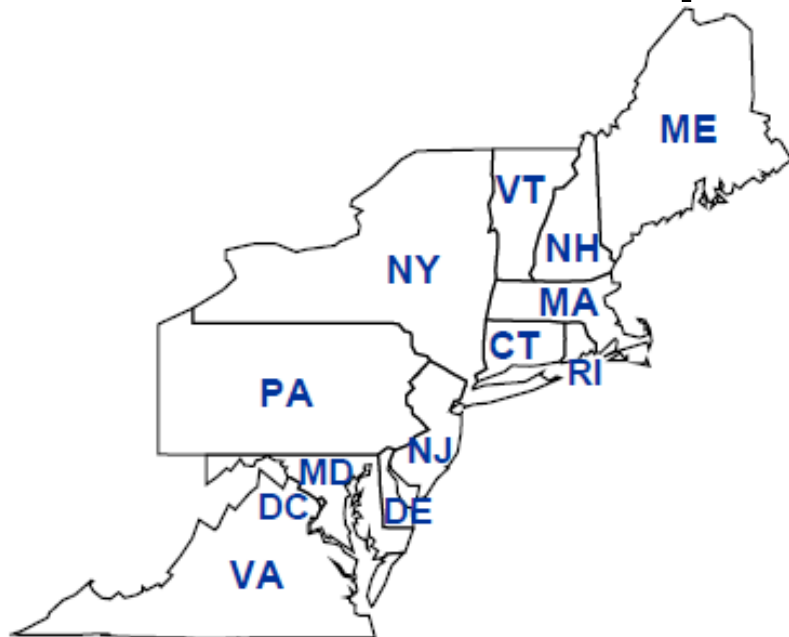




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OZONE TRANSPORT COMMISSION

Ozone Transport Commission Update



Joan Rohlfs
June 22, 2011

Ozone Transport Commission

- The Ozone Transport Commission (OTC) is a multi-state organization created under the Clean Air Act (CAA). It is responsible for advising EPA on transport issues and for developing and implementing regional solutions to the ground-level ozone problem in the Northeast and Mid-Atlantic regions.

Ozone NAAQS History

1-Hour Standard of 124ppb (1991)

- Standard met throughout OTR (NO_x SIP Call)

8-Hour Standard of 84ppb (1997)

- Most recent fully implemented standard (CAIR/TR1)

