

Modeling Committee Update

OTC Committee Meeting

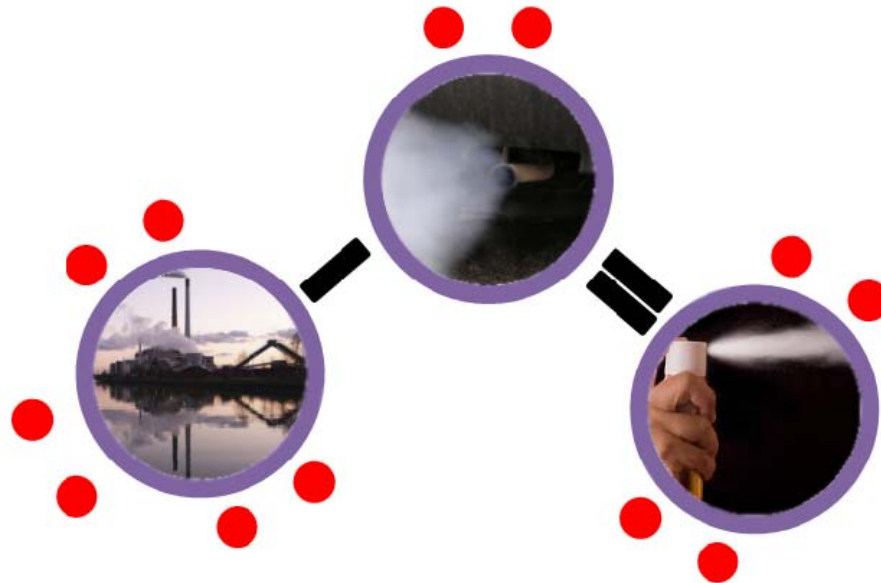
March 21st, 2012
Washington, DC



OZONE TRANSPORT COMMISSION

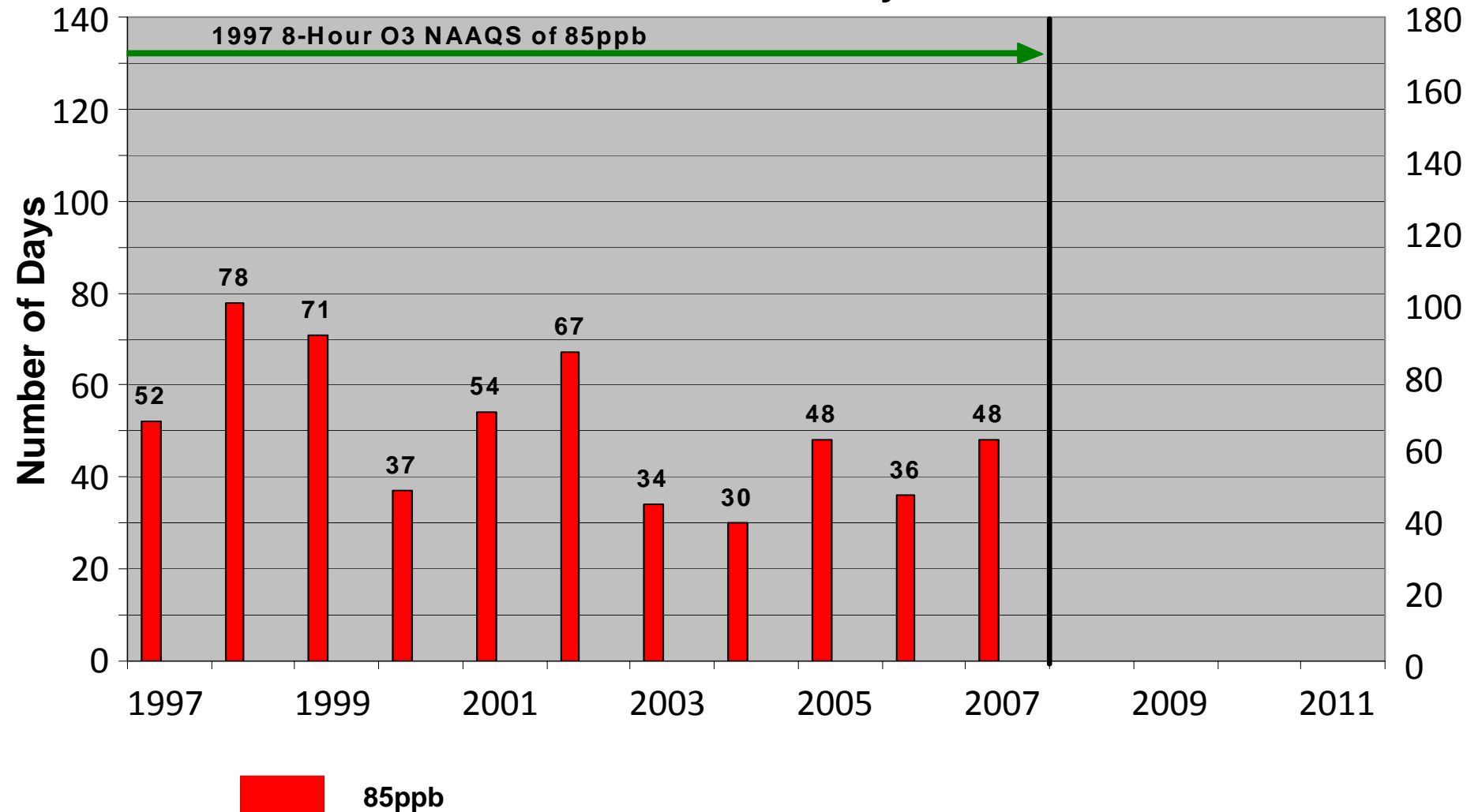
