

LADCO Workshop



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Main Topics

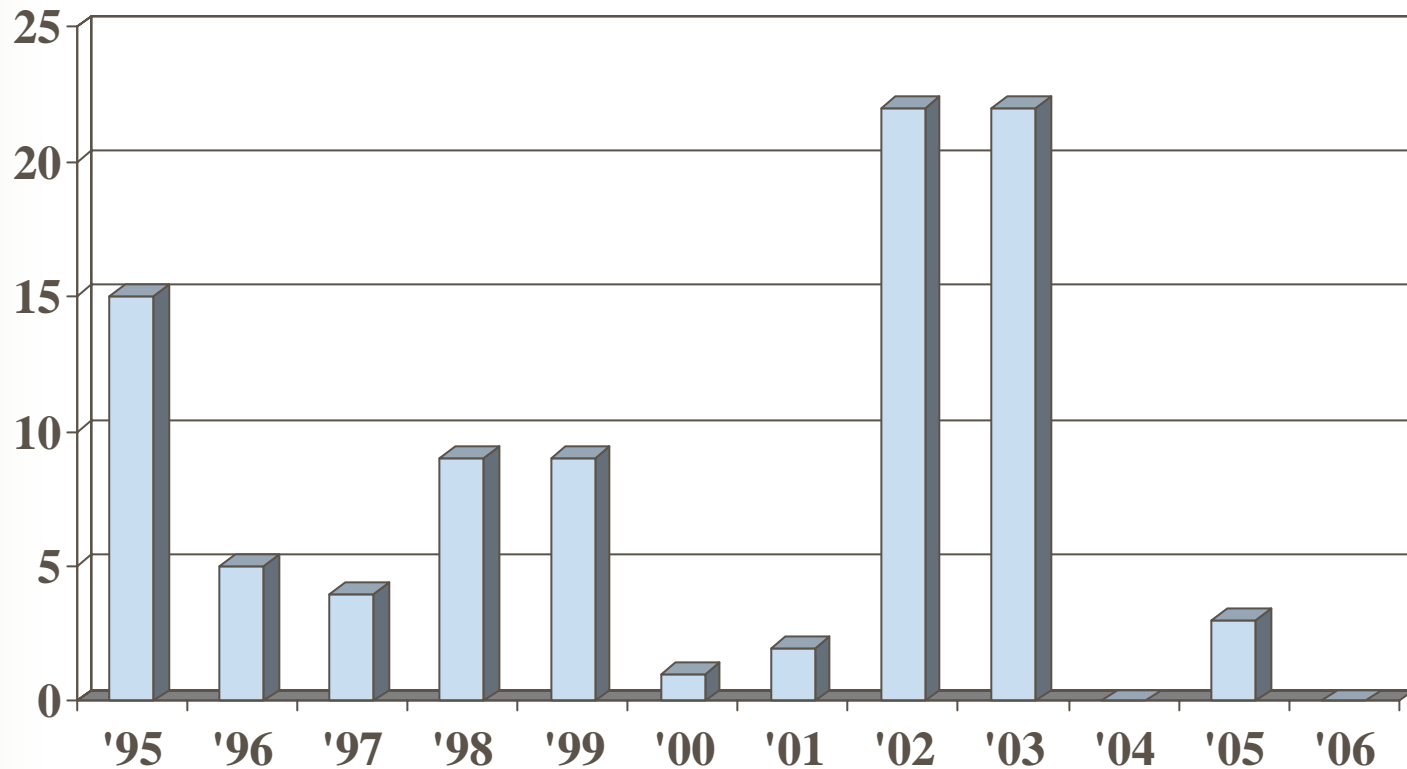
- Ozone challenges and request for redesignations
- PM 2.5 air quality



