

REDESIGNATION REQUEST & MAINTENANCE PLAN (2015 OZONE NAAQS)

Sunil Kumar
Principal Engineer (Air)

MWAQC
July 22, 2026



Background

- December 28, 2015 - EPA published and made effective revised 8-hour ozone standard (0.070 ppm/70 ppb).
- EPA designated the Washington, DC-MD-VA region as “Marginal Nonattainment Area” for the 2015 standard on August 3, 2018.
- Since the area failed to attain the above standard by the deadline, EPA reclassified the area to “Moderate Nonattainment Area” on November 7, 2022.
- EPA subsequently determined that the area attained the standard by the August 3, 2024 attainment deadline and issued a Clean Data Determination on April 4, 2025.
- Following these EPA actions, the region started to work on submitting a request to EPA to redesignate it to Attainment/Maintenance along with a maintenance plan to demonstrate future compliance.

Purposes of Redesignation Request & Maintenance Plan

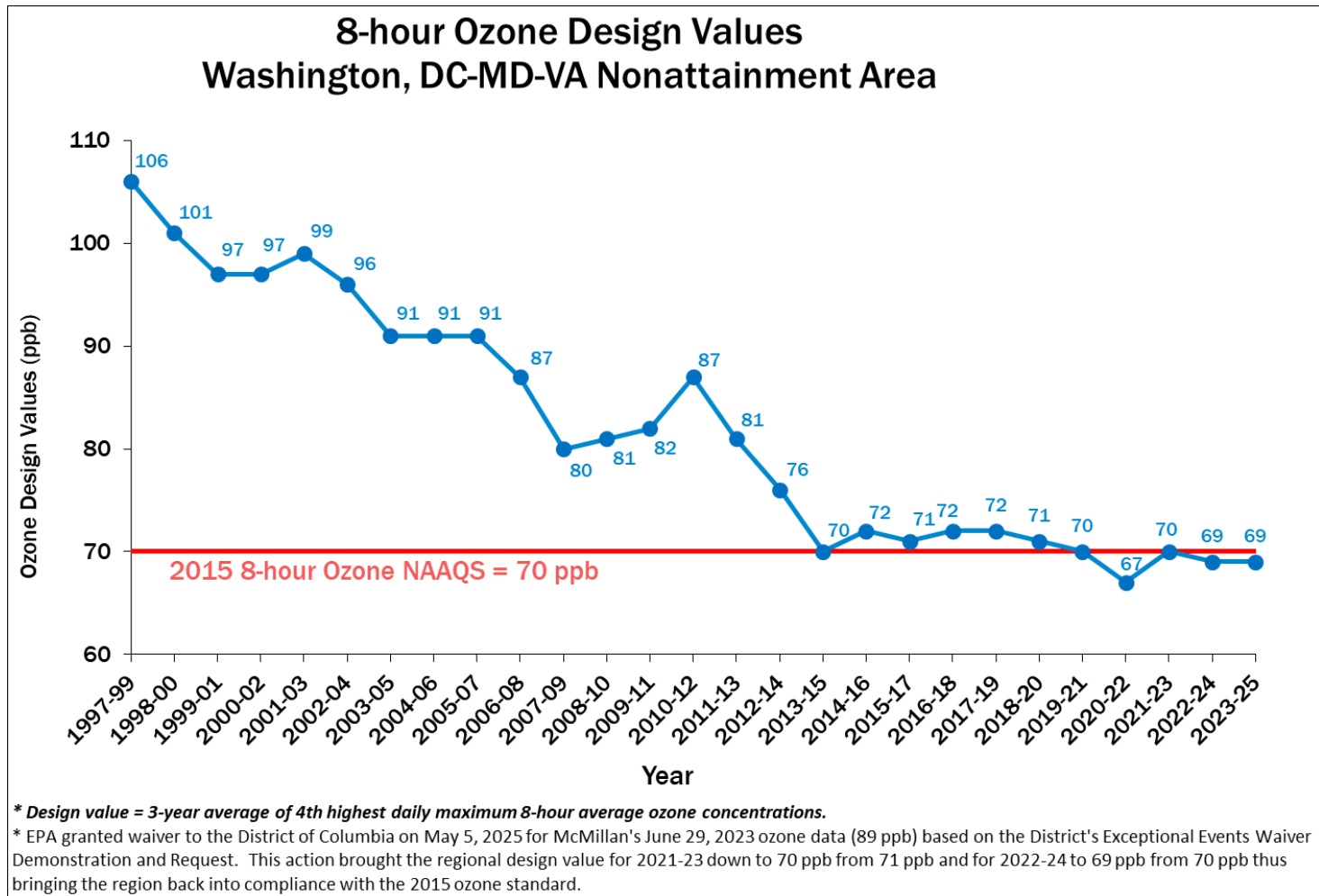
- **Redesignation Request**
 - Request for redesignating to attainment/maintenance
 - Base Year 2017, Attainment Year 2022
 - Demonstrates decline in emission levels between 2017-2022 due to permanent and enforceable measures
- **Maintenance Plan**
 - Demonstrate compliance ten years into future (2038) after EPA's redesignation to attainment (expected by 2028)
 - Contingency triggers, Contingency measures



