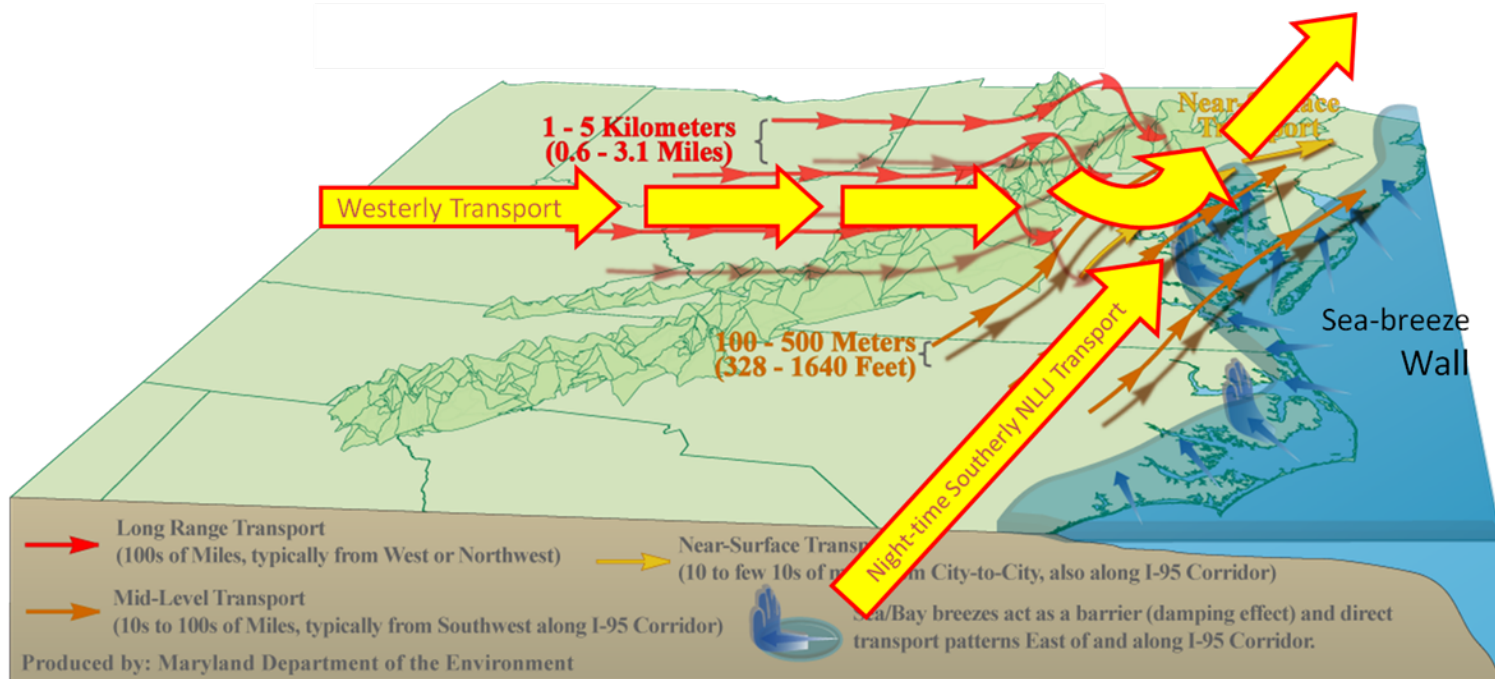


Status Report

The OTC Transport Team



OTC Committee Meeting – March 21, 2012
Tad Aburn - Air Director, MDE

Topics

- Background
 - Who is the Transport Team?
 - What has OTC already done?
 - Pushing for federal measures
 - Is it working?
- What else can states do?
 - Options to address transport
- Schedule



Background

- At its November 10, 2011 meeting the OTC charged the Air Directors to develop a technical and legal strategy to better address regional transport
 - Some areas of the OTR continue to measure “incoming” ozone levels that are already above the new 75 ppb standard.
- A Transport Team is now in place to coordinate this effort
 - Looking at both technical analyses and legal tools
 - Examining the impact of shutdowns by EGUs on transport, as well



