

REDESIGNATION REQUEST & MAINTENANCE PLAN (2008 OZONE NAAQS)

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Background

- May 27, 2008 - EPA published and made effective revised 8-hour ozone standard (0.075 ppm/75 ppb).
- EPA designated the Washington, DC-MD-VA area as “Marginal Nonattainment Area” for the 2008 standard on July 20, 2012.
- Washington, DC-MD-VA area attained the standard starting 2015.



Timeline

- July 20, 2017 – MWACQ-TAC recommended MWAQC the approval of the plan for public hearing and comment purposes
- July 26, 2017 – MWAQC approved the plan for public hearing and comment purposes
- September–November 2017 – Public hearings held, comments received

	District of Columbia	Maryland	Virginia
Public comment period	September 29 – November 1, 2017	September 26 – November 8, 2017	October 16 - November 15, 2017
Public hearing date	November 1, 2017 (5:30 PM)	November 8, 2017 (11 AM)	November 6, 2017 (11 AM)

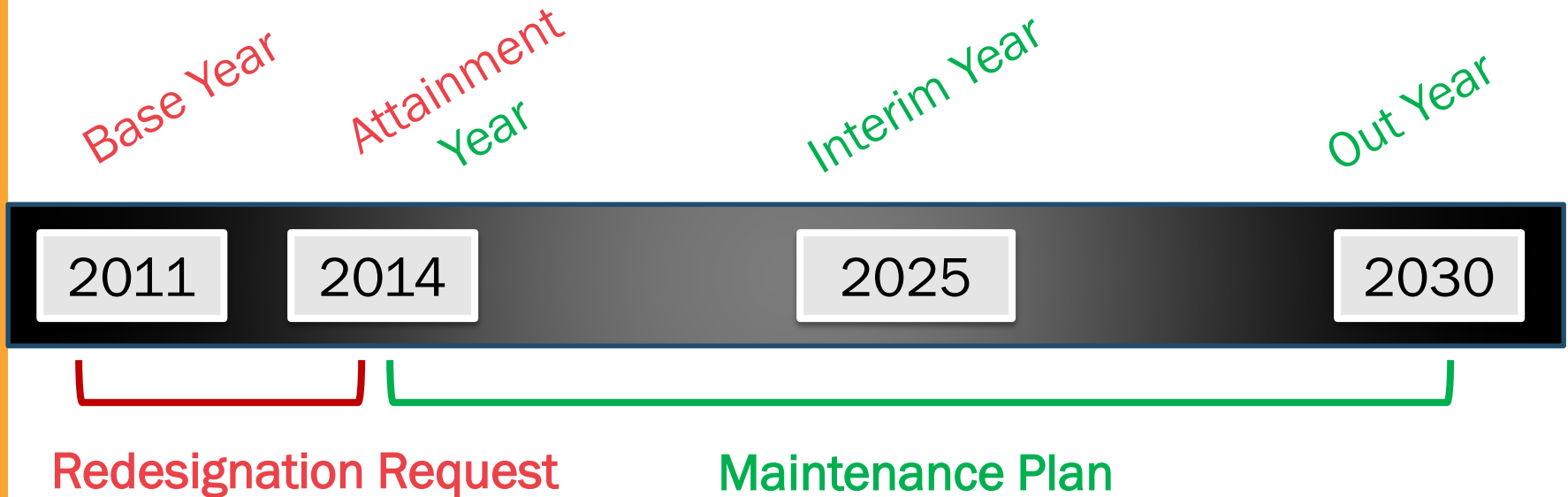
- December 12, 2017 - MWAQC-TAC recommended MWAQC the final approval of the plan for EPA submittal
- December 20, 2017 – MWAQC discusses final plan; States submit plan to EPA once MWAQC approves it

Redesignation Request & Maintenance Plan

- **Redesignation Request**
 - Base Year 2011, Attainment Year 2014
 - Demonstrate decline in ozone levels during 2011-2014

- **Maintenance Plan**
 - Demonstrate compliance ten years into future 2014, 2025, 2030
 - Contingency triggers, Contingency measures

Redesignation Request & Maintenance Plan Milestone Years



What's in the Ozone Maintenance Plan ?