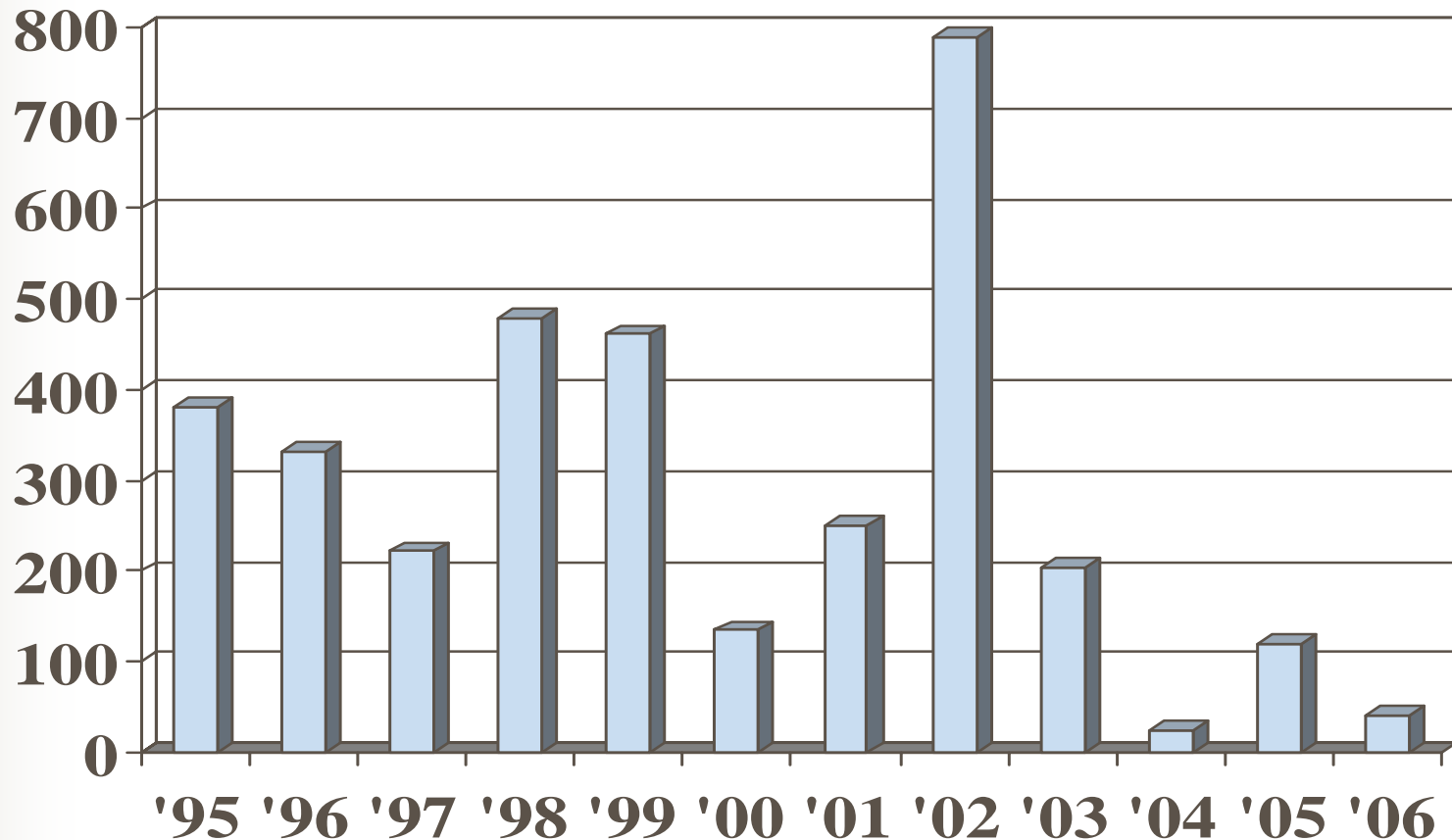
Ohio's Attainment Status

- In attainment for nitrogen dioxide, sulfur dioxide, lead and carbon monoxide.
- Nonattainment areas for PM_{2.5} and ozone

Ozone Exceedances of the One-Hour Standard



Ozone Exceedances of the Eight-Hour Standard





Redesignation Request

- For ozone – Allen County (Lima), Belmont County (Wheeling WV) and Stark County (Canton) in 2005
- Requested for Toledo, Youngstown, Marietta, Columbus, Dayton and Steubenville in 2006
- Leaves only Cleveland and Cincinnati as nonattainment for eight-hour ozone

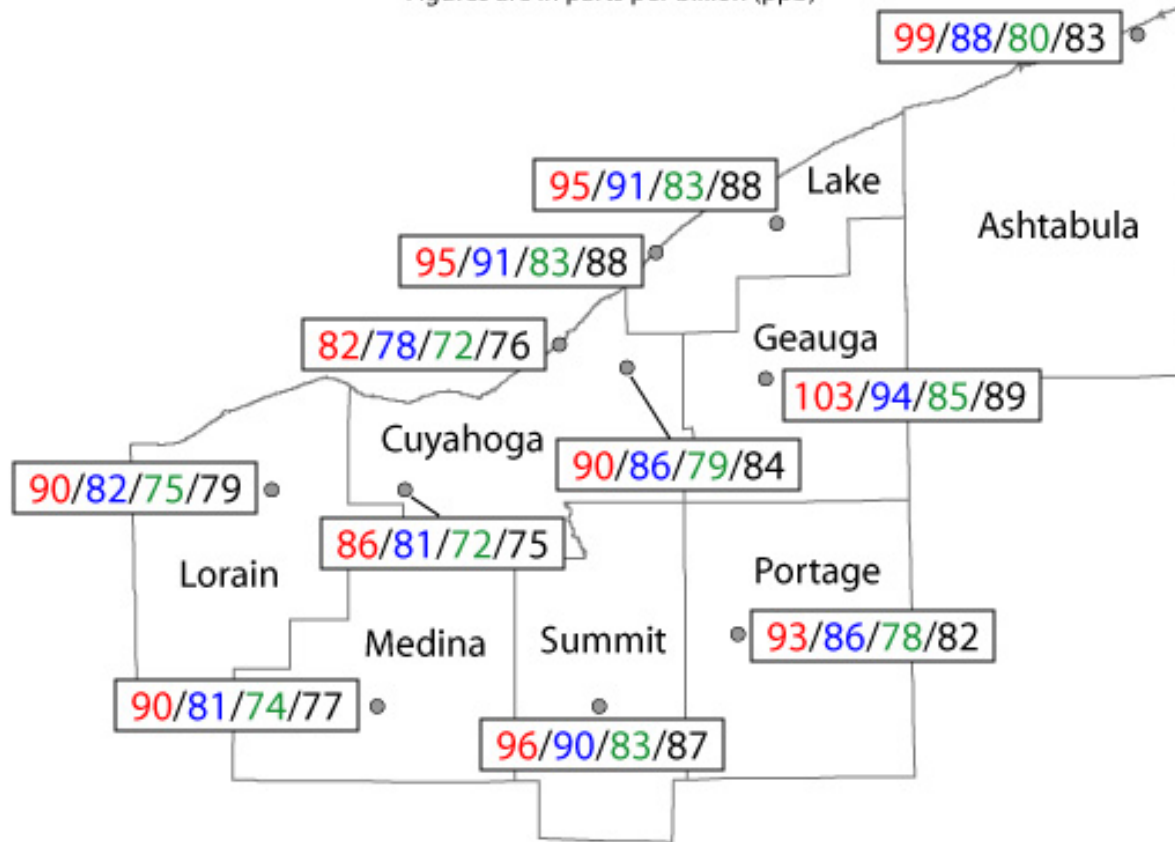


Where we were with 2002 baseyear

- Modeling showed big difference between projected air quality and attainment in Cleveland
- Much effort and energy put into finding a way to solve problem
- US EPA creative and helpful
- Ultimately, cleaner air provided a way to look at problem more realistically

Effect of Current Clean Air Act Requirements on 2010 Air Quality and with Additional Controls Strategies

Figures are in parts per billion (ppb)



RED: Design values based on 2001-2003

BLUE: Future year (2010) design value - current Clean Air Act requirements

GREEN: Design value assuming zero point and area source emissions, no reduction for non-road & on-road

BLACK: Design value assuming 25% cut on point, area, on-road and off-road in Cleveland, 65% cut on elevated point sources statewide



Where we are now

- Initial modeling shows attainment by deadline in most areas – Cincinnati very close, Cleveland not there yet
- Working with other midwestern states to redo SIP modeling with 2005 baseline for Cleveland
- Results will not be available to later this year
- Expect to be much closer to standard for Cleveland
- Moving forward with some rules



Ohio EPA Upcoming Rules

- CAIR Rules – NO_x and SO₂ reductions from utilities – will propose soon
- CAMR Rules – Reductions of Hg from utility plants – in front of JCARR later this month



Ohio EPA Upcoming Rules

- Cleveland RACT Rules – First round of NO_x requirements for Cleveland area – under internal review prior to proposal
- Consumer products – IP completed, under internal review, will propose soon
- AIM Coatings – IP completed, under internal review, will propose soon
- VOC RACT Rules – Under consideration, some may be statewide (e.g. degreaser, autobody refinishers)



PM2.5 Air Quality

- Old standard - 15 ug/m³ annual
65 ug/m³ 24 hour
- 42 monitors in the state
- In 2005, 22 monitors exceeded annual
- In 2006, 17 monitors exceeded annual
- Highest reading – Cincinnati at 17.4 ug/m³
- Cleanest - Athens County at 12.2 ug/m³



PM2.5 in Ohio

(2002-2004, 2003-2005, 2004-2006)

- Cleveland/Akron: 17.6 ug/m³, 18.1 ug/m³, 17.2 ug/m³
- Cincinnati: 16.9 ug/m³, 17.9 ug/m³, 17.43 ug/m³
- Columbus: 15.7 ug/m³, 15.97 ug/m³, 15.03 ug/m³
- Youngstown: 14.5 ug/m³, 15.53 ug/m³, 15.03 ug/m³
- Toledo: 14.4 ug/m³, 14.67 ug/m³, 14.07 ug/m³
- Dayton: 15.53 ug/m³, 15.93 ug/m³, 15.17 ug/m³
- Canton: 16.6 ug/m³, 16.77 ug/m³, 16.03 ug/m³
- Steubenville: 16.9 ug/m³, 17.20 ug/m³, 16.3 ug/m³
- Cleanest monitor is near Athens – 12.13 ug/m³, 12.33 ug/m³, 12.17 ug/m³



Addressing PM2.5

- Attainment demonstrations follow same process as ozone
- Must develop plans by April 2008 to show how areas will be brought into attainment by late 2010
- Plans include:
 - preparing “micro-inventories” around certain monitors,
 - identifying possible control measures needed to meet the standard
 - Conducting additional modeling to better identify sources contributing to violations