

2004 Member Handbook

Metropolitan Washington Air Quality Committee



Including

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- Primers on Air Quality Planning and Transportation Conformity

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Metropolitan Washington Air Quality Committee MEMBERSHIP LIST

Denotes Chair ★ Denotes Vice Chair ★ ★

		Denotes Vice				
Jurisdiction	Member	Telephone	Fax	Alternate	Telephone	Fax
District of Columbia						
Council	Phil Mendelson ★★	(202) 724-8064	(202) 724-8099	Adrian Fenty	(202) 724-8052	-
Executive	Ted Gordon Elizabeth Berry	(202) 442-8989 (202) 727-3512	(202) 442-4808	James Collier Sharon Anderson	(202) 535-1656 (202) 727- 6265	(202) 535-1362
Maryland	,,,,,					
Bowie	VACANT	-	-	-	-	-
Calvert County Charles County College Park Frederick County	Dave Brownlee Wayne Cooper Eric C. Olson Jan Gardner	(301)535-1600x2338 (301) 638-0801 (301) 864-3770 (301) 694-1092 (301) 694-1100 main	(301) 645-0560 (301) 699-8029 (301) 694-1849	Howard Chang Victoria Greenfield Andrew Fellows Larry Bohn	(301)870-2520 (301) 638-0801 (301) 864-8666 (301) 631-3179	(301)274-1924 (301) 645-0560 (202) 895-0438 (301) 631-3180
Gaithersburg Greenbelt Montgomery County (Council) Montgomery County (Council)	John Schlichting Leta M. Mach Nancy Floreen ★★ Howard Denis	(202) 729-3835 (301) 474-8000 (240) 777-7906 (240) 777-7964	(202) 929-1010 (301) 441-8248 (240) 777-7989 (240) 777-7989	- - Keith Levchenko	- - (240) 777-7944	- - (240) 777-7888
Montgomery County (Executive) Prince George's Co. (Council) Prince George's Co. (Executive)	Douglas Duncan Thomas E. Dernoga ★ Donna M.P Wilson	(240) 777-2500 (301) 952-3887 (301) 883-5812	(240) 777-7765 (301) 952-4801 (301) 883-5444	James Caldwell - Sherry Conway Appel	(240) 777-7781 - (301) 883-5835	(240) 777-7765 - (301) 883-5444
Rockville Takoma Park	<i>VACANT</i> Share Maack	- (301) 270-1700	-	VACANT	-	-
Virginia	Chare mader	(60.) 270 1700				
Alexandria	Rodella S. "Del" Pepper	(703) 751-0770 (h) (703) 838-4500 (o)	(703) 519-3356	Andrew H. Macdonald	(703) 548-7572 (ho) (703) 838-4500 (o)	(703) 838-6433
Arlington County City of Fairfax	Paul Ferguson Patrice Winter	(703) 228-3130 (703) 385-7800	(703) 228-7430 (703) 385-7811	Barbara Favola Robert F. Lederer	(703) 228-3130 (703) 591-8217	(703) 228-7430 (703) 385-7811
Fairfax County Fairfax County Fairfax County	Linda Smyth T. Dana Kauffman★★ Sharon Bulova	(703) 560-6946 (703) 971-6262 (703) 425-9342	(703) 207-3541 (703) 971-3032 (703) 503-9583	Gerald Hyland	(703) 780-7518	(703) 780-1491
Falls Church Loudoun County	Lindy Hockenberry Mick Staton	(703) 241-0934 (703) 777-0204	(703) 248-5146 (703) 777-0421	David Sydner -	(703) 241-0914 -	(703) 248-5146 -
Prince William County Stafford County	Corey Stewart Robert Gibbons	(703) 792-4620 (540) 752-7276	(703) 792-4610 (540) 752-1936	Ricardo Canizales Jeffrey Harvey	(703) 792-5985 (540) 658-8668	(703) 792-7159 (540) 658-6824
State Air Management	Directors					
District of Columbia Maryland Virginia	Don Wambsgans Tom Snyder John M. Daniel	(202) 535-2255 (410) 537-3290 (804) 698-4311	(202) 535-1371 (410) 537-3391 (804) 698-4510	Stan Tracey/Ram T. George (Tad) Aburn James Sydnor	(202) 535-2990 (410) 537-3242 (804) 698-4424	(202) 535-1371 (410) 537-3202 (804) 698-4510
Chairman, Transports	ation Planning Board					
	Christopher Zimmerman	(703) 358-3130	(703) 228-7430	-	-	-
Chairman, Air Zuality	Public Advisory Comm	nittee				
	Julie Crenshaw	(703) 549-2630 (H)	-	-	-	-
State Transportation T	irectors					
District of Columbia Maryland Virginia	Michelle Pourciau Marsha Kaiser Thomas Farley	(202) 671-1356 (410) 865-1275 (703) 383-2477	(202) 671-0650 (410) 865-1339 (703) 383-2382	Maurice Keys Nat Bottingheimer Joanne Sorenson	(202) 671-2730 (410) 865-1285 (703) 383-2461	(202) 671-0617 (410) 850-9263 (703) 383-2470
Maryland General Ass		(,,	\ ,	23,3,3,3,	,, 2.0.	() 100 2170
, ,	Del. James Hubbard TBD	(301) 858-3103	(301) 858-3850 (301) 858-3850	Del Barbara Frush Sen Roy Dyson	(301) 858-3114 (410) 841-3673	(301) 858-3850 (301) 858-3928
Virginia General Assem	bly					
	Sen. Mary Margaret Whipple Del. Jack Rollison	(703) 538-4097 (703) 690-4368	(703) 538-2486 (703) 368-1476	Sen Warren Barry Del. Brian Moran	(703) 321-0900 (703) 549-8253	- (703) 739-6761





Metropolitan Washington Air Quality Committee 2004 Schedule of Meetings

Month	MWAQC-TAC (10:00 am - 12 Noon)	Executive Committee (9:00 am) Conference Call	MWAQC ¹ (12 Noon - 2:00 pm)
January	9 (12 pm - 2pm)	14	28
February	6 (12-2)*	11	19 **
March	12	10	24
April	9	14	28
May	14	12	26
June	11	9	23
July	9	14	28
August		11	
September	10	8	22
October	8	13	27
November	12	10	24
December	10	8	22

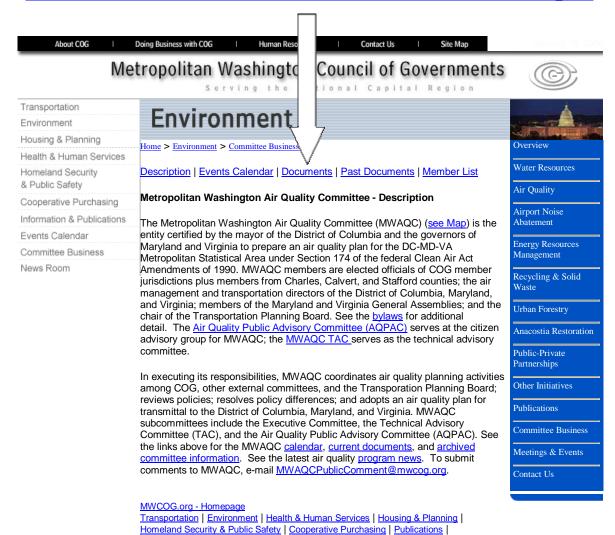
^{1.} All MWAQC meetings are held in the 3rd Floor Board Room.

^{*}New date and new time

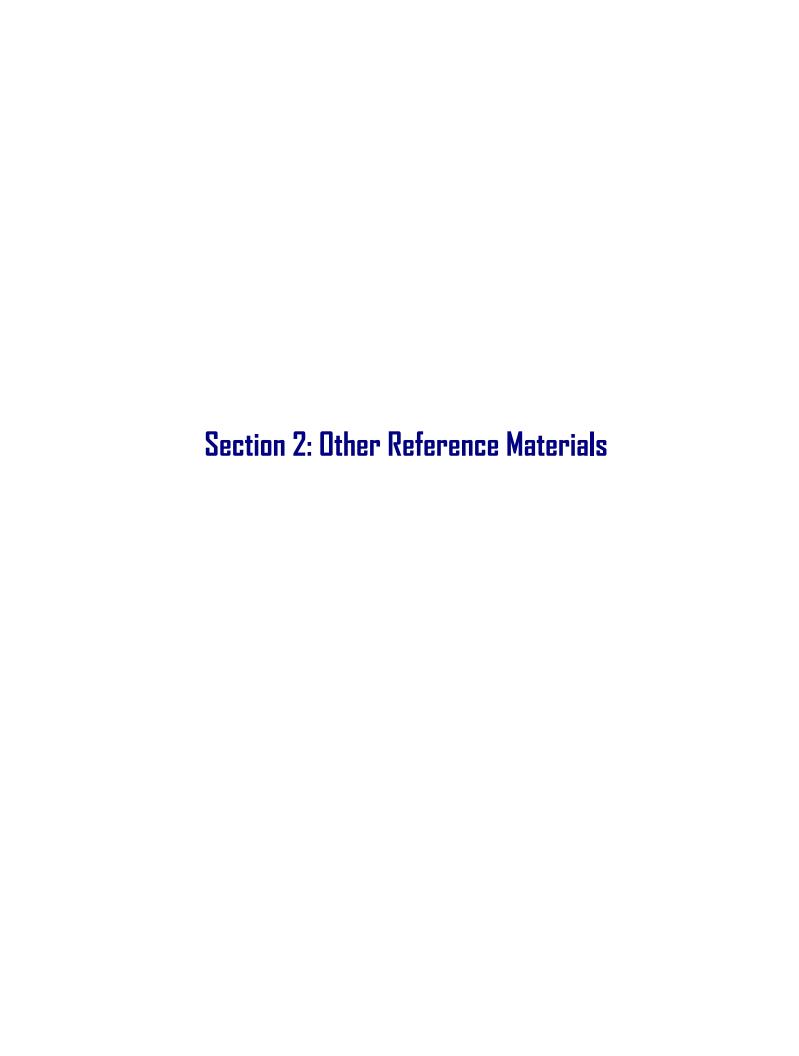
^{**} New date

MWAQC Meeting Materials

- Meeting notices and agendas are emailed to members one week before each meeting. Meeting materials
 are posted in the MWAQC section of the COG website.
- To view the MWAQC home page, please visit
 http://www.mwcog.org/environment/committee/committee/default.asp?CDMMITTEE_ID=14.
- For MWAQC meeting materials, follow the "Documents" link from the MWAQC home page, or go directly to http://www.mwcog.org/environment/committee/committee/documents.asp?COMMITTEE ID=14



Events Calendar | Committee Business | News Room | About COG |
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Glossary of Terms and Acronyms

Air Quality Monitors	Devices measuring ozone levels at various locations throughout the Washington region
AQPAC	Air Quality Public Advisory Committee
Area sources	Sources of emissions that remain in a fixed location and emit less than 25 tons per year of a pollutant (i.e. small businesses such as bakeries, dry cleaners)
Attainment	a designation given to an area meeting the federal health-based standard for a pollutant
Bump-up	See "reclassification"
Clean Air Partners	Non-profit, regionally-sponsored organization in the Baltimore-Washington metro area that educates businesses and the public to take actions to reduce ozone, especially on Air Quality Code Red days.
Classification	Federal designation indicating the severity of a region's air quality problem. A region's classification determines the date on which a region must attain the federal health standard and which pollution controls it must implement
CLRP	Constrained Long Range Plan; lists expected changes to transportation infrastructure over next 20 years
Conformity	Federally-required process during which regional transportation planning board ensures that expected transportation emissions are consistent with the region's air quality plans
Contingency Measures	Pollution control measures to be implemented after the fact if the region fails to demonstrate rate of progress toward or attainment of an air quality standard
Control Measures	Pollution control measures implemented as part of an air quality plan
Emissions Inventory	A document that details the amounts of projected regional emissions at a point in time. Includes four types of emissions: point sources, area sources, mobile sources and nonroad sources.
EPA	U.S. Environmental Protection Agency
Exceedance	Condition created when an air quality monitor registers ozone levels exceeding the federal health standard (Air Quality Code Red)
I/M	Inspection and maintenance programs that require vehicle owners to have their vehicles' emission systems regularly tested and repaired, if necessary.
MOBILE6	EPA model used to estimate levels of mobile emisisons
Mobile Budget	Cap on mobile emissions set in the SIP and used in transportation conformity.
Mobile Source	Vehicles such as carts, trucks, motorcycles and buses authorized to travel on public roads. Also referred to as "on-road" sources.
MWAQC	Metropolitan Washington Air Quality Committee; a regional air quality planning committee comprised of elected officials from 20 cities and counties in the Metropolitan Washington non-attainment area, plus representatives from state legislatures, air agencies and transportation agencies. MWAQC has primary responsibility for developing plans to achieve the air quality standard for ground-level ozone.
Nonattainment	a designation given to an area that does not meet the federal health-based standard for a pollutant
Nonroad Sources	Sources of emissions that can change location but do not move on public roads, e.g. construction equipment, lawnmowers. Also referred to as "off-road" sources.