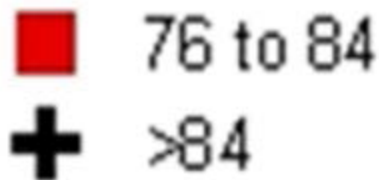
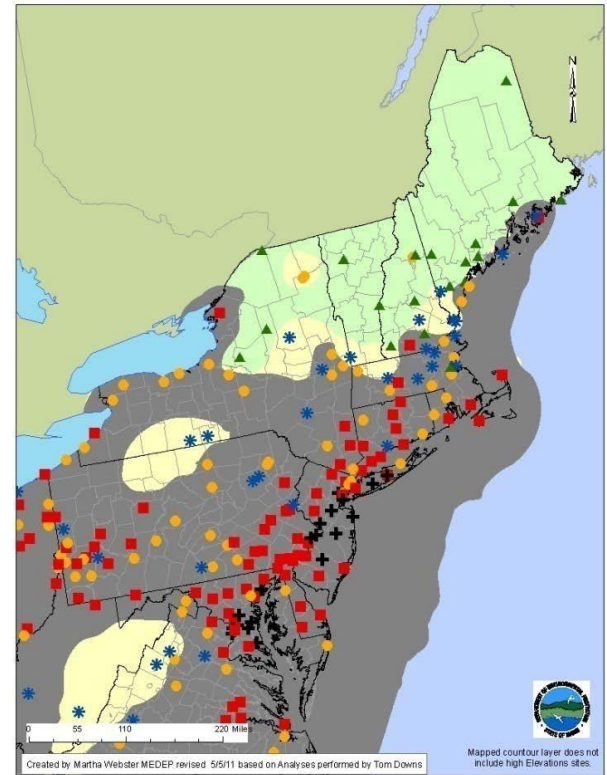
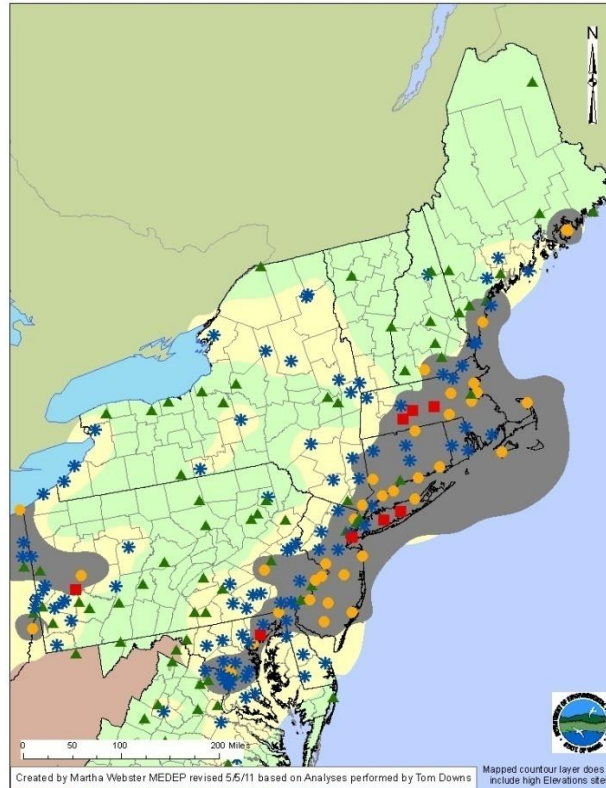
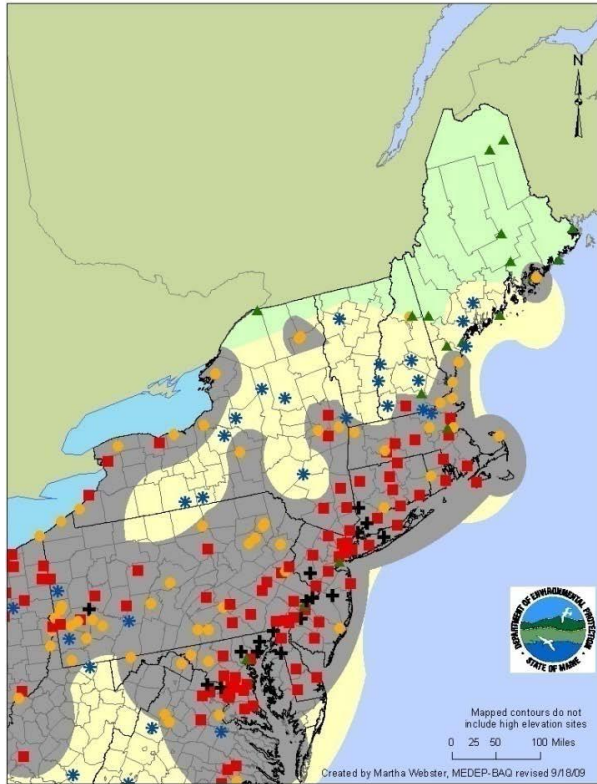
8-Hour Standard of 75ppb (2008 Reconsidered)

- Most recent standard but not fully implemented

Proposed Standards - To be announced next month?

