

AIR & CLIMATE PUBLIC ADVISORY COMMITTEE

Air Quality Planning in Metropolitan Washington

New Member Briefing

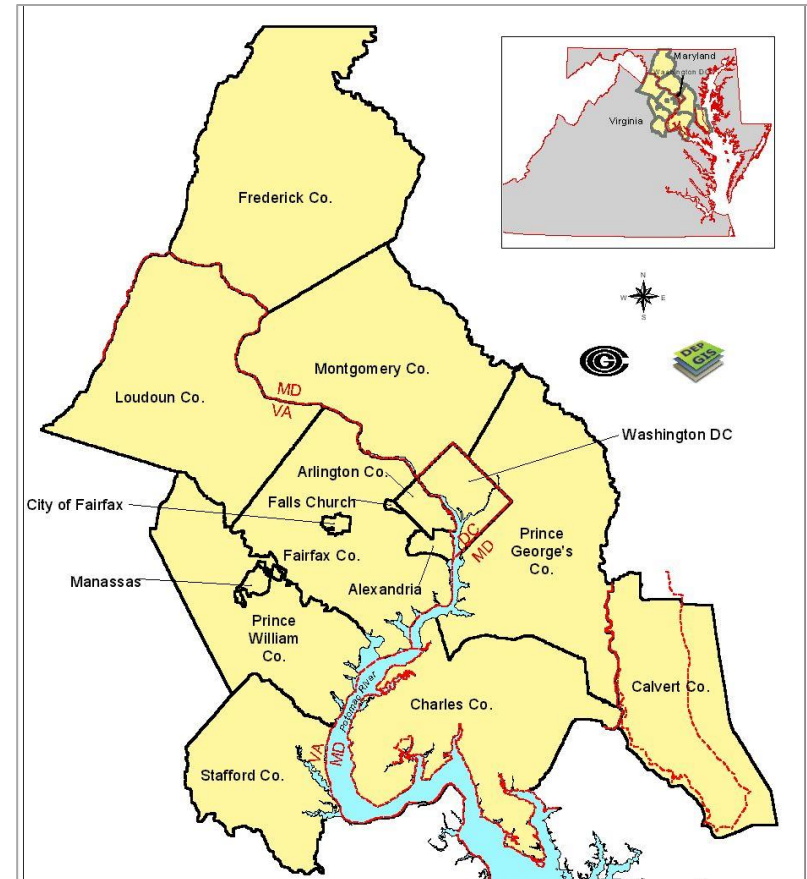
Clean Air Legislative History

- Regulates emission of air pollutants from human sources
 - Classifies areas that do not meet the federal health standard as nonattainment areas (marginal, moderate, severe)
 - Criteria pollutants include Ozone, PM, CO, NO₂, SO₂, Pb
 - NAAQS, SIPs, NSPS, PSD, NESHAPs
 - Stationary and mobile source controls; interstate transport
 - Acid rain, toxics regulation
 - Monitoring, research & assistance to states
- Legislation
 - Air Pollution Control Act of 1955
 - Clean Air Act of 1963
 - Motor Vehicle Air Pollution Control Act of 1965
 - Air Quality Act of 1967
 - Clean Air Act of 1970
 - Clean Air Act Amendments of 1977
 - Clean Air Act Amendments of 1990



Metropolitan Washington Air Quality Committee

- Designated body for air quality planning for the Washington nonattainment Region
- Created in 1992
- Authority derived from certification from the Mayor/Governors as the region's air quality planning entity