Glossary of Terms and Acronyms (cont.)

NOx	Nitrogen oxides, a precursor to ozone formation
ОТС	Ozone Transport Commission, a commission of air directors from northeastern and mid-Atlantic states affected by transported ozone
OTC Measures	Pollution control measures developed by the OTC, included in the region's most recent SIP revision
PEI	Periodic Emissions Inventory, an inventory of regional emissions compiled every three years in accordance with federal requirements
Point Sources	Sources of emissions that remain in a fixed location and emit more than 25 tons per year of a pollutant (i.e. power plants, large boilers). Also referred to as stationary sources.
RACM	Reasonably available control measures
RACT	Reasonably available control technology
Reclassification	Process by which areas failing to attain the air quality standard by the assigned date are reassigned to a more stringent nonattainment category
ROP	Rate of progress; requirement for all nonattainment areas to demonstrate a 9% reduction in emissions every three years.
SIP	State Implementation Plan, the region's air quality plan
TAC	Technical Advisory Committee
tpd	Tons per day
tpy	Tons per year
ТРВ	National Capital Region Transportation Planning Board, body responsible for development of regional transportation plans
TCM	Transportation Control Measure, a pollution control measure reducing mobile source emissions and committed to in both the SIP and the transportation plan
TERM	Transportation Emissions Reduction Measure; a pollution control measure reducing mobile source emissions but not committed to in the SIP
TIP	Transportation Improvement Program; a short-term transportation plan produced by TPB, usually covering a five year period.
VOC	Volatile Organic Compounds, a precursor to ozone formation
Voluntary Measures	Pollution control measures that are not regulatory in nature
1-hour Standard	Current ozone standard setting maximum average ozone concentrations over a one-hour period
8-hour Standard	More stringent health standard setting maximum average ozone concentrations over an 8-hour period. Expected to be implemented in 2005.

Air Quality Links

STATES

District of Columbia Dept. of Health: Virginia Dept. of Environmental Quality: Maryland Dept. of the Environment:

www.dchealth.dc.gov www.deq.state.va.us www.mde.state.md.us

www.deg.state.va.us/ozone

www.mde.state.md.us/Air

metosrv2.umd.edu/~forecaster/

FORECASTS & AQ DATA

Virginia Dept. of Environmental Quality: Maryland Dept. of the Environment: University of Maryland Dept. of Meteorology:

ozone fcst.html Baltimore-Washington real time AQ data map: www.air-watch.net www.epa.gov/airnow

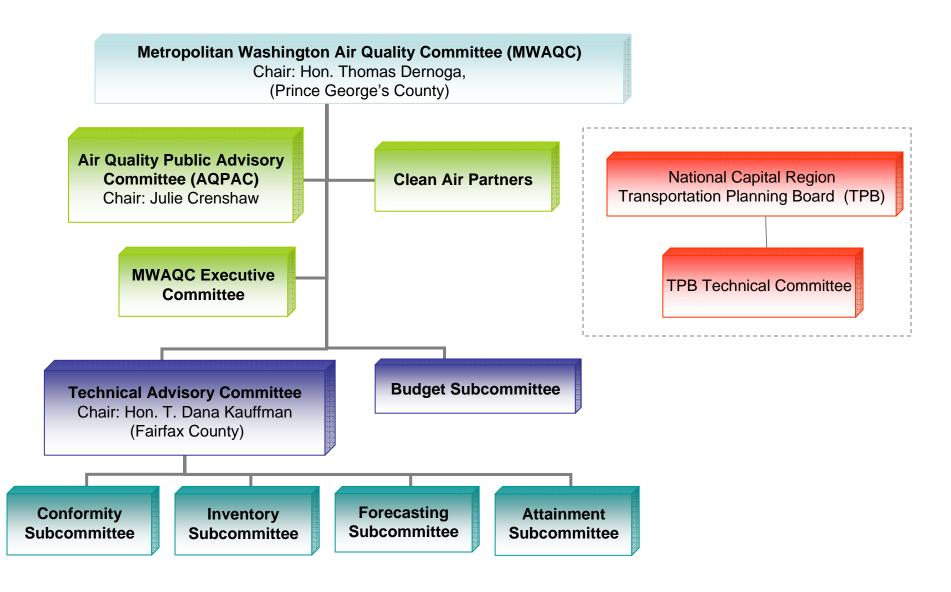
EPA Air Quality data maps and forecasts:

ORGANIZATIONS

Clean Air Partners: www.cleanairpartners.net Ozone Transport Commission: www.otcair.org EPA (Home page) www.epa.gov

EPA Region 3 www.epa.gov/reg3artd EPA Air Quality Policy & Standards: www.epa.gov/oar/oaqps EPA Office of Transportation & Air Quality: www.epa.gov/otaq

MWAQC Organizational Structure 2004



Adopted: July 22, 1992

Amended: September 14, 1994 Amended: November 29, 1995

Amended: July 24, 1996 Amended: May 22, 2002

BYLAWS of the

Metropolitan Washington Air Quality Committee

Section 1: NAME

The name of this committee is the Metropolitan Washington Air Quality Committee (MWAQC).

Section 2: AUTHORITY

The authority of the 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.

The principal mandates of the MWAQC are to prepare, according to the provisions of Title I of the Clean Air Act Amendments of 1990, the following documents for transmittal to and consideration by the Government of the District of Columbia, the State of Maryland, and the Commonwealth of Virginia suitable for inclusion in their air quality State Implementation Plans:

- 1. A plan demonstrating attainment of the federal ozone standard by November, 1999 and maintenance of the standard for ten years thereafter (State Implementation Plan submittals due November, 1994 to EPA);
- A plan demonstrating a 15% reduction in emissions of volatile organic compounds from 1990 levels by the year 1996 (State Implementation Plan submittals due November, 1993 to EPA);
- 3. An inventory of wintertime emissions of carbon monoxide for the year 1990 (State Implementation Plan inventory due November 1992); and
- 4. Other inventories of emissions as may be required by the U.S. EPA.

Section 3: MISSION

The MWAQC has been established to conduct interstate air quality attainment and maintenance planning for the Washington, D.C.-Maryland-Virginia Metropolitan Statistical Area. In fulfilling its mission, the MWAQC shall:

1. Formulate, adopt and submit to the Government of the District of Columbia, the State of Maryland and the Commonwealth of Virginia a proposed regional air quality plan for ozone control suitable for incorporation into air quality State Implementation Plans (SIP's).

- 2. Develop an air quality maintenance plan for ozone control which includes measures and implementation commitments for consideration and incorporation into SIP's and implementation by the states, local governments and the U. S. EPA.
- 3. Fulfill any other functions and obligations necessary for the promulgation and maintenance of regional air quality policies, plans or programs as may be assigned to it by federal or state statute, policy or regulation or by request of a local jurisdiction. The MWAQC shall develop appropriate policies and procedures to implement these requirements.

In executing its policy and plan preparation functions, the MWAQC shall:

- 1. Periodically review interim products and progress in the plan's development.
- 2. Coordinate its activities with relevant planning efforts of the National Capital Region Transportation Planning Board, the Metropolitan Washington Council of Governments' (COG) Environmental Policy Committee, the Tri-County Council for Southern Maryland, state air quality and transportation agencies, and the region's local governments.
- 3. Develop and approve a public participation and education program.
- 4. Provide assistance and policy direction in the planning process to achieve cooperation in developing plan recommendations and facilitate the resolution of interjurisdictional policy issues.
- 5. Facilitate plan implementation by fulfilling an advocacy role for plan elements in appropriate forums.
- 6. After adoption of the plan, periodically assess whether new information, including demographic and emissions forecasts, warrants the plan's revision and, working with the appropriate jurisdictions and agencies, prepare revisions and modifications of the plan to the District of Columbia, the State of Maryland and the Commonwealth of Virginia.

Section 4: MEMBERSHIP

Membership of the MWAQC shall consist of representatives appointed by the following governing bodies of the Washington, D.C.-Maryland-Virginia Metropolitan Statistical Area, state air quality and transportation agencies:

Member

Number Of Representatives

District of Columbia	
Office of The Mayor	2
Council of the District of Columbia	2
Maryland	
City of Bowie	1
City of College Park	1
City of Frederick	1
Frederick County	1
City of Gaithersburg	1
City of Greenbelt	1
Montgomery County, Office of the County Executive	1
Montgomery County Council	2
Prince George's County, Office of the County Executive	1
Prince George's County Council	1
City of Rockville	1
City of Takoma Park	1
Calvert County	1
Charles County	1
Maryland General Assembly	2
Virginia	
City of Alexandria	1
Arlington County	1
City of Fairfax	1
Fairfax County	3
City of Falls Church	1
Loudoun County	1
Prince William County	1
Stafford County	1
Virginia General Assembly	2
State Air Management Directors	
District of Columbia Dept. of Consumer and Regulatory Affairs	1

Maryland Department of the Environment	1
Virginia Department of Department of Environmental Quality	1
State Transportation Directors	
District of Columbia Department of Public Works	1
Maryland Department of Transportation	1
Virginia Department of Transportation	1
National Capital Region Transportation Planning Board	
Chair, or the Chair's designee, of the National Capital Region Transportation Planning Board	1
TOTAL	40

Section 5: TERM OF MEMBERSHIP, METHOD OF APPOINTMENT, AND ALTERNATES

5.1: Term of Membership and Method of Appointment

Members shall serve until replaced by their respective appointing authority (or successor authority) or by resignation.

Appointments to the MWAQC shall be made by each appointing authority (or successor) as made the original appointment. Notification of appointments shall be made in writing to the Chair of the MWAQC, c/o the Metropolitan Washington Council of Governments.

5.2: Alternates

Alternates to voting members may be appointed at the discretion of the original appointing authority (or successor) and will serve until replaced. Alternates to members shall, as far as practical, be elected officials with the following exceptions:

Mayor, District of Columbia County Executive, Montgomery County County Executive, Prince George's County State Air Management and Department of Transportation Members

Section 6: OFFICERS

6.1: Enumeration, Terms and Election of Officers

Election of officers shall be held at the last business meeting of the year, following this amendment to the bylaws, starting in calendar year 1995. Officers currently serving at the time of adoption of this bylaw amendment shall continue to serve until elections are held under this provision.

The office of Chair, Metropolitan Washington Air Quality Committee, shall be selected by the membership and shall serve a one year term, which may be renewed for a second year. There shall be three Vice Chairs elected by the membership who shall, likewise, serve a one year term concurrent with the Chair and whose terms may be renewed for a second year. There shall be one Vice-Chair each from the District of Columbia, Maryland and Virginia selected from the membership. The Chair shall be rotated among these jurisdictions in alphabetical order after completion of the term of the first Chair.

At the meeting preceding the election of the Chair and Vice Chairs, there shall be appointed by the Chair a Nominating Committee which shall propose a slate of officers for election by the membership. The Nominating Committee shall request a nomination from each caucus for consideration as Vice Chair.. There shall be a minimum of ten days notice of the list of nominees for officers transmitted to MWAQC members prior to the date of election.

The term of office for each officer shall be for one year, and shall commence as of January 1 of each year.

6.2: Duties of Officers

The Chair of the MWAQC shall approve meeting agendas, preside at all meetings, appoint committees and subcommittees, and shall perform other such duties that the MWAQC may assign.

A Vice Chair, designated by the Chair, shall act to discharge the duties of the Chair in the absence or inability of the Chair to act.

Section 7: QUORUM, VOTING PROCEDURES, MEETINGS

7.1: Quorum

A quorum shall consist of twelve (12) members or designated alternates to include

at least two (2) voting members from the District of Columbia, four (4) from Maryland and four (4) from Virginia. For Matters of Extraordinary Issues of Policy (Section 7.3) a quorum shall consist of a majority of the membership including at least four (4) voting members from each of the District of Columbia, Maryland and Virginia.

7.2: Voting Procedures

It is the goal of the MWAQC that all matters shall be resolved collegially through the development of consensus positions.

Simple majority vote of the members present (or designated alternates in case of absences) shall prevail on all motions, resolutions or election of officers, except in the case of matters of extraordinary issues of policy as defined in Section 7.3.

7.3: Matters of Extraordinary Issues of Policy

Matters of Extraordinary Issues of Policy shall require the majority approval of the representatives in attendance from each state's membership. The TPB Chair's vote shall be considered non-voting in cases of "Matters of Extraordinary Issues of Policy". These matters shall include:

- 1. Approval or revision of the regional air quality plan or components of the plan, including contingency measures (for example, individual control measures recommended for application regionally, allocation of emission reductions by state or by source, recommendation of air quality State Implementation Plan revisions affecting the non- attainment region.)
- 2. Approval of work programs and budgets.
- 3. Recommendations to alter membership of the MWAQC.
- 4. Initial approval of Bylaws, Amendments to Bylaws and Suspension of Bylaws.

