



Metropolitan Washington
Council of Governments

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

Fiscal Year 2023
(July 1, 2022 through June 30, 2023)
Adopted Month/Date, 2022

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 for Fiscal Year 2023 (July 1, 2022 to June 30, 2023). 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 in the metropolitan Washington 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 fine particulate (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 as being in nonattainment. The air quality plans developed by MWAQC are provided to the states for incorporation in the State Implementation Plan (SIP) for submittal to the U.S. Environmental Protection Agency (EPA).

Air Quality Classifications of the Washington Metropolitan Region

Pollutant	Attainment	Nonattainment
Ozone (O ₃)		
2015 Standard		●
2008 Standard	●	
Fine Particles (PM _{2.5})	●	
Carbon Monoxide (CO)	●	
Sulfur Dioxide (SO ₂)	●	
Nitrogen Dioxide (NO ₂)	●	

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.

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, Emissions Inventory, and Local Government Initiatives Subcommittee.

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.

II. FY 2023 MWAQC Work Program Objectives

The metropolitan Washington region was initially designated as a marginal nonattainment area for the 2015 ozone NAAQS. Based on 2018-2020 data, the region failed to attain the standard by the August 2021 deadline. EPA is expected to redesignate the region as a moderate nonattainment region and would require an attainment SIP to be submitted by January 2023.

By contrast, as of the end of the 2021 ozone season, preliminary 2019-to-2021 data show that the area has met the standard. The data are expected to be certified by May 2022 and the region anticipates that EPA will issue a Clean Data Determination (CDD). The CDD will suspend the requirement for the SIP and allow the region to request redesignation to attainment and submit a maintenance plan and redesignation request (MP/RR).

The District of Columbia submitted an exceptional-events request to the EPA seeking to invalidate the District's 2020 ozone season data. EPA's decision on this request will influence whether the region will be determined to be in attainment or nonattainment of the 2015 ozone standard.

The tasks in the FY 2023 work program are thus dependent on the timing and final actions, on the above two items, by EPA. Due to this uncertainty, the work program, at this time, will plan for both 2015 Ozone NAAQS attainment SIP and MP/RR. Staff will monitor EPA's actions and coordinate with the states and MWAQC to determine which one of the two alternative work activities to pursue and complete during FY 2023.

During the same planning timeframe, MWAQC staff will assist the Virginia Department of Environmental Quality (DEQ), with the support of the District, Maryland, develop a

redesignation request and maintenance plan for the 1-hour ozone standard, which is needed to move forward with Virginia's Nonattainment New Source Review (NNSR) certification requirements for the 2015 ozone standard. The specifics (including content and schedule) of the 1-hour ozone NAAQS maintenance plan are currently being discussed by Virginia DEQ staff and the EPA. Additional description of this work activity and associated fiscal budget information will be appended to the work program once finalized.

MWAQC FY 2023 work program objectives include:

- Develop an attainment SIP and/or MP/RR, including updated Motor Vehicle Emissions Budgets, for the 2015 ozone standard.
- Track air monitor data and EPA actions to determine the area's designation status for the 2015 ozone NAAQS.
- Assist in the development of a redesignation request and a maintenance plan for the 1-hour ozone NAAQS.
- Work with local members to identify and implement initiatives to reduce air pollution.
- Track regulatory actions related to transport of pollution and comment when appropriate.
- Review and comment on transportation conformity assessments for ozone.
- Communicate to regional leaders and the public on improvements to air quality and the need for actions to reduce emissions and continue to improve the air.

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 inventories as needed for ozone, 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 (DTP) staff on mobile emissions inventory and conformity issues.

This document is intended to guide the activities of MWAQC through the twelve-month period from July 1, 2022 to June 30, 2023. In subsequent sections the reader will find detailed descriptions of the six major work program areas that are included in this work program. The core work areas are as follows:

1. Emissions Inventory Development
2. Regional Control Measures
3. Transportation Conformity/Mobile Emissions Analysis
4. Public Participation
5. MWAQC Support
6. 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 Committee, in consultation with the states and in concurrence with 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 will take place only as long as EPA deadlines, as interpreted by MWAQC, are achieved.