Role of MWAQC

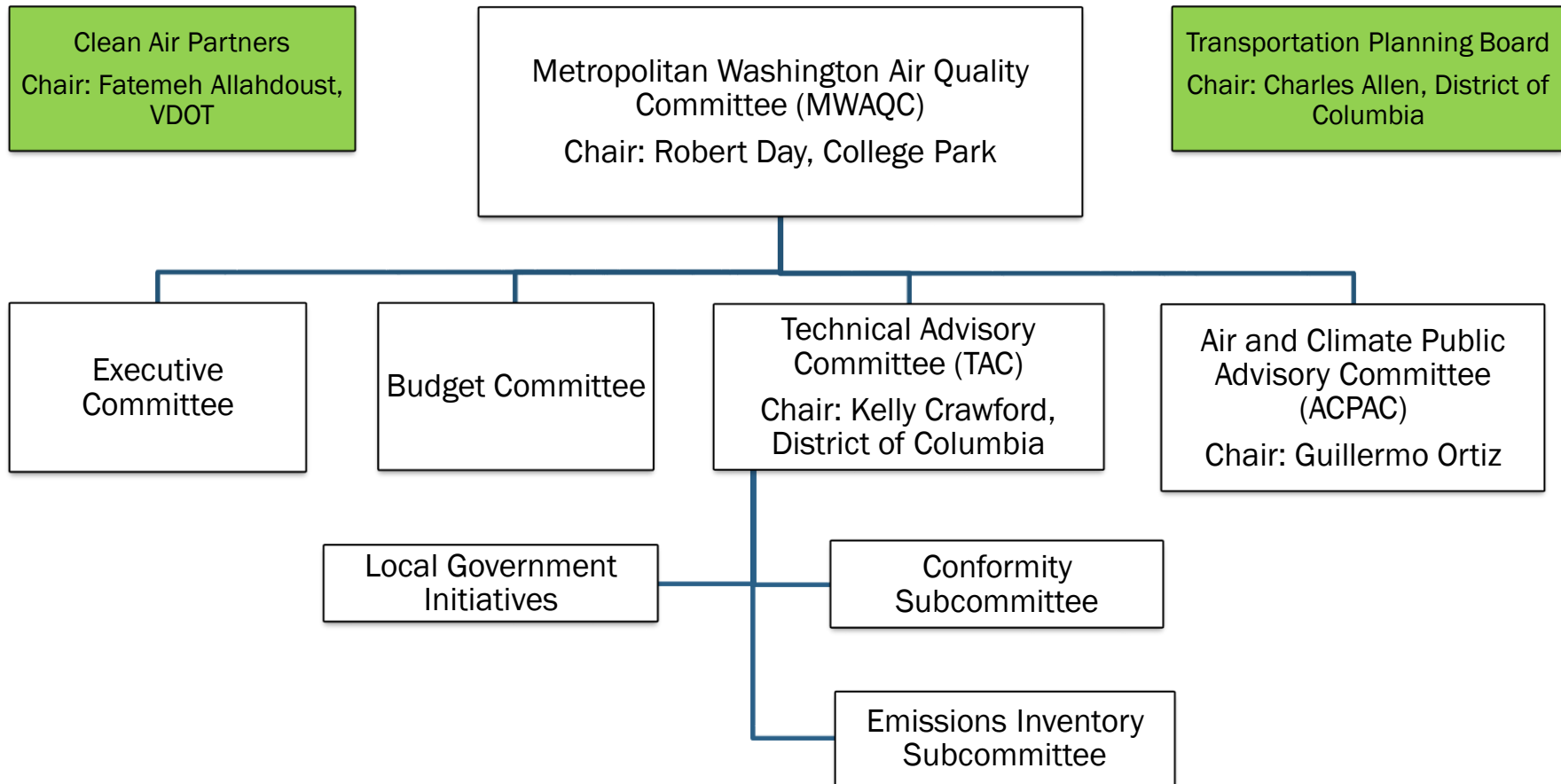
- Prepare/revise region-wide State Implementation Plans (SIP)
 - Demonstrate attainment of federal national ambient air quality standards (NAAQS) for criteria pollutants (Ozone & Fine Particles)
 - Demonstrate rate of progress reducing criteria air pollutants
 - Include inventories & emission budgets
 - Provide a maintenance plan after the region attains compliance
- Perform other functions to improve regional air quality
- Cooperate with other committees
 - TPB, COG Board of Directors, policy committees (CEEPC/CBPC)
 - Tri-County Council for Southern Maryland
 - State air & transportation agencies and local governments
- Develop and maintain a public participation & education program
- Advocate for plan elements

Membership

District of Columbia (6)	
Mayor (2), Council (2)	
District Department of Energy and Environment	
District Department of Transportation	
Maryland (20)	Virginia (17)
City of Bowie	City of Alexandria
City of College Park	City of Fairfax
City of Frederick	City of Falls Church
City of Gaithersburg	City of Manassas
City of Greenbelt	City of Manassas Park
City of Rockville	Arlington County
City of Takoma Park	Fairfax County (3)
Frederick County	Loudoun County
Montgomery County (1 Executive, 2 Council)	Prince William County (2)
Prince George's County (1 Executive, 2 Council)	Stafford County (1-hour ozone issues only)
Calvert County	Virginia General Assembly (2)
Charles County	Virginia Department of Environmental Quality
Maryland General Assembly (2)	Virginia Department of Transportation
Maryland Department of the Environment	Other (1)
Maryland Department of Transportation	Transportation Planning Board Chair or Designee



