

# AIR QUALITY PLANNING ACTIVITIES

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## EPA Clean Data Determination and Demonstration of Attainment by Attainment Date Rulemaking

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# Presentation Outline

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- Background on air quality
- Summarize recent EPA rulemaking pertaining to the DC-MA-VA nonattainment area
- Explain how this fits into air quality planning, including agency/committee involvement



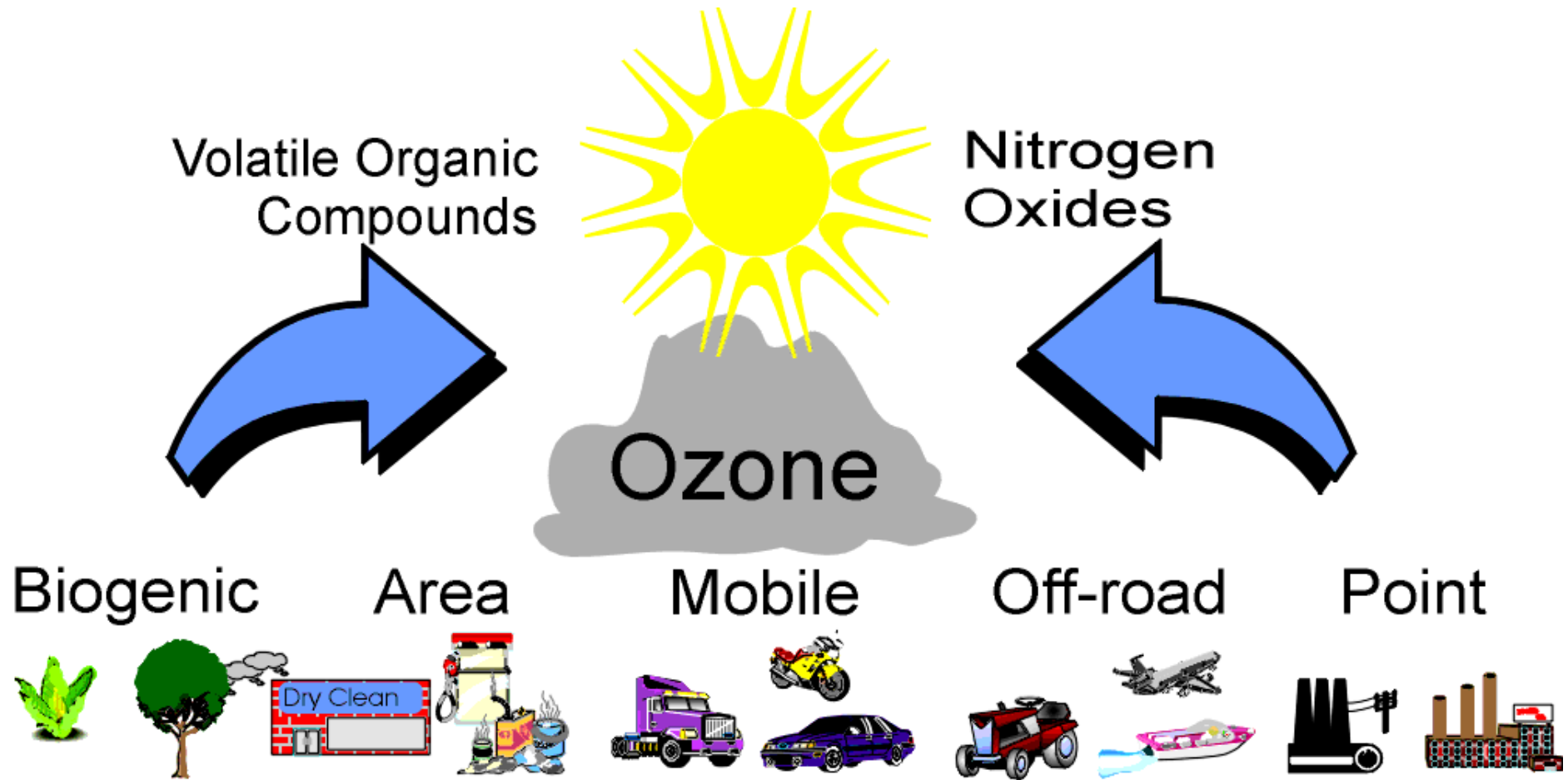
# National Ambient Air Quality Standards (NAAQS)

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- The Clean Air Act (CAA), last amended in 1990, requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for six principal air pollutants (“Criteria” air pollutants).
  - **Ozone (O<sub>3</sub>), Particulate Matter (PM), Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>), Lead (Pb), and Sulfur Dioxide (SO<sub>2</sub>)**
- Achieving the NAAQS is verified using regional monitoring data.
- Even after attaining the NAAQS, ongoing analyses and evaluations are required under the CAA.
- The pollutant of concern for the region is Ground Level Ozone.



