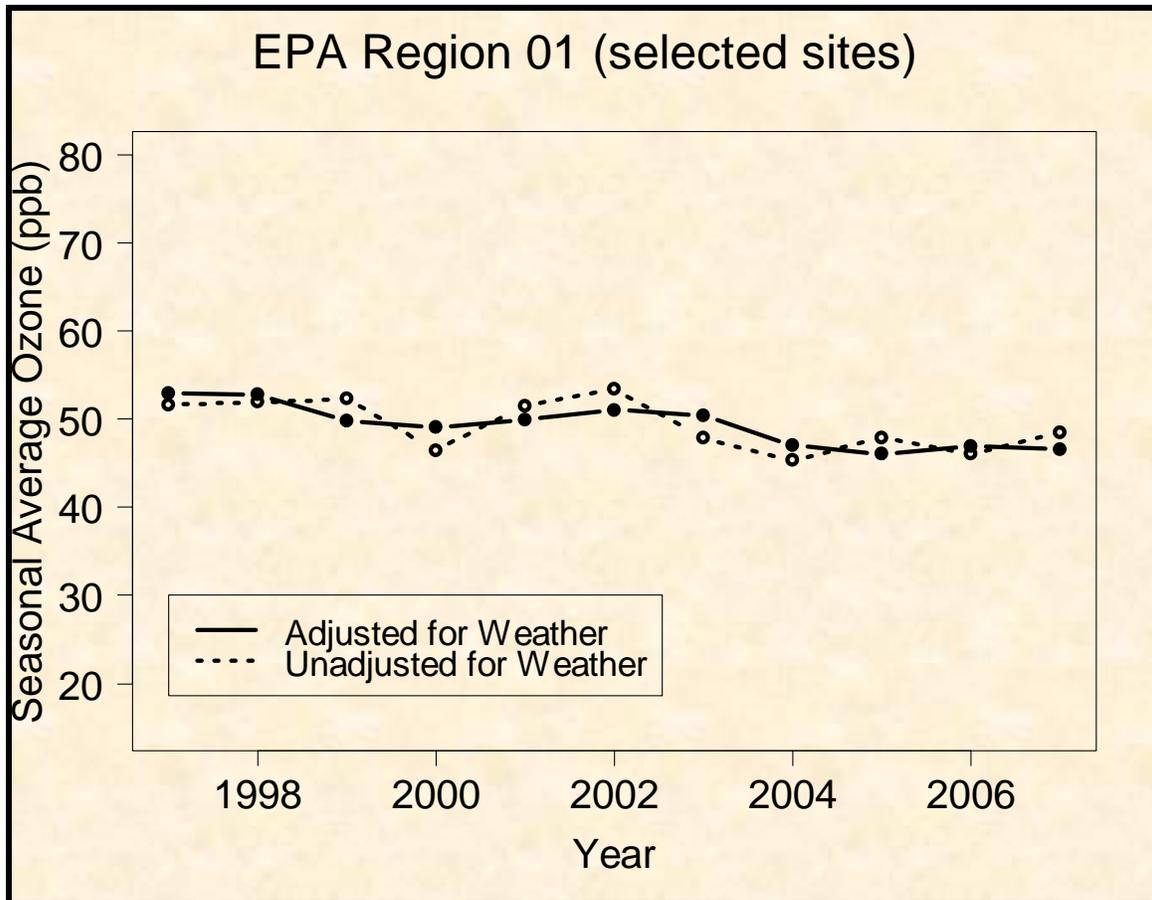


# Weather Makes a Difference: 8-hour Ozone Trends for 1997-2007

State and Local Information for EPA Region 1

Connecticut  
Maine  
Massachusetts  
Rhode Island

Composite trend for available sites in these states:



U.S. Environmental Protection Agency  
Office of Air and Radiation  
Office of Air Quality Planning and Standards

