



# New Mexico Environment Department

## Ozone Attainment Initiative

Robert Spillers

Air Quality Bureau

November 14, 2019





# AQB Mission

Our mission is to protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality.



White Sands



Alamogordo



Organ Mountains



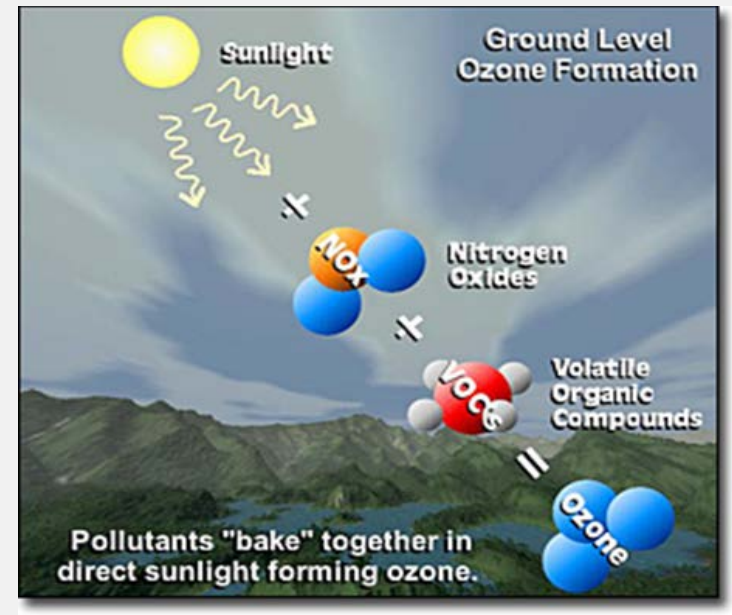
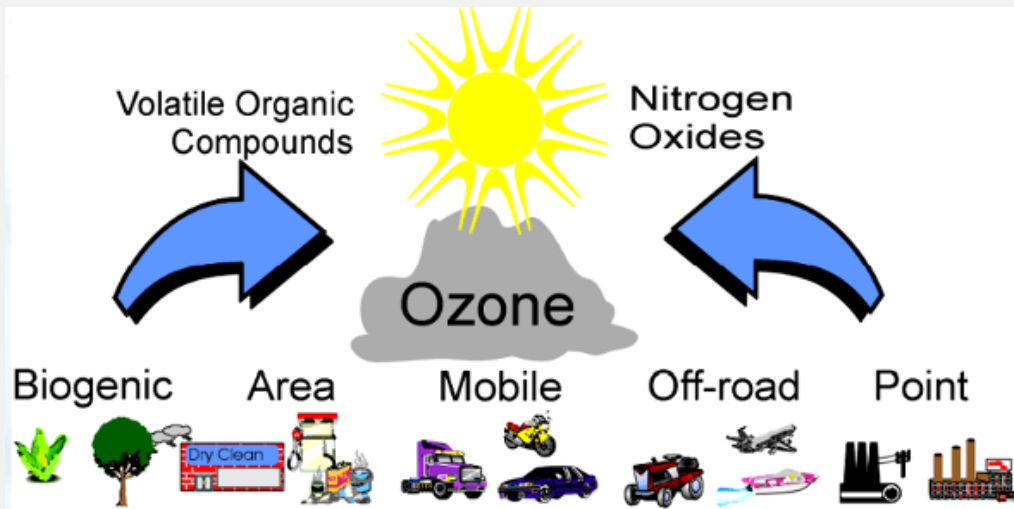
# Outline

- Ground-level ozone formation
- Health effects of ground level ozone
- Federal ozone standard
- What is the OAI?
- Where are the focus areas?
- How will NMED implement the OAI?
- What is the projected timeline?
- How can stakeholders get involved?



