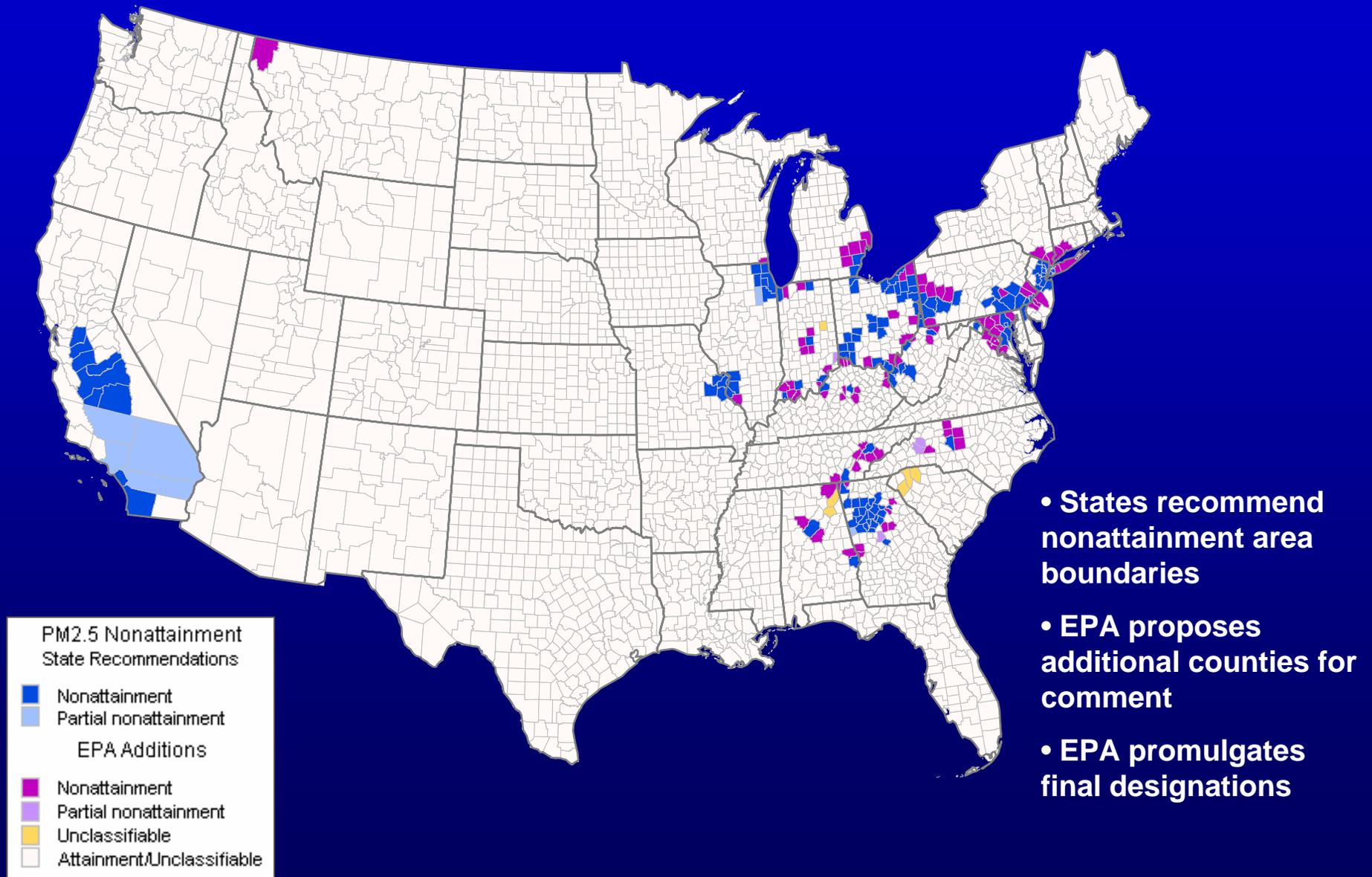


# Particulate Matter and Science: *A Regulatory Perspective*