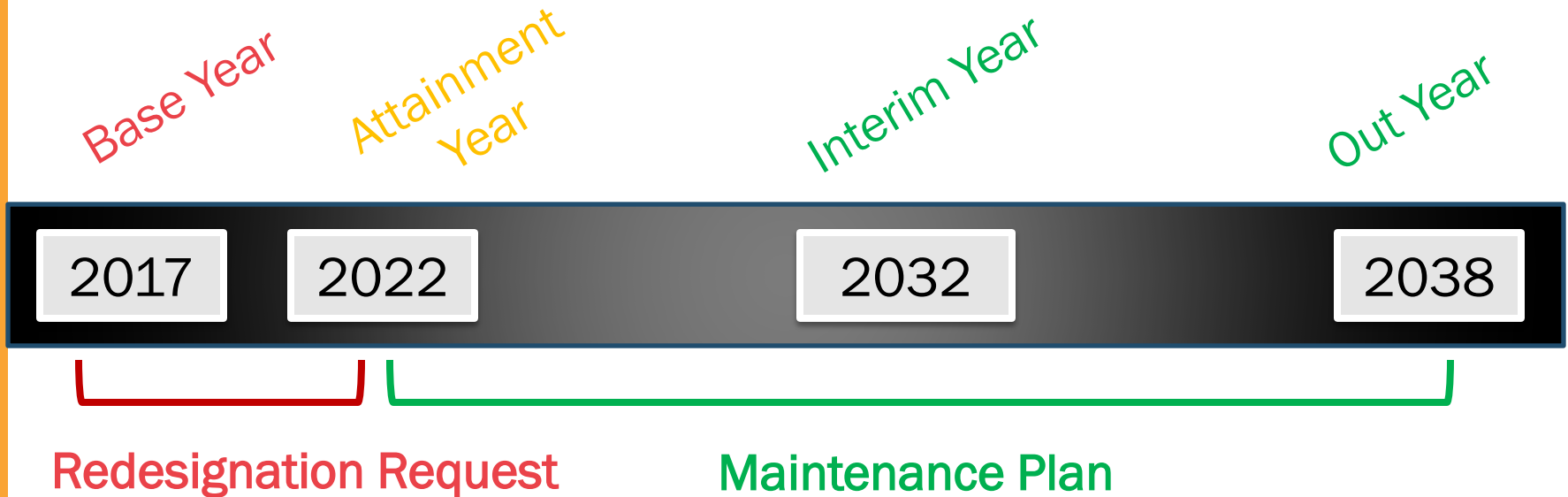
What's in the Ozone Maintenance Plan ?

- **Air Quality Data**
 - Air quality data to show compliance with the 2015 Ozone standard
- **Emissions Inventories**
 - Demonstrate even lower emissions in future
- **Motor Vehicle Emissions Budgets (Mobile Budgets)**
 - Mobile emissions ceiling for transportation conformity purposes
- **Contingency Measures**
 - In case region exceeds 2015 Ozone standard in future, these measures would be implemented

Trend in Ozone Design Value



Redesignation Request & Maintenance Plan Milestone Years



Emissions Inventories 2017, 2022, 2032, 2038



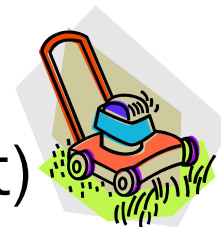
Point Source (Electric Generating Units & Non-EGU)



Nonpoint Source (Woodstove, Portable container)