# Ground-level Ozone Formation

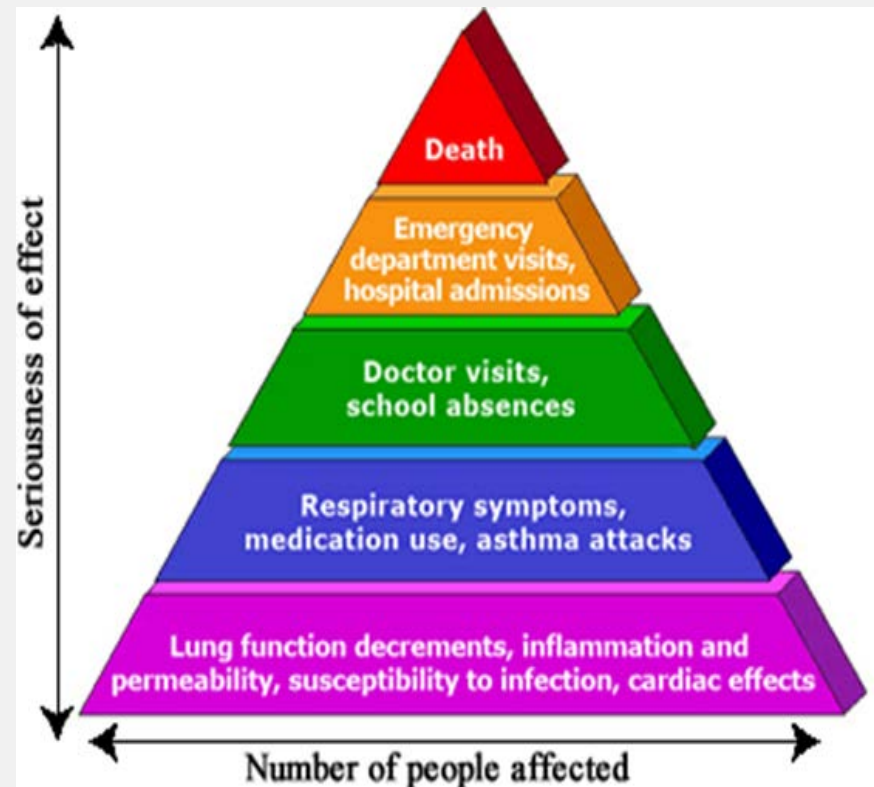
- Main pollutants, Oxides of nitrogen (NO<sub>x</sub>)
- Volatile organic compounds (VOC)
- Not directly emitted
- Reaction - NO<sub>x</sub> with VOC in presence of sunlight





# Ozone Pollution Health Effects

- Effects seen across a wide range of health outcomes
- Sensitive groups include:
  - Asthmatics and other people with lung disease
  - All children and older adults, especially people active outdoors
  - Outdoor workers



[www.epa.gov/ozone-pollution-and-your-patients-health/health-effects-ozone-patients-asthma-and-other-chronic](http://www.epa.gov/ozone-pollution-and-your-patients-health/health-effects-ozone-patients-asthma-and-other-chronic)