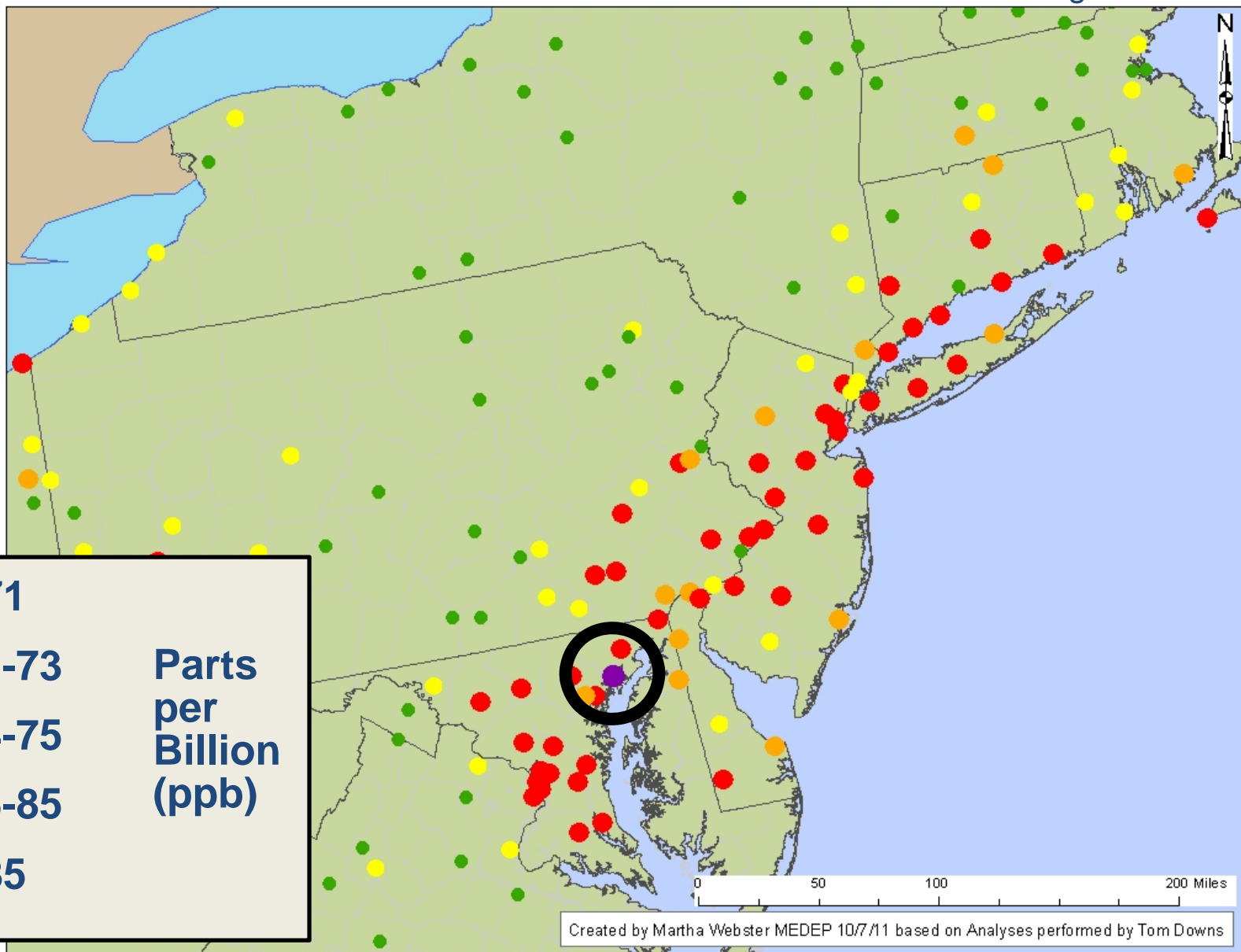
The Current “Big” Picture

- The White House delayed the Ozone NAAQS Reconsideration in September, of 2011 and decided to implement the 2008 ozone NAAQS of 75ppb
 - Scientific community still recommends 60 to 70 ppb
- EPA’s recent rulemaking, the Cross-State Air Pollution Rule (CSAPR) does not address the 2008 ozone NAAQS of 75 ppb, and has been stayed by the court of appeals
- Transport still dominant - Measured, “incoming” ozone routinely exceeds 75 ppb



Who's Above 75 ppb?

