# Does the Washington Region Need (more) Control Measures?

MWAQC Control Measure Work Session October 26, 2005



### Challenge: New Ozone Standard

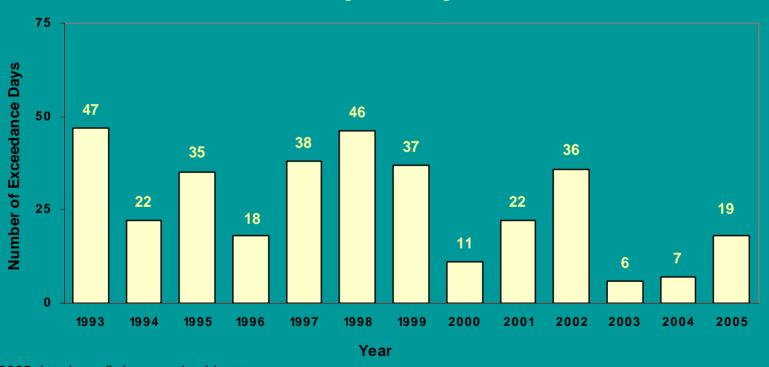
2010

 19 exceedances in 2005 (Code Orange)

- EPA modeling for the Clean Air Interstate Rule (CAIR) shows the Washington region not meeting the 2010 deadline for ozone.
- New control measures are needed to meet the new standard.

#### 8-hr Ozone Exceedance Days

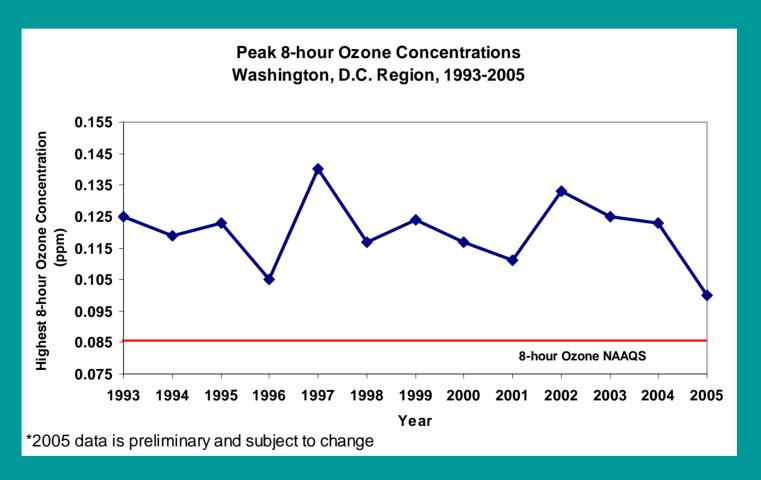
#### Exceedances of 8-hour Ozone Standard Washington, D.C. Region, 1993-2005



\*2005 data is preliminary and subject to



#### Peak 8-hr Ozone Concentrations





# **Preliminary Analysis**

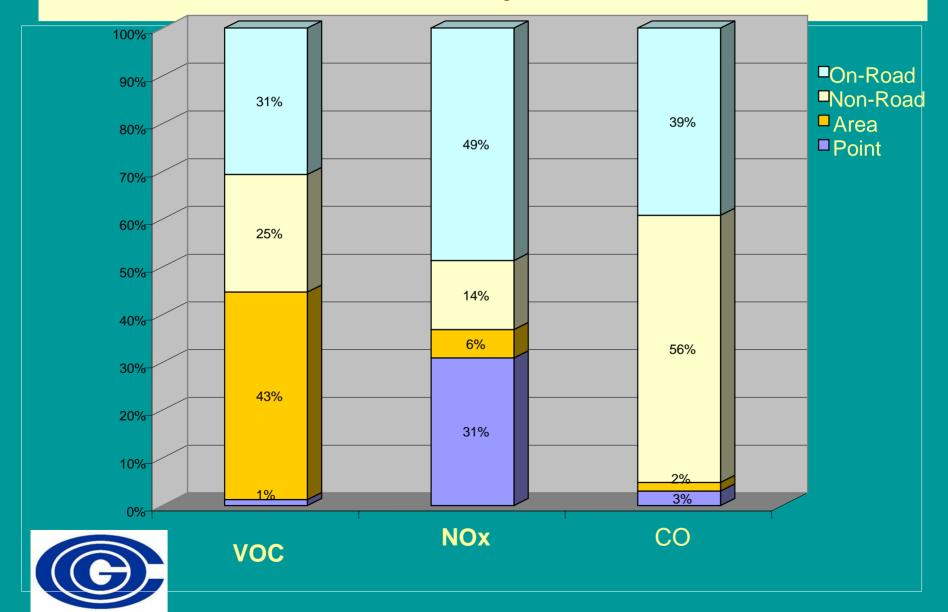
- "On the Books" and "On the Way" controls reduce emissions >21%
- More Reductions are needed to meet 8 hr standard.