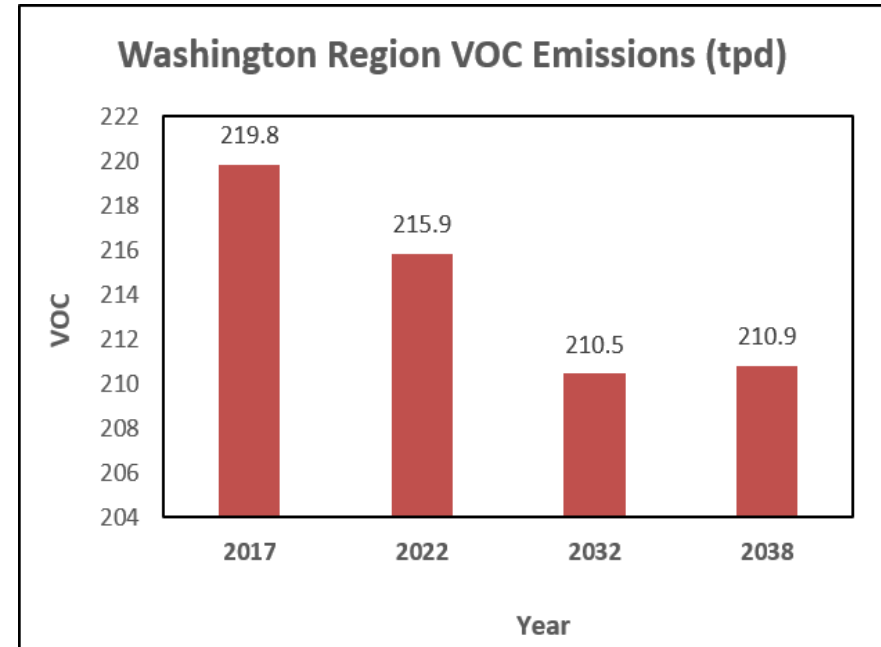
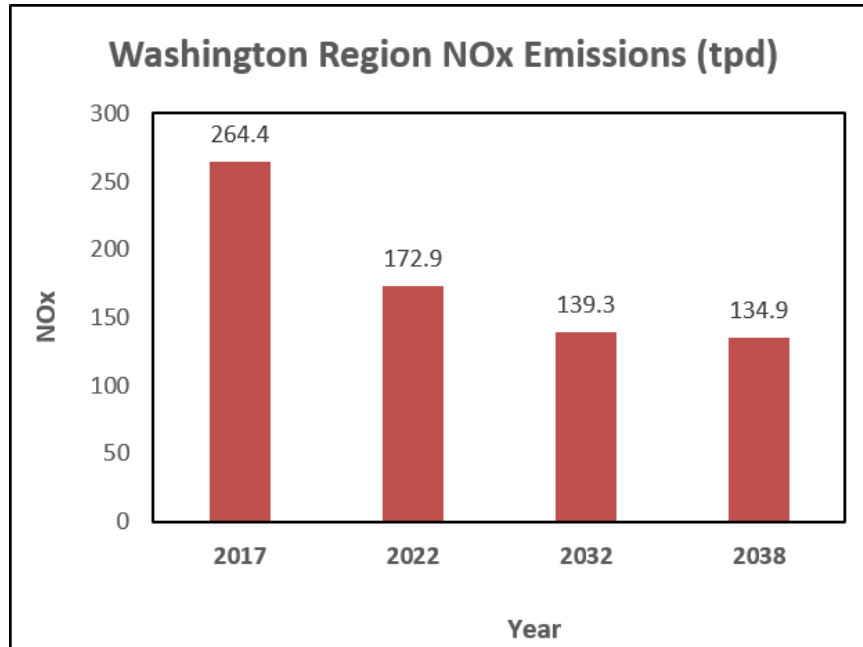
Nonroad Source (Lawn mowers, marine engine, airport, railroad, ag equipment)



Onroad Source (Motor vehicles)



Emissions – Lower in Future



* Base Year Emissions Inventory for 2017 approved earlier by EPA was updated with MOVES5.0.0 based onroad and nonroad emissions

How Do Transportation Plans Relate to the SIP?

- The SIP sets the Motor Vehicle Emissions Budgets (MVEBs) or *mobile budget*, the maximum allowable emissions from vehicles.
- TPB must ensure that the regional transportation plan does not result in emissions above this level.