Data through 9/28/2011



Pushing Federal Measures

... as the best tool to address transport

- Multiple OTC actions on federal measures over the past 2 years
 - OTC has supported federal measures to reduce transport from almost all 50 states several times
- The OTC has built a very strong scientific basis for the need to reduce regional emissions with federal measures
 - Analyses of past efforts show that these regional emission reduction programs can work



The Priority Source Categories

The OTC National Asks from
June 2011:

- Power Plants (EGUs)
- On-Road Vehicles – Cars and trucks
- ICI Boilers
- Cement Kilns
- Marine Engines
- Locomotives

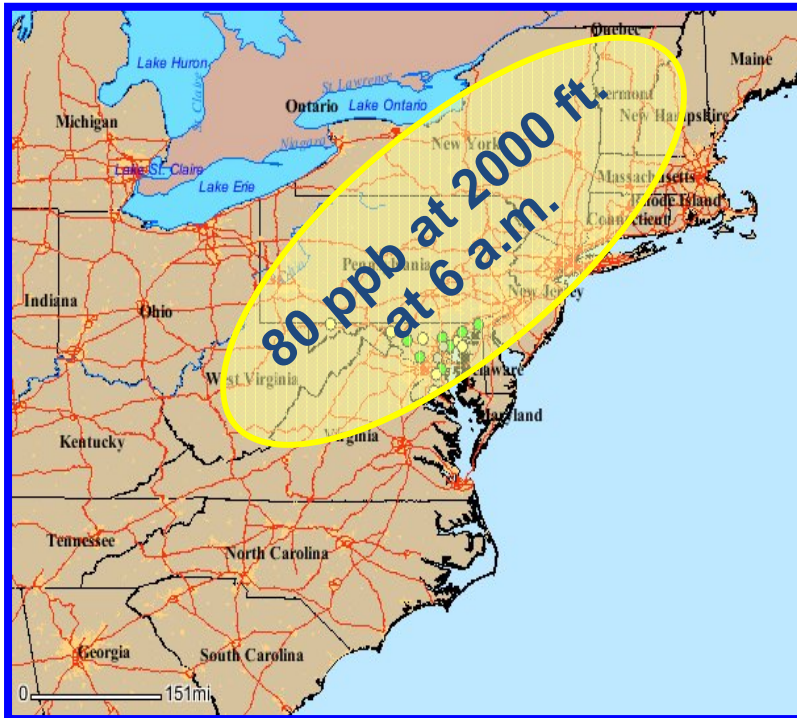
These represent ...

- 75 % of the NO_x left to regulate
- 85 % of the SO₂ left to regulate
- 75 % of the 2005 Hg emissions



Why Are Federal Measures Important?

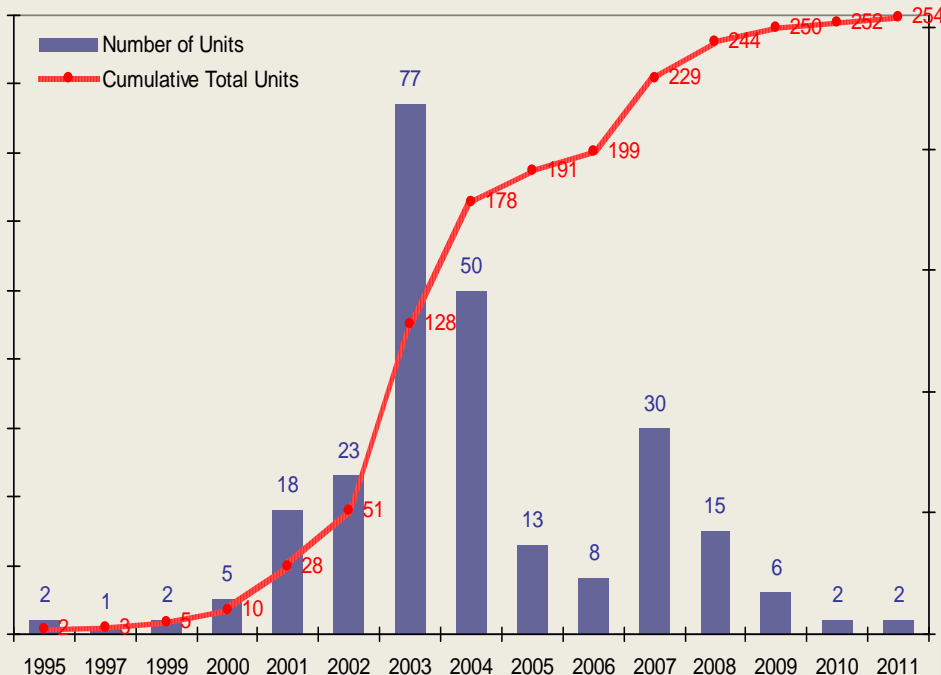
Morning Elevated Reservoir of Ozone Above the OTR



- Because they work!
- The classic ozone transport story
 - Incoming ozone levels (as high as 80 ppb) collect in an elevated reservoir over night
 - Real world programs like the NOx SIP call have shown that
 - Adding regional controls ...
 - Results in regional NOx emission reductions ...
 - Which lead to reduced ozone in the elevated reservoir ...
 - Which lead to lower ozone at ground level and public health protection!