- **Air Quality Data**

- Air quality data to show compliance with the 2008 ozone standard

- **Emissions Inventories**

- Demonstrate even lower emissions in future

- **Mobile Budgets**

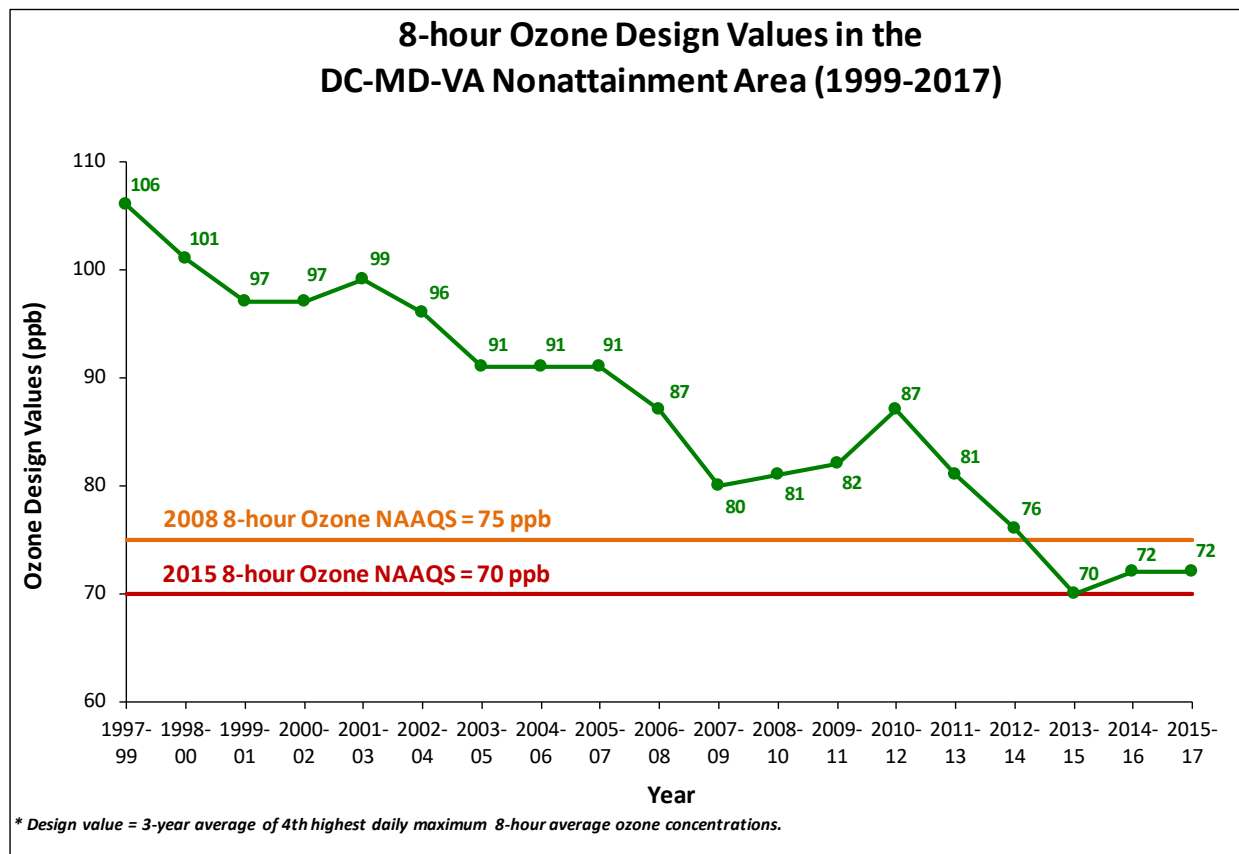
- Mobile emissions ceiling for transportation conformity purposes

- **Contingency Measures**

- In case region exceeds 2008 ozone standard in future, these measures would be implemented



Trend in Ozone Design Value



* 2017 data is preliminary as of December 20th, 2017



Emissions Inventories 2011, 2014, 2025, 2030



Point Source (Electric Generating Units & Non-EGU)



Area Source (Woodstove, Portable fuel container)