- Primary: 8-Hour - 60 to 70ppb
Secondary: - W126 - 7 to 15 ppm-hours

Annual 4th High Ozone Values or the 3 Design Value Years –2008, 2009 and 2010

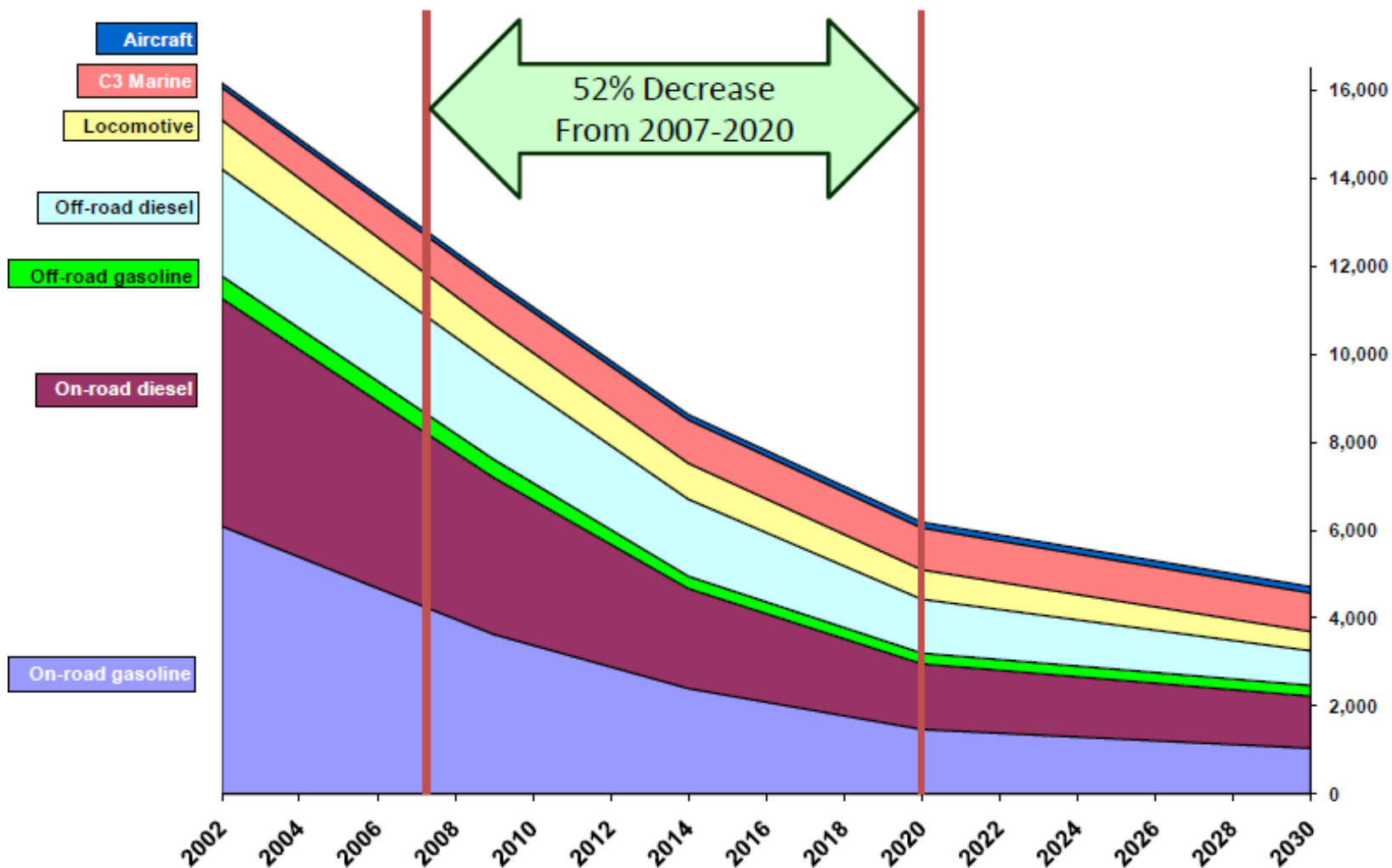


Parts per Billion (ppb)