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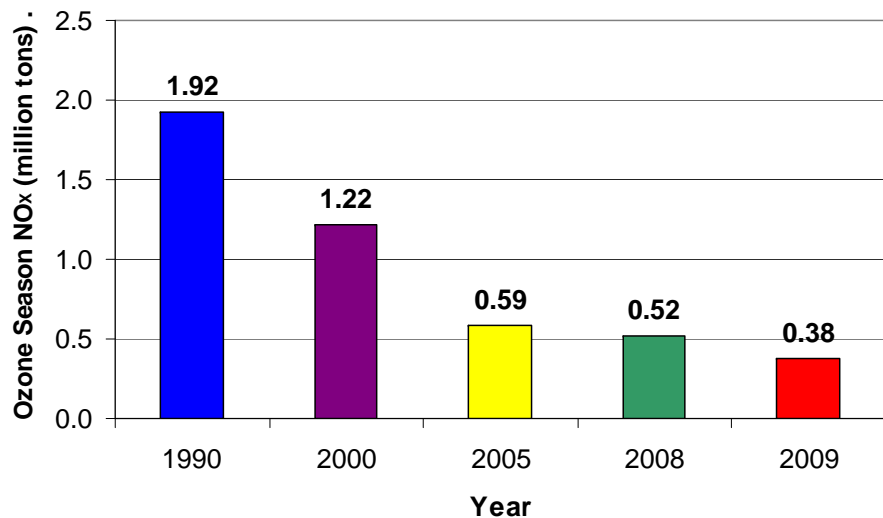
Huge Investment in SCRs in 2003 and 2004



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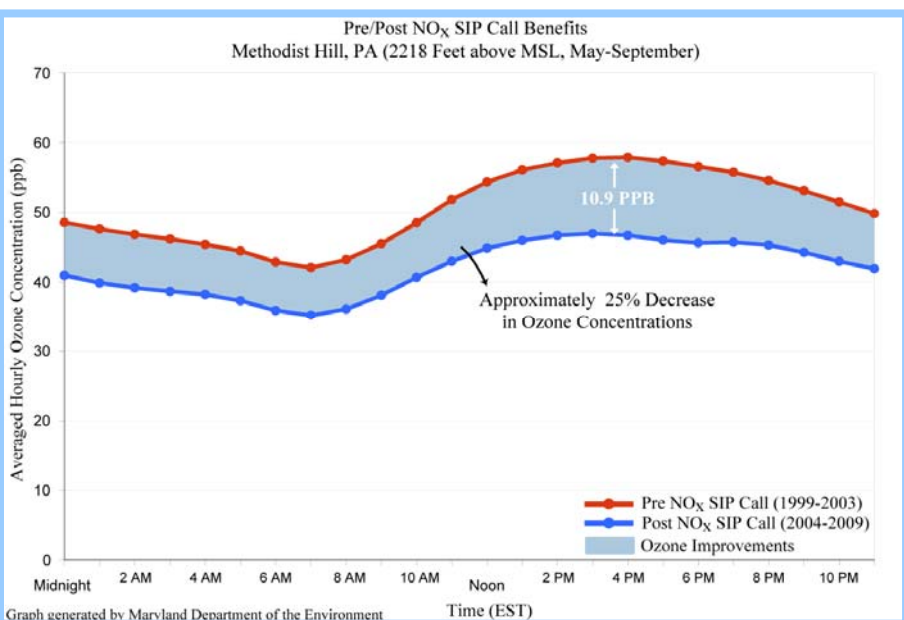
Regional NO_x Emissions Drop Dramatically in 2004



