169	0.0439	-	0.0341	0.0111	0.0200	0.0094	0.0130	0.0085	0.0089	0.0084	0.0089	0.0089	TR		
146	X	2003-08	DC	Bicycle Lane in D. C. (35 Mile)	X				2005	2008	0.0154	0.0153	0.0107	0.0094	0.0099	0.0085	0.0098	0.0084	0.0065	0.0053	0.0066	0.0044	0.0054	0.0032	0.0049	0.0027	0.0048	0.0027	0.0048	C (TCM)		
147	X	2003-08	DC	Bicycle Racks in D. C. (500)	X				2005	2004	0.0021	0.0017	0.0015	0.0011	0.0014	0.0010	0.0014	0.0009	0.0009	0.0006	0.0009	0.0005	0.0008	0.0004	0.0007	0.0003	0.0007	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	0.0022	0.0034	0.0020	0.0031	0.0020	0.0031	0.0013	0.0019	0.0013	0.0016	0.0011	0.0012	0.0010	0.0010	0.0010	0.0010	0.0010	C (TCM)		
149		2003-08	DC	CNG Rental Cars (18)			X		2005		0.0000	0.0002	0.0000	0.0002	0.0000	0.0002	0.0000	0.0002		0.0000	0.0001									SP		
150	X	2003-08	DC	Sidewalks in D.C. (\$ 5 million)	X				2005	2004	0.0578	0.1008	0.0404	0.0619	0.0374	0.0556	0.0369	0.0552	0.0243	0.0334	0.0247	0.0290	0.0204	0.0213	0.0183	0.0177	0.0182	0.0176	0.0176	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	0.0001	0.0020	0.0001	0.0020	0.0000	0.0011								H (TCM)		
152	X	2003-08	DC	Circulator / Feeder Bus Routes	X				2005	2003	0.0211	0.0363	0.0147	0.0223	0.0136	0.0201	0.0134	0.0199	0.0089	0.0121	0.0090	0.0105	0.0074	0.0077	0.0067	0.0064	0.0066	0.0064	0.0064	C		
153	X	2003-08	MDOT	Commuter Tax Credit	X				2005	n/a	0.1262	0.2219	0.0881	0.1364	0.0816	0.1225	0.0805	0.1216	0.05													