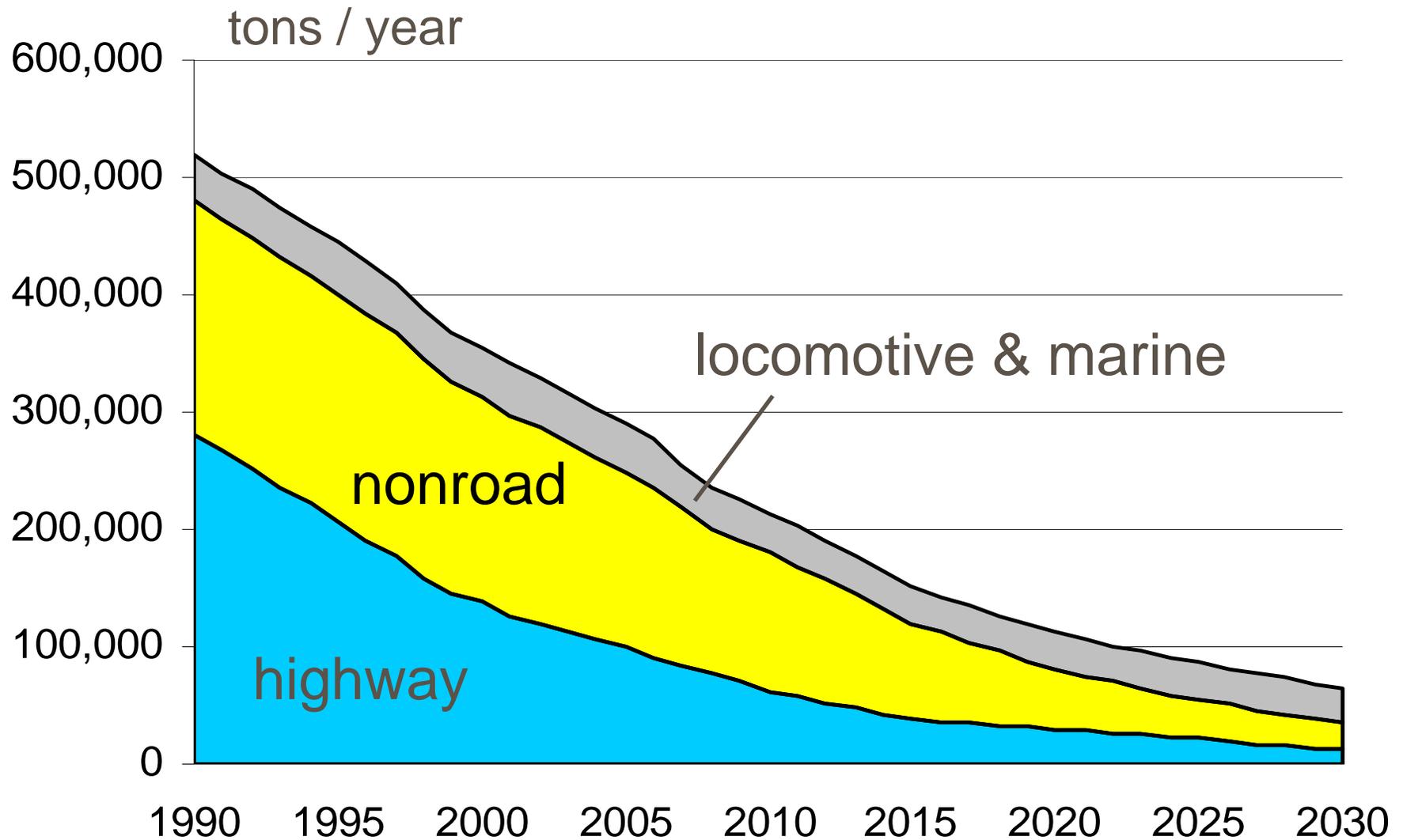
Jeffrey R. Holmstead  
Assistant Administrator,  
U.S. EPA, Office of Air & Radiation