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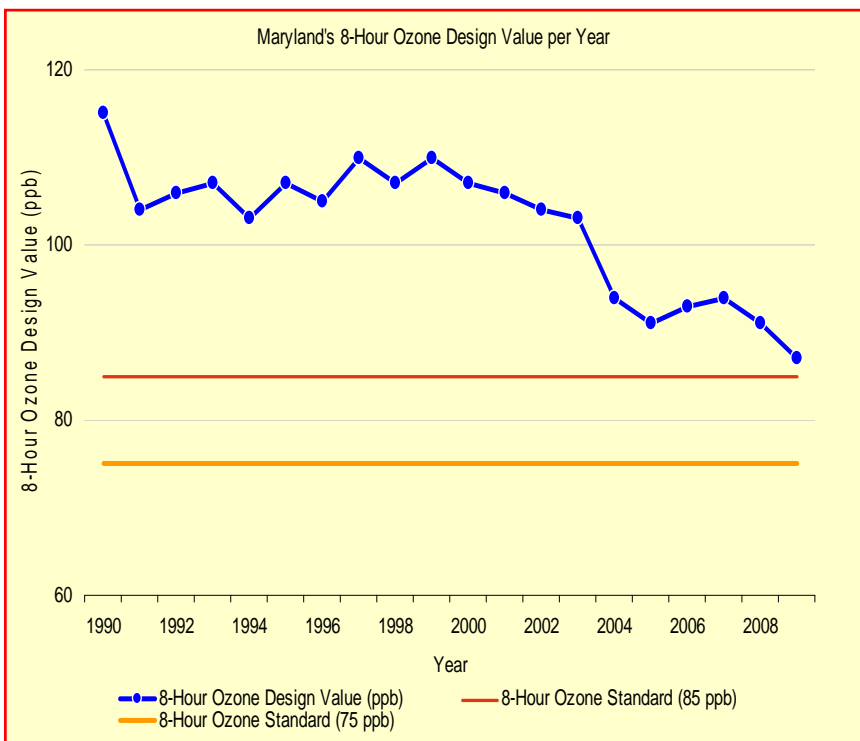
Ozone Levels in the Elevated Reservoir Reduced by 25% after 2004



