

OZONE MAINTENANCE PLAN: MOBILE BUDGETS

Briefing on Mobile Budgets in the Ozone
Maintenance Plan Related to the 2008
Ozone Standard

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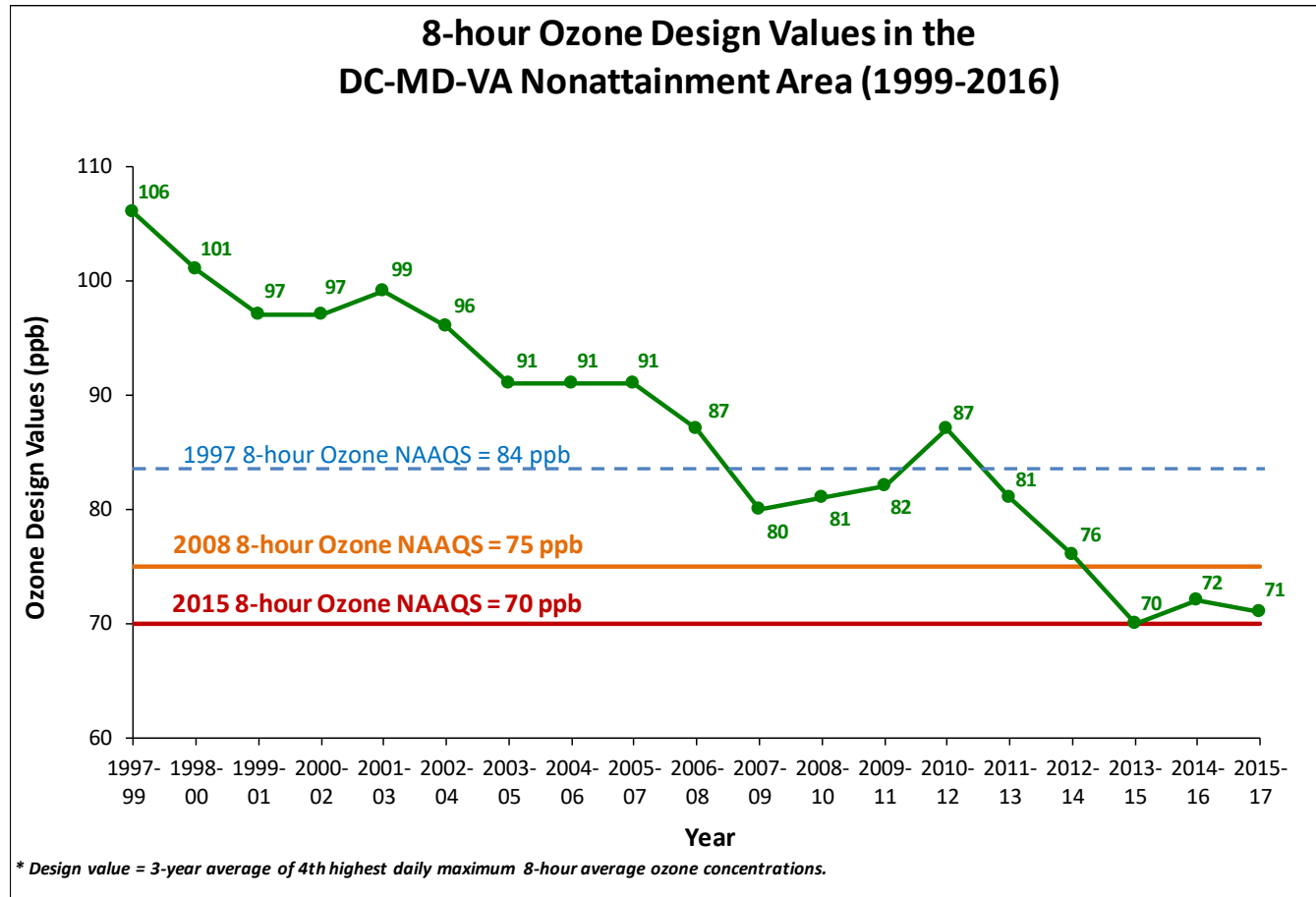
Transportation Planning Board
September 8, 2017

Agenda Item #11

Background

- EPA published and made effective revised 8-hour ozone standard (0.075 ppm/75 ppb) on May 27, 2008
- EPA revoked previous 8-hour standard of 0.08 ppm/84 ppb published in 1997
- EPA designated the Washington, DC-MD-VA area as “Marginal Nonattainment Area” for the 2008 standard on July 20, 2012 (marginal nonattainment areas are not required to develop new mobile budgets, so the region continued to use the 1997 standard mobile budgets)
- Washington, DC-MD-VA area attained the 2008 ozone standard starting in 2015