III. FY 2023 Work Program Task Descriptions

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

1. Emissions Inventory Development (\$47,245)

In FY 2023, staff will work on the development of inventories that can be used for an attainment State Implementation Plan (SIP) and/or maintenance plan/redesignation request (MP/RR) for the 2015 ozone standard.

MWAQC staff will develop the necessary inventories to be submitted as part of the attainment SIP or MP/RR. Staff will coordinate with state air agencies, EPA, the Ozone Transport Commission (OTC), and the Mid-Atlantic Regional Air Management Association (MARAMA) regarding the selection of a base year, Reasonable Further Progress (RFP) year, and the attainment year for the plan.

Staff will coordinate with and assist the state air agencies and TPB staff to determine the necessary data for on-road modeling inputs and review on-road model inputs and emissions inventories for various milestone years. Staff will coordinate with TPB staff to develop new Motor Vehicle Emissions Budgets (MVEBs). The addition of buffers to the mobile source budgets under the 2015 ozone standard attainment or maintenance plan scenarios will be provided, as available and as allowed, for each scenario.

Staff will coordinate with state air agencies to receive point source inventories for all milestone years and nonpoint inventories for the base year and develop nonpoint inventories for other milestone years and onroad and nonroad inventories for all milestone years.

Staff will participate in OTC and MARAMA meetings to support inventory development and keep track of various Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x) control measures being adopted by states to reduce ozone. Identification of control measures and voluntary actions will help in attaining the ozone NAAQS.

Attainment modeling is conducted by Regional Planning Organizations such as the OTC and the state air agencies. 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/webinars held by the University of Maryland and the Maryland Department of Environment (MDE) staff. Staff at the Virginia Department of Environmental Quality (VDEQ) is also actively participating in the OTC modeling effort and will provide critical information on emissions reduction needed locally in the Washington region to attain the 2015 ozone standard. COG staff will present informational briefings on the results of modeling exercises to the TAC and MWAQC.

Deliverables:

- a) Development of inventory/SIP
- b) Meetings of UMD/MDE Modeling
- c) Attend Emissions Inventory Trainings and Conferences

Deadline:

Ongoing
Quarterly
As needed

2. Regional Control Measures (\$126,429)

As directed from MWAQC, staff will provide assistance to develop and implement recommended actions to meet the ozone standard and work towards eliminating unhealthy air days. Actions should be cost-effective, viable, implementable, consider equity, and include co-benefits for criteria pollutants. Staff will facilitate further discussions among MWAQC member agencies and COG committees, such as CEEPC, TPB, and TPB Technical Committee on the findings and potential implementation actions included in the control measure recommendations. Efforts will involve the development of necessary elements of a comprehensive control strategy for use in the 2015 ozone NAAQS SIP and planning and implementation support for local government actions to improve air quality. Control measures developed for the attainment SIP can also be used in the MP/RR.

Staff will provide support for the planning and development process related to the 2015 ozone standard including providing a forum for coordinating policies and measures among state air and energy agencies and local jurisdictions to improve the region's air.

Support for Control Measure Development:

Control strategy options will be developed and include identification, review and analysis of existing and new measures for potential inclusion in planning support documents for the attainment SIP and MP/RR.

Staff will focus on federal, state, and local measures and will evaluate the extent to which measures are strong candidates for inclusion in planning documents based on a set of analysis metrics and criteria to be developed using past approaches and SIP best practices and requirements. Control measures development and evaluation will be conducted in close collaboration with the MWAQC TAC and state and local agency staff. Presentations will also be developed for COG's Air and Climate Public Advisory Committee (ACPAC) and MWAQC. Local actions development work will be coordinated with the Built Environment and Energy Advisory Committee (BEEAC) and Climate, Energy and Environment Policy Committee's (CEEPC) as well.

Support for Local Government Actions to Improve Air Quality:

Local governments in the Washington region will continue to work on their commitments to reduce emissions. MWAQC staff will assist local members to develop and implement programs to reduce ozone precursors by highlighting and prioritizing measures to reduce ozone levels – both in the short and long term. Local measures may include those related to energy efficiency, renewable energy, low emission vehicles, anti-idling, high-performance buildings, transportation demand management (TDM), low-impact development, urban heat island reduction, tree canopy management, and anti-tampering. Staff will identify priority measures and 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, provide co-benefits for PM_{2.5} and greenhouse gases, and to provide a methodology for calculating and reporting evidence of actions taken.