A motion to make a resolution or other action of the committee (other than the four items above) subject to the voting provisions of Section 7.3 "Matters of Extraordinary Issues of Policy", may be made by any member; such motion shall require the majority approval of the representative in attendance from the membership of any one of Virginia, Maryland and the District of Columbia.

7.4: Meetings and Parliamentary Authority

The MWAQC shall meet at least four times per year, and more frequently as it deems necessary. The regular meeting date is established as the fourth Wednesday of the months of January, April, July and October at 12:00 Noon at the offices of COG. The

meeting date, place and time may be otherwise determined by agreement.

Additional meetings may be called with ten days written notification (from the time the notice is sent) by the Chair or by written request of five members of the MWAQC.

Roberts Rules of Order, Revised, shall be the parliamentary authority for the conduct of meetings of the MWAQC.

Section 8: COMMITTEES

8.1 Technical Advisory Committee (TAC)

There shall be established a Technical Advisory Committee (TAC) to advise and assist the MWAQC in planning for and maintaining the region's air quality. The Chair of the TAC shall be appointed by the Chair of MWAQC from among the members of MWAQC. Membership of the TAC shall consist of:

- The Air Management Directors of the District of Columbia, Maryland and Virginia or their designated representatives.
- Representatives from the Departments of Transportation of the District of Columbia, Maryland and Virginia.
- A representative of each local government with membership on the Metropolitan Washington Air Quality Committee.
- A representative of the Technical Committee to the National Capital Region Transportation Planning Board

The Technical Advisory Committee shall:

- a. Review and advise the MWAQC on the proposed draft of the air quality plan for submittal to the governments of the District of Columbia, the State of Maryland and the Commonwealth of Virginia.
- b. Recommend to the MWAQC an air quality work program and budget.
- c. Coordinate technical committees and working groups in executing work program elements.
- d. Receive and comment upon technical products developed during the planning process.

- e. Advise the MWAQC on potential technical and policy issues related to air quality as they arise and provide periodic status reports on the work program.
- f. Provide a coordinating mechanism among the MWAQC, the Mid-Atlantic Regional Air Management Association (MARAMA), the Ozone Transport Commission (OTC), and other agencies as appropriate.
- g. Report to MWAQC and the public on the daily air quality and air quality trends.
- h. Review and advise the MWAQC on the daily air quality forecasting during the ozone season.
- Provide technical review and recommendations to MWAQC on the Determinations of Conformity prepared by the staff of the Transportation Planning Board for the Transportation Improvement Plan (TIP) and its amendments and the regional Long Range Transportation Plan and its amendments.
- j. Execute any other duties as assigned by the MWAQC.

8.2: Executive Committee

The Chair, the three Vice Chairs and the Immediate Past Chair shall constitute an Executive Committee for MWAQC. The Executive Committee shall have such powers and shall perform such duties as MWAQC may delegate by resolution to it from time to time. In addition, the Executive Committee shall have authority to transact such business as is necessary from time to time in furtherance of the mission of MWAQC and which has been neither, by these Bylaws nor by action of the Board, delegated to any other officer, employee or committee, nor has been undertaken by MWAQC itself.

8.3: Relationship with Other Committees

The Metropolitan Washington Air Quality Committee shall have full authority to define its support

- The Environmental and Public Works Directors Committee (EPWDC) and Regional Air Management Subcommittee (RAMS.)
- The National Capital Regional Transportation Planning Board and Transportation Planning Board Technical Committee.
- The Metropolitan Development Policy Committee (MDPC) and Planning Directors Technical Advisory Committee (PDTAC.)

- The Southern Maryland Air Quality Working Group.
- The Southern Maryland Transportation Planning Board.

8.4: Appointment of Other Subcommittees

The Chair, upon approval by the MWAQC, may appoint other subcommittees as deemed necessary for conducting its business.

Section 9: PUBLIC PARTICIPATION AND EDUCATION

All meetings of the MWAQC and its Technical Staff Coordination Committee shall be open to the public. Meetings shall be closed only in the case of matters dealing with personnel or litigation.

The MWAQC shall adopt a public participation and education program as part of its attainment planning and maintenance work program.

Section 10: STAFFING, CONTRACTING, ADMINISTRATION AND FINANCE

10:1: Staff

The technical and administrative staff of the Metropolitan Washington Council of Governments, as reflected in the annual work program and budget of the MWAQC, shall serve as the staff to the MWAQC in the conduct of the air quality planning process. Technical staff support to the MWAQC in support of Charles and Calvert Counties, Maryland will be provided, at their discretion, by the Tri-County Council for Southern Maryland. Technical staff support to the MWAQC will also be provided by Stafford County, VA.

10.2: Contractual Authority

The Metropolitan Washington Council of Governments, acting through its Board of Directors, shall serve as the contracting agent for obtaining consultant and other necessary contractual services requested by the MWAQC.

10.3: Administration and Finance

The Metropolitan Washington Council of Governments shall be the administrative mechanism for the application, receipt, expenditure, and accounting of funds supporting the work of the COG staff in the MWAQC air quality planning work program. The Tri-County Council for Southern Maryland shall be the administrative mechanism for the

application, receipt, expenditure and accounting of funds supporting work of TCC staff on air quality planning on behalf of Charles and Calvert Counties, Maryland. The Rappahannock Area Development Commission shall be the administrative mechanism for the application, receipt, expenditure and accounting of funds supporting work of the Stafford County, VA staff on air quality planning on behalf of Stafford County, Virginia.

The MWAQC shall, from time to time, adopt work programs and budgets for the execution of its work program. Local funds required as match for federal and state funds shall be apportioned to the general purpose local government members of the MWAQC on a pro rata population basis, in the same manner as in the annual budget process of the Metropolitan Washington Council of Governments. Contributions from local governments not members of the Metropolitan Washington Council of Governments may be provided in the form of in-kind services.

Section 11: AMENDMENTS

These Bylaws may be amended pursuant to the following procedures:

- a. With the approval of the majority of those voting members of the MWAQC present and voting, a proposal to amend the Bylaws introduced at any regular meeting of the Committee shall be recorded in the minutes, and
- b. A special written notice setting forth such proposal shall be mailed to every member of the MWAQC at least ten days before the next regular meeting.
- c. The amendment shall be acted upon at the next regular meeting following the meeting at which it was proposed. A majority of those present and voting from the District of Columbia, Maryland and Virginia, (as described in Sec. 7.3 of these Bylaws) will be required for approval.

I:\AIR\BYLAWS\MWAQC.WPD



METROPOLITAN WASHINGTON AIR QUALITY COMMITTEE 777 North Capitol Street, N.E. Washington, D.C. 20002

Air Quality Planning Work Program and Budget

July 1, 2003 through June 30, 2004

Prepared by

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

Approved March 26, 2003

I. Background

This document presents the work program for the Metropolitan Washington Air Quality Committee (MWAQC) to be carried out between July 1, 2003 and June 30, 2004. 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 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 while simultaneously helping meet transportation needs in the Washington region consistent with air quality goals.

Certification of the Metropolitan Washington Air Quality Committee

Pursuant to §174 of the Clean Air Act Amendments of 1990, MWAQC was certified in 1992 by the Mayor of the District of Columbia and the Governors of Maryland and Virginia to carry out regional air quality planning for the Washington metropolitan region. The primary responsibilities of MWAQC are development of regional plans for meeting the federal health standards for the criteria pollutants, e.g., carbon monoxide and ground-level ozone.

Air Quality Classifications of the Washington metropolitan region

Under the Clean Air Act Amendments, the metropolitan Washington region was classified as a serious non-attainment area for ground-level ozone. The region was provided a deadline of 1999 for meeting the federal health standard. In January 2001 EPA approved the region's attainment demonstration, post-1996 rate-of-progress plan and attainment date extension to November 15, 2005. In July 2002 the U.S. Circuit Court of Appeals for the District of Columbia remanded EPA's approval of the Washington region's SIP back to EPA. In January 2003 EPA reclassified the region as a severe nonattainment area. The region is required to submit a new state implementation plan adopting all the requirements for severe nonattainment areas. The plan is due to EPA no later than March 2004. The region has a deadline of November 15, 2005, to meet the one-hour ozone standard. ¹

Portions of the region were also classified as non-attainment for carbon monoxide until 1995, when the regional plan prepared by MWAQC demonstrated attainment of the carbon monoxide standard and further demonstrated that the standard could be maintained for at twelve years beyond 1995

Membership on MWAQC

¹ Federal Register, Vol 67, no. 219, November 13, 2002, 68805-68814.

Membership on MWAQC consists of representatives from twenty-one 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).

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 Plan Review, Forecasting, and Modeling.

Current officers of MWAQC are the Honorable Phil Mendelson, Chair (Council of the District of Columbia), the Honorable Mary K. Hill, Vice-Chair (Prince William Board of Supervisors), and the Honorable Thomas Dernoga, Vice Chair (Prince George's County Council). Elections of officers were held during November 2002 at the last business meeting of the calendar year and in January 2003.

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. Summary of MWAQC Accomplishments During FY 2002-03

MWAQC's primary achievement in FY2003 was completion of MOBILE6 mobile vehicle emissions modeling, and development of a new State Implementation Plan (SIP) meeting the Clean Air Act Amendment requirements for severe ozone nonattainment areas. These major projects responded to EPA's reclassification of the region in November 2002. The SIP responded to EPA's requirements for 2002 and 2005 rate of progress plans, Reasonably Available Control Measures (RACM), severe area Reasonably Available Control Technology requirements for stationary sources, threshold and offset rules for stationary sources, and contingency plans for each Rate of Progress milestone year.

MWAQC considered a wide-range of control measures as RACM and as contingency measures. These measures were analyzed by staff and discussed with stakeholders in the Air Quality Public Advisory Committee and a stakeholder meeting held in the spring 2003.

The "severe" area SIP was scheduled to be completed and submitted to EPA by July 2003, well in advance of EPA's deadline of March 2004. MWAQC adopted the aggressive SIP-submittal schedule so that the National Capital Region Transportation Planning Board (TPB) would be able to adopt a 2003 CLRP that conformed to a MOBILE6 mobile emissions budget. The 2003 CLRP and FY2004 Transportation Improvement Program (TIP) will need to be approved by January 2004 to avoid a conformity lapse.

MWAQC Committees

MWAQC met seven times during the year, including a meeting held in executive session in June. Continued operation of the MWAQC regional process was possible due to the operation of the Executive Committee and the Technical Advisory Committee (TAC). The Executive Committee discussed issues and guided staff between full MWAQC meetings.

Air Quality Planning Documents

The "severe" air quality plan (SIP) met the requirements for Rate of Progress for 2002, and 2005. The plan included most of the elements for a severe area SIP required by the Clean Air Act Amendments. In addition to Rate of Progress, the plan contained Reasonably Available Control Measures (RACM), contingency measures, and CAA Title I modifications: severe area RACT, threshold and offset rules for stationary sources. The plan will be revised with weight of evidence documentation in the coming year, but it will be submitted before the March 2004 deadline.

Mobile Emissions Modeling Using MOBILE6

COG's Dept. of Environmental Programs, Air Quality staff and the Transportation Planning staff took a coordinated approach to MOBILE6 modeling for the "severe area" SIP. The MOBILE6 Task Force, the joint working group of MWAQC Technical Advisory Committee and the TPB Technical Committee, completed its work in January 2003. It reviewed and recommended to the respective technical committees the 2005 mobile emissions budget and the revised 1990 mobile emissions budget. The MOBILE6 modeling inputs included revision of the VMT, particularly the HDV fraction for local roads. MOBILE6 requires complex inputs such as vehicle registration data for 28 categories of vehicles and Vehicle Miles Traveled by type of vehicle by facility type. The MOBILE6 Task Force discussed every input and came to agreement on each input and the methodologies to calculate each input.

In addition to modeling mobile emissions for the attainment year, EPA required several intermediate years to be modeled using MOBILE6, to conduct a fair comparison of the progress in reductions made between the base year, 1990, and intermediate milestone years, 1996, 1999, 2002. MWAQC staff prepared MOBILE6 emission factors for the milestone years and DTP staff produced emission inventories for the intermediate years.

1999 and 2005 Emissions Inventory

The 1999 Periodic Emissions Inventory, finalized in November 2001, was revised using MOBILE6. Also the projected 2005 emissions inventory was revised to include regulations adopted since 1999 and the latest growth factors. Rate of Progress inventories were prepared for milestone years, 1996, 1999 and 2002.

Citizen Support

MWAQC maintains an Air Quality Public Advisory Committee (AQPAC) in order to provide a conduit through which citizens can be briefed and comment on the actions before MWAQC. The AQPAC continued to provide comments on how regional air quality information could be made more accessible to the public audience.