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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL AC COMPLETION DATE	TUAL COMPLETION DATE	2005		2008		2009		2010		2015		2016		2020		2030		2040		Project Category *		
					FULL	SCALED-BACK	UNDER-WAY	REM			VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX		VOC	NOX
167	X	2003-08	MCG	Free Bus Service on Selected Routes on I-270	X				2004		0.0017	0.0030	0.0012	0.0018	0.0011	0.0017	0.0011	0.0016	0.0007	0.0010	0.0007	0.0009	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	c		
168	X	2003-08	MCG	Annual Sidewalk Program	X				2004		0.0275	0.0480	0.0192	0.0295	0.0178	0.0285	0.0176	0.0263	0.0116	0.0159	0.0117	0.0138	0.0097	0.0102	0.0087	0.0084	0.0087	0.0084	c		
169		2003-08	MDOT	Bethesda Breeze/International Express Metrobus			X		2005	Removed	0.0060	0.0097	0.0042	0.0059	0.0039	0.0053	0.0038	0.0053	0.0025	0.0032	0.0026	0.0028	0.0021	0.0020	0.0019	0.0017	0.0019	0.0017	c		
170		2003-08	MDOT	Bethesda-8, Silver Spring Downtown Dasher and Prince Georges Co. Shuttles at 3 PNR lot			X		2005	Removed	0.0142	0.0189	0.0099	0.0116	0.0092	0.0104	0.0091	0.0104	0.0060	0.0064	0.0061	0.0054	0.0050	0.0040	0.0045	0.0033	0.0045	0.0033	c		
171		2003-08	MDOT	Proposed Transportation Management District in Montgomery County (Rockville and Gaithersburg)			X		2005	Removed	0.0093	0.0142	0.0065	0.0087	0.0060	0.0078	0.0059	0.0078	0.0039	0.0047	0.0040	0.0041	0.0033	0.0030	0.0029	0.0025	0.0029	0.0025	c		
172	X	2003-08	MDOT	Sidewalks (Bikes/Pedestrian) at / near Rail Stations	X				2005	2002	0.0150	0.0267	0.0105	0.0164	0.0097	0.0147	0.0096	0.0146	0.0063	0.0088	0.0064	0.0077	0.0053	0.0057	0.0048	0.0047	0.0047	0.0047	c		
173	X	2003-08	MDOT	Neighborhood Sidewalks Improvements (Bike/Pedestrian)	X				2005	2004	0.0052	0.0030	0.0037	0.0018	0.0034	0.0017	0.0033	0.0016	0.0023	0.0011	0.0022	0.0009	0.0018	0.0006	0.0017	0.0005	0.0016	0.0005	c		
174	X	2003-08	MDOT	Neighborhood Conservation Program - Neighborhood Sidewalks Improvements (Bikes/Pedestrian)		X			2005	Ongoing	0.0046	0.0026	0.0032	0.0016	0.0030	0.0014	0.0029	0.0014	0.0020	0.0010	0.0020	0.0008	0.0016	0.0006	0.0015	0.0005	0.0014	0.0005	c		
175	X	2003-08	MDOT	Maryland bus Transit Service Expansion	X				2005	2004	0.0228	0.0586	0.0159	0.0360	0.0147	0.0323	0.0145	0.0321	0.0094	0.0191	0.0097	0.0169	0.0080	0.0124	0.0072	0.0103	0.0072	0.0103	c		
176	X	2003-08	VDOT	Universal Transportation Access Program	X				2005	2005-07	0.0019	0.0034	0.0013	0.0021	0.0012	0.0019	0.0012	0.0019	0.0008	0.0011	0.0008	0.0010	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	c		
177	X	2003-08	VDOT	Interactive Rideshare & Kiosk Initiative			X		2008 onward		0.0006	0.0013			0.0004	0.0007	0.0004	0.0007	0.0003	0.0004	0.0003	0.0004	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	c		
178	X	2003-08	VDOT	Mobile Commuter Stores	X				2005	2005	0.0035	0.0071	0.0024	0.0044	0.0022	0.0039	0.0022	0.0039	0.0014	0.0023	0.0015	0.0020	0.0012	0.0015	0.0011	0.0012	0.0011	0.0012	c		
179	X	2003-08	VDOT	Telework Incentive Program (Telework VA)	X				2005	Fall 2006	0.0012	0.0022	0.0008	0.0013	0.0008	0.0012	0.0008	0.0012	0.0005	0.0007	0.0005	0.0006	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	c		
180	X	2003-08	VDOT	Commuter Choice	X				2005		0.0015	0.0025	0.0011	0.0016	0.0010	0.0014	0.0010	0.0014	0.0007	0.0008	0.0007	0.0007	0.0005	0.0005	0.0005	0.0004	0.0005	0.0004	c		
181	X	2003-08	VDOT	Employer Shuttle Services			X		2005		0.0184	0.0301	0.0128	0.0185	0.0119	0.0166	0.0117	0.0165	0.0077	0.0100	0.0078	0.0087	0.0065	0.0064	0.0058	0.0053	0.0058	0.0053	c		
184	X	2003-08	VDOT	Van Start / Van Save	X				2005	till 2006	0.0022	0.0047	0.0016	0.0029	0.0015	0.0026	0.0014	0.0025			0.0010	0.0013							c		
185	X	2003-08	VDOT	Metro Shuttle Bus			X		2005	1999-2005	0.0019	0.0047	0.0013	0.0029	0.0012	0.0026	0.0012	0.0026	0.0008	0.0015	0.0008	0.0013	0.0007	0.0010	0.0006	0.0008	0.0006	0.0008	c		
187	X	2003-08	VDOT	VRE Mid-Day Train Service	X				2005	2002	0.0025	0.0053	0.0018	0.0033	0.0016	0.0029	0.0016	0.0029	0.0011	0.0017	0.0011	0.0015	0.0009	0.0011	0.0008	0.0009	0.0008	0.0009	c		
190	X	2003-08	VDOT	Employer Vanpool Program (Bridge deck)	X				2005	2004 - 2008	0.0015	0.0034	0.0011	0.0021	0.0010	0.0019					0.0000	0.0000							c		
191	X	2003-08	VDOT	Town of Leesburg P&R Lot	X				2005	2010	0.0031	0.0071					0.0020	0.0039	0.0013	0.0023	0.0013	0.0020	0.0011	0.0015	0.0010	0.0012	0.0010	0.0012	c		
192	X	2003-08	VDOT	District-wide P&R Lots	X				2005	2001-2005	0.0182	0.0406	0.0127	0.0249	0.0118	0.0224	0.0116	0.0222	0.0076	0.0133	0.0078	0.0117	0.0064	0.0086	0.0058	0.0071	0.0057	0.0071	c		
193	X	2003-08	VDOT	Additional Parking at 4 Metro stations	X				2005	2005	0.0235	0.0604	0.0164	0.0372	0.0152	0.0334	0.0150	0.0331	0.0097	0.0197	0.0100	0.0174	0.0083	0.0128	0.0074	0.0106	0.0074	0.0106	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	0.0021	0.0870	0.0021	0.0870	0.0014	0.0457							SP (TCM)		
197	X	2003-08	WMATA	250 CNG Buses (175 buses by Dec. 2004; 75 buses by mid 2006)	X				2005	Jun-06	0.0083	0.3400	0.0083	0.3400	0.0083	0.3400	0.0083	0.3400	0.0083	0.3400	0.0055	0.1786							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	0.0138	0.0755	0.0138	0.0755	0.0092	0.0396							SP		
199	X	2003-08	WMATA	Car Sharing Program	X				2005	2004	0.0013	0.0033	0.0009	0.0020	0.0008	0.0018	0.0008	0.0018	0.0005	0.0011	0.0005	0.0009	0.0005	0.0007	0.0004	0.0006	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	0.0014	0.0021	0.0013	0.0019	0.0012	0.0019	0.0008	0.0012	0.0008	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		0.0055	0.013	0.0055	0.0133	0.0055	0.0133	0.0055	0.0133	0.0055	0.013	0.004	0.007	0.0055	0.0133				SP			
203	X	2003-08	MDOT	Replace 55 Montgomery County 10 yr. old buses w/ new CNG buses			X		2005	Ongoing	0.0459	0.1628	0.0459	0.1628	0.0459	0.1628	0.0459	0.1628		0.2861	0.0307	0.0855	0.0459	0.1628				SP			
204		2003-08	MDOT	Neighborhood Bus Shuttle (5 circulator routes)			X		2005		0.0121	0.0221	0.0084	0.0136	0.0078	0.0122	0.0077	0.0121	0.0051	0.007	0.005	0.006	0.0043	0.0047	0.0038	0.0039	0.0038	0.0039	c		
205	X	2003-08	MDOT	New Surface Parking at Transit Centers (500 spaces)			X		2005	2005	0.0042	0.0108	0.0030	0.0066	0.0027	0.0060	0.0027	0.0059	0.0017	0.0035	0.0018	0.0031	0.0015	0.0023	0.0013	0.0019	0.0013	0.0019	c		
206		2003-08	MDOT	Additional Bike Lockers at Metro-Stations			X		2005		0.0213	0.0379	0.0149	0.0233	0.0138	0.0209	0.0136	0.0208	0.0090	0.0125	0.0091	0.0109	0.0075	0.0080	0.0067	0.0067	0.0067	0.0066	c		
207	X	2003-08	MDOT	Bike Facilities at PnR Lots or other similar location			X		2005	2005	0.0150	0.0300	0.0105	0.0185	0.0097	0.0166	0.0096	0.0165	0.0063	0.0099	0.0064	0.0086	0.0053	0.0064	0.0048	0.0053	0.0047	0.0053	c		
208		2003-08	MDOT	CNG Fueling Stations			X		2005		0.1270	0.1170	0.1270	0.1170	0.1270	0.1170	0.1270	0.1170			0.0849	0.0614							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	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	N/A	N/A	N/A	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	0.0016	0.0025	0.0015	0.0022	0.0014	0.0022	0.0009	0.0013	0.0010	0.0012	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	c (TCM)		
212	X	2003-08	MDOT	Bike Pedestrian Trail - Anacostia River Walk			X		2005	Ongoing	0.0009	0.0008	0.0007	0.0005	0.0006	0.0005	0.0006	0.0005	0.0004	0.0003	0.0004	0.0002	0.00								

