



Martin J. Chávez, Mayor



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# Ambient Air Quality in Bernalillo County

By  
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Presentation at the June 10, 2009  
A/B AQCB Meeting



# Network Design

- 10 Ambient Air Monitoring Stations
  - 7 Ozone
  - 5 Carbon Monoxide
  - 7 Fine Particulate (PM<sub>2.5</sub>)
  - 6 Coarse Particulate (PM<sub>10</sub>)
  - 1 Nitrogen Dioxide
  - 10 Met Stations

# 2011 Network Additions



- 2ZM Del Norte High School
  - Total Nitrogen
  - High Sensitivity Carbon Monoxide
  - High Sensitivity Sulfur Dioxide
- 2ZN Wilson Park (anticipated under current regs)
  - Lead Sampling

# Carbon Monoxide Monitoring in Bernalillo County



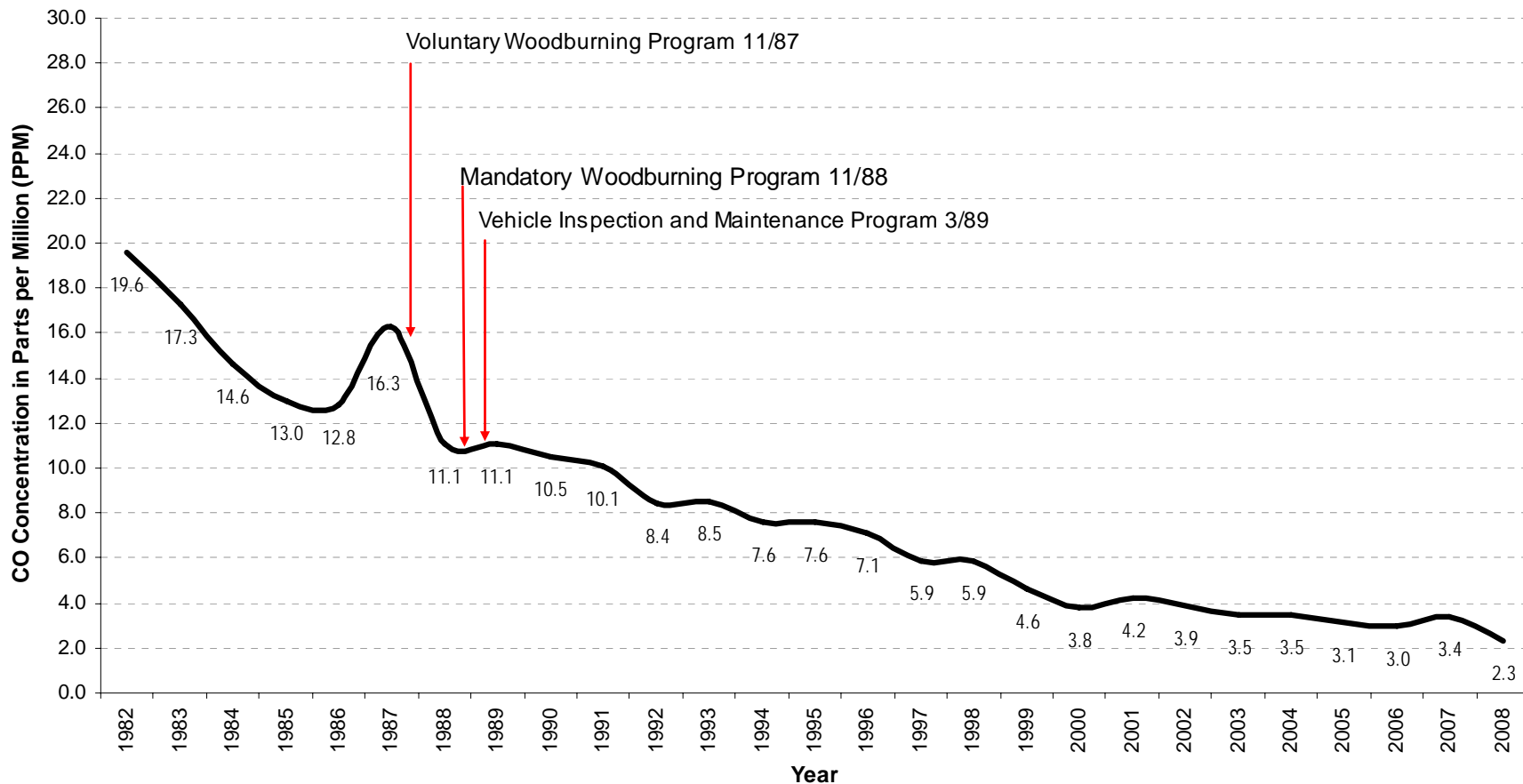
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# 27 Years of Carbon Monoxide Bernalillo County New Mexico

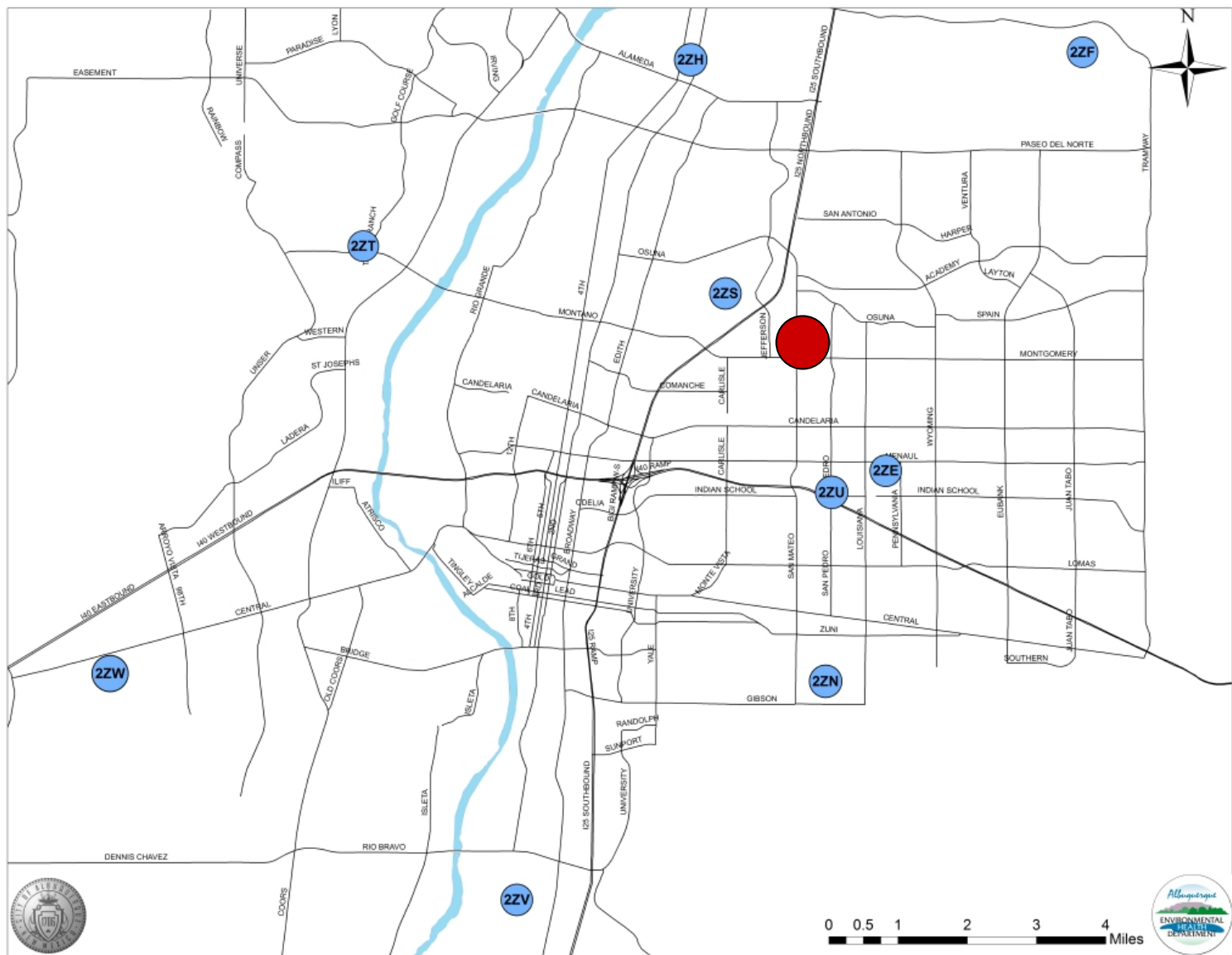
## 8 Hour Averages, Second Maximum Value, Network wide values 1982 to 2008

