

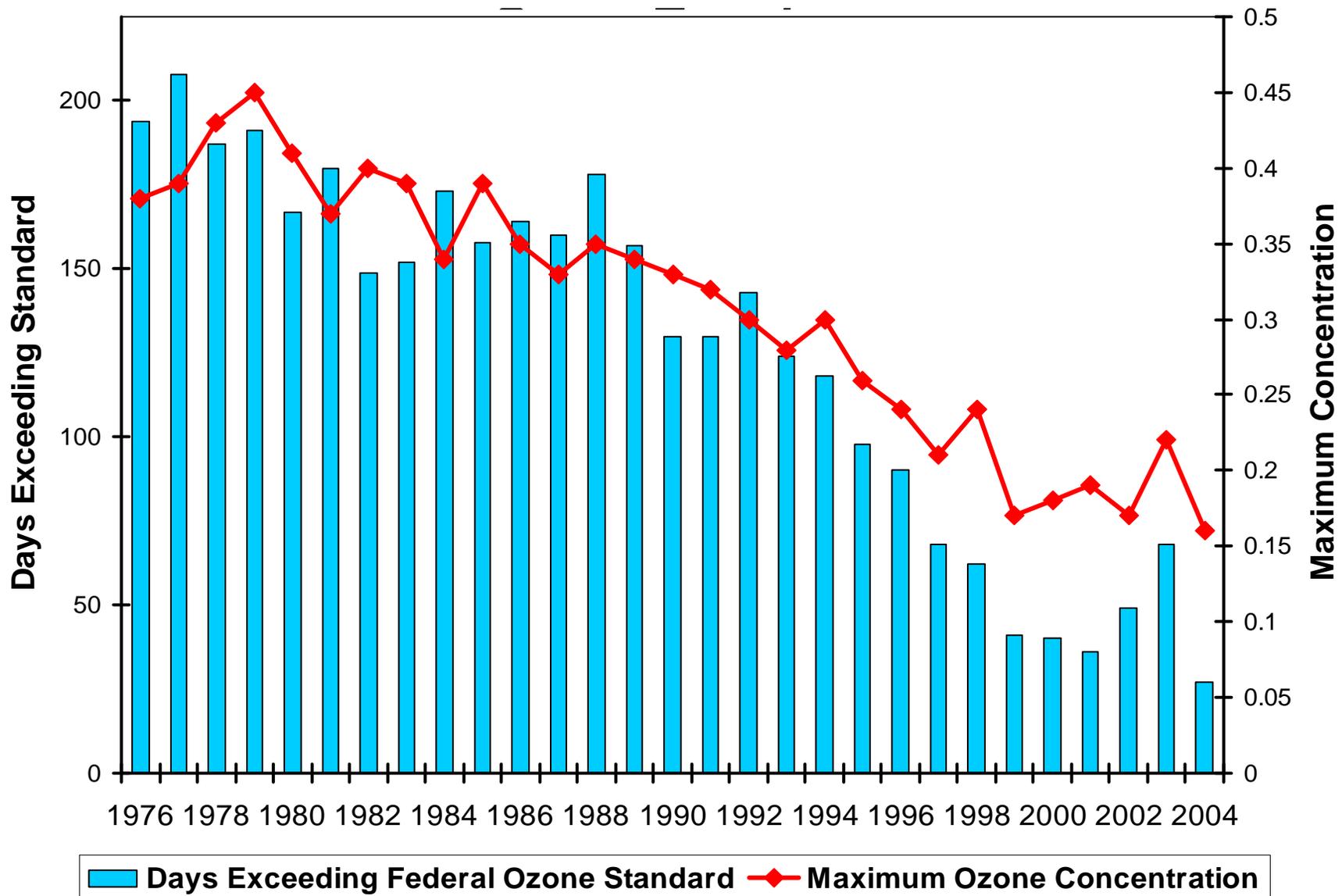
# **VOC Reactivity Technology Forum and Roundtable Discussion**



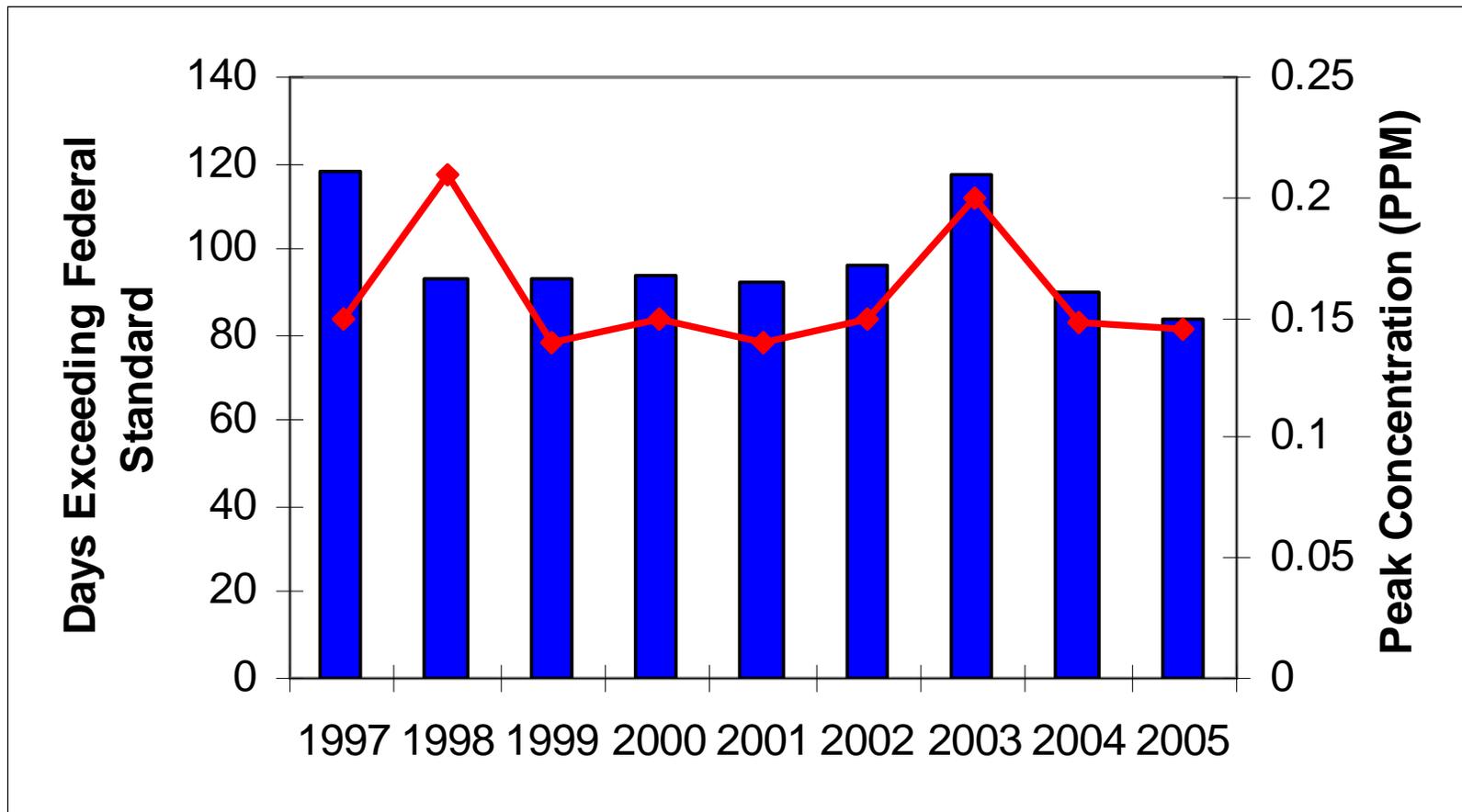
September 25, 2007

Elaine Chang, DrPH  
Deputy Executive Officer  
Planning, Rule Development, & Area Sources

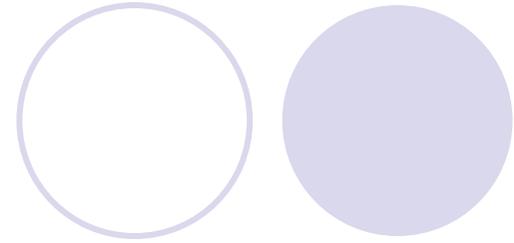
# Air Quality Trends - Ozone



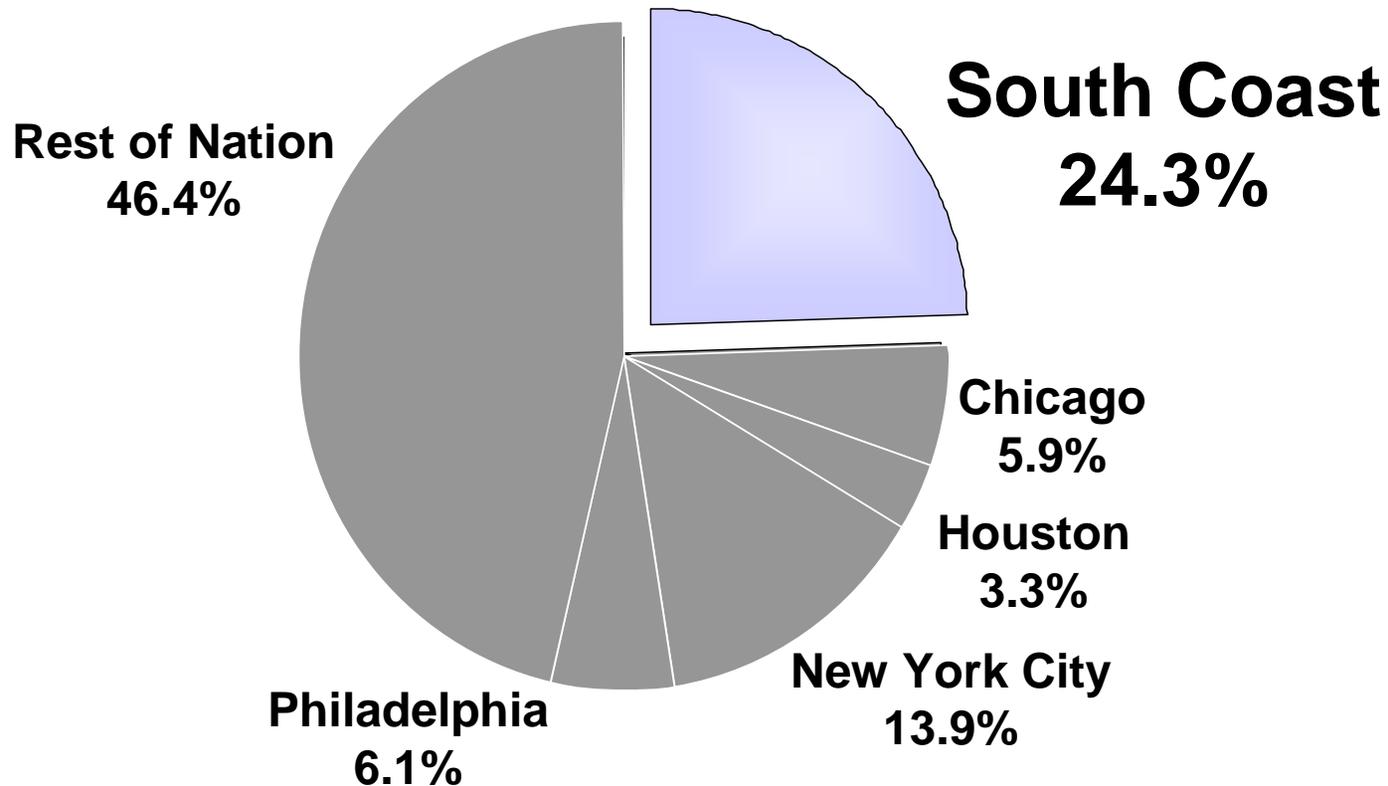
# 8-Hour Average Ozone



# Basin's Disproportionate Air Pollution Exposure



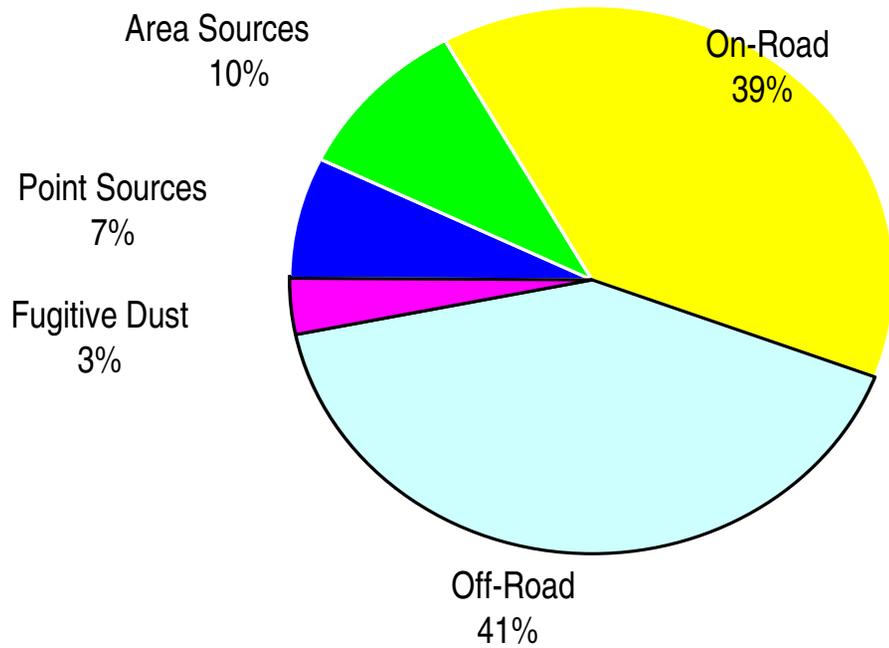
8 Hour Ozone  
(NAAQS = 0.08 ppm)



Population-weighted exposures above the NAAQS, based on 2000-02 AIRS data

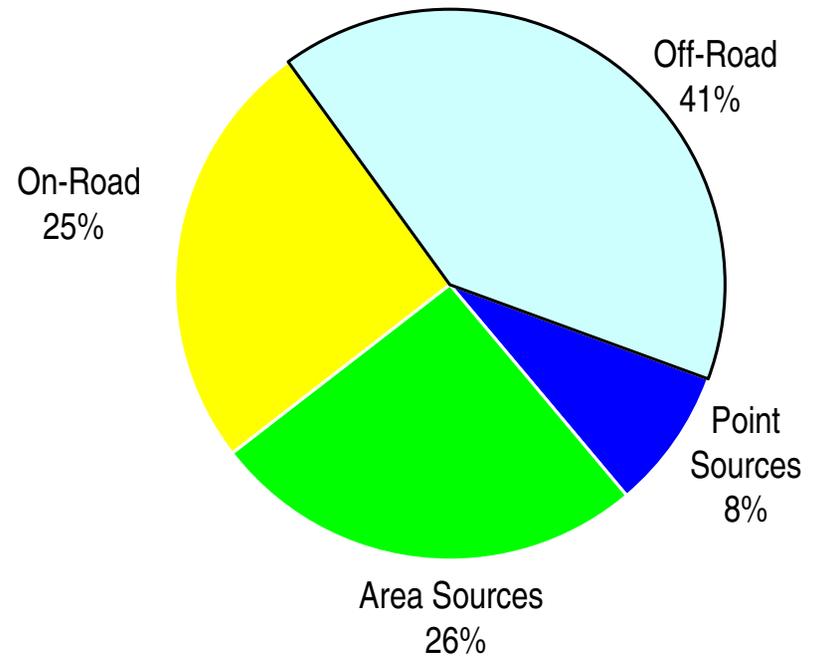
# Emissions by Major Category

PM2.5, 2014



**(NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>2.5</sub>)**

8-Hr Ozone, 2023

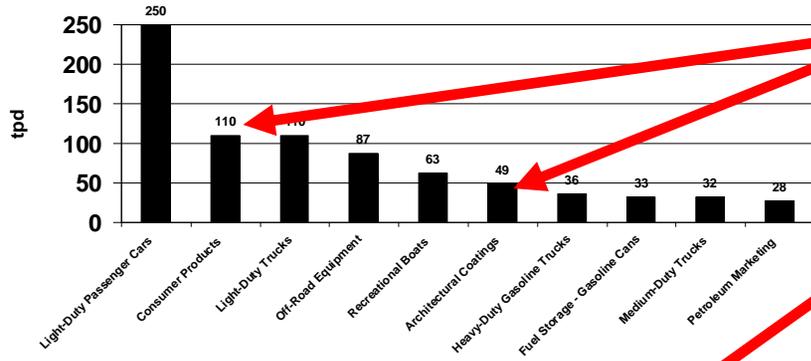


**(VOC, NO<sub>x</sub>)**

# Needed Pollution Reduction (tons per day)

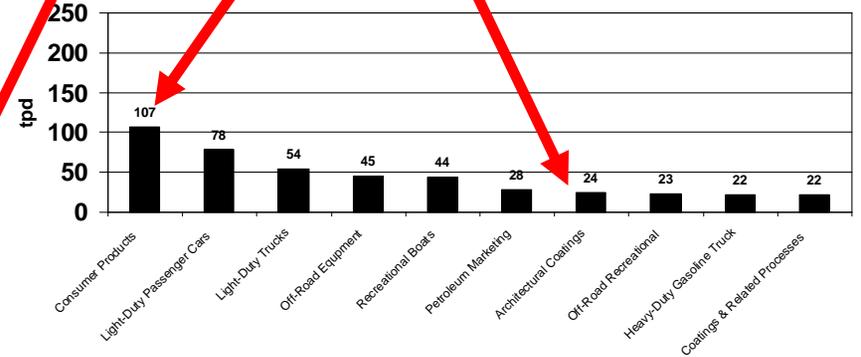
	2014	2023
NOx	203 (31%)	383 (76%)
VOC	59 (11%)	116 (22%)
SOx	24 (56%)	---
PM2.5	14 (14%)	---

## VOC Annual Average Emissions-2002

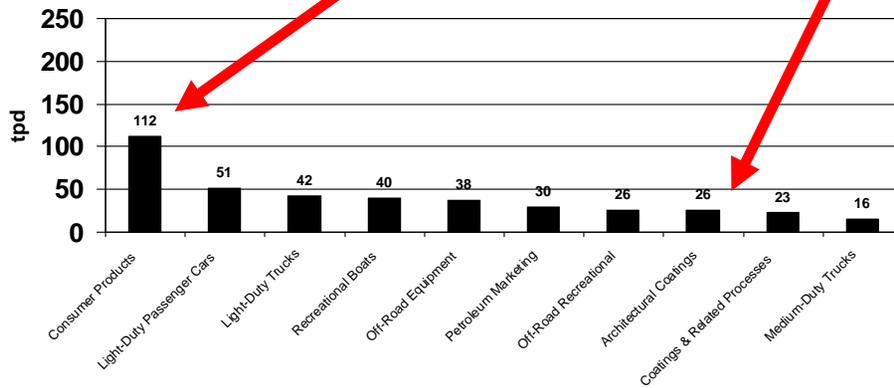


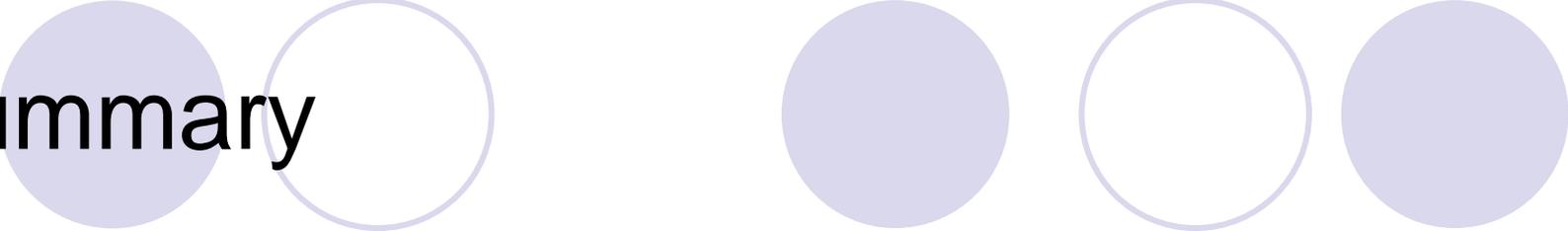
**Consumer Products & Architectural Coatings emissions expected to remain in the top 10 categories, even with planned reductions**

## VOC Annual Average Emissions-2014



## VOC Annual Average Emissions-2020

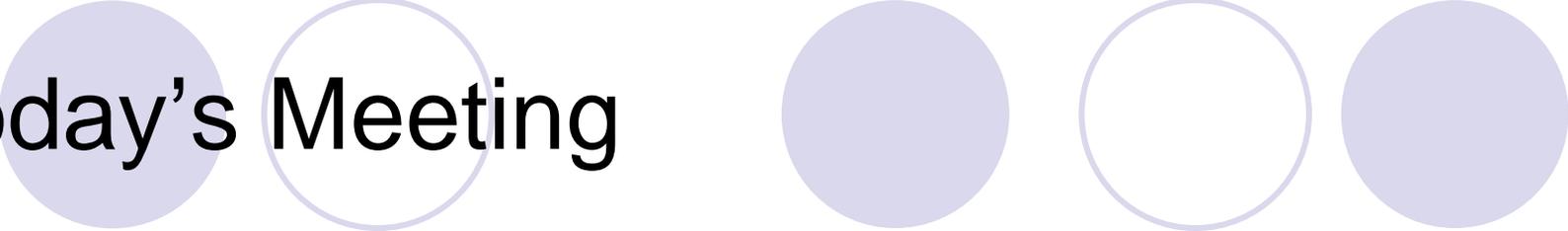




# Summary

- VOC Mass Reduction – Progress in Air Quality
- 2007 AQMP calls for further VOC Reductions (22% by 2023)
- Reactivity-based approaches identified as one alternative

# Today's Meeting



- Share current knowledge on reactivity
- Identify key research needs
  - Secondary Organic Aerosol formation – Nascent Stage
- Explore viable regulatory approach
  - Enforcement & Testing Protocols
- Assess Potential Environmental Trade-offs
  - HAPs
  - PM<sub>2.5</sub> Formation Potential