Trend In Ozone Design Value



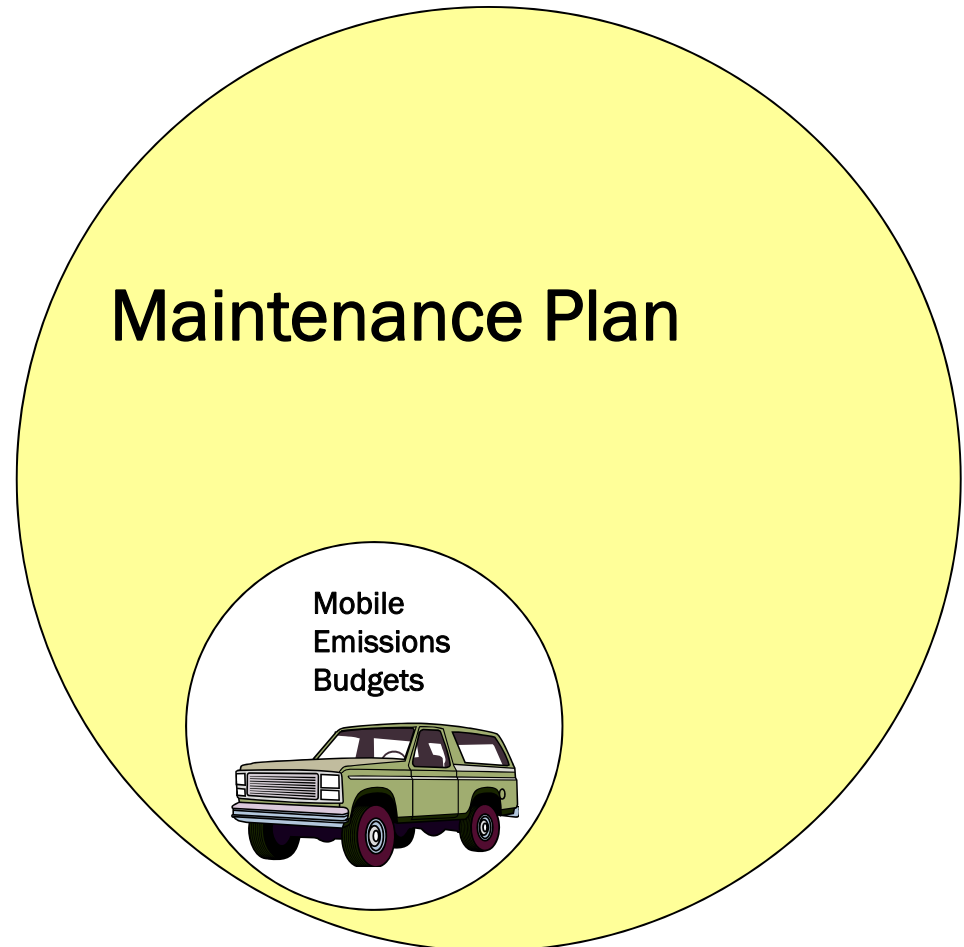
- * 2016 data is a draft as of July 20th, 2017.
- * 2017 data is incomplete and preliminary as of July 20th, 2017

2008 Ozone Maintenance Plan

- MWAQC, in consultation with TPB, developed the 2008 ozone standard maintenance plan
 - In order to be officially “in attainment” of the standard, the States must request redesignation to attainment and submit a “Maintenance Plan” to show how the region will maintain its attainment of the standard
- Motor Vehicle Emissions Budgets (mobile budgets or MVEBs) are a required component of the maintenance plan
- TPB transmitted mobile inventories and recommended mobile budget levels for the maintenance plan

How Does the Transportation Plan Relate to the Maintenance Plan?

