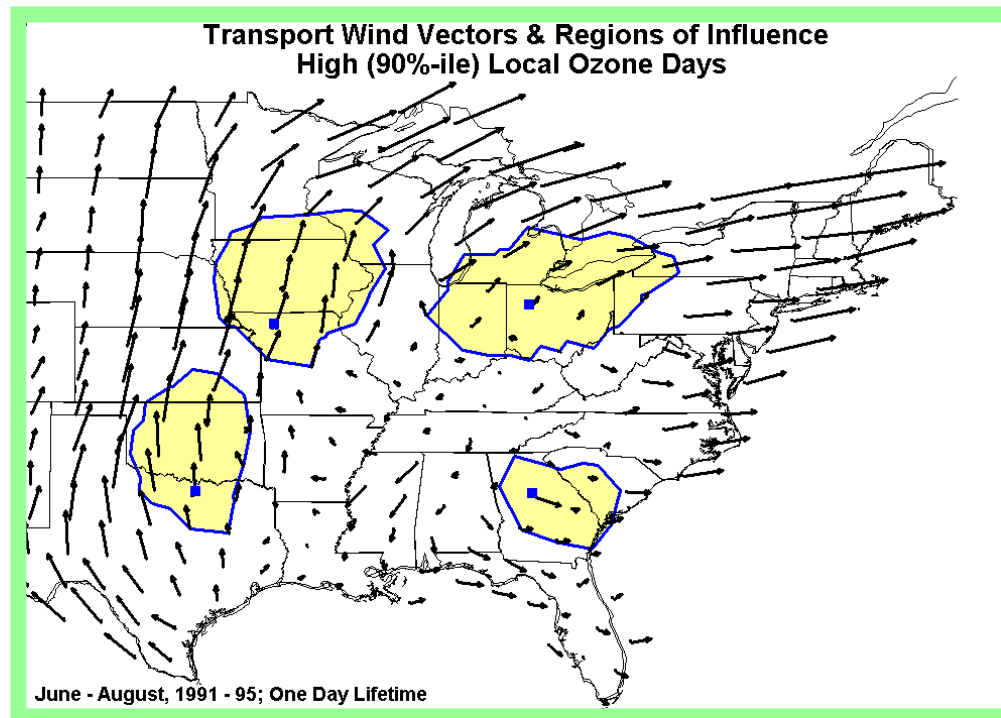


# Status Report

## The OTC Transport Team



OTC Annual Meeting – May 24, 2012  
Tad Aburn - Air Director, MDE

# Topics

- Background
  - Who is the Transport Team?
  - What has OTC already done?
    - Our push 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 Workgroup is now in place to coordinate this effort
  - Looking at both technical analyses and legal tools