**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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL AC COMPLETION DATE	TUAL COMPLETION DATE	2005		2008		2009		2010		2015		2016		2020		2030		2040		Project Category *					
					FULL	SCALED-BACK	UNDER-WAY	REM			VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX	VOC	NOX		VOC	NOX			
223	X	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. (37 spaces)	X				2008	2008							0.0007	0.0013			0.0004	0.0007	0.0004	0.0005	0.0003	0.0004	0.0003	0.0004						
224	X	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. - expansion (39 spaces)			X		2011	2011											Credits included in TS 224 (for 37+ 39 spaces)													
225	X	2008-13	MDOT	MCG/MDOT P & R Lots at I 70 & MD 355 (100 spaces)			X		2010	2010							0.0009	0.0017			0.0006	0.0009	0.0005	0.0007	0.0005	0.0006	0.0005	0.0006						
226	X	2008-13	MDOT	MCG/MDOT P & R Lots at I 270 & MD 80 (164 spaces)	X				2009	2009							0.0014	0.0028			0.0010	0.0015	0.0008	0.0011	0.0007	0.0009	0.0007	0.0009						
227	X	2008-13	MDOT	MDOT Signal System Reviewing			X		2010	on-going											Credits shown in Regional signal TERM - TS 220													
228	X	2008-13	MDOT	MDOT Takoma Langely 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											3.716	7.556	2.752	5.400	2.471	4.856	2.456	4.797	2.164	3.704	1.639	2.505	1.430	1.113	1.284	0.747	1.271	0.744						

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

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

NOs	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	TONS/DAY REDUCTION CREDITED								Project Category	
					FULL	SCALED-BACK	UNDER-WAY	REM			2016		2020		2030		2040			
											VOC	NOx	VOC	NOx	VOC	NOx	VOC	NOx		
221	X	1995-00 TIP	REGION	M-24 Speed Limit Adherence	X				2010			-0.0050	0.1437	-0.0021	0.1206	0.0005	0.0377	0.0005	0.0376	TR
222		1996-01 TIP	MGC	Rock Spring Park Pedestrian Amenities								0.0007	0.0021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-
223	X	1996-01 TIP	MGC	Olney Transit Center Park and Ride					2015			0.0013	0.0042	0.0009	0.0030	0.0003	0.0007	0.0003	0.0007	C
224	X	1996-01 TIP	MGC	Damascus Park and Ride						2003		0.0007	0.0021	0.0004	0.0015	0.0001	0.0003	0.0001	0.0003	C
225	X	1996-01 TIP	DC	M-103 Taxicab Replacement (DC)					2015			0.0000	0.0000	0.1745	0.3000	0.3490	0.6000	0.3467	0.5984	H
226	X	STADIUM ANALYSIS		M-103 Taxicab Replacement (MD)					2008			0.0000	0.0000	0.1560	0.2400	0.1560	0.2400	0.1550	0.2394	H
227	X	1997-02 TIP	MDOT	Shady Grove West Transit Center Park and Ride								0.0000	0.0053	0.0000	0.0038	0.0000	0.0009	0.0000	0.0009	C
228	X	1997-02 TIP	MGC	Olney Transit Center Park and Ride					2015			0.0000	0.0000	0.0004	0.0012	0.0003	0.0007	0.0003	0.0007	C
229	X	1997-02 TIP	MGC	White Oak Park and Ride					2008			0.0000	0.0105	0.0000	0.0076	0.0000	0.0017	0.0000	0.0017	C
230	X	1997-02 TIP	MGC	Damascus Park and Ride						2003		0.0000	0.0000	0.0002	0.0005	0.0001	0.0003	0.0001	0.0003	C
231	X	1997-02 TIP	MGC	Four Corners Transit Center					2015			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								0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-
233	X	1997-02 TIP	MGC	Silver Spring Transit Access								0.0000	0.0005	0.0000	0.0003	0.0000	0.0002	0.0000	0.0002	C
234	X	1997-02 TIP	MGC	Shady Grove Parking Construction						2003		0.0033	0.0100	0.0021	0.0072	0.0007	0.0017	0.0007	0.0017	C

PLAN TOTAL	0.0004	0.1715	0.0019	0.1424	0.0022	0.0434	0.0021	0.0432
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GRAND TOTAL (Current Measures + CLRP plan)	1.639	2.676	1.432	1.255	1.286	0.791	1.274	0.787
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DEFINITIONS: Project Numbers implemented fully prior to 2000 were removed from the TERM Tracking Sheet

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 J of Conformity Document). No credit has been taken for projects in which only some components of the measure have been implemented.

