

REDESIGNATION REQUEST & MAINTENANCE PLAN (2008 OZONE NAAQS)

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July 26, 2017

Background

- May 27, 2008 - EPA published and made effective revised 8-hour ozone standard (0.075 ppm/75 ppb).
- Previous 8-hour standard of 0.08 ppm/84 ppb published in 1997 was revoked.
- 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.

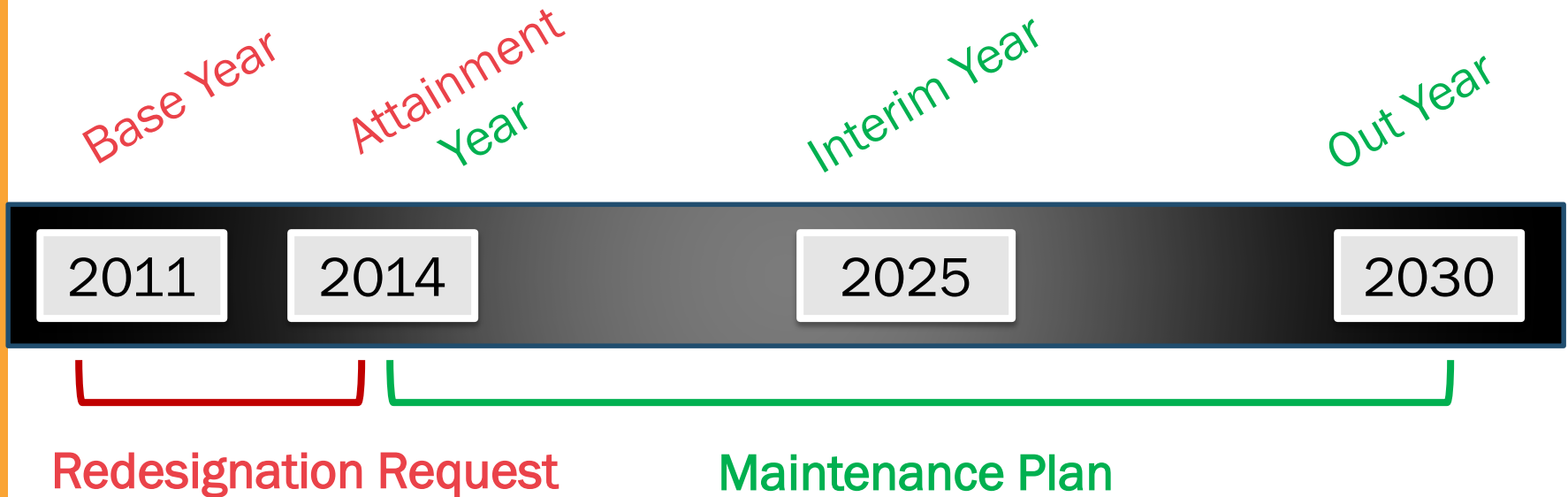


Redesignation Request & Maintenance Plan