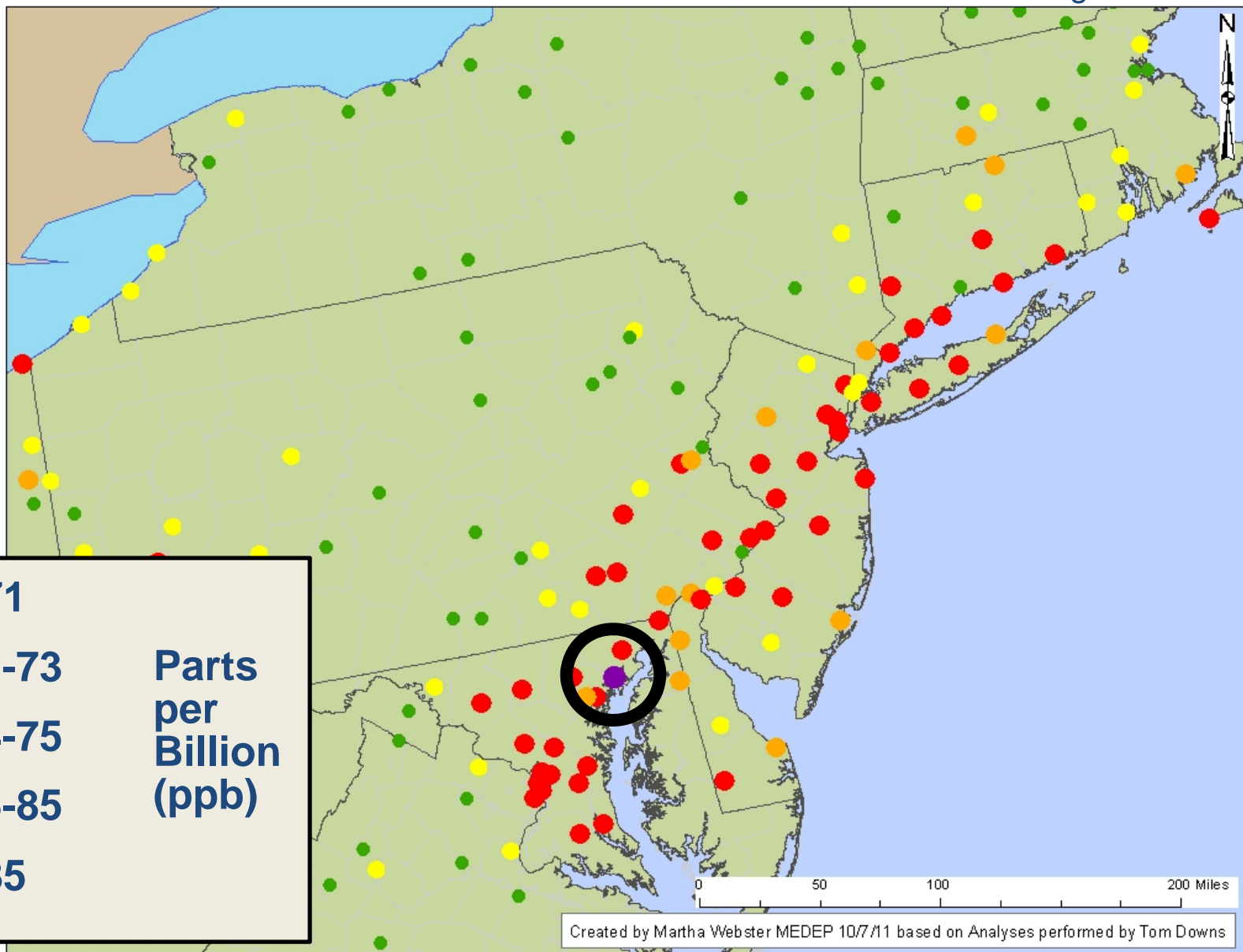
# The Current “Big” Picture

- 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 Cross-State Air Pollution Rule (CSAPR) does not address the 2008 ozone NAAQS of 75 ppb, and is being challenged in court.
  - Decision expected soon
- 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
  - Support for federal measures to reduce transport from almost all 50 states
- 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 will work



# The Priority Source Categories

The OTC National Asks:

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

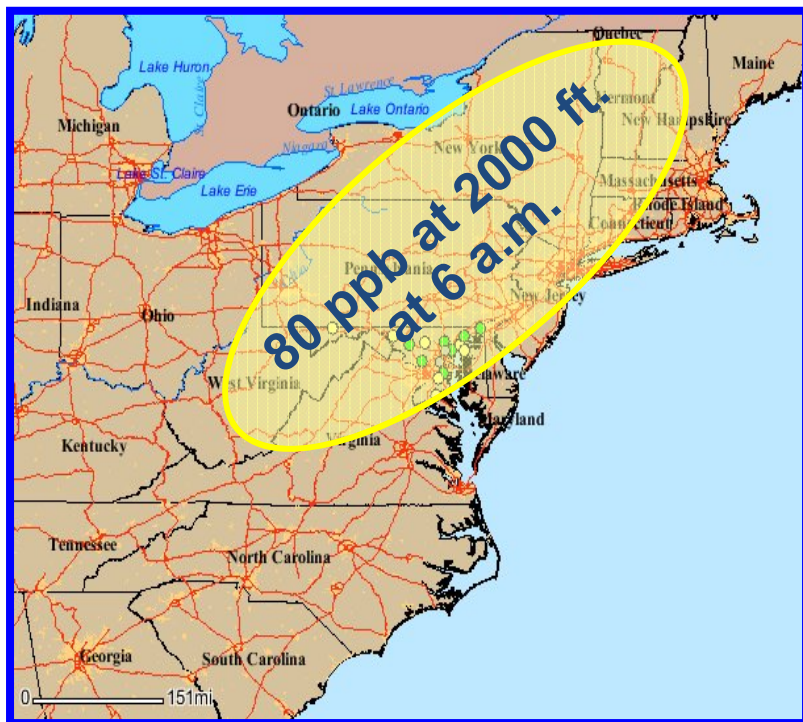
These represent ...

- 75 % of the NO<sub>x</sub> left to regulate
- 85 % of the SO<sub>2</sub> left to regulate
- 75 % of the 2005 Hg emissions



# Why Are Federal Measures Important?

## Morning Elevated Reservoir of Ozone Above the OTR



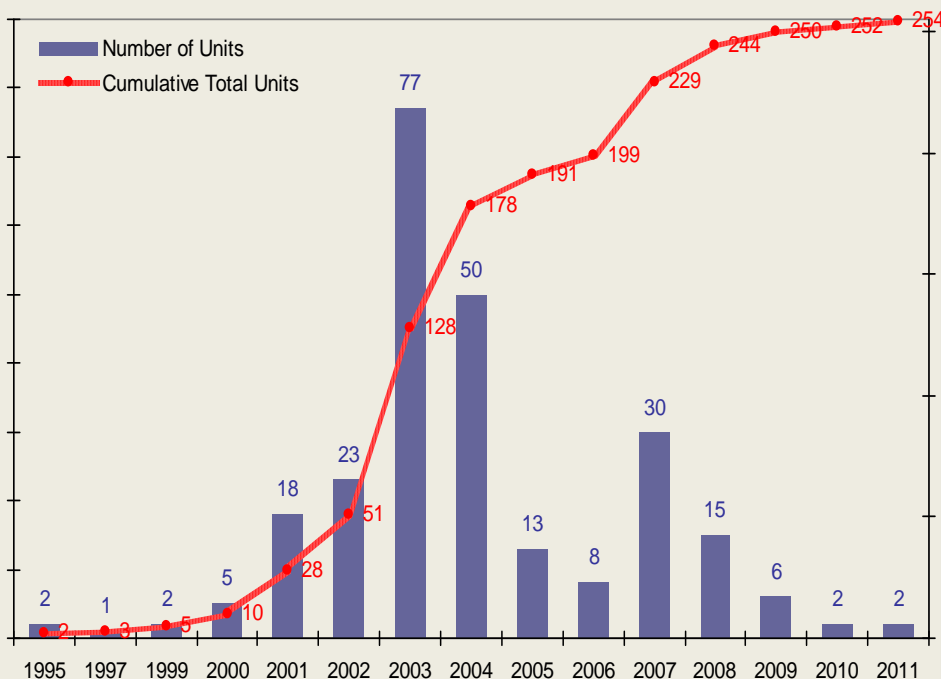
- Because they work!
- The classic ozone transport story
  - Incoming ozone levels (as high as 80 ppb) collect in an elevated reservoir over night
  - Real world programs like the NOx SIP call have shown that
    - Adding regional controls ...
    - Results in regional NOx emission reductions ...
  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