April 2008

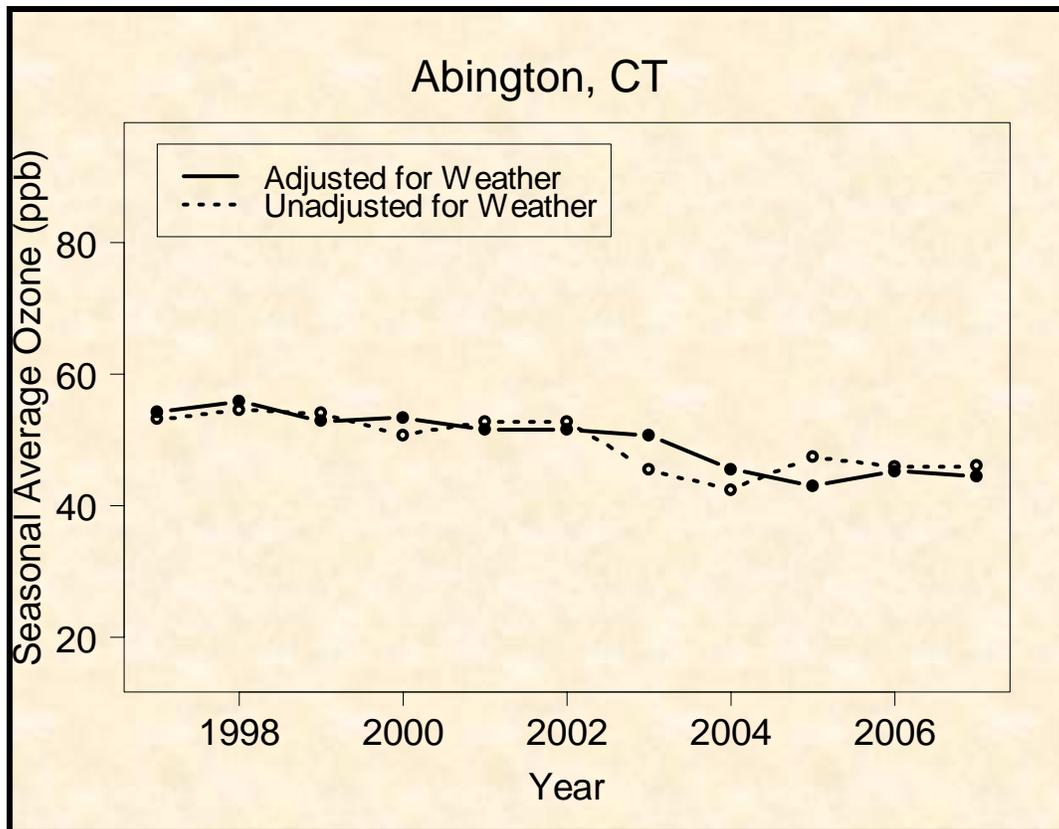
## Connecticut

### Ozone

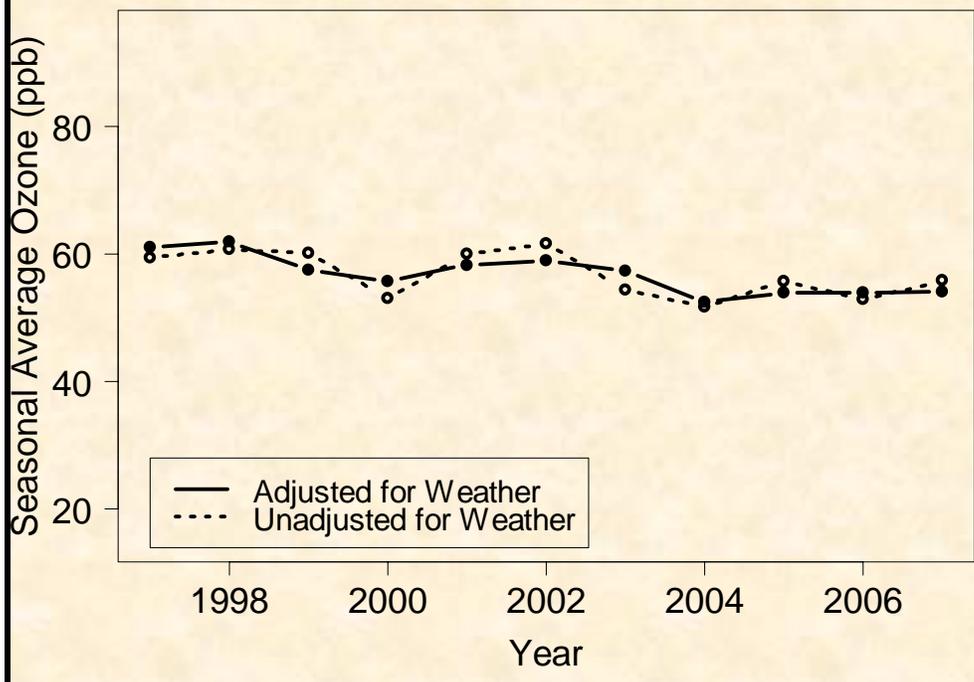
On average, ozone adjusted for weather conditions declined 13 