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

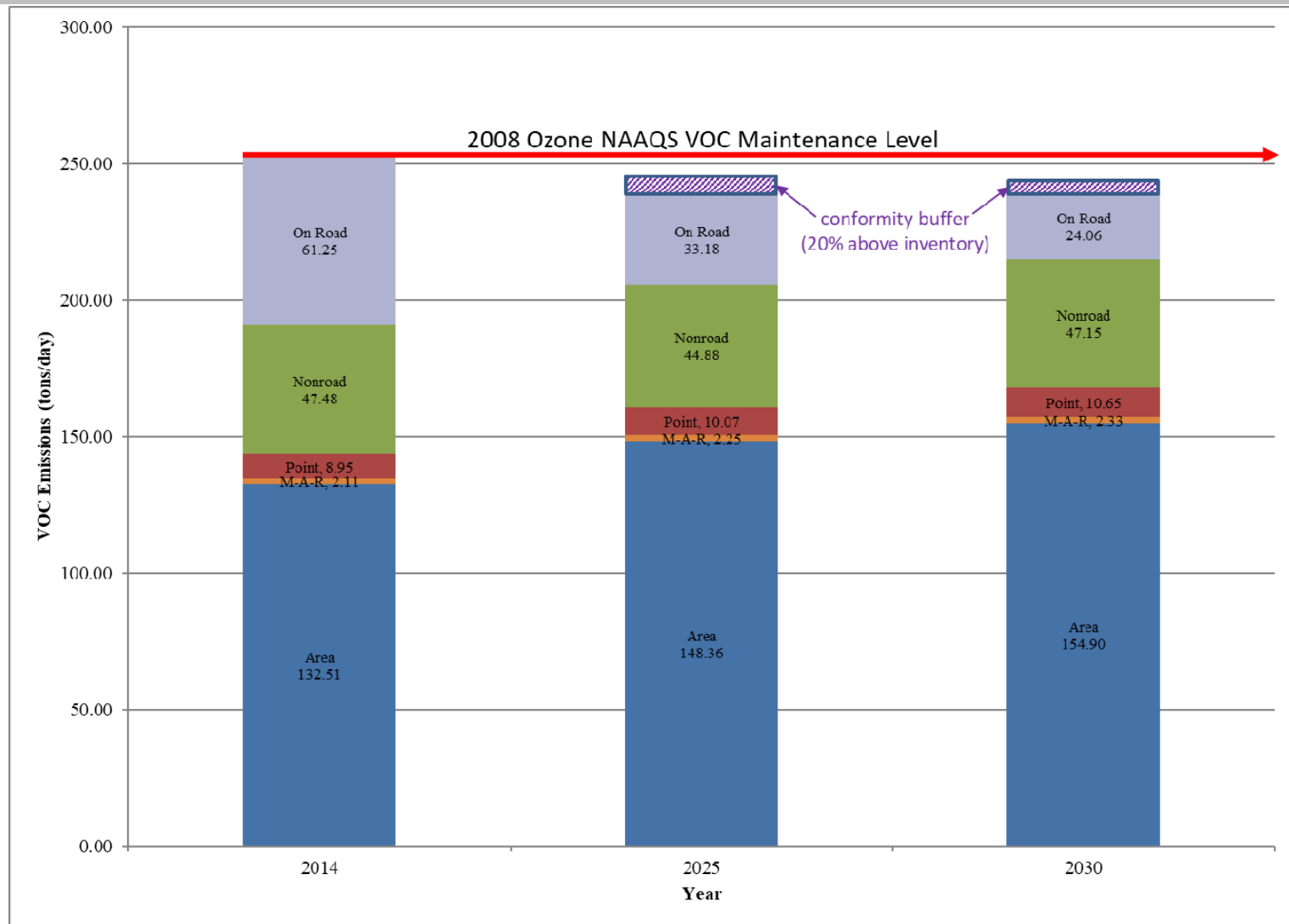


2008 Ozone Maintenance Plan: Mobile Budgets

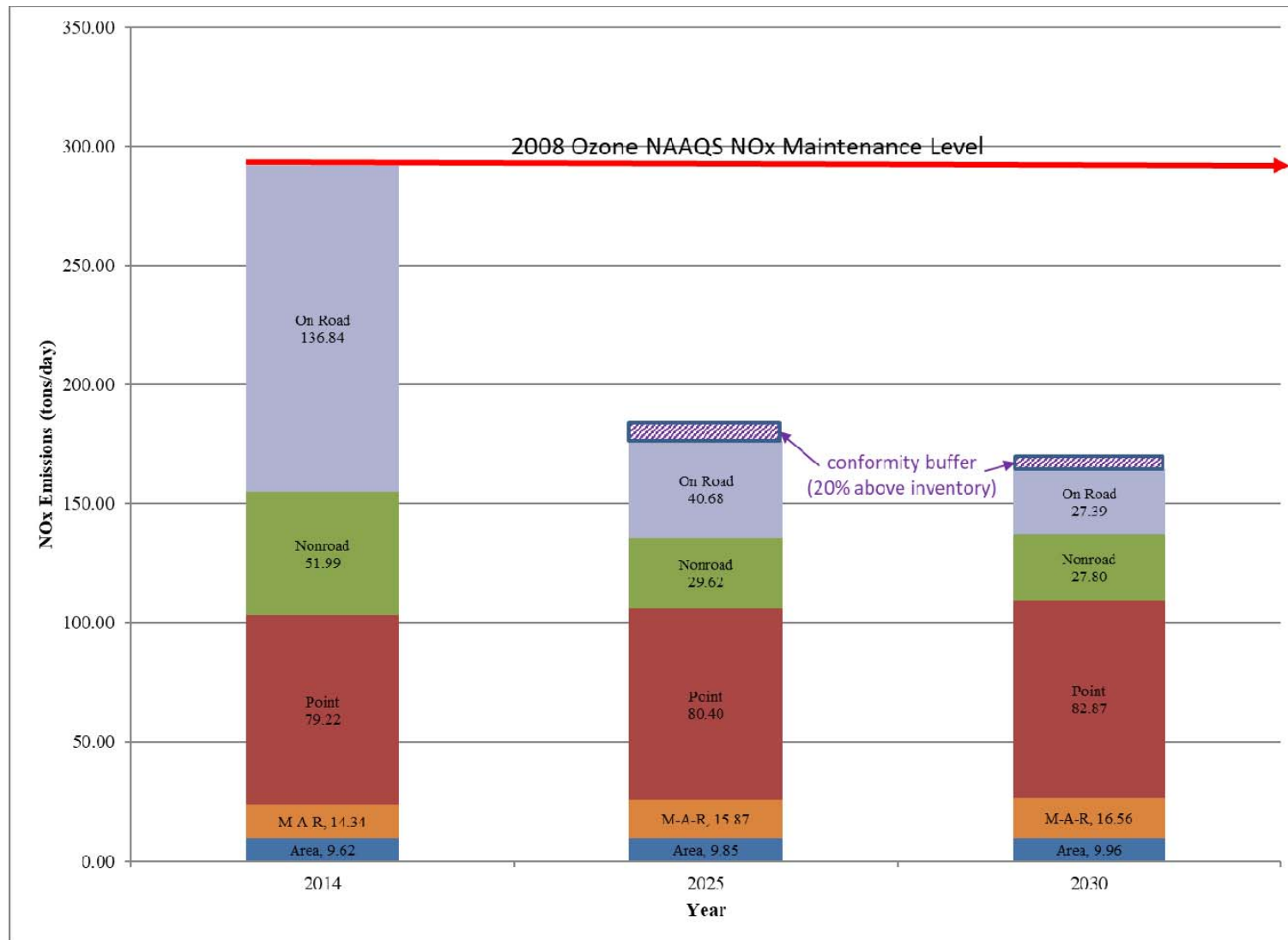
- The Maintenance Plan sets mobile budgets for 2014, 2025 & 2030 for
 - VOC
 - NO_x

- Mobile budgets
 - Two sets of mobile budgets:
 - Without Conformity Buffers
 - With Conformity Buffers

