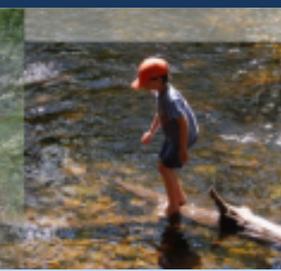
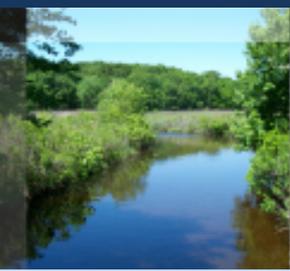
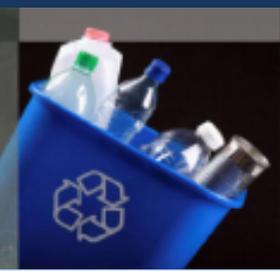




Connecticut Department of Energy and Environmental Protection



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

Petition to EPA to Expand the Ozone Transport Region Under CAA sec. 176A

Ric Pirolli

December 12, 2013

SIPRAC



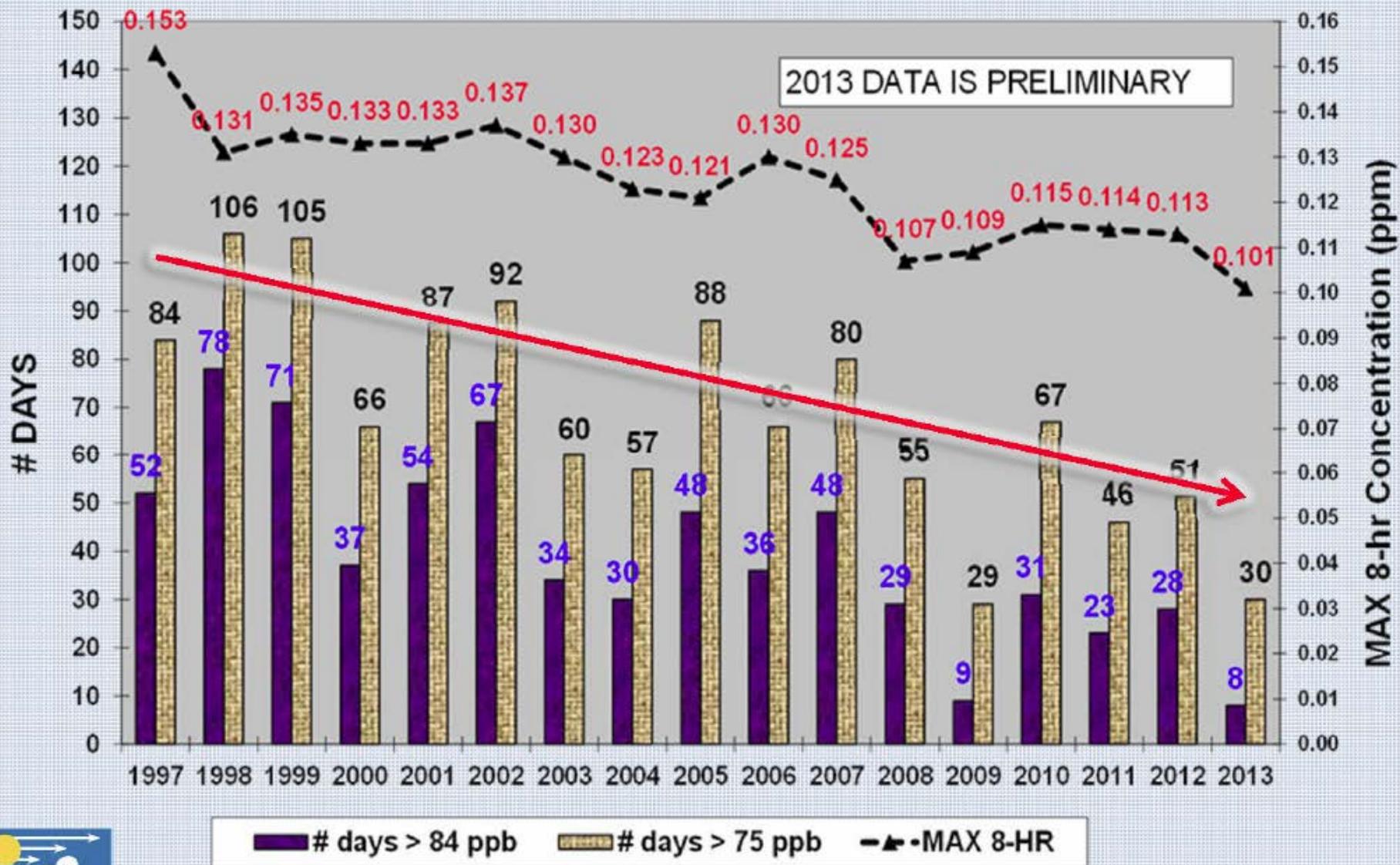
Connecticut Department of Energy and Environmental Protection

Ozone Transport Region

- Established by 1990 CAA Amendments (CAA Sec 184)
- Includes CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT and VA portion of Wash DC CMSA
- Requires statewide major source NO_x & VOC RACT , CTGs, moderate NA NSR
- Brings member states to table to discuss regional control options
- Allows OTC majority to request EPA “SIP calls” for additional controls in one or more OTR states



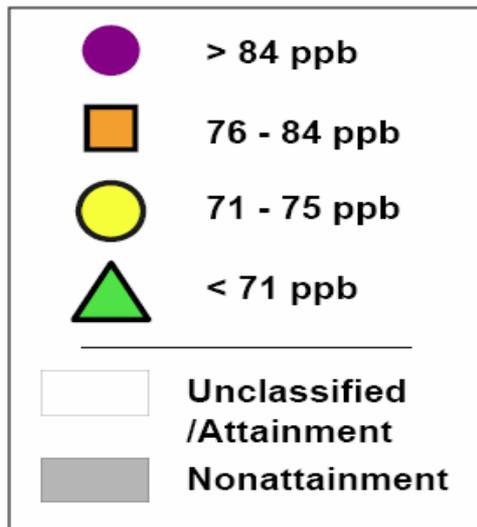
Ozone Progress 1997-2013 (OTR)



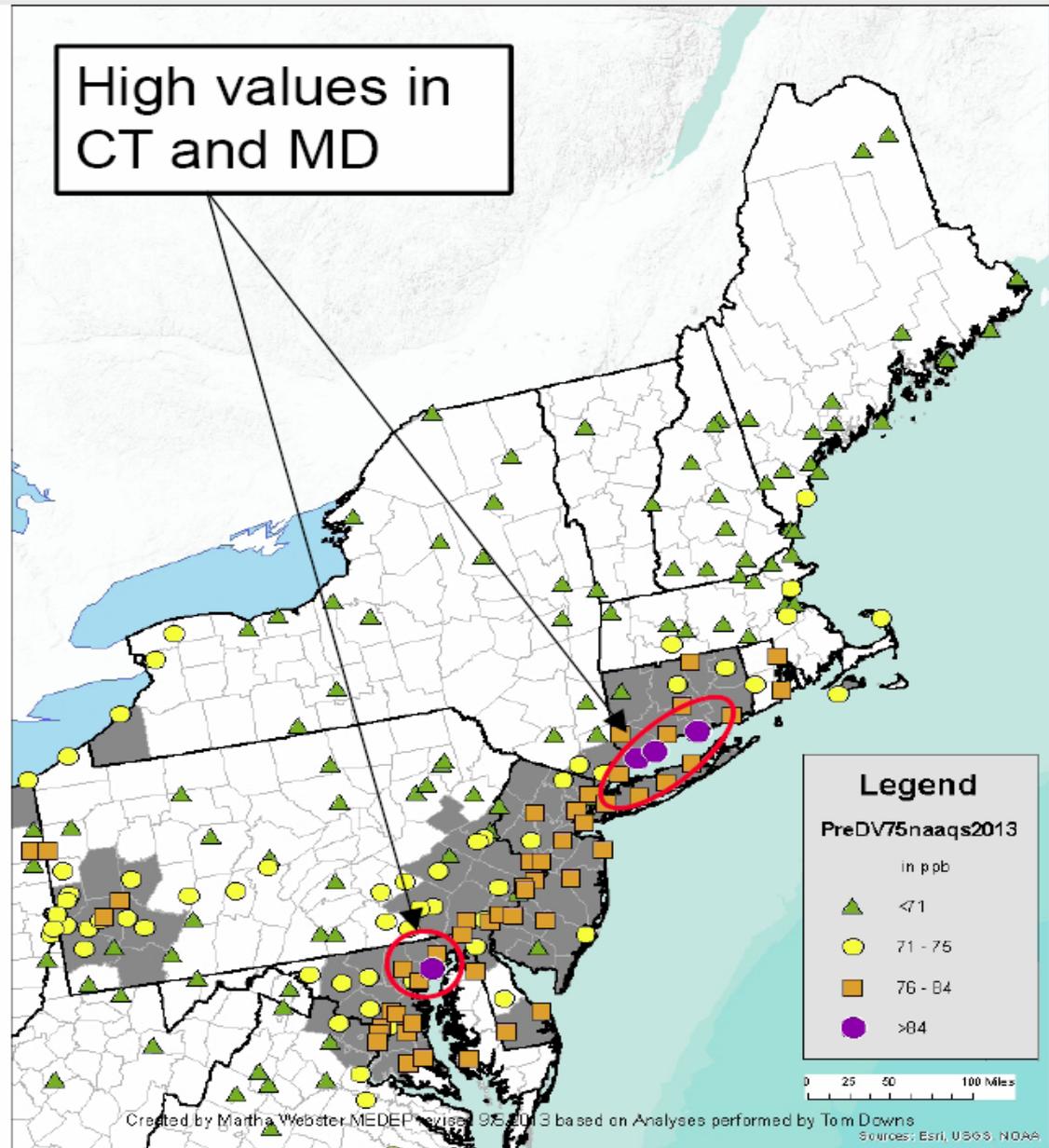
Created by Tom Downs, Maine DEP-BAQ - 9/4/2012

... But Ozone Violations Persist

Preliminary 2013 Ozone Design Values

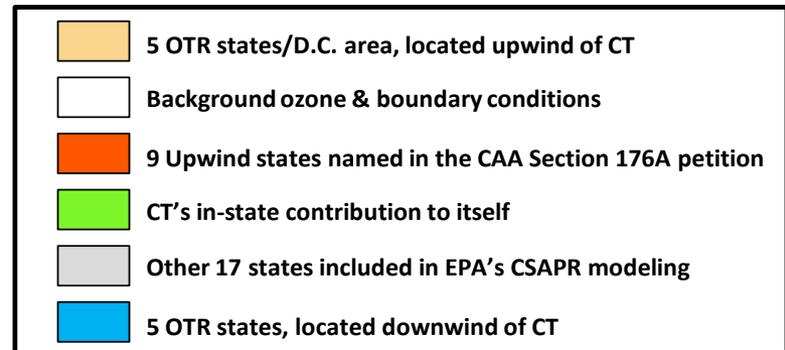
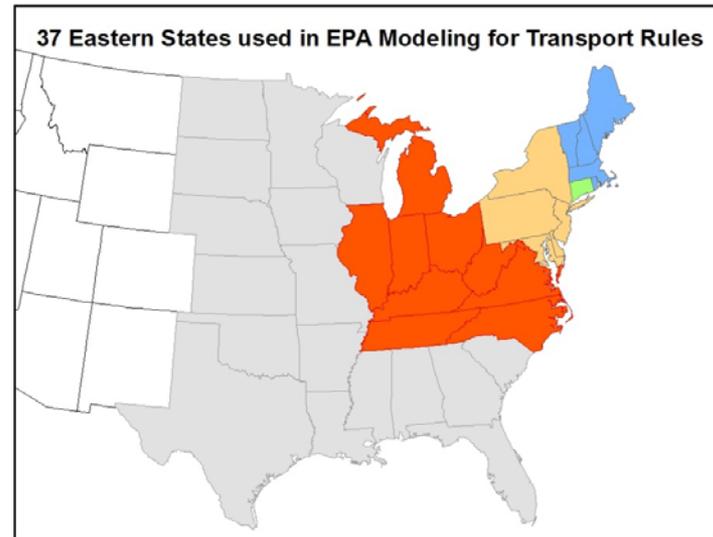
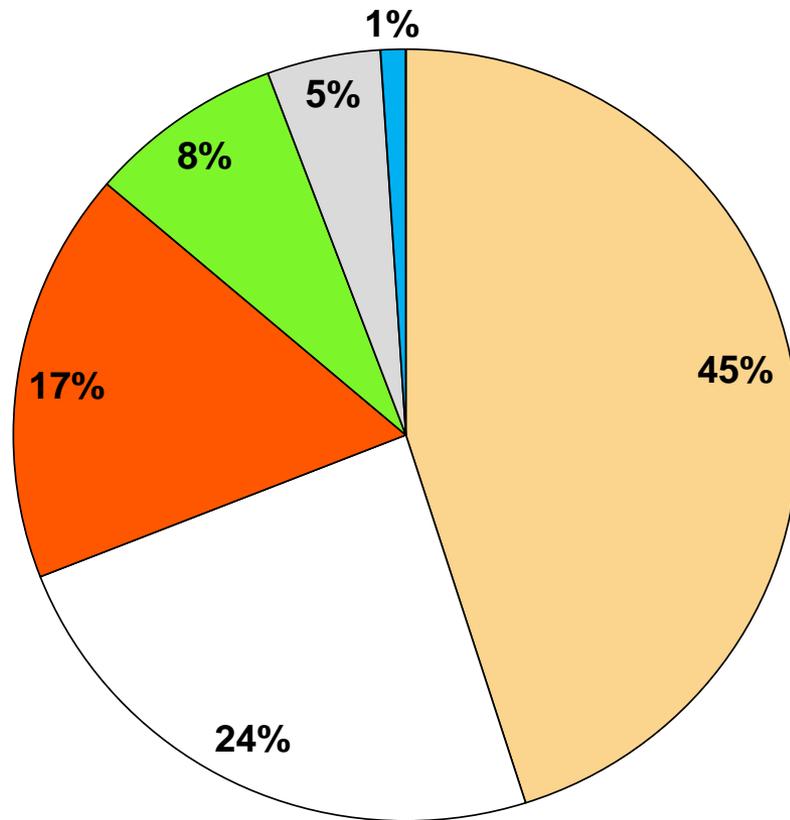


3-Year average of the 4th high concentration for 2011, 2012, 2013



Most of CT's Problem is Transport

Percent Contributions to Connecticut Peak Ozone Levels



Data source: http://www.epa.gov/crossstaterule/pdfs/CSAPR_Ozone%20and%20PM2.5_Contributions.xls

Percentages calculated using EPA modeled 2012 design values & state contributions to CT, averaged across all CT monitors.

Upper, Mid and Low Level Transport

Three Different Types of Transport



Westerly Transport

- “Aloft” transport - 100s of miles
- Generally from W or NW
- Primarily power plants

Southerly, Night-Time Transport

- Pushed by a “Nocturnal Low Level Jet (NLLJ)” of wind
- “Aloft” transport at night !!!
- 100s of miles
- SW to NE along the Atlantic
- Vehicles, power plants and other sources

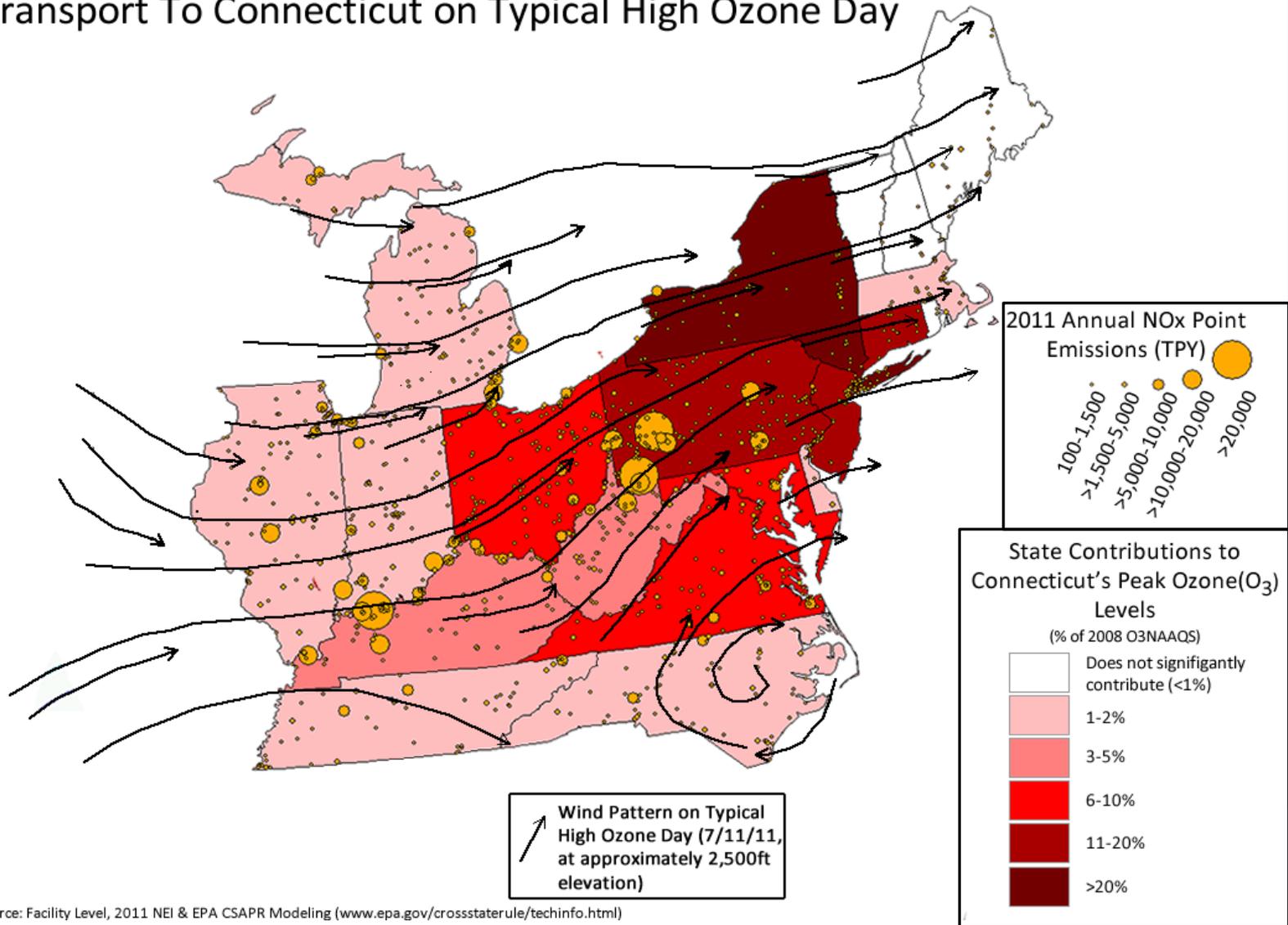
City-to-City Transport

- Washington to Baltimore, Baltimore to Philadelphia, etc.
- All sources contribute



Typical Elevated Transport to CT

Transport To Connecticut on Typical High Ozone Day

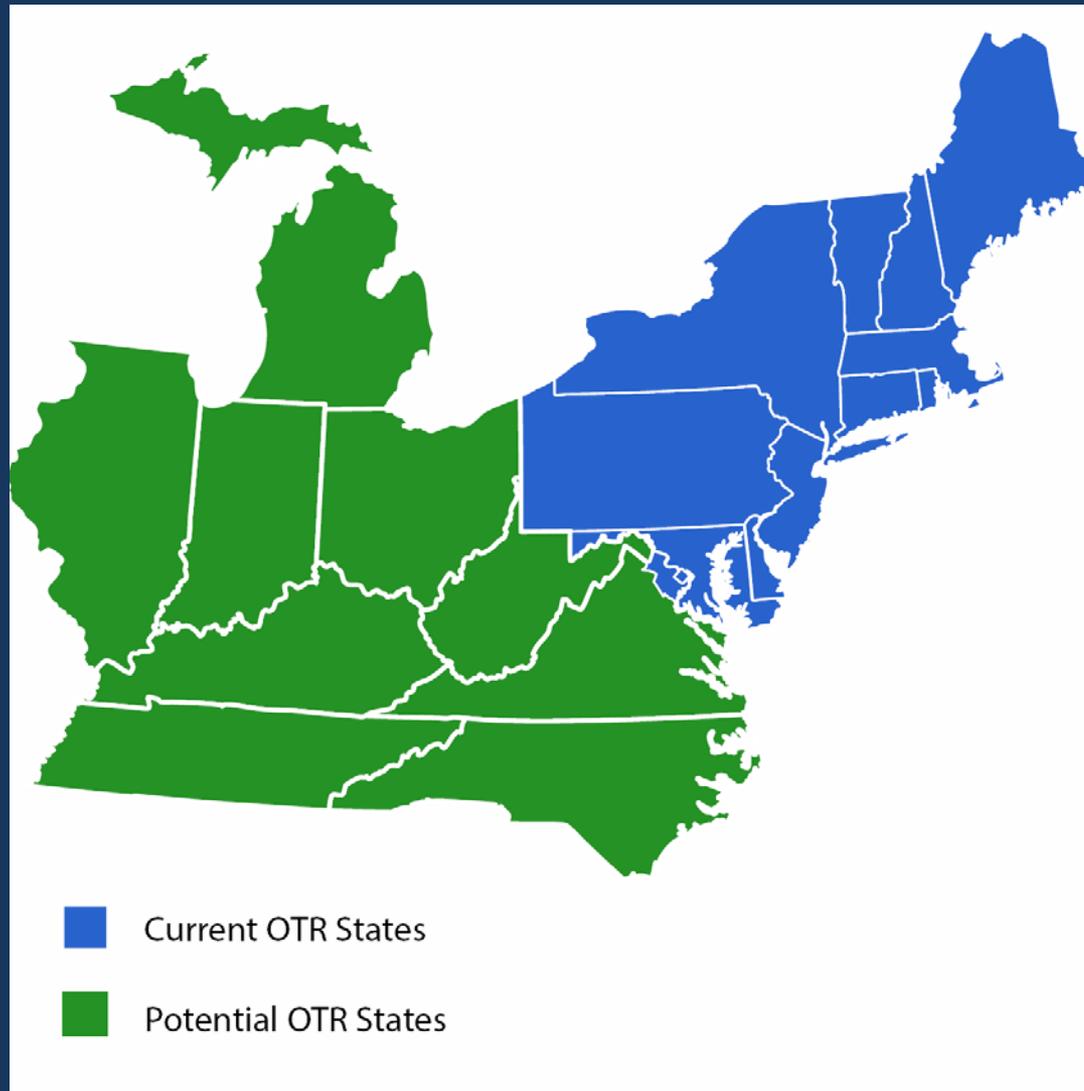


Petition to Expand OTR

- On December 9th, 9 OTR states (all but ME , NJ & DC) petitioned EPA to expand the OTR to include 9 upwind states
 - IL, IN, KY, MI, NC, OH, TN, VA, WV
- CAA Sec 176A allows EPA to expand OTR if there is:
“reason to believe that the interstate transport of air pollutants from such State significantly contributes to a violation of the standard in the transport region”
- EPA must rule on petition within 18 months



Expanded OTR Based on Petition



Questions?

For more information on the Petition:

http://www.ct.gov/deep/cwp/view.asp?a=2684&Q=536370&deepNav_GID=1619



Connecticut Department of Energy and Environmental Protection