- **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

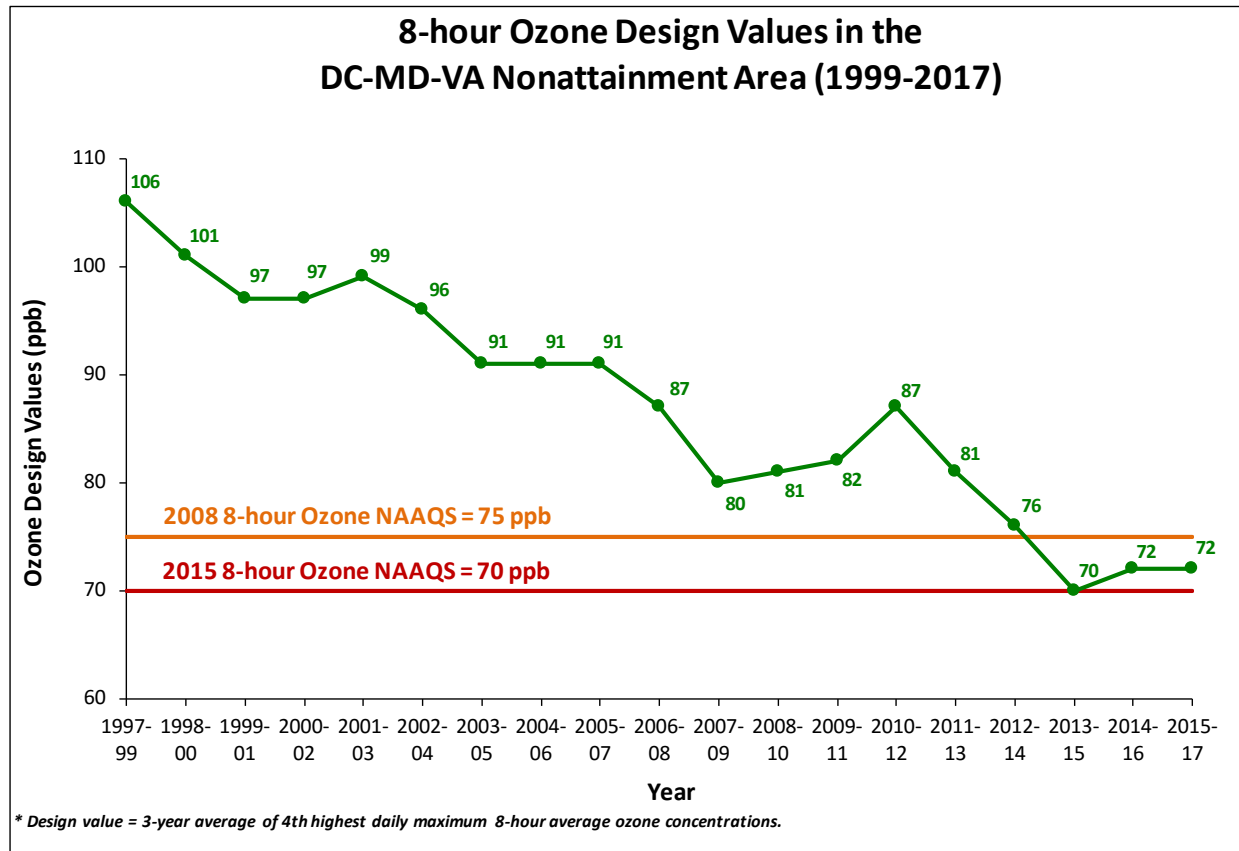
- **Mobile Budgets**

- 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



* 2016 data is a draft as of July 26th, 2017.

* 2017 data is incomplete and preliminary as of July 26th, 2017



Emissions Inventories 2011, 2014, 2025, 2030



Point Source (Electric Generating Units & Non-EGU)



Area Source (Woodstove, Portable fuel container)