# Why Are Federal Measures Important?

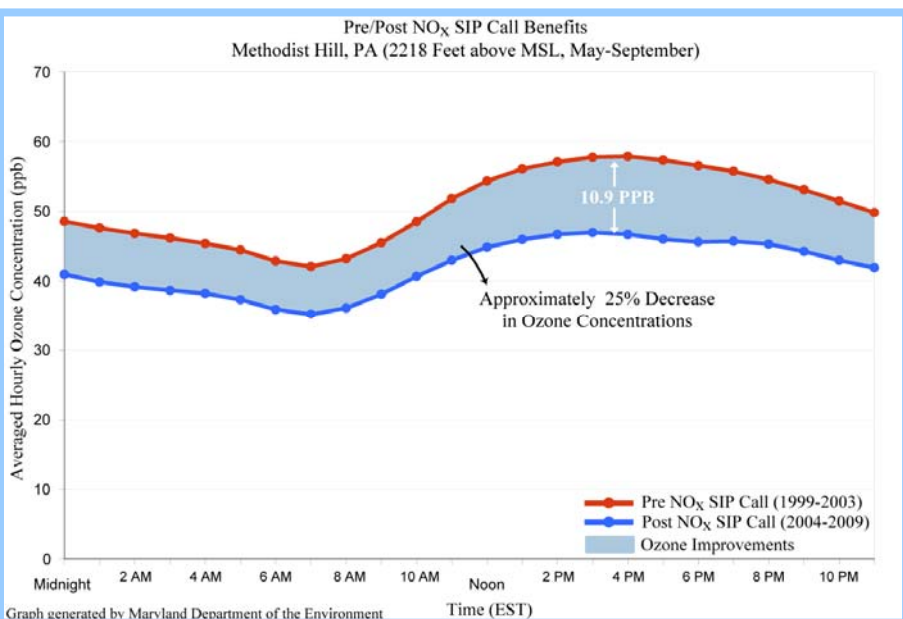
## Ground Level Ozone Drops Dramatically in the Same Time Frame

- 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!



# Why Are Federal Measures Important?

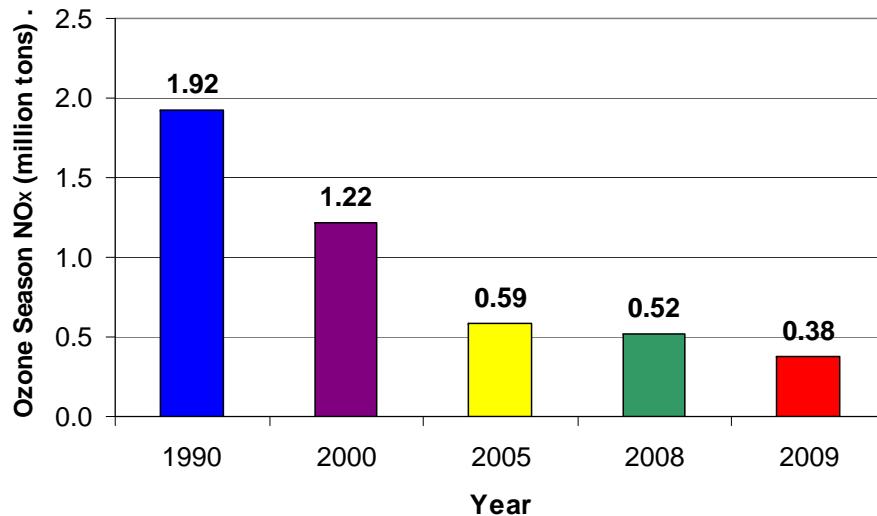
## Ozone Levels in the Elevated Reservoir Reduced by 25% after 2004



- 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 NO<sub>x</sub> SIP call have shown that
    - Adding regional controls ...
    - Results in regional NO<sub>x</sub> emission reductions ...
    - Which lead to reduced ozone in the elevated reservoir ...
    - Which lead to lower ozone at ground level and public health protection!

