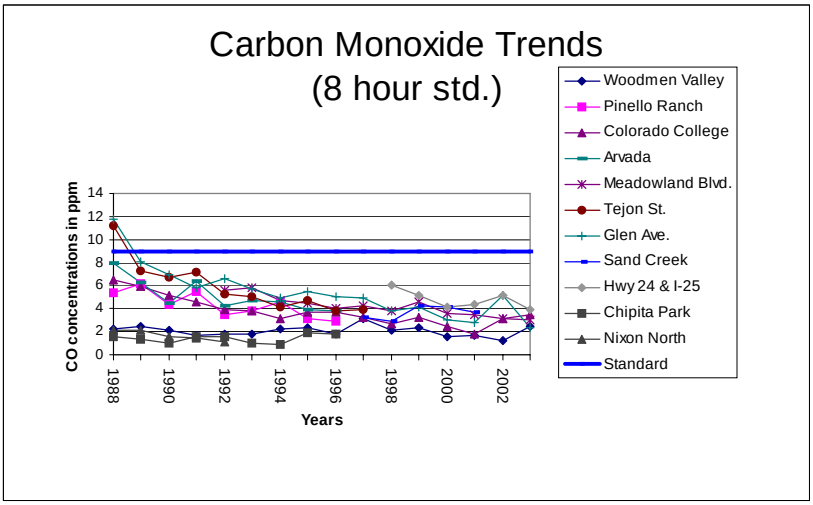
2004 Air Quality Data Addendum
Air Quality in the Pikes Peak Region Spatial and Temporal Trends

Overview

The 2004 Air Quality Data Addendum provides an analysis of air quality trends for Carbon Monoxide, Sulfur Dioxide, Nitrogen Dioxide, Lead and Particulate Matter through 2003 and for ozone through 2004 based on air quality data available for the Pikes Peak Region. This is the first addendum to the Air Quality Trends Report that was completed in October 2003 and provided a analyses of air quality trends through 2002. This addendum indicates no change in temporal trends. Information specific to each of the six air quality criteria pollutants is shown below:

Carbon Monoxide (CO)

Number of active monitoring stations: 5
Trends: CO concentrations showed a slight increase at two stations; slight decrease at two stations and unchanged at one station

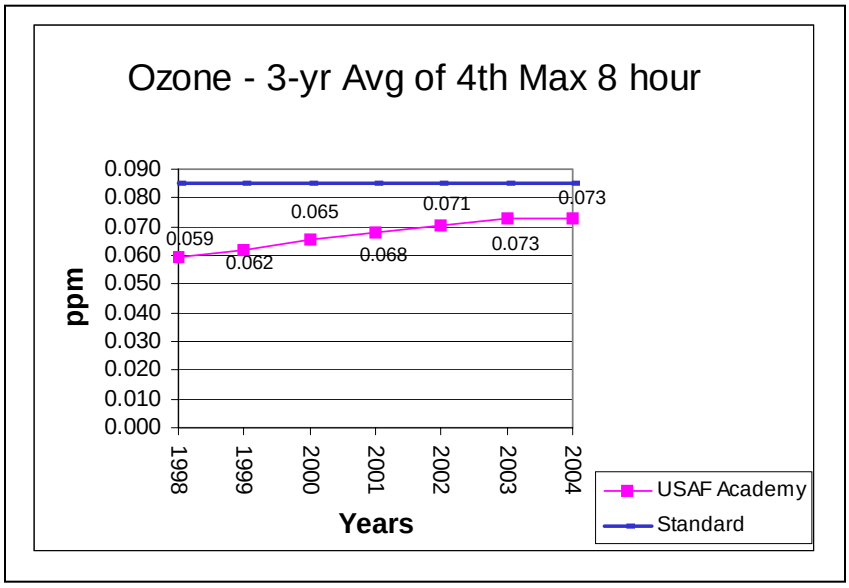


Ozone (O_3)

Number of active monitoring stations: 2 (Manitou Springs ozone monitoring station began operation in April 2004).
Trends: The annual 4th Max ozone values for 2004 were much lower than 2003. Research conducted by the APCD indicates that values in 2004 appear to be lower in 2003 primarily because of weather: lower average temperatures, weaker upper level higher pressure system, and an increase in westerly winds at mid levels of the atmosphere. In 2003 there were higher average temperatures and an upper level higher pressure system conducive to the buildup of ozone through the summer weeks. Monitoring results for the 2004 ozone season show levels at the Manitou Springs Station have been consistently between 0.003 and 0.005 ppm lower then at the USAFA Station. The five highest values from the USAFA and Manitou Spring's station for the 2004 ozone season are shown below:

	1st Max	2nd Max	3rd Max	**4th Max**	5th Max
Manitou Springs	.069 ppm	.067 ppm	.067 ppm	**.066 ppm**	.066 ppm
USAF Academy	.072 ppm	.072 ppm	.071 ppm	**.070 ppm**	.070 ppm

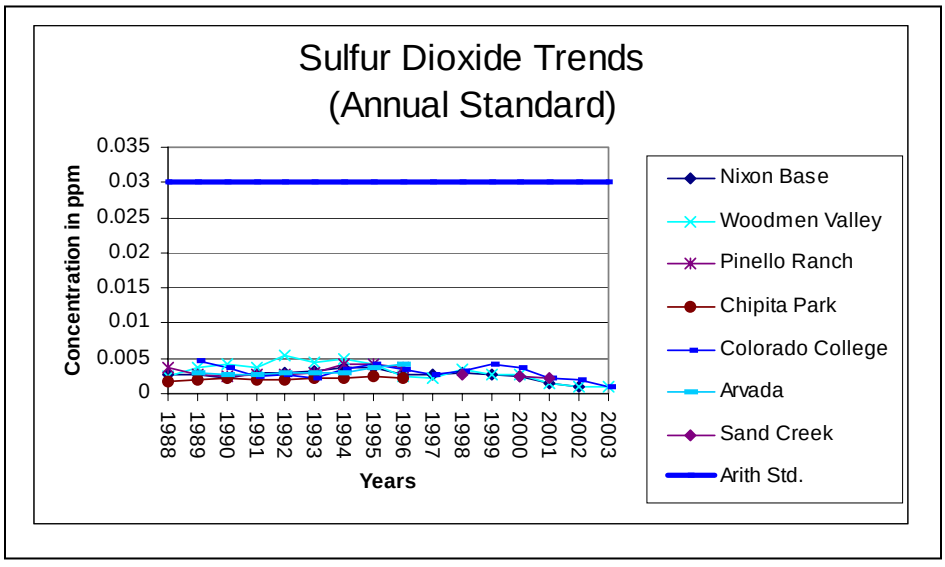
The lower ozone concentrations in 2004 caused the 3-year average of the 4th Max readings to remain unchanged at 0.073 ppm. (about 85% of the standard).



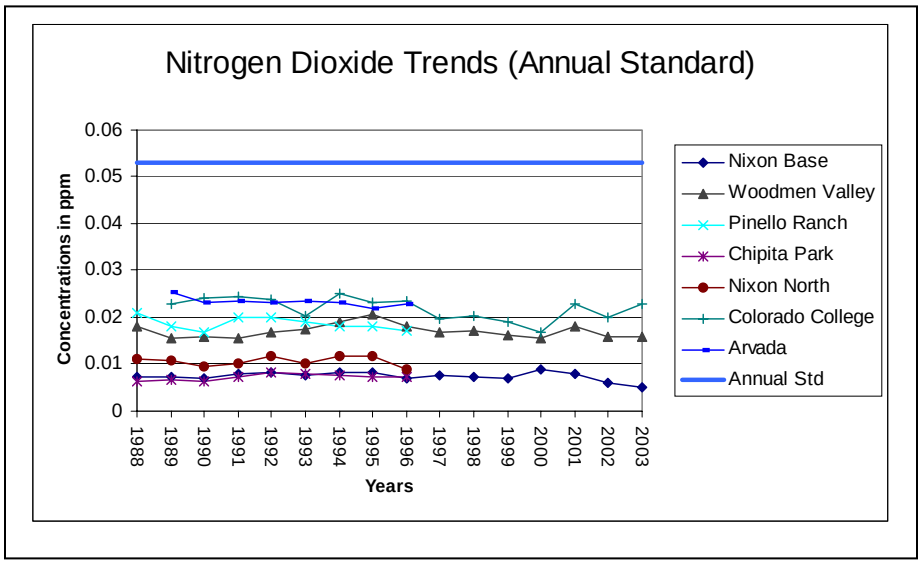
Sulfur Dioxide (SO_2)

Number of active monitoring stations: 2

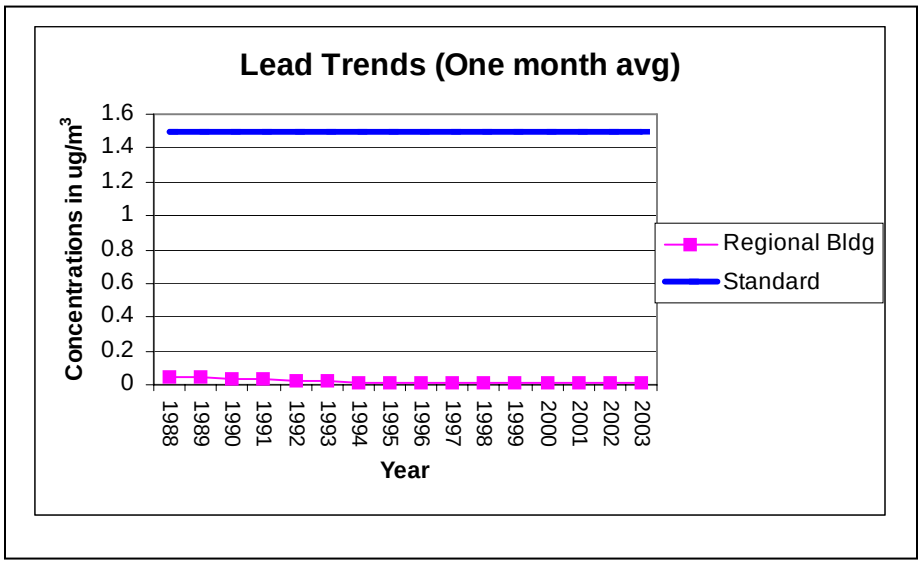
Trends: SO_2 concentrations remained unchanged between 2002 and 2003.



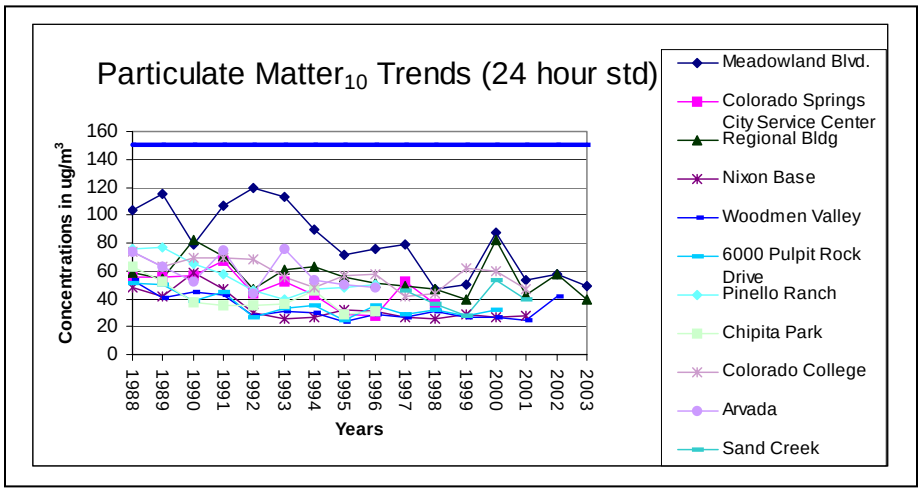
Nitrogen Dioxide (NO_2)
Number of active monitoring stations: 2
Trends: NO_2 concentrations remained unchanged between 2002 and 2003.



Lead (Pb)
Number of active monitoring stations: 1
Trends: Pb concentrations remained unchanged between 2002 and 2003.



Particulate Matter$_{10}$ (PM_{10})
Number of active monitoring stations: 2
Trends: PM_{10} concentrations remained unchanged between 2002 and 2003.



Particulate Matter$_{2.5}$ ($PM_{2.5}$)
Number of active monitoring stations: 2
Trends: $PM_{2.5}$ concentrations remained unchanged between 2002 and 2003.