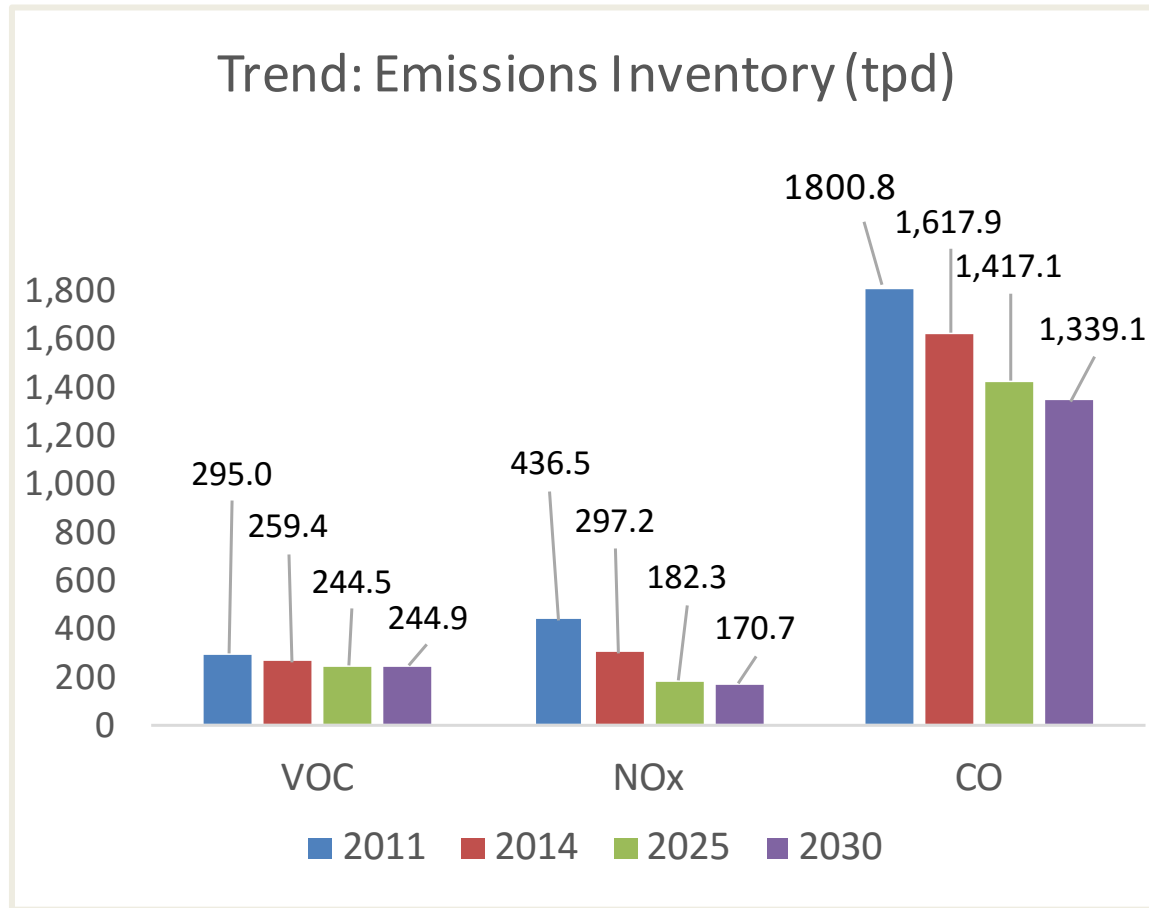
Nonroad Source (lawn mowers, marine engine, airport, railroad)



On-road Source (motor vehicles)