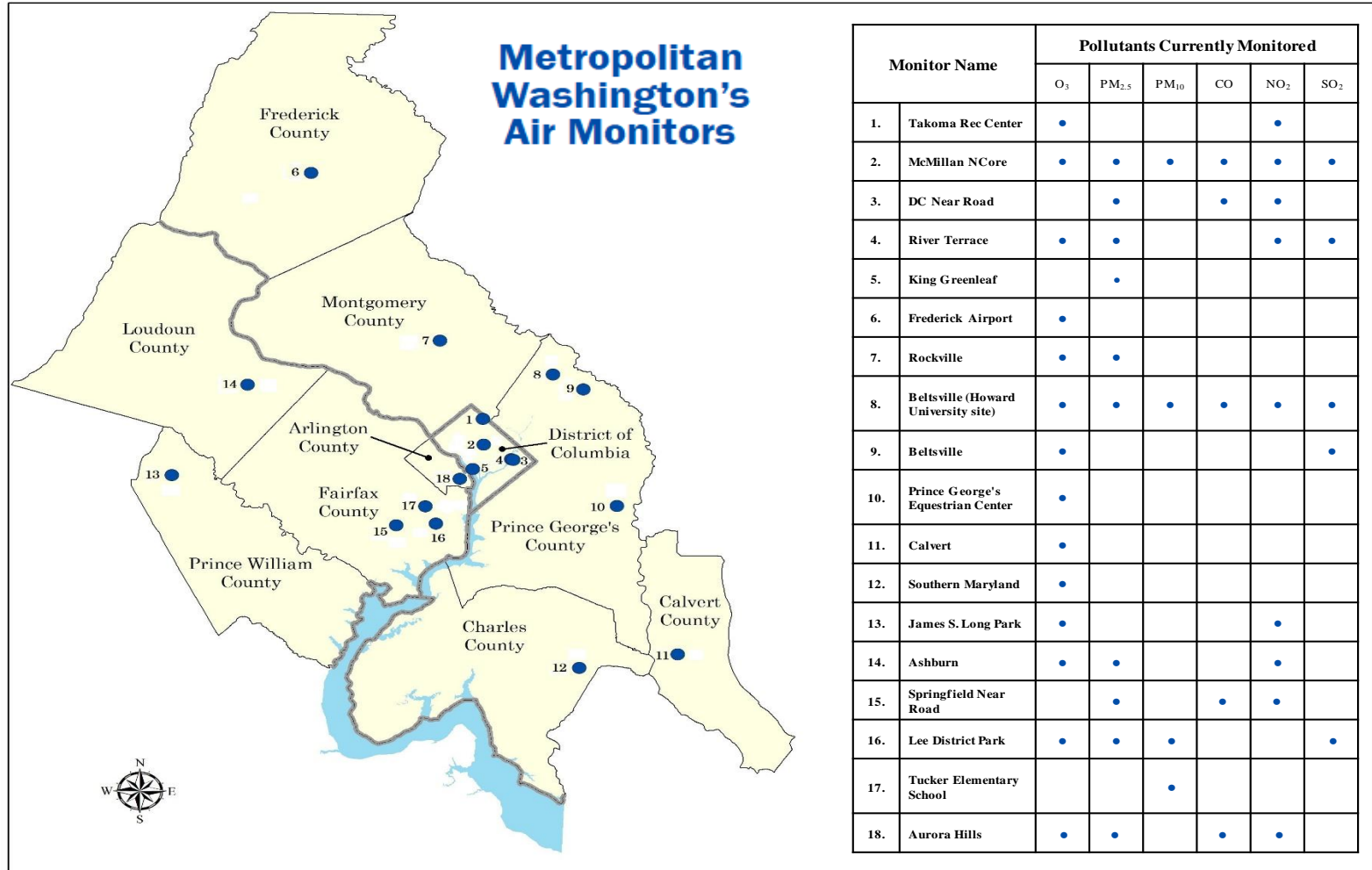
Organizational Structure



MWAQC and State Air Quality Planning

- COG
 - MWAQC – Region-wide air quality planning
 - Develop regional air quality plans
 - Develop regional emissions inventories
 - Implement regional control measure programs
 - Coordinate with TPB on transportation conformity
 - Forecast & report regional air quality
 - Clean Air Partners
 - Serve metropolitan Washington and Baltimore
 - Educate on air quality risks & individual actions to improve air quality
 - Air Quality Index & notices
- State air agencies
 - Statewide air quality planning and permit facilities
 - Issue individual source permits
 - Develop state level emissions inventories
 - Develop & enforce state regulations
 - Develop & implement state-wide measures for area, mobile, and point sources – i.e. emissions & inspection programs