Overview

1. Ozone Design Value Update
2. Nonattainment Area Projections
3. Screening Modeling Scheduling



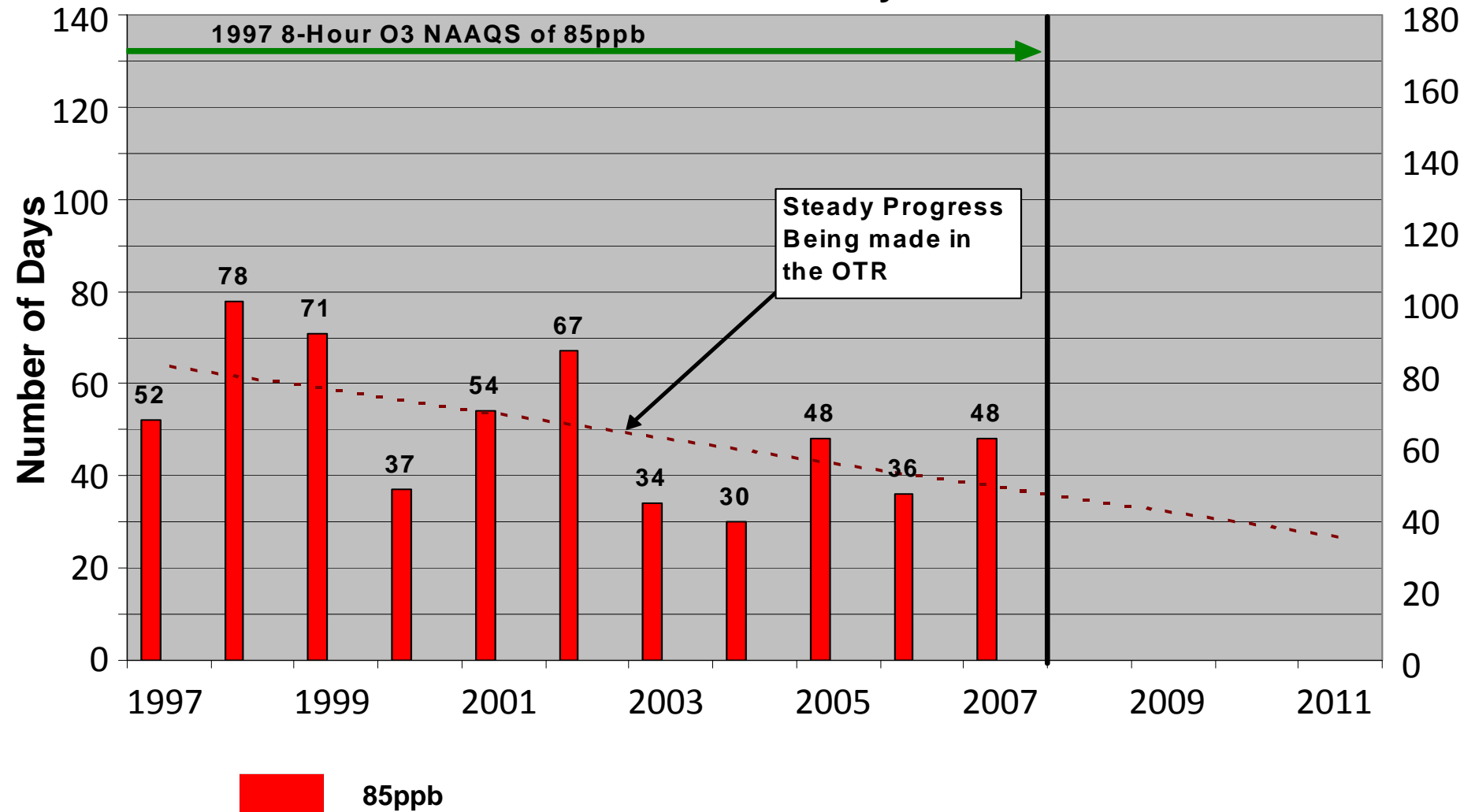
8-Hour Ozone Trends in OTR