# How is Ground Level Ozone Formed?



# Ozone Standard

- Current ozone NAAQS is the 2015 8-Hour Standard of 70 ppb
- Promulgated in October 2015
- The region was designated nonattainment in August 2018
- Originally Washington region was classified as “marginal” nonattainment
- The region failed to meet the NAAQS by the prescribed attainment date (Aug 3, 2021)
- The region was subsequently reclassified as “moderate” nonattainment and given a new NAAQS attainment date (Aug 3, 2024)

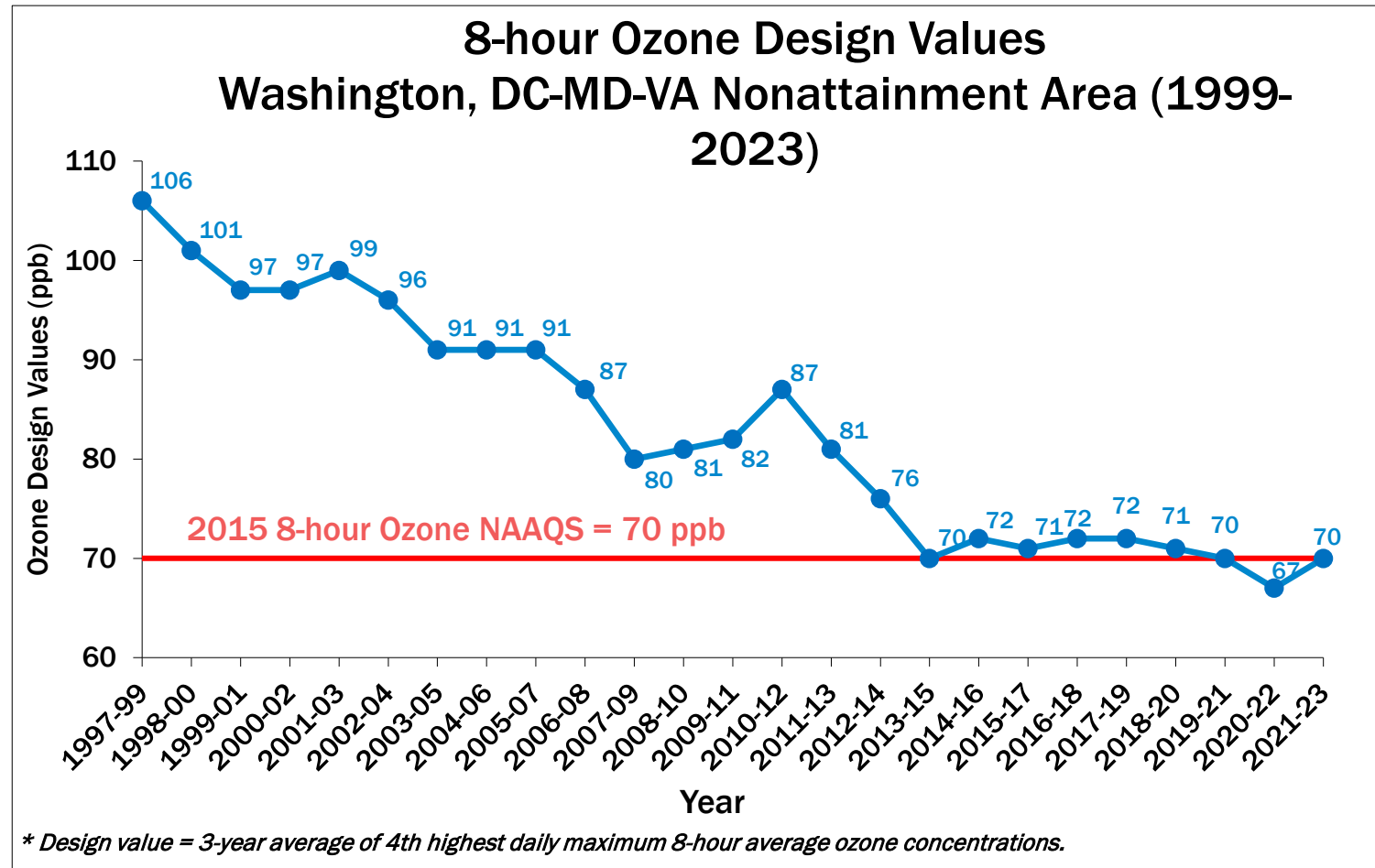


## Metropolitan Washington Ozone Monitors

Washington, DC, MD, VA



# Ozone Standards – Regional Data



# EPA Rulemaking

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- On April 4, 2025, final rulemaking by the EPA confirmed that the region has met the 2015 NAAQS for Ozone.
- The rulemaking consisted of three actions:
  - An exceptional events waiver was granted for monitor readings determined to be detrimentally impacted by Canadian wildfires
  - Granting a Clean Data Determination (CDD) for the region
  - Granting a Determination of Attainment by Attainment Date (DAAD) for the region



# EPA Rulemaking

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- Exceptional Event Waiver:
  - Granted for the Bryant St NW and First St NW monitor for June 29, 2023
  - High readings were determined to be the result of wildfire smoke
  - Recognizes that readings on that day were not indicative of local air quality – do not need to be considered in the CDD
- Clean Data Determination:
  - Verifies that the air quality monitor data shows that for the 2023 Ozone season (March 1 to October 31), the 2015 Ozone NAAQS were achieved





# EPA Rulemaking

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- Determination of Attainment by the Attainment Date
  - Given its moderate nonattainment status, the region had until August 3, 2024 (effectively the 2023 Ozone Season) to demonstrate attainment of the 2015 Ozone NAAQS
  - Rulemaking confirms this occurred
- Combined, this confirms that the region has met the 2015 Ozone NAAQS.
- This does not, on its own, change the official status of the region to attainment.



# Redesignation Request/Maintenance Plan

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- A Redesignation Request (RR) is a formal request to the EPA to designate an area as attaining the Ozone NAAQS, placing the region in “Maintenance” status.