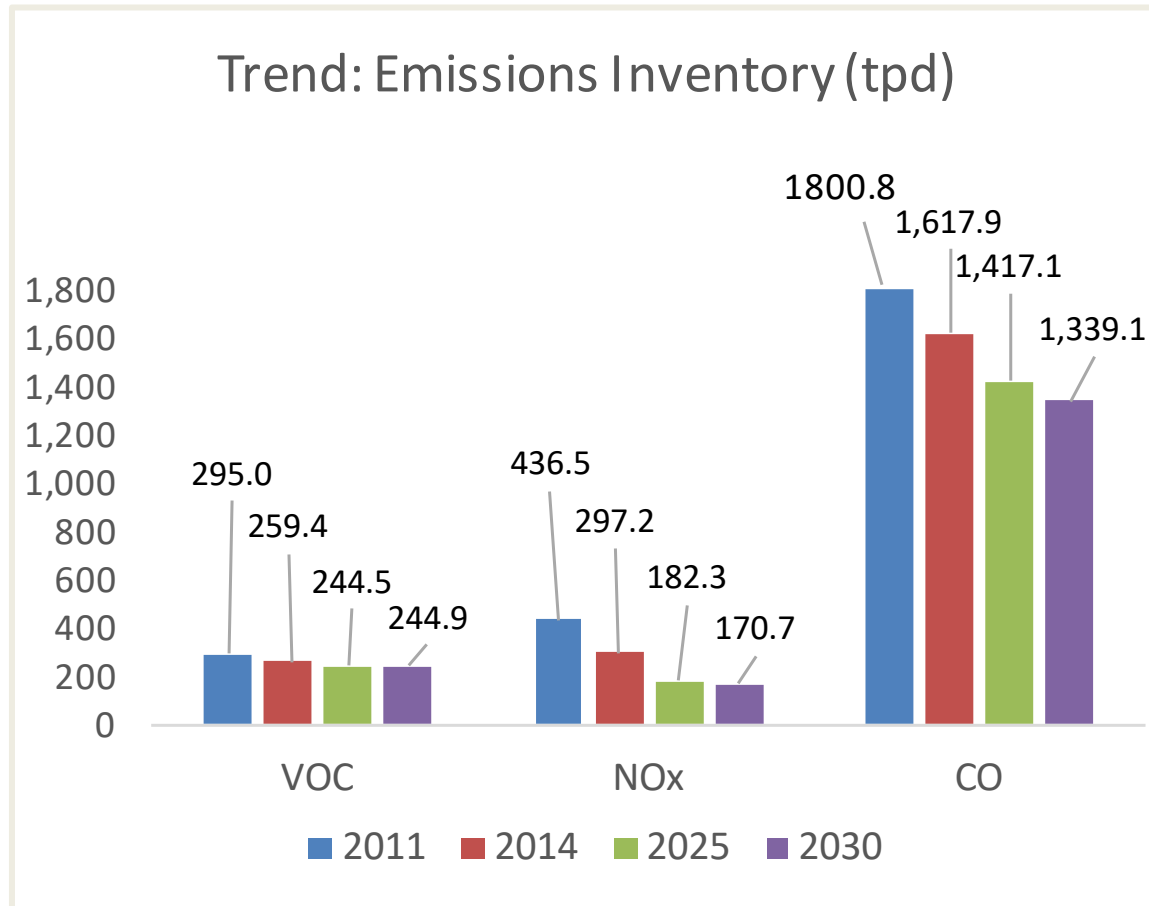
Nonroad Source (lawn mowers, marine engine, airport, railroad)



On-road Source (motor vehicles)



Emissions – Lower in Future



* 2011 Data – Base Year Emissions Inventory (Approved May 2015)