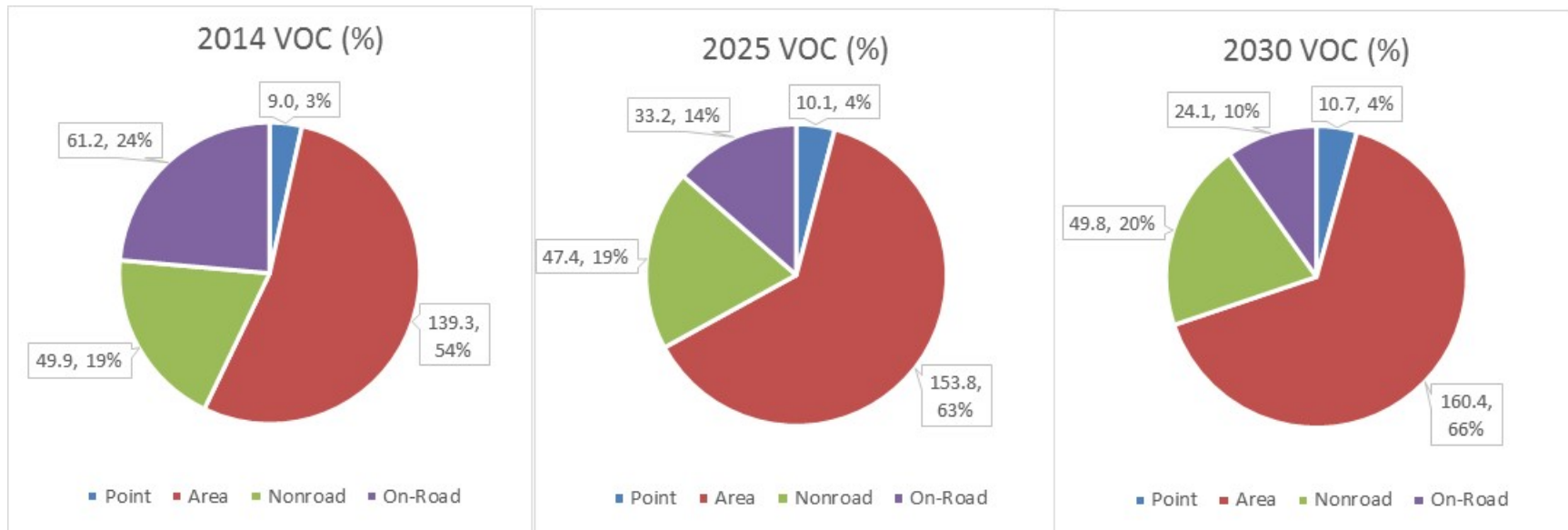
Emissions – Lower in Future



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



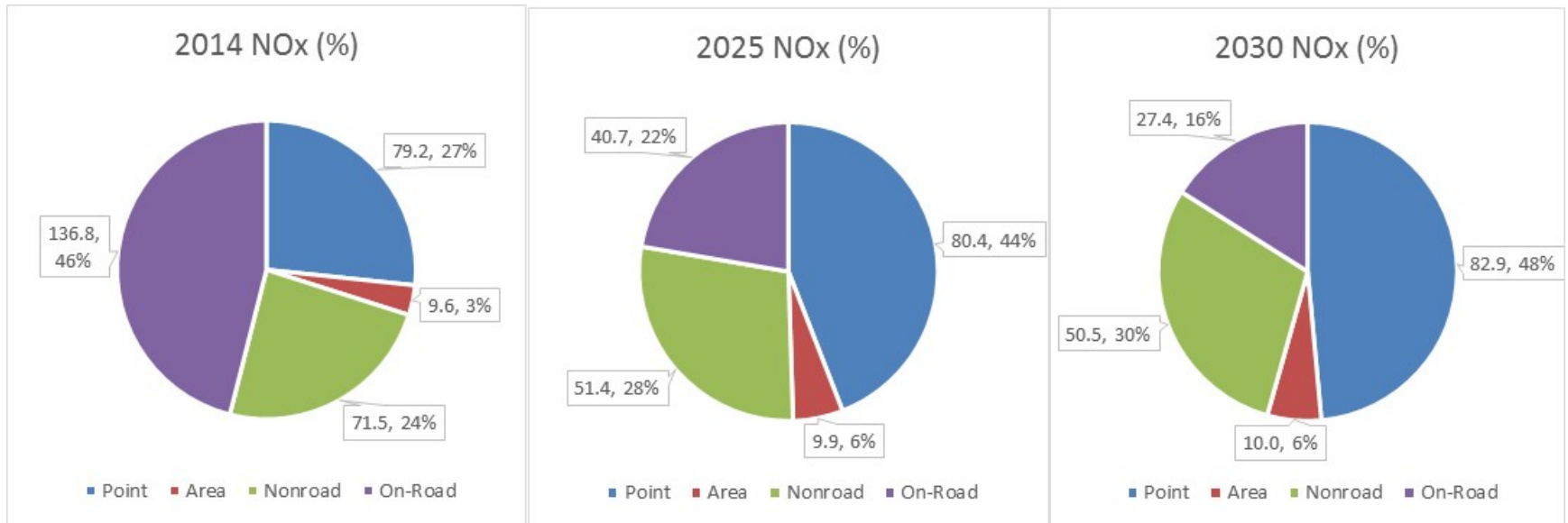
Emissions – Lower in Future



- 2011 Data – Base Year Emissions Inventory (Approved May 2015)
- Emissions are in tons per day