City of Albuquerque, Environmental Health Department, Air Quality Division EPA AQS Data



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# Nitrogen Dioxide Monitor in Bernalillo County

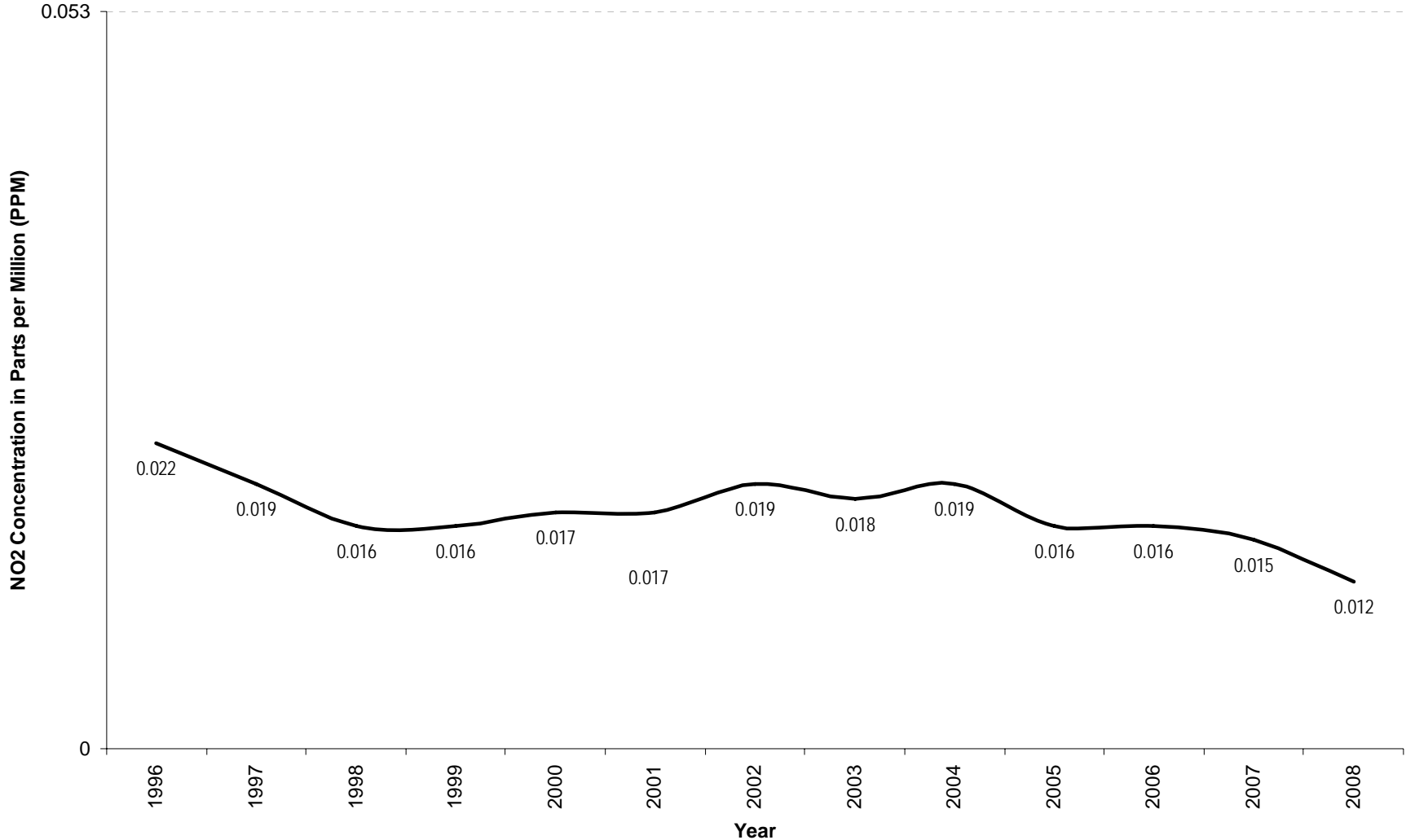


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# 13 Years of Nitrogen Dioxide Bernalillo County New Mexico Annual Averages

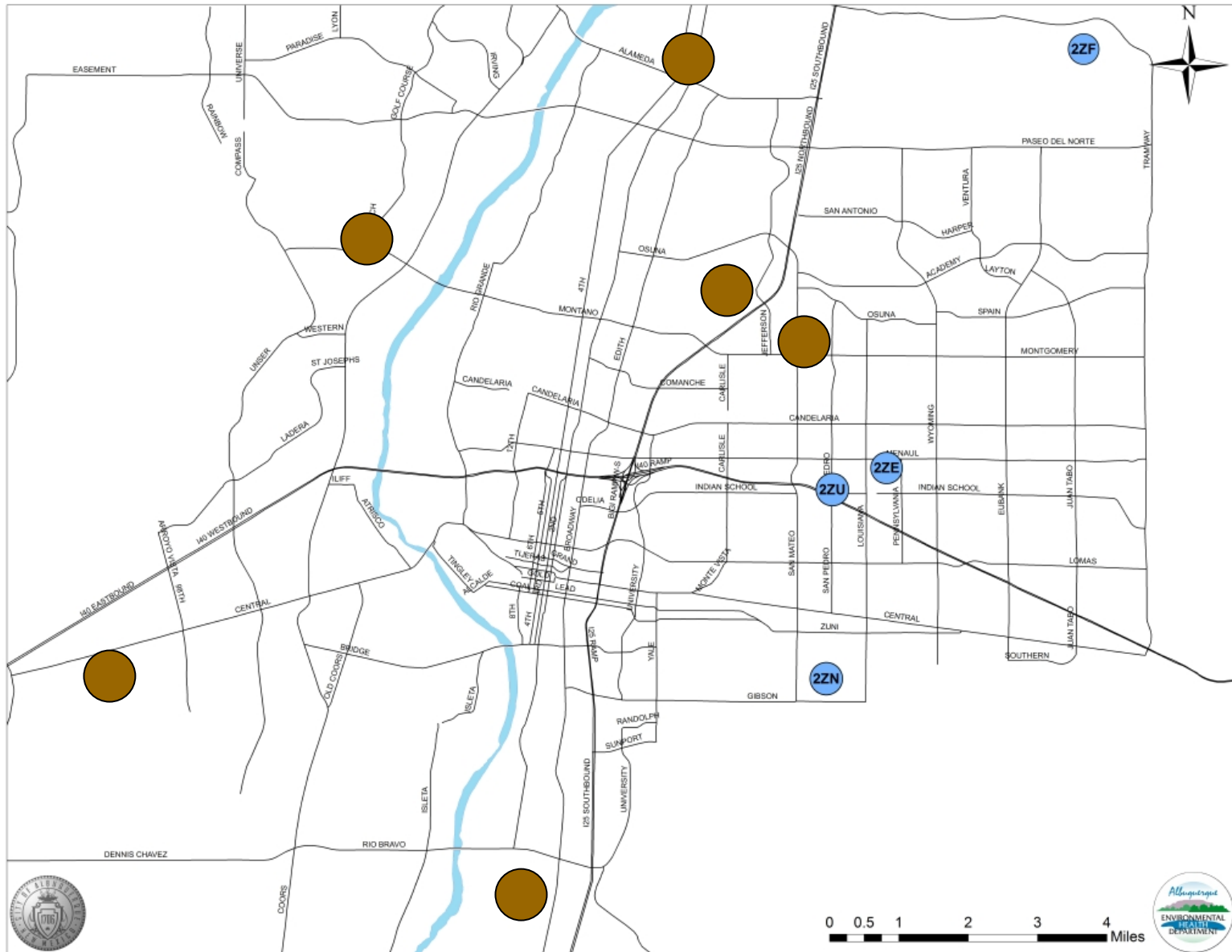


City of Albuquerque, Environmental Health Department, Air Quality Division EPA AQS Data