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

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
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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL ACTUAL		2016		2020		2030		2040		Project Category *					
					FULL	SCALED-BACK	UNDER-WAY	REM	COMPLETION DATE	COMPLETION DATE	PM2.6	Precursor NOx	PM2.5	Precursor NOx	PM2.5	Precursor NOx	PM2.6	Precursor NOx						
9	X	1994-99	MDOT	Park & Ride Lot - MD 210/ MD 373	X				2000	2003	0.0095	0.1374	0.0095	0.1000	0.0095	0.0830	0.0095	0.0689	C					
19	X	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			-					
20	X	1994-99	ALEX	King St. Metrorail access improvements	X					2006	0.0095	0.1374	0.0095	0.1000	0.0095	0.0830	0.0095	0.0689	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	0.0000	0.0000	0.0000	0.0000	TR					
39	X	1995-00	MDOT	Signal Systems - MD 355 J-70 ramps to Grove Rd.	X				1996	n/a	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	TR					
44	X	1995-00	MDOT	Signal Systems - MD 410, 62nd Ave. to Riverdale Rd.	X				1996	2002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	TR					
48	X	1995-00	MDOT	MARC Replacement Coaches	X				1999	2004	0.0095	0.1374	0.0095	0.1000	0.0095	0.0830	0.0095	0.0689	C (TCM)					
49	X	1995-00	MDOT	MARC Expansion Coaches	X				1999	2004	0.0891	1.2820	0.0891	0.9332	0.0891	0.7745	0.0891	0.6428	C (TCM)					
51	X	1995-00	VDOT	Alexandria Telecommuting Pilot Program	X					2000 & 2001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C					
54	X	1995-00	VDOT	City of Fairfax Bus Shelters	X				1999	2004	0.0032	0.0458	0.0032	0.0333	0.0032	0.0277	0.0032	0.0230	C (TCM)					
56	X	1995-00	VDOT	Cherry Hill VRE Access			X			Jul-08	0.0764	1.0988	0.0764	0.7999	0.0764	0.6639	0.0764	0.5510	C (TCM)					
58	X	1995-00	WMATA	Bus Replacement (172 buses)	X				1998	1998									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	0.0000	0.0000	0.0000	C					
60	X	1995-00	MCG	White Oak Park and Ride			X		2010		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	C					
61	X	1995-00	MCG	Bicycle Facilities			X		FY99		0.0064	0.0916	0.0064	0.0667	0.0064	0.0553	0.0064	0.0459	C					
62	X	1995-00	MCG	Pedestrian Facilities to Metrorail			X				0.0255	0.3663	0.0255	0.2666	0.0255	0.2213	0.0255	0.1837	C					
63	X	1995-00	MDOT	MARC Replacement Coaches	X				1999	2004	0.0382	0.5494	0.0382	0.4000	0.0382	0.3319	0.0382	0.2755	C					
64	X	1995-00	MDOT	MARC Expansion Coaches	X				1999	2004	0.3309	4.7617	0.3309	3.4663	0.3309	2.8768	0.3309	2.3875	C (TCM)					
66	X	1995-00	VDOT	Commuter Lots - District Wide			X		varies	1995, 2001	0.1050	1.5109	0.1050	1.0999	0.1050	0.9128	0.1050	0.7576	C					
67	X	1995-00	VDOT	I-66 and Stringfellow Rd. Park and Ride	X				2000	2000 end	0.0636	0.9157	0.0636	0.6666	0.0636	0.5532	0.0636	0.4591	C					
68	X	1995-00	VDOT	Lake Ridge Park and Ride (now called Tacketts Mill lot)	X					1999/2000	0.0318	0.4579	0.0318	0.3333	0.0318	0.2766	0.0318	0.2296	C					
69	X	1995-00	VDOT	Bicycle Trails and Facilities (Arlington & Fairfax Co - 7 locations)			X		varies	2010-12	0.0541	0.7783	0.0541	0.5666	0.0541	0.4702	0.0541	0.3903	C					
70	X	1995-00	VDOT	Improved Access to Metrorail Stations (VRE 2 Stn)			X		varies	2000-2012	0.0032	0.0458	0.0032	0.0333	0.0032	0.0277	0.0032	0.0230	C					
71	X	1995-00	VDOT	I-66 HOV access at Monument Dr.	X				1997		0.0636	0.9157	0.0636	0.6666	0.0636	0.5532	0.0636	0.4591	C					
72	X	1995-00	DC	Bicycle Facilities	X						0.0636	0.9157	0.0636	0.6666	0.0636	0.5532	0.0636	0.4591	C					
73	X	1995-00	REGION	COG Regional Ridesharing Support	X				on-going		1.7913	24.4149	1.7913	17.8484	1.7913	14.9204	1.7913	12.3829	C					
74	X	1995-00	REGION	M-47 Integrated Ridesharing	X				on-going		0.6199	8.5312	0.6199	6.2319	0.6199	5.2028	0.6199	4.3180	C					
75	X	1995-00	REGION	M-92 Telecommuting Support	X				on-going		1.2883	18.1945	1.2883	13.2638	1.2883	11.0351	1.2883	9.1583	C					
77	X	1996-01	VDOT	Duke Street Pedestrian Bridge	X				2005	2007	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	0.0095	0.1374	0.0095	0.1000	0.0095	0.0830	0.0095	0.0689	C					
81	X	1996-01	VDOT	Arlington County Metrocheck Program	X				1997	1997 Onwards	0.0095	0.1374	0.0095	0.1000	0.0095	0.0830	0.0095	0.0689	C					
82	X	1996-01	VDOT	Old Dominion Drive Bike Trail			X		2000	2010-11	0.0032	0.0458	0.0032	0.0333	0.0032	0.0277	0.0032	0.0230	C					
83	X	1996-01	WMATA	Bus Replacement (see line 58, above)	X					1998	Credit taken in line 58, above													
85	X	1996-01	VDOT	Fairfax County Bus Shelters (30 shelters with project #79)	X				1999	2001	0.0032	0.0458	0.0032	0.0333	0.0032	0.0277	0.0032	0.0230	C					
90	X	1996-01	REGION	M-47c Employer Outreach / Guaranteed Ride Home	X				on-going		3.7262	52.9524	3.7262	38.5840	3.7262	32.0744	3.7262	26.6195	C					
91	X	1996-01	REGION	M-70a Bicycle Parking			X		1999		0.0223	0.3205	0.0223	0.2333	0.0223	0.1936	0.0223	0.1607	C					
92	X			M-92 Telecommuting Support ¹	Combined with item #75															C				
95	X	1997-02	MCG	Germantown Transit Center	X				2005		0.0605	0.8699	0.0605	0.6333	0.0605	0.5256	0.0605	0.4362	C (TCM)					
102	X	1997-02	PG	Prince George's County Bus Replacement	X				1998	1998									SP (TCM)					