2008 Ozone Maintenance Plan – VOC Emissions

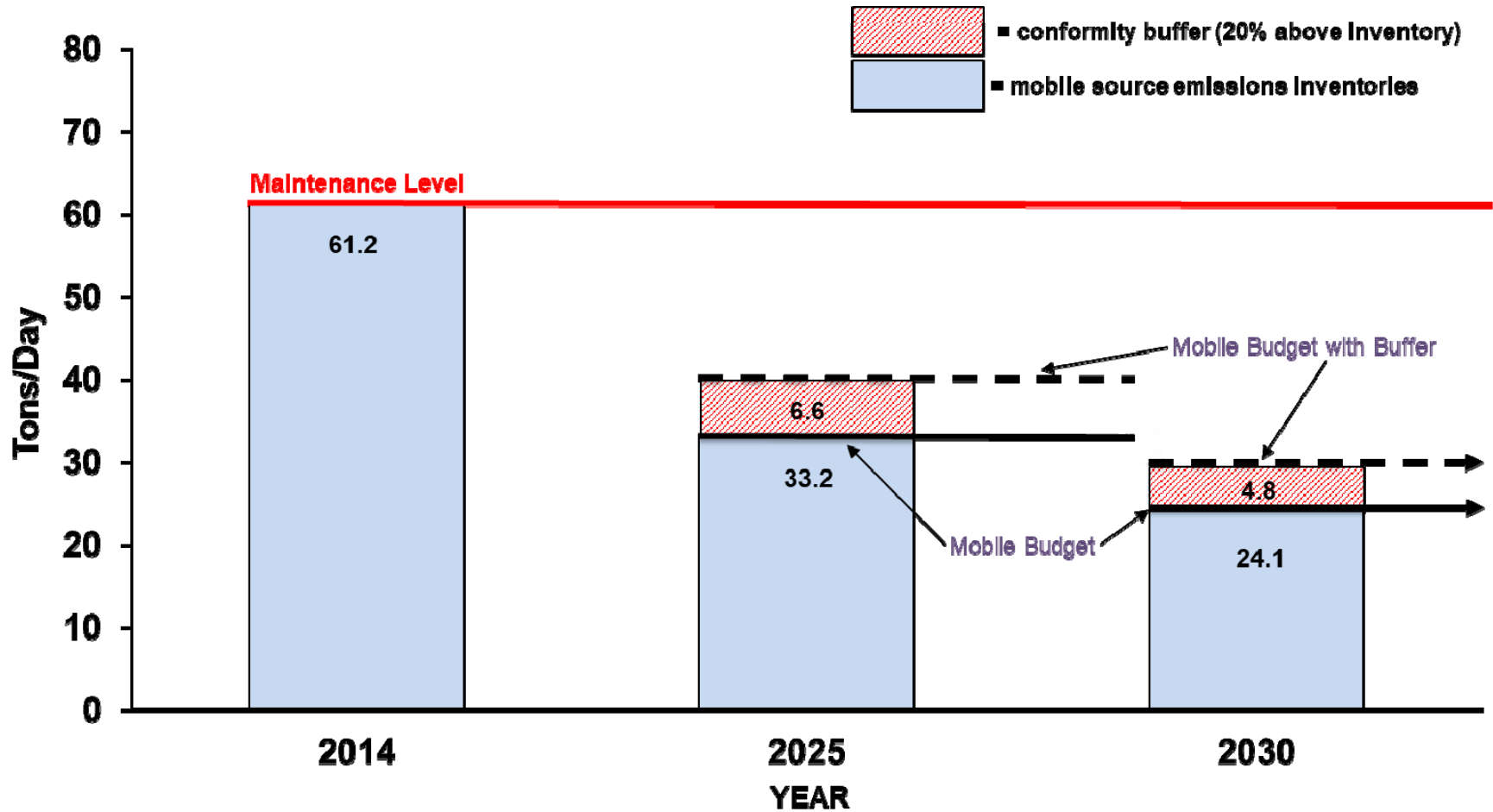


2008 Ozone Maintenance Plan – NOx Emissions



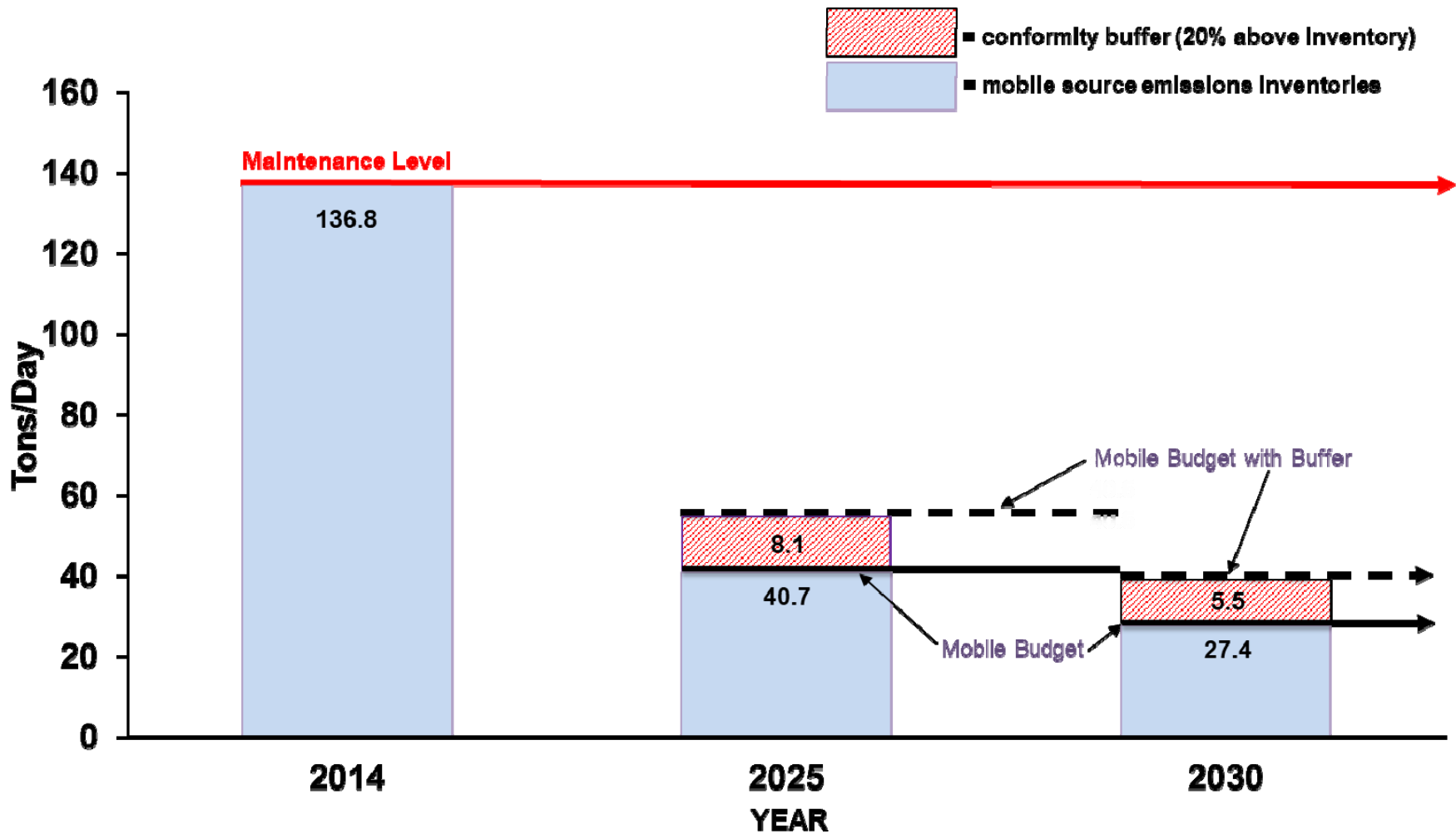
2008 Ozone Maintenance Plan

On-Road Mobile Emissions with Mobile Budgets- VOC



2008 Ozone Maintenance Plan

On-Road Mobile Emissions with Mobile Budgets- NOx



When Are New Budgets Used?

- Once EPA finds them adequate, or approves the maintenance plan, the mobile budgets will become effective immediately
- Once approved by EPA, these mobile budgets must be used in all conformity analyses, constraining future mobile emissions for all years of the Long Range Plan, regardless of any changes to input assumptions (federal vehicle and fuel programs, vehicle fleet data, land activity data, etc.), until new mobile budgets are developed for the region and are approved by EPA.

Which Mobile Budget is Used?

- Without Conformity Buffers – Default budget
- With Conformity Buffers– Applicable if changes in data, model, or planning assumptions lead to mobile emissions exceeding the mobile budgets without buffers

Schedule

April	TPB Transmits Mobile Emissions Inventories to MWAQC