During the period of July 2002 through June 2003, the Air Quality Public Advisory Committee (AQPAC) held eleven meetings. AQPAC provided comment to MWAQC on a variety of air quality issues, including MOBILE6 modeling, rate of progress, and New Source Review regulations. A major contribution during the year was AQPAC's review of proposed Reasonably Available Control Measures (RACM) and contingency measures. AQPAC reviewed the criteria for the RACM and control measures, discussed a list of candidate measures and proposed new measures for consideration. AQPAC commented to MWAQC's Technical Advisory Committee (TAC) in January during the review and analysis period before TAC recommended a short list of measures.

AQPAC members maintained a continual process for replacing members who resigned by recruiting candidate members from a variety of sources, including chambers of commerce and environmental groups in the region. Members of AQPAC have been involved in the activities of the Joint Technical Working Group through attending their meetings and providing input into the development of Measures of Effectiveness to be used to evaluate alternative transportation and land use scenarios. Limited staff support to AQPAC is provided through the MWAQC work program.

III. Overview and Organization of Proposed 2004 Work Program

The 2004 Work Program builds on the progress already made by MWAQC towards attainment of the National Ambient Air Quality Standard for ozone, and includes provisions to review subsequent conformity determinations. This document is intended to guide the activities of the MWAQC through the twelve month period from July 1, 2003 to June 30, 2004. In subsequent sections the reader will find detailed descriptions of the seven major work program areas that are included in this proposed work program. The seven major work areas are presented in more detail as tasks in the work program. The major work areas are as follows:

- 1. MWAQC, TAC Support
- 2. Public Participation and Education, Support for the Air Quality Public Advisory Committee
- 3. State Implementation Plan Coordination
- 4. Attainment Coordination
- 5. Inventory Development
- 6. Transportation Conformity Review
- 7. Program Management

Costs for each of the above tasks items are also included along with more detailed descriptions in Section IV of this document. Section V presents the proposed funding sources and projected budget for COG staff. Costs for each subtask of the work program is shown in Table IV.

The Washington Metropolitan area is classified as a severe nonattainment area for the one-hour ozone standard and meets the criteria for a traditional nonattainment area under the eight-hour standard. On July 2, 2002, the U.S. Circuit Court of Appeals in the District of Columbia decided in favor of the Sierra Club in *Sierra Club v. EPA*, regarding EPA's obligation under the Clean Air Act to reclassify the region as a "severe" area in 1999 when the region failed to meet the one-hour ozone standard. In November EPA proposed reclassification and, required, as part of the reclassification, submittal of a new state implementation plan (SIP) that adopts all the severe area requirements no later than March 2004.

The Clean Air Act Amendment, Sections 182(a) through 182(d), lists the following SIP requirements for severe ozone nonattainment areas:

- (1) attainment demonstration for 2005 and Rate of Progress demonstrations for 2002 and 2005, including adequate on-road mobile emissions budgets for transportation conformity;
- (2) A 25 ton-per-year major stationary source threshold for volatile organic compounds and nitrogen oxides;
- (3) More stringent new source review requirements;

- (4) Enforceable transportation control strategies and measures to offset projected growth in vehicle miles traveled or number of vehicle trips as necessary to demonstrate attainment and to achieve periodic emissions reduction requirements;
- (5) Contingency measures.

MWAQC adopted an expedited schedule to develop a "severe area" SIP, and to approve a SIP by July 2003 for the states to submit to EPA. Although most of the SIP development effort will take place in the FY 2003 period for a July 2003 submittal deadline, staff will prepare a weight of evidence section for the SIP and the weight of evidence section will be added as a SIP revision before EPA's March 2004 SIP submittal deadline. As for enforceable transportation control strategies, there are current work activities that are consistent with this requirement.

The Washington region must submit a Periodic Emissions Inventory (PEI) for 2002 by June 2004, a date established in the Consolidated Emissions Reporting Rule (CERR). In November 2002 EPA issued guidance stating that the 2002 Periodic Emissions Inventory will be used as the new baseline for 8-hour ozone attainment planning. As with the 1990 emissions inventory which was the baseline for the one-hour ozone standard attainment planning, the 2002 PEI will be developed using the most recent and best data available. The 2002 PEI will be the baseline inventory for the 8-hour attainment SIPs due in 2007 or 2008. Development of the PEI will require significant coordination between the state air agencies.

EPA is expected to implement the 8-hour standard beginning in the fall of 2003 and plans to proposed 8-hour nonattainment areas in early 2004. MWAQC will have the opportunity to comment on EPA's proposed classification system for the 8-hour standard, and on proposed designations of 8-hour nonattainment areas. Although there is uncertainty regarding the new standard and geographic boundaries of the new nonattainment areas, some of the proposed new nonattainment boundaries for the Washington area may require restructuring and possibly recertification.

In addition to the 2004 deadline for MWAQC to approve a new "severe area" SIP, EPA also requires the region to revise its Carbon Monoxide Maintenance Plan by the fall of 2003. The updated plan will project carbon monoxide emissions for ten years into the future and will plan to maintain levels that continue to meet the national public health standard for carbon monoxide.

MWAQC staff will perform several tasks as part of the transportation/air quality conformity process. Staff and the Conformity Subcommittee will review proposed transportation projects, amendments to the Transportation Improvement Plan, and review and participate in the air quality conformity analysis. Staff will provide regular briefings for the Transportation Planning Board (TPB) and TPB Technical Committee about EPA regulations and guidance as they apply to conformity in the Washington region.

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. The work program and budget for FY 2003 and FY 2004 were developed to respond to an unexpected change in legal requirements; future funding requirements may

be lower. 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 the integrity of the policy making process is maintained and EPA deadlines as interpreted by MWAQC are achieved.

IV. Proposed 2004 Work Program Task Descriptions

1. Metropolitan Washington Air Quality Committee (MWAQC) Support

Objective:

The objective of MWAQC support is to provide a forum for regional air quality decision-making.

Estimated Cost: \$118,428

Summary Description:

During the year, MWAQC will approve a new State Implementation Plan (SIP) to meet requirements for severe nonattainment areas. The SIP will include a mobile emissions budget using MOBILE6, with the most recent emissions factors and most recent vehicle registration data. MWAQC will review evidence of the Washington region's ability to attain the one-hour ozone standard by 2005, and the evidence will be added to the SIP submitted in July 2003.

The MWAQC Technical Advisory Committee will begin reviewing new local control measures for conformity or for a new eight-hour attainment standard. MWAQC staff will continue to research cost effective measures for reducing emissions, such as diesel retrofit projects which reduce area and nonroad emissions, since these are areas of future emissions growth.

EPA will issue 8-hour ozone implementation guidance in fall 2003. MWAQC may comment on proposed guidance as it applies to revocation of the one-hour ozone standard and schedule for SIP submittals for the 8-hour standard. Designation of 8-hour nonattainment areas is expected in 2004.

MWAQC meeting support will include seven full MWAQC meetings and approximately 12-15 related subcommittee meetings. Meeting support includes drafting meeting agendas, assuring review by the Executive Subcommittee, technical review of issues by the Technical Advisory Committee, consultations with the Chairman and members, and providing comprehensive briefing materials along with the agenda to fully and objectively inform the Committee on the issues before them.

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A. Regular Meeting Support

Description: This task includes regular meeting support for seven MWAQC meetings. This task includes preparing agendas and the accompanying informational materials. Agendas must be reviewed by the Executive Subcommittee. At each meeting, the full Committee will be briefed on the activities of its subcommittees and briefed on other relevant events in air quality planning. Staff will attend pertinent conferences and meetings to provide MWAQC with an appropriate level of information for the decision making process. Meeting summaries must be prepared after each meeting and included in the informational materials for the subsequent meeting. Meeting materials are prepared and transmitted to the Committee members and observers before each meeting. Staff will carry out follow-up activities as directed including development and transmittal of correspondence, and distribution of documents, etc. MWAQC staff will prepare monthly calendars of all scheduled MWAQC-related meetings and conference calls. The calendars will be distributed to the Technical Advisory Committee and updated, if electronically available, on a weekly basis.

The focus for this task is to provide a forum for elected officials to make regional decisions on air quality issues. Staff will coordinate with State Air Agencies and the MWAQC Technical Advisory Committee to maintain a regional approach and keep the Committee fully briefed on relevant issues. This task also includes support for the Nominating Committee and other Ad Hoc Committees that may be established.

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Seven MWAQC meetings

Meeting materials and support for MWAQC

Consultation with Chair and individual members Meeting materials and support for Nominating and Ad Hoc Committees

Timeframe

July, Sept., Oct., Nov., Jan., March, May

July, Sept., Oct., Nov., Jan., March, May Meeting months

Meeting months

B. Executive Committee Support

Description: The Executive Committee will meet at least once prior to the full committee for each of the scheduled MWAQC meetings in order to discuss relevant issues and review the agenda for the full committee. The Executive Committee will help prioritize agenda items, particularly those that require a vote or endorsement by the full Committee. Meeting support for the Executive Committee includes coordinating with members to schedule meetings, as well as reviewing and revising the agenda with respect to their comments. The Executive Committee

will meet every month except August to address pressing issues, such as status of court decisions affecting the attainment plan, in the absence of a scheduled full MWAQC meeting.

Deliverables: Timeframe

Eleven Executive Committee Meetings Monthly, except August

Meeting materials and support for Executive Committee Meeting months

C. Technical Advisory Committee Support

Description: Meetings of the TAC will be held in order to review the technical documents and presentations before submittal to MWAQC. Meeting support for these meetings will include schedule coordination and technical coordination. Mail out materials for the TAC will be transmitted before each meeting and will contain an agenda, meeting summary and any pertinent technical memoranda needed for the meeting.

> There will be eleven meetings of the TAC to review technical materials and reports to be considered by MWAQC. A standing item on the TAC agenda will be review of work program progress and setting priorities and assignments. Support for these meetings will include technical work with documentation and coordination with members of the TAC. .

Deliverables: Timeframe

Eleven meetings of the TAC July, Sept., Oct., Nov., Dec., Jan., Feb, Mar

April, May, June

TAC review of work program progress,

priorities and assignments At regular meetings Meeting materials for TAC and subcommittees Meeting months Technical documentation for information pertinent to MWAQC As Needed Supporting technical information for specific MWAQC charges As Needed

Subcommittee Meetings:

Attainment Plan Subcommittee (4 meetings) As Needed Budget Subcommittee (3 meetings) Oct, Nov, March Conformity Subcommittee As Needed

Deliverables for State Air Agencies:

Review, through participation in the TAC and meetings with COG and State Air Agencies, technical documents prepared for MWAQC when appropriate

As Needed

D. **EPA Region 3 Consultation/ Coordination**

Description:

The need for MWAQC to comment on significant air quality policy in the making is important. MWAQC comments may come in the form of resolutions or written letters of comment, but also as having representatives participate in EPA discussions and workgroups when appropriate. MWAQC may need to comment on implementation of the 8-hour ozone standard, implementation guidance, and, possibly, designation of 8-hour attainment area boundaries. MWAQC staff will prepare analysis and presentations to TAC and MWAQC on these issues.

EPA Region 3 issues guidance regarding regulations and comments on revisions needed in the attainment plan. Staff will coordinate conference calls and/or meetings between EPA Region 3 staff, state air agencies, and MWAQC subcommittees to discuss questions and issues regarding the Washington, DC-MD-VA Nonattainment region as needed.

Deliverables:	Timef	rame
Formal testimony from MWAQC regarding proposed EPA Implementation guidance		As Needed
Participation in EPA and other workgroups focusing implementation policy	on new EPA	As Needed
Presentation to MWAQC describing analysis and/or issue Conference Calls		As Needed As Needed
Meetings with EPA Region 3		As Needed

2. Public Participation and Education, Support for the Air Quality Public Advisory **Committee (AQPAC)**

Objective:

To provide an opportunity for citizens to learn and comment on local air quality issues and decisions on a timely basis.

Estimated Cost: \$33.213

Summary Description:

The Air Quality Public Advisory Committee (AQPAC) to the MWAQC provides a conduit through which information on regional air quality planning can reach the public and public reaction and input can be provided to the MWAQC. AQPAC will have an increased role in providing the public with more specialized information regarding topics on air quality in the area. AQPAC will also assist MWAQC by providing an early "litmus test" to public reaction to MWAQC's recommendations. Public education and acceptance of air quality issues and remedies continues to be an important aspect of air quality planning in the region. Materials for the press will be produced and provided on an as needed basis.

Key Tasks:

A. Regular Meeting Support for AQPAC

Description: The AQPAC meets before each scheduled MWAQC meeting. Meeting support for this committee requires agendas, informational briefings, and meeting summaries for each meeting. In addition, speakers will be scheduled to provide presentations or public forums on control measure strategies selected by the AQPAC. AQPAC will be given an opportunity to comment on the material that will be brought before MWAQC. The Chair of AQPAC has the opportunity to speak before MWAQC at each full MWAQC meeting.