# EPA must formally designate PM<sub>2.5</sub> areas before the end of the year

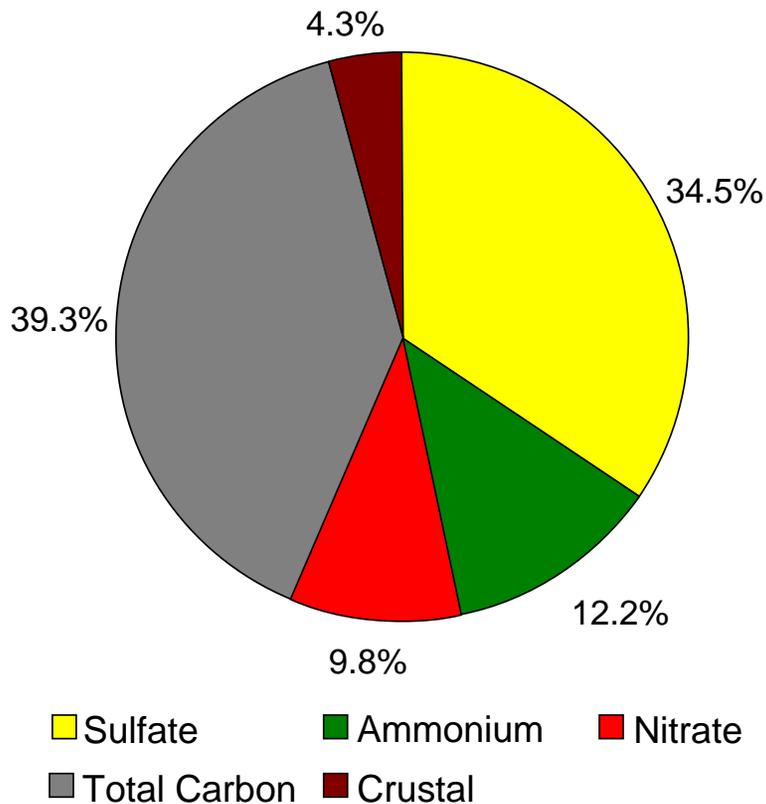


# Impact of Mobile Source Programs on Diesel PM<sub>2.5</sub>

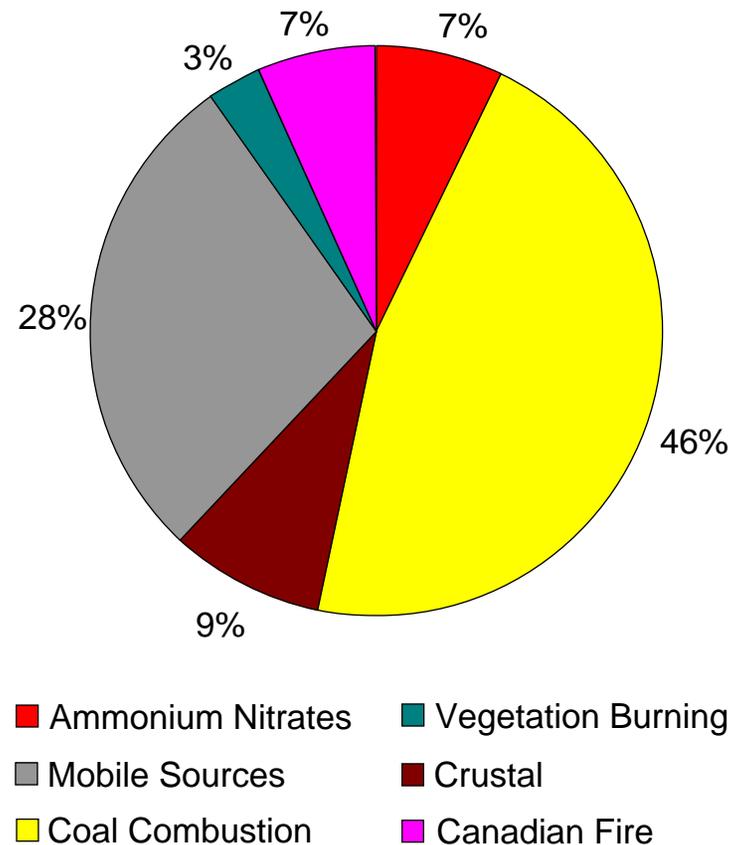


# Identifying Sources of Fine Particles in Washington, D.C.

## Composition of PM2.5 2001-2



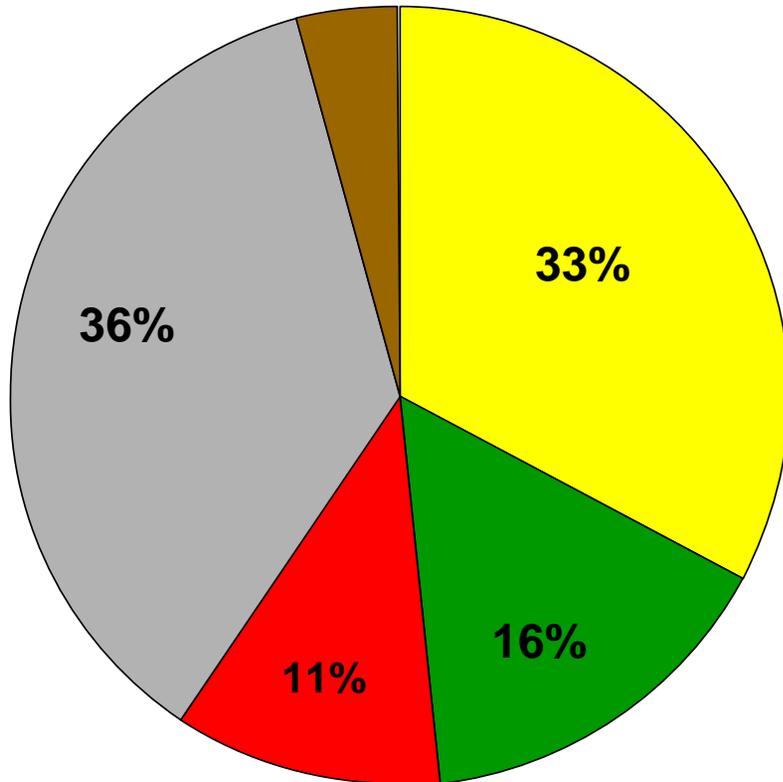