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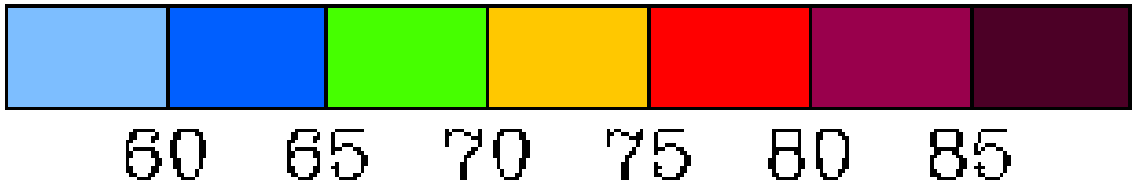
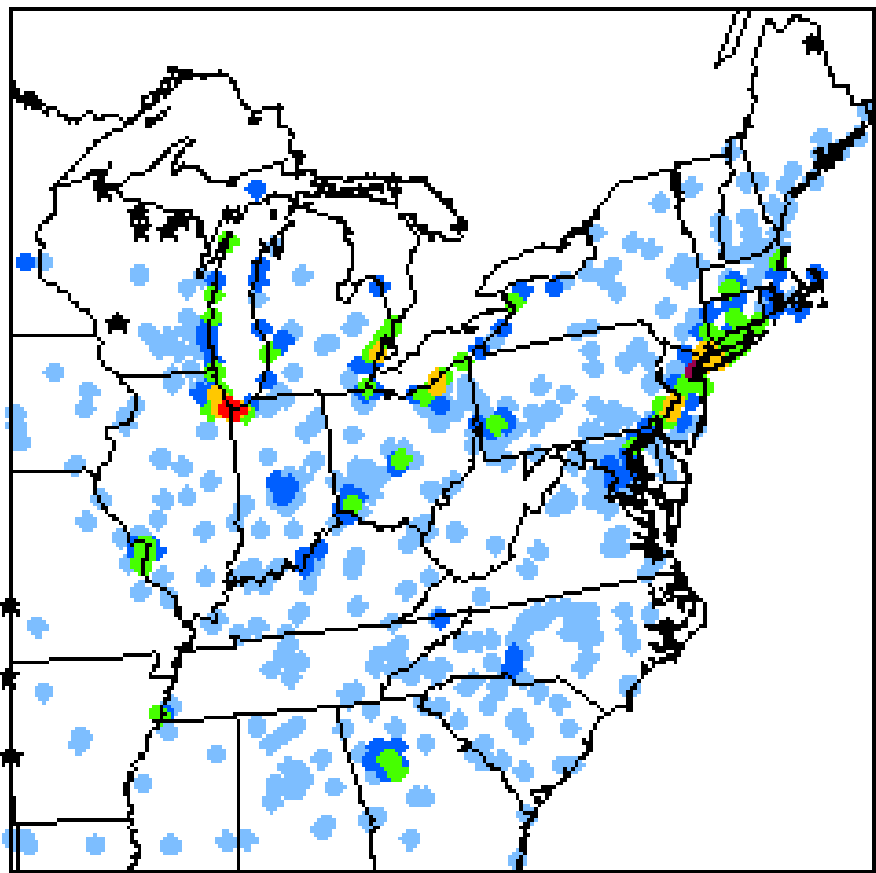
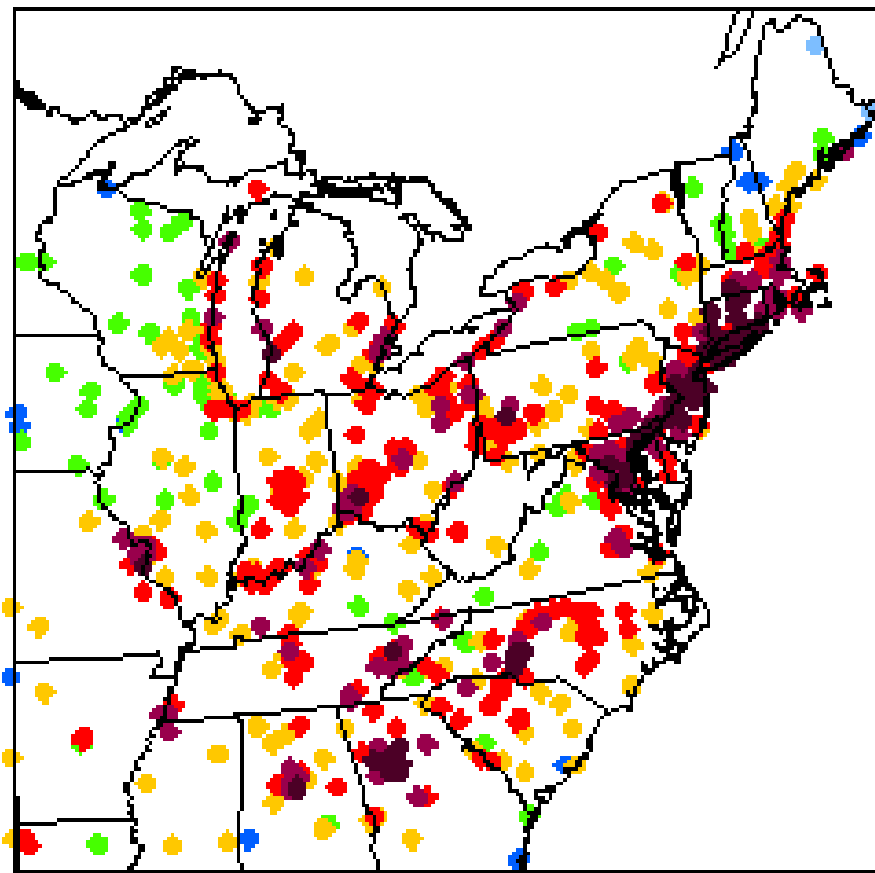
Why Are Federal Measures Important?