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# PM10 Monitoring in Bernalillo County

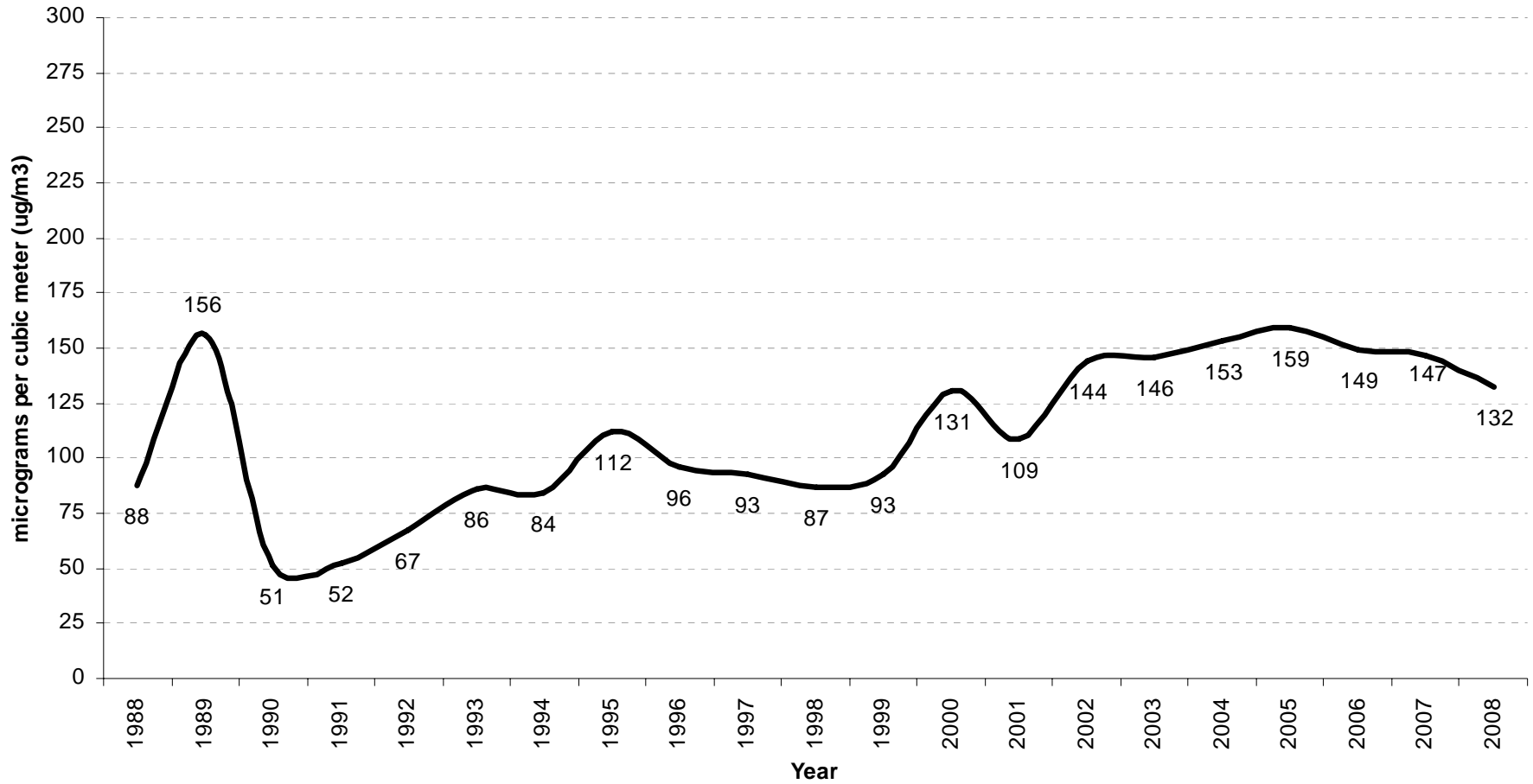


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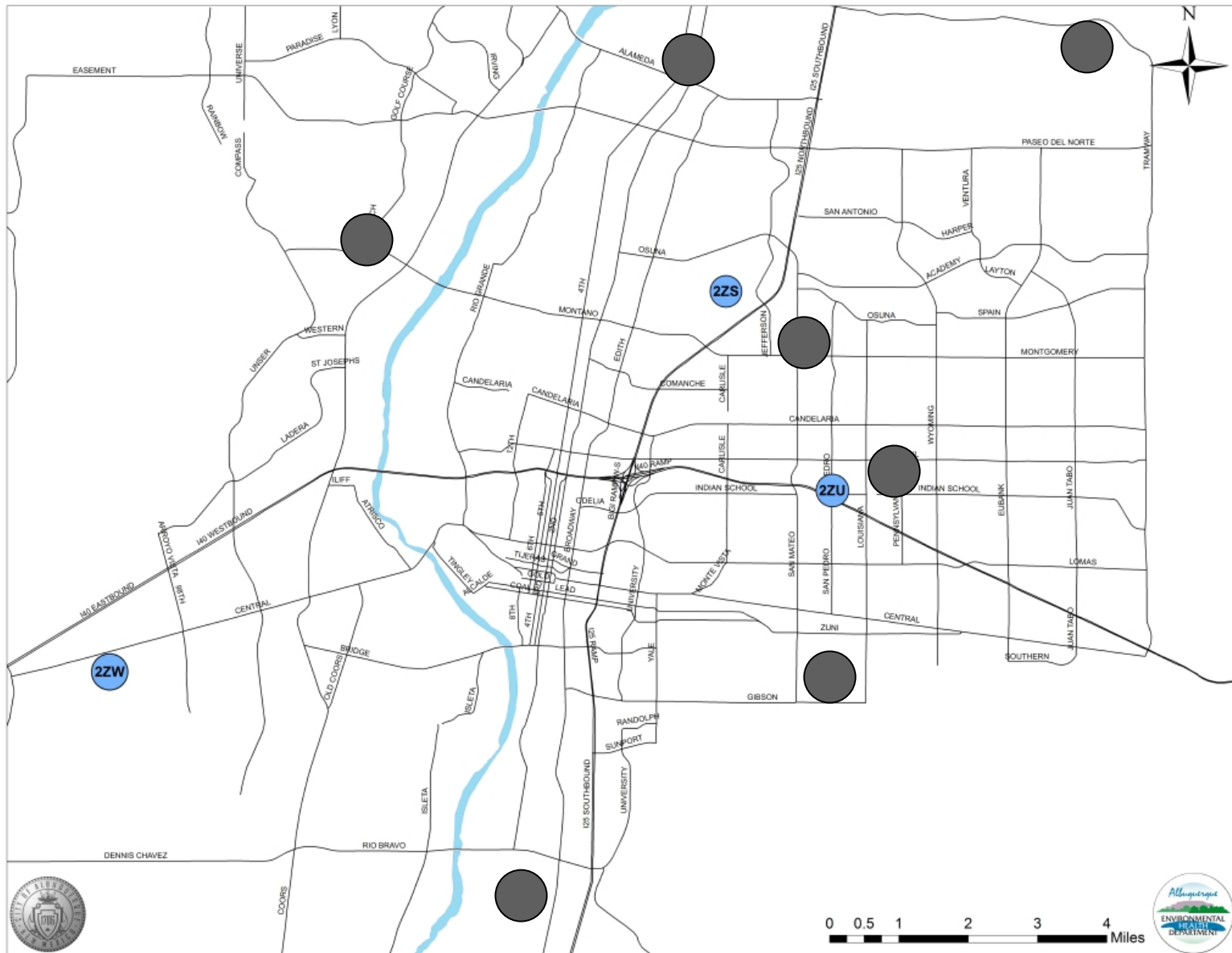


