

Ozone Attainment, Regional Reductions Needed

OTC Annual Meeting

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Red Bank, New Jersey

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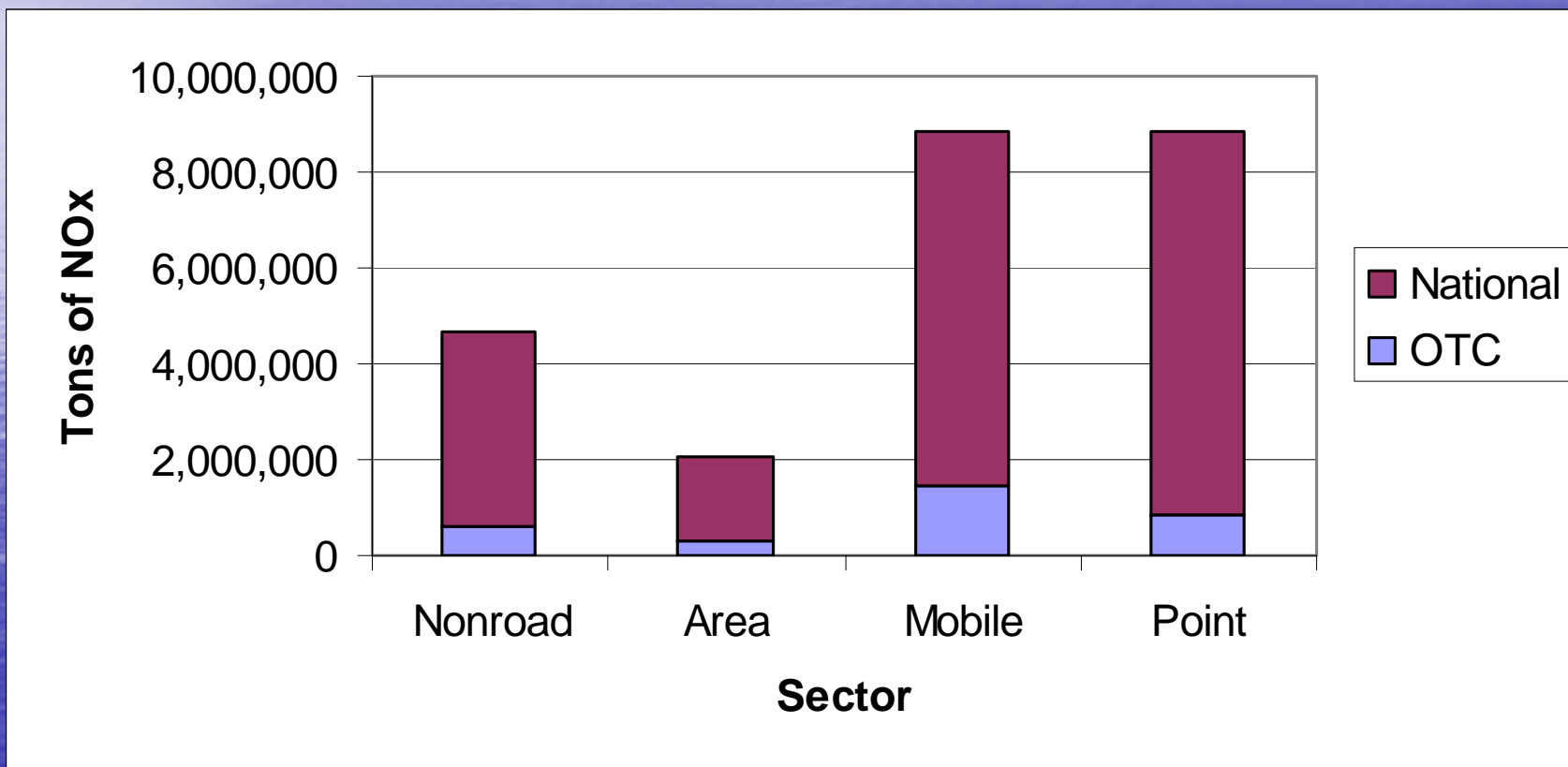
Brief Recap of OTR Need

- Reductions Needed for:
 - Compliance with Ozone and PM2.5 Standards
 - Meeting Health Performance Objectives
 - Regional Haze obligations

Standards

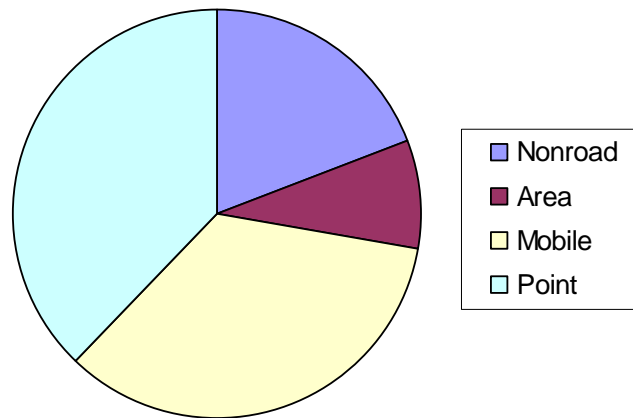
- US Ozone
 - 80 ppb 8 hour average by 2010-2012
 - Most areas in region are now designated moderate (90+ppb), so target date is 2010.
 - EPA now using 4th highest monitor result in 2001-2003 period