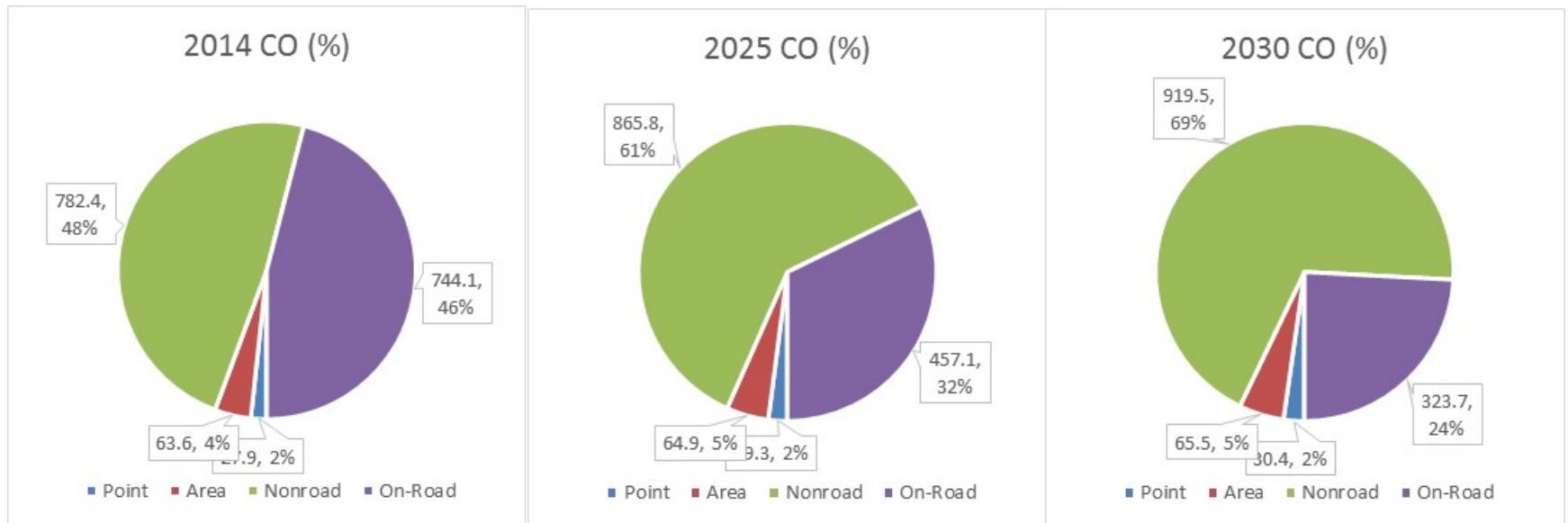
Emissions – Lower in Future



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Emissions – Lower in Future



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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