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO<sub>x</sub> and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

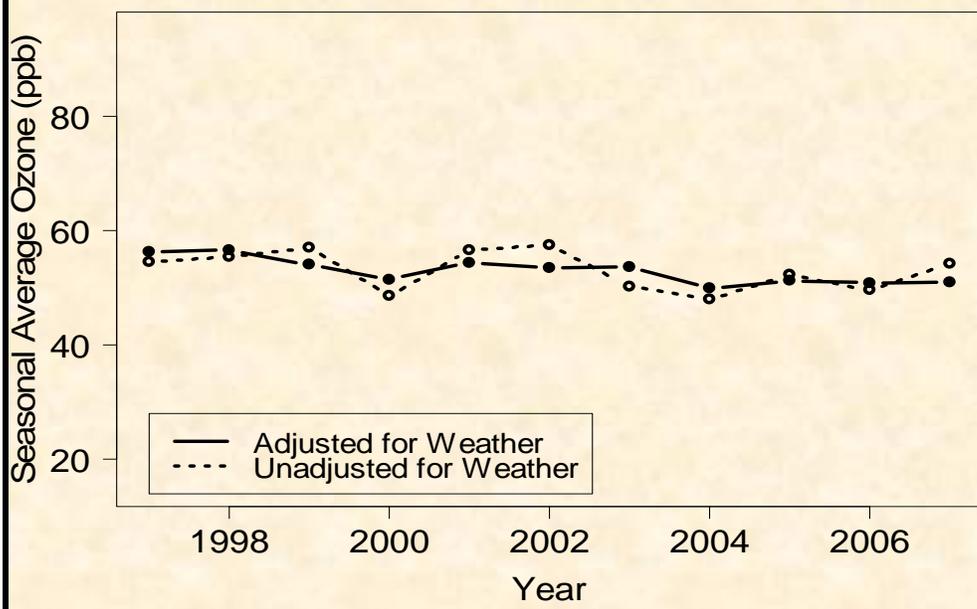
#### Seasonal Average 8-hour Ozone Trends