NOx Emissions

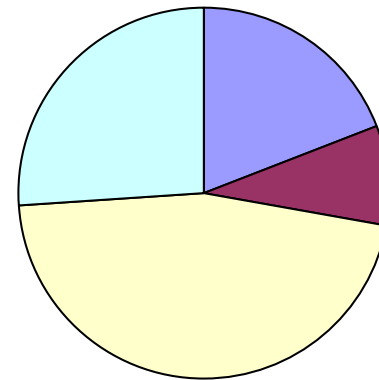


Relative Contribution NOx Emissions – US and OTR

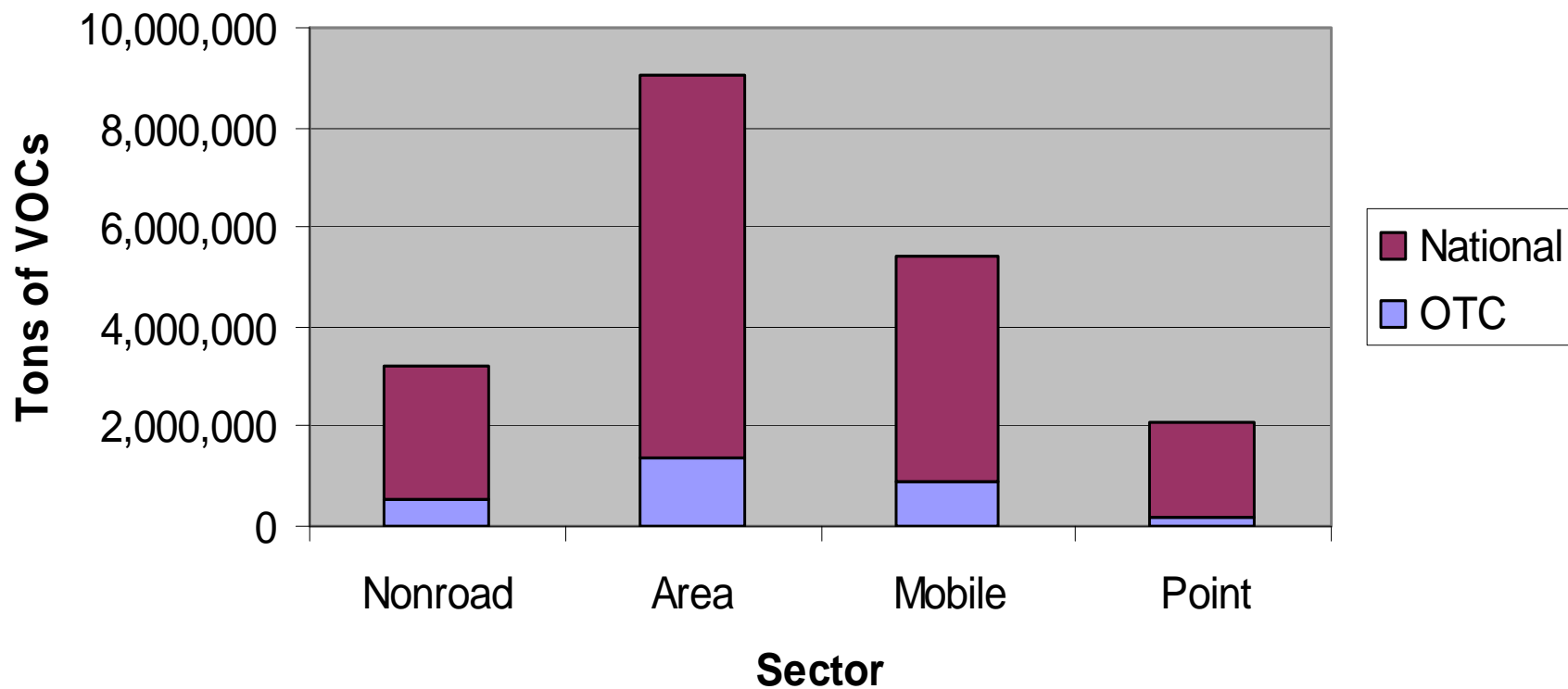
2002 NEI NOx Emissions for the U.S.