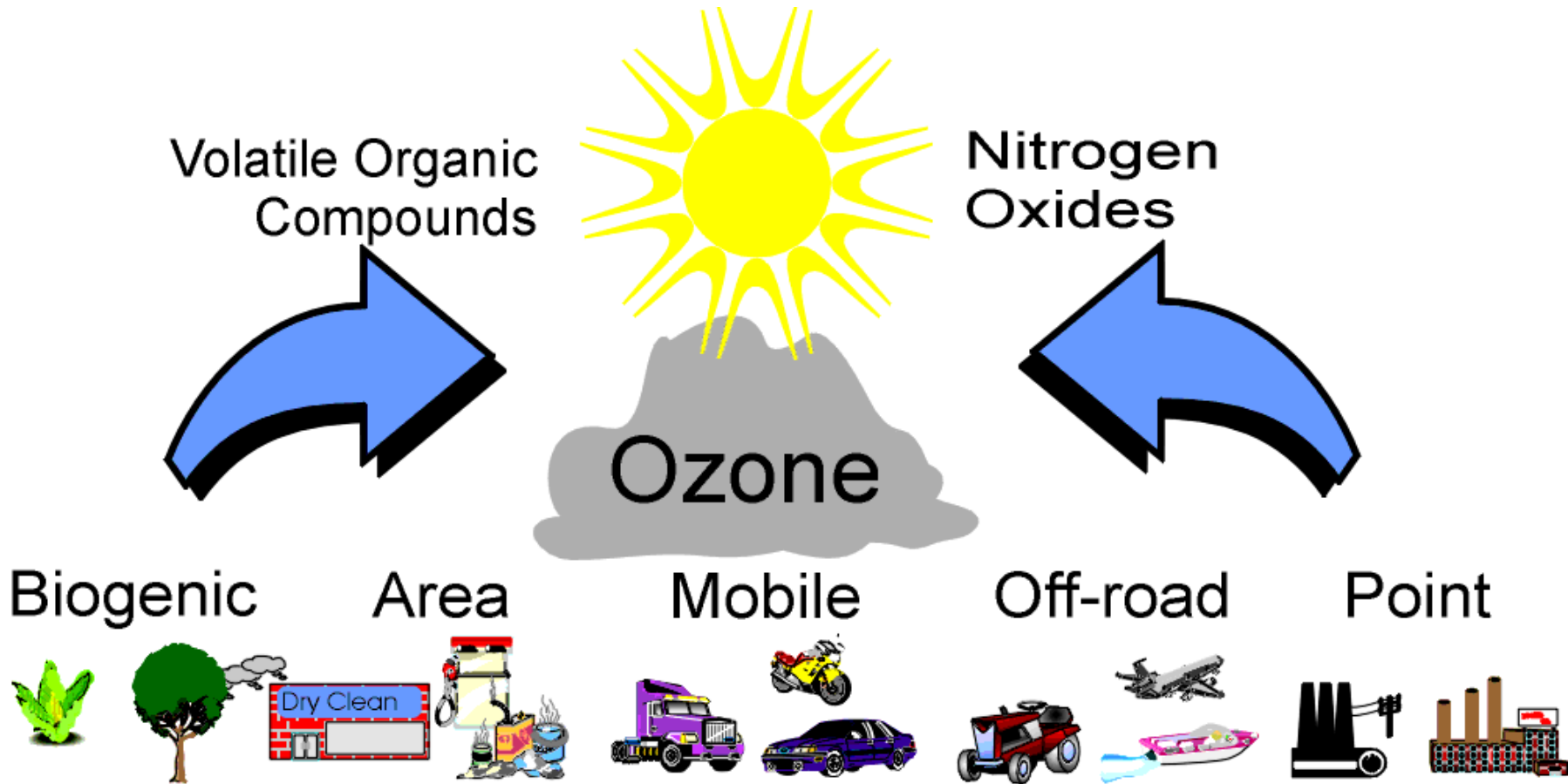
Monitors



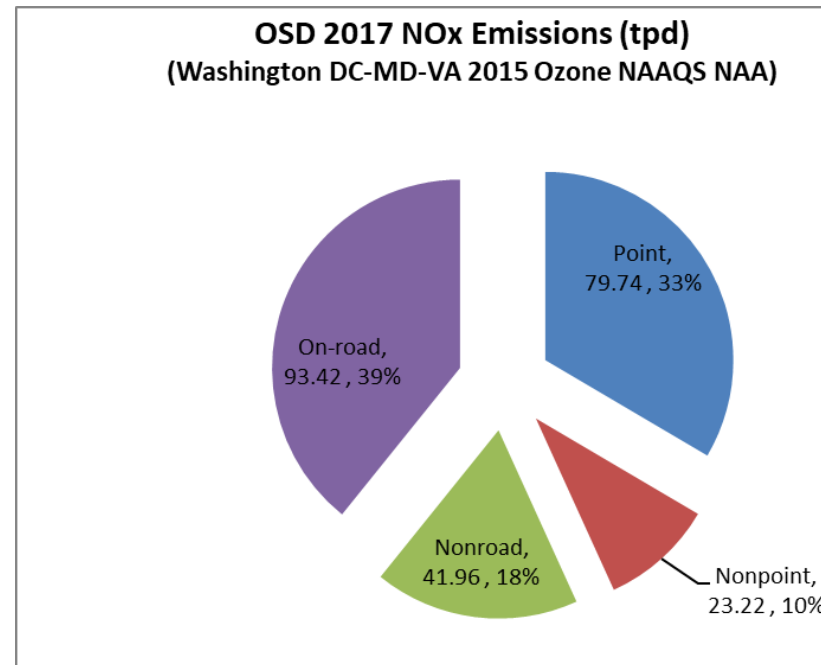
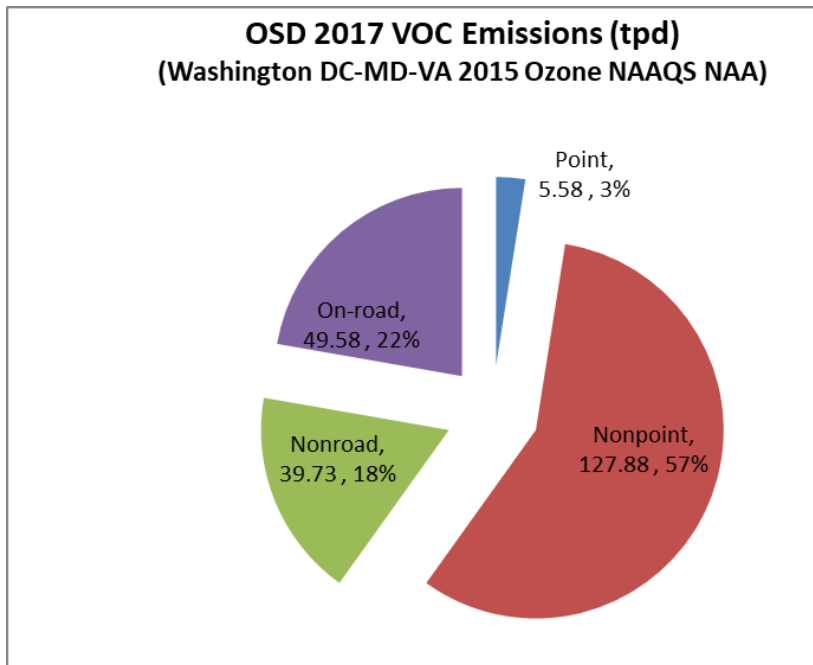
The Air Quality Index (AQI)

AQI Range	AQI Color	Health Descriptor
0- 50	GREEN	Good
51 - 100	YELLOW	Moderate
101 - 150	ORANGE	Unhealthy for Sensitive Groups
151 - 200	RED	Unhealthy
201 - 300	PURPLE	Very Unhealthy