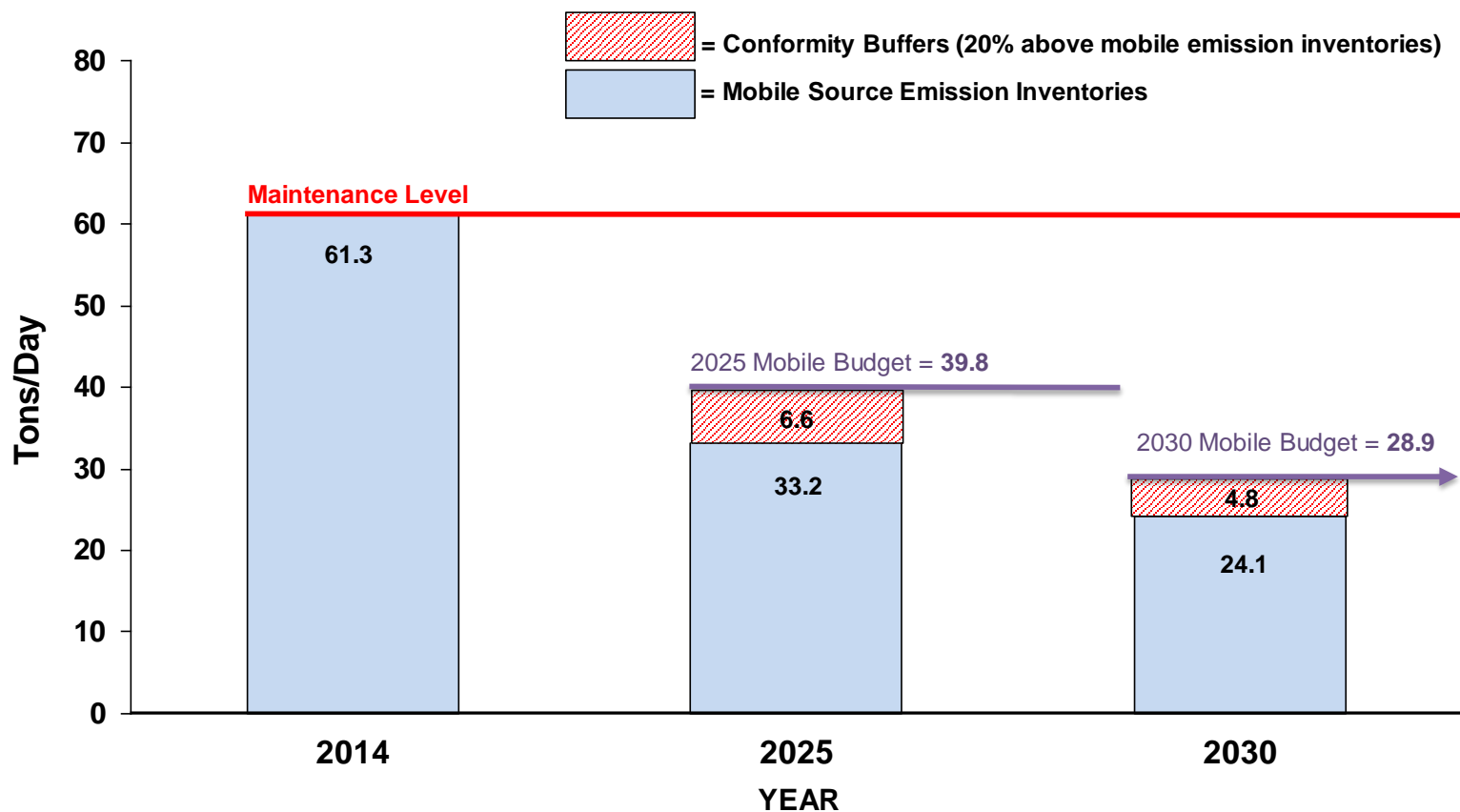


Maintenance Plan: Mobile Budgets

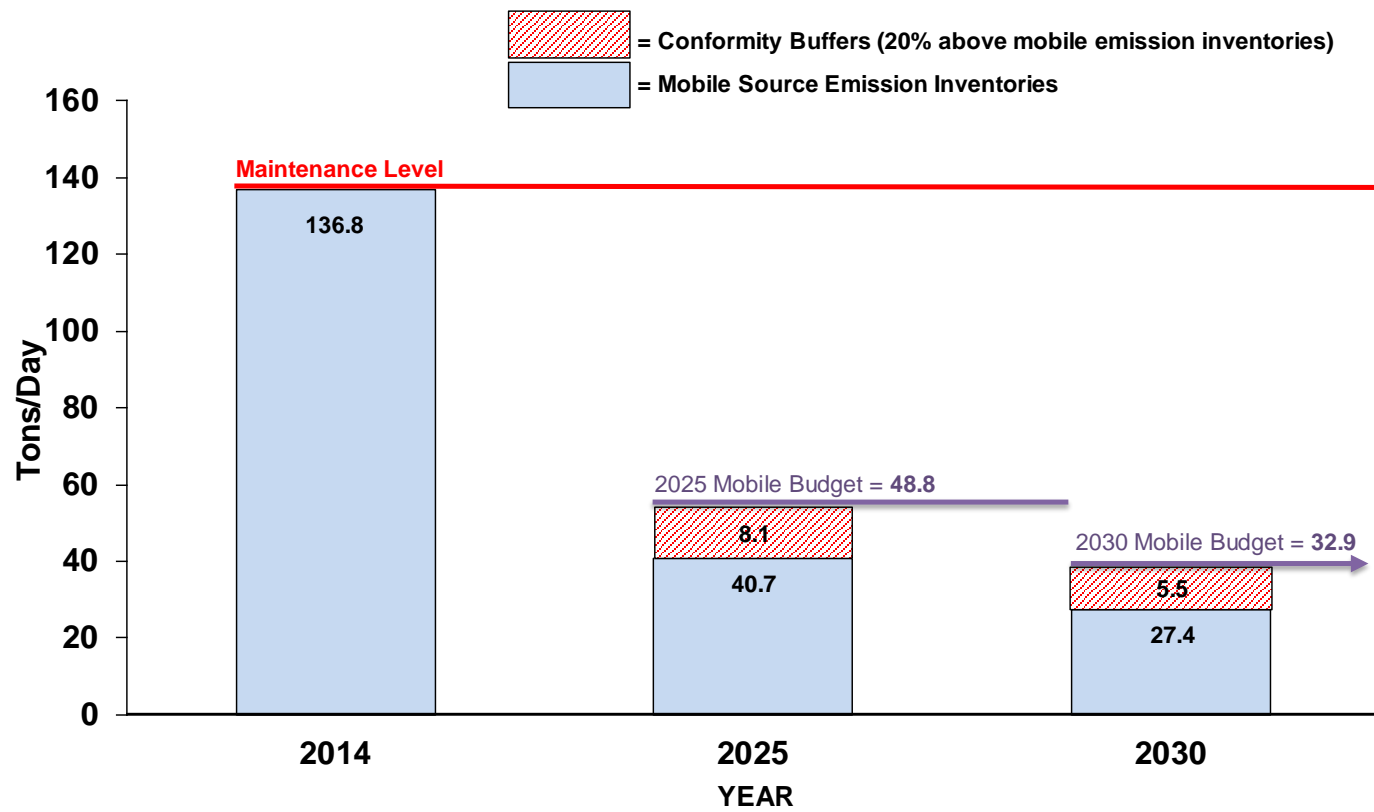
- The Maintenance Plan sets mobile emissions ceilings (“budgets”) for 2014, 2025 & 2030 for
 - VOC
 - NO_x
- Mobile budgets
 - Two sets of mobile budgets:
 - Without Conformity Buffers
 - With Conformity Buffers

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)



Which mobile budget is used?

- 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



Maintenance Plan: Contingency Measures

- **Contingency Measures**

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

- 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)
- SNCR controls (or equivalent) for NO_x on Unit #5 at Possum Point Power Station latest by ozone season, 2021 (VA)
- NO_x Rule - Phase I (MD)
- On-road engine idling rule (DC)



2008 Ozone NAAQS Redesignation Request and Maintenance Plan

<https://www.mwcog.org/events/2017/7/26/metropolitan-washington-air-quality-committee-mwaqc/>