TERM TRACKING SHEET
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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL ACTUAL		2016		2020		2030		2040		Project Category *
					FULL	SCALED BACK	UNDERWAY	REM	COMPLETION DATE	COMPLETION DATE	PM2.6	Precursor NOx	PM2.5	Precursor NOx	PM2.5	Precursor NOx	PM2.6	Precursor NOx	
106	X	1997-02	VDOT	PRTC Employer Commuting Outreach Program	X					1977 on-going	0.0016	0.0229	0.0016	0.0167	0.0016	0.0138	0.0016	0.0115	C
107	X	1997-02	VDOT	PRTC Multimodal Strategic Marketing Implementation Plan	X					1977 on-going	0.0016	0.0229	0.0016	0.0167	0.0016	0.0138	0.0016	0.0115	C
108	X	1997-02	MDOT	M-103 Taxicab Replacement in Maryland ²	X				2005	Stopped									SP
109	X	1997-02	REGION	M-70b Employer Outreach for Bicycles	X				1998	on going	0.0035	0.0587	0.0035	0.0423	0.0035	0.0344	0.0035	0.0286	C
110		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			C
111	X	1998-03	WMATA	Bus Replacement (108 buses)	X				1999	1999									SP
112	X	1998-03	MCG	Montgomery County Bus Replacement	X					Ongoing									SP
113	X	1998-03	PG	Prince George's County Bus Replacement	X				1998	Ongoing									SP
114	X	1998-03	FDC	Frederick County Bus Replacement	X														SP
117	X	1998-03	VDOT	Arlington County Four Mile Run Bike Trail	X				1999	2009	0.0032	0.0458	0.0032	0.0333	0.0032	0.0277	0.0032	0.0230	C
118	X	1998-03	VDOT	Northern Virginia Turn Bays	X				2000	1998	0.0056	0.0806	0.0056	0.0587	0.0056	0.0487	0.0056	0.0404	TR
119	X	1998-03	VDOT	Fairfax City Bus Replacement	X				2001	2003									SP
121	X	1998-03	WMATA	WMATA Bus Replacement (252 buses)	X				2001	2001									SP
122	X	97 & 98 TIP	REGION	M-101a Mass Marketing Campaign (Consumer)				X		2005	0.21571884	2.9697	0.2157	2.1692	0.2157	1.8109	0.2157	1.5029	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	0.1146	1.6483	0.1146	1.1999	0.1146	0.9958	0.1146	0.8265	C
124	X	1999-04	MDOT	Signal Systems (197/MD-198, MD-382 TO US-301,US301)	X				2000	2002	-0.0112	-0.1612	-0.0112	-0.1173	-0.0112	-0.0974	-0.0112	-0.0808	TR
125	X	1999-04	VDOT	Transit Center at 7 Corners	X				2002	2001	0.0064	0.0916	0.0064	0.0667	0.0064	0.0553	0.0064	0.0459	C
126	X	1999-04	VDOT	Falls Church Clean Diesel Bus Service	X				2000	2003									SP
127	X	1999-04	VDOT	VA 234 Bike Trail				X	2001	2010	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	C
130	X	1996-01	VDOT	M-14: I-66 Feeder Bus Fare Buy Down	X					1998 onward	0.1750	2.5182	0.1750	1.8331	0.1750	1.5214	0.1750	1.2626	C
131	X	2000-05	MDOT	Various park and Ride Lots	X				2002	2003	0.1035	1.4885	0.1035	1.0836	0.1035	0.8993	0.1035	0.7464	C
132	X	2000-05	MDOT	Signal Systems	X				Varies	on-going	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	TR
133	X	2000-05	VDOT	250 Spaces at Gambrell/Hoos Rds. Park and Ride	X				2002	2004	0.0573	0.8241	0.0573	0.5999	0.0573	0.4979	0.0573	0.4132	C
134	X	2000-05	VDOT	300 Spaces at Backlick Rd	X				2003	2007	0.0414	0.5952	0.0414	0.4333	0.0414	0.3596	0.0414	0.2984	C
135	X	2000-05	VDOT	Accotink-Gateway Connector Trail	X				2002	2005	0.0318	0.4579	0.0318	0.3333	0.0318	0.2766	0.0318	0.2296	C
136	X	2000-05	VDOT	Columbia Pike Trail				X	2000	2009	0.0255	0.3663	0.0255	0.2666	0.0255	0.2213	0.0255	0.1837	C
137	X	2000-05	VDOT	Lee Highway trail	X				2000	2007	0.0127	0.1831	0.0127	0.1333	0.0127	0.1106	0.0127	0.0918	C
138	X	2000-05	VDOT	Arlington Bus Shelter Improvements	X				2005	2005	0.0032	0.0458	0.0032	0.0333	0.0032	0.0277	0.0032	0.0230	C
139	X	2000-05	VDOT	Pentagon Metrostation Improvements	X					2003	0.0541	0.7783	0.0541	0.5666	0.0541	0.4702	0.0541	0.3903	C
140	X	2000-05	MDOT	East/West Intersection Improvements				X	2005	2005	0.0795	1.1446	0.0795	0.8332	0.0795	0.6915	0.0795	0.5739	C
141	X	2001-06	Feds	Federal Transit/Ridesharing subsidy	X				on-going		0.6078	8.7450	0.6078	6.3660	0.6078	5.2833	0.6078	4.3848	C
142	X	2002-07	WMATA	100 CNG buses	X				2002										SP (TCM)
143	X	2002-07	WMATA	ULSD with CRT filters	X				2006	Jun-06	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	H (TCM)
144		2003-08	DC	Replace 23 12 Taxicabs with CNG cabs				X	2005	2006									H
145	X	2003-08	DC	D.C.Incident Response & TrafficManagement System	X				2005	2004	0.2761	3.9730	0.2761	2.8922	0.2761	2.4003	0.2761	1.9921	TR
146	X	2003-08	DC	Bicycle Lane in D. C. (35 Mile)	X				2005	2008	0.0428	0.8392	0.0428	0.6134	0.0428	0.4896	0.0428	0.4064	C (TCM)
147	X	2003-08	DC	Bicycle Racks in D. C. (500)	X				2005	2004	0.0040	0.0955	0.0040	0.0699	0.0040	0.0547	0.0040	0.0454	C (TCM)
148	X	2003-08	DC	External Bicycle Racks on WMATA Buses in D. C. (600)	X				2005	2003	0.0206	0.2982	0.0206	0.2171	0.0206	0.1800	0.0206	0.1494	C (TCM)
149		2003-08	DC	CNG Rental Cars (18)				X	2005										SP