Ground-Level Ozone

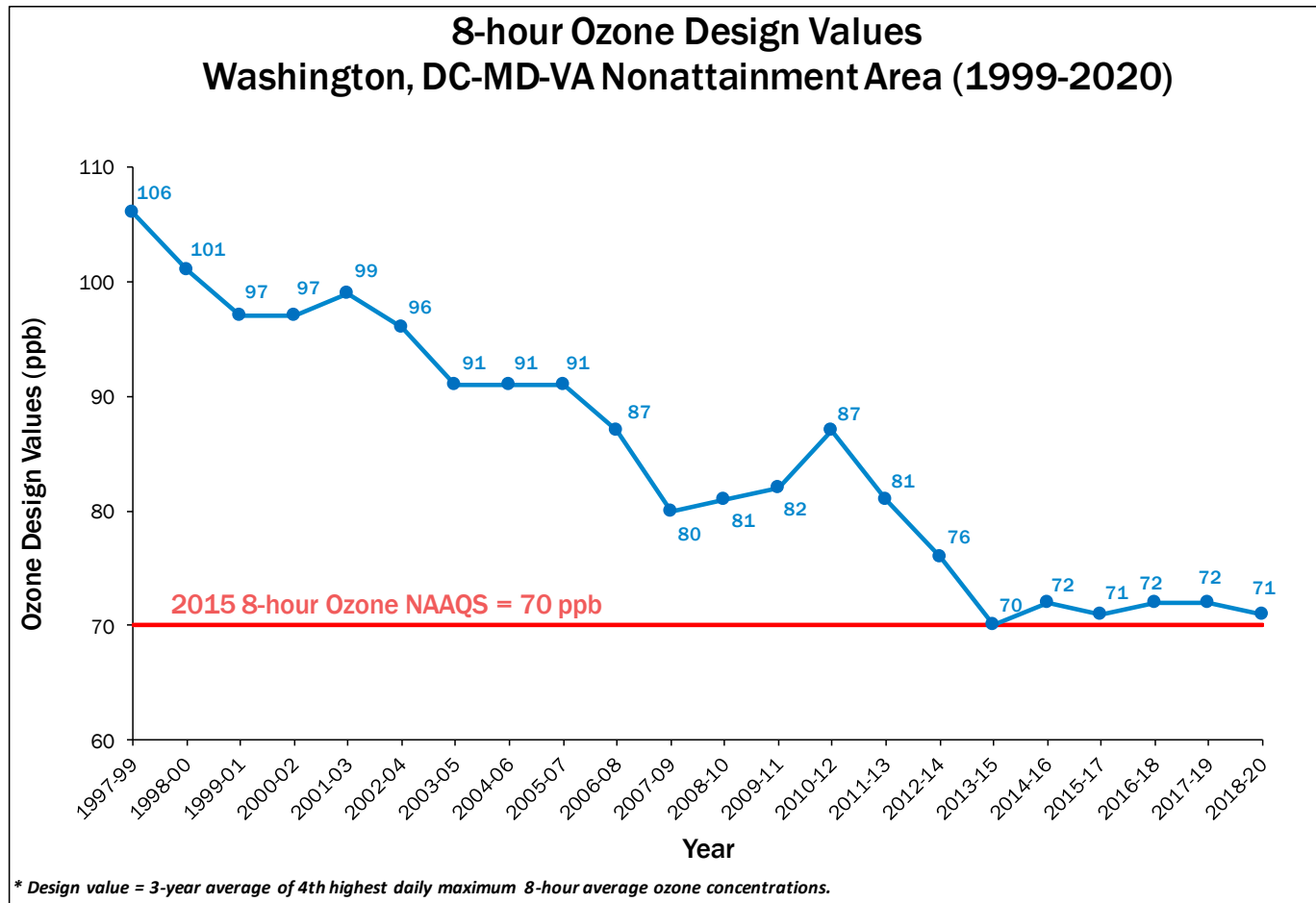


Sources of Ozone Forming Emissions



Source: Base Year 2017 Emissions Inventory (Submitted to EPA in 2020)