Ground Level Ozone Drops Dramatically in the Same Time Frame

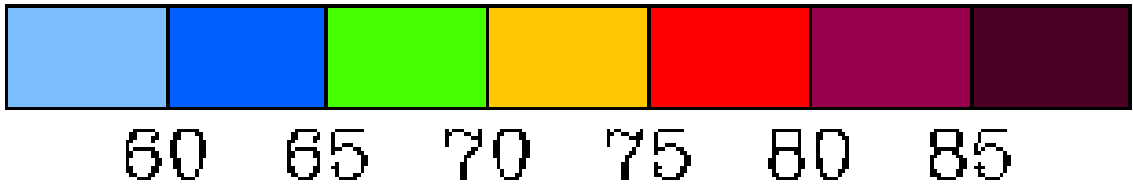
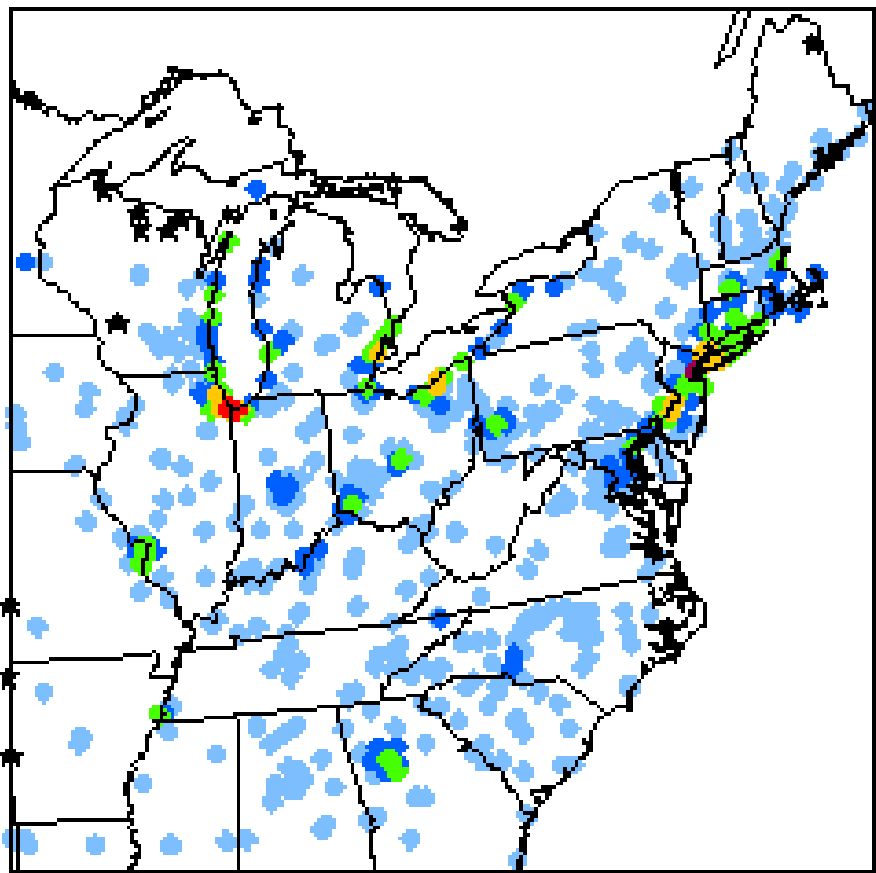
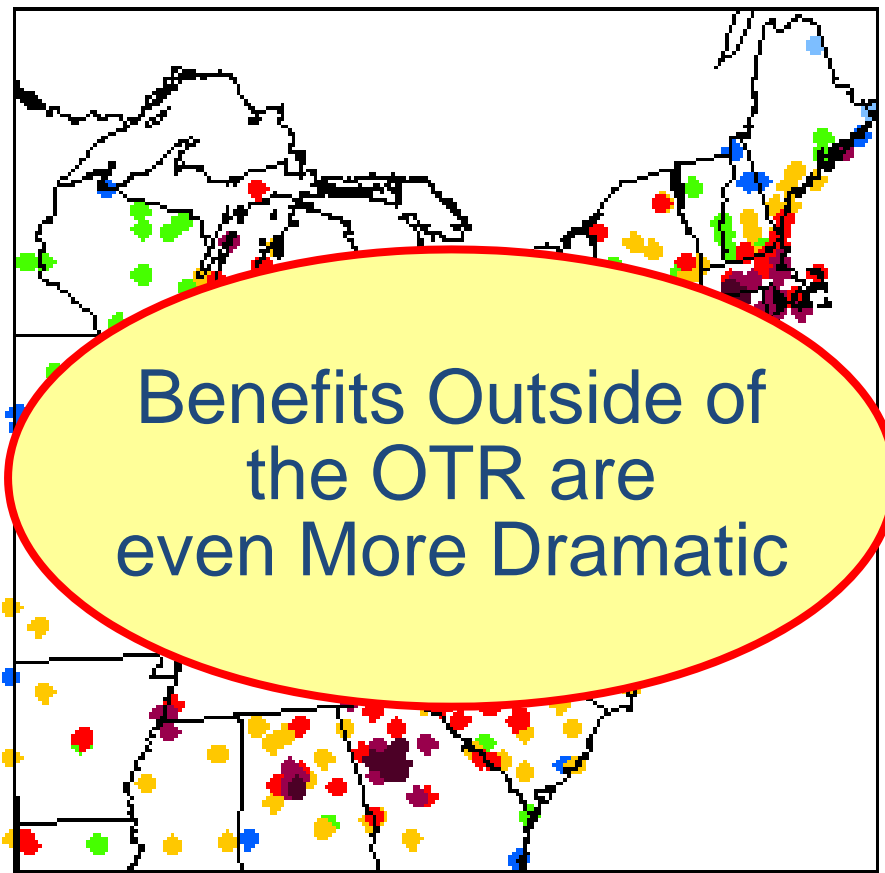