**21 Years of PM10**  
**Bernalillo County New Mexico**  
**24 Hour Average, Second Maximum Value, Network wide values**  
**1988 to 2008 - CY2008 is incomplete**  
City of Albuquerque, Environmental Health Department, Air Quality Division EPA AQS Data



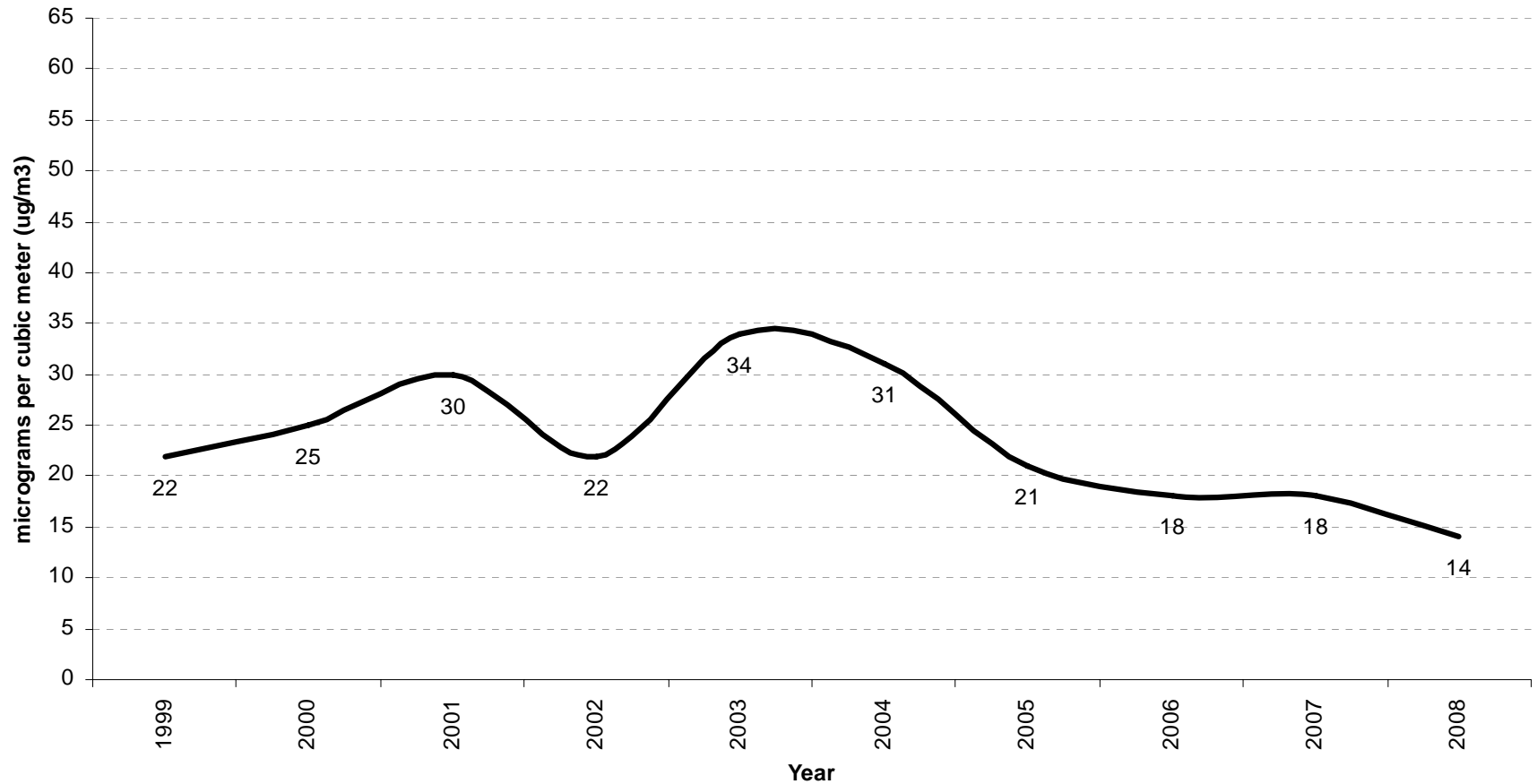
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# PM2.5 Monitoring in Bernalillo County



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**10 Years of PM2.5  
Bernalillo County New Mexico  
24 Hour Averages, 98th Percentile Value, Network wide maximum values  
1999 to 2008**  
City of Albuquerque, Environmental Health Department, Air Quality Division EPA AQS Data



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# 10 Years of PM2.5 Bernalillo County New Mexico Annual Averages, Network wide maximum values 1999 to 2008

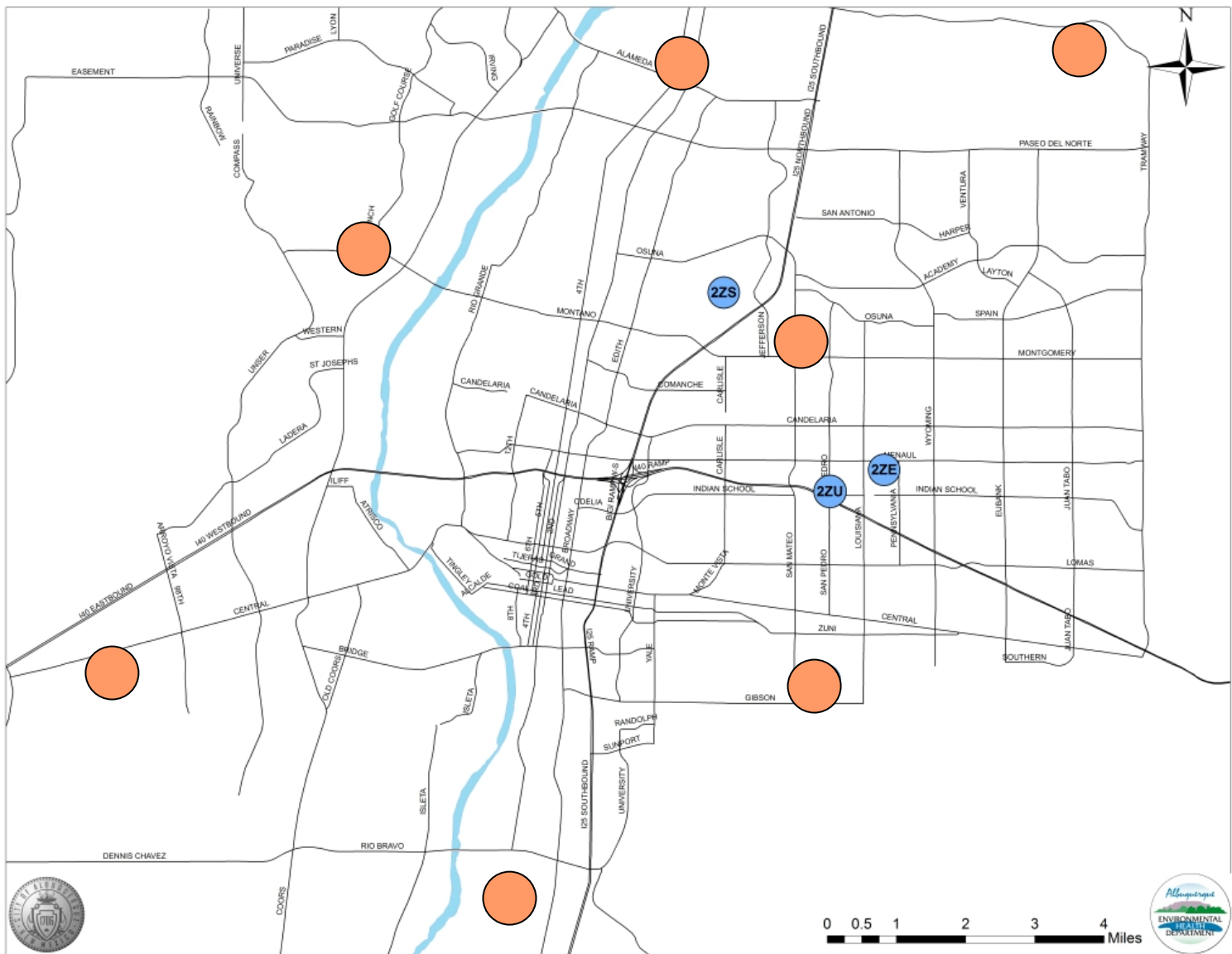


City of Albuquerque, Environmental Health Department, Air Quality Division EPA AQS Data