Metropolitan Washington Ozone Trends

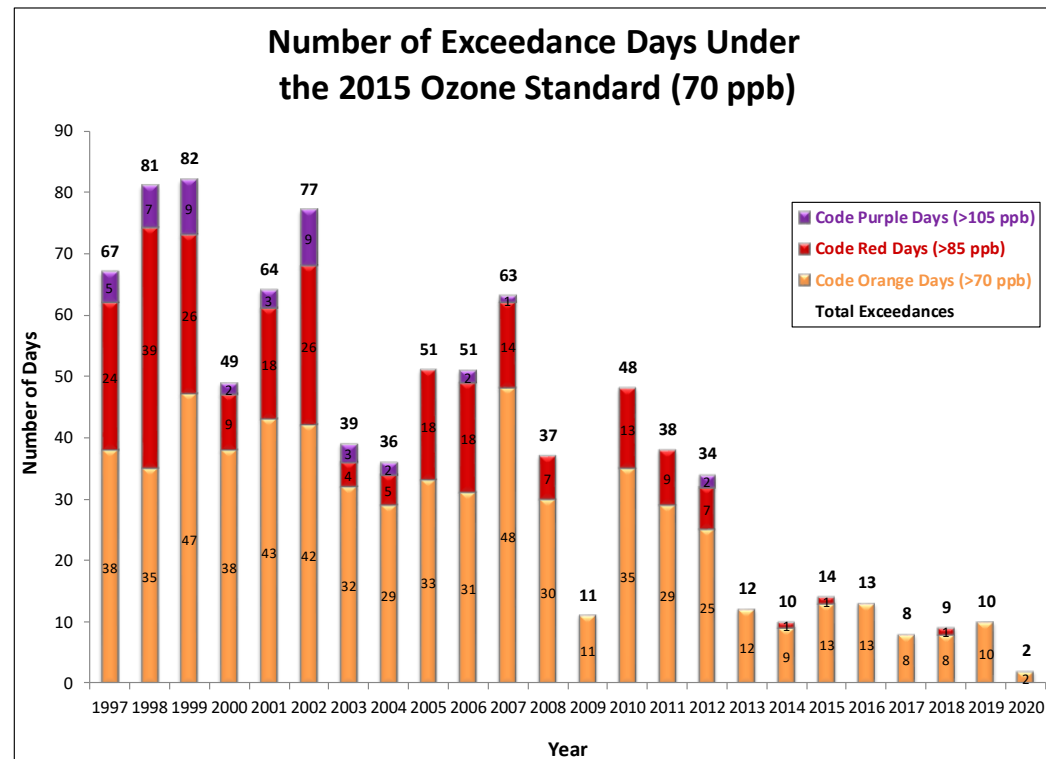


* 2020 data is draft.



Metropolitan Washington Ozone Trends

- Striving for no unhealthy air days
- 2020 Ozone Season
 - 32 Code Yellow Days
 - 211 Code Green Days
- 2019 Ozone Season
 - 83 Code Yellow Days
 - 152 Code Green Days
- 2018 Ozone Season
 - Season extended - March to October
 - 77 Code Yellow Days
 - 159 Code Green Days
- 2017 Ozone Season
 - 83 Code Yellow Days
 - 154 Code Green Days