# Why Are Federal Measures Important?

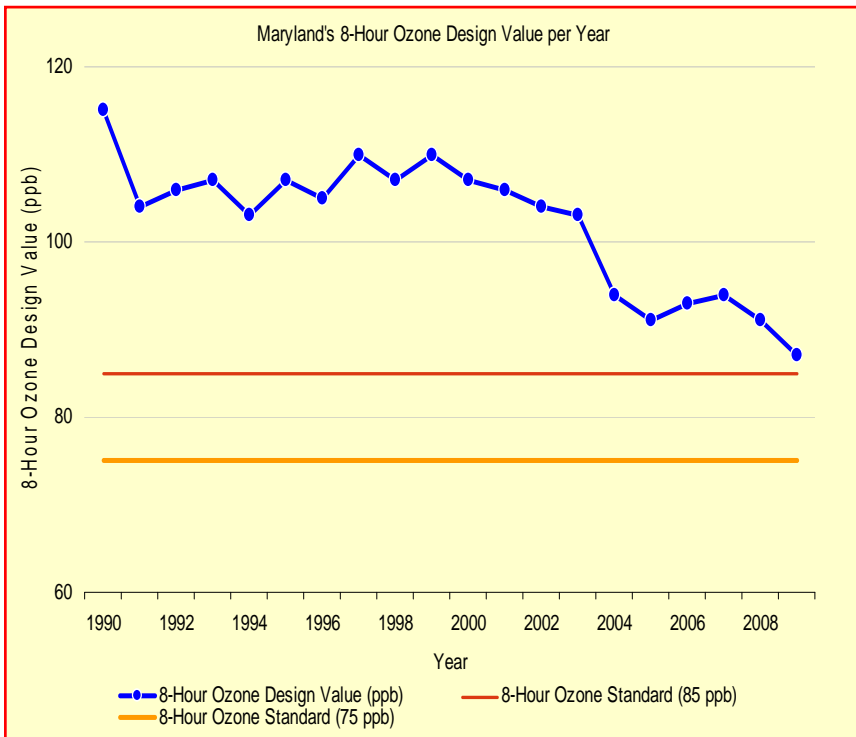
## Regional NO<sub>x</sub> Emissions Drop Dramatically in 2004



- 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 NO<sub>x</sub> SIP call have shown that
    - Adding regional controls ...
    - Results in regional NO<sub>x</sub> emission reductions ...
    - Which lead to reduced ozone in the elevated reservoir ...
    - Which lead to lower ozone at ground level and public health protection!