8-Hour Ozone Exceedance Days in the OTR



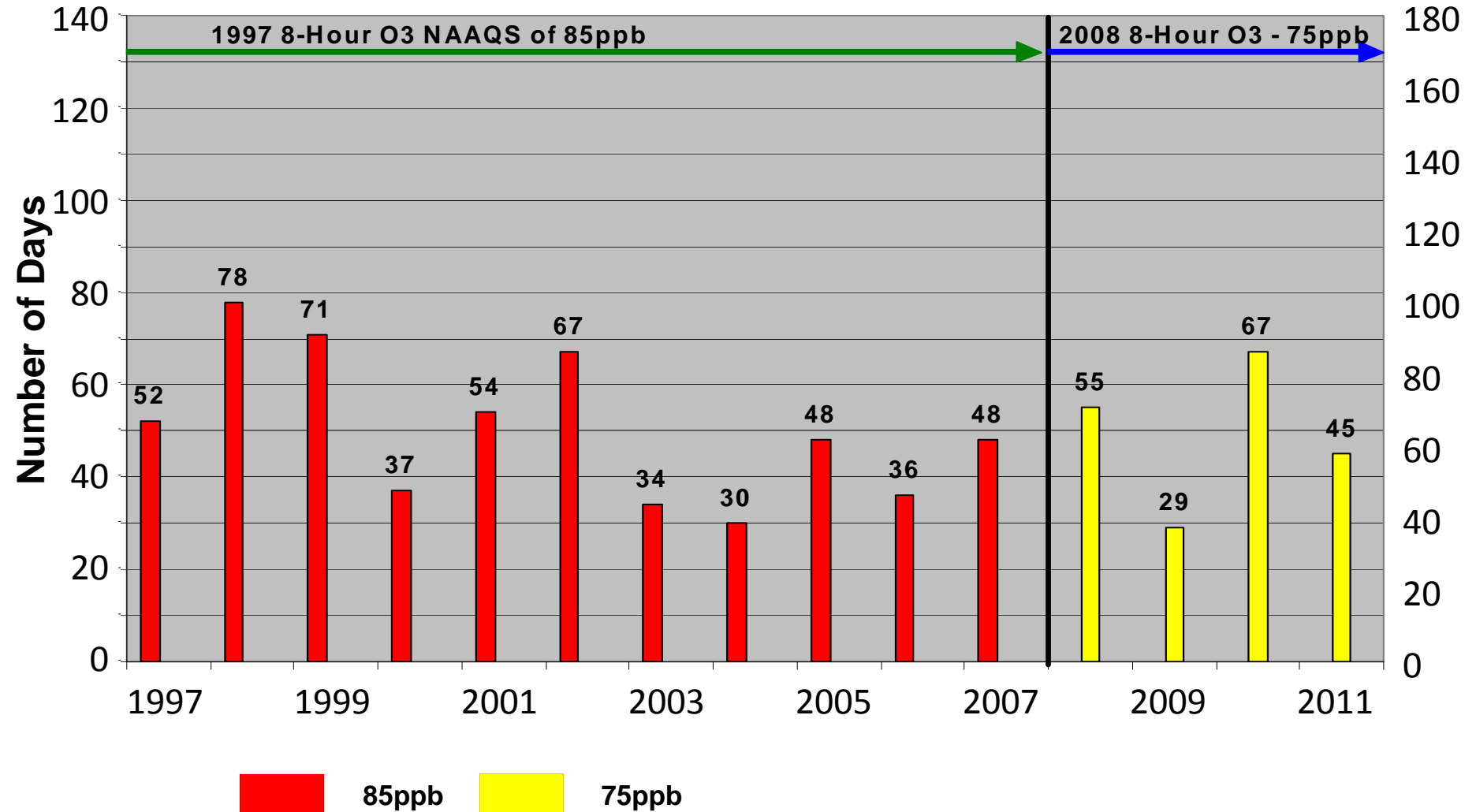
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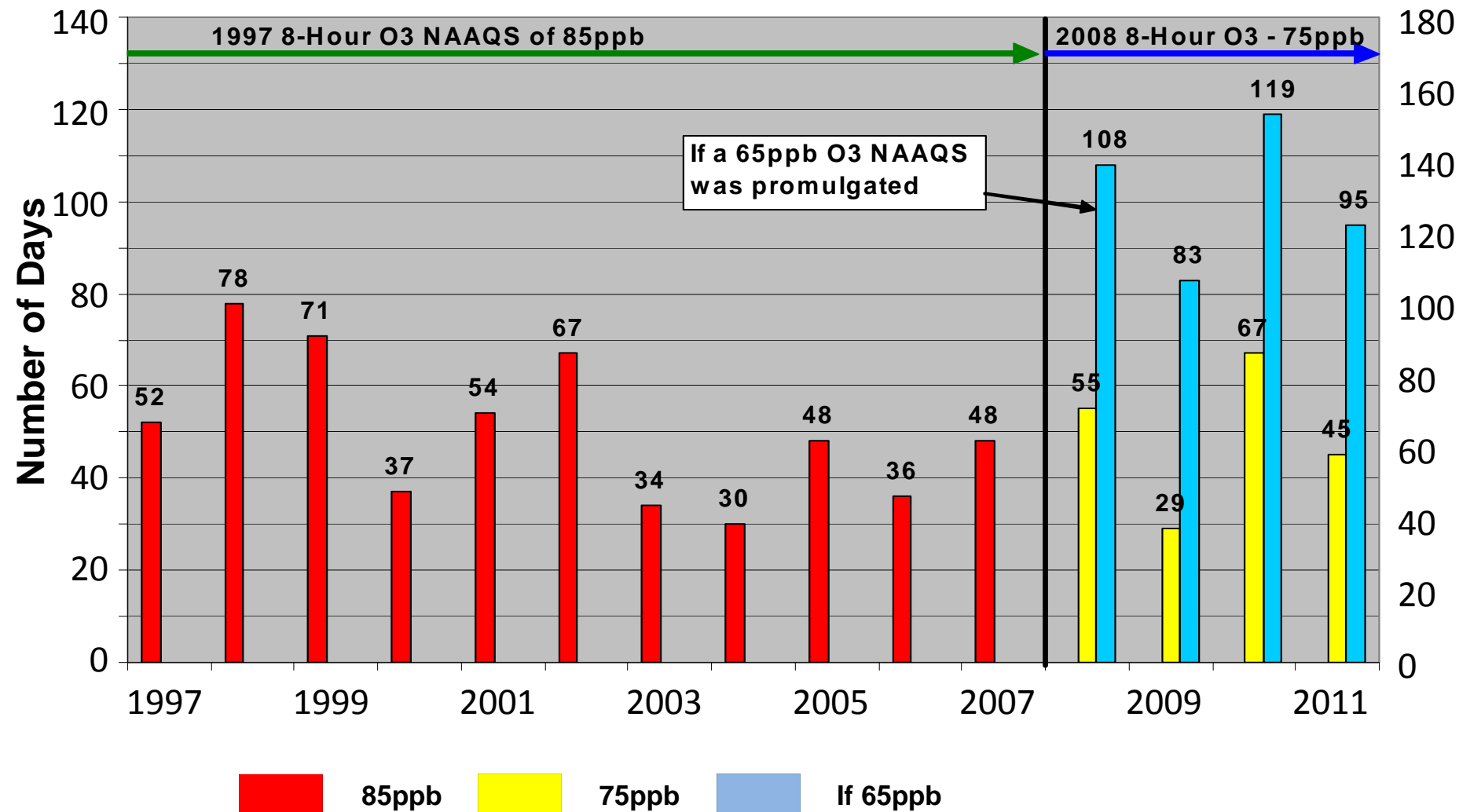