2002 NEI NOx Emissions for the OTC

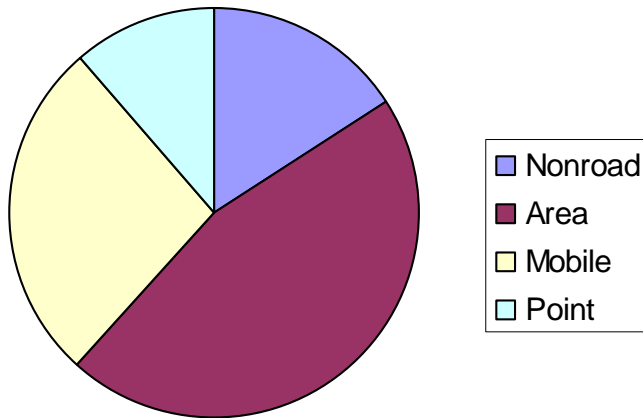


Sector VOC Emissions

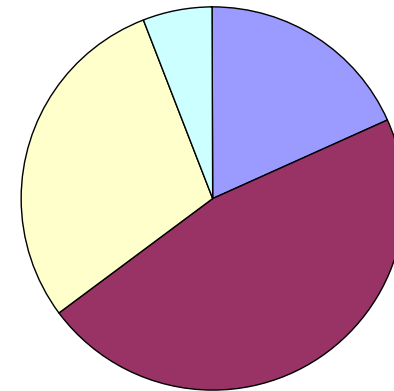


Relative Contribution VOC Emissions – US and OTR

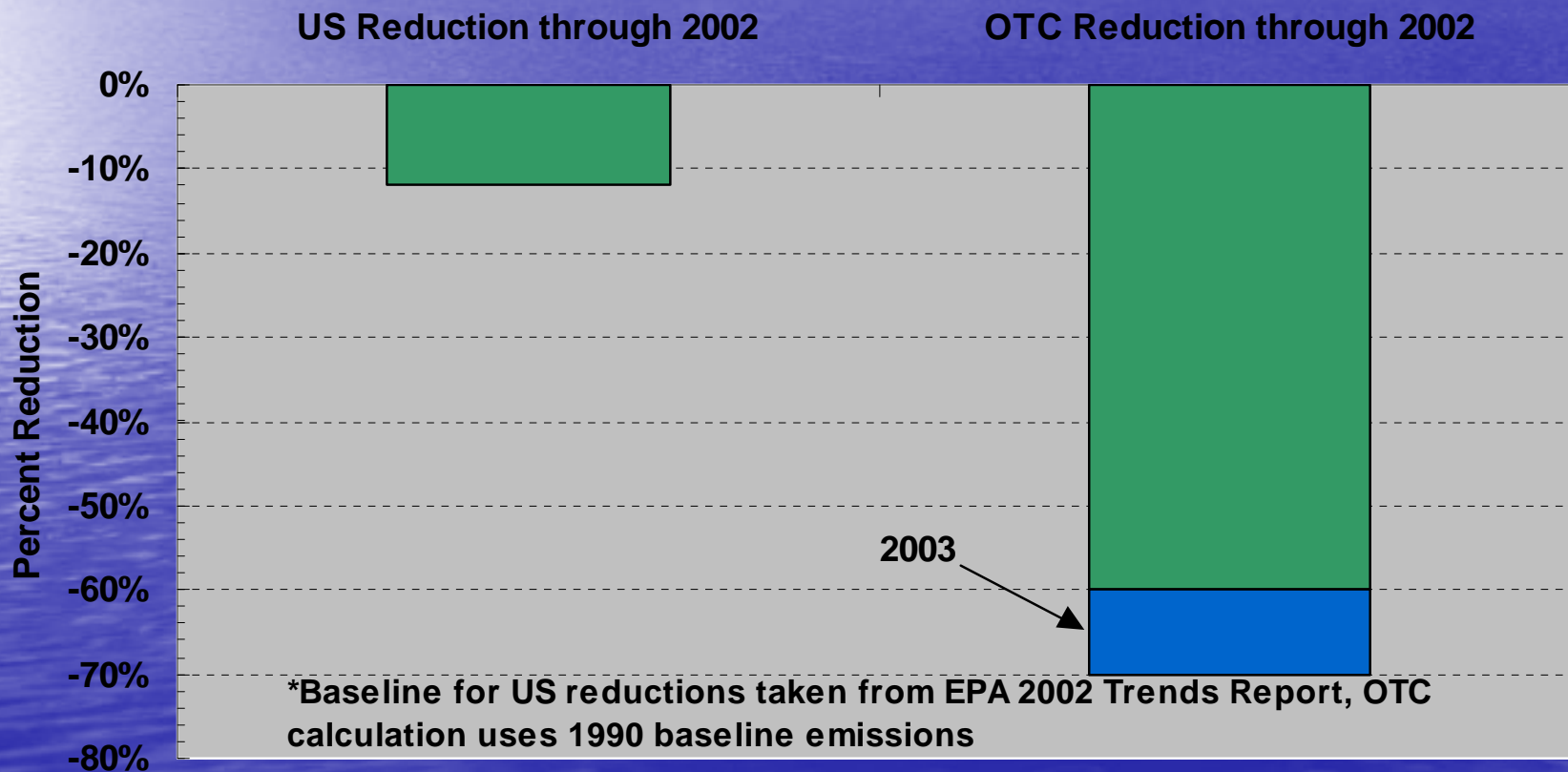
Annual 2002 NEI VOC Emissions
National



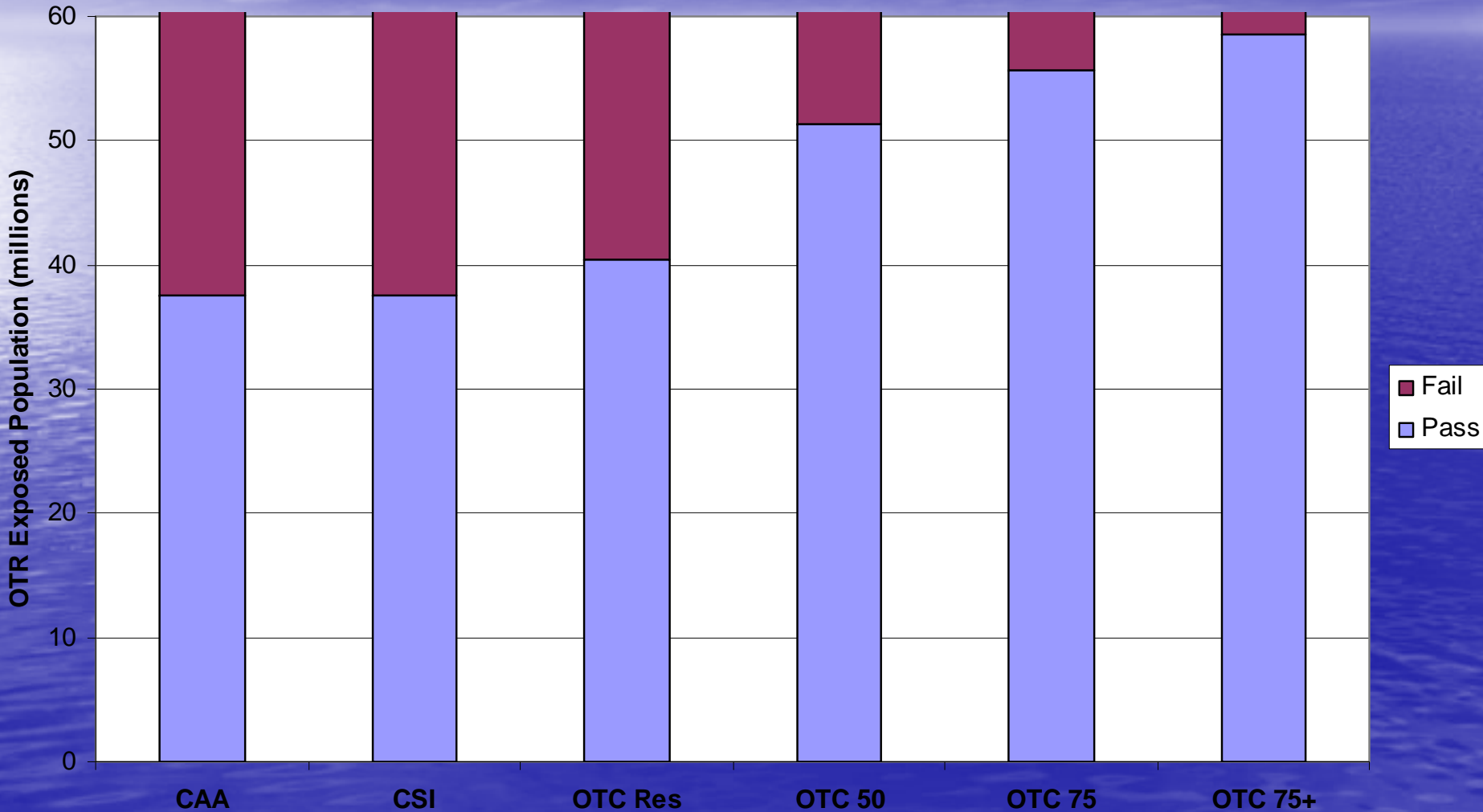
Annual 2002 NEI VOC Emissions
for the OTR