April-June	Finalize Draft Emissions Inventories (All Sectors) and Develop Mobile Budgets and Draft Maintenance Plan
July	MWAQC Approves Draft Emissions Inventories and Draft Maintenance Plan for Public Comment
August	States Post Notices for Public Hearings and Comments
Sept–Nov	Public Hearing and Comment Period
December	MWAQC Approves Final Maintenance Plan
Early 2018	States Submit Redesignation Request and Maintenance Plan to EPA
???	EPA Approves SIP or Finds Mobile Budgets Adequate for Use in Conformity



Visualize 2045 Conformity Impacts

- TPB Action for Conformity: October 2018
- EPA Action on 2008 Ozone Maintenance Plan Mobile Budgets: ???
- 2 sets of MOVES runs
 - meteorological data used in the MOVES run for conformity must be consistent with that used in the development of the mobile budgets used for conformity:
 - 1) Inputs consistent with current (1997 NAAQS) mobile budgets
 - 2) Inputs consistent with 2008 ozone maintenance plan mobile budgets
- Concerns with potential forecast emissions increases
 - New out year: 2045
 - Updated vehicle fleet mix

Maintenance Plan

2008 Ozone NAAQS Redesignation Request and Maintenance Plan

<https://www.mwcog.org/events/2017/7/20/mwaqc-tac-call/>

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