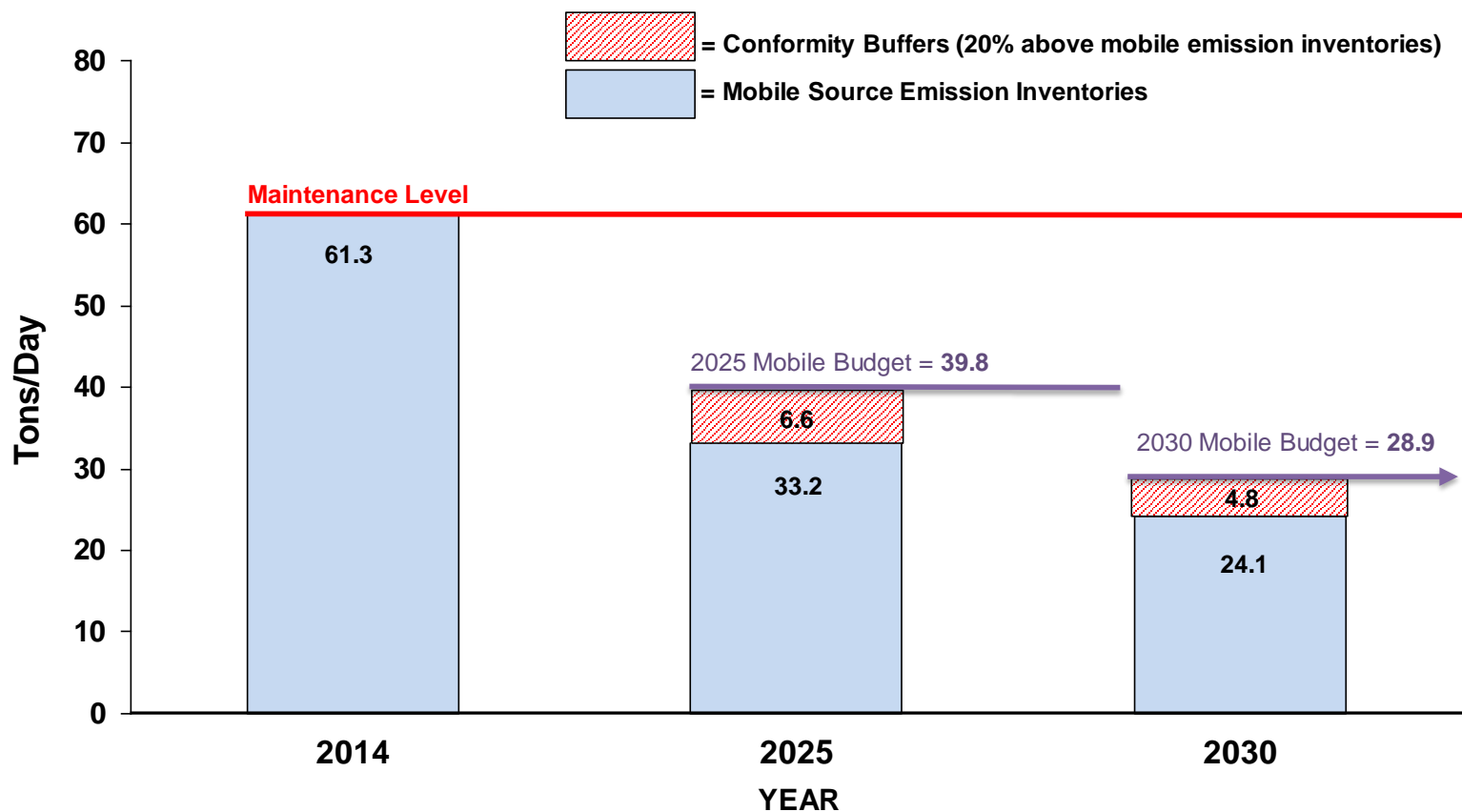
Maintenance Plan: Mobile Budgets

- The Maintenance Plan sets on-road mobile emissions ceilings (“mobile budgets”) for 2014, 2025 & 2030 for
 - VOC
 - NO_x
- Mobile budgets
 - Two sets of mobile budgets:
 - Without Conformity Buffers
 - Applicable when maintenance plan budgets are determined to be adequate or are approved
 - With Conformity Buffers
 - Applicable if changes in data, model, or planning assumptions lead to mobile emissions exceeding the mobile budgets; Need to use mobile budgets with conformity buffers to be fully documented in the conformity analysis and will follow Interagency consultation procedures



