



# **Air Quality Action Days**

**Past, Present, and Future**

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**Clean Air Partners Board  
Meeting**

**March 9, 2006**



## **The Beginning – Ozone Action Days**

Started in 1993 as a public education campaign and voluntary action program.

### Three Main Goals:

- 1) Educate the public about air quality problems.
- 2) Develop support to achieve cleaner air.
- 3) Reduce emissions.

## Program Description

- Recruit OAD participants (currently over 600).
- Employer commitment to take voluntary actions (ex. notify employees, refuel after dusk).
- Provide air quality forecasts and notifications.
- Ride Free on Code Red.





## **Air Quality Forecasting**

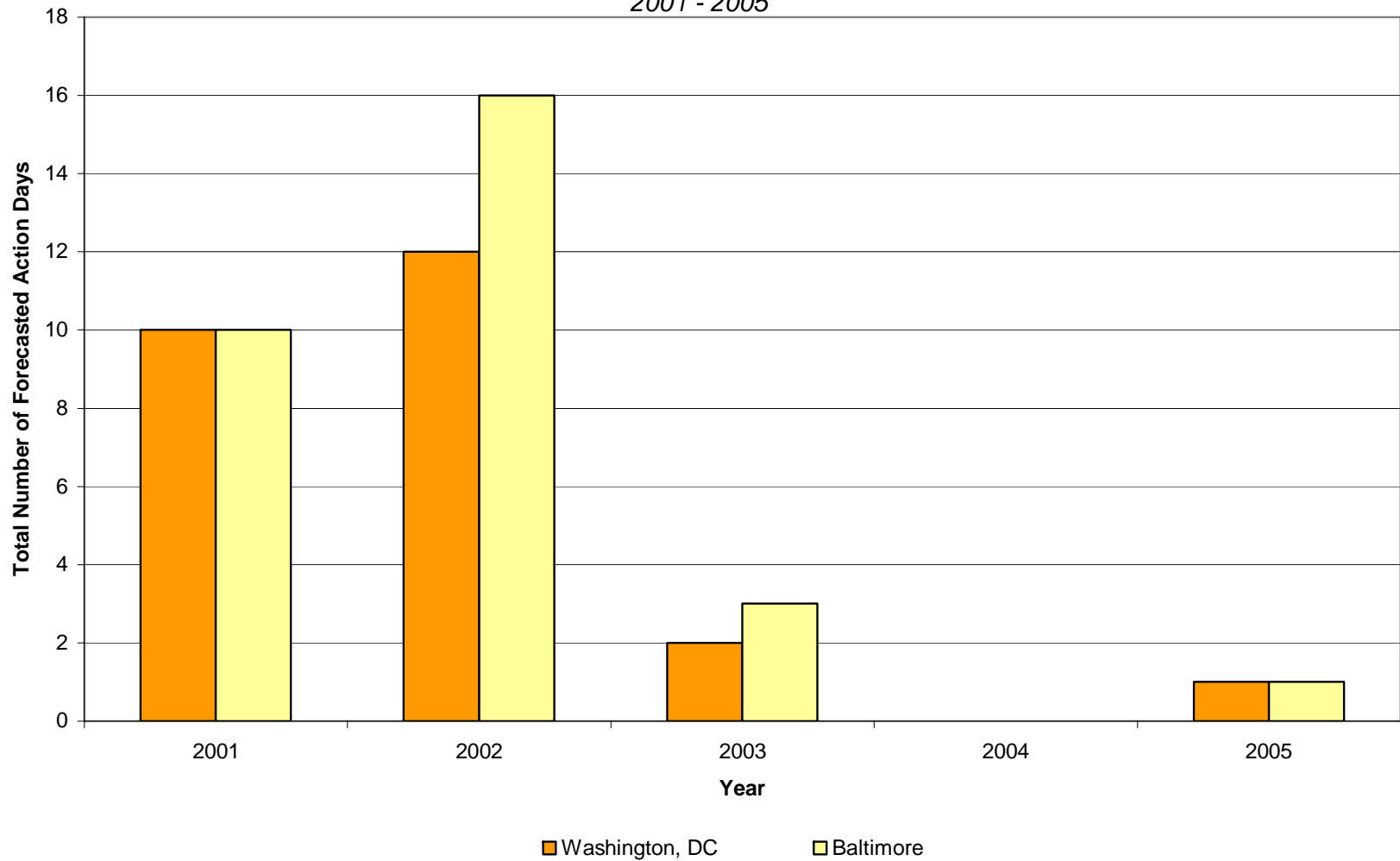
- Forecasting is an integral part of the Air Quality Action Day Program.
- Local meteorologist prepare daily forecasts.
- Forecasts are issued using the color-coded AQI; green, yellow, orange, red, or purple.

**Traditionally, Air Quality Action Days were called on all forecasted Code Red days.**



# Historical Number of Forecasted AQAD

Forecasted Air Quality Action Days  
Baltimore/Washington Regions  
2001 - 2005





## Awareness of the Program

- Episodic survey conducted in 2003.
- 76% respondents remember hearing “call to action.”
- 55% respondents aware of the air pollution event.
- **77% familiar with Code Red/Bad Air Days.**





## Two New Health Standards

- 2004 was the year of new health standards – ozone and fine particles.
- Washington and Baltimore were designated nonattainment for the 8-hr ozone standard.
- Transition year, from the 1-hr standard to the 8-hr standard.
- Name change to Air Quality Action Days in order to address multi-pollutants.

## The Ozone Standards

- **8-hr Ozone Standard** = any 8-hr averaging period greater than or equal to 85 ppb is an exceedance of the standard
- **1-hr Ozone Standard** = any 1-hr averaging period greater than or equal to 125 ppb is an exceedance of the standard



Eight-hour exceedances are based on an 8-hour running average. An 8-hour exceedance will not be known until the end of the day.

One-hour exceedances are based on an hourly average. A 1-hour exceedance will be known at the end of an hour.





## How do the Ozone Standards Compare?

8-Hr Ozone Range (parts per billion)	Air Quality Index	1-Hr Ozone Range* (parts per billion)
> 124	Very Unhealthy	> 150
105 - 124	Unhealthy	125 - 150
85 - 104	Unhealthy for Sensitive Groups	105 - 124
65 - 84	Moderate	80 - 104
0 - 64	Good	0 - 79

8-Hr Standard →

← 1-Hr Standard

\* 1-Hr breakpoints below 125 ppb were created for the purpose of forecasting. They are not determined by the U.S. EPA



## **A Survey of Local AQAD Programs**

- Prepared in 2005 by the MWCOCG Air Quality Intern.
- Purpose: to determine the AQI cutpoint used in other local Air Quality Action Day programs.
- Phone survey conducted with 29 local programs across the nation.



## A Survey of Local AQAD Programs -Results-

25 out of 29 regions call Air Quality Action Days at the Code Orange level.

Region	Level of AQAD	Potential Number of AQAD/Year
Atlanta, GA	Orange	15
Connecticut	Orange	20
Michigan	Orange	25
Sacramento, CA	Orange	35
Texas	Orange	50
South Coast, CA	No AQAD Program	> 100

Main reason for calling AQAD at Code Orange = Health