

METROPOLITAN WASHINGTON AIR QUALITY COMMITTEE
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Air Quality Planning
Work Program and Budget

July 1, 2014 through June 30, 2015

Adopted xx, 2014

Prepared by

Metropolitan Washington Council of Governments
Department of Environmental Programs
Air Quality Section

I. Background

This document presents the work program for the Metropolitan Washington Air Quality Committee (MWAQC) to be carried out between July 1, 2014 and June 30, 2015. It describes the work to be carried out by the staff of the Metropolitan Washington Council of Governments (COG) that is directly funded in this work program, as well as the in-kind contributions of the state air quality management agencies from the District of Columbia, Maryland, and Virginia. The tasks outlined in this work program are designed to ensure a regional approach to meeting the federal health standards for ground-level ozone and fine particle matter (PM_{2.5}) in the Washington metropolitan region. Through the activities described for the coming year, several important steps will be taken towards improving the air quality of the region and meeting the deadlines required by the Clean Air Act.

Certification of the Metropolitan Washington Air Quality Committee

The authority of MWAQC is derived from the certifications made by the Governors of Maryland and Virginia and the Mayor of the District of Columbia pursuant to Title I, "Provisions for Attainment and Maintenance of National Ambient Air Quality Standards," of the Clean Air Act Amendments of 1990 (section 174, 42 U.S. Code 7504).

Mission of Metropolitan Washington Air Quality Committee

The primary responsibilities of MWAQC are development of regional carbon monoxide (CO), ozone, and PM_{2.5} National Ambient Air Quality Standards (NAAQS) plans for meeting the federal health standards for the criteria pollutants for which the Washington, DC-MD-VA region has been designated nonattainment. The air quality plans developed by MWAQC are provided to the States for incorporation in the State Implementation Plan (SIP) for submittal to EPA.

Air Quality Classifications of the Washington Metropolitan Region

Ozone Standard¹:

EPA designated the metropolitan Washington region as moderate nonattainment for the 8-hour ozone NAAQS in January 2004. The SIP adopting all the requirements for moderate nonattainment areas was submitted in June 2007. The region met the June 15, 2010, deadline to meet the 1997 8-hour ozone standard.² In 2008 EPA announced a new ozone standard of 75 ppb. The geographic scope of the region includes the Metropolitan Washington Region defined as follows: Montgomery, Prince George's, Frederick, Charles, Calvert Counties in Maryland; Fairfax County, Arlington County, City of Alexandria, City of Falls Church, City of Fairfax, Prince William County, Loudoun County, City of Manassas, City of Manassas Park in Virginia; and the District of Columbia.

¹ One-Hour Ozone Standard: The Washington region's air quality met the one-hour ozone standard by the region's deadline of November 2005, although EPA revoked the standard earlier in the year and, therefore, no longer made findings of attainment for the one hour ozone standard. In July 2008 EPA published a notice in that the Washington region attained the one-hour ozone standard by its deadline of November 2005.

² Federal Register, Vol.77, no. 39, February 28, 2012, 11739.

In 2009 EPA approved the Reasonable Further Progress portion of the region's 2007 ozone state implementation plan. The approval established a 2008 Motor Vehicle Emissions budget for use in transportation conformity analysis.³

In March 2008 EPA promulgated a new ozone standard of 75 ppb based on new evidence that ozone at lower levels has serious health effects. The states in the Metropolitan Washington region recommended to EPA that the region be designated as not attaining the 2008 ozone standard based on monitor data.⁴ In 2009 EPA announced it would reconsider the 2008 ozone standard. In January 2010 EPA proposed to lower the ozone standard to the range of 60-70 ppb.⁵ EPA postponed announcement of the revised ozone standard until July 2011, at which time the President decided to keep the 2008 standard of 75 ppb. EPA is currently reviewing the 2008 standard and published, in January 2014, a second external review draft of the policy assessment for the review of the 2008 ozone NAAQS.

In May 2012 EPA designated the Washington, DC-MD-VA Metropolitan Area as "Marginal" nonattainment for the 2008 ozone standard. The Washington region and all Marginal nonattainment areas have a deadline of 2015 to attain the 75 ppb standard.