TERM TRACKING SHEET
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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL ACTUAL		2016		2020		2030		2040		Project Category *
					FULL	SCALED BACK	UNDERWAY	REM	COMPLETION DATE	COMPLETION DATE	PM2.6	Precursor NOx	PM2.5	Precursor NOx	PM2.5	Precursor NOx	PM2.6	Precursor NOx	
150	X	2003-08	DC	Sidewalks in D.C. (\$ 5 million)	X				2005	2004	0.3688	5.3710	0.3688	3.9106	0.3688	3.2400	0.3688	2.6889	C
151	X	2003-08	DC	CNG Refuse Haulers (2)	X				2005	2004									H (TCM)
152	X	2003-08	DC	Circulator /Feeder Bus Routes	X				2005	2003	0.1325	1.9373	0.1325	1.4106	0.1325	1.1681	0.1325	0.9694	C
153	X	2003-08	MDOT	Commuter Tax Credit	X				2005	n/a	0.8145	11.8243	0.8145	8.6087	0.8145	7.1356	0.8145	5.9220	C
155		2003-08	MDOT	Employer Vanpool Program (WWB)				X	2005										C
156	X	2003-08	MDOT	Green Line Link				X	2005	n/a	0.0326	0.4503	0.0326	0.3276	0.0326	0.2735	0.0326	0.2270	C
157	X	2003-08	MDOT	Park & Ride Lots - Southern Maryland				X	2005	2005	0.0704	0.9256	0.0704	0.6728	0.0704	0.5660	0.0704	0.4697	C
158	X	2003-08	MDOT	Prince George's County- Bus Exp				X	2005	n/a	0.4574	6.3152	0.4574	4.5942	0.4574	3.8360	0.4574	3.1836	C
159	X	2003-08	MDOT	MTA - Bus Service Expansion				X	2005	n/a	0.1108	1.5063	0.1108	1.0955	0.1108	0.9168	0.1108	0.7609	C
160	X	2003-08	MDOT	Ride- On - Super Discount				X	2005	n/a	0.0094	0.1366	0.0094	0.0995	0.0094	0.0824	0.0094	0.0684	C
161	X	2003-08	Regional	Regional Traveler Information Systems				X	2005		3.6007	51.8103	3.6007	37.7158	3.6007	31.3014	3.6007	25.9780	TR
162	X	2003-08	MDOT	Universal Transportation Access (MD + WMATA)				X	2005	n/a	0.1654	2.4082	0.1654	1.7534	0.1654	1.4527	0.1654	1.2056	C
163	X	2003-08	MCG	Construction of 1300 additional Parking Spaces at Grosvenor Metro Garage	X				2004		0.0765	0.9986	0.0765	0.7258	0.0765	0.6113	0.0765	0.5073	C (TCM)
164	X	2003-08	MCG	Bethesda Shuttle Bus Services	X				2004		0.0316	0.4617	0.0316	0.3362	0.0316	0.2784	0.0316	0.2310	C
165	X	2003-08	MCG	External Bicycle Racks on Ride-On Buses in Montgomery County	X				2004		0.0064	0.0930	0.0064	0.0677	0.0064	0.0561	0.0064	0.0466	C
166	X	2003-08	MCG	New CNG Powered Light Duty Vehicle fleet in the County	X				2004										SP
167	X	2003-08	MCG	Free Bus Service on Selected Routes on I-270	X				2004		0.0110	0.1599	0.0110	0.1164	0.0110	0.0965	0.0110	0.0801	C
168	X	2003-08	MCG	Annual Sidewalk Program	X				2004		0.1756	2.5576	0.1756	1.8622	0.1756	1.5428	0.1756	1.2804	C
169		2003-08	MDOT	Bethesda Breeze/International Express Metrobus				X	2005	Removed	0.0345	0.5169	0.0345	0.3765	0.0345	0.3107	0.0345	0.2579	C
170		2003-08	MDOT	Bethesda-8, Silver Spring Downtown Dasher and Prince Georges Co. Shuttles at 3 PNR lot				X	2005	Removed	0.0623	1.0184	0.0623	0.7427	0.0623	0.6058	0.0623	0.5028	C
171		2003-08	MDOT	Proposed Transportation Management District in Montgomery County (Rockville and Gaithersburg)				X	2005	Removed	0.0496	0.7591	0.0496	0.5531	0.0496	0.4550	0.0496	0.3776	C
172	X	2003-08	MDOT	Sidewalks (Bikes/Pedestrian) at / near Rail Stations	X				2005	2002	0.0983	1.4213	0.0983	1.0347	0.0983	0.8581	0.0983	0.7122	C
173	X	2003-08	MDOT	Neighborhood Sidewalks Improvements (Bike/Pedestrian)	X				2005	2004	0.0038	0.1712	0.0038	0.1259	0.0038	0.0944	0.0038	0.0783	C
174	X	2003-08	MDOT	Neighborhood Conservation Program - Neighborhood Sidewalks Improvements (Bikes/Pedestrian)			X		2005	Ongoing	0.0033	0.1498	0.0033	0.1102	0.0033	0.0826	0.0033	0.0685	C
175	X	2003-08	MDOT	Maryland bus Transit Service Expansion	X				2005	2004	0.2366	3.0876	0.2366	2.2442	0.2366	1.8900	0.2366	1.5685	C
176	X	2003-08	VDOT	Universal Transportation Access Program	X				2005	2005-07	0.0124	0.1806	0.0124	0.1315	0.0124	0.1090	0.0124	0.0904	C
177	X	2003-08	VDOT	Interactive Rideshare & Kiosk Initiative				X	2008 onward		0.0049	0.0682	0.0049	0.0496	0.0049	0.0414	0.0049	0.0344	C
178	X	2003-08	VDOT	Mobile Commuter Stores	X				2005	2005	0.0273	0.3772	0.0273	0.2744	0.0273	0.2291	0.0273	0.1901	C
179	X	2003-08	VDOT	Telework Incentive Program (Telework VA)	X				2005	Fall 2006	0.0080	0.1153	0.0080	0.0839	0.0080	0.0696	0.0080	0.0578	C
180	X	2003-08	VDOT	Commuter Choice	X				2005		0.0091	0.1356	0.0091	0.0988	0.0091	0.0816	0.0091	0.0677	C
181	X	2003-08	VDOT	Employer Shuttle Services				X	2005		0.1081	1.6096	0.1081	1.1723	0.1081	0.9682	0.1081	0.8035	C
184	X	2003-08	VDOT	Van Start / Van Save	X				2005	till 2006									C
185	X	2003-08	VDOT	Metro Shuttle Bus				X	2005	1999-2005	0.0188	0.2468	0.0188	0.1794	0.0188	0.1509	0.0188	0.1253	C
187	X	2003-08	VDOT	VRE Mid-Day Train Service	X				2005	2002	0.0204	0.2804	0.0204	0.2040	0.0204	0.1704	0.0204	0.1414	C
190	X	2003-08	VDOT	Employer Vanpool Program (Bridge deck)	X				2005	2004 - 2008									C
191	X	2003-08	VDOT	Town of Leesburg P&R Lot	X				2005	2010	0.0280	0.3755	0.0280	0.2730	0.0280	0.2289	0.0280	0.1900	C
192	X	2003-08	VDOT	District-wide P&R Lots	X				2005	2001-2005	0.1589	2.1456	0.1589	1.5604	0.1589	1.3072	0.1589	1.0848	C
193	X	2003-08	VDOT	Additional Parking at 4 Metro stations	X				2005	2005	0.2440	3.1849	0.2440	2.3149	0.2440	1.9495	0.2440	1.6180	C
196	X	2003-08	WMATA	64 CNG Buses (Purchased in 2001)	X				2005	2004									SP (TCM)
197	X	2003-08	WMATA	250 CNG Buses (175 buses by Dec. 2004; 75 buses by mid 2006)	X				2005	Jun-06									SP