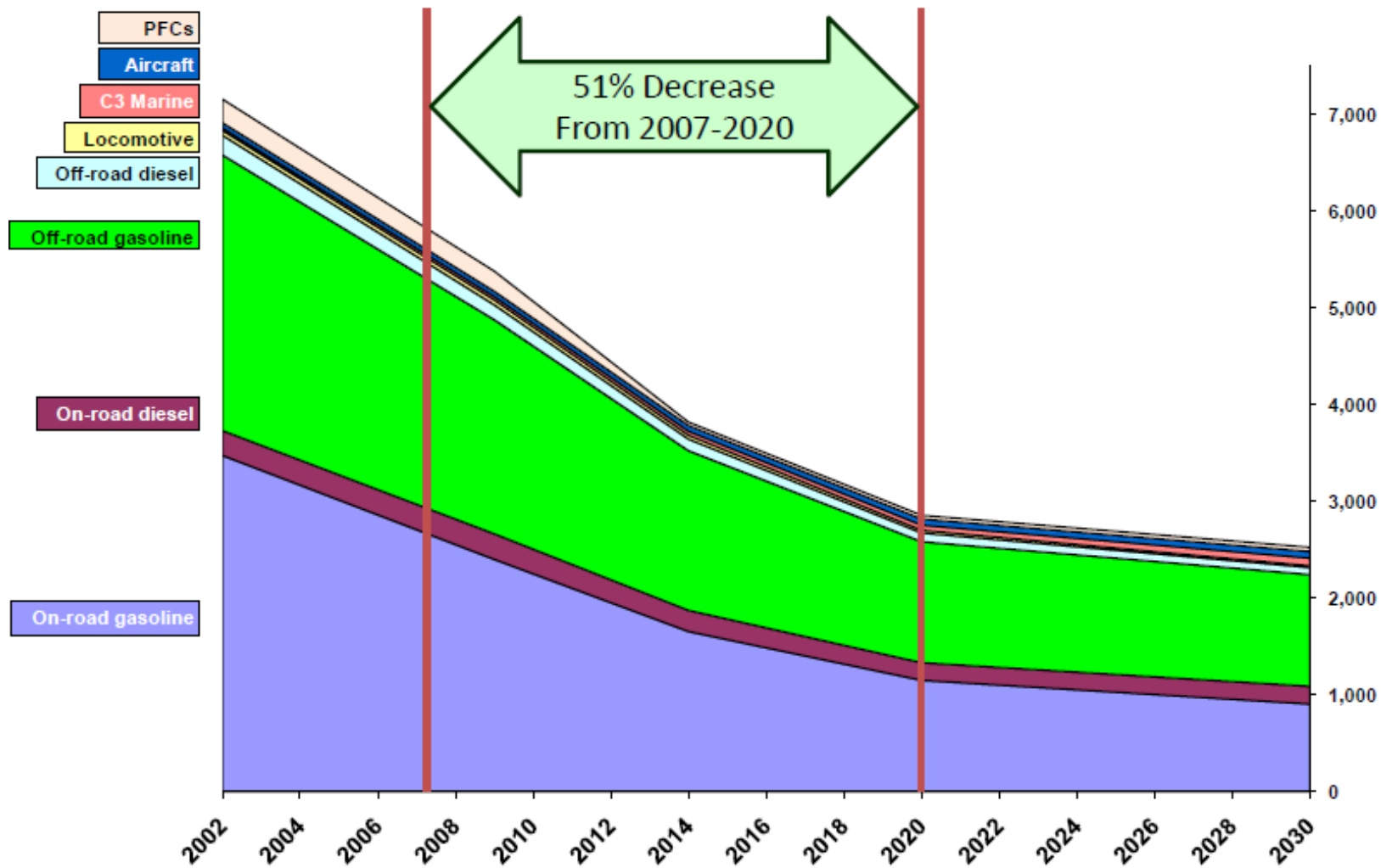
OTR MOBILE Inventory Analysis: Summary

- Onroad:
 - Waiting for MOVES data
- Mobile is a large part of the OTR inventory:
 - NOX-2007 (74%), 2020 (51%)
 - VOC -2007 (57%), 2020 (43%)
- Significant reductions are expected in 2020 in all Mobile Sectors
- Important nonroad categories during Ozone Season
 - NOX-Construction, Pleasure Craft, Marine
 - VOC -Pleasure Craft, Lawn/Garden, Recreational
- Emission Increases are projected for:
 - Pleasure Craft -NOX(4%)
 - Aircraft -NOX(14%), VOC (4%)