Deliverables:

Six AQPAC meetings Mailout materials meeting support and consultation with Chair and members

Timeframe Per MWAQC Per MWAQC Schedule

B. Media and Public Outreach

Description: This task includes providing support to answer questions from the media regarding the decisions and plans of the MWAQC. Public affairs support, media relations, and press releases are covered under this task. MWAQC staff working with public affairs staff maintains a web page containing information about air quality planning and issues to be addressed. During the ozone season, a special telephone line is maintained seven days a week to respond to media requests.

Timeframe Deliverables: Press Relations As Needed

Air Quality web page(s) Continuously maintained Telephone hotline for media requests ozone season, 7 days/week

3. State Implementation Plan (SIP) Coordination

Objective:

Complete development of a State Implementation Plan for the Washington, DC-MD-VA region that meets CAAA requirements for a severe nonattainment area. Revise the SIP to include analysis of evidence for the region's attainment of the one-hour ozone standard by November 2005. Update the carbon monoxide maintenance plan.

Estimated Cost: \$109,816

Summary Description: The Washington, DC-MD-VA nonattainment area is required to submit a state implementation plan (SIP) meeting Clean Air Act Amendment requirements for a severe nonattainment area. The plan must be submitted to EPA no later than March 2004.

Key Tasks:

A. Development of and Revision of State Implementation Plan (SIP) for Severe Nonattainment Area Classification

Description: The Washington, DC-MD-VA nonattainment area must prepare a SIP meeting requirements for severe nonattainment of the one-hour ozone standard. The SIP must include an analysis of all Reasonably Available Control Measures (RACM), a MVEB with MOBILE6 emissions factors, a Rate of Progress determination for 2002, 2005; and contingency measures for 1999 ROP, 2002 ROP and 2005 ROP. The task will include technical corrections to the Severe Area SIP. The revised severe area SIP will be subject to a review process and a public hearing process.

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Timeframe TAC, MWAQC approve final SIP July 2003

TAC, MWAQC approve draft weight of evidence November –December 2003 Public hearings on SIP revision January 2004 TAC, MWAQC approves SIP revision (WOE) February 2004

State Air Agency Deliverables:

States submit Severe Area SIP to EPA Region 3 July 2003 States submit revised Severe Area SIP to EPA Region 3 March 2004

В. **Develop Potential Regional Control Measures to Reduce Ambient Ozone**

Description: Projections for the Washington nonattainment area indicate that future growth in emissions will be largest in the area and nonroad source inventory. In preparation for a new, more stringent ozone standard, staff will work with the states to develop new regional control measures requiring memorandums of understanding, such as with the Washington Airports Authority. Staff will participate in Ozone Transport Commission committee meetings and hearings on proposed regional control measures for short-term and long-term reductions. Staff will look at benefits from proposed local measures such as bus replacement, diesel retrofits, and "Smart Growth" land use planning initiatives.

Deliverables: Timeframe As needed Periodic reports and updates to TAC, MWAQC

C. Revise Carbon Monoxide Maintenance Plan

Description: The Washington DC-MD-VA region is required to revise its 12-year maintenance plan for carbon monoxide. EPA redesignated the Washington area as attaining the carbon monoxide standard in 1996. In 1996 EPA approved the region's maintenance plan which planned for maintenance until 2007. The deadline for the revised carbon monoxide maintenance plan is 2004, eight years after redesignation.

Deliverables:	Timeframe
Prepare draft CO maintenance plan	July-September 2003
Deliverables:	Timeframe
TAC review of document	September 2003
MWAQC approve for public hearing	September 2003
Public hearings on revisions	October 2003
Response to public comments	October 2003
MWAQC approves revisions	November 2003

State Air Agency Deliverables:

Hold public hearings on maintenance plan October 2003 Submit CO 10-year maintenance plan November 2003

4. Coordinate Attainment Strategies

Objective: The objective of this task is to coordinate strategies for meeting the one-hour standard in the Washington nonattainment area, including tracking attainment modeling done by mid-Atlantic regional groups. The region will be required to demonstrate, using modeling results, inventories, and air quality data, that the region will attain the one-hour ozone standard by 2005. The Attainment Subcommittee will discuss methodologies used in the weight of evidence demonstration, comment on EPA's implementation guidance for the 8-hour standard and comment on EPA's designation of 8-hour nonattainment areas

Estimated Cost: \$28,064

Summary Description:

Track development and participate in discussion of methodologies for evaluating progress towards attaining the one-hour ozone standard, and comment on EPA guidelines. Prepare weight of evidence, including statistical analysis of latest air quality data and design values, to be included in "severe area" SIP as a revision.

Track development and application of emissions inventories and modeling of attainment for the 8-hour standard, the fine particulate matter standard, and, possibly, the one-hour ozone standard as part of the "midcourse" review. Communicate with the States with respect to the modeling inputs and procedures for the one-hour standard. Staff will participate and track larger scale, modeling efforts supported by the Ozone Transport Commission (OTC) and the Mid-Atlantic Regional Air Management Association and that may have an affect on the modeling assumptions used for the Washington area and interpret these developments for MWAQC members.

A. Coordinate Attainment Strategies

Description: The Attainment Subcommittee will meet to coordinate strategies for meeting the one-hour ozone standard in 2005. The states committed to conduct a midcourse review in 2003-4 to determine if the Washington Nonattainment area is on track to attaining the one-hour ozone standard in 2005. The Attainment Subcommittee will meet to consider EPA's suggested metholodologies and will recommend the most appropriate methodology for the Washington region's analysis. The subcommittee will comment on EPA's implementation guidance for the 8-hour ozone standard.

Deliverables: **Timeframe**Attainment Subcommittee Meeting As needed

B. Tracking Regional Modeling

Description: Large scale modeling initiatives for the 8- hour standard are being organized in the northeast by the modeling group of the Ozone Transport Commission. Pieces of the modeling work may be done by states in the Washington nonattainment area. Staff will attend conferences and modeling meetings for the purpose of learning about these tools, contributing information, and planning the appropriate use of these models for the Baltimore-Washington domain. Staff will present significant policy issues and unresolved matters to TAC and MWAQC. The Attainment Subcommittee will consider applications of regional modeling for the Washington region.

> Staff will update the TAC periodically about modeling issues being discussed at regional meetings. Summaries of modeling results or proposed modeling protocols will be reviewed and discussed by the MWAQC-TAC and the full MWAQC. Both MWAQC and TAC will be informed about regional modeling issues, results and directions.

Deliverables: Timeframe: Attend OTC and MARAMA modeling Meetings As Held Presentations to TAC and MWAQC As Needed **State Air Agency Deliverables:** Presentations for TAC workshop As Needed Presentations to MWAQC and TAC As Needed

5. Periodic Emissions Inventory

Objective:

Washington Nonattainment area is required to submit a 2002 Periodic Emissions Inventory in June 2004. The new 2002 PEI which will include a MOBILE6 mobile emissions inventory will be used as the baseline inventory for future 8-hour ozone attainment modeling and planning.

Estimated Cost:

Summary Description: The Clean Air Act requires a Periodic Emissions Inventory be submitted every three years. The last PEI was prepared for 1999 and was submitted in 2001. MWAQC staff coordinates the task with the MWAQC Inventory Subcommittee.

Key Tasks:

Deliverables:

A. Coordinate and Provide Technical Support for the Periodic Emissions Inventory Description:

COG staff in coordination with States and MWAQC TAC will revise the inputs to the MOBILE6 model for determining the mobile emissions inventory for 2002. Growth factors and activities levels will be discussed and applied to grow the 1999 inventory to 2002. As established by EPA's Consolidated Emissions Reporting Rule (CERR), the Periodic Emissions Inventory must be submitted to EPA by June 2004.

Timeframe

Draft revision to Inventory Subcommittee for review Present draft Revision to TAC MWAQC approval	March 2004 April 2004 May 2004
State Air Agency Deliverables:	
Review and participate in developing assumptions	November-December 2003
Participate in reviewing and revising calculations	January-February 2004
States submit revised inventory	June 2004

6. Transportation Conformity/Mobile Emissions Analysis

Objective:

To actively participate in the interagency consultation procedure between the MWAQC and the Transportation Planning Board in order to ensure that future transportation plans conform with air quality goals under ISTEA and EPA's Transportation Conformity Regulations.

Estimated Cost: \$109,382

Summary Description:

Transportation conformity procedures require consultation between the Transportation Planning Board (TPB) and the MWAQC. Transportation Improvement Plans (TIP 1-6 year plans) and Constrained Long Range (CLRP) transportation plans must be analyzed for their collective effect on air quality. Specifically, mobile source emission budgets specified in SIP documents establish emission limits for future years. Conformity analyses must demonstrate that the TIP and CLRP do not increase emissions above those established in the SIP. The TPB Work Program provides for preparation of proposed conformity analyses and findings. This process is separately funded through the TPB Work Program during fiscal year 2004. In FY 2004 MWAQC will request TPB to fund this task in its entirety.

Coordination between regional air quality planning and transportation planning are now intricately linked by Conformity Regulations and the Intermodal Surface Transportation Efficiency Act (ISTEA). Staff will provide necessary consultation with TPB technical subcommittees in order to thoroughly discuss and identify the ramifications of the emission budgets proposed in the new "severe area" SIP. The SIP submittal in 2003 will establish a new mobile emissions budgets using MOBILE6, and after EPA determines that the budgets are adequate to reach attainment, TPB will use the new mobile budgets in future conformity analyses. MWAQC's role in the transportation conformity process is to review and comment on the process and the outcome.

Key Tasks:

A. Facilitate Process for Involving State and Local Air Agencies in the Washington Transportation Planning Process and Conformity Determination

Description: MWAQC and TPB will continue work on the mobile emissions for the SIP milestone years. MWAQC staff will revise mobile emissions factors as technical corrections as needed. If required as a result of technical corrections, staff will revise emissions factors for all milestone years. These factors will be provided to the Transportation Planning staff to prepare

revised mobile inventories for the milestone years, as they are required for the Severe Area SIP submittal.

Each year the TPB analyzes the conformity of the regional transportation plan with the adopted State Implementation Plans for air quality. This process begins with a request for plan inputs and culminates with the TPB's approval of the conformity determination. The Conformity Subcommittee plays a major role is reviewing mobile modeling inputs and results, conformity rules and guidance, procedures, requesting information and reviewing transportation planning input. MWAQC and the TAC are consulted throughout the process and participate at key milestones. In October 2003 TPB will approve a conformity determination for the 2003 Constrained Long Range Plan (CLRP) and the FY 2004 TIP. MWAQC staff will review and comment on the conformity determination for these two plans.

Deliverables:Provide revised emissions factors for milestone years As needed

Provide revised emissions factors for milestone years (technical corrections)

Provide transportation conformity information to local air agencies through the TAC Conformity Subcommittee Review of transportation model inputs
Review of TERMS
Review of conformity determination, comments from MWAQC

Ongoing September 2003 August-October 2003

September-October 2003

C. Transportation/Air Quality Coordination

Description: Staff will coordinate closely with Transportation Planning Staff to provide regular briefings for the Transportation Planning Board (TPB) and the TPB Technical Committee about air quality regulations, MWAQC deadlines and air quality work program elements relating to the State Implementation Plan (SIP) and mobile emission budgets. MWAQC staff will work closely with TPB staff to make technical corrections to milestone year inventories as needed for the SIP.

Staff will jointly sponsor and participate in orientation workshops for TPB elected officials and staff to explain the Clean Air Act, EPA regulations and guidance and MWAQC organization and procedures as they relate to transportation conformity in the Washington region.

Deliverables:

Brief TPB and TPB Technical Committees
Prepare overview of MWAQC and role in conformity
Sponsor and participate in Orientation Workshops for MWAQC,
TPB Members and staff

Timeframe

At Monthly Meetings February 2004 March 2004

7. **Project Management**

Objective:

To effectively manage the resources devoted to the regional air quality planning program to best serve the MWAQC while maintaining agreement among the State Air Agencies regarding the general direction and implementation of the program.

Estimated Cost: \$43.014

Summary Description:

This task includes coordination with State Air Agencies and provides for internal staff management and related direct support not covered elsewhere. Incidental expenses such as computer support, budget support, work program development are accounted for in this task.

Key Tasks:

A. Work Program Development, Billings, and Budget Support

Description: Work program development for 2004 includes meetings with the TAC and internal meetings to develop programs that will adequately support MWAQC. These programs for 2004 have been itemized in the preceding tasks descriptions. Quarterly meetings will be held with the State Air Agencies to review progress on the work program. Budget oversight and billing requirements are included in this task. Quarterly accounting of expenses and progress reports on all tasks and deliverables will be submitted to the State Air Agencies. Changes in due dates or deliverables may be recommended by the State Air Agencies at the quarterly meeting. The recommended changes will be presented to the Technical Advisory Committee and MWAQC for approval, and, if approved, the work program will be adjusted accordingly.

Deliverables:

General management (internal meetings) Draft Budget and work program for 2005 Submittal of 2005 work plan for MWAQC approval Quarterly meetings with State Air Agencies Meeting materials and summaries Ouarterly expense reports and progress reports

Timeframe

Weekly

September 2003 March 2004 Aug, Nov., Feb., March. Aug, ,Nov.,Feb.,March. August, Nov, Feb., March,

B. Computer Support

Description: Staff use 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.