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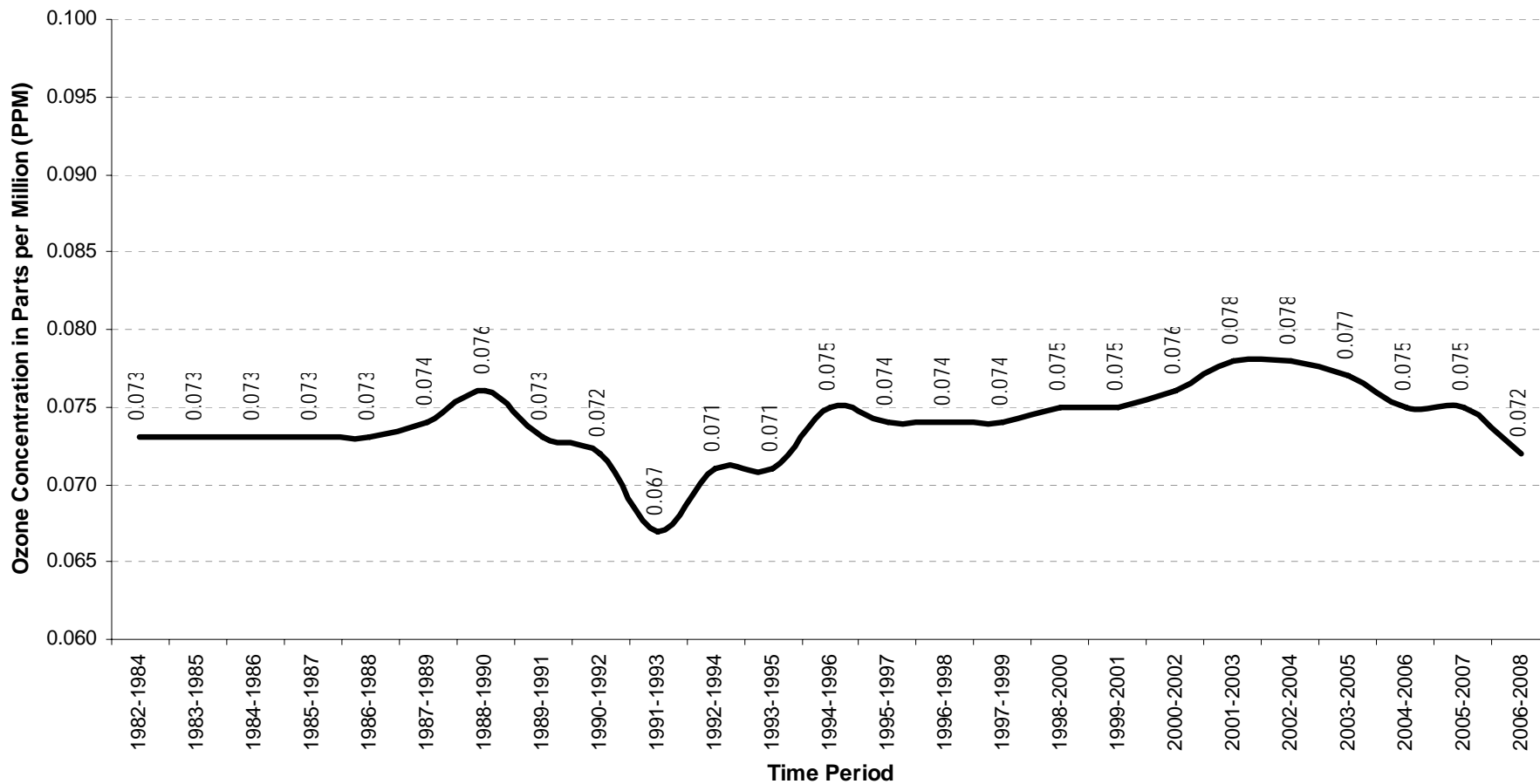
# Ozone Monitors in Bernalillo County



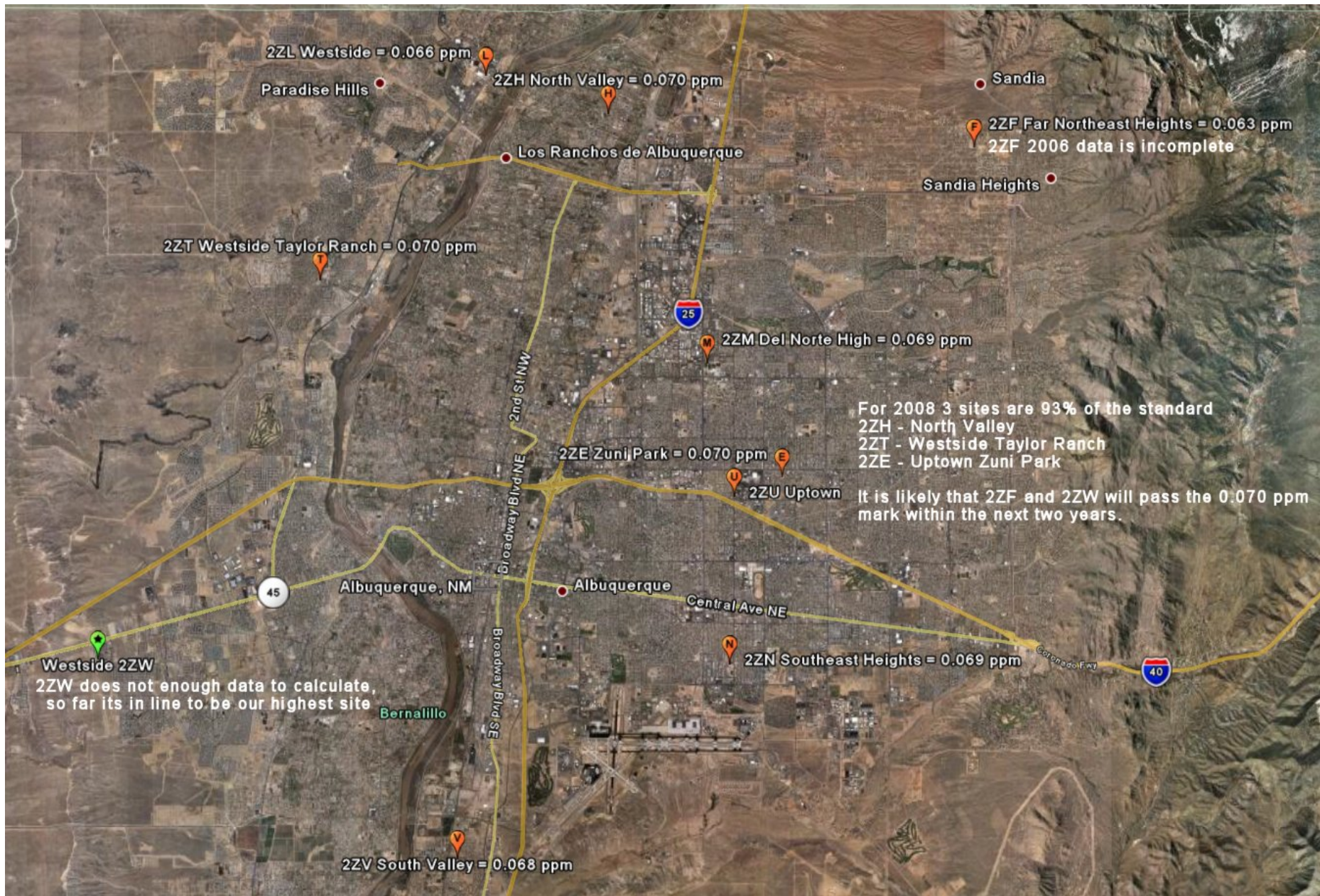
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**27 Years of Ozone**  
**Bernalillo County New Mexico**  
**Network wide 8 Hour Averages, Fourth Maximum Value**  
**1982 to 2008 Three Year Averages, not NAAQS comparable**  
**City of Albuquerque, Environmental Health Department, AQD EPA AQS Data**