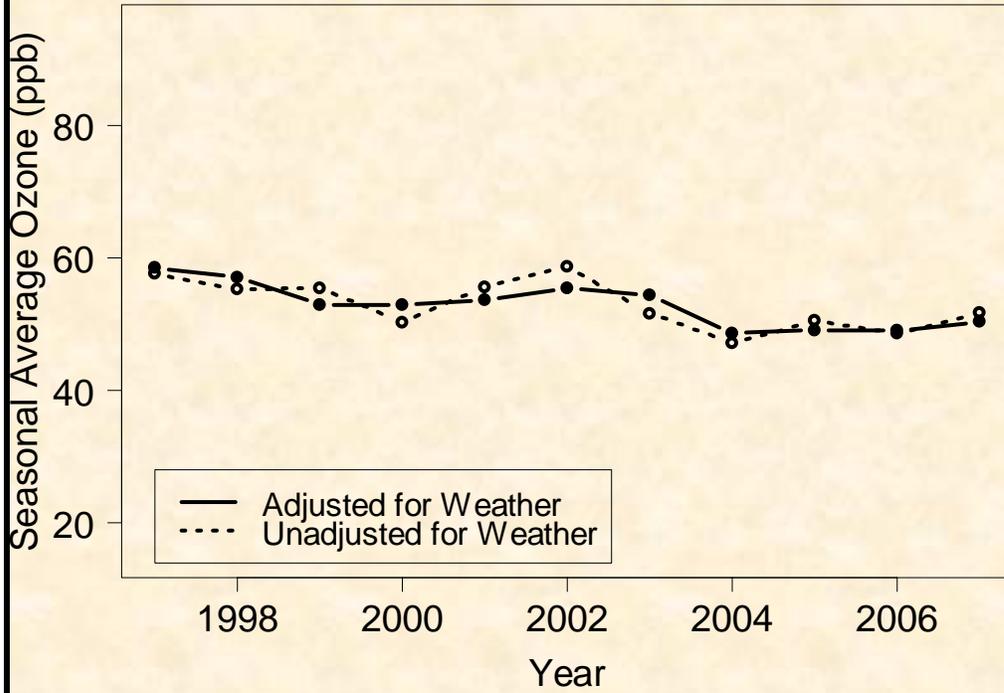
### Bridgetown, CT 8-hr Ozone Trends



### Hartford, CT 8-hr Ozone Trends



# New Haven, CT 8-hr Ozone Trends

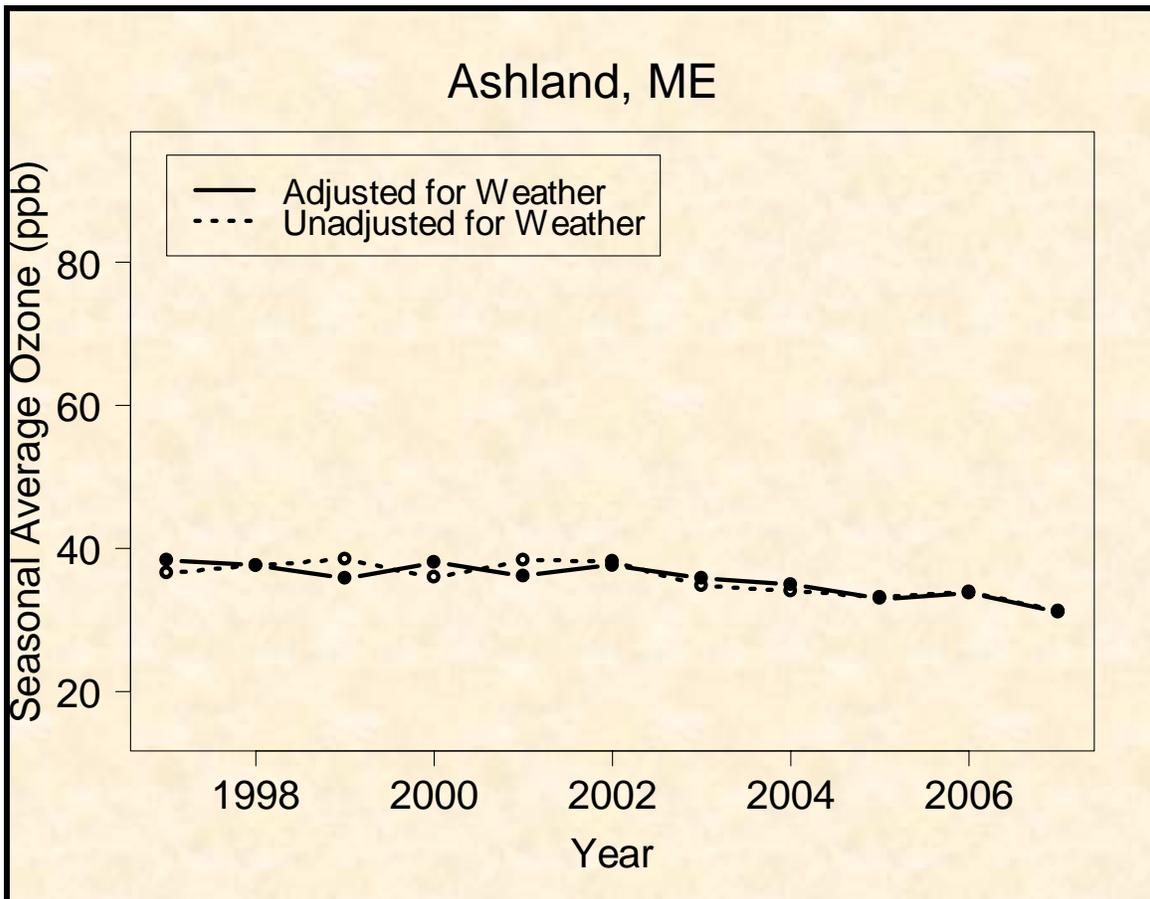