Maintenance Plan/SIP

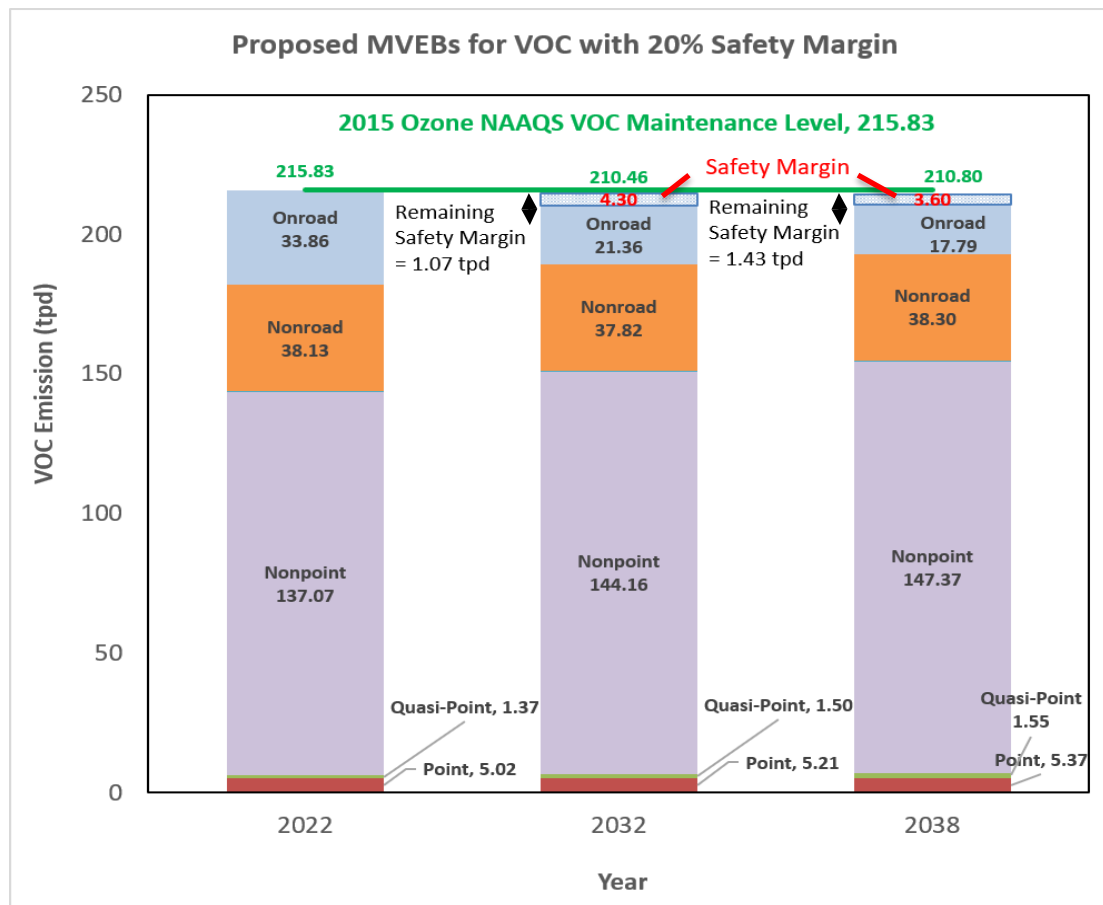
Mobile
Emissions/
Budgets



Maintenance Plan: Mobile Budgets

- The Maintenance Plan sets mobile emissions ceilings (“budgets”) for 2022, 2032 & 2038 for
 - VOC
 - NO_x
- Mobile budgets
 - Includes transportation buffers:
 - 20% for VOC
 - 40% for NO_x

Emissions & Motor Vehicle Emission Budgets–VOC (tpd)



