



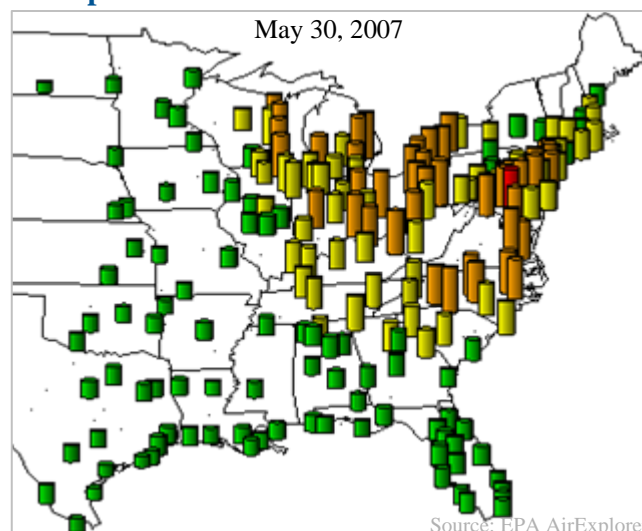
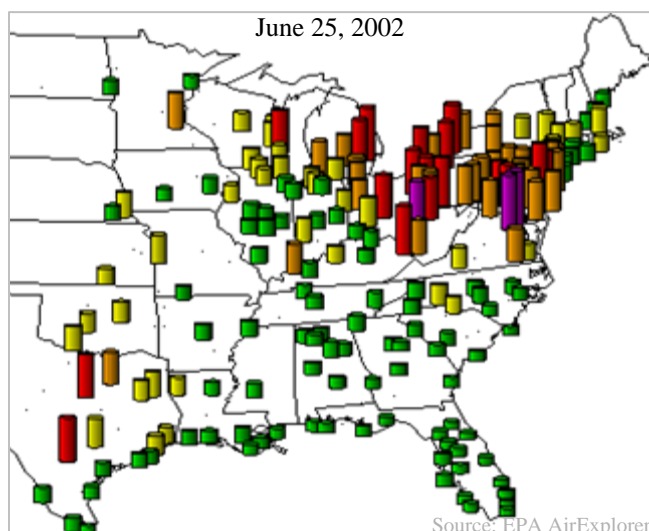
# Air Quality Facts

## OZONE – EXTENT OF THE OZONE POLLUTION PLUME

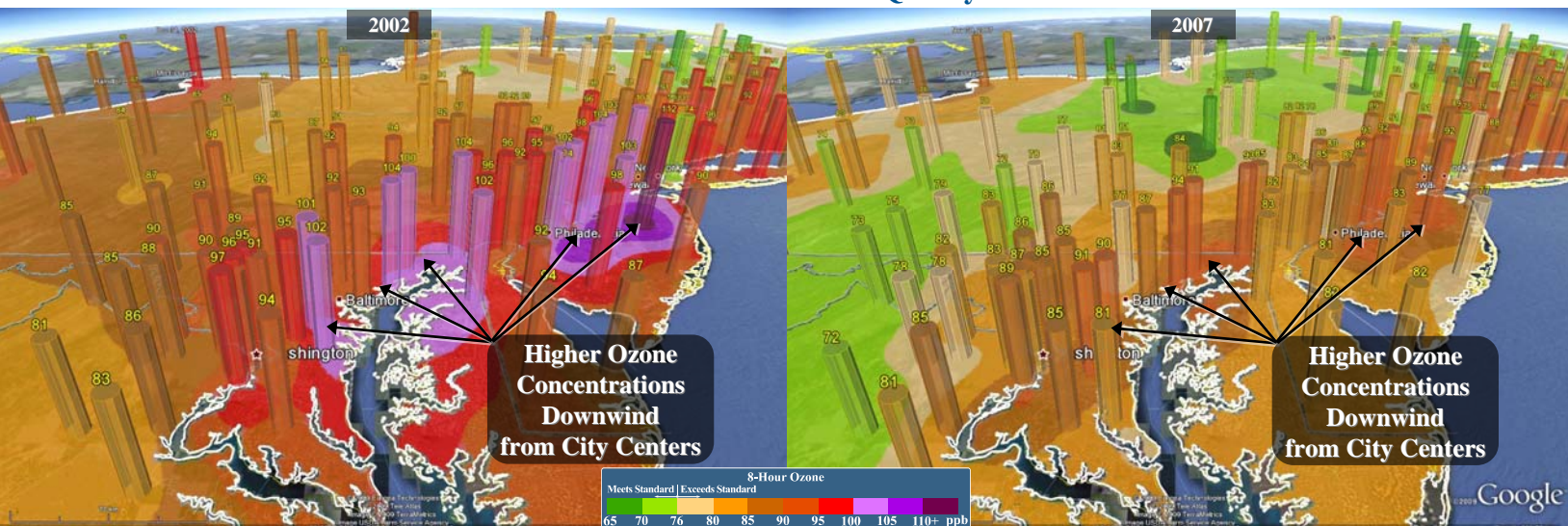
### WHERE IS OZONE POLLUTION THE HIGHEST?

During a typical air pollution event, the ozone pollution plume is found along the I-95 corridor, from northern Virginia, through Maryland, and can extend up to Boston, Massachusetts. Within the plume, high ozone concentrations are found in suburban and rural locations downwind from city centers, rather than the city itself. For instance, ozone concentrations during a typical pollution event are higher in Baltimore, Harford, and Cecil counties rather than Baltimore City. In city centers, ozone concentrations are lower due to “ozone scavenging” resulting in destruction of ozone. Ozone scavenging occurs in locations where higher levels of reactive oxides of nitrogen ( $\text{NO}_x$ ) are found. Consequently, these locations frequently are city centers or very urbanized areas where there are many vehicles. In these areas, emissions containing  $\text{NO}_x$  (newly emitted to the atmosphere) react very quickly with ozone ( $\text{O}_3$ ) to form nitrogen dioxide ( $\text{NO}_2$ ) and Oxygen ( $\text{O}_2$ ); hence, ozone scavenging results in lower ozone concentrations in city centers.

### Ozone Plume on Selected Episodes



### Ozone Plume for Selected Air Quality Seasons



The top two maps show selected air pollution events in 2002 and 2007. The bottom two maps show the overall extent of the ozone pollution plume over the summer air quality season in 2002 and 2007. The plume over the selected season is larger than those observed on any given day. Please note that MDE is not responsible for the quality of non-Maryland data. You can learn more about the ozone pollution plume by exploring the interactive map at <http://www.mde.state.md.us/Programs/AirPrograms/Monitoring/HistoricalData>. Protect your health by knowing the current air quality conditions and forecasts. Visit [www.cleanairpartners.net](http://www.cleanairpartners.net) or call the air quality hotline at 410-537-3247.

### Air Quality Index (AQI)



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