PM_{2.5} Standard ("Fine Particles"):

EPA designated the metropolitan Washington region as nonattainment for the 1997 annual PM_{2.5} NAAQS (15 micrograms per cubic meter, ug/m³) in January 2005. The state implementation plan adopting all requirements for the 1997 PM_{2.5} standard was submitted in 2008.⁶ The geographic scope of the PM_{2.5} NAAQS Washington region nonattainment area is the same as for the 1997 8-hour ozone NAAQS, with the exception of Calvert County, Maryland. In December 2008 EPA announced that the monitors in the Washington region showed compliance ("Clean Data") with the 1997 PM_{2.5} NAAQS.⁷ Due to monitoring data showing compliance with the 2006 PM_{2.5} NAAQS, which reduced the daily standard to 35 ug/m³, EPA designated the region attainment for that standard. Therefore, no attainment planning is required for the 2006 PM_{2.5} NAAQS.

On December 14, 2012, EPA announced a revised PM_{2.5} NAAQS, which lowered the annual standard to 12 ug/m³. The Metropolitan Washington region's level of fine particles for 2011 and 2012 are below the 2012 PM_{2.5} NAAQS, so the region currently meets the 2012 standard. The region is not expected to have any planning requirements for the 2012 PM_{2.5} NAAQS.

In spring 2013 MWAQC and the States requested EPA to redesignate the Washington region to attainment of the 1997 PM_{2.5} NAAQS. EPA has eighteen months to act on the redesignation.

³ Federal Register: September 4, 2009 (Volume 74, Number 171)]
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⁴ Federal Register, Vol.73, no. 60, March 27, 2008, 16436-16513

⁵ Federal Register, Vol. 75, No.11, January 19, 2010, 2938-3053.

⁶ Federal Register, Vol. 70, No. 3, January 5, 2005, 948-1018.

⁷ Federal Register, Vol. 74, No. 7, January 12, 2009, 1146-1148.

Until EPA redesignates the region, the test for PM_{2.5} conformity assessments is the “build no greater than 2002” interim emissions.

Carbon Monoxide Standard:

The Washington region met the carbon monoxide standard in 1995. In 2004 a maintenance plan submitted to EPA demonstrated the standard will be maintained until 2016.

SO₂ Standard:

EPA revised the primary SO₂ standard, published in the Federal Register on June 22, 2010, by establishing a new 1-hour standard at a level of 75 ppb. States have until August 2017 to attain the standard. EPA initially asked states with "Unclassifiable" counties to submit a "Maintenance" SIP by June 2013. EPA also published a draft implementation guidance for this purpose. However, based on the feedback received on the above guidance from states, EPA is currently in the process of revising the guidance. EPA is not expecting the June 2013 SIP submittal from states. The revised guidance would include changes to the monitoring and modeling requirements from the draft guidance for attainment designations and SIP. The States have primary responsibility for developing the Maintenance SIPs.

NO₂ Standard:

EPA's final NO₂ standard was published on January 25, 2010. It establishes a 1-hour nitrogen dioxide standard at the level of 100 ppb. The current annual average NO₂ of 53 ppb is unchanged. In urban areas, monitors are required near major roads as well as areas where maximum concentrations are expected. In January 2012 EPA determined that no area in the country is violating the 2010 national air quality standards for nitrogen dioxide. The areas have been designated as “unclassifiable/attainment.” EPA is working with the state and local air agencies to put in place additional NO₂ roadside monitors that were required. The monitoring network was expected to be operational in 2013, but in March 2013, EPA issued a rule revision requiring states and local agencies to begin operating the roadside NO₂ monitoring network in phases between January 1, 2014 and January 1, 2017. This amends the 2010 rule that originally required all new NO₂ monitors to begin operating on January 1, 2013. Designations will be revised once three years of data from the roadside monitors is available. The states have primary responsibility for developing the required planning documents for the 2010 NO₂ NAAQS.

Membership on MWAQC

Membership on MWAQC consists of representatives from twenty-two member local governments within the non-attainment area, as well as the Directors or their designees from the state air quality management agencies and state transportation agencies, representatives of state legislatures, and the Chair of the National Capital Region Transportation Planning Board (TPB). MWAQC's bylaws allow for the expansion or contraction of MWAQC membership, depending on the geographic scope of the designated nonattainment area. Stafford County, Virginia, participated on MWAQC for the 1-hour ozone standard, but is not part of the 1997 or 2008 8-hour ozone nonattainment area.

Organizational Structure of MWAQC

MWAQC adopted by-laws which established a position of Chair and three Vice-Chairs, and it has several standing subcommittees or special supporting committees including an Executive Committee, a Technical Advisory Committee, and a Public Advisory Committee. The Technical Advisory Committee has several standing subcommittees: Conformity, Attainment Modeling, Forecasting, Emissions Inventory, and Local Government Initiatives Subcommittee.