Electric Sector NOx Reductions Nationally vs. OTR



Summary of Proposals - 2002

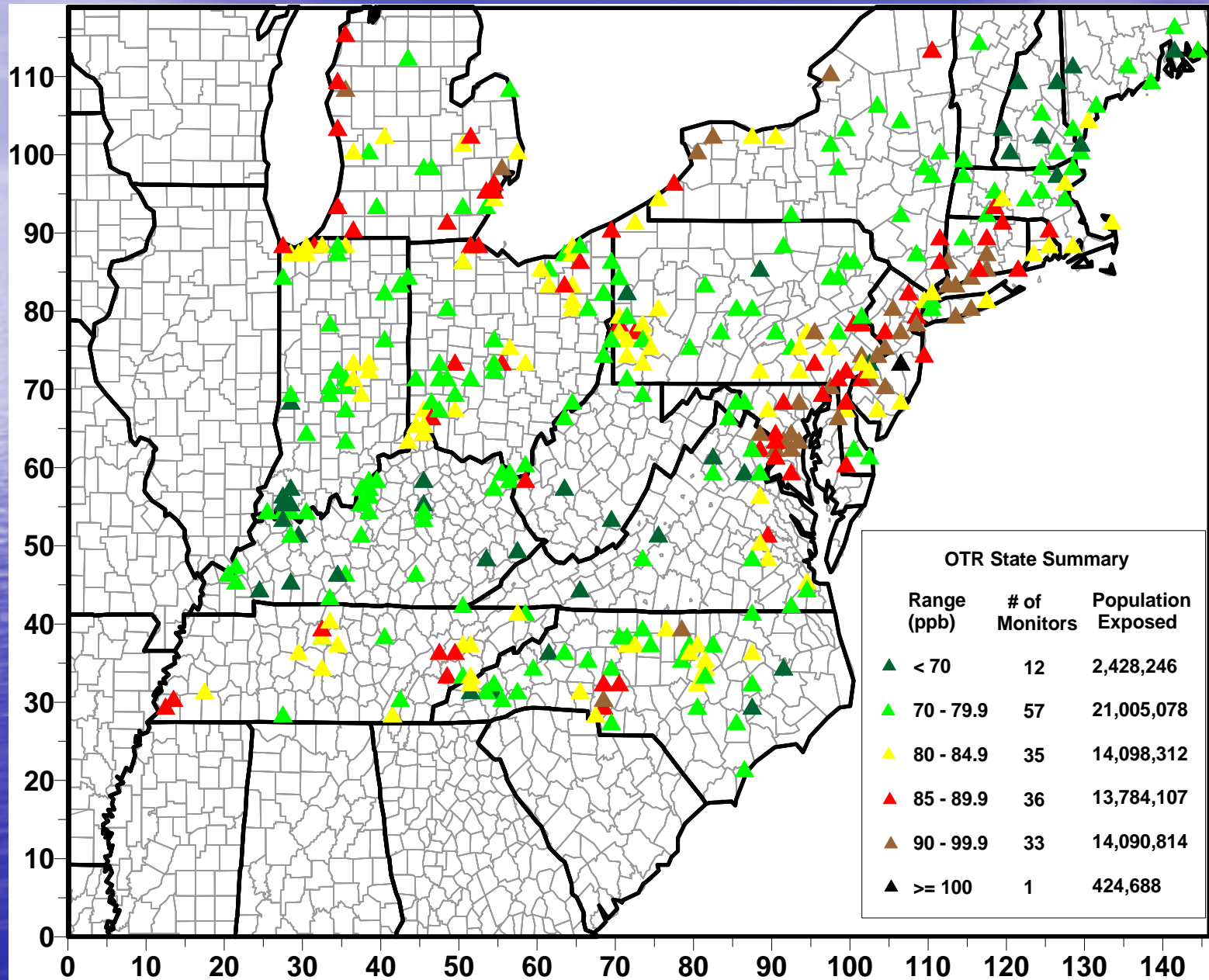


Based on June and July 1995 Episodes

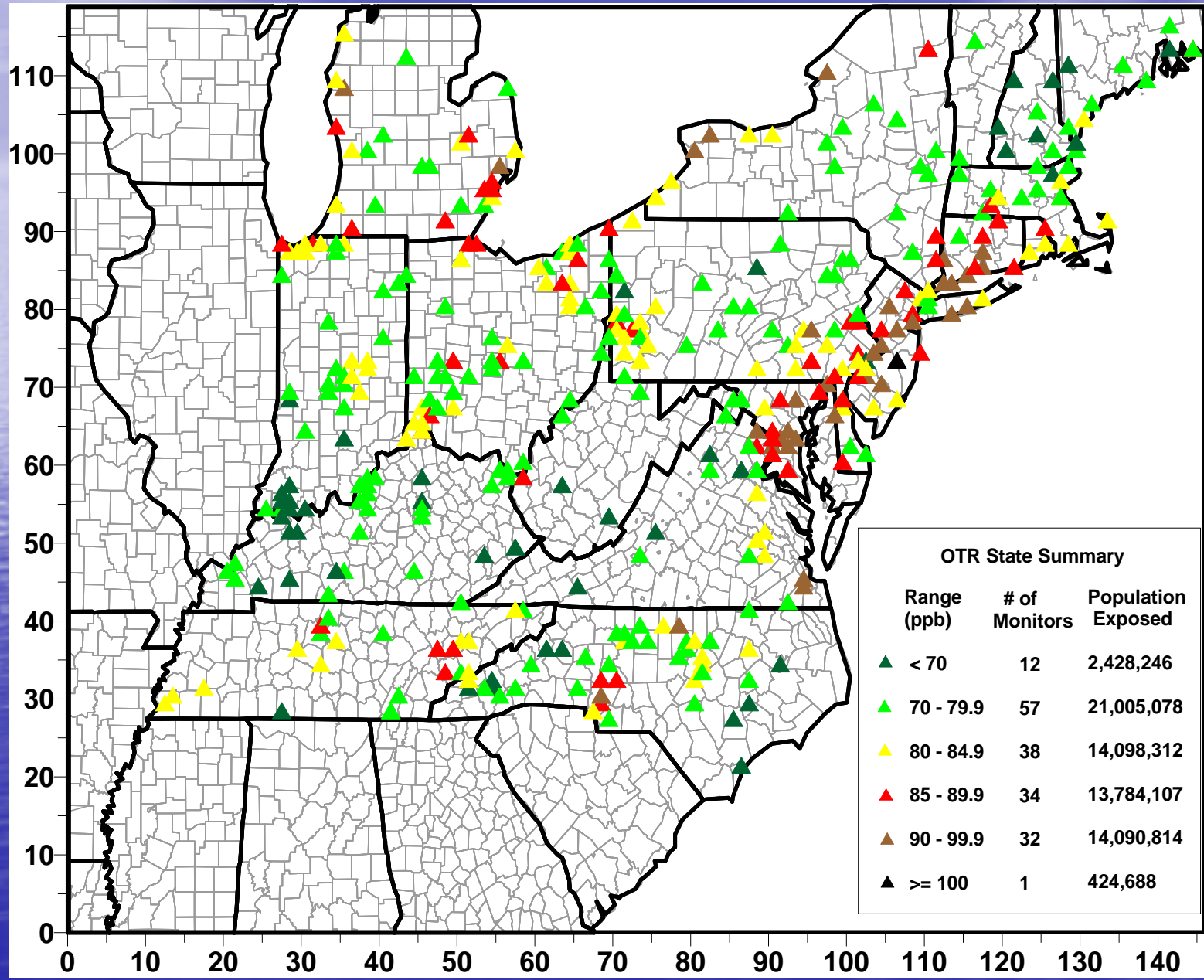
Other Sources - Actions

- Mobile – NO_x and VOC's
 - On-Road Diesel
 - Off-Road Diesel
 - Locomotive and Marine
 - Regional Fuels
 - Small Engines (<50hp)
 - VMT's?
- Other Stationary
 - Industrial Boilers
 - RACM/RACT Determinations
 - BART Sources
- Area – VOC's and Ammonia