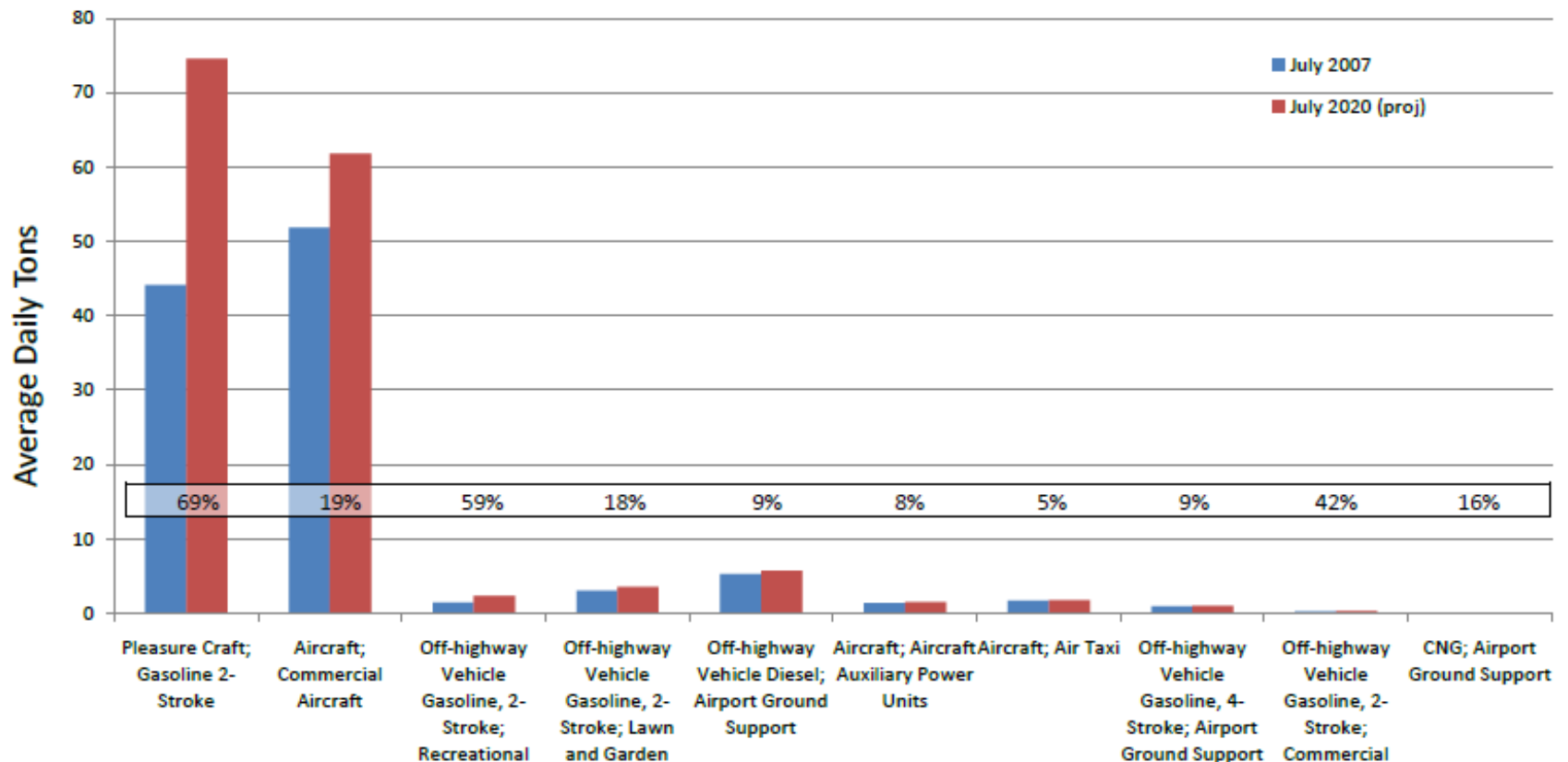
Annual U.S. Mobile Source NO_x Emission Projections (ktons per year) Including C3 Marine (ECA) Control



Annual U.S. Mobile Source VOC Emission Projections (ktons per year) Including C3 Marine (ECA) Control