## Maine Ozone

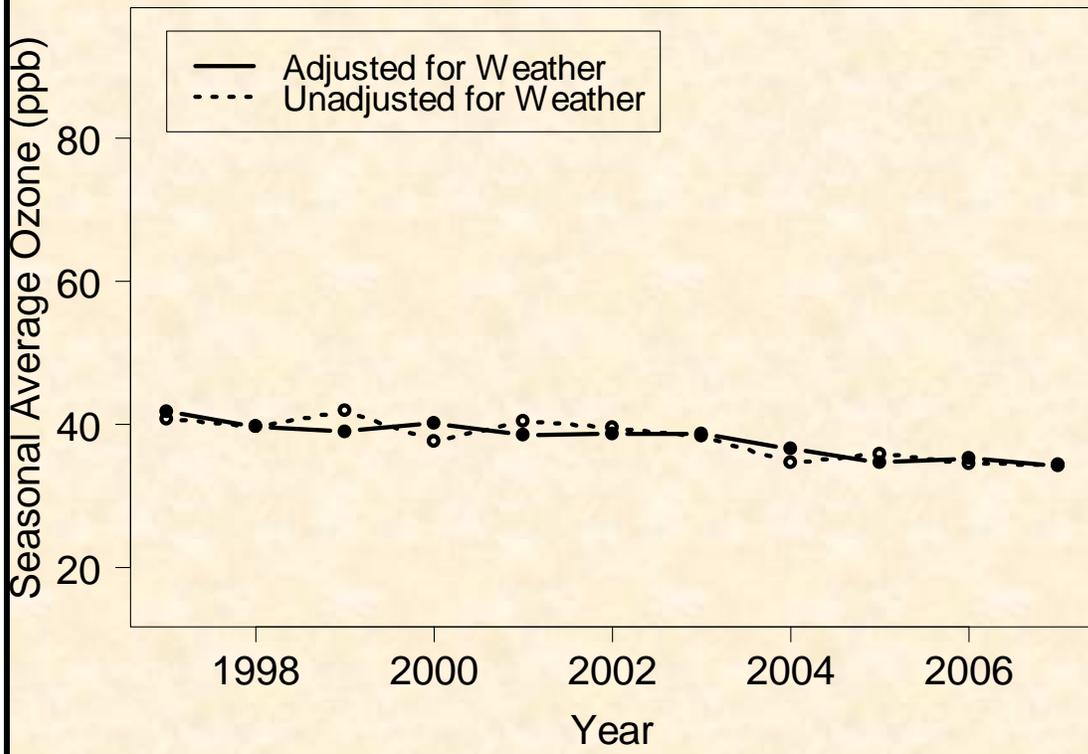
On average, ozone adjusted for weather conditions declined 18 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO<sub>x</sub> and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