V. Proposed Funding Sources and Projected Budget for COG Staff

This work program is based on a twelve-month period from July 1, 2003 through June 30, 2004. Seven major activity areas are included and are described in detail in Section IV of this document. Proposed funding allocations are presented in Table I. For this 2004 Work Program, the required funding has been allocated assuming COG and local governments provide 44 percent of the total funding needed, Transportation Planning Board provides 24 percent, and the District of Columbia, Maryland, and Virginia air management agencies share the remaining 32 percent allocated by population in the nonattainment area. The allocation amounts are determined on the basis of the work program task budget. The total budget for the MWAQC work program is \$464,996

Table II presents a breakdown of cost by work program element, as was included in the enclosed work program task descriptions. Table III presents the allocation of COG staff time by professional/support staff person that is estimated to perform the tasks described in this document. These estimates provide funding or partial funding for the anticipated staff positions as shown in Table III. Table IV provides the staff time and cost of work program tasks by subtask.

Table I Funding Allocations for FY 2004 Air Quality Work Program (July 1, 2003 through June 30, 2004)

Revenue Source	2003 Funding Amount	2004 Funding	Total Funding	
	\$	Required (\$)	Amount (\$)	
COG	246,042	203,814	203,814	
COG Transportation Planning Board	131,675	109,382	109,382	
DC Department of Health	17,688	17,688	17,688	
Maryland Department of the Environment ²	68,953	68,953	68,953	
Virginia Department of Environmental Quality ²	65,159	65,159	65,159	
TOTAL ²	529,517	464,996	464,996	

^{1.} Transportation funding to support SIP planning and the conformity process. This contribution is contingent on approval by the Transportation Planning Board.

Table II FY2004 Air Quality Work Program Tasks -- July 2003 through June, 2004 (Breakdown of Costs by Type)

		0 01 /		
Work Program Tasks	COG staff (\$)	Consultants(\$)	Direct	Total Cost (\$)
			Costs (\$)	
1. MWAQC Support	106,228	0	12,200	118,428
2. Public Participation and Education	32,213	0	1,000	33,213
3. State Implementation Plan Coordination	78,816	30,650	350	109,816
4. Attainment Coordination	26,864	0	1200	28,064
5. Inventory Preparation	22,680	0	400	23,080
6. Transportation Conformity/Mobile Emissions Analysis *	103,713		5,670	109,382
7. Project Management	36,814	0	6,200	43,014
TOTAL	407,326	30,650	27,020	464,996

^{2.} The contributions of the state air agencies are allocated by population in the nonattainment area.

Table III COG Staff Allocation - July 1, 2003 through June 30, 2004 (in hours)

	Director of DEP	DEP/Air Planning Chief	DEP/ Senior Engineer	DEP/Air Planner II	DEP/Air Planner II	Consul tant	Financial & Grant Manager	Public Affair s	Admin. Aide	Total
1. MWAQC Support	48	284	155	160	48				575	1310
2. Public Participation and	0	72	0	0	173			60	100	457
Education										
3. State Implementation Plan	0	240	225	520	40			0	0	1026
Coordination										
4. Attainment Coordination	0	72	238	0	0				0	307
5. Inventory Preparation	0	52	155	40	40				0	287
6. Transportation	80	309	390	400	0				0	1179
Conformity/Mobile Emiss. *										
7. Project Management	32	128	0	0	0		172		64	396
TOTAL	160	1157	1160	1120	341		172	60	739	4961

Table IV. Air Quality Work Program Costs by Subtask, 7/1/03-6/30/04

Task/Subtask	Total Hours	Total \$	Total Direct costs	Total Project	
I. MWAQC Support					
1. MWAQC Meetings (6)	677	\$53,107	\$8,750	\$61,857	
2. Exec. Ctte Meetings (8)	188	16,514	\$400	\$16,914	
3. TAC Ctte. Meetings (8)	393	\$31,352	\$2,800	\$34,152	
4. EPA Region Coord/Consultation	52	\$5,255	\$250	\$5,505	
Subtotal, MWAQC Support	1310	\$106,228	\$12,200	\$118,428	
II. Public Particip., Education					
1. AQPAC Meetings (6)	265	\$17,076	\$750	\$17,826	
2. Media and Public Outreach	192	\$15,137	\$250	\$15,387	
Subtotal, Public Partic, Education	457	\$32,213	\$1000	\$33,213	
III. SIP Coordination					
1. Revise SIP/Develop ROP	710	\$54,951	\$30,650	\$85,601	
2. Identify New Measures	315	\$23,865	\$350	\$24,215	
Subtotal, SIP Coordination	1025	\$78,816	\$31,000	\$109,816	
IV. Attainment Coordination					
1. Coordinate Attainment Strategies	72	\$6,838	\$500	\$7,213	
2. Mid-Course Review	195	\$16,859	\$350	\$17,209	
3. Track Attainment Modeling	40	\$3,166	\$350	\$3,516	
Subtotal, Attainment Modeling V. Periodic Emissions Inventory Preparation	307	\$26,864	\$1,200	\$28,064	
1. Develop 2002 PEI	287	\$22,680	\$400	\$23,080	
Subtotal, Inventory	287	\$22,680	\$400	\$23,080	
VI. Transp.Conformity/Mobile Em.					
1. Conformity Process/Subcomm.	104	\$8,339	\$0	\$8,589	
2. Prepare Emissions Factors	385	\$39,069	\$2,835	41,904	
3. Transportation/AQ Coordination Subtotal ,	690	\$56,304	\$2,835	\$59,139	
Transp.Conform./Mob.Emm.	1179	\$103,713	\$5,670	\$109,382	

VII. Project Management

Grand Total	4,961	\$407,326	\$57,670	\$464,996
Subtotal, Project Management	398	\$36,814	\$6,200	\$43,014
3. Computer Support	0	\$0	\$4,500	\$4,500
2. Quarterly Reports	48	\$5,508	\$0	\$5,508
1. Dev. Work Program & Billing	348	\$31,306	\$1,200	\$32,506





Air Quality Requirements and Planning in WASHINGTON, DC-MD-VA

Joan Rohlfs, Chief
Air Quality Planning
Metro. Washington Air Quality Committee/
MWCOG

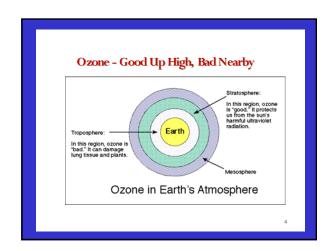
Overview

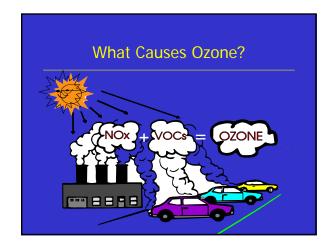
- Clean Air Act
- Causes and Effects of Ozone
- Air Quality Planning in the Washington Metropolitan Region
- The Ozone Challenge
- The Transportation Challenge

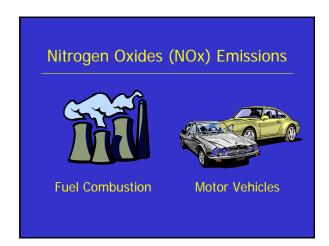


Clean Air Act Amendments 1990

- CAAA classifies areas that do not meet the federal health standard as nonattainment areas
- In 1991 Washington, D.C. region was designated a "serious" ozone nonattainment area











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Ground-level Ozone Health Effects

- Difficulty breathing, shortness of breath
- Aggravates coughing and/or chest pain
- Can trigger asthma attacks
- Respiratory infection
- Repeated exposure can result in chronic damage to the lungs
- · Sensitive populations: children, elderly

Ground-level Ozone Environmental Effects

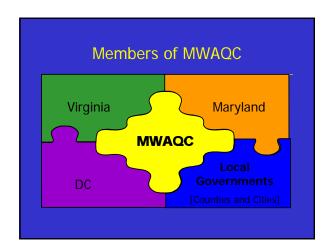
- Crop damage of \$500 million annually
- Forest and vegetation damage
- Damage to building materials, rubber, paint



MWAQC Created

The Metropolitan Washington Air Quality Committee conducts air quality planning for the Washington nonattainment region.







Air Quality Plan ("SIP")

- A plan containing an emissions goal to improve air quality by a deadline established by the Clean Air Act
- The plan contains federal, state, and local measures to reduce air pollution

CAAA Required Measures to Clean the Air

- Enhanced automobile inspection and maintenance testing program (I/M)
- Gasoline vapor recovery systems at gas stations
- Reasonably available control technology on major sources of NOx and VOCs
- New source permitting with lowest achievable emission rate and offsets for new and expanded sources

The Ozone Challenge

- To reach "attainment", the region must have 0-1 excursions per year above the ozone standard.
- November 1999 was the deadline for the region to meet the 1-hour ozone standard.



The Ozone Challenge

- Ozone from outside the region is transported into our region and hinders our ability to control pollution.
- The Washington Region would have met the standard in 1999 but for transported pollution from outside the region.

EPA



- Is taking steps to reduce transported air pollution (ozone) by the year 2005 (NOx SIP Call) and
- Approved an extension of the attainment date from 1999 to 2005.
- However, EPA's authority to issue this extension was contested in federal court. EPA was forced to reclassify ("bump up") the region from "serious" to "severe" nonattainment.

DC-MD-VA Air Quality Plan

- After the bump-up, MWAQC developed a new air quality plan to meet the new severe area requirements.
- First plan approved by MWAQC in August 2003 addressed many, but not all, requirements.
- Revision addressing all requirements will be voted on in February.

DC-MD-VA Air Quality Plan

- Commits to meet the 1-hour ozone standard by the year 2005,
- Identifies control measures to be taken to reduce pollution created locally
- Sets a mobile emissions budget
- Identifies contingency measures if region fails to attain in 2005.

4 Sources of Air Pollution



Point Source

Mobile Source

Area Source Non-road source

The Transportation Challenge

- Transportation plans must not exceed the mobile emission budgets (ceilings) established in the air quality plan (SIP)
- The budget or ceiling is equal to the level of mobile emissions expected in the attainment year (2005)

The Transportation Challenge

Vehicles will become more efficient by 2004 due to improved emissions controls, cleaner engines and lowsulfur gasoline...

sulful gasolille..

... but they will travel more miles, a projected 25% increase from 2005-2025.

The Transportation Challenge

Preferences for larger vehicles (SUVs) with higher per-mile emission rates continue to grow.

Higher motor vehicle emissions must be offset to ensure conformity with air quality plan.

Transportation Measures to Reduce Emissions from Cars

TPB identifies Transportation Emission Reduction Measures (TERMS) to reduce vehicle emissions.

- Park and ride lots
- CNG buses,
- Transit projects (bus, subway, train)
- Ride-sharing
- Teleworking

Clean Air Partners

In 1994, MWAQC created an organization to promote voluntary measures to clean up the air, now known as Clean Air Partners.



CLEAN AIR PARTNERS

- Clean Air Partners encourages voluntary actions to reduce pollution on Ozone Action Days
- Participate as an Ozone Action Day participant; receive pollution forecasts and helpful information
- For more information, see <u>www.cleanairpartners.net</u>



in the Metropolitan Washington Region

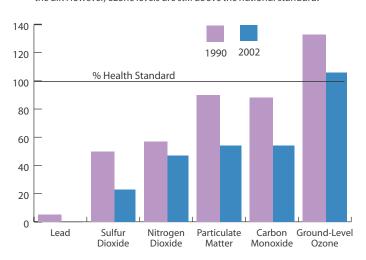
Qualitu

The Clean Air Act, first passed in 1970 and amended in 1990, established a framework that forms the basis for improving air quality and for air quality planning throughout most of the United States.

Federal Clean Air Standards The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to set national air quality standards to limit exposure to pollutants that can harm public health and our environment. These national standards limit the quantities of six pollutants that are often found in the air we breathe: carbon monoxide, lead, nitrogen dioxide, ground-level ozone, particulate matter and sulfur dioxide.

The air in the metropolitan Washington region meets the federal air quality standards for five of the six regulated pollutants. However, on some days in the summer, the average quantity of ground-level ozone in our region's air during a given hour is greater than EPA allows. As a result, we violate the one-hour ozone standard and our region is classified as an ozone nonattainment area.

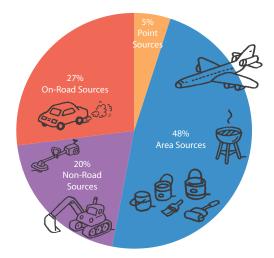
Air quality in the Washington region continues to improve, as is shown by the reduced quantity of regulated pollutants present in the air. However, ozone levels are still above the national standard.