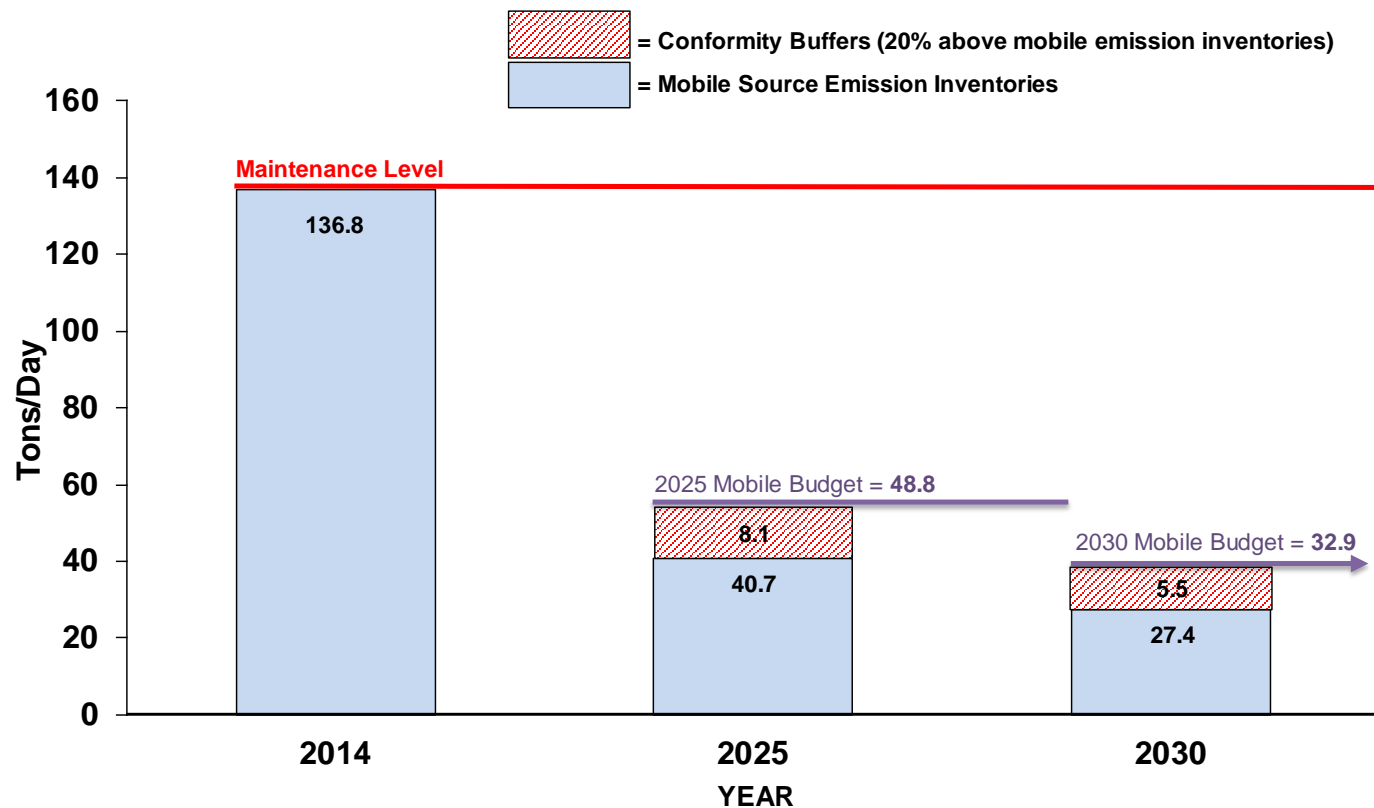
On-Road Mobile VOC Emission

(Washington, DC-MD-VA 2008 Ozone NAAQS NAA)



On-Road Mobile NOx Emission

(Washington, DC-MD-VA 2008 Ozone NAAQS NAA)



Maintenance Plan: Contingency Measures

- **Contingency Measures**

Emissions controls to be implemented if region exceeds 2008 ozone standard in future

- **Short-Term Measures** (To be implemented if a monitor exceeds the 4th highest daily max 8-hour avg ozone conc of 0.075 ppm or violates 2008 NAAQS **before 2022**)
 - NO_x Rule - Phase I (MD) – Retirement of Possum Point Power Station’s Unit #5 or installation of selective non-catalytic reduction on Possum Point Power Station’s Unit #5, an 840 MW residual oil-fired EGU;
 - Installation of LN technology on four municipal solid waste combustors at Covanta Fairfax; and
 - Installation of LN technology on three municipal solid waste combustors at Covanta Alexandria/Arlington.
- **Long-Term Measures** (To be implemented if a monitor exceeds the 4th highest daily max 8-hour avg ozone conc of 0.075 ppm or violates 2008 NAAQS **in 2022 or beyond**)
 - OTC 2009-2014 model rule for VOC for consumer products (VA)
 - OTC 2009-2014 model rule for VOC for architectural and industrial maintenance coatings (VA)
 - On-road engine idling rule (DC)



Public Comments & Responses

- **Public Comments - Sierra Club & EPA**
- **Sierra Club Comments – Received by Virginia**

Comment	Response
No approved Reasonably Available Control Technology (RACT) SIP; required for redesignation	RACT (non-CTG) required due to northern Virginia being part of the Ozone Transport Region (OTR), not due to its non-attainment status
Contingency measures should be implemented in 12 months, not in 21 months	EPA guidance memo- allows 24 months for implementation; 12 months inadequate given Virginia's Administrative Process Act
Include discussion of climate change impacts in the plan to ensure that it is adequate and demonstrates continued compliance	Overall ozone levels seen declining over 20 years in spite of a number of years with increased temperatures; expected significant VOC and NOX emission reductions in future will drive ozone further down



Public Comments & Responses

- EPA Comments

Comment	Response
Maryland's NOx Rule Phase 1 is already in place, emission reductions have already been achieved, and so this rule cannot be used as a contingency measure; new measures needed for additional emissions reductions	Language in the plan will be revised to clarify that Maryland's NOx Rule Phase 1 and other mandated measures would apply as contingency measures for exceedances and violations experienced prior to the achievement of the emission reductions (contingency measures for near term air quality exceedances); For exceedances of the 2008 ozone NAAQS experienced after the achievement of the mandated emission reductions, states have clarified that additional control programs that are currently not mandated would be implemented (contingency measures for long term air quality exceedances).

2008 Ozone NAAQS Redesignation Request and Maintenance Plan

<https://www.mwcog.org/events/2017/12/20/metropolitan-washington-air-quality-committee-mwaqc/>