TERM TRACKING SHEET
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	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				ORIGINAL ACTUAL		2016		2020		2030		2040		Project Category *
					FULL	SCALED-BACK	UNDER-WAY	REM	COMPLETION DATE	COMPLETION DATE	PM2.6	Precursor NOx	PM2.5	Precursor NOx	PM2.5	Precursor NOx	PM2.6	Precursor NOx	
198	X	2003-08	WMATA	60 Engine Replacement (MY 1992 & 1993 MY buses)	X				2004	2004									SP
199	X	2003-08	WMATA	Car Sharing Program	X				2005	2004	0.0133	0.1732	0.0133	0.1259	0.0133	0.1060	0.0133	0.0880	C
200	X	2003-08	WMATA	Bikes Racks on WMATA Buses in VA (372 Bike Racks)	X				2005	2004	0.0128	0.1854	0.0128	0.1350	0.0128	0.1119	0.0128	0.0929	C (TCM)
202		2003-08	MDOT	Fleet Replacement (state auto fleet, gas to hybrid, 250 vehicles)				X	2005		0.0492	0.7082	0.0492	0.5155					SP
203	X	2003-08	MDOT	Replace 55 Montgomery County 10 yr. old buses w/ new CNG buses				X	2005	Ongoing	0.6024	8.6685	0.6024	6.3103					SP
204		2003-08	MDOT	Neighborhood Bus Shuttle (5 circulator routes)				X	2005		0.0824	1.1787	0.0824	0.8580	0.0824	0.7126	0.0824	0.5914	C
205	X	2003-08	MDOT	New Surface Parking at Transit Centers (500 spaces)				X	2005	2005	0.0436	0.5700	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		0.1395	2.0172	0.1395	1.4685	0.1395	1.2179	0.1395	1.0107	C
207	X	2003-08	MDOT	Bike Facilities at PnR Lots or other similar location				X	2005	2005	0.1144	1.5933	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			SP
210		2003-08	MDOT	Gas can turnover (ROP Credit)				X	2005		N/A	N/A	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	0.0148	0.2137	0.0148	0.1556	0.0148	0.1290	0.0148	0.1071	C (TCM)
212	X	2003-08	MDOT	Bike \ Pedestrian Trail - Anacostia River Walk				X	2005	Ongoing	0.0022	0.0463	0.0022	0.0339	0.0022	0.0268	0.0022	0.0223	C
213		2003-08	MDOT	Transit Prioritization - Queue Jumps				X	2005		0.0225	0.3639	0.0225	0.2654	0.0225	0.2168	0.0225	0.1799	C
214	X	2003-08	MDOT	Commuter Choice Benefit/Tax Credit - Marketing Expansion	X				2005	Ongoing	0.5732	8.3042	0.5732	6.0457	0.5732	5.0126	0.5732	4.1601	C
215	X	2003-08	MDOT	Improvements to Pedestrian Access in TOD areas (4 locations)				X	2005	Ongoing	0.0567	0.8434	0.0567	0.6142	0.0567	0.5074	0.0567	0.4211	C
216	X	2003-08	MDOT	Telecommuting Expansion ¹	X				2005	Ongoing	0.8466	11.6148	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	X	2003-08	VDOT	MV-92 Telecommuting Program - Expanded ¹	X				2005	2005	0.9041	12.4039	0.9041	9.0228	0.9041	7.5408	0.9041	6.2584	C
219	X	2003-08	VDOT	MV-123 Employer Outreach for Public Sector Employees ²	X				2005	2003	0.1574	2.2923	0.1574	1.6690	0.1574	1.3828	0.1574	1.1476	C
220	X	2003-08	REGION	Signal System Optimization	X				2005	2005	1.0065	14.4817	1.0065	10.5421	1.0065	8.7492	1.0065	7.2612	TR
221	X	2007-12	MDOT	Two P & R Lots in Frederick County (99 spaces)	X				2007	2008	0.0121	0.1636	0.0086	0.0831	0.0086	0.0709	0.0086	0.0589	C
222	X	2007-12	MDOT	MDOT P & R Lots at US 340 (66-99 spaces, Frederick Co.)	X				2007	2007									
223	X	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. (37 spaces)	X				2008	2008	0.0093	0.1256	0.0093	0.0913	0.0093	0.0765	0.0093	0.0635	
224	X	2008-13	MDOT	MCG/MDOT P & R Lots at US 340 & Mt Zion Rd. - expansion (39 spaces)				X	2011	2011									
225	X	2008-13	MDOT	MCG/MDOT P & R Lots at I 70 & MD 355 (100 spaces)				X	2010	2010	0.0123	0.1653	0.0123	0.1202	0.0123	0.1007	0.0123	0.0836	
226	X	2008-13	MDOT	MCG/MDOT P & R Lots at I 270 & MD 80 (164 spaces)	X				2009	2009	0.0201	0.2710	0.0201	0.1971	0.0201	0.1652	0.0201	0.1371	
227	X	2008-13	MDOT	MDOT Sygal System Reviewing				X	2010	on-going									
228	X	2008-13	MDOT	MDOT Takoma Langely Transit Center				X	2012	2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Available Emissions Credits											17.655	283.411	15.744	187.199	15.141	150.310	15.141	124.747	