Improving AIR Quality

in the Metropolitan Washington Region

Ozone is formed when volatile organic compounds (VOC), and nitrogen oxides (NOx), undergo chemical reactions in the presence of heat and sunlight. Reducing the amount of VOC and NOx in the air reduces ozone formation. These graphics show predicted sources of VOC and NOx emissions in the Washington region for the year 2005.



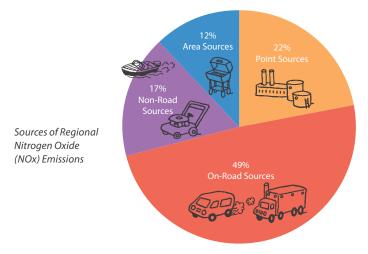
Sources of Regional Volatile Organic Compound (VOC) Emissions

How Ozone Is Formed

Ozone is formed on hot summer days when two types of compounds, nitrogen oxides (NOx) and volatile organic compounds (VOC), undergo chemical reactions in strong sunlight. These precursors, the compounds that form ozone, are released in our region daily through hundreds of activities that are part of everyday life. Sources producing ozone precursors fall into one of four categories:

- **1. Point sources** stationary sources such as power plants and factories.
- **2. On-Road sources** or mobile sources, such as cars and trucks,
- **3. Non-Road sources** or off-road sources such as construction machinery, lawn and garden equipment and recreational marine watercraft.
- **4. Area sources**, including locomotives, aircraft, bakeries, dry cleaners, openair combustion and alcohol or petroleum-based consumer products.

Other regions can transport ozone precursors into the Washington area. Winds coming from the west can carry NOx into our air from hundreds of miles away.





In addition to being generated locally, NOx and VOC emissions can be transported into Washington from the Midwest or the South. Winds from the south and west frequently blow ozone precursors into the region.



Improving AIR Quality

in the Metropolitan Washington Region

The percentage of Washington region air quality monitors showing a violation of the ozone standard indicates what portion of the region experiences unhealthy ozone levels on days the health standard is violated. The percentage of monitors registering unhealthy air decreased through the mid-1990s.

Percentage of Washington region air quality monitors violating the one-hour ground-level ozone standard

Monitoring Air Quality

To determine whether the region's air attains the federal standard for groundlevel ozone, ozone concentrations are monitored hundreds of times of day using air monitors located throughout the Washington region. Local air quality has improved dramatically since the Washington region began monitoring air quality 40-50 years ago. Levels of all six regulated pollutants, including ozone, have dropped significantly. Through the mid-1990s, the region continued to make good progress in reducing ozone levels. Though the region expects to see large drops in ozone within the next few years as a result of new federal and state controls on power plant and vehicle emissions, additional effort is required to ensure that the Washington region will attain the one-hour ozone standard.



Ozone concentrations are monitored hundreds of times of day using air monitors located throughout the Washington region. The locations of regional air quality monitors are indicated by green circles.



Improving Quality

in the Metropolitan Washington Region

The EPA-designated nonattainment area in the Metropolitan Washington Region is composed of the District of Columbia and certain Maryland and Virginia jurisdictions. State and local officials from these jurisdictions are working together through MWAQC to develop new air quality plans for the region.

The Effects Of Ozone On Our Health

The air quality standard for ground level ozone is designed to protect the health of the public, including people such as asthmatics, children and the elderly, who are especially sensitive to air pollution. Though ozone high in the atmosphere benefits living organisms by protecting them from harmful ultraviolet radiation, ground-level ozone can damage lung tissue in people and animals. Ozone can cause breathing problems in healthy people and animals, including chest pains, coughing, nausea, throat irritation, and congestion. In people already experiencing health problems, ozone can worsen bronchitis, heart disease, emphysema and asthma and reduce lung capacity.

The ozone standard also protects public welfare and the environment by ensuring that pollution does not reduce visibility or damage wildlife. Ozone causes the same breathing problems and lung damage in animals as it causes in people. High levels of ozone prevent plants from making and storing food, making them more susceptible to damage from disease, insects and bad weather. This results in millions of dollars of annual damage to agricultural crops and national parks. Ozone also causes deterioration of buildings, monuments and other man-made structures. Compounds that form ozone also contribute significantly to Chesapeake Bay.pollution.

For further information about air quality and air quality planning in the Washington region, please visit: www.mwcog.org/ environment/air where you can access current air quality conditions and daily air quality forecasts and read our region's air quality plan. To learn about actions citizens can take to clear the air. please visit: www.cleanairpartners. net/and www.commute

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Air Quality Planning in the Metropolitan Washington Region

Because people generate NOx and VOC as part of everyday life, the emissions that cause ozone formation will probably never go away. In fact, without efforts to reduce them, emissions in the Washington region can continue to increase as the number of people in the region grows. In order to reduce emissions and improve air quality in metropolitan Washington, the governors of Maryland and Virginia and the mayor of the District of Columbia certified the Metropolitan Washington Air Quality Committee (MWAQC) to develop a regional strategy to control ground-level ozone. MWAQC includes as its members elected officials from 20 cities and counties in the Washington nonattainment area, plus representatives from the three states' legislatures, air agencies and transportation agencies.

Key Acronyms and Terms

EPA

Environmental Protection Agency

MWAQC

Metropolitan Washington Air **Quality Committee**

Nitrogen oxides

voc

Volatile organic compounds

SIP

State Implementation Plan

One-hour ozone standard

Maximum allowable quantity of ground-level ozone during a given hour, determined by EPA

Nonattainment Area

a region violating a national air quality standard

State Implementation Plan (SIP)

Under the Clean Air Act, a State Implementation Plan (SIP) is the primary tool for determining how and when a region will attain an air quality standard. During the SIP process, a region identifies emission sources that contribute to nonattainment, then determines the amount of emissions that must be reduced in order for the area to reach attainment and selects emission reduction measures most appropriate for the area. MWAQC has primary responsibility for developing SIPs that contain pollution control measures necessary to achieve the air quality standard for ground-level ozone. MWAQC is staffed by the Metropolitan Washington Council of Governments (MWCOG).



Metropolitan Washington Region State Implementation Plan | SIP

Quality



National Air Quality Standards Every region in the U.S. is required to monitor its air to ensure that it complies with the U.S. Environmental Protection Agency (EPA)'s national air quality standards. A region with air containing more pollution than the standards permit becomes a nonattainment area. EPA assigns a date by which each nonattainment region must meet the air quality standard. This attainment date depends upon the severity of the region's pollution. Each nonattainment area must prepare a State Implementation Plan (SIP) to show how it plans to improve the air in time to meet the standard. The Plan to Improve Air Quality in the Washington, DC-MD-VA Region is the latest SIP in a series beginning in the 1970s. In that sense, it revises previous SIPs. This SIP contains some of the same information presented in previous documents, but it also includes new information based on the latest available data important to air quality planning.

planning assumptions or requirements change significantly, such as new federal or state regulations, or new air quality planning data or modeling techniques, or when a region achieves or fails to meet the air quality standard by the attainment date. A revised plan is also necessary if the region wishes to alter a major component of the plan, such as the mobile source emissions budget, which is used to ensure that emissions from new transportation projects will not cause the region to miss the air quality attainment goals.

This SIP revision is being performed because the SIP approved in 2000 requested extending the Washington region's attainment date from 1999 to 2005. This extension was requested because much of the region's ozone nonattainment problem is due to pollution tansported from areas outside of Virginia, Maryland and the District of Columbia. EPA found the SIP submitted in 2000 acceptable and approved the

Improving AIR Quality

Metropolitan Washington Region State Implementation Plan

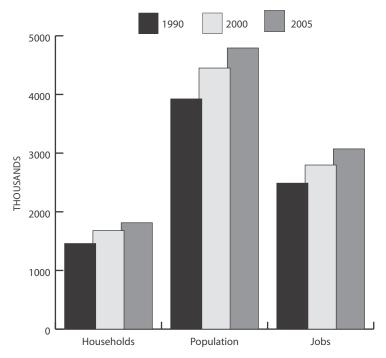
requested extension, but subsequent litigation overturned that decision. As a result, EPA declared that the Washington region did not attain the standard in 1999, as it should have. EPA was then obligated to assign the region a later attainment date and require a new, more stringent air quality plan. This action requires that the Metropolitan Washington Air Quality Committee (MWAQC), develop a new SIP. MWAQC is the regional air quality planning committee with primary responsibility for developing SIPs to achieve the air quality standard for ground-level ozone.

Elements of the SIP The SIP contains an accounting of VOC and NOx emissions, called emission inventories, at specific points in time over a long-term planning horizon. The beginning inventory is called the baseline inventory. In this case the baseline is 1990, and it serves as the starting point for air quality planning. It represents the amount of human-made emissions for the four source categories: point, on-road, non-road and area.

The baseline inventory is the starting point used to calculate the inventory for the future attainment year, the year the region expects to meet the air quality standard. Because the amount of emissions in the region is directly related to the number of people and businesses, the attainment year inventory is calculated using population, household and employment data for the region. The Washington region must attain the ozone standard in 2005. To meet that goal, the SIP must show that by 2005, NOx and VOC emissions will be reduced to levels that protect the public, and that emissions reductions take place every year between 1990 and 2005.

Reducing Emissions The Clean Air Act requires that emissions must be reduced continually below the levels that occurred in 1990. This includes offsetting increased emissions resulting from the rapid growth occurring in the region.

Our region has experienced tremendous growth between 1990 and 2005. Along with this high growth come even more activities that produce emissions, such as driving, mowing lawns, painting houses and buildings, generating electricity, construction and hundreds of other actions.



Predicted growth in the number of households, population and jobs in the region from 1990 to 2005

Key Terms

Metropolitan Washington Air Quality Committee (MWAQC):

a regional air quality planning committee consisting of elected officials from 20 cities and counties in the Washington nonattainment area, plus representatives from state legislatures, air agencies and transportation agencies. MWAQC has primary responsibility for developing SIPs to achieve the air quality standard for ground-level ozone.

Emissions Inventories: accounting of quantity and source of pollutants produced in a region

Baseline Inventory: forms the starting point for calculating how emissions will change over a period of time

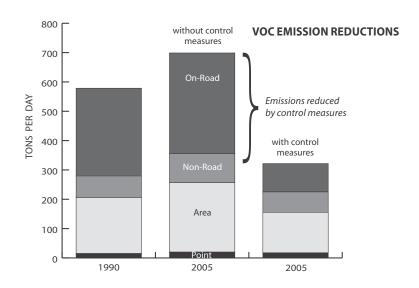
Control Strategies: initiatives designed to reduce pollution

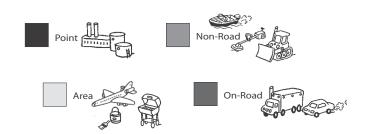
Mobile Source Emissions Budget: maximum emissions allowable from mobile sources

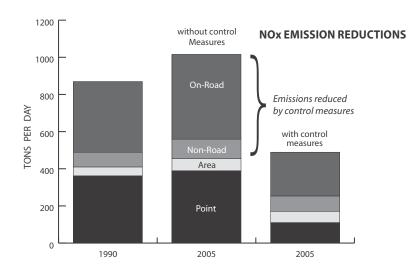
Improving AIR Quality

1990 baseline emissions level, 2005 uncontrolled level, and 2005 emissions level after controls are in place.

Metropolitan Washington Region State Implementation Plan







The SIP is also the plan to reduce these emissions. It presents the regulations, called control strategies, established to reduce emissions and help attain the ozone standard. The SIP calculates the reductions from each control measure and totals them to demonstrate that the region will reduce emissions to the levels required by the EPA. The representatives constituting MWAQC decide which control strategies to implement and when they must be in place. The control strategies become law and the state and local governments are committed to implementing them.

Control Strategies in the SIP are targeted at each of the four source categories. Together, they achieve deep reductions that will enable the region to achieve the ozone standard in 2005. The control measures achieving the biggest reductions are:

- Point Sources Power plant controls to reduce smokestack NOx emissions
- Area Sources
 - Vehicle refueling controls to capture gasoline vapors
 - Reformulated surface coatings, such as paints and stains, to reduce vapors
 - Auto body refinishing controls to recapture paint and varnish vapors
- Non-road Sources National controls on machinery such as construction, boats and lawn and garden equipment
- On-Road Sources Controls on cars and trucks, such as:
 - Inspection and maintenance programs to maintain vehicle emission systems
 - · Cleaner burning gasoline
 - National controls to require cleaner engines on all new cars, SUVs and heavy trucks

In all, 33 different control measures have been or will be enacted to achieve clean air in the Washington, DC, region.

Improving AIR Oualitu

Metropolitan Washington Region State Implementation Plan

Iransportation Planning Because transportation planning has an impact upon air quality by enabling more vehicles to travel on our region's roads, Congress enacted special requirements that apply to emissions from on-road vehicles. Congress required that each SIP place a cap on mobile emissions, known as a mobile source emissions budget. When transportation planners prepare regional transportation plans, they must analyze all proposed improvements to the transportation system in future years and ensure that emissions will not be greater than the emissions budget set in the SIP. This ensures that the region will meet the goal of clean air in 2005 and future years.

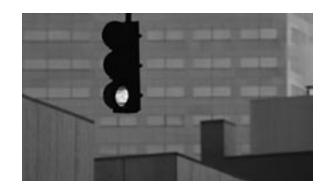
The emissions budget proposed in the SIP is set at a level that allows us to make road improvements deemed necessary to our growing region. It is based on anticipated 2005 on-road emissions after accounting for all control measures designed to reduce emissions from vehicles or the number of miles traveled.

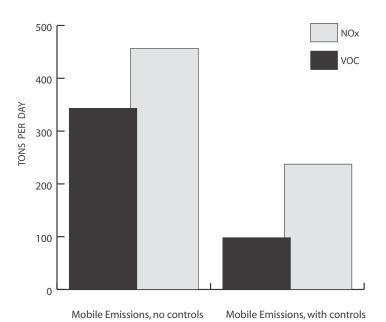
Penalties The SIP is a commitment by the states and localities governing the region to implement the regulatory measures that guide the plans. If the results are not achieved, or if the commitments are not met, there are harsh penalties for the region's residents and businesses. These include large sources of pollution paying a fee, losing all federal money for transportation projects, and developing and imposing a more restrictive plan. More importantly, residents continue to breathe unhealthy air.

Because meeting the clean air goals is a serious endeavor, the SIP also contains contingency measures that will go into effect if the region does not achieve the federal health standard by the deadline. These could include additional controls on locomotive engines, fuel additives for large trucks and construction equipment and increased enforcement of existing regulations.



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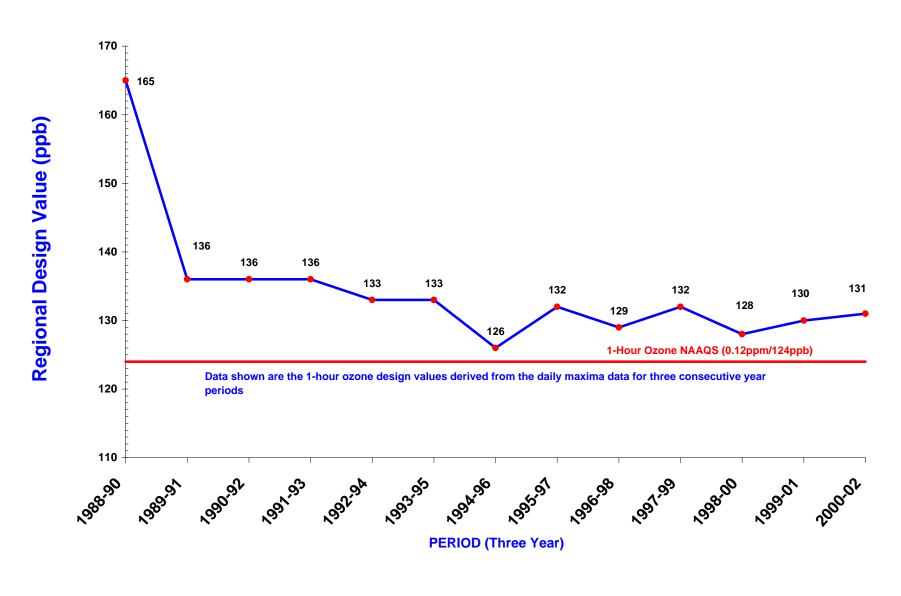
With the proposed SIP Mobile Budget the region's motor vehicle emissions will not exceed VOC: 98.1 tons/day and

Next Steps

NOx: 237.4 tons/day

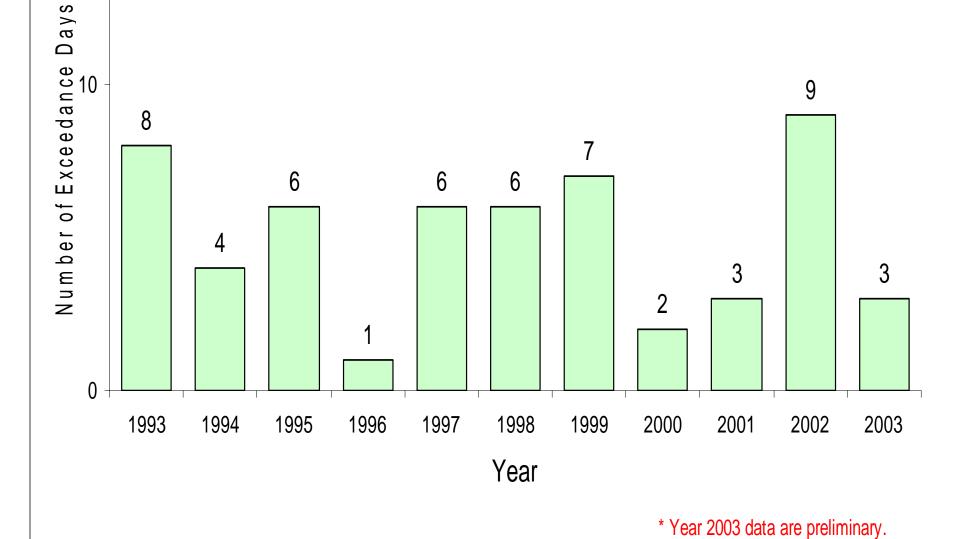
Maryland, Virginia and the District are holding public hearings on the SIP to gather comments. The states will address those comments and may make changes to the SIP. After that, the SIP is submitted to the EPA for review. EPA checks the SIP thoroughly for technical accuracy and to ensure that it contains the necessary elements. EPA will then comment on the SIP and issue a rulemaking to adopt it. EPA will also review the mobile source emissions budget to determine if it is adequate. MWAQC revisits the SIP periodically to review assumptions and determine if the region is still on course to meet air quality standards.

1-Hour Ozone Design Value Trend Washington Non-Attainment Area (1990-2002)

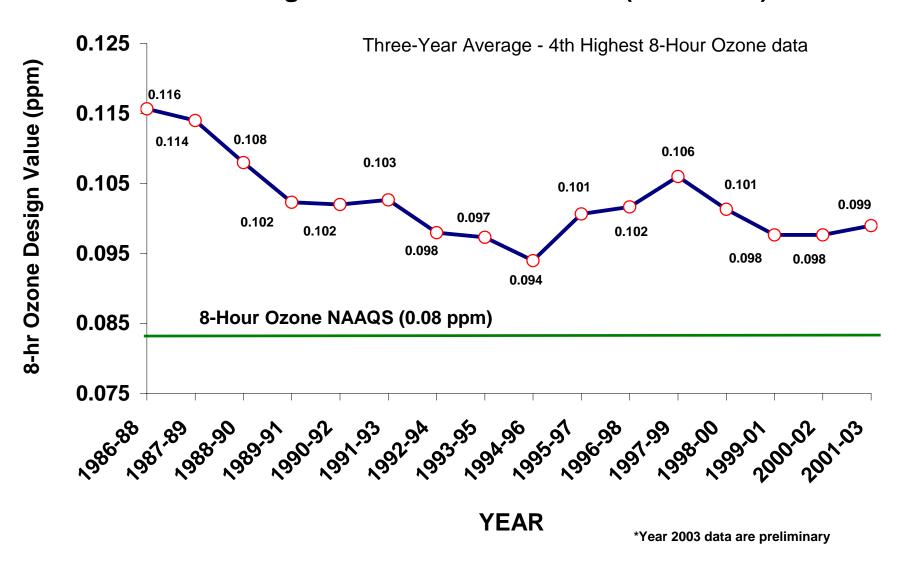


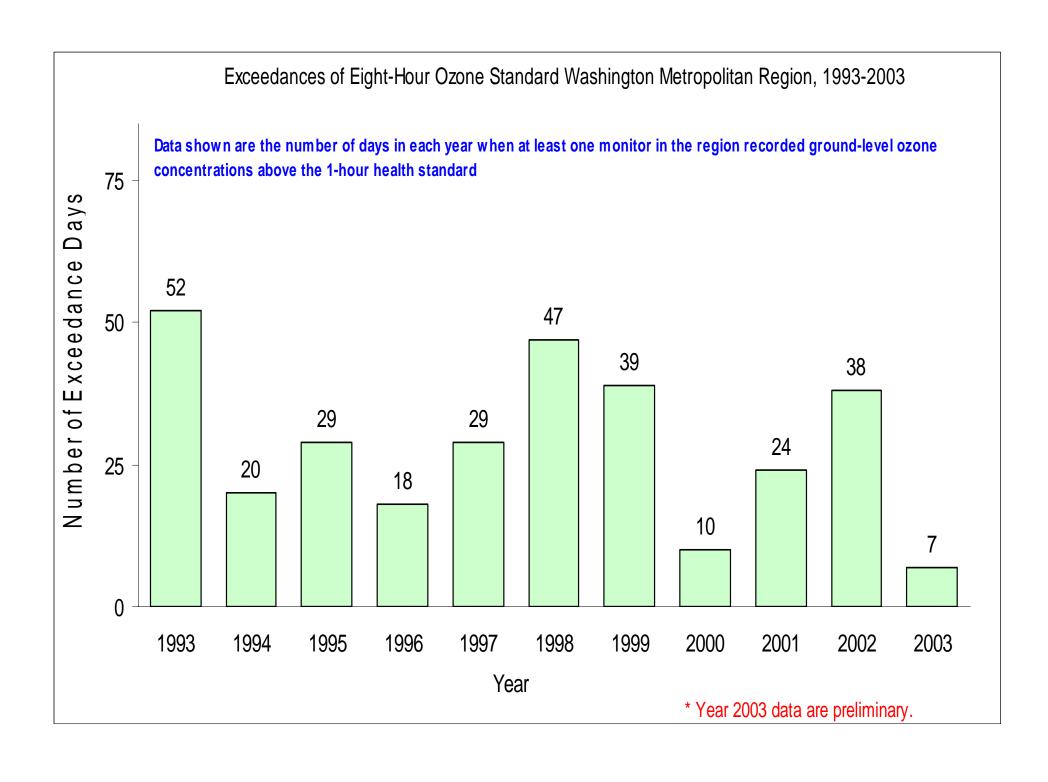
Exceedances of One-Hour Ozone Standard Washington Metropolitan Region, 1993-2003

Data shown are the number of days in each year when at least one monitor in the region recorded ground-level ozone concentrations above the 1-hour health standard



8-Hr Ozone Design Value Trend Washington Non-Attainment Area (1988-2003)









Transportation Conformity Basics

based on FHWA "Transportation Conformity: Basic Guide"

Metropolitan Washington Air Quality Committee January 28, 2004

Background



Clean Air Act of 1977 included a provision requiring transportation investments to be consistent with (conform to) regional air quality plans.

What is Transportation Conformity?



Conformity ensures that Federal funding and approval are given to transportation activities that are consistent with air quality goals.



Ensures that these transportation activities do not worsen air quality or interfere with the "purpose" of the SIP

What is Transportation Conformity?

According to the CAA, transportation plans, programs, and projects cannot:



create new violations of Federal air quality standards



increase the frequency or severity of existing violations of the standards



delay attainment of the standards

What Actions are Subject to Conformity?

The CAA requires that transportation





plans

projects

in nonattainment or maintenance areas funded or approved by the Federal Highway Administration (FHWA) or Federal Transit Agency (FTA) be part of a conformity demonstration.

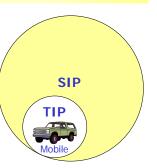
How Do Transportation Plans Relate to the SIP?

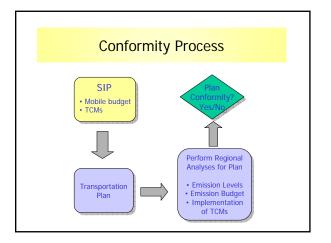
- The region's air quality plan, the SIP, controls emissions from four sectors producing ozone-forming pollution.
- The TIP affects only one of these sectors: mobile emissions.



How Do Transportation Plans Relate to the SIP?

- The SIP sets the *mobile budget*, the maximum allowable emissions from vehicles.
- TPB must ensure that the regional transportation plan does not result in emissions above this level.





What are Transportation Plans?



CLRP 2005-2025

Transportation Improvement Program Multi-year list of projects proposed for funding or approved by FHWA or FTA

Constrained Long-Range Plan 20-year perspective on transportation investments for their region.

The CLRP and TIP must result in emissions consistent with those allowed in the air quality plan.

Who Makes Conformity Determinations?







National Capital Region Transportation Planning Board FHWA
Federal Transit
Administration (FTA)

Conformity must be done every three years, or when changes are made to plans, TIPs, or projects. TPB usually performs conformity determinations annually.

Changing Planning Requirements

Just as air quality planning requirements will change with the 8-hour standard, transportation planning requirements will change.







Legislation proposes changes to conformity process 8-hour mobile budgets needed

ed

New guidance on 8-hour conformity

Cooperation Between Planning Boards



MWAQC and TPB must continue to work together to ensure continuity of air quality and transportation planning and programs.



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