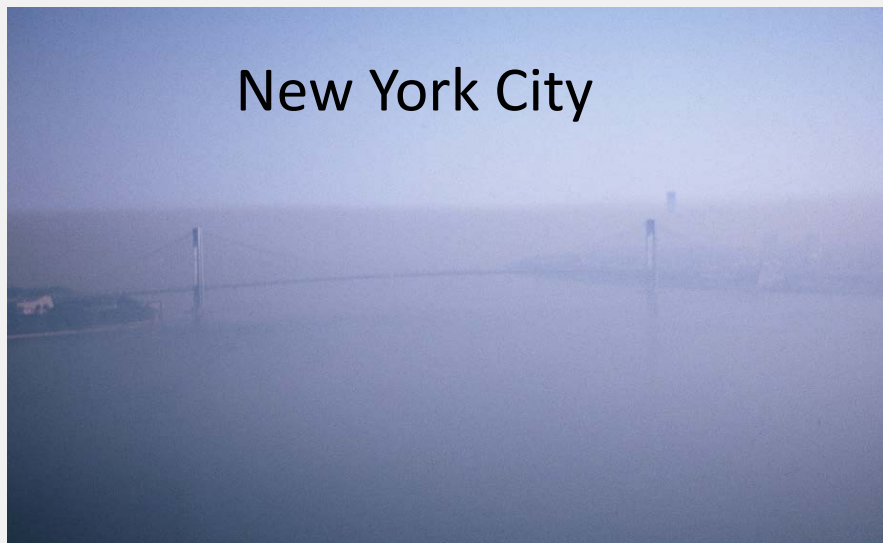
# Smog



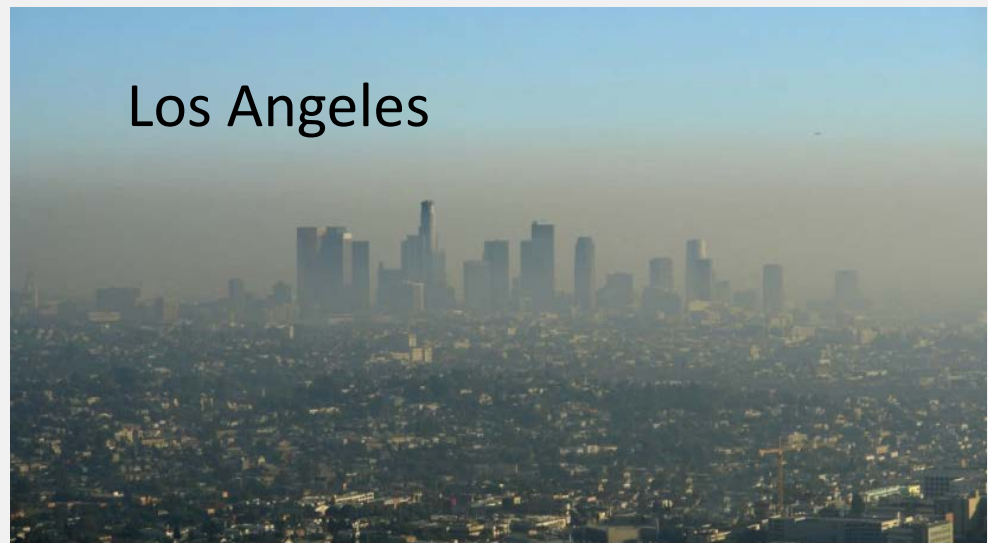
Paso del Norte



Denver



New York City



Los Angeles



# Federal Standards

## National Ambient Air Quality Standards (NAAQS)

- Standards for criteria pollutants
  - PM, Pb, CO, NO<sub>2</sub>, SO<sub>2</sub>, O<sub>3</sub>
- Established by the U.S. Environmental Protection Agency (EPA)
- Nonattainment Area= An area that violates one of the NAAQS
- 2015 Ozone NAAQS – 0.070ppm (70ppb)

EPA's calculation methodology can be found at:

<https://www.epa.gov/air-trends/air-quality-design-values>



# What is the Ozone Attainment Initiative (OAI)?

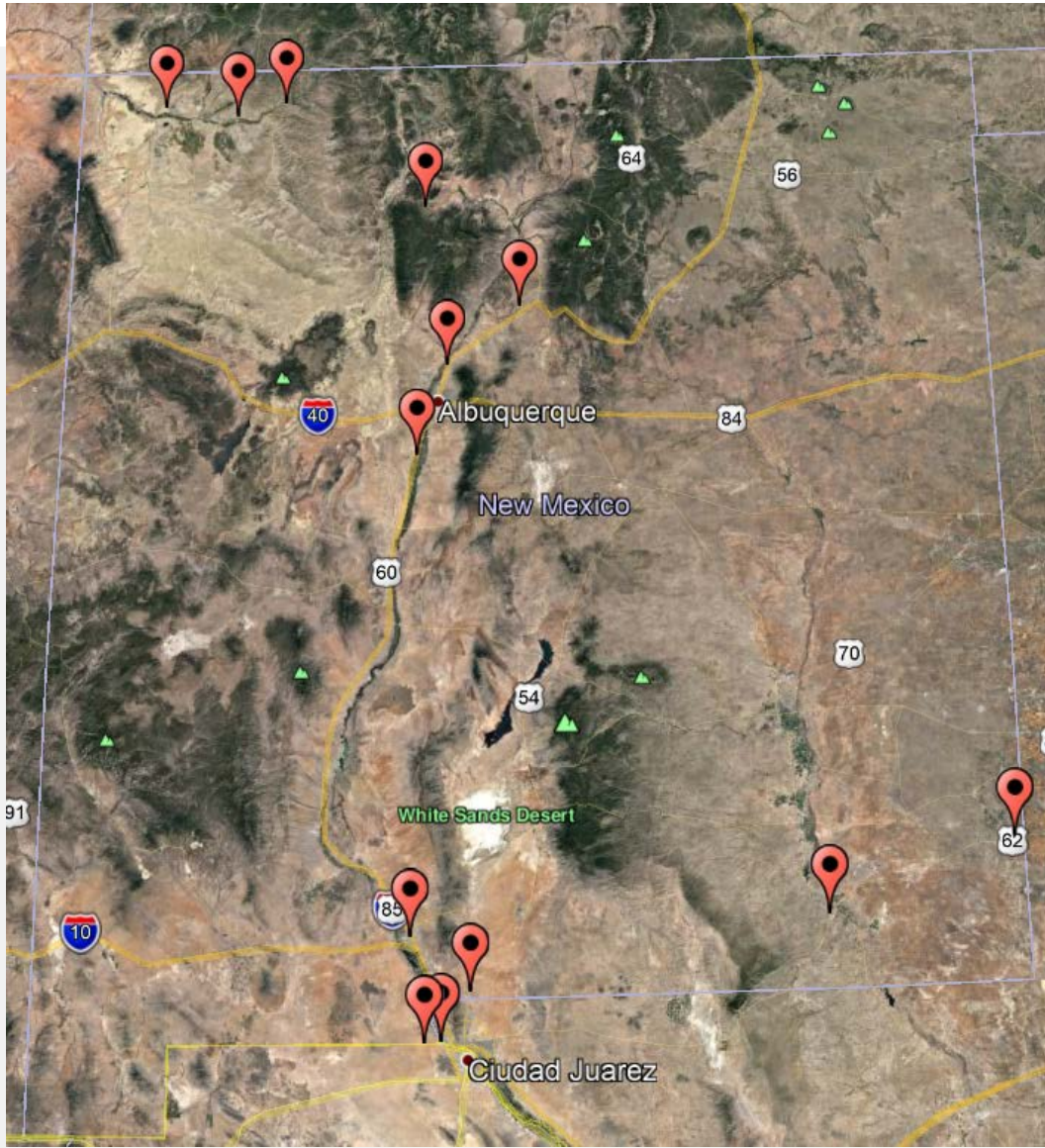
Monitoring data show several areas in the State approaching or exceeding the level of the National Ambient Air Quality Standard (NAAQS) for Ozone