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# Ozone



- Bernalillo County is at about 93% of Federal Ozone Standard at .070 ppm
- 2009 Legislative Session
  - HBIC/HB 195
  - Created a New Section of the State Air Act
    - State or Local Board SHALL Adopt a Plan to Control Emissions from Sources of:
      - Oxides of Nitrogen
      - Volatile Organic Compounds



# New NM Air Act Section



- Allows the State and Local Board to be more stringent than federal rule for areas that are violating or are within 95% of a national ambient air quality standard for ozone.
- Allows for additional standards of performance for sources.
- Other specifics...

# Ozone Overall



- Most of the Western United States is close to or exceeding Federal Ozone Standards.
- 1 Ozone Non-Attainment Area in the State, Sunland Park, New Mexico.
- 1 Area at 100% of the Current Standard, San Juan County, New Mexico

# Ozone Action



- It is not if we go non-attainment, it is when...
  - 1) Violating the Current Standard
  - 2) Standard is Reduced to Violating
- Community needs to be aware of situation and upcoming requirements.
- Begin Ozone Mitigation Plan Development Process.

# South Valley Air Monitoring Station

- Station was relocated and sited for Ozone and Carbon Monoxide
- Added Particulate Matter (PM) monitors and other analytical equipment
- Station Area did not meet PM siting criteria
- Bernalillo County upgraded/stabilized Area in April and May 2009
- We have re-evaluated siting criteria and have recommended to EPA Region 6 that the PM data be NAAQS comparable

## 2ZV – South Valley Station Western View – Pre-Stabilization



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## 2ZV – South Valley Station Western View – Post-Stabilization



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## 2ZV – South Valley Station Southwestern View – Pre-Stabilization



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## 2ZV – South Valley Station Southwestern View – Post-Stabilization



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## 2ZV – South Valley Station Southern View – Pre-Stabilization



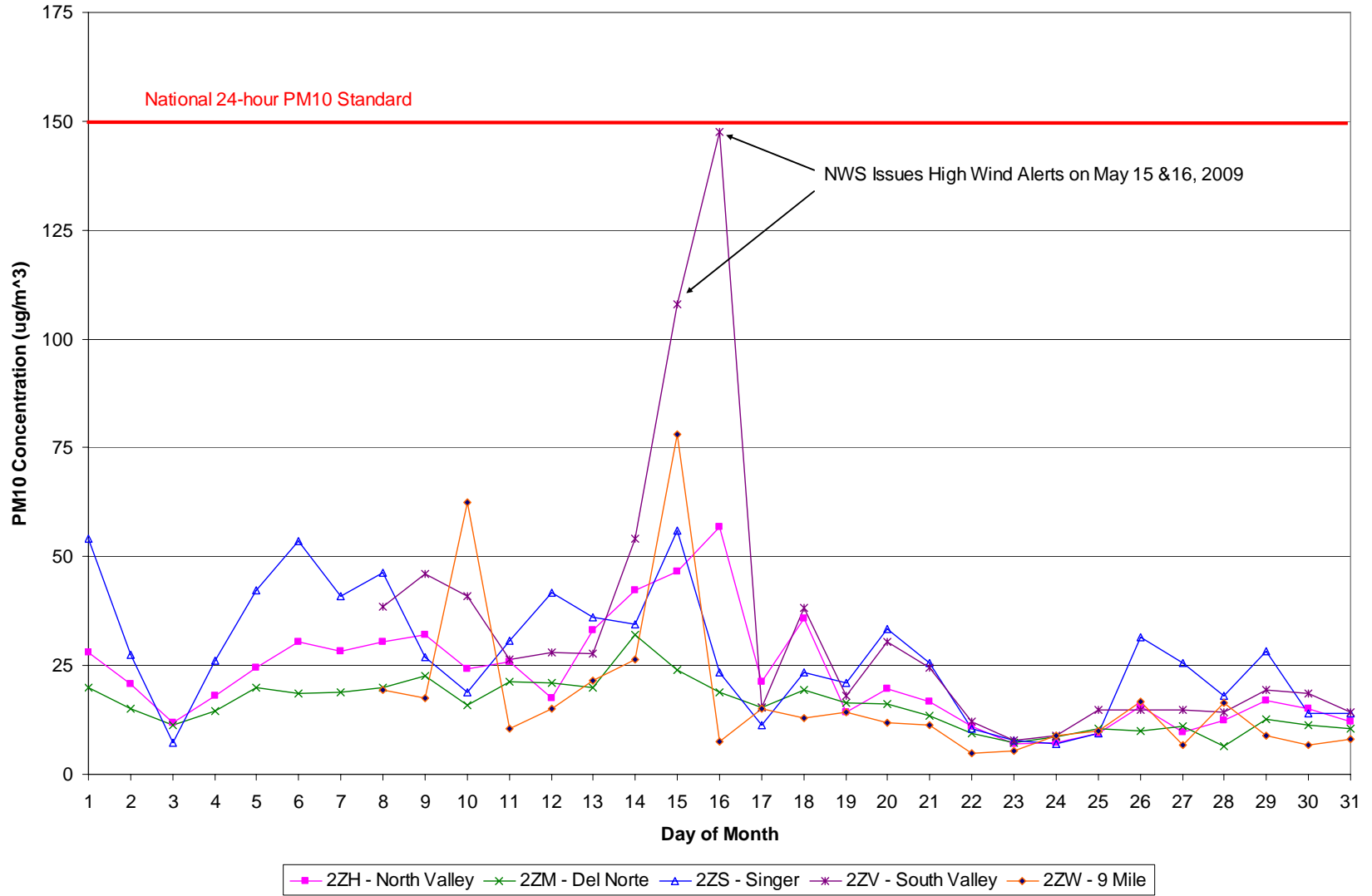
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## 2ZV – South Valley Station Southern View – Post-Stabilization



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Air Quality Division  
Bernalillo County-Wide  
NON-Quality Assured Continuous PM10 Measurements for May 2009