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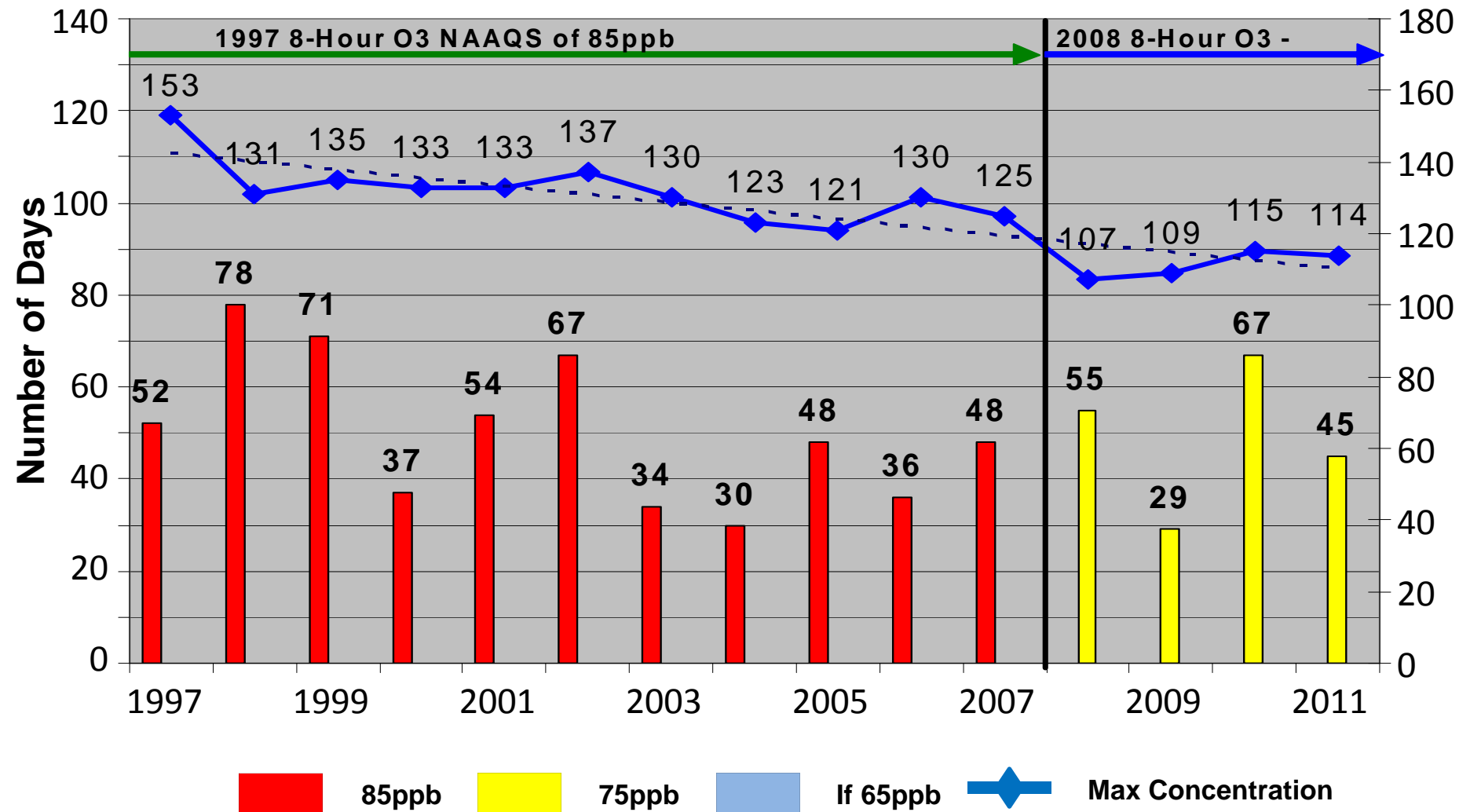
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8-Hour Ozone Trends in OTR