The OAI aims to:

- Utilize early efforts to reduce ozone in areas within 95% of the NAAQS
- Protect the attainment/unclassifiable status of all areas in the state
- Ensure the health and welfare of the residents of the state for future generations

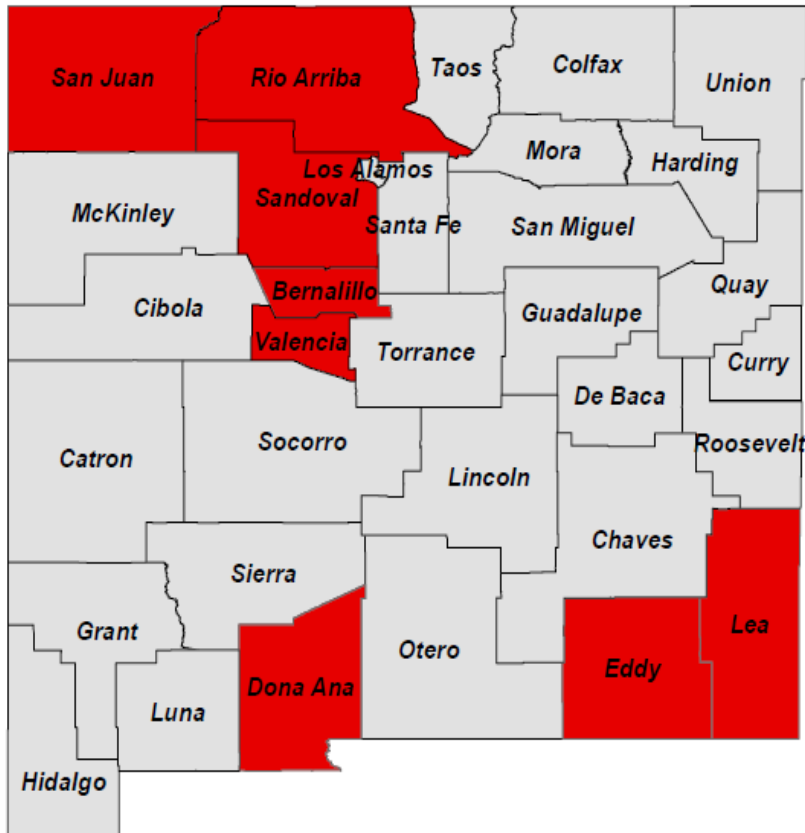


# NMED Ozone Monitoring Sites





# Focus Areas