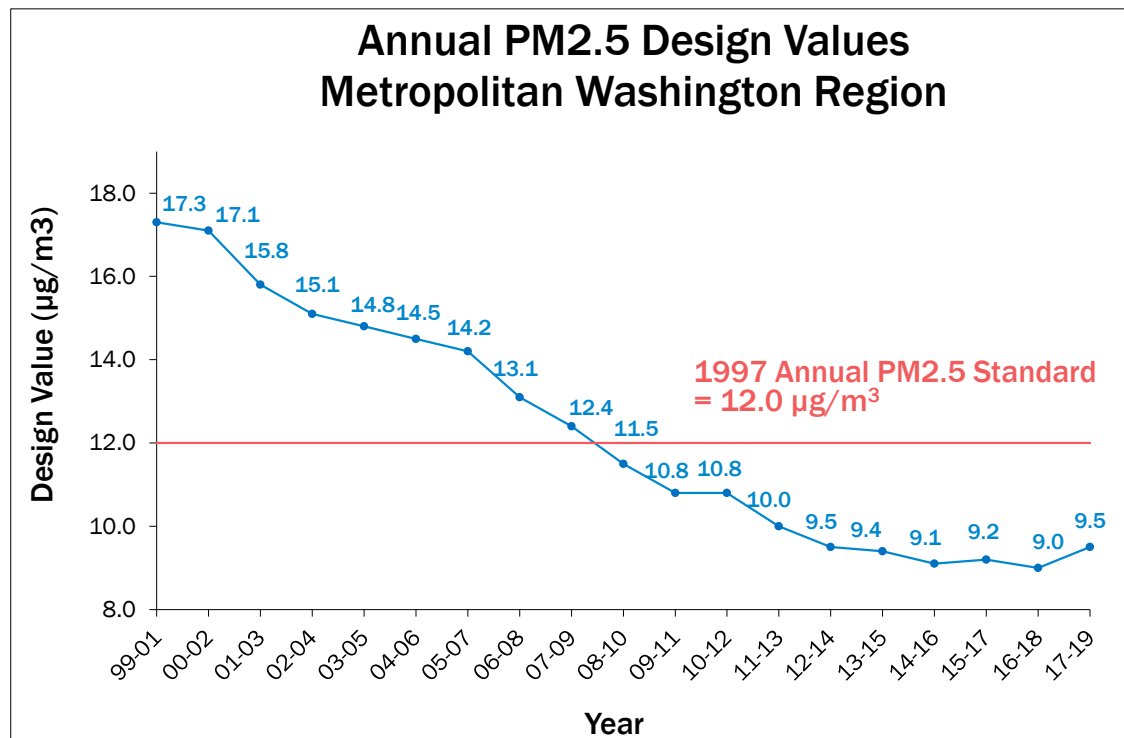
2015 Ozone NAAQS Attainment Schedule

- Washington DC-MD-VA marginal nonattainment issued August 3, 2018
- Requires
 - Base year emissions inventory due within 2 years – submitted in 2020
 - Transportation conformity demonstration
 - Periodic emission inventory updates, major source emission statements, RACT determination & new source review program
- Attainment date 3 years from nonattainment designation
 - Use 2018-2020 data
- Attainment
 - Did not meet the federal standard by the 2020 deadline
- Non-attainment?
 - Possible extensions (two, one-year each) if showing progress
 - Region could be bumped to moderate nonattainment after August 2021
 - Requires State Implementation Plan
 - Demonstrate attainment by 2024 (use 2020-2023 data)



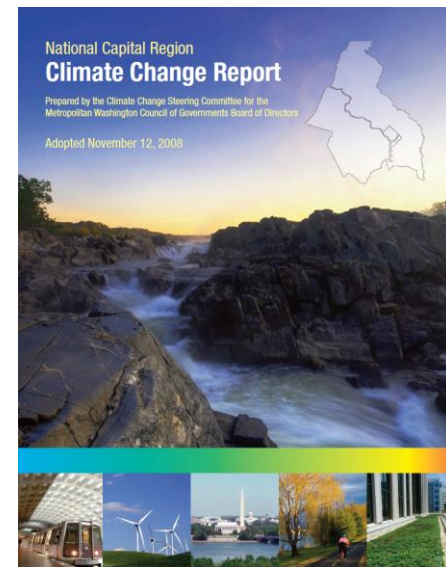
Fine Particles (PM_{2.5})

- Chemical, particulate matter or aerosol
- From combustion, cars & trucks, construction, power plants, industry
- Causes respiratory problems, impairs visibility
- COG/state forecasting & reporting



Climate, Energy, Environment, & Policy Committee (CEEPC)

- Created by the COG Board of Directors in 2009
 - Provide leadership on climate change, energy, green building, alternative fuels, solid waste & recycling issues.
 - Help support area governments work together to meet the goals in the 2008 *National Capital Region Climate Change Report*.



Climate, Energy, Environment, & Policy Committee (CEEPC)

- 2030 Climate & Energy Action Plan
 - Reduce energy consumption
 - Increase share of renewables
 - Advance sustainable regional mobility
 - Increase sustainable urban development
 - Move towards zero waste
 - Build regional resilience
 - Protect equity & health
 - Grow the regional clean economy
- Activities
 - Built Environment & Energy Advisory Committee
 - Climate and Energy Action Plan support and Resource Guide
 - Climate and Energy Awards Program
 - Technical assistance
 - Grant support
 - Cooperative purchasing



What Local Members Can Do

Renewable Energy Programs	Energy Efficiency Programs	Mobile Vehicle Programs
<ul style="list-style-type: none"> • Green power purchasing • Renewable Power Purchase Agreements • Community choice aggregation <ul style="list-style-type: none"> • Opt-out/Opt-in • Community solar/solar co-ops 	<ul style="list-style-type: none"> • Building energy efficiency <ul style="list-style-type: none"> • New building performance standards; Net-zero • Existing buildings benchmarking & improvements • Financing (PACE, Green Banks) • Microgrids/CHP • Back-up solar + storage 	<ul style="list-style-type: none"> • Idle reduction <ul style="list-style-type: none"> • On-road & off-road • Programs, infrastructure & technology • Adopt California car standard • EV infrastructure & vehicle expansion • Bike & pedestrian infrastructure

Other measures

- Activity centers with high capacity transit
- Tree canopy improvements
- Healthy soils for sequestration
- Local procurement/supply chain
- Waste management
- Advocacy

[What We Can Do Report
Climate & Energy Action Plan
Gold Book](#)



Air Quality Resources

MWAQC Committee Page

- <https://www.mwcog.org/committees/metropolitan-washington-air-quality-committee/>

Air Quality Trends Report

- <https://www.mwcog.org/documents/2017/09/27/air-quality-trends-air-quality-air-quality-data/>

Current Air Quality Data & Forecasts

- <https://www.mwcog.org/environment/planning-areas/air-quality/air-quality-forecast/>
- <https://www.cleanairpartners.net/current-and-forecasted-air-quality>

Historical Air Quality Data

- <https://www.cleanairpartners.net/historical-air-quality>

Download the free Air Quality App and Sign Up for EnviroFlash

- <http://www.cleanairpartners.net/>

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Council of Governments