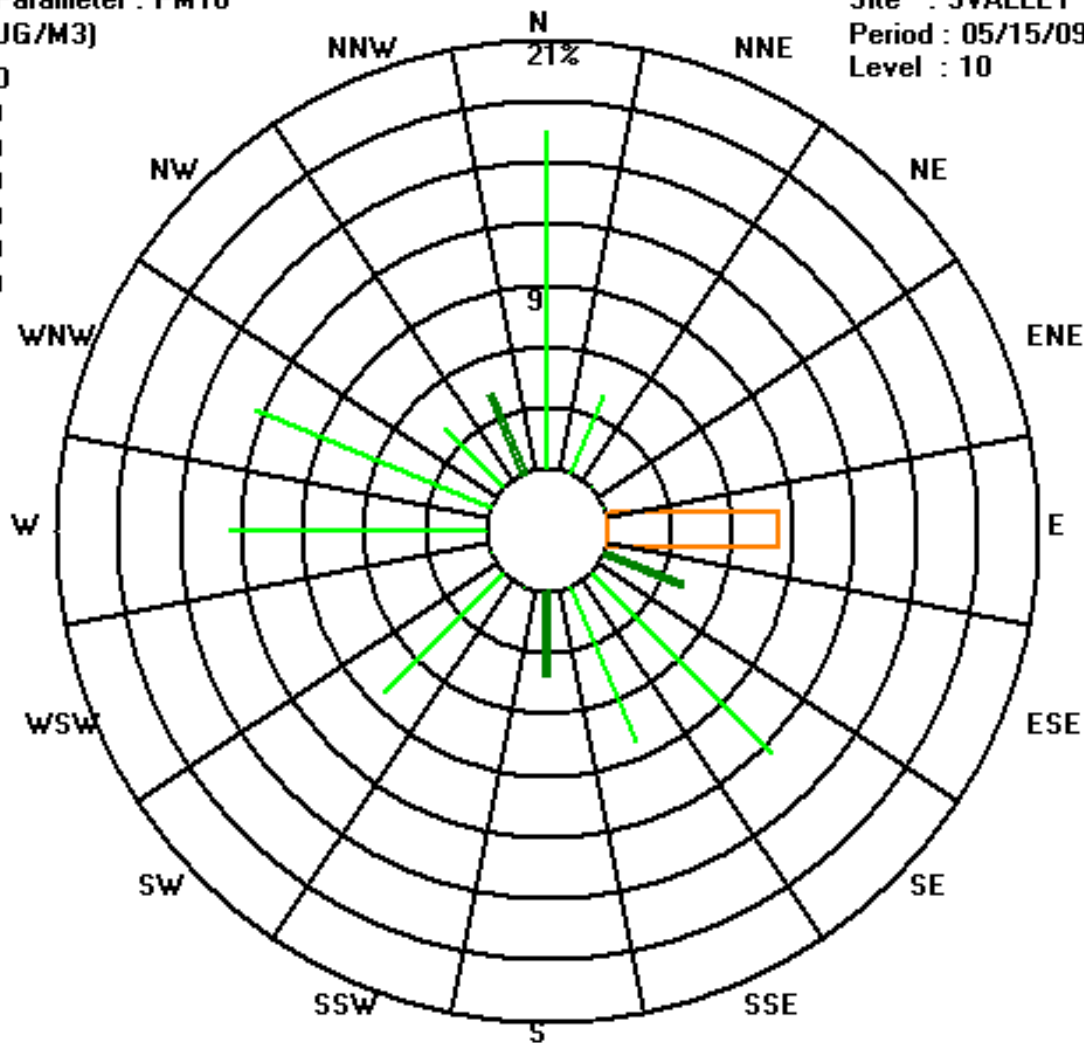
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Logger : ZV Parameter : PM10  
Class Limits (UG/M3)

Site : SVALLEY  
Period : 05/15/09-05/15/09  
Level : 10

- >= 350.0
- < 350.0
- < 300.0
- < 250.0
- < 200.0
- < 150.0
- < 100.0
- < 50.0

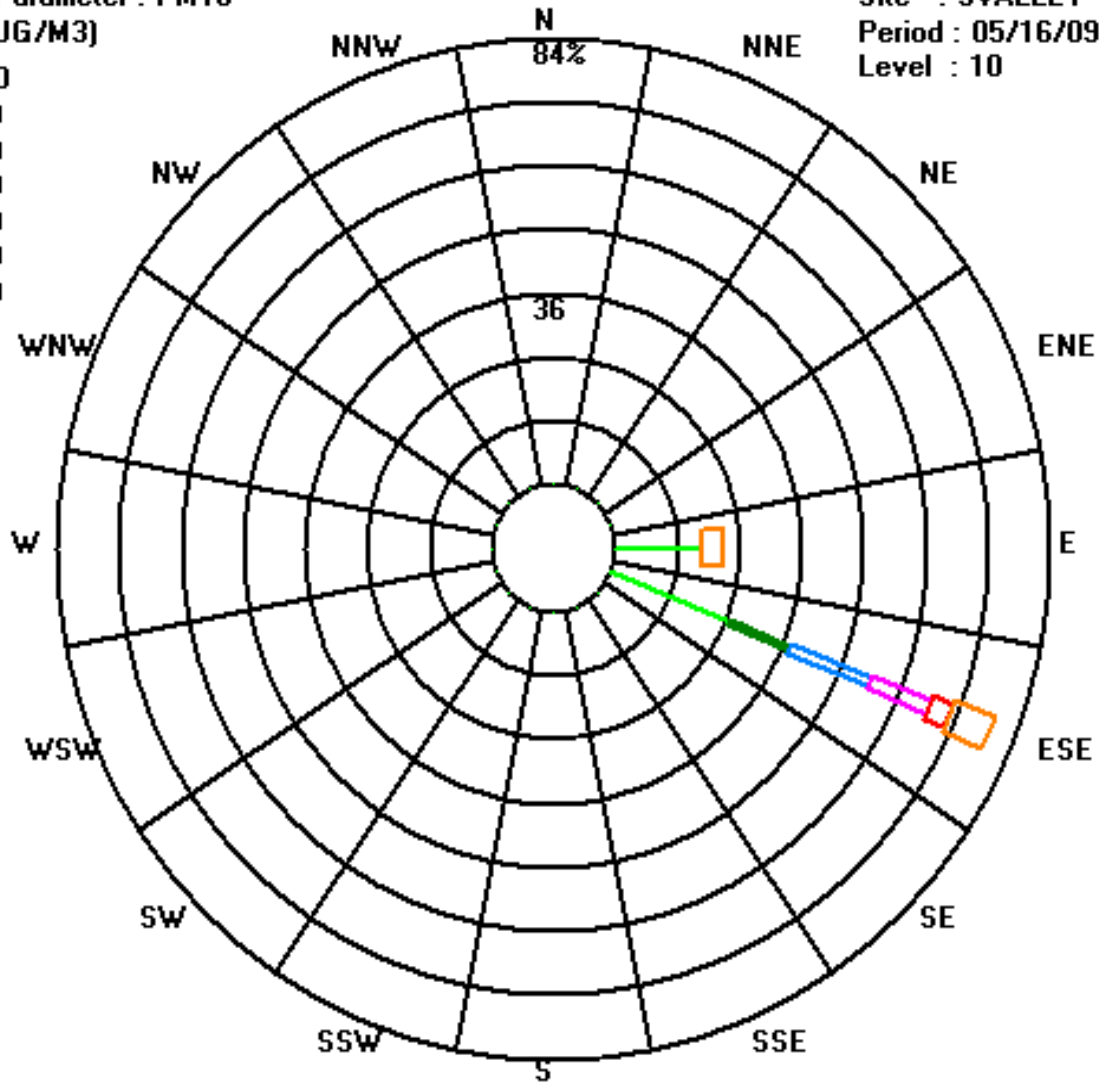
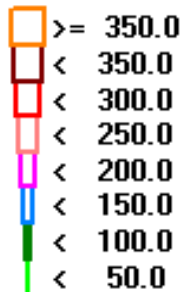