**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 Dudy Vehicles), SP- Specific Vehicle Type

NOS	CREDIT TAKEN	TIP CREDITED	AGENCY	PROJECT	IMPLEMENTATION STATUS				PROJECTED COMPLETION DATE	ACTUAL COMPLETION DATE	TONS/ANNUM REDUCTION CREDITED								Project Category
					FULL	SCALED-BACK	UNDER-WAY	REMOVED			2016		2020		2030		2040		
											PM2.5	Precursor NOx	PM2.5	Precursor NOx	PM2.5	Precursor NOx	PM2.6	Precursor NOx	
221	X	1995-00 TIP	REGION	M-24 Speed Limit Adherence					2010		1.8471	26.5777	2.1072	22.0719	0.7941	6.9030	0.7941	5.7290	TR
222		1996-01 TIP	MGC	Rock Spring Park Pedestrian Amenities				X			0.0270	0.3886	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-
223	X	1996-01 TIP	MGC	Olney Transit Center Park and Ride					2015		0.0540	0.7772	0.0531	0.5559	0.0147	0.1279	0.0147	0.1062	C
224	X	1996-01 TIP	MGC	Damascus Park and Ride					2003		0.0270	0.3886	0.0265	0.2780	0.0074	0.0640	0.0074	0.0531	C
225	X	1996-01 TIP	DC	M-103 Taxicab Replacement (DC)				X	2015		0.0000	0.0000	5.2412	54.8984	12.6415	109.8936	12.6415	91.2039	H
226	X	STADIUM ANALYSIS		M-103 Taxicab Replacement (MD)				X	2008		0.0000	0.0000	4.1929	43.9187	5.0566	43.9574	5.0566	36.4816	H
227	X	1997-02 TIP	MDOT	Shady Grove West Transit Center Park and Ride				X			0.0675	0.9715	0.0663	0.6949	0.0184	0.1599	0.0184	0.1327	C
228	X	1997-02 TIP	MGC	Olney Transit Center Park and Ride					2015		0.0000	0.0000	0.0218	0.2280	0.0147	0.1279	0.0147	0.1062	C
229	X	1997-02 TIP	MGC	White Oak Park and Ride					2008		0.1350	1.9431	0.1327	1.3898	0.0368	0.3199	0.0368	0.2655	C
230	X	1997-02 TIP	MGC	Damascus Park and Ride					2003		0.0000	0.0000	0.0082	0.0855	0.0055	0.0480	0.0055	0.0398	C
231	X	1997-02 TIP	MGC	Four Corners Transit Center					2015		0.0068	0.0972	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	-
233	X	1997-02 TIP	MGC	Silver Spring Transit Access							0.0068	0.0972	0.0054	0.0570	0.0037	0.0320	0.0037	0.0265	C
234	X	1997-02 TIP	MGC	Shady Grove Parking Construction					2003		0.1283	1.8459	0.1261	1.3204	0.0350	0.3039	0.0350	0.2522	C

PLAN TOTAL											0.3579	31.7268	0.3804	26.0561	0.1196	7.9425	0.1196	6.5917	
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GRAND TOTAL (Current Measures + CLRP plan)											18.013	315.138	16.124	213.255	15.261	158.252	15.261	131.338	
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DEFINITIONS: Project Numbers implemented fully prior to 2000 were removed from the TERM Tracking Sheet

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 J of Conformity Document). No credit has been taken for projects in which only some components of the measure have been implemented.

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

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