### Seasonal Average 8-hour Ozone Trends



# Howland, ME



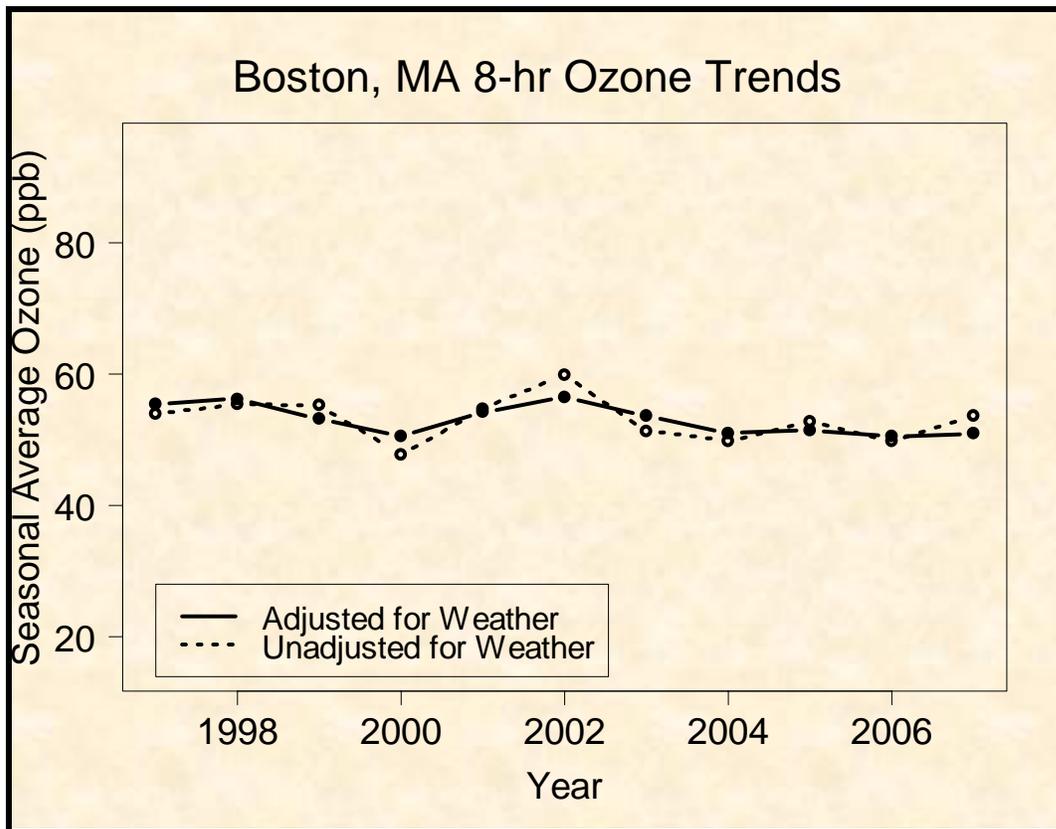
## Massachusetts

### Ozone

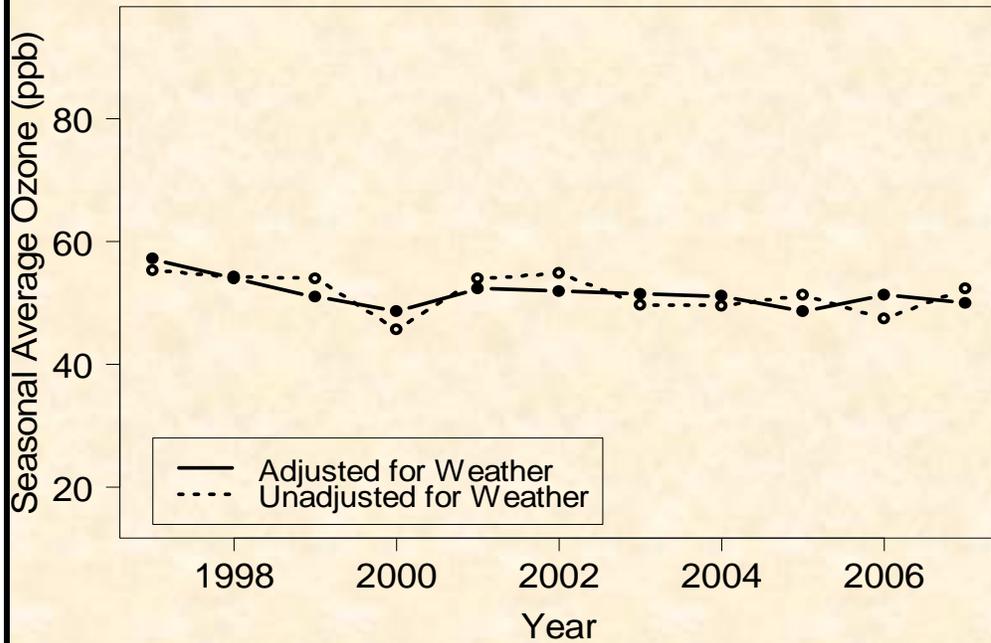
On average, ozone adjusted for weather conditions declined 8 percent between 1997 and 2007. These improvements in ozone are in response to both state and regional reductions in NO<sub>x</sub> and VOC emissions. The level of ozone improvement varies from site to site.

Trends for 1997-2007 for rural sites and urban areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