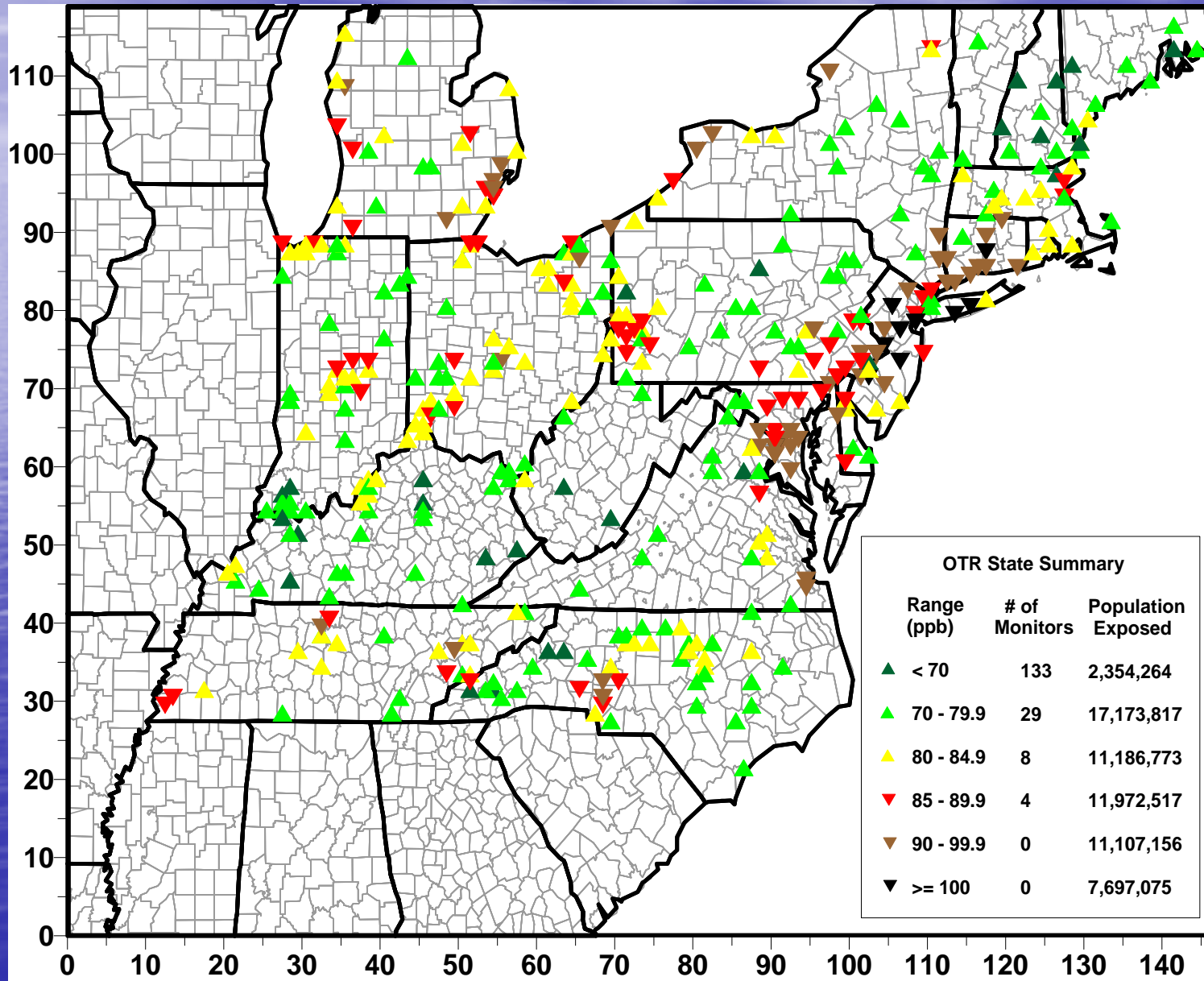
2010 Clean Air Act Measures



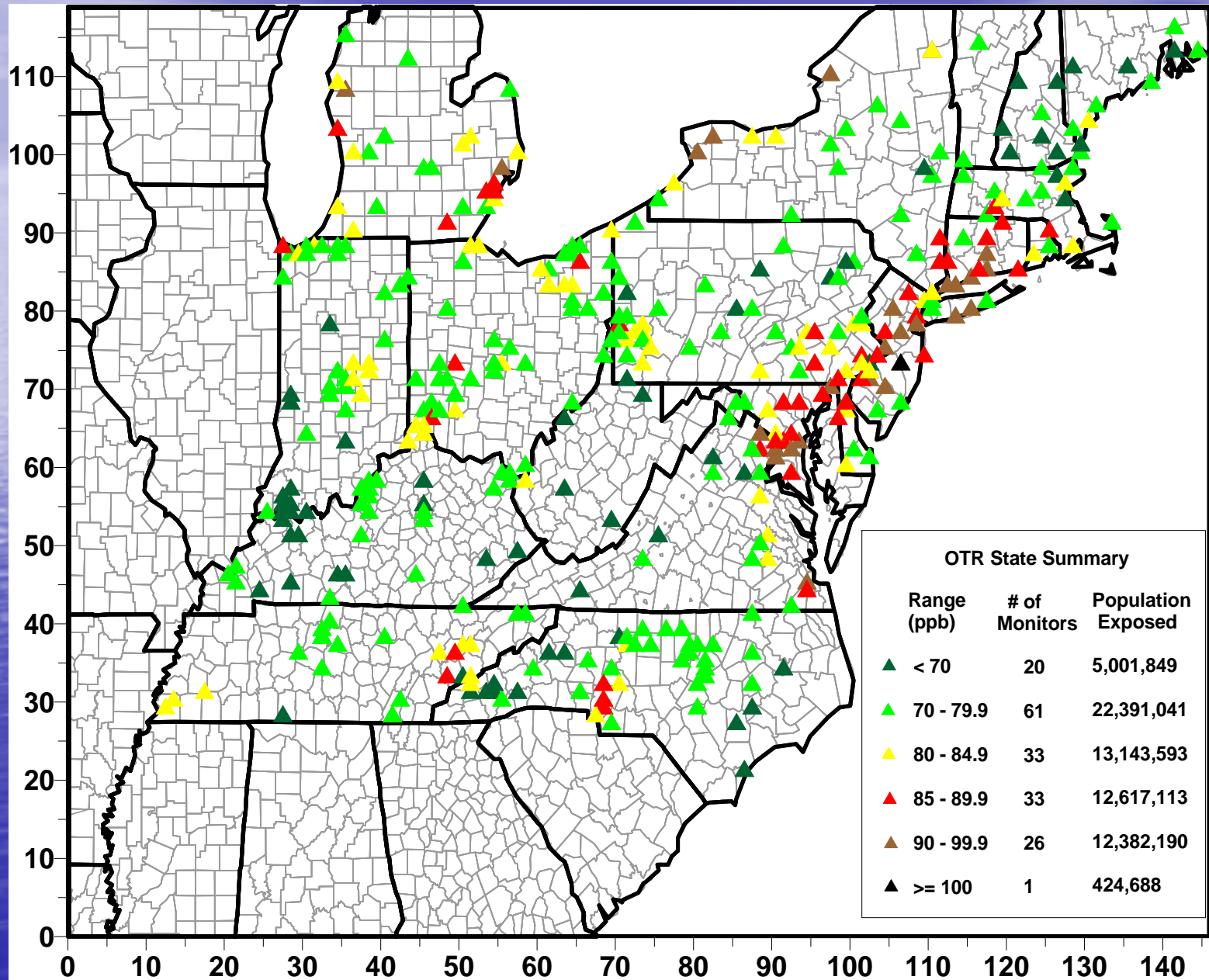
2010 Clear Skies Act (2002)



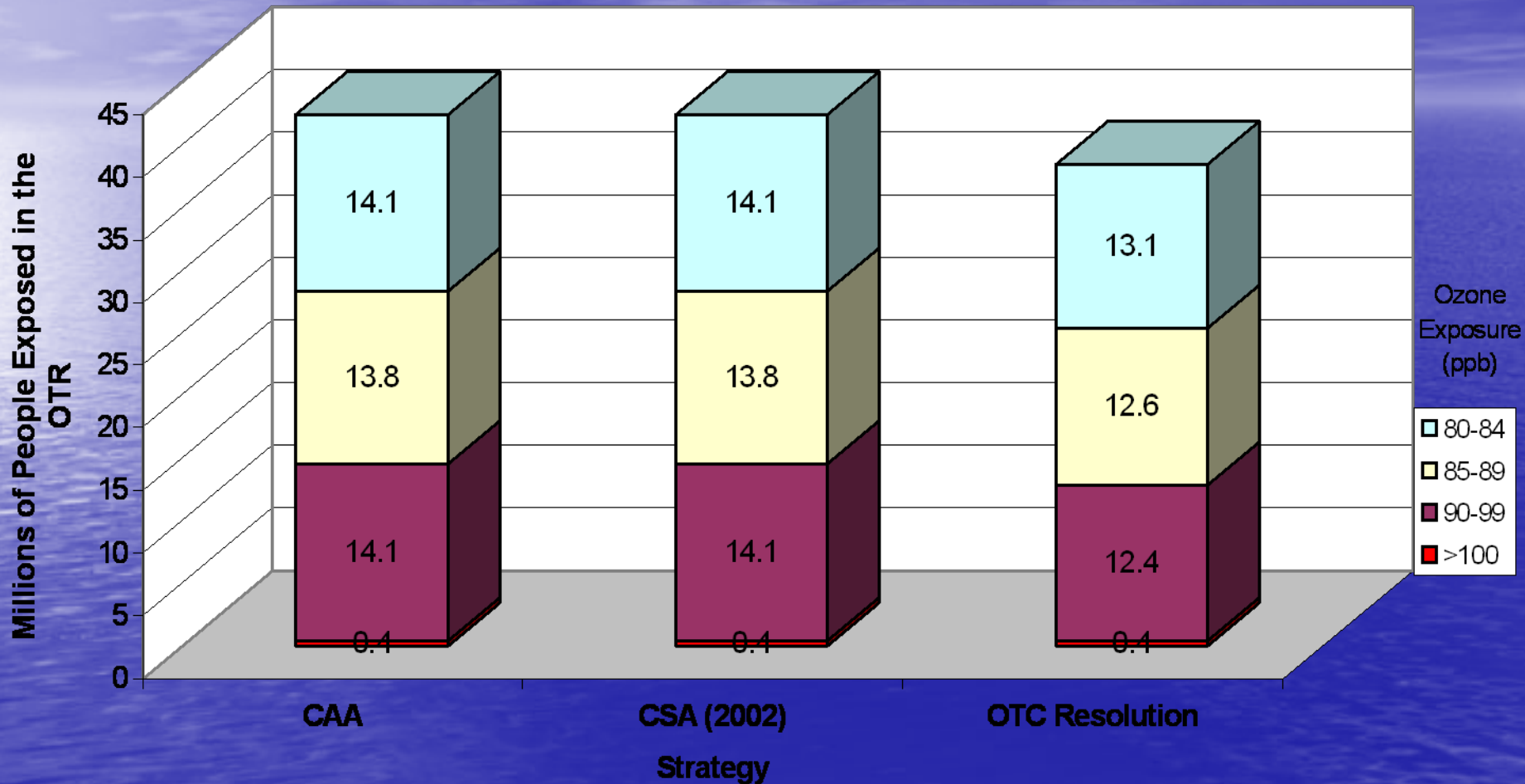
2010 Clear Skies Act (2003)