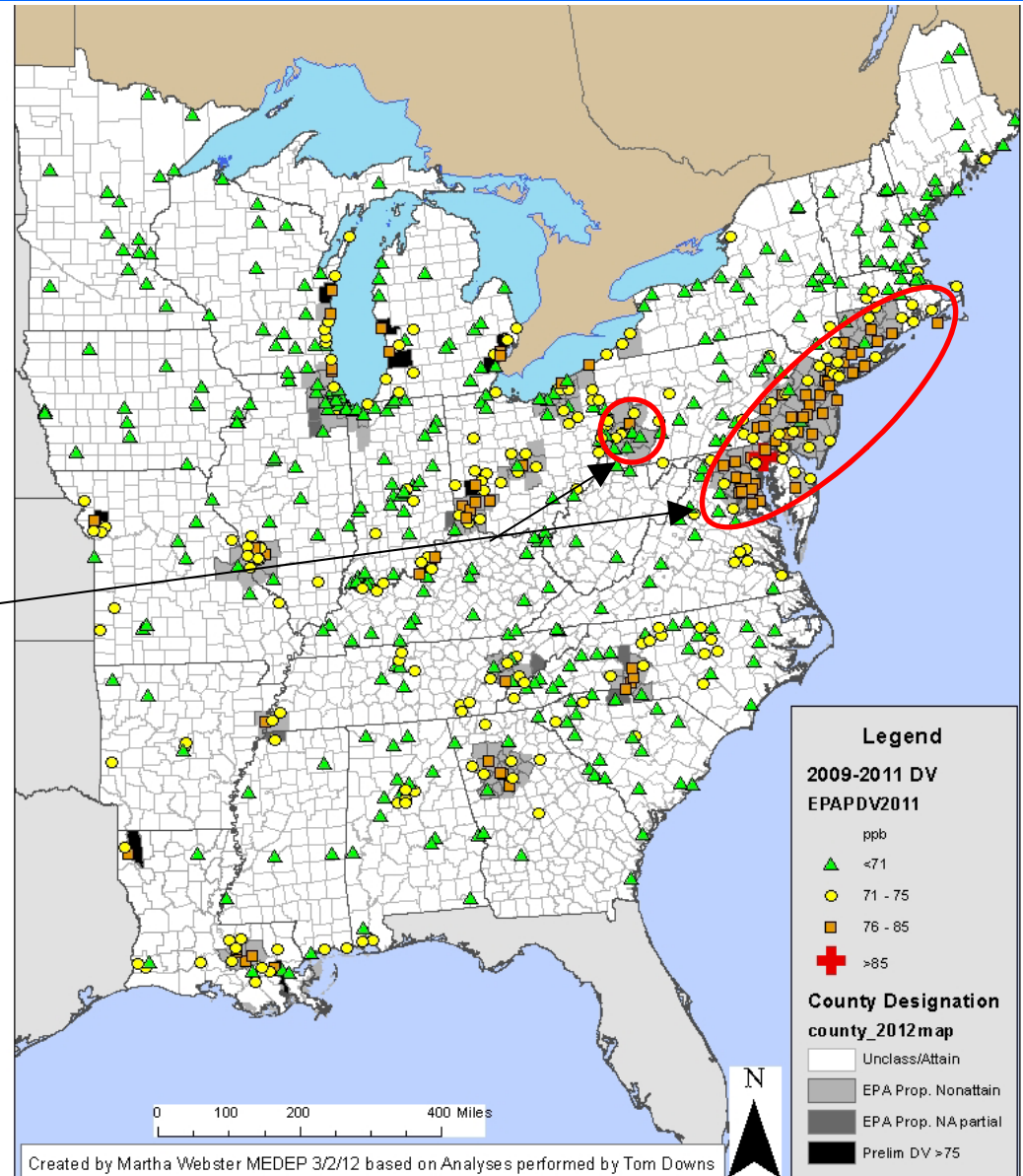
8-Hour Ozone Exceedance Days in the OTR



Preliminary 2011 Ozone Design Values

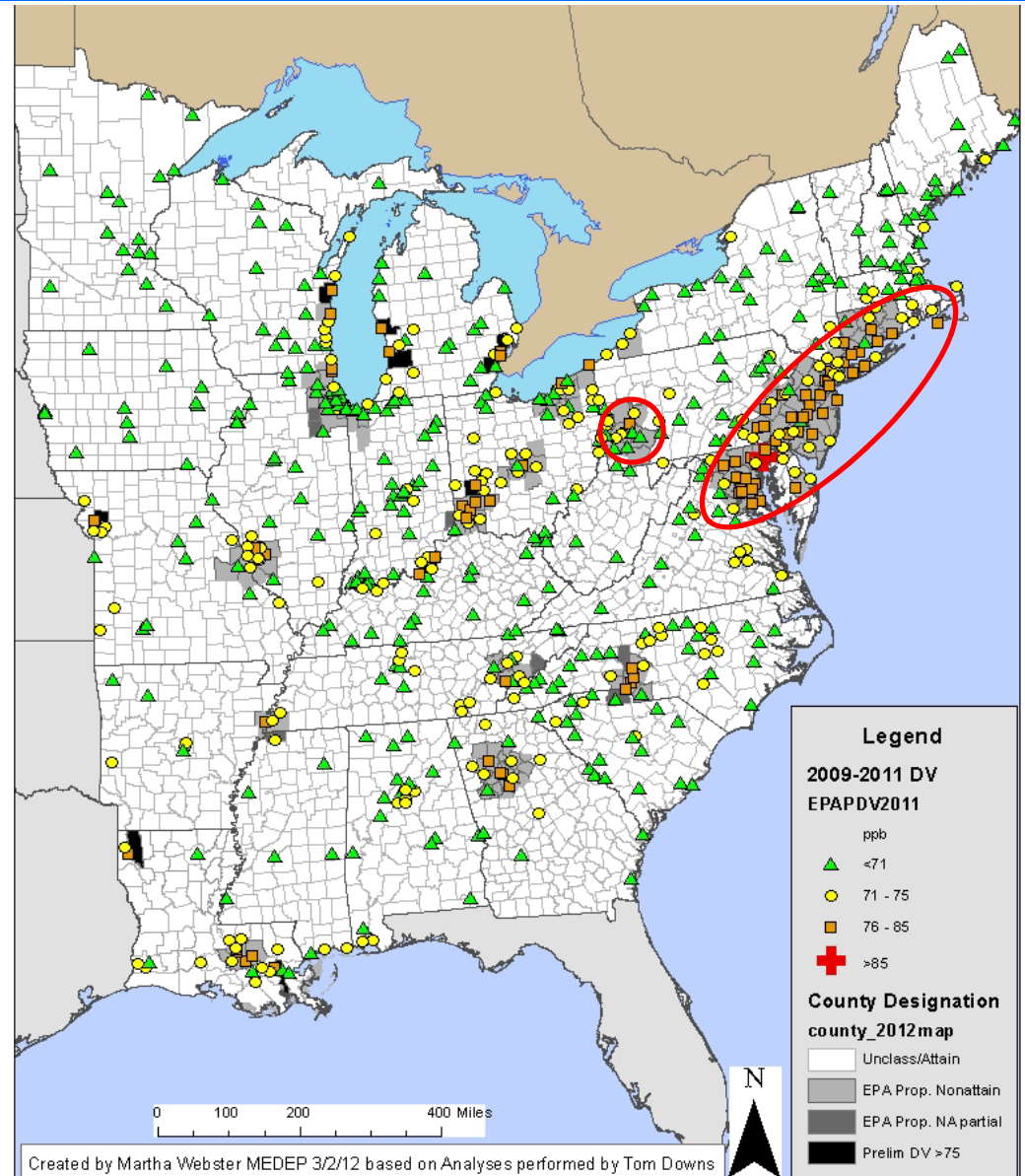
3-Year average of the 4th high concentration for 2009, 2010, 2011