Current officers of MWAQC are the Honorable David Snyder, Chair (Council, City of Falls Church; Honorable John Cook, Vice Chair (Council, Fairfax County); Honorable Mary Cheh, Vice Chair (Council of the District of Columbia); Honorable Hans Reimer, Vice Chair (Council, Montgomery County Council). Elections of officers were held on December 18, 2013, the last business meeting of the calendar year.

Interstate Air Quality Council

The Interstate Air Quality Council (IAQC) is a cabinet-level collaboration between the District of Columbia, the State of Maryland and the Commonwealth of Virginia. It is comprised of the secretaries of the environment and transportation. IAQC resolves difficult issues if needed to ensure the mutual goals of improved air quality and efficient transportation are met.

Staff Support to MWAQC

The lead role for administrative and technical support to MWAQC is held by the staff of the Metropolitan Washington Council of Governments. Major additional complementary technical staff support is provided by the staffs of the state air quality management agencies. During 1996, MWAQC established a Technical Advisory Committee (TAC) which formally broadened its staff support to include local government technical staff as well as staff representing the state transportation agencies. The 2014 TAC is chaired by Tad Aburn, Maryland Department of the Environment.

II. FY 2015 MWAQC Work Program Objectives

MWAQC and the states will continue to work towards meeting the 2008 ozone NAAQS by 2015. Control measures will be evaluated on their ability to cost-effectively reduce ozone precursors: NO_x and VOC. For control programs that may provide co-benefits by reducing SO₂ or PM_{2.5} emissions, those reductions may also be quantified. The core work program will also provide technical support for local government air quality initiatives. Coordinating air quality planning with state and local Clean Energy programs will continue to be a focus.

In FY 2015 MWAQC Core Program objectives:

- Complete the draft Reasonable Further Progress (RFP) plan to attain the 2008 Ozone NAAQS, as required by the agreement placed in the 1997 PM_{2.5} NAAQS redesignation request and maintenance plan.
 - Finalize ozone inventories for 2017.
- Begin the process to determine if an update for the 1997 PM_{2.5} NAAQS maintenance plan Motor Vehicle Emissions Budgets (MVEB) for 2017, 2025 is necessary. If so, work with

the TPB staff to provide appropriate inputs to the modeling effort, including updated vehicle registration data.

- MOVES2014 model training, input development.
- Develop MOVES2014 mobile inventories for the draft ozone RFP.
- Review and comment on transportation conformity assessments for ozone, PM_{2.5}, and CO.
- Track local government Supplemental Measures (formerly the Voluntary Bundle) in the 1997 Annual PM_{2.5} and Ozone NAAQS SIPs (2007).
- Work with the Region Forward Coalition, TPB, CEEPC, and COG to identify and coordinate opportunities to advance strategies identified in the Regional Transportation Priorities Plan (RTPP).
- Identify cost-effective control measures to meet the requirements of attaining the 2008 ozone standard.
- Coordinate air quality planning with state and local Clean Energy Programs.

Role of COG/MWAQC Staff

The lead role for administrative and technical support to MWAQC is held by COG/MWAQC staff. Close collaboration between MWAQC staff and the state air agencies will be necessary to review and revise SIP inventories as needed for ozone and PM_{2.5}, potential control measures, and calculation of necessary reductions needed to meet the standards. MWAQC staff will hold monthly calls with the state air agencies to coordinate work tasks and use of resources. As in the past, MWAQC staff will work closely with COG's Department of Transportation Planning staff on mobile emissions inventory and conformity issues.

MWAQC Meeting Frequency

Five MWAQC meetings are proposed during the 12-month period. The Committee will review and discuss policy implications of federal guidance and proposed revisions of NAAQS for ozone, and to take actions such as commenting on guidance and policies potentially recommending SIP revisions for approval as needed for the region and reviewing designation criteria and regional data.

Forecast for Air Quality Planning, 2014-2015

There is considerable uncertainty next year regarding EPA's proposed regulations and the timing of the proposals and actions such as SIP approvals. A partial list of the issues affecting the Washington region includes: revision of the federal ozone standard and release of a revised mobile vehicle emissions model, MOVES2014. EPA Region 3 has not yet finalized approval of the Metropolitan Washington Region's 1997 Ozone NAAQS attainment plan and has not yet proposed approval of the 1997 PM_{2.5} Maintenance Plan.⁸

If the region's air quality data (2013-2015) does not meet the 2008 ozone standard of 75 ppb, EPA may notify the states and MWAQC that they did not meet the 2008 ozone standard by June

⁸ EPA has 18 months to approve the 1997 PM_{2.5} NAAQS Redesignation Request and Maintenance Plan, which was submitted in June 2013. The estimated date for approval is December 2014.

20, 2016. EPA may bump up the region to the “moderate nonattainment” classification, requiring the region to meet the standard by 2018. For this reason, the states propose that MWAQC begin to develop 2018 inventories in 2014-2015 as resources allow. However, 2013 monitoring data for the region was exceptionally clean. Design value information for 2015 will not be available until the winter of 2015 at the earliest and therefore any change in classification will not affect this work plan period.

Alternatively, EPA could propose a new, more stringent ozone standard in 2014. If so, the new standard would likely be finalized by 2015 or 2016. Designations would take place two to three years after the new standard is finalized, if EPA meets the deadlines within the CAA. Compliance deadlines for the standard as well as planning requirements for the standard would be determined by the area’s designation and classification for the new standard.

This document is intended to guide the activities of MWAQC through the twelve month period from July 1, 2014 to June 30, 2015. In subsequent sections the reader will find detailed descriptions of the seven major work program areas that are included in this work program. The seven major work areas are presented in more detail as tasks in the work program. The core work areas are as follows:

1. Emissions Inventory Development
2. SIP/Multi-Sector Strategy Development
3. Local Measures
4. Transportation Conformity/Mobile Emissions Analysis
5. Public Participation
6. MWAQC Support
7. Program Management

Costs for each of the above tasks are also included along with more detailed descriptions in Section III of this document.

The states and COG staff will meet periodically to discuss the work program status once contracts have been executed. COG will report quarterly on expenses. With the consent of the Chair of MWAQC and/or the Executive Subcommittee, in consultation with the states and concurrence of the funding agencies, specific subtasks may be delayed, new tasks or subtasks added or substituted, or existing tasks or subtasks modified in scope. These actions would only take place as long as EPA deadlines as interpreted by MWAQC are achieved.

III. FY 2015 Work Program Task Descriptions

Following is a detailed description of the seven major work program areas.

1. Emissions Inventory Development (\$48,607)

MWAQC and the States will finalize the preliminary ozone RFP plan for the 2008 ozone standard. MWAQC states agreed to develop a preliminary RFP plan in 2012 as part of a

compromise on approving mobile budgets for the 1997 PM_{2.5} NAAQS Maintenance Plan, submitted in spring 2013. For the RFP, staff will finalize a future year 2017 inventory. Staff and the states will begin development of a 2018 future year inventory as resources allow. Staff will participate in Ozone Transport Commission (OTC) and Mid-Atlantic Region Air Management Association (MARAMA) inventory development to keep track of various VOC and NO_x control measures being adopted by states to reduce ozone.

If EPA proposes a revised ozone standard during this period, staff will work with the states to identify the range of actions that may be needed for future year inventories.

Attainment modeling for ozone SIPs will be conducted by Regional Planning Organizations such as the OTC. Staff will participate in and track larger scale attainment modeling efforts at OTC and regional modeling centers in OTC states. Staff will participate in quarterly modeling research meetings held by the University of Maryland and MDE staff. VADEQ is also actively participating in the OTC modeling effort and will provide input as needed to evaluate and understand the results of available modeling exercises. COG staff will present informational briefings on the results of modeling exercises to TAC and MWAQC.

As a revision to the 1997 PM_{2.5} NAAQS maintenance plan, staff will begin to develop updated 2017 and 2025 MVEBs for NO_x and PM_{2.5}.⁹ MWAQC and TPB staff will work together to ensure appropriate inputs are developed and used for the modeling effort. This is contingent on the timing of the release and testing of MOVES2014.

Deliverables:	Deadline:
a) Finalize Preliminary RFP Base Year information for the 2008 Ozone NAAQS	December 2014
b) Develop Draft Future Year Projection Inventories for RFP	June 2015
c) Emissions Inventory Subcommittee Calls	As needed
d) Meetings of UMD/MDE Modeling (RAAMP)	Quarterly
e) Revised 2017 and 2025 MVEBs	Contingent on the release of MOVES 2014

2. SIP/Multi-Sector Strategy Development (\$46,236)

The main focus areas will be ozone planning and identifying cost-effective control measures. MWAQC will plan to meet Clean Air Act and EPA requirements for attaining the 2008 ozone standard. The Metropolitan Washington region is classified as “marginal” nonattainment for the 75 ppb standard and has a deadline of 2015 to meet the standard.

MWAQC and the states will work on laying the groundwork for a RFP plan for the 2008 ozone standard.⁹ This RFP may be needed for use by States as a SIP submittal if the area is bumped up to a

⁹ As agreed to in Appendix D of the 1997 PM_{2.5} NAAQS Redesignation Request and Maintenance Plan which was submitted in June 2013.

“moderate” or higher classification in future years. Staff will coordinate with the States to develop a multi-sector strategy for the reduction of ozone precursors. Measures will be evaluated in terms of their potential to reduce ozone precursors and cost-effectiveness. Co-benefits from these measures in terms of reductions of PM_{2.5} and SO₂ may also be quantified. Staff will coordinate with OTC/MARAMA ozone precursor pollutant inventory development and photochemical modeling.

Staff will work with the Region Forward Coalition, TPB, CEEPC, and COG to identify opportunities to advance the strategies identified in the Regional Transportation Priorities Plan (RTPP) for region-wide implementation.

Staff will quantify benefits from Energy Efficiency and Renewable Energy programs and projects (EERE) for potential inclusion in future SIPs. Staff will coordinate efforts with the state and local energy offices and state air quality agencies. Projects will be analyzed in terms of providing benefits for NO_x, SO₂, and CO₂.

Staff will follow changes in NO₂, SO₂ and CO monitoring networks for the new NAAQS. Staff will review and brief MWAQC on proposed federal and state regulatory initiatives affecting the region and develop comment letters as required.

Staff will track state legislation that affects air quality in the Washington region. Staff will provide information and a forum for coordinating public policies that affect air quality among the state air and energy agencies and local governments in the region.

Deliverables:	Deadline:
a) Develop draft RFP plan for the 2008 Ozone Standard	May 2015
b) Reports on State Legislative Activity	As needed

3. Local Measures (\$28,000)

MWAQC staff will promote local government actions to reduce ozone precursors by highlighting and prioritizing state and local measures in the revised Gold Book. Staff will provide technical expertise, in cooperation with the states, to assist local governments in the development of strategies and programs to reduce emissions of ozone precursors and PM_{2.5} and to provide a methodology for calculating and reporting evidence of actions taken. Staff will help with the measurement and evaluation of local measures to be potentially included as voluntary and/or supplemental measures in a SIP if required for a new ozone standard.

Also as part of this initiative, staff participates with the regional Tree Canopy Workgroup that focuses on regional tree canopy management. MWAQC staff will continue to manage Diesel Emissions Reduction Act (DERA) projects and seek funding for new projects.

President Obama’s sustainability executive order requires military bases to coordinate plans with communities. Each base is supposed to develop 25 year energy/sustainability plans. Staff

will work with military bases in the region to assess potential for deployment of clean energy to power both base as well as surrounding community. Staff will continue to collaborate with military bases on this effort.

Deliverables:

- a) Regional Tree Canopy Workgroup
- b) Annual Progress Report Survey
- c) Update Local Voluntary Bundle for SIPs
- d) Update Local Measures in RACM

Deadline:

- Monthly
- March 2015
- Spring 2015
- Spring 2015

4. Transportation Conformity/Mobile Emissions Analysis (\$174,539)

During FY 2015, TPB will be executing two cycles of its annual Air Quality Conformity Determination: the 2014 CLRP & FY2015-20 TIP Air Quality Conformity Determination (expected to be approved by the TPB in October 2014), and the 2015 CLRP & FY2015-20 TIP Air Quality Conformity Determination (expected to be approved by the TPB in July 2015). Approval of the 2014 CLRP & FY2015-20 TIP Air Quality Conformity Determination was delayed from its original schedule – July 2014 – by the additional time needed to complete the CLRP Financial Plan which is required every four years while the air quality conformity determination is an annual work task at the TPB.

MWAQC staff will review and comment on the inputs, outputs, and MRS files for the conformity analysis for the 8-hour ozone, PM_{2.5} and CO standards. With respect to non-travel related MOVES2010 inputs, MWAQC staff will coordinate with states to acquire Inspection & Maintenance programs parameters and fuel supply and formulation characteristics. MWAQC staff will review such data for accuracy and for MOVES-ready format compliance. In addition, MWAQC staff will obtain, review and process meteorology data and upon organizing them into a MOVES-ready format will transmit such data to DTP for direct incorporation into the air quality conformity MOVES model runs. Upon execution of the MOVES model runs, TPB staff will forward the input, output and MRS files of the milestone years of the conformity analyses to MWAQC staff for review and approval.

The Conformity Subcommittee may choose to review regional transportation conformity work and participate in the TPB interagency consultation process. Upon request by the TPB and the TPB Technical Committee, staff may provide briefings on EPA rulings, new air quality standards, and guidance as they apply to conformity in the Washington region.

In addition to the above work activities, MWAQC staff will also work closely with state air and transportation agencies and COG TPB staff to develop inputs for the new version of the MOVES model (MOVES2014) expected to be released in 2014. Depending on the need, new inputs may be required to be developed for the new model and this may require a need for establishing a Task Force to provide guidance and oversight during the development of such inputs. MWAQC staff will coordinate efforts with the above agencies and COG TPB staff should the need arise.

During FY 2015, TPB will be updating the Vehicle Identification Number (VIN) databases at the jurisdictional level. Acquisition of such data is a cooperative effort between TPB and MWAQC staff. MWAQC staff will contact state agencies and request their cooperation in furnishing updated VIN databases in a timely manner. TPB staff will decode, process, quality control review, and format data for incorporation into the MOVES model runs associated with the FY2015 CLRP & FY2015-20 TIP Air Quality Conformity Determination. Timeframe for acquisition of the VIN databases from state agencies: July-August 2014.

Deliverables:	Deadline:
a) Comment on Conformity Scope	January 2015
b) Comment on Transportation Conformity Analysis	June 2015
c) Provide Briefings and Written Reports to TPB and TPB Technical Committee	As needed
d) MOVES2014 Training	As offered

5. Public Participation (\$59,586)

Task 1: ACPAC

Staff will support the Air and Climate Public Advisory Committee (ACPAC), an advisory committee to MWAQC and to the Climate, Energy and Environment Policy Committee (CEEPC), by attending meetings, providing administrative support, and briefing the committee on EPA regulations, air quality progress, air quality planning issues, and proposed actions of MWAQC. ACPAC will meet approximately eight times in 2014-2015.

Task 2: Air Quality Reporting and Outreach

MWAQC leadership, COG/MWAQC Air Quality staff and COG Public Affairs staff will meet with the media, particularly environmental reporters and editorial boards, to inform them about air quality issues and progress. Staff will make periodic reports about the air quality challenge associated with the current and future ozone standard, current emissions and related air quality trends to the COG Board of Directors, Chief Administrative Officers' Committee and to member local governments as requested. The goal of the outreach program is to inform decision-makers about air quality issues and challenges. This task also covers COG staff time to respond to media inquiries or support the MWAQC leadership in responding to media inquiries.

Deliverables:	Deadline:
a) ACPAC Meetings	8 meetings as scheduled
b) Member Recruitment, Orientation	December-February
c) Meetings with Print Media	As needed
d) Response to Media Inquiries	Ongoing
e) Briefing to TPB on Mobile Emission Trends and Challenges	At time of transportation conformity

6. MWAQC Support (\$113,611)

MWAQC Support includes staff support for MWAQC meetings, MWAQC Executive Committee and the TAC meetings. MWAQC will hold four to five regular business meetings to discuss

regulations, guidance and legislation about air quality issues affecting the Washington region and whether or not to comment or act on proposed plans.

The TAC will meet monthly, with frequent subcommittee meetings. The Executive Committee will continue to meet monthly, more frequently if needed.

Deliverables:

- a) MWAQC Meetings (4-5)
- b) MWAQC Executive Ctte Calls
- c) Technical Advisory Ctte Meetings

Deadline:

- As scheduled
- Monthly (no August meeting)
- Monthly (no August meeting)

7. Project Management (\$53,034)

Staff will prepare a draft work program and budget for the fiscal year 2016. Staff will work with the MWAQC Budget Subcommittee and MWAQC to get an approved budget in the spring before the fiscal year begins. Staff will provide quarterly financial and status reports to track the progress of implementing the approved work program and budget. Staff will hold monthly calls with the state air agencies to coordinate use of resources and progress on the SIP.

Staff uses computers extensively in performing analyses, completing written summaries, transmitting information via facsimile modem, downloading information from EPA's Technology Transfer Network, and the Internet for a variety of research needs. Contribution to computer support for project staff and management systems is accounted for in this task. Efforts to provide meeting materials on the Internet may also fall under this task.

Deliverables:

- a) State Air Agency Coordination Calls
- b) Quarterly Expense and Progress Reports
- c) MWAQC Budget Committee
- d) Draft MWAQC FY2016 Work Program and Budget
- e) Adopt MWAQC FY2016 Work Program and Budget

Deadline:

- Monthly
- Quarterly
- Meetings, calls as needed
- December 2014
- February 2015

IV. Funding Sources and Projected Budget

The MWAQC Work Program for FY 2015 is a 12-month work program and budget for the period from July 1, 2014 to June 30, 2015.

The MWAQC bylaws adopted in October 2004 include a funding formula that allocates contributions to the MWAQC budget by thirds, 1/3 from state air agencies, 1/3 from state transportation agencies, and 1/3 from local governments (Table 1). The budget for the core work program is a total of \$523,616. The state air agencies, the state and local departments of transportation and the Transportation Planning Board, and the Council of Governments will each contribute \$174,539. The funding by task is shown in Table 2. The MWAQC bylaws also

state that “nothing shall preclude additional sub-regional efforts to be added to the work program at the request and expense of individual state agencies and local governments.”

Note that the funding from the TPB to support air quality planning and conformity is contingent upon TPB’s approval of the Unified Planning Work Program (UPWP) for FY 2015 which is scheduled for March 19, 2014.

Table 1
FY 2015 MWAQC Funding Contributions by Source

Source	Approved FY 2014	Requested FY 2015	Change
COG member jurisdictions	\$174,539	\$174,539	
State DOT/TPB*	\$174,539	\$174,539	
State Air Agencies			
DDOE	\$20,945	\$20,945	
MDE	\$78,542	\$78,542	
VDEQ	\$75,051	\$75,051	
States. Subtotal	\$174,539	\$174,539	
TOTAL	\$523,616	\$523,616	0
Special Project: **	\$ 10,000	\$10,000	
Total w/ Special Project	\$533,616	\$533,616	

*TPB funding is contingent on approval of the Unified Planning Work Program for FY 2015. The amount of funding will be confirmed in September 2014.

**MDE funds 100% of the Special Project as described in Appendix A of FY 2015 Work Program and Budget.

Table 2
FY 2015 Air Quality Work Program Tasks
(Breakdown of Costs by Type)

Work Program Tasks	COG staff (\$)	Consultants(\$)	Direct (\$)	Total Cost (\$)
1. Emissions Inventory Development	46,607		2,000	\$48,607
2.SIP/Multi-pollutant Strategy Development	45,636		600	\$46,236
3. Local Measures	27,700		300	\$28,000
4. Transportation Conformity/Mobile Emissions Analysis	174,539		0	\$174,539
5. Public Participation	55,808		3,778	\$59,586
6. MWAQC Support	102,339		11,275	\$113,614
7. Project Management	52,534		500	53,034
TOTAL, Core	\$505,441	\$0	\$18,175	\$523,616

Appendix A:

Special Project Phase II **Evaluation and Consideration of Innovative and Non-Regulatory Initiatives Designed to Expedite or Enhance Attainment and Maintenance of Air Quality Goals**

Background

The primary responsibilities of MWAQC are development of regional carbon monoxide (CO), ozone, and PM_{2.5} National Ambient Air Quality Standards (NAAQS) plans for meeting the federal health standards for criteria pollutants for which the Washington, DC-MD-VA region has been designated as nonattainment. At the request of an appropriate state, regional or local jurisdiction, MWAQC may perform other functions to improve regional air quality, including the evaluation and consideration of innovative and non-regulatory initiatives designed to expedite or enhance attainment and maintenance of air quality goals.

At the request of and funded by the Maryland Department of the Environment, a Special Project was established to assess future ozone and climate change goals for the National Capital Region. Phase I of this work resulted in draft white papers addressing possible environmental emission benchmarks for and gap analysis of NO_x and CO₂ emissions that might be needed to meet possible future ozone standards and regional climate change goals. These papers mainly focus on on-road mobile sources and emissions.

The NO_x white paper provided estimates of NO_x emissions and existing controls for the on-road, point, area and non-road sectors. It compared NO_x emission changes among the four sectors for 2007 and 2020. It also calculated NO_x emission benchmarks for 2015 and 2020 for the on-road sector only that may be needed to attain current and possible future ozone standards. These benchmarks were based, in part upon draft photochemical modeling from the Ozone Transport Commission (OTC).

The CO₂ white paper addressed carbon dioxide targets in state and local climate plans and MWCOG climate change reports. The paper took a particular look at modeled emissions from the mobile sector and the gaps needed to meet the CO₂ emission targets.

These draft papers, presented to the MWAQC-TAC for review, also included information about how mobile emissions estimates are estimated, how they are used, and their applicability to assessment of current and future ozone and carbon dioxide emission goals.

However, these Phase I documents and the identified benchmarks have not been fully reviewed nor have the conclusions of these documents been accepted by all parties involved. This review will be completed as the first step of the Phase II project.

Next Steps

There are significant changes coming major sectors of the emissions inventory including electric utilities, other point sources and mobile sources. In the case of utilities and other point sources, numerous plant closures and fuel conversions are underway or have been announced through 2020. For mobile sources, Tier 3 vehicle emission and fuel standards and new fuel efficiency (CAFÉ) standards for light duty vehicles will help to reduce future emission levels.

Improved federal fuel and vehicle standards also have been identified as important changes needed to meet possible future CO₂ targets. Better analysis of the effects of these federal actions is needed to identify the additional regional actions that could be taken to meet future standards and targets.

The EPA has also been reevaluating the levels of the existing ozone standards and may lower the maximum allowable concentration from the current 75 ppm limit. While it is not known what, if any, limit might be proposed, there is interest in understanding how regional actions might assist in meeting possible new standards.

Phase II

Phase I of the Special Project showed that the region may not be able to produce the reductions needed to meet new lower regulatory limits. However, we lack the analysis and data needed to identify what the gap might be with the new federal standards in place. More accurate analysis and data are essential for planning future needed actions.

Phase II of this Project will prepare a more rigorous analysis of future emissions based estimates across all sectors. It will use the results of the new MOVES2014 model and updated OTC modeling. The analysis will include scenarios needed to better identify the gaps between the updated projections and benchmarks or targets potentially needed to meet future proposed ozone standard and climate change goals.

The results of this analysis will be fully reviewed by the affected MWAQC committees as part of the process to develop conclusions and recommendations agreed to by all parties to be presented to MWAQC and CEEPC. This may allow regional decision makers to better understand the potential gaps between projected emissions and actual needs for future years.

The Phase II deliverables will include the following components for NO_x and CO₂:

- A primary benchmarks based on actions anticipated to be proposed by EPA to modify the ozone standard and the implementation of control programs across all sectors, including Tier 3, fuel efficiency standards, CASAPR, and others as appropriate;
- Updated gap analysis based on likely scenarios of future emission standards and targets;
- Point, area, mobile and non-road sector analyses of what level of cost-effective controls may be needed to bridge the gaps, considering the ozone reduction

potential, cost per ton of pollution reduction and the economic impact of any additional controls proposed; and

- Presentations of results, as agreed to by all parties on the results of the analyses.

Following provides additional details of the updates to the NO_x and CO₂ assessment.

1. NO_x

Phase I of the project was based on draft photochemical modeling scenario analyses. OTC is expected to update these analyses with up to date data (emissions, controls for all sectors), including updated mobile emissions using the MOVES2014 model. The OTC effort will also use a new modeling framework and will update the base year to 2011 and make projections to 2017, 2018, and 2020. Any gap between the actual projected emission in the future year and the emission level that may be needed in that year to meet proposed tougher ozone standard will be analyzed. Measures such as Transportation Emission Reduction Measures (TERMS), emission reduction measures included in the *Gold Book*, and measures in other sectors, including a look at their ozone reduction potential, cost effectiveness, economic impact, and timing, will be analyzed to assess what actions might be needed to fill the gap. The analysis, to be presented to MWAQC, also will include an assessment of the appropriateness of applying the OTC results to the National Capital Region scale.

2. CO₂

Phase II of the project will update baseline projection to include the new Tier 3 vehicle and fuel standards and the new CAFÉ rules using MOVES2014, and planned improvements in other sectors. This will allow analysis of the gaps between projected emissions and the goals for the years 2020, 2025 and 2040. These gaps will be presented to the CEEPC as part of its analysis of the effects of actions included in the Climate Change Report action plan, *Gold Book* and *What Would It Take* analysis.