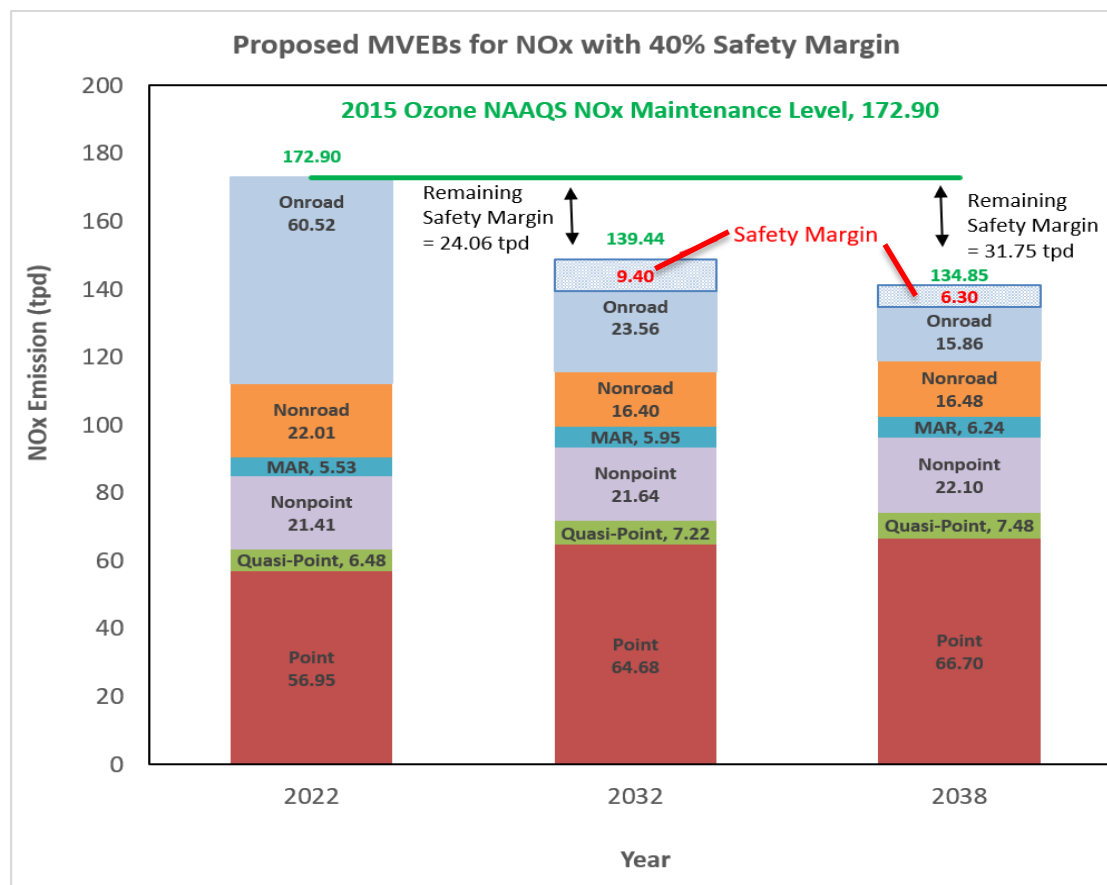
VOC MVEBs (20% Safety Margin)

2032: 21.4 + 4.3 = 25.7 tpd

2038: 17.8 + 3.6 = 21.4 tpd



Emissions & Motor Vehicle Emission Budgets–NOx (tpd)



NOx MVEBs (40% Safety Margin)

2032: 23.6 + 9.4 = 33.0 tpd

2038: 15.9 + 6.4 = 22.3 tpd



Re-evaluation of mobile budgets

If necessary, the MVEBs will be re-evaluated in case there is a roll-back of federal emissions control programs and/or changes to USEPA's emissions estimation model that result in significant changes in emissions inventories or to accommodate transportation planning issues when the region's federally required metropolitan transportation plan horizon year is extended beyond 2050.



Maintenance Plan: Contingency Measures

- **Contingency Measures**
 - Emissions controls to be implemented if region exceeds 2015 Ozone standard in future
- Ozone Transport Commission (OTC) 2009-2014 model rule for VOC for consumer products (VA)
- OTC 2009-2014 rule for VOC for architectural and industrial maintenance coatings (DC, VA)
- OTC Phase 4 model rule for consumer products (VA)
- OTC Phase 5 model rule for consumer products (DC, MD, VA)
- OTC Solvent Degreasing Rule (DC, VA)
- Low Permeation Hoses (DC, MD, VA)
- Drip-less nozzles (MD)
- Ultra Low NOx Burners for Small Boilers (DC, VA)

Draft 2015 Ozone NAAQS Redesignation Request and Maintenance Plan

MWAQC Website

<https://www.mwcog.org/events/2026/7/22/metropolitan-washington-air-quality-committee/>

MWCOG SIP Website

<https://www.mwcog.org/environment/planning-areas/air-quality/air-quality-plans/>