Projected nonattainment areas in the OTR

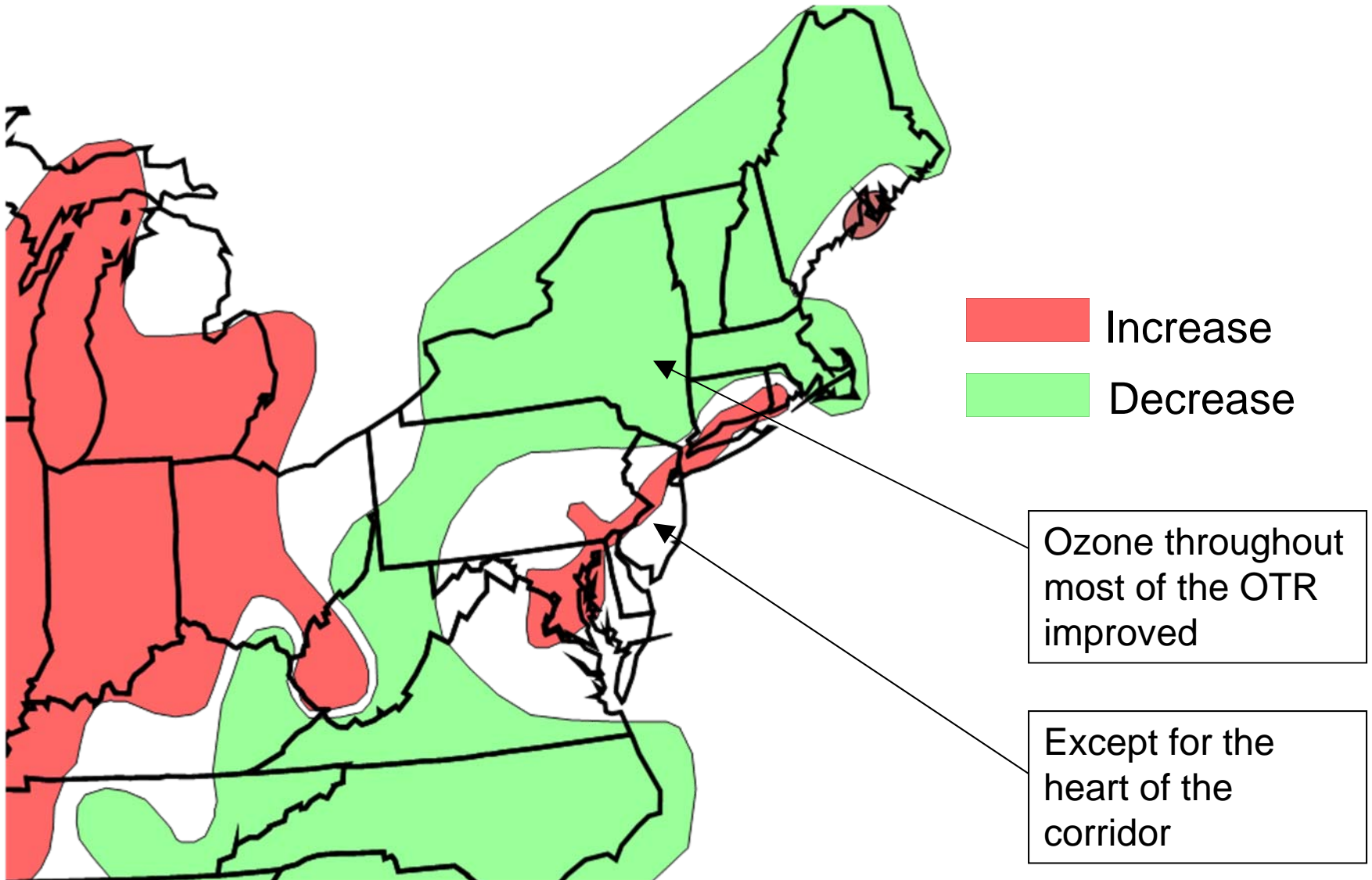


Preliminary 2011 Ozone Design Values

3-Year average of the 4th high concentration for 2009, 2010, 2011

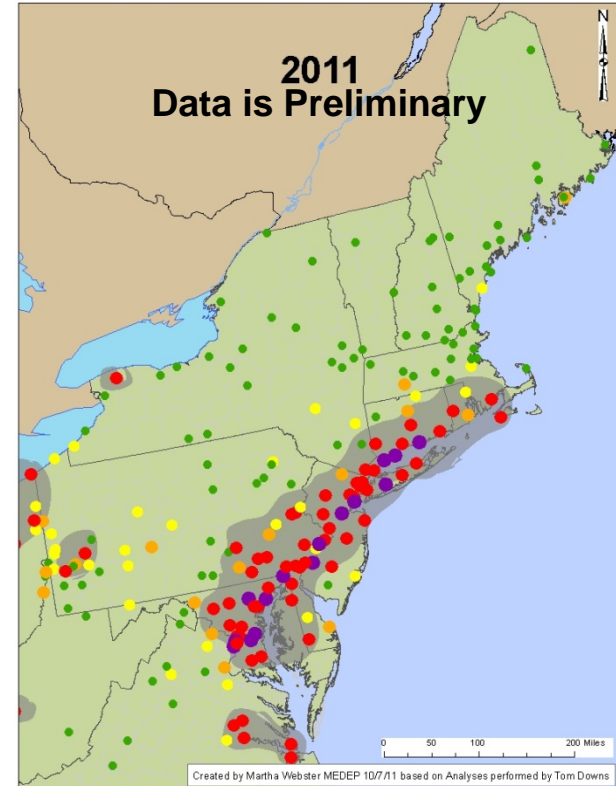
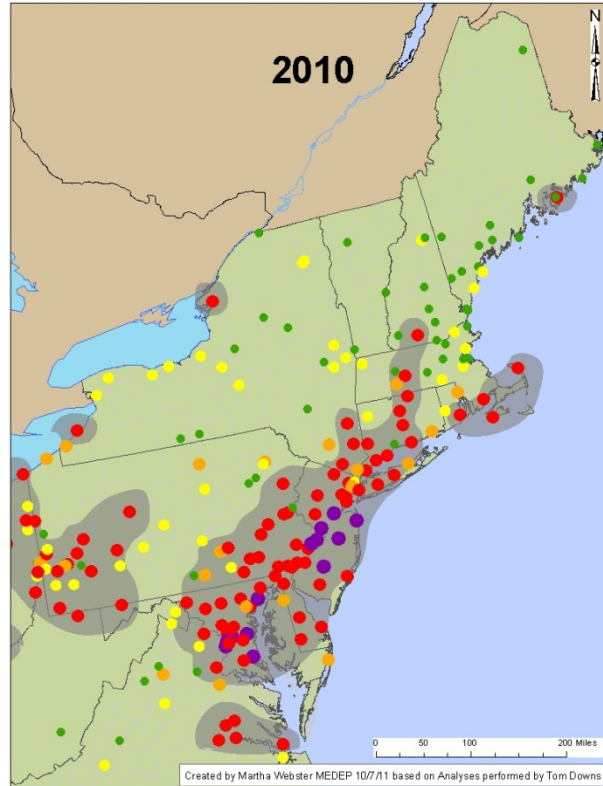
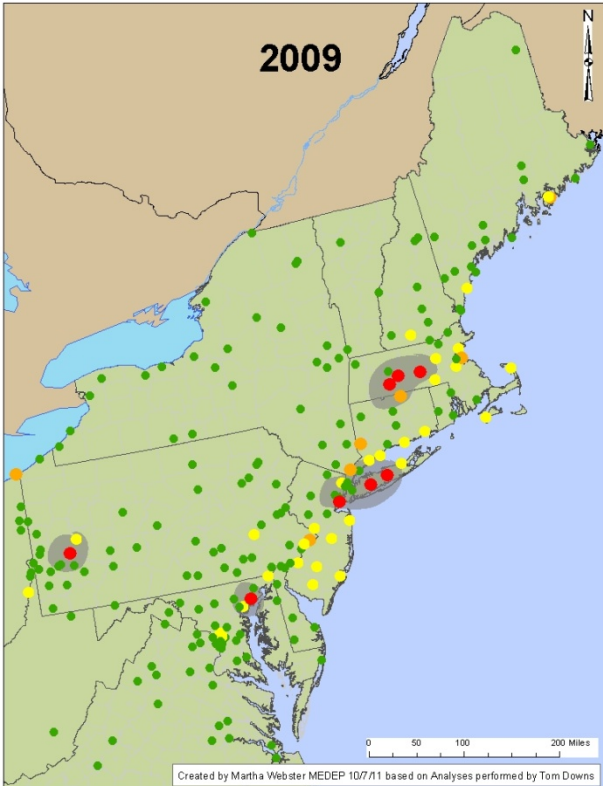