2010 Clean Air Act Plus OTC Resolution



Comparison of Multi-Pollutant Strategies for Electric Generation Units



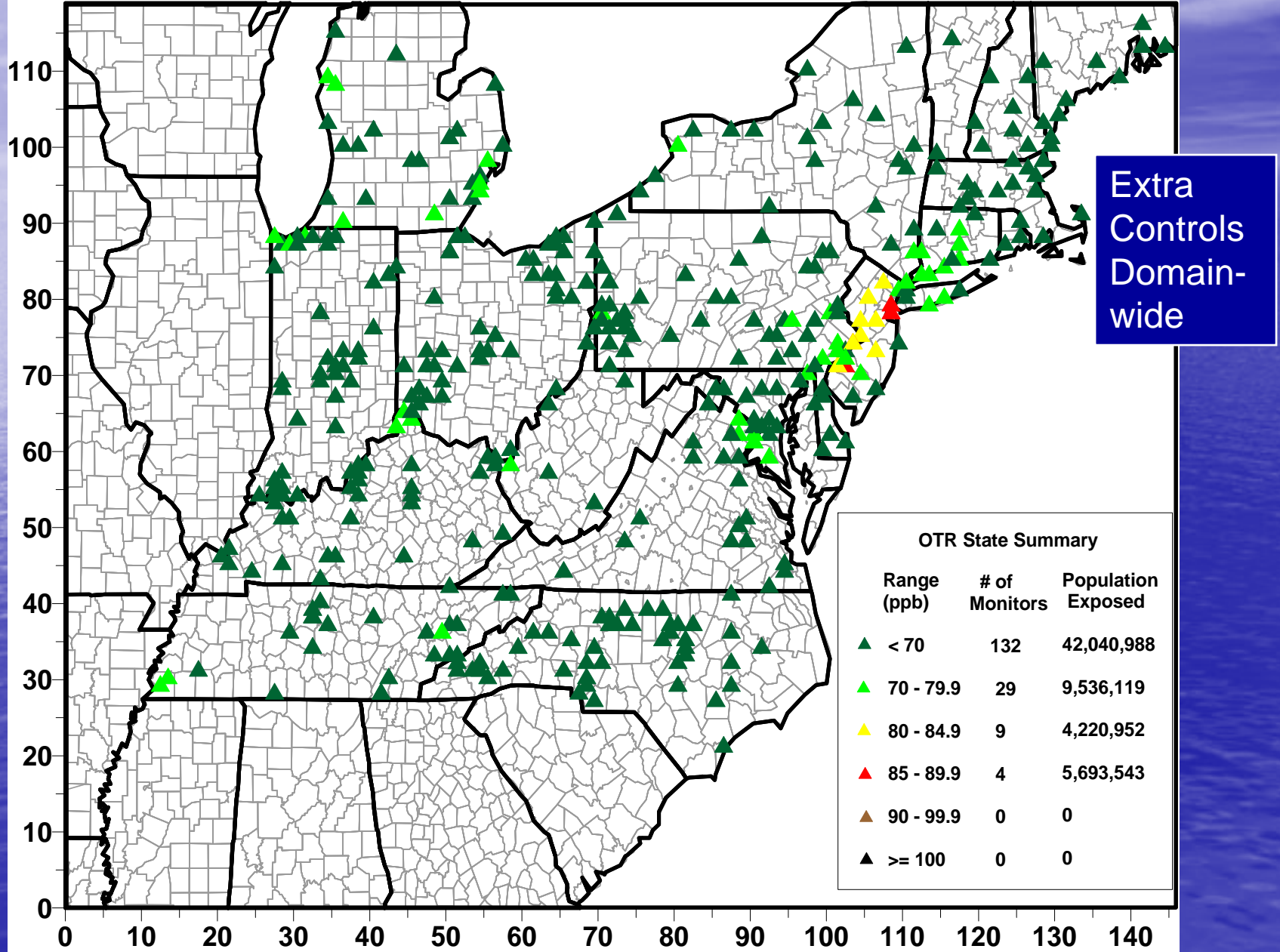
Additional Reductions

After screening emission reductions in each major source category, the following measures stood-out as being the most effective in reducing ozone in the OTR:

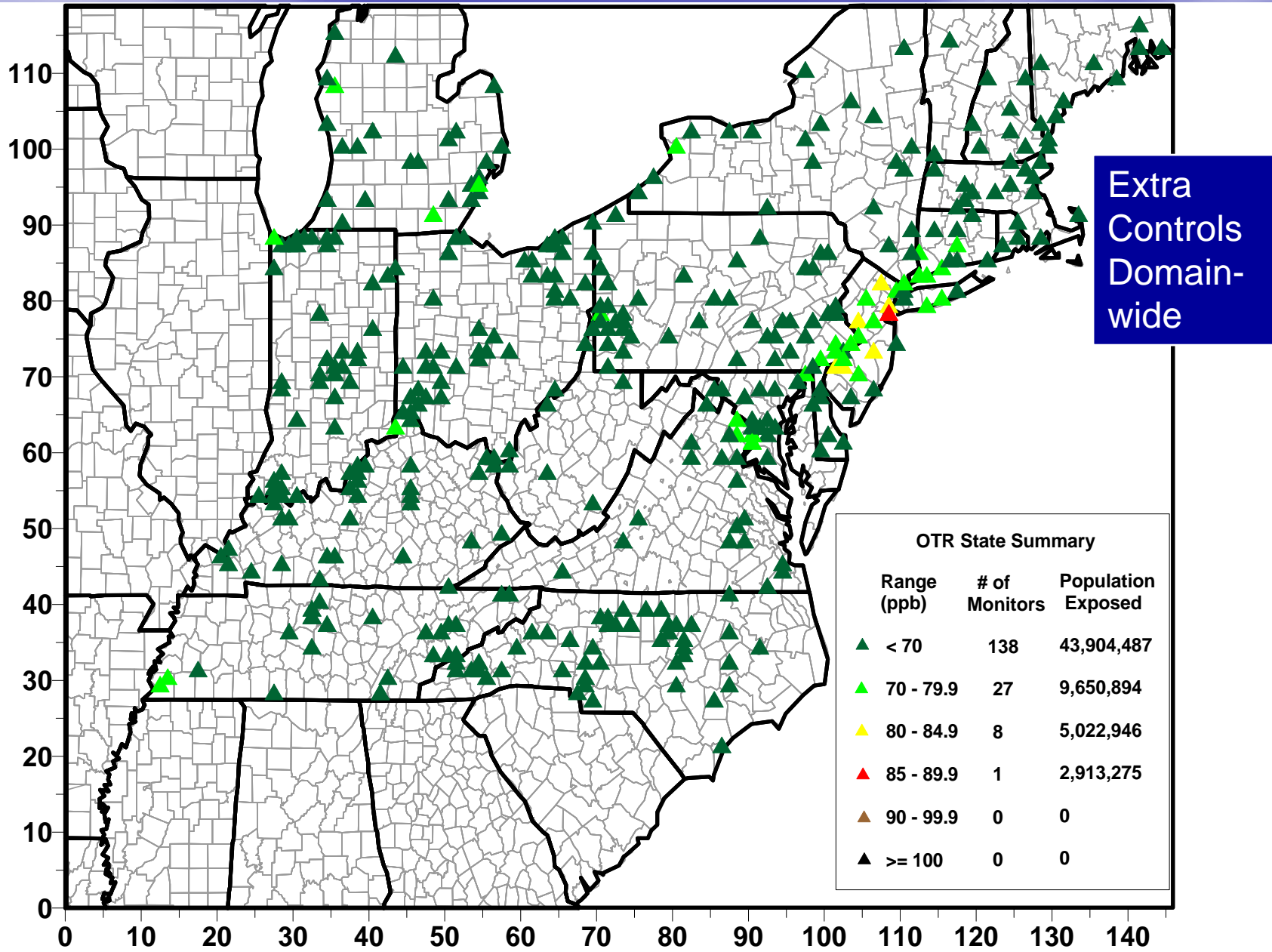
- Area source NO_x and VOC
- Mobile source NO_x
- Based on this, strategies targeting a 75% reduction in mobile source NO_x and 75% reduction of area source NO_x and VOCs.
- Screening modeling is now looking at where these controls might work best.

2010 OTC Resolution and

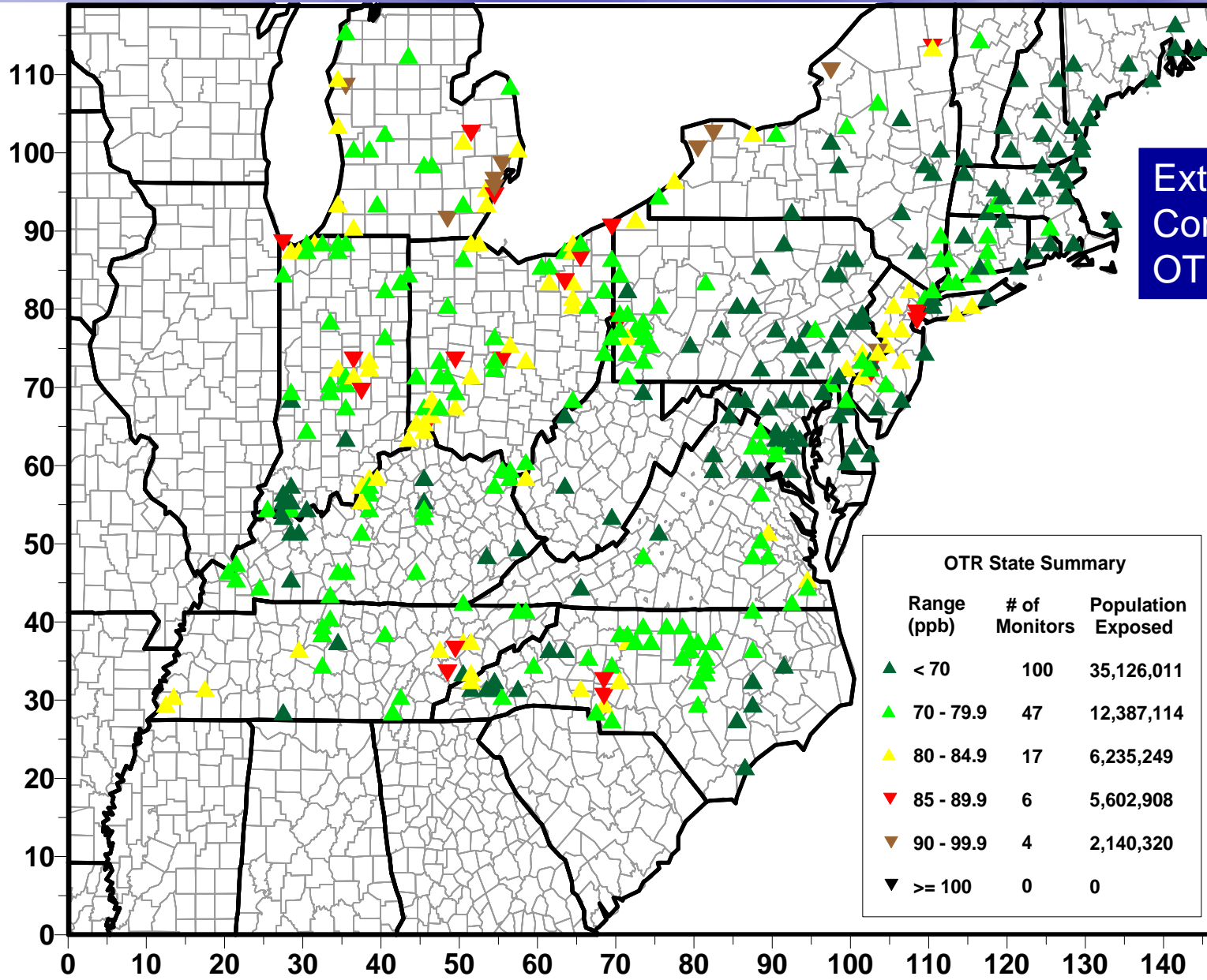
75% reduction in Area NOx and VOCs and 75% reduced Mobile NOx