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Would Federal Measures Get Us to 75 ppb?



Would Federal Measures Get Us to 75 ppb?



Status of EPA's Federal Measures?

- Federal rules for all key categories in some stage of proposal
 - Tier 3/low sulfur fuels and CSAPR are two good examples of EPA's efforts on federal rules to reduce transport
 - Many of EPA's current efforts fall short in reducing NO_x – the key to reducing ozone transport
 - For example, EPA has promised to do more with NO_x – in CSAPR "2"
 - Some final rules and rules that are being proposed are likely to be litigated and delayed



CAA Transport Tools

- Giant non-attainment areas
- Section 126 Petitions against stationary sources
- Section 110A2D “Good Neighbor” requirements
- Section 176A (or 184) Petition to create a new, much larger “Eastern Transport Region”
- Another “state partnership” effort
 - Daughter of OTAG
- One, none or some combination of above?



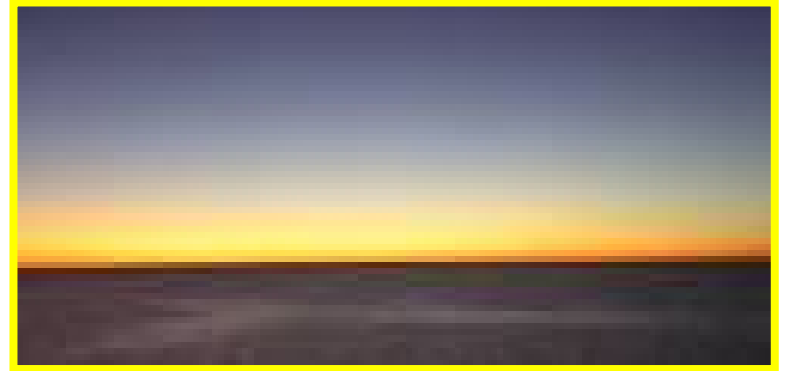
The Giant Nonattainment Area

The New Baltimore
Nonattainment
Area ???



Section 126 Petitions

- The classic upwind transport tool
- States can petition EPA to require controls on specific (or groups of) stationary sources that contribute to non-attainment in downwind areas
- Many OTC states have used Section 126 petitions in the past
- Presumes quick action by EPA if the Petition is successful



Section 110A2D “Good Neighbor” Provisions

- Section 110A2D requires upwind states to include control measures in their SIPs to address transport
- In the past, regional control programs like the NOx SIP Call and CAIR have allowed upwind states to easily comply with 110A2D
 - There is no such regional control program for the 75 ppb standard
- The 110 SIPs were due this past Spring
 - Legal challenges (the environmental community) have already been initiated



The Section 176A or 184 Petition

- Option 1 - Petition EPA to establish a new very large “Eastern States” Ozone Transport Region
 - A 20 to 30 state Transport Region
- Option 2 - Petition EPA to expand the current Ozone Transport Region
- Works from same kind of significant contribution concept as CSAPR



Another OTAG?

- OTAG – The Ozone Transport Assessment Group
 - An early 1990's, 38 state partnership that lead to the NOx SIP Call
- Success in distant past with OTAG and more recently with the NE/MA/MW 17 State Collaborative
- Technical partnership between the Northeast, Midwest and Southern Regional Planning Organizations (RPOs) has been a major success



Schedule

- Designations by Spring 2012
- Much of the OTR will be marginal nonattainment areas
 - 2015 Attainment Date
 - Clean air in monitors by 2013
- The last purple dot ... will be a moderate nonattainment area
 - 2018 Attainment Date – Clean monitors 2015 to 2018
- Timeframe to act is very short