How DVs Changed From 2010 to 2011

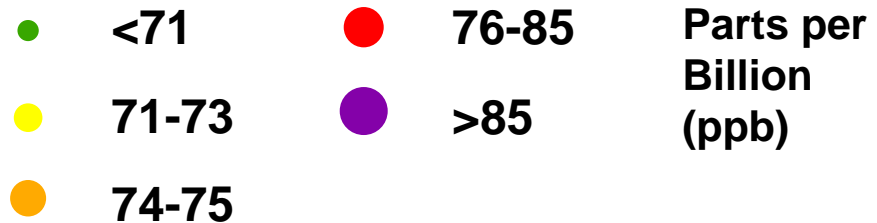


Annual 4th High Ozone Values

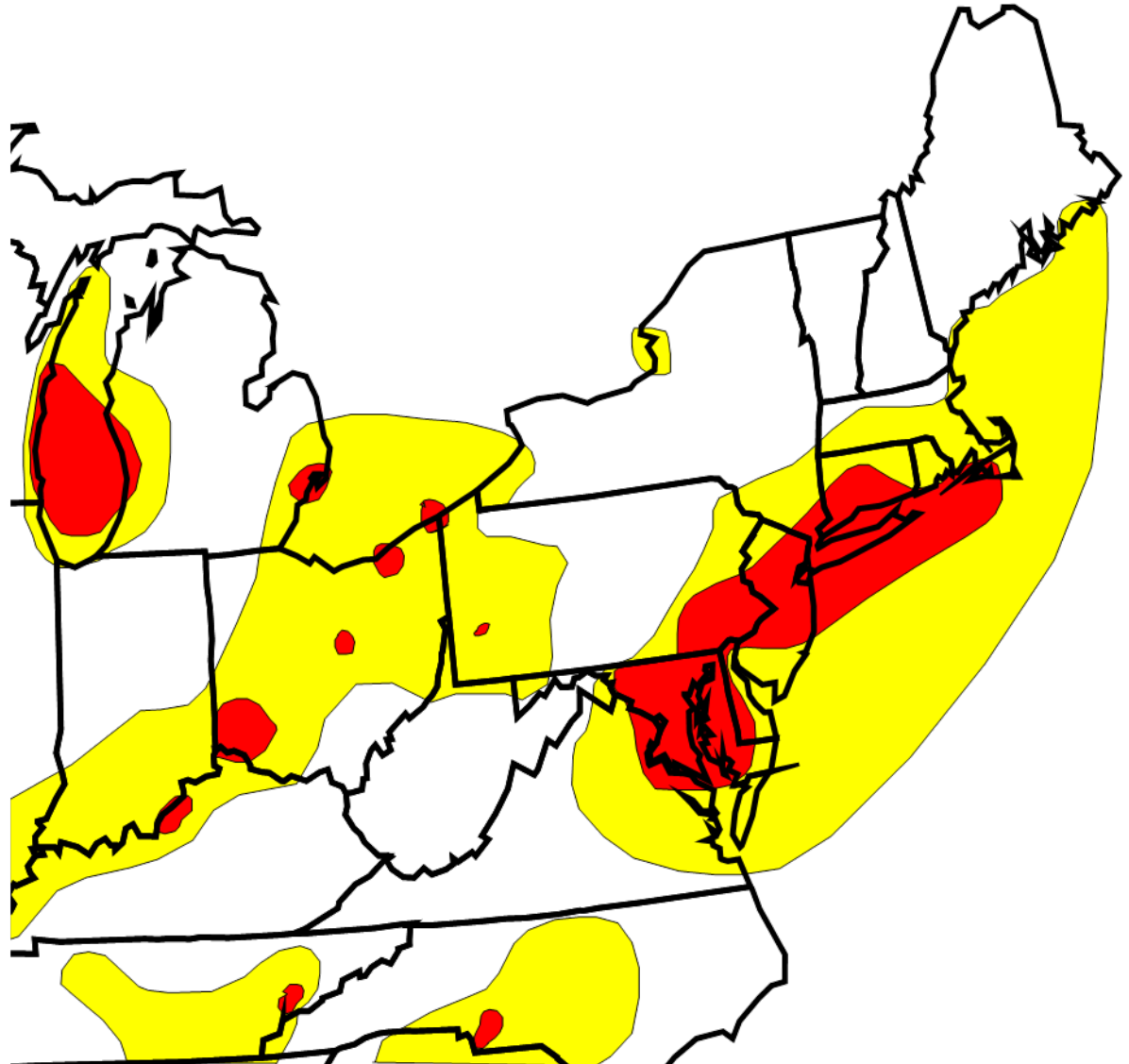
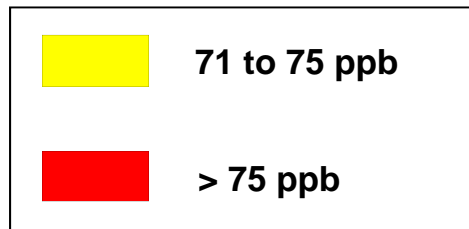
for the 3 Design Value Years – 2009, 2010 and 2011



Grey shaded area highlights general areas greater than 75 ppb ozone

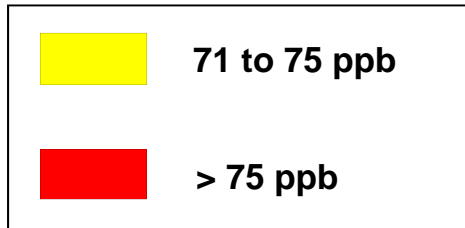


Analysis of 2011 Design Values



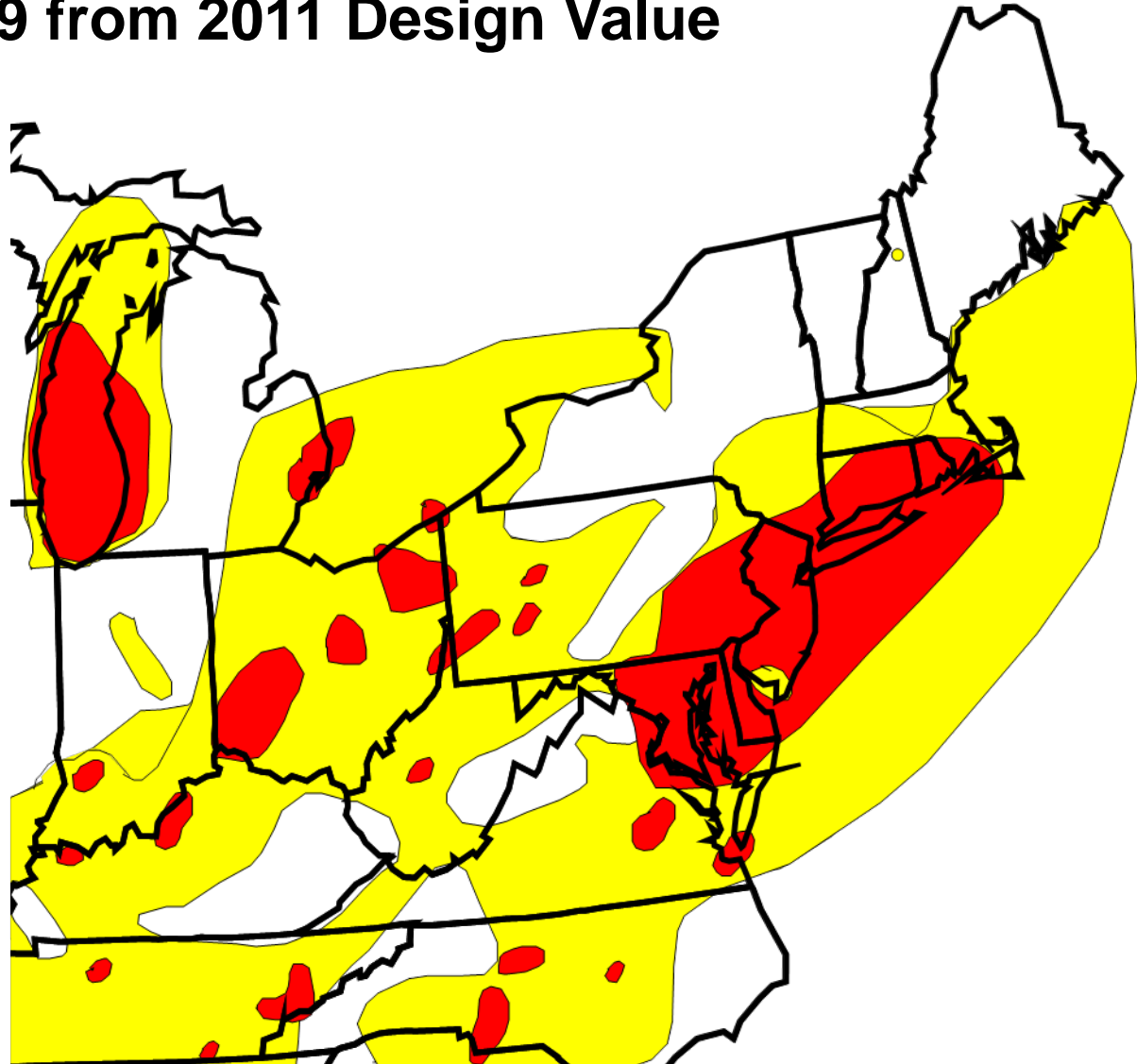
Analysis of 2011 Design Values

Removing 2009 from 2011 Design Value



Data based on average of 2010 and 2011 4th high ozone values

Note: 2009 was an abnormally low ozone year



Screening Schedule

Level 1 Screening
(2007 Inventory & 2020 Control Scenario Using Proxies)

- Completed

Level 2 Screening
(2007 Inventory & 2020 Control Scenario Using Proxies)

- Completed

Level 3 Screening
(Complete 2020 Inventory + Boundary Conditions)

- For Fall 2012

SIP Quality

- For SIP submission deadline TBD

Planned Screening Activities

- Base Cases – 2007 and 2020
- Potential control scenarios and screening for earlier attainment dates will also be considered

Upgrades from Level 2 to 3 Screening

- Upgraded Version 3 of MARAMA Emission Inventory
 - Decrease in NO_x for every state from 1-5%
 - Decrease in VOC for every state except PA & DC
- 2020 Updates
 - MOVES estimate
 - ERTAC EGU or updated EGU estimate
- Emissions Outside of the OTR
 - Full 2007 SESARM/LADCO inventory
 - Updated NEI for remaining areas/sectors
- Boundary Conditions
 - Improved from static to modeled time variant

Level 3 Screening Schedule

Early Spring

- Version 3 of MARAMA (w/ finalized MOVES)
- 2020 MOVES estimate
- Updated NEI12008

Late Spring

- ERTAC EGU code
- LADCO/SESARM/CENSARA (include 2020 % reduction file)
- CAT 3 Marine

Early Summer

- ERTAC EGU results
- Boundary Conditions

Mid Summer

- Start SMOKE and CMAQ Runs

Other Committee Activities

- Model performance analyses on 2007 base
- Exploring BenMAP health benefit analysis
- Analysis of transport patterns:
 - Meteorological data
 - Sensitivity modeling

Questions

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