- A Maintenance Plan (MP) outlines how the local air district will maintain its attainment of a federal air quality standard for 10 years into the future.
- MWAQC, in conjunction with TPB, develops both the RR and MP. These are then provided to the state air agencies for finalization and submission to the EPA for approval.
- In an Ozone MP, precursor pollutants, Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>), are evaluated instead of Ozone directly.



# Elements of Redesignation Request and Maintenance Plan

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## Air Quality Data

- Monitor data to show compliance with the 2015 ozone standard (3-year average: 2021-2023)

## Emissions Inventories (Point, Area, Non-road, On-road Mobile Sources)

- 2017 Base Year
- 2022 Attainment Year
- 2032 Intermediate Year
- 2038 Final Maintenance Year (must be at least 10 years beyond EPA's official date of redesignation for an area – likely in 2027)



# Elements of Redesignation Request and Maintenance Plan (Continued)

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## Contingency Measures

- In case region exceeds the ozone standard in future, these measures would be implemented.

## Motor Vehicle Emissions Budgets (MVEBs)

- Emissions ceilings for on-road mobile sources (2022, 2032, 2038).
- On-road (and non-road) mobile emissions are modeled using the EPA's MOtor Vehicle Emissions Simulator (MOVES).
- The new MVEBs will replace the existing MVEBs, developed for the previous 2008 Ozone Standard.
- EPA can provide an adequacy finding for the MVEBs so they can be used for air quality analyses without waiting for the MP to be approved.



# TPB and MWAQC

**The TPB and the Metropolitan Washington Air Quality Committee (MWAQC) work together to develop the Maintenance Plan.**

- I. TPB: Develops on-road mobile inventories for ozone season pollutants, VOC and NO<sub>x</sub>, using the latest version of EPA's MOVES model, MOVES5.
- II. MWAQC: Develops inventories for other sources.
- III. TPB & MWAQC: Set MVEBs for use in future air quality conformity analyses of the region's Long-Range Transportation Plans and Transportation Improvement Programs.

The RR and MP are provided to the state air agencies for finalization and submission to the EPA for approval, tentatively in late 2026/early 2027



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