## 2002 Emissions by Source Sector



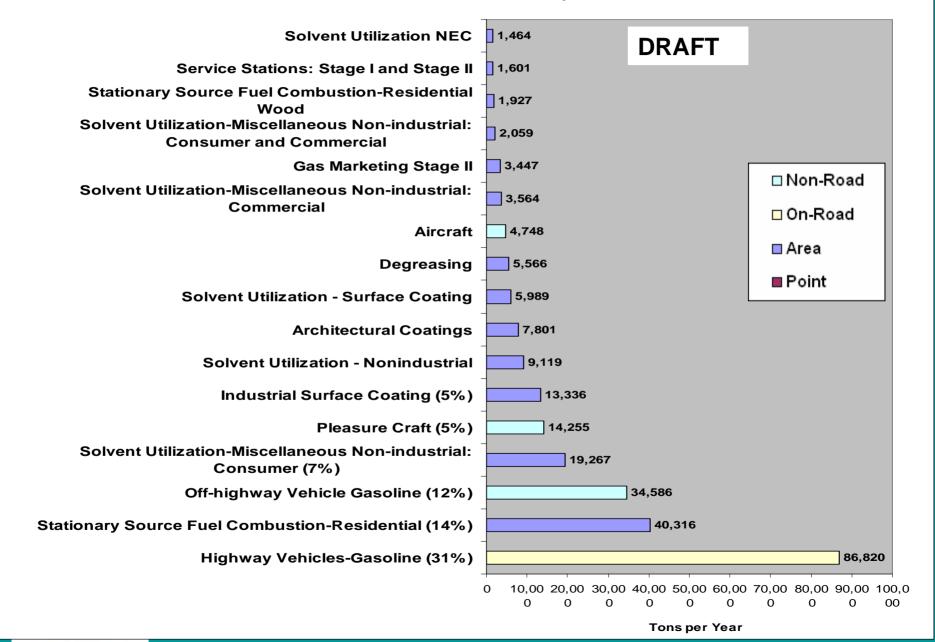
# Contributing Sources

- Analysis of emissions by Source Classification Code (SCC)
- List of top contributing sources suggests where control programs are needed and may be most effective



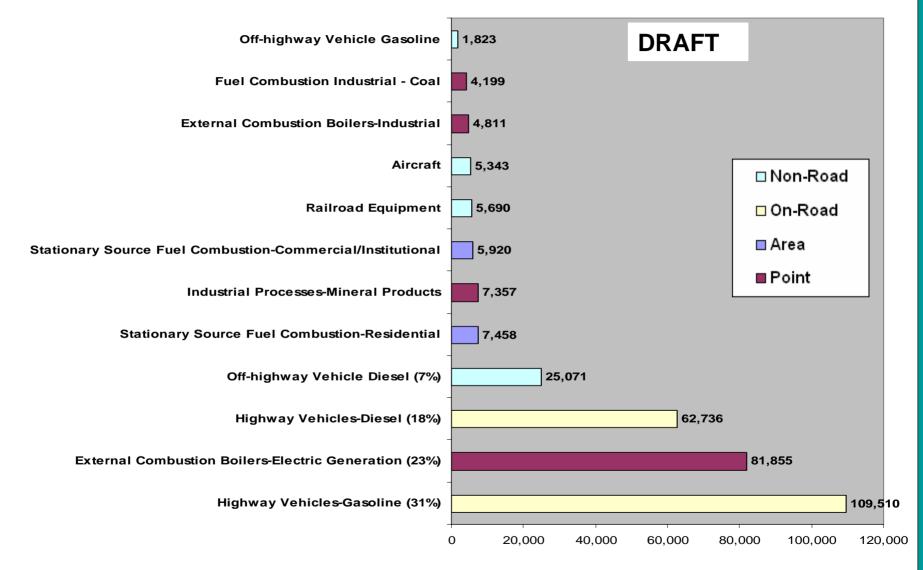
### Washington, DC-MD-VA Nonattainment Area 2002 VOC Inventory (Top Source Categories)

Total Emissions - 283,082 t/yr



#### Washington, DC-MD-VA Nonattainment Area 2002 NOx Inventory (Top Source Categories)

Total Emissions - 353,991 t/yr



Tons per Year

# Top Contributing Sources VOC

- Highway gas vehicles, 31%
- Residential heating, 14%
- Off-road gas Vehicles,12%
- Consumer solvents, 7%

- Highway gas vehicles, 31%
- Electric generation,23%
- Highway diesel vehicles, 18%
- Off-road diesel vehicles, 7%



# Attainment Modeling Results

- Attainment modeling can demonstrate the benefits of regional control strategies
- Local voluntary programs have small emissions benefits which do not affect modeling results
- Modeling results will be supported by Weight of Evidence



# Next Steps

- Complete Attainment Modeling Winter 2005
- Finalize Control Strategy, Jan-Feb 2006
- Introduce New Legislation and Regulations Winter/Spring 2006
- Complete SIP Fall/Winter 2006



#### Washington Region SIP Deadlines

