

Ozone and PM2.5 update

OKI Regional Ozone Coalition

October 11, 2006

Ozone

Designations

- Original 8-hour designations were effective June 15, 2004
- The Cleveland/Akron area was designated ‘Subpart 2, Moderate’ This is similar to the 1-hour designation for this area.

Developing the SIP

- September 2006 ‘catch-up’ RACT
- VOC and NO_x RACT from the 1990’s not implemented due to 1-hour ozone designations.
- The PLAN

The PLAN

- Air quality modeling
- Reasonable Controls
- Weight of evidence

Air Quality Modeling

- Guideline approach with a 2002 base year (including the 2002 design value)
- Future year ‘on the books’ gets us to ~ 88.8 ppb
- More refined modeling on the way (e.g., Base L, 4 km grid spacing, mobile source inputs)

Reasonable Controls

- The list being developed with input from Ohio EPA, U.S. EPA and the NE Ohio task force
- Regional discussions with other MW states and the OTC states
- ‘Reasonable’ is far from defined.

Weight of Evidence

- Why do we believe the the area will attain on time even though the model says no
- Alternative modeling (e.g., 2003 base case)
- Alternative growth assumptions
- Ambient data trends
- Emission trends

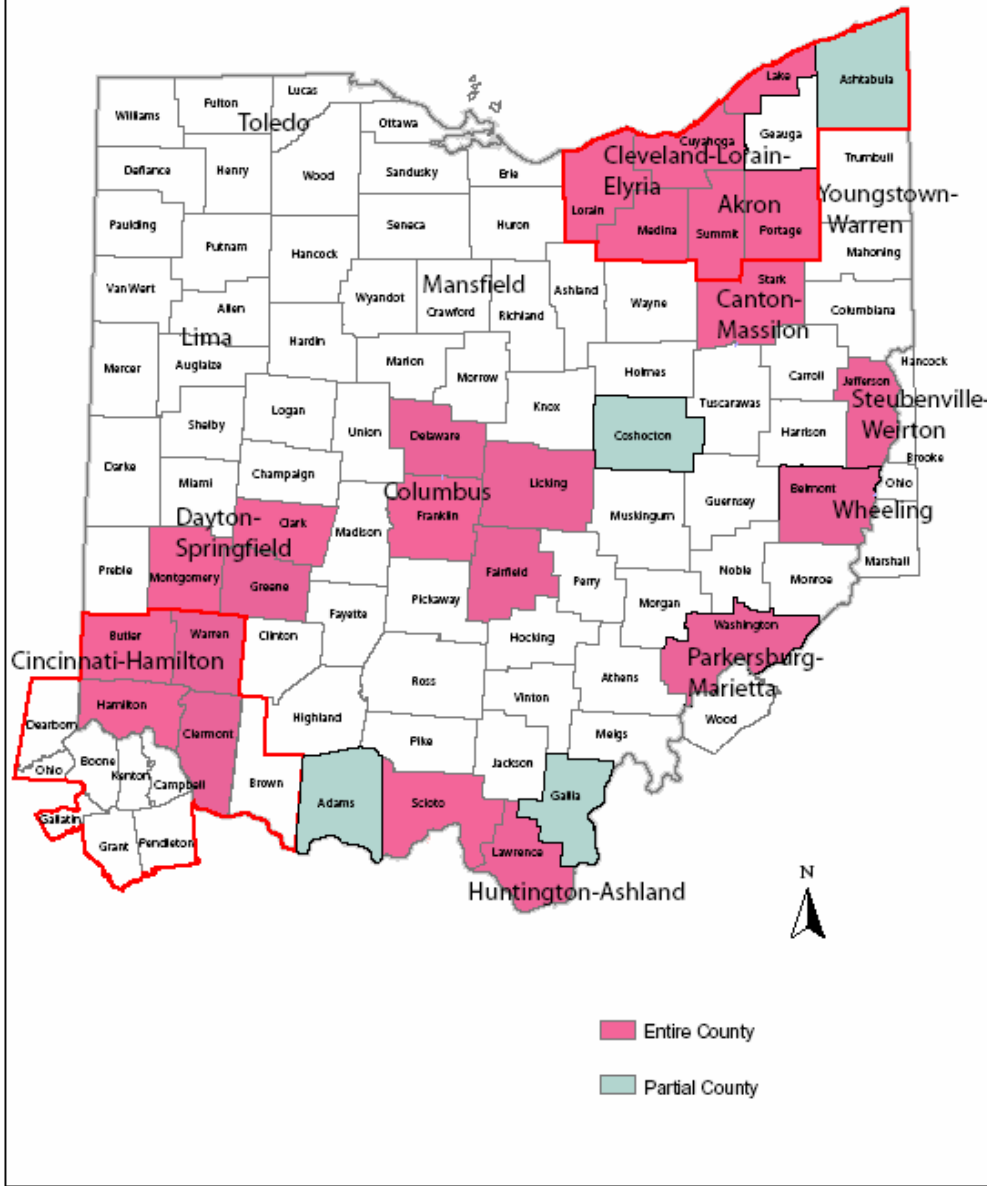
E-Check Replacement

- Final revisions to Chapters 72 and 14 submitted _____
- Hamilton County 8-hour SIP (due 6/07) will not include E-Check
- Will include RVP? AIM? Consumer Products?
- Feds also working on these rules.
- Will the feds implement by 2008?

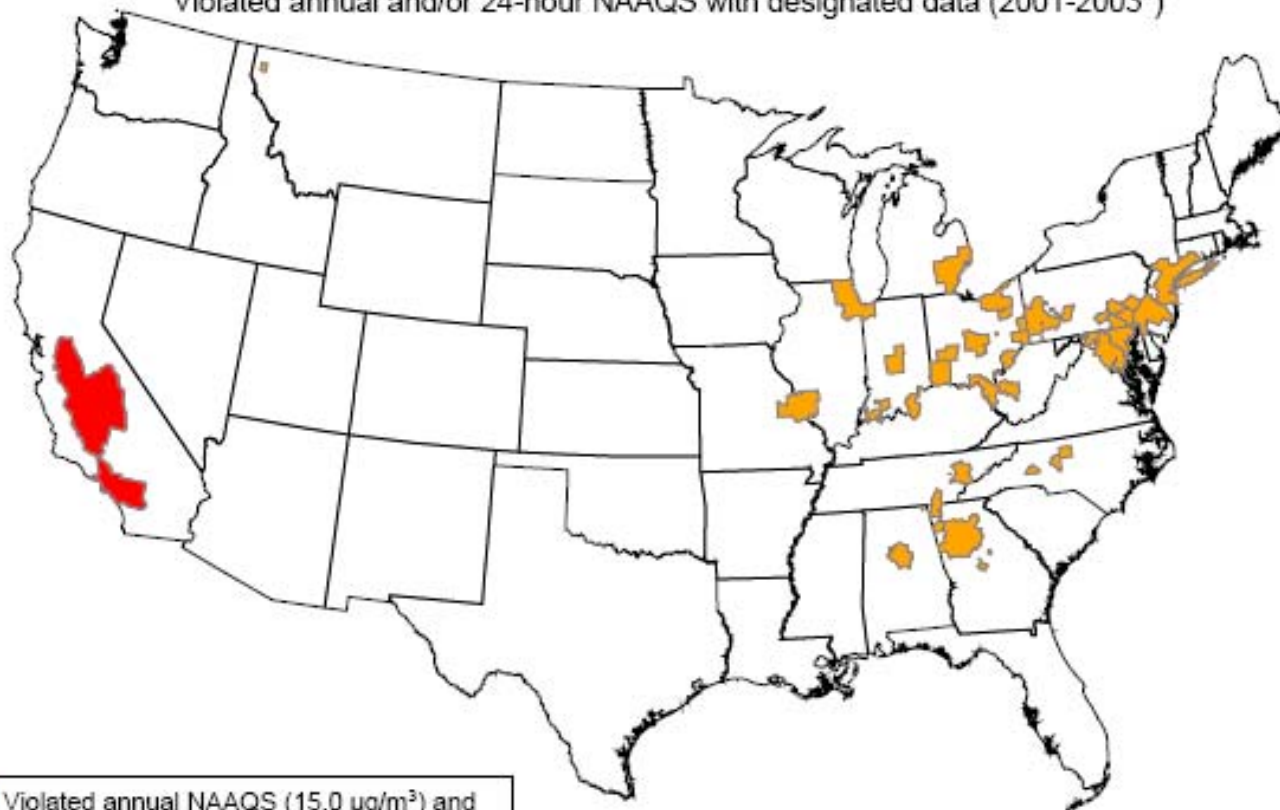
PM2.5

PM 2.5 Nonattainment

04/12/05



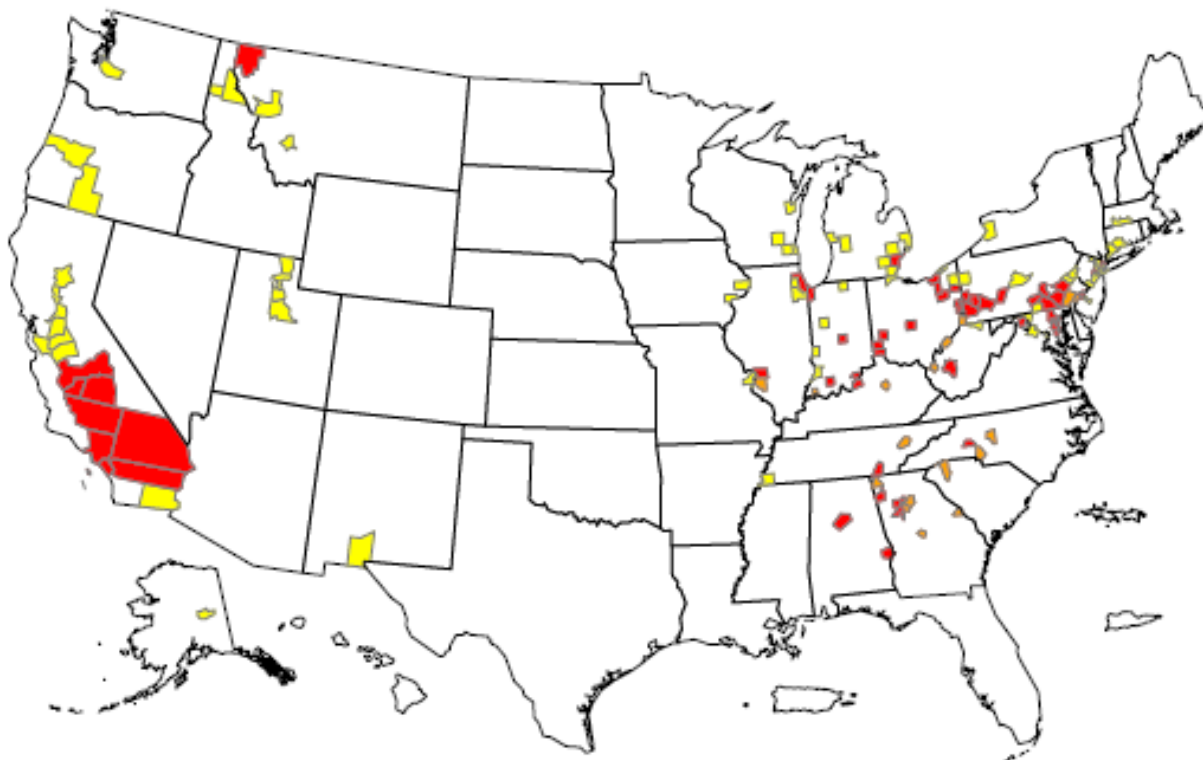
Currently Designated PM_{2.5} Nonattainment Areas - 1997 Standards
Violated annual and/or 24-hour NAAQS with designated data (2001-2003*)



- Violated annual NAAQS (15.0 $\mu\text{g}/\text{m}^3$) and 24-hour NAAQS (65 $\mu\text{g}/\text{m}^3$) [2 areas]
- Violated only 24-hour NAAQS (65 $\mu\text{g}/\text{m}^3$) [0 areas]
- Violated only annual NAAQS (15.0 $\mu\text{g}/\text{m}^3$) [37 areas]

* 2002-2004 data were considered in the designation process but all nonattainment designations were based on 2001-2003 data

Counties Exceeding New NAAQS Levels, Based on 2003-2005 Monitoring Data



Legend

County with monitor exceeding:

- both annual and 24-hour PM_{2.5} standards
- ONLY the 24-hour PM_{2.5} standard
- ONLY the annual PM_{2.5} standard

Total Counties Exceeding

Number of Counties

55
69
17
141

• Data from AQS 7/10/2006

• Data completeness computed per CFR 7/10/2006

PM2.5 additional timeline

- State Recommendations based on 2004-6 data: 12/07
- Final Designations (signed): 12/09
- Effective: 4/10
- SIPs due: 4/13
- Attainment: 4/15

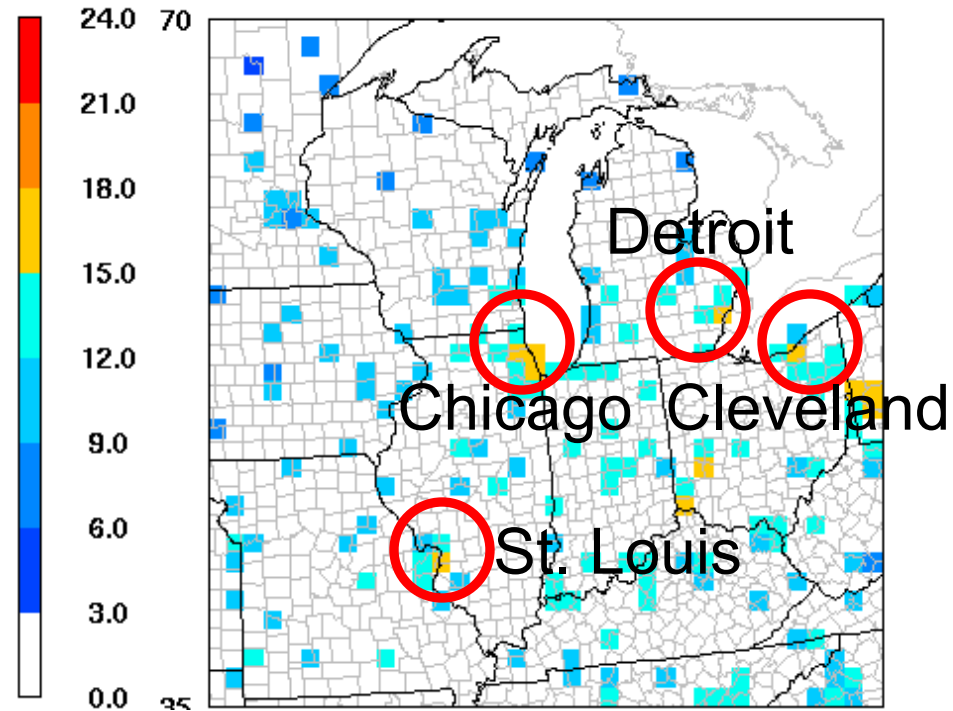
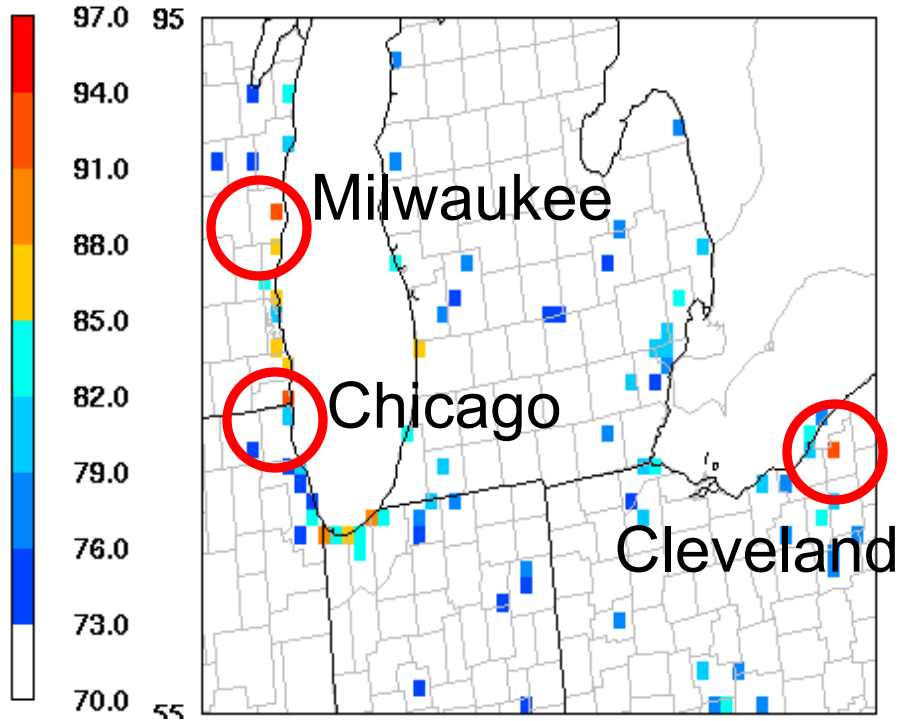
Current PM2.5 Timeline Still In Place

- SIPs due: 4/08
- Attainment: 4/10

Residual Nonattainment Areas (High Monitors)*

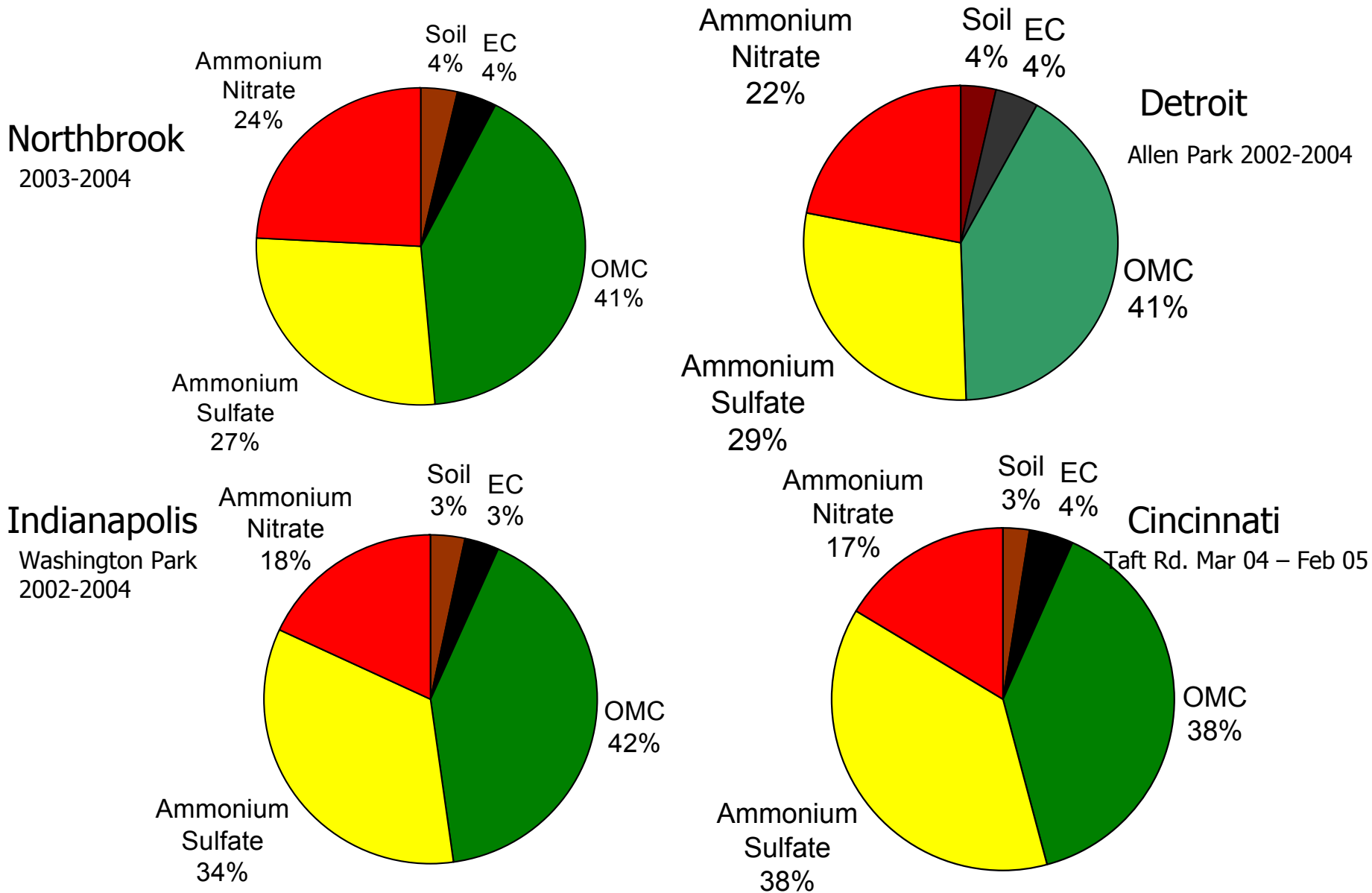
Ozone

PM_{2.5}

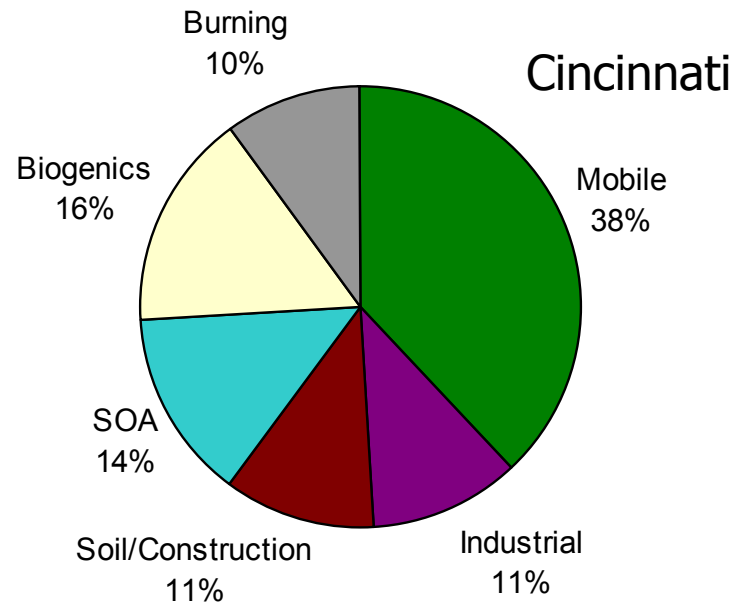
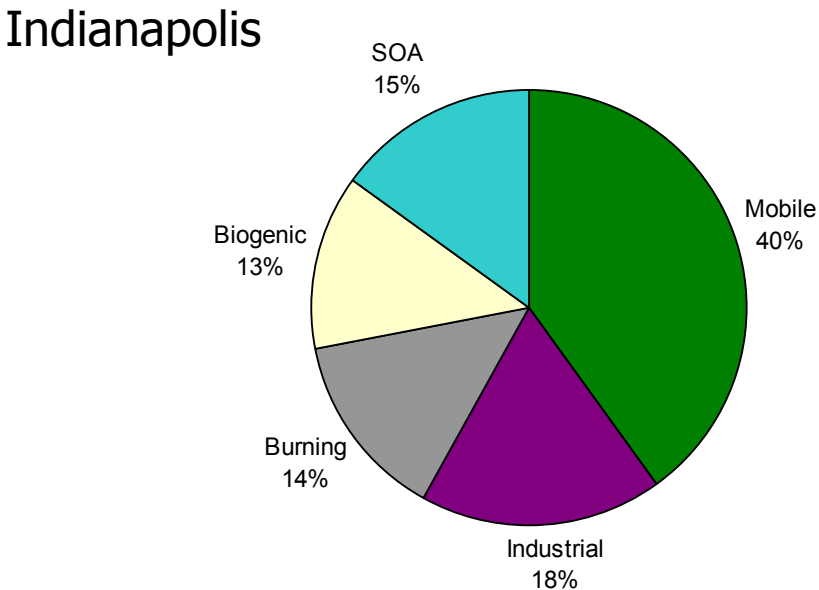
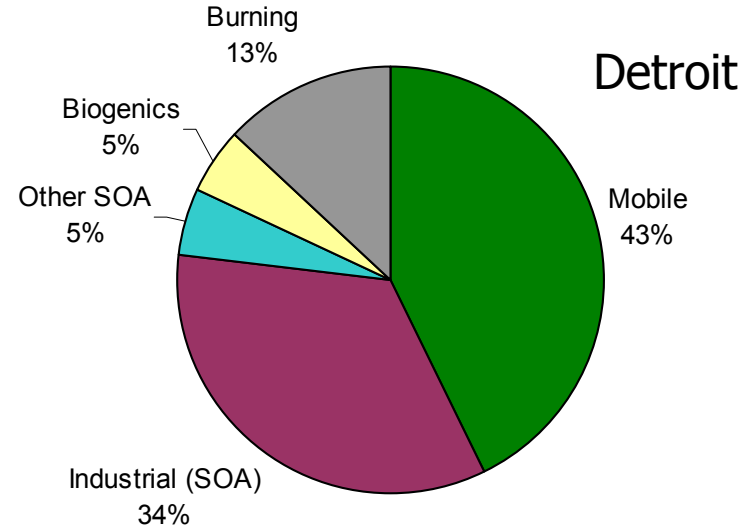
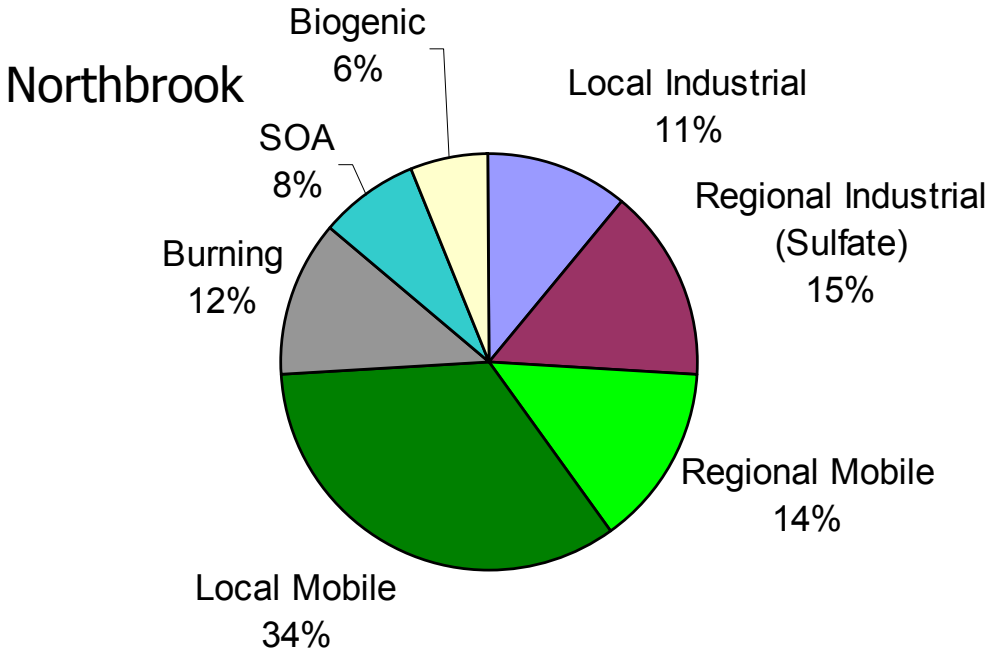


* More than 1 ppb or 1 ug/m³ above standard

Average Composition of PM_{2.5}



Source Contribution to Organic Carbon



Need for Micro Inventory

- Urban Excess sources
- On-road mobile
- Off-road mobile
- Area sources
- Nearby small sources
- Regional large sources

Questions?