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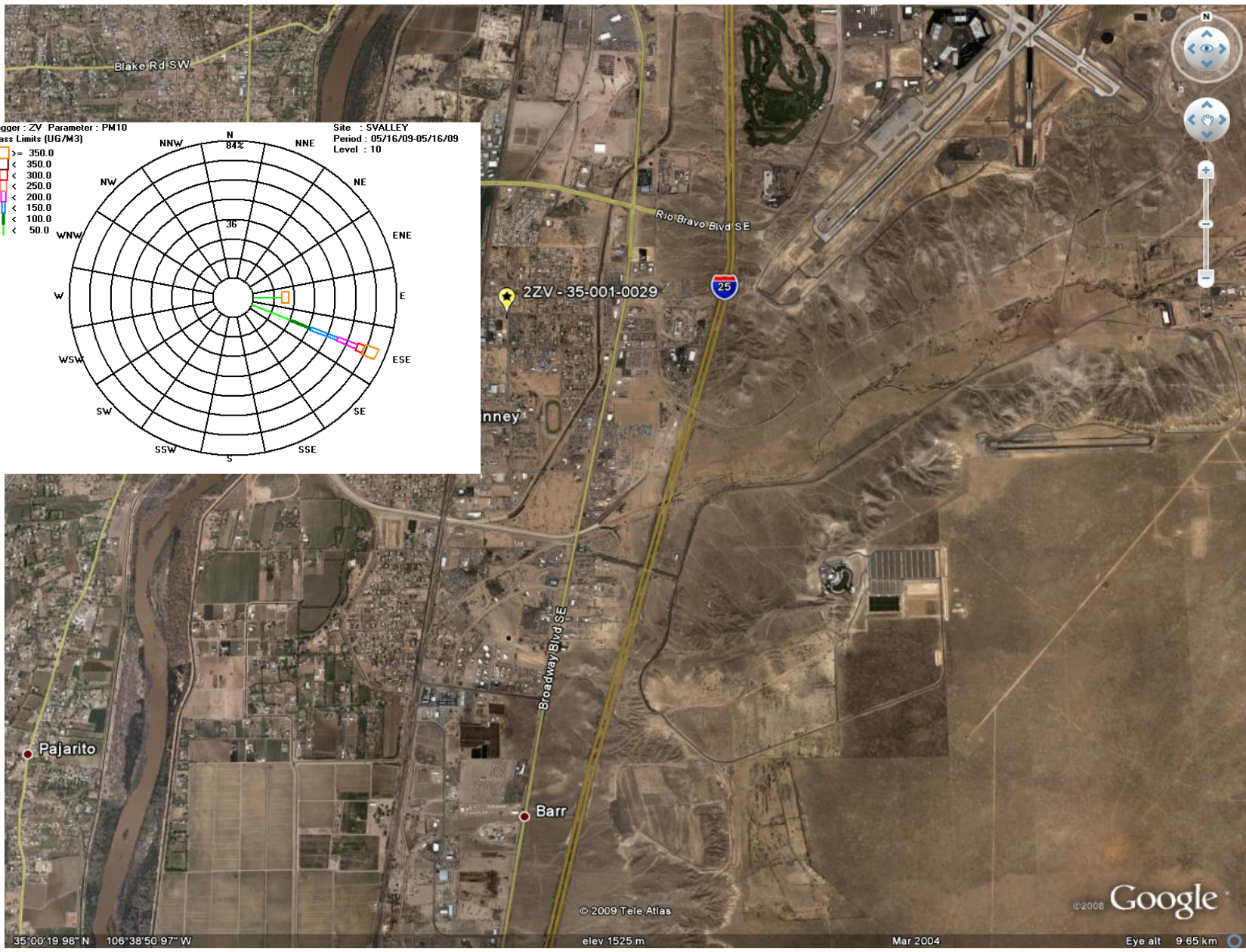


Logger : ZV Parameter : PM10  
Class Limits (UG/M3)

Site : SVALLEY  
Period : 05/16/09-05/16/09  
Level : 10

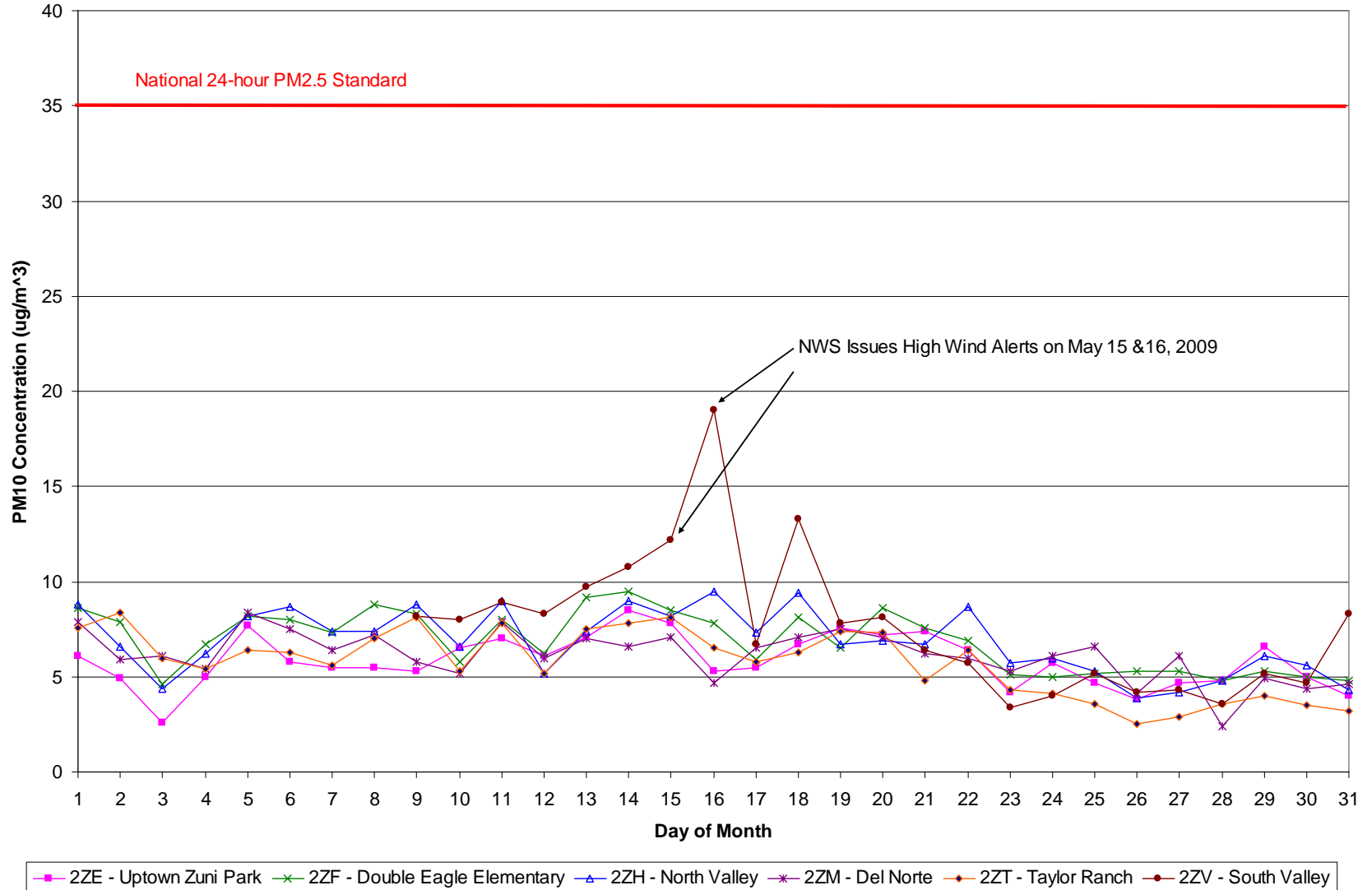


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# Air Quality Division Bernalillo County-Wide NON-Quality Assured Continuous PM2.5 Measurements for May 2009



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# Climate Change Information and Data

- <http://nosa.noaa.gov/>
- <http://www.esrl.noaa.gov/gmd/ccgg/index.html>



# Air Quality Announcement

- US EPA (Washington, D.C. – May 21, 2009)

## **EPA Announces New IRIS Assessment Development Process**

- **Integrated Risk Information System (IRIS)**
- <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=190045>
- Contact: LaTisha Petteway, 202-564-3191 / 4355 /  
[petteway.latisha@epa.gov](mailto:petteway.latisha@epa.gov)

# Questions?

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