COG will continue to work with members and partners to support an electric vehicle (EV) infrastructure network and increase awareness of electric mobility. Staff will participate on regional and local workgroups, such as the Mid-Atlantic Electrification Partnership, to develop a regionwide EV charging infrastructure and coordinate with local members on implementation.

Staff will participate with groups such as CEEPC, BEEAC, Regional Tree Canopy Subcommittee, Greater Washington Region Clean Cities Coalition (GWRCCC), and similar efforts that will help reduce emissions.

Staff will stay abreast of OTC/MARAMA ozone precursor pollutant inventory development and photochemical modeling. Staff will provide support for the planning process related to the 2015 ozone standard.

Staff will track federal statutory and judicial regulatory actions that affect air quality, including air pollution transport, in the Washington region and work with MWAQC to take appropriate policy actions and comment as needed. 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:

- | Deliverables: | Deadline: |
|---|------------------|
| a) Identify, evaluate, measure, document measures to reduce ozone precursors and identify potential co-benefits | Ongoing |
| b) Identify opportunities to expand local control measures | Ongoing |
| c) Track implementation of state and local control measures | Ongoing |
| d) Track/report on State and federal Legislative Activity | As needed |
| e) Regional Workgroups | As Scheduled |

3. Transportation Conformity/Mobile Emissions Analysis (\$184,802)

During FY 2023, staff will support any conformity analysis conducted by TPB staff. MWAQC staff will review and comment on any remaining activities related to the conformity analysis undertaken in support of the 2022 long-range transportation plan. If necessary, MWAQC staff will present the results of the conformity analysis to MWAQC and facilitate development of a comment letter.

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, air quality standards, and guidance as they apply to conformity in the Washington region.

Staff will coordinate planning the attainment SIP or MP schedule and tasks with TPB staff. MWAQC staff will coordinate with TPB staff to develop mobile emissions inventories needed for the 2015 ozone attainment SIP or MP and the establishment of new Motor Vehicle Emissions Budgets (MVEBs). The addition of buffers to the MVEBs for the 2015 ozone attainment SIP or MP will be provided, as available and as allowed, for each scenario.

In addition to the above work activities, MWAQC staff will assist TPB with inputs as well as technical work supporting state environmental planning activities. MWAQC staff will work closely with state air and transportation agencies and COG TPB staff to revisit and potentially refresh inputs for the EPA Motor Vehicle Emission Simulator (MOVES) model, including any activities related to the vehicle registration/vehicle identification number (VIN) data.

Deliverables:	Deadline:
a) Comment on Transportation Conformity Analysis	TPB deadline
b) Provide Briefings and Written Reports to TPB and TPB Technical Committee	Ongoing
c) Review analysis input, output, and acquire and quality assure data	Ongoing

4. Public Participation (\$56,693)

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 program support, and briefing the committee on federal regulations, air quality progress, air quality planning issues, local member initiatives, equity issues, and proposed actions of MWAQC. ACPAC will meet six times in FY 2023. The ACPAC Chair will participate in MWAQC meetings to report on the Committee’s deliberations and recommendations as a regular part of MWAQC meetings.

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 challenges associated with the NAAQS, 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 is to inform decision-makers about air quality improvements, 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.

Public outreach will be conducted to promote the region’s air quality improvements, challenges of meeting the air quality standards, to promote local member initiatives, and foster equity and inclusion. Existing materials will be updated, and new materials will be developed such as press releases, chair talking points, guest blogs, and the air quality dashboard.

Deliverables:	Deadline:
a) ACPAC Meetings	As scheduled (6)
b) ACPAC Member Recruitment	January 2023
c) Response to Media Inquiries	Ongoing
d) Develop Materials (Press Releases, Articles, Blogs)	As needed

5. MWAQC Support (\$104,724)

MWAQC Support includes staff support for MWAQC meetings, MWAQC Executive Committee, TAC, State Air Coordination, and subcommittee meetings and calls. Staff will coordinate and participate in all meetings, including preparing agendas, minutes, presentations, and materials, and securing speakers. MWAQC will hold four regular business meetings to discuss planning, local measures, regulations, guidance and legislation about air quality issues affecting the Washington region and whether or not to comment or act on proposed plans. Staff will coordinate with the chair and vice chairs, responding to requests, and develop materials for new members.

The TAC will meet monthly or as needed, with frequent subcommittee meetings. Staff will recruit stakeholders to participate on TAC. The Executive Committee will meet five times during the year. Staff will hold monthly calls with the state air agencies to coordinate use of resources and attainment progress. The Local Government Initiatives Subcommittee will meet as needed to help identify and implement priority/voluntary measures.

Deliverables:

- a) MWAQC Meetings
- b) MWAQC Executive Committee Calls
- c) Technical Advisory Committee Calls
- d) TAC Stakeholder Recruitment
- e) State Air Agency Coordination Calls
- f) Subcommittee calls (local government initiatives, emissions inventory, conformity)

Deadline:

- As scheduled (4)
- As scheduled (5)
- Monthly or as scheduled
- January 2023
- Monthly
- As Scheduled

6. Project Management (\$34,513)

Staff will prepare a draft work program and budget for the fiscal year 2024. 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 work with funding agencies to finalize grants and contracts and invoice as required. Staff will provide quarterly financial and status reports to track the progress of implementing the approved work program and budget.

Staff uses information technology extensively in performing analyses, completing written summaries, downloading information and data from EPA, 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 materials on the COG website may also fall under this task.

Deliverables:

- a) Quarterly Expense and Progress Reports
- b) MWAQC Budget Committee
- c) Draft MWAQC FY2024 Work Program and Budget
- d) Adopt MWAQC FY2024 Work Program and Budget

Deadline:

- Quarterly
- As scheduled
- January 2023
- March/May 2023

IV. Funding Sources and Projected Budget

The MWAQC Work Program for FY 2023 is a 12-month work program and budget for the period from July 1, 2022 to June 30, 2023.

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 \$554,406. The state air agencies, the state and local departments of transportation and the Transportation Planning Board, and the Council of Governments will each contribute \$184,802. 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 2023. Contributions from the State Air Agencies are contingent on approval of their organization’s funding. If needed, the MWAQC Work Program will be revised should the final budget amount change.

Table 1
FY 2023 MWAQC Funding Contributions by Source

Source	Approved FY 2022	Requested FY 2023	Change
State DOT/TPB	\$181,227	\$184,802	+\$3,575
COG member jurisdictions*	\$181,227	\$181,227	+\$0
Unexpended Carryforward	\$0	\$3,575	+\$3,575
COG Member. Subtotal	\$181,227	\$184,802	+\$3,575
State Air Agencies*			
DOEE	\$22,103	\$22,103	+\$0
MDE**	\$76,738	\$76,738	+\$0
VDEQ	\$75,698	\$75,698	+\$0
Unexpended Carryforward	\$6,688	\$10,263	+\$3,575
States. Subtotal	\$181,227	\$184,802	+\$3,575
TOTAL	\$543,680	\$554,406	+10,726 (1.97%)

*State air agencies and COG member contributions will be invoiced at FY2022 levels. Carryforward will be used to fund the difference.

**Funded by the Maryland Department of Transportation

Table 2
FY 2023 Air Quality Core Work Program Tasks
(Breakdown of Costs by Type)

Work Program Tasks	COG staff* (\$)	Consultants (\$)	Direct (\$)	Total Cost (\$)
1. Emissions Inventory Development	\$45,245		\$2,000	\$47,245
2. Regional Control Measures	\$124,929		\$1,500	\$126,429
3. Transportation Conformity/Mobile Emissions Analysis	\$184,802		\$0	\$184,802
4. Public Participation	\$46,693		\$10,000	\$56,693
5. MWAQC Support	\$92,224		\$12,500	\$104,724
6. Project Management	\$32,157		\$2,356	\$34,513
TOTAL	\$526,050	\$0	\$28,356	\$554,406

*Fully burdened - includes indirect costs