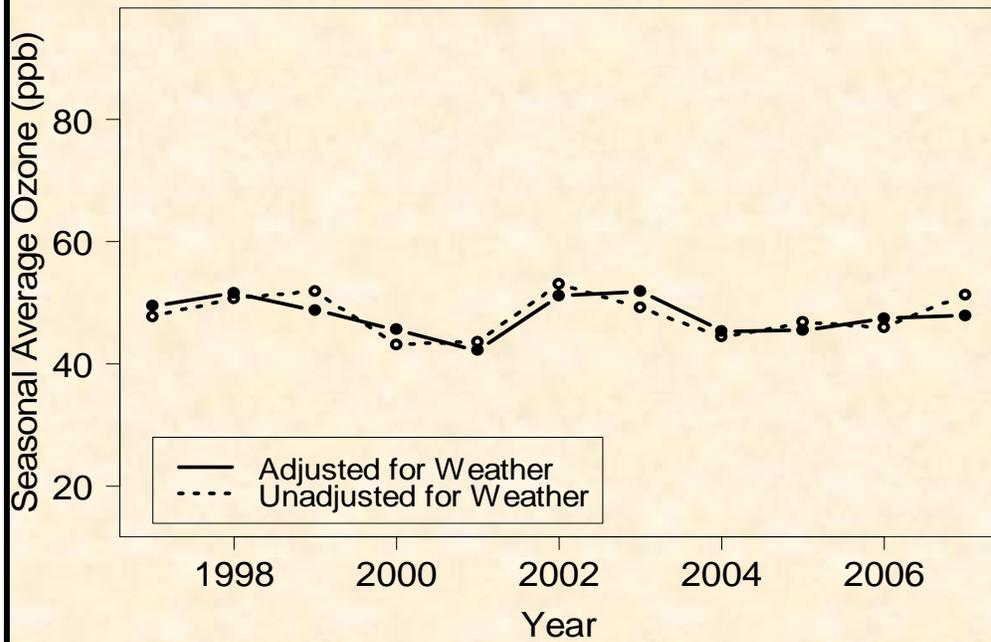
#### Seasonal Average 8-hour Ozone Trends



### Springfield, MA 8-hr Ozone Trends



### Worcester, MA 8-hr Ozone Trends



## Rhoda Island

### Ozone

In Providence, RI, ozone adjusted for weather conditions declined 10 percent between 1997 and 2007. This improvement in ozone is in response to both state and regional reductions in NO<sub>x</sub> and VOC emissions.

Trends for 1997-2007 for a site with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends