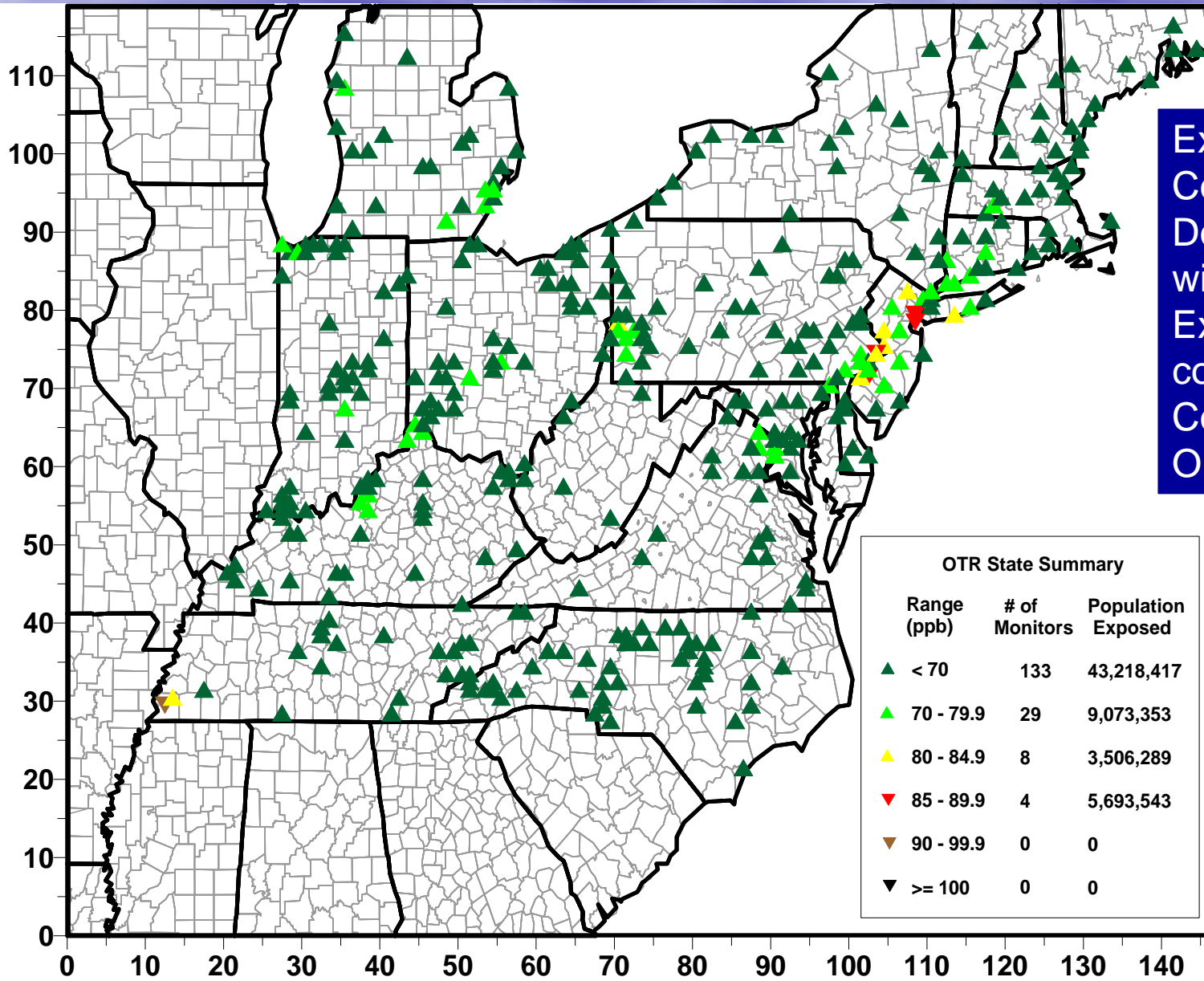
2010 OTC Resolution (EGU and nonEGU) and 75% reduction in Area NOx and VOCs and 75% reduced Mobile NOx



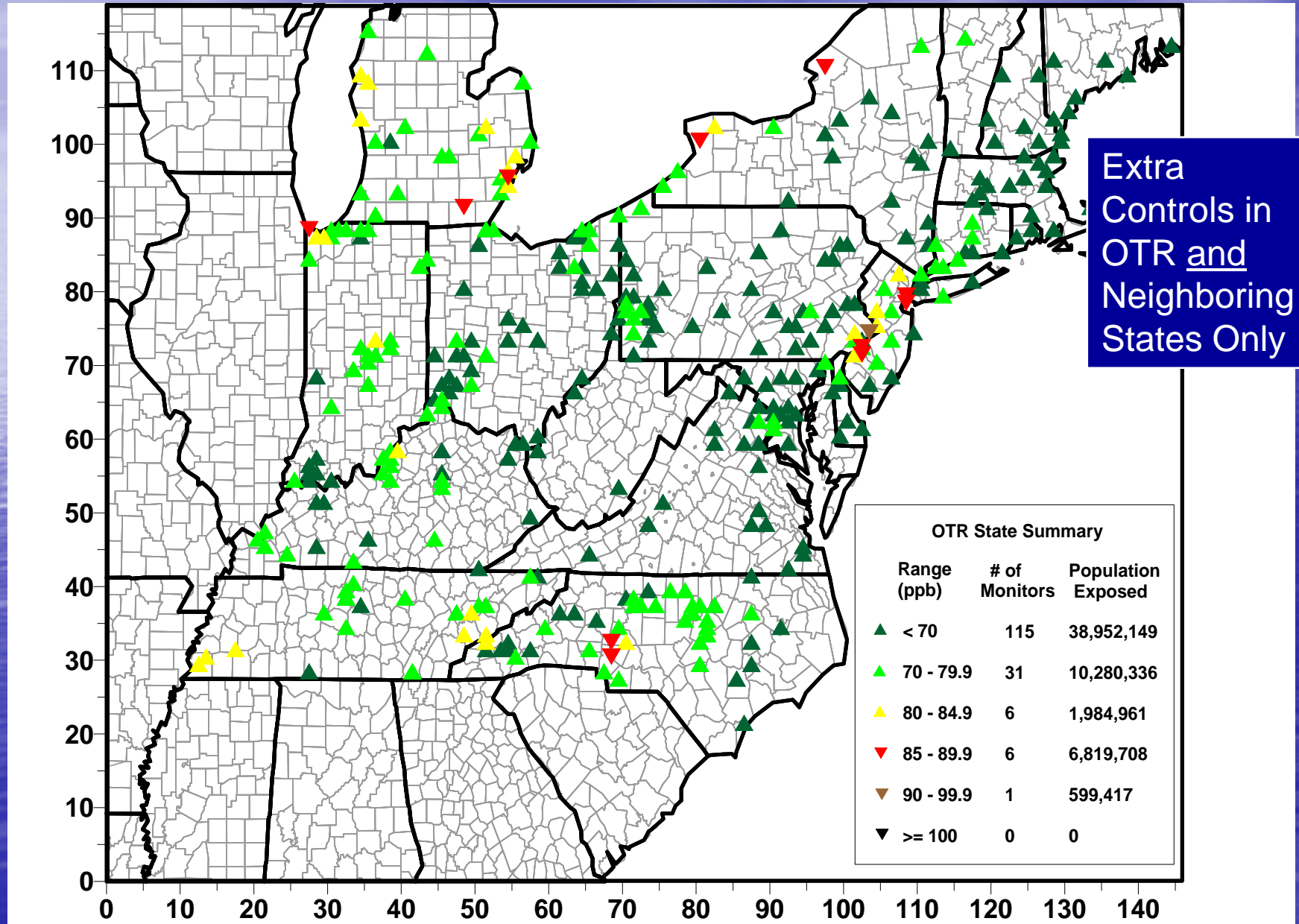
2010 OTC Resolution (EGU and nonEGU) and 75% reduction in Area NOx and VOCs and 75% reduced Mobile NOx



2010 OTC Resolution (EGU and nonEGU) and 75% reduction in Area NOx and VOCs and 75% reduced Mobile NOx



2010 OTC Resolution (EGU and nonEGU) and 75% reduction in Area NOx and VOCs and 75% reduced Mobile NOx



Locating Extra Control Measures

(Further Reducing 75% Area and Mobile NOx and 75% Area)