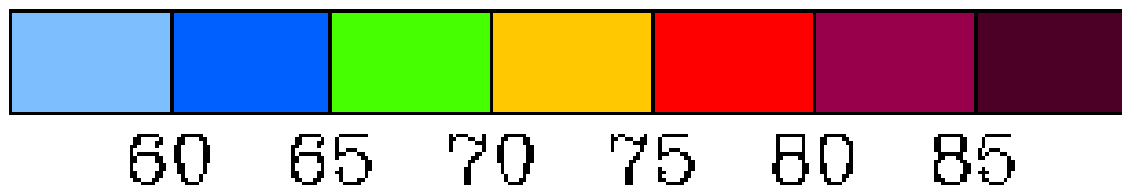
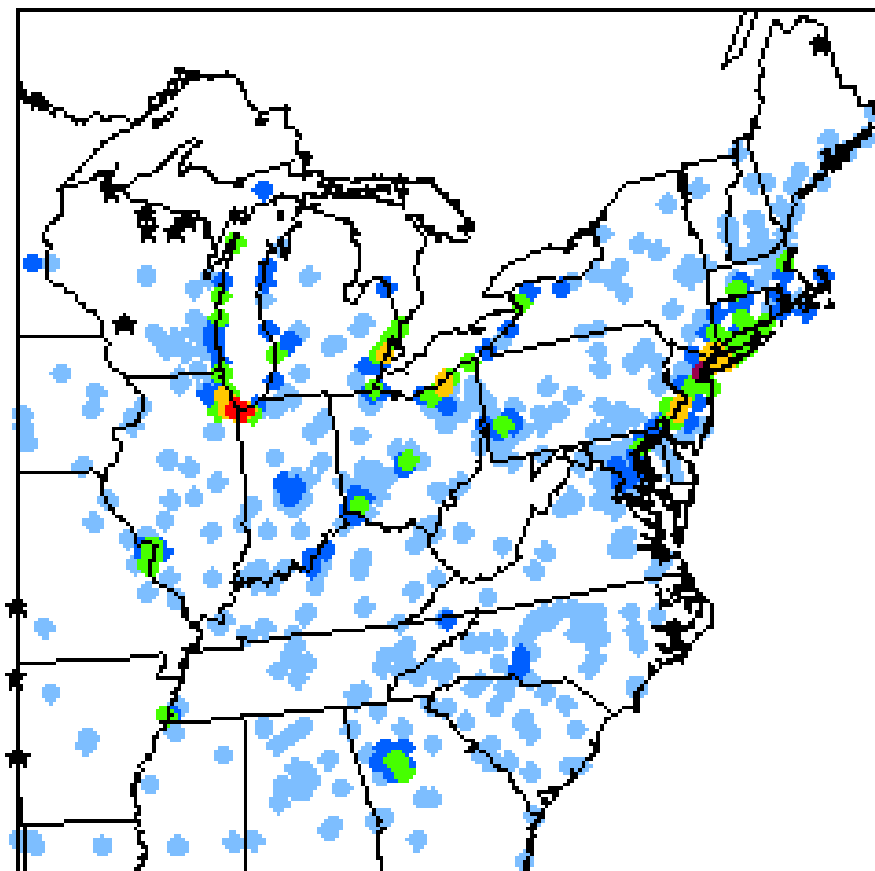
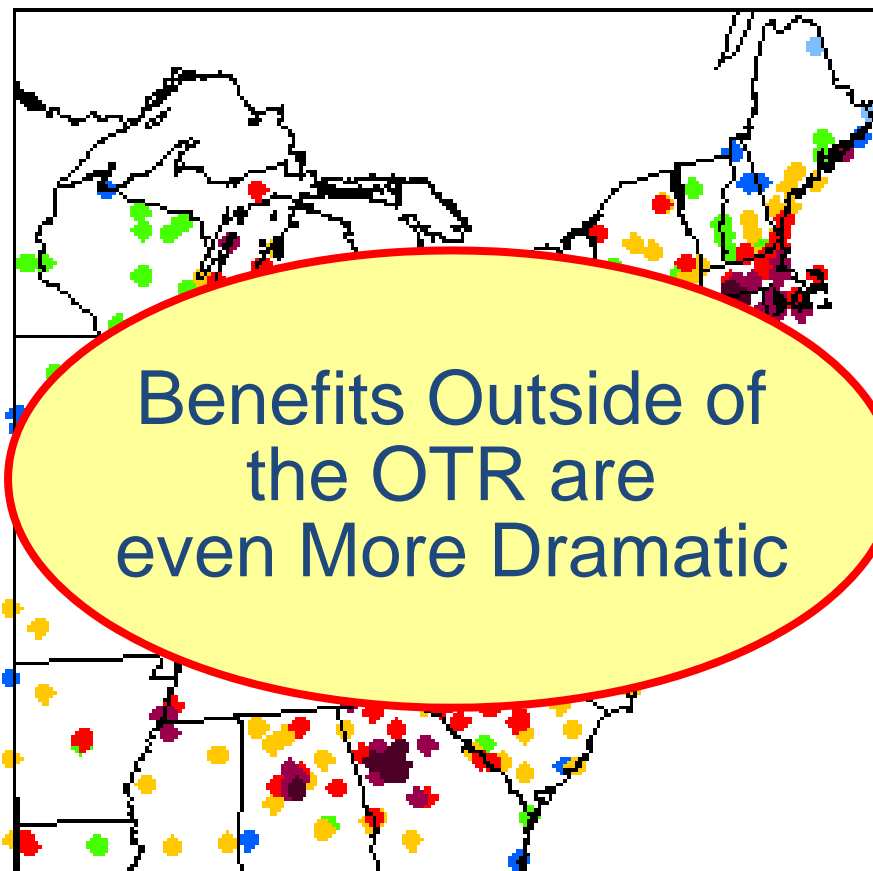
# Why Are Federal Measures Important?

## Ground Level Ozone Drops Dramatically in the Same Time Frame



- 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!

# Will 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 fuel 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<sub>x</sub> – the key to reducing ozone transport
    - For example, EPA has promised to do more with NO<sub>x</sub> – 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 Process

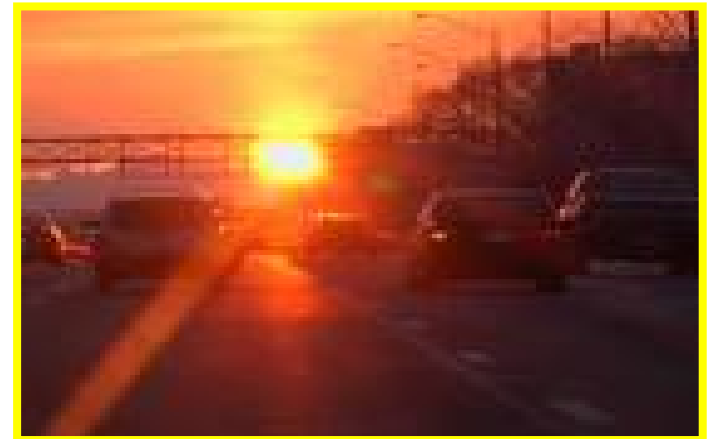
- The OTC process
  - Series of policy, legal and technical calls and meetings focusing primarily on:
    - Enhancing technical work
    - Discussing transport action options, and
    - Helping states decide if they want to consider taking any of those actions
- The individual state process
  - Several states are already working together technically and legally to refine approaches for taking specific actions
  - This process is state driven and does not involve OTC





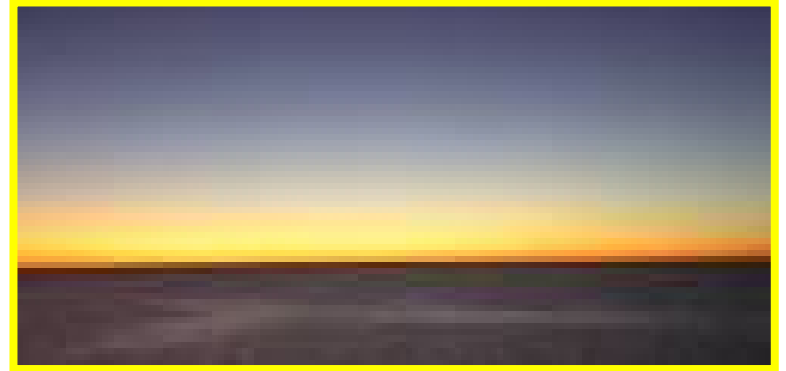
# The Giant Nonattainment Area

- Would include all of the “contributing” areas in a large non-attainment area for the 75 ppb standard, and would be “science” or “airshed” based
  - A 15 to 20 state non-attainment area
- CT, DE and MD have moved forward with this option
  - EPA finalized designations for traditional, small nonattainment areas in May
  - Ongoing discussion with EPA and these three states



# 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 - for the 75 ppb standard - were due in early 2011
  - 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 Northeast/Mid-Atlantic/Midwest 17 State Collaborative
- Technical partnership between the Northeast, Midwest and Southern Regional Planning Organizations (RPOs) has been a major success



# Schedule

---

- Designations finalized in May 2012
- Much of the OTR will be marginal nonattainment
  - 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 short