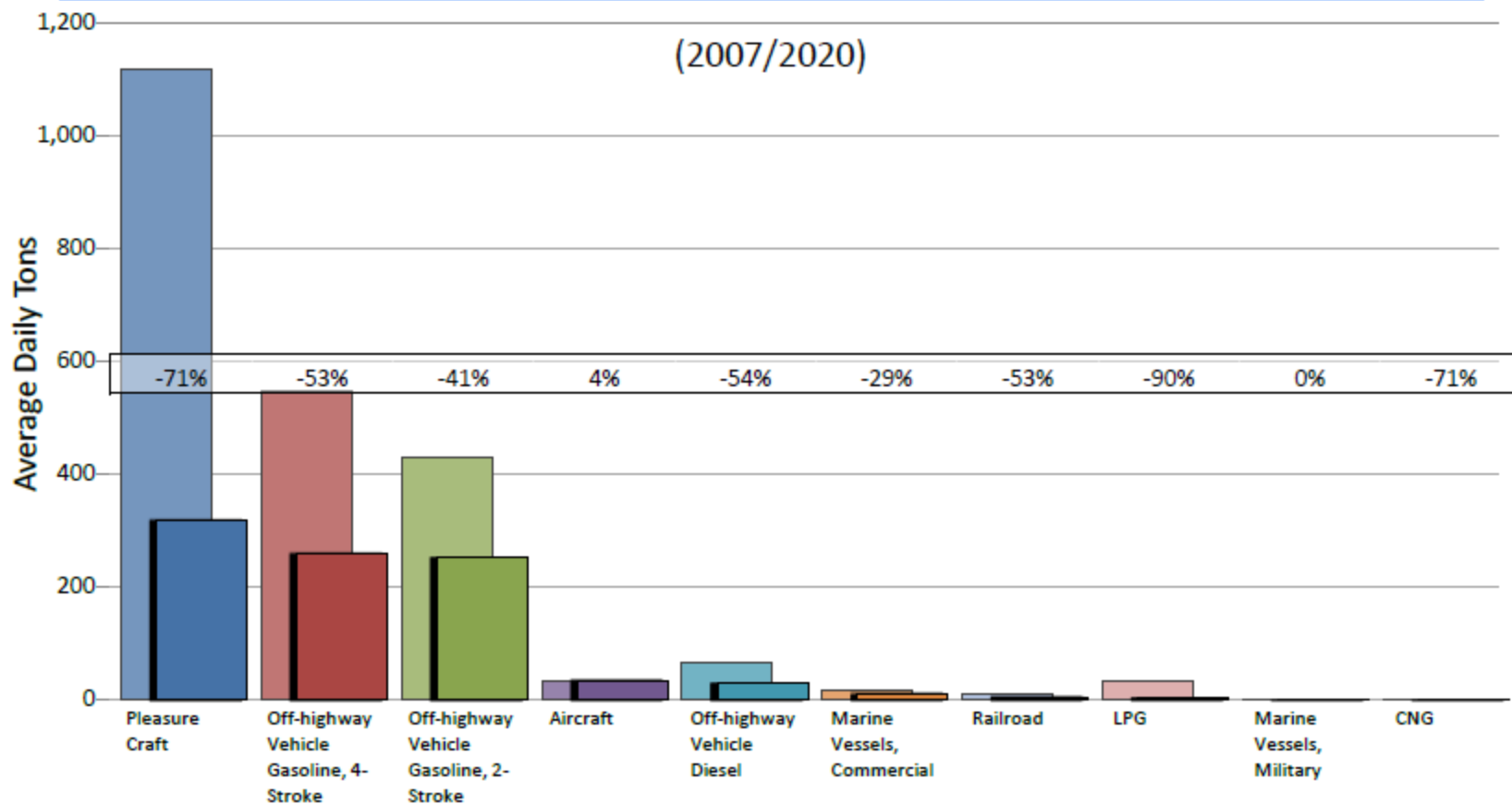


Nonroad NOx: Categories that Increase



2007 Marine/Air/Rail: Updated 02/17/2011, Other Nonroad: Updated 09/29/2010
 2020 Marine/Air/Rail: Updated 02/17/2011, Other Nonroad: Updated 01/05/2011

Nonroad VOC July Avg. Daily Tons



2007 Marine/Air/Rail: Updated 02/17/2011, Other Nonroad: Updated 09/29/2010

2020 Marine/Air/Rail: Updated 02/17/2011, Other Nonroad: Updated 01/05/2011

Federal Commitments: Cleaner Vehicles

- April 2010, DOT and EPA established GHG emission and fuel economy standards for MY2012-2016 light-duty cars and trucks (34.1 mpg)
- May 2010, EPA, DOT and CA announced they would produce joint standards for MY2017-2025 in Sept 2011. [Proposing 47-62 mpg by 2025.](#)

OTC asking EPA for national controls on important nonroad categories during Ozone Season

- NOx : Construction, Pleasure Craft, Marine
- VOC: Pleasure Craft, Lawn/Garden, Recreational

New Measures Under Consideration

- Nonroad Idling Model Rule
 - Reduce Nox, PM2.5, Toxics air pollutants
 - Affects nonroad diesel engines
- Heavy Duty Inspection & Maintenance programs (trucks)
- Stationary Source controls (boilers serving Electric Generating Units, Municipal waste incinerators)
- Gasoline Station Vapor Emission (VOC), Solvent degreasing (VOC), Consumer Products (VOC)
- Model rules based on state rules (ex: CA, MD, NJ,)

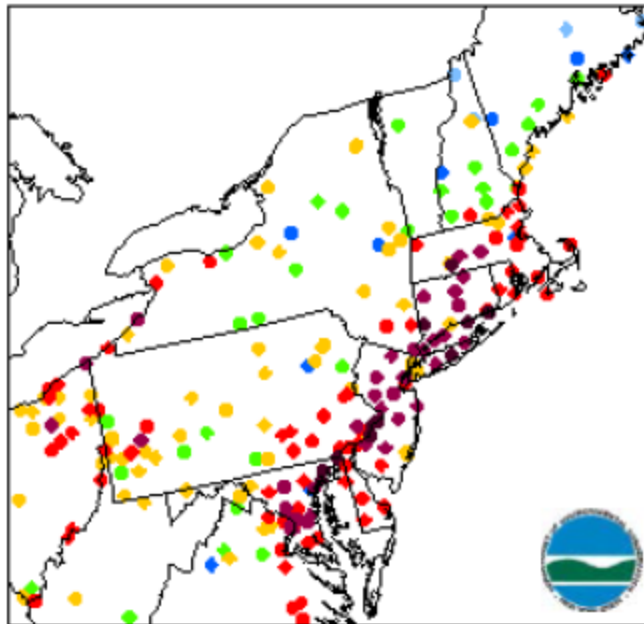
Modeling Scenario

- OTC modeling for 2007-2009 created a scenario using broad domain-wide NO_x and VOC reductions to see what would work to reach 75 ppb ozone standard.
- All OTC recommended measures are included in the projected reductions.

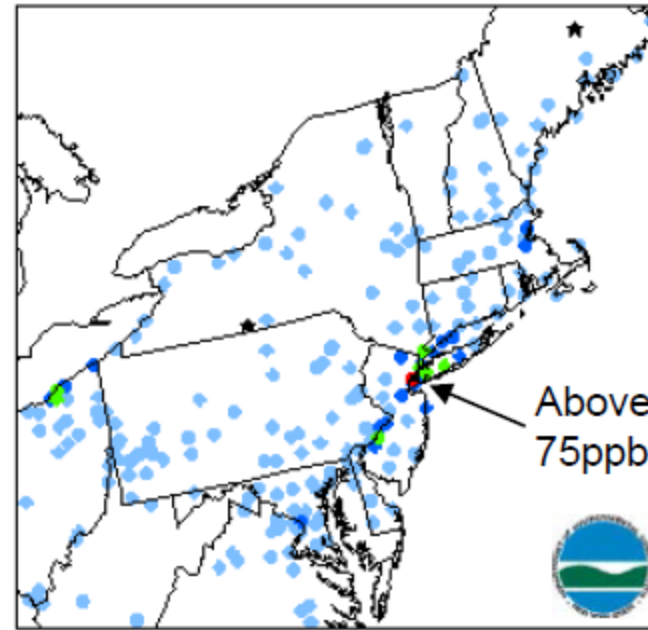
Level 1 Screening “Scenario 3”

Screening of OTC Recommended Measures Predicted Nearly Full Attainment of 75ppb NAAQS!
All locations would meet the 84ppb version of the NAAQS

Observed 2005 - 2009



OTC Recommendations “Scenario 3”



Model predicted future design values



62 67 72 77 82 87
Parts per Billion (ppb)

Next Steps

- EPA soon to announce new Transport Rule to replace CAIR, June 30
- EPA announces new ozone National Ambient Air Quality Standard (NAAQS) in late July
- EPA will address issues with Renewable Fuels Standard in September
- OTC will adopt new model rules in November



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Ozone Transport Commission (OTC)

www.otcair.org/