## Source Apportionment Results\*



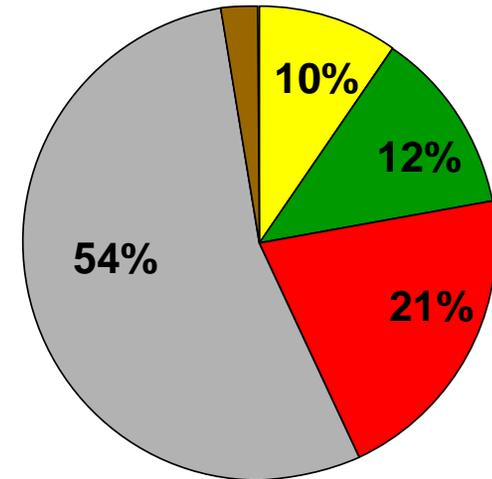
\*EPA staff estimates reflect recent emissions and ambient data, and are subject to a number of measurement, analytical, and modeling uncertainties.

# Urban PM2.5: Urban and Regional Components in Baltimore

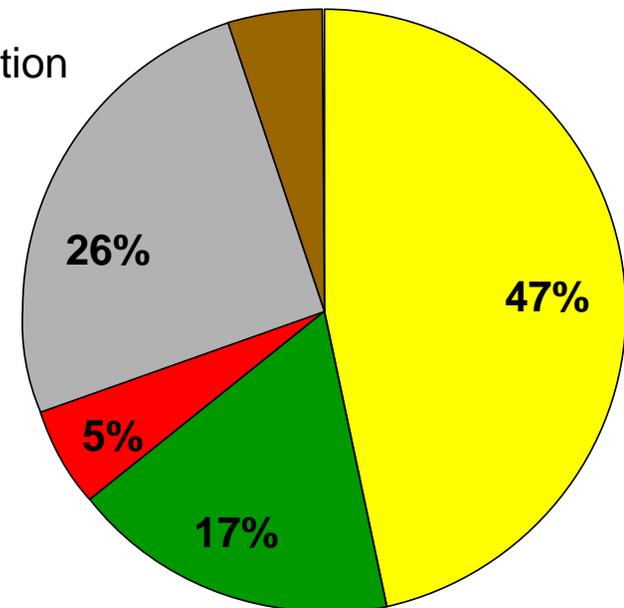
Urban Composition  
(PM2.5 ~17ug/m3)



Urban Increment  
~6ug/m3



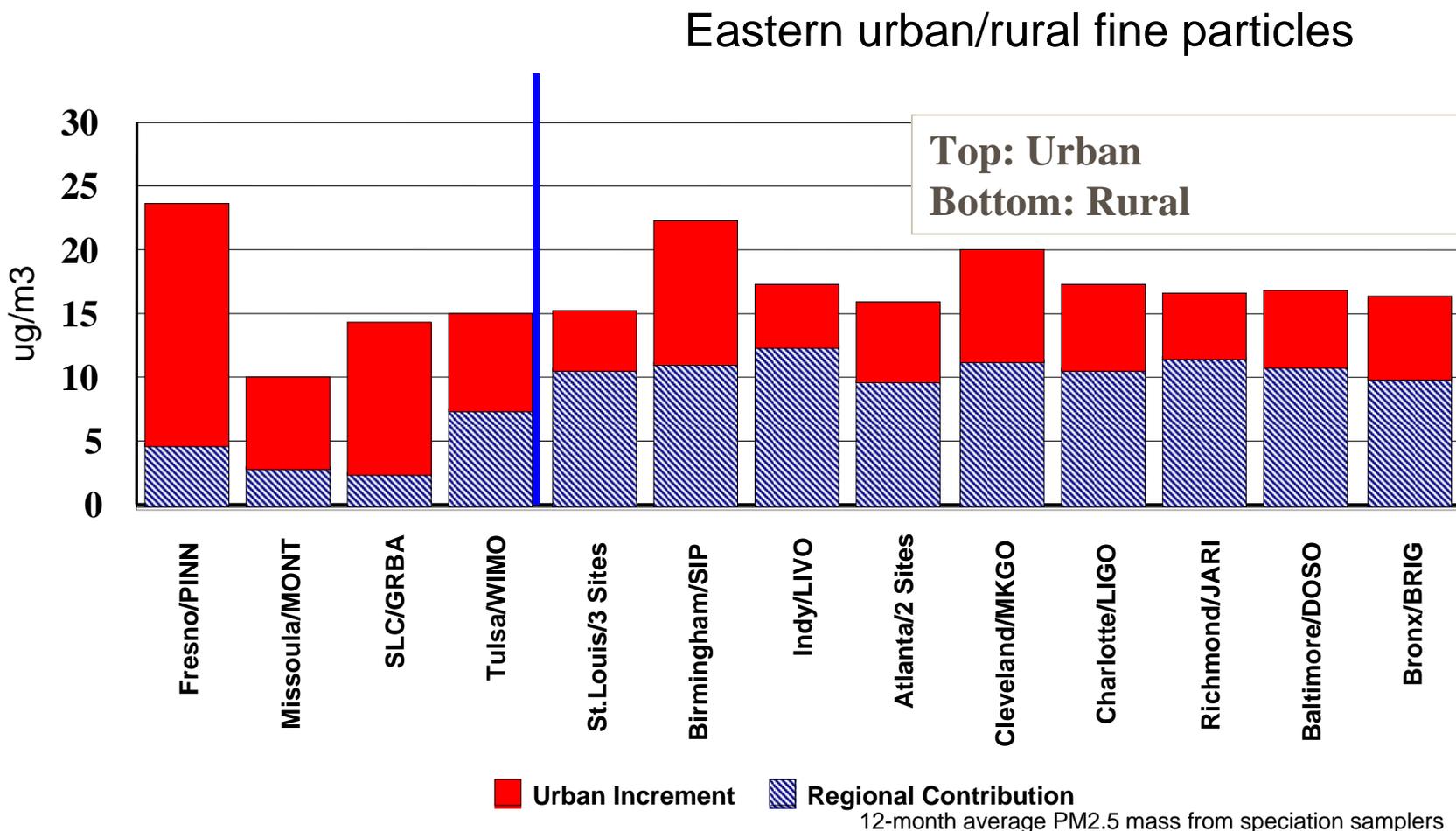
Regional Contribution  
~11ug/m3



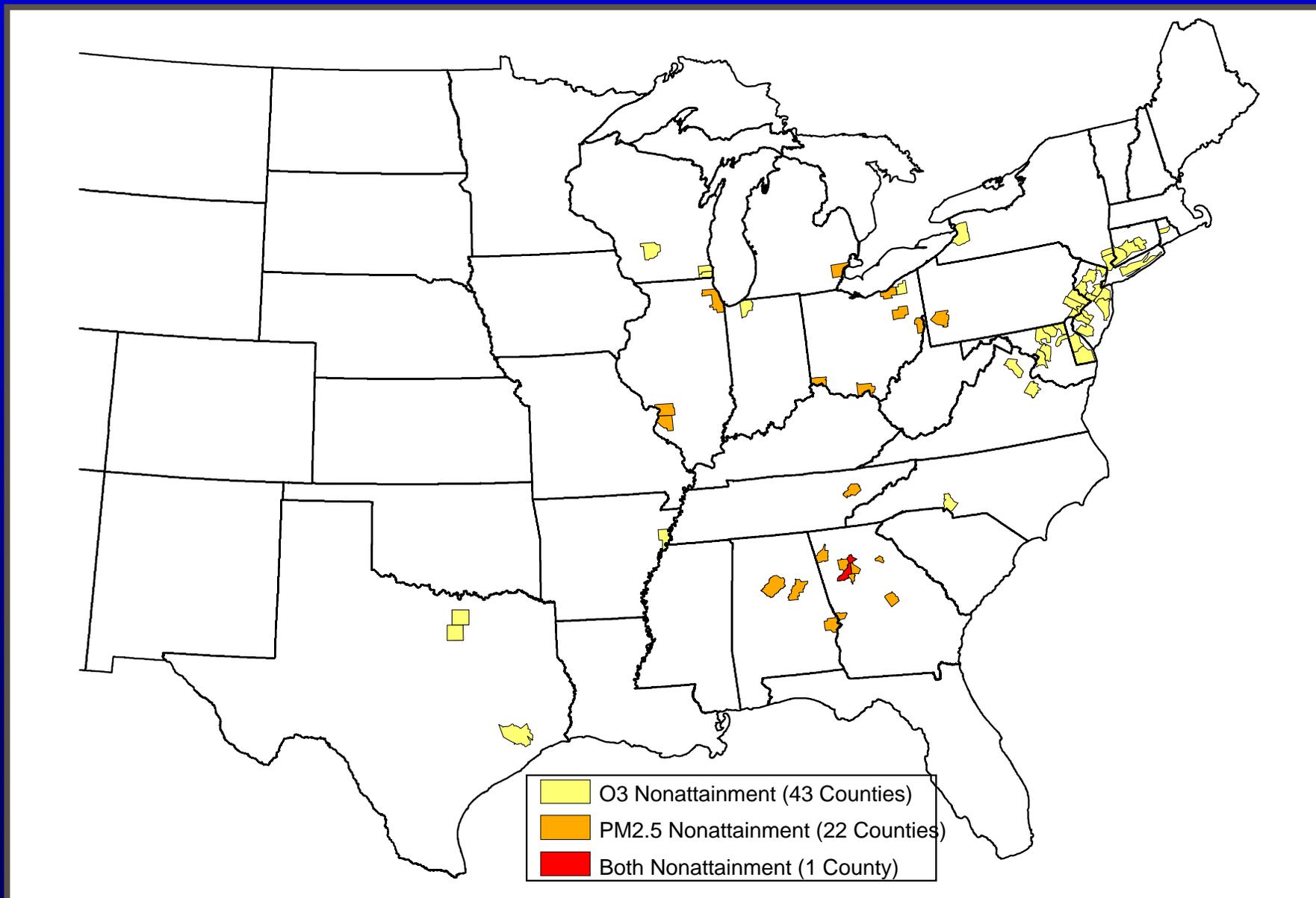
Legend:  
Total carbonaceous material (Grey)    Sulfate (Yellow)    Crustal (Brown)  
Estimated Ammonium (Green)    Nitrate (Red)

March 01 – Feb 02

# In the East, transport is a major fraction of PM2.5



## CAIR Proposal: 2010 Control Case Projection of 8-Hour Ozone and Annual Average PM2.5 Nonattainment in the East



# CAIR Proposal: 2015 Control Case Projection of 8-Hour Ozone and Annual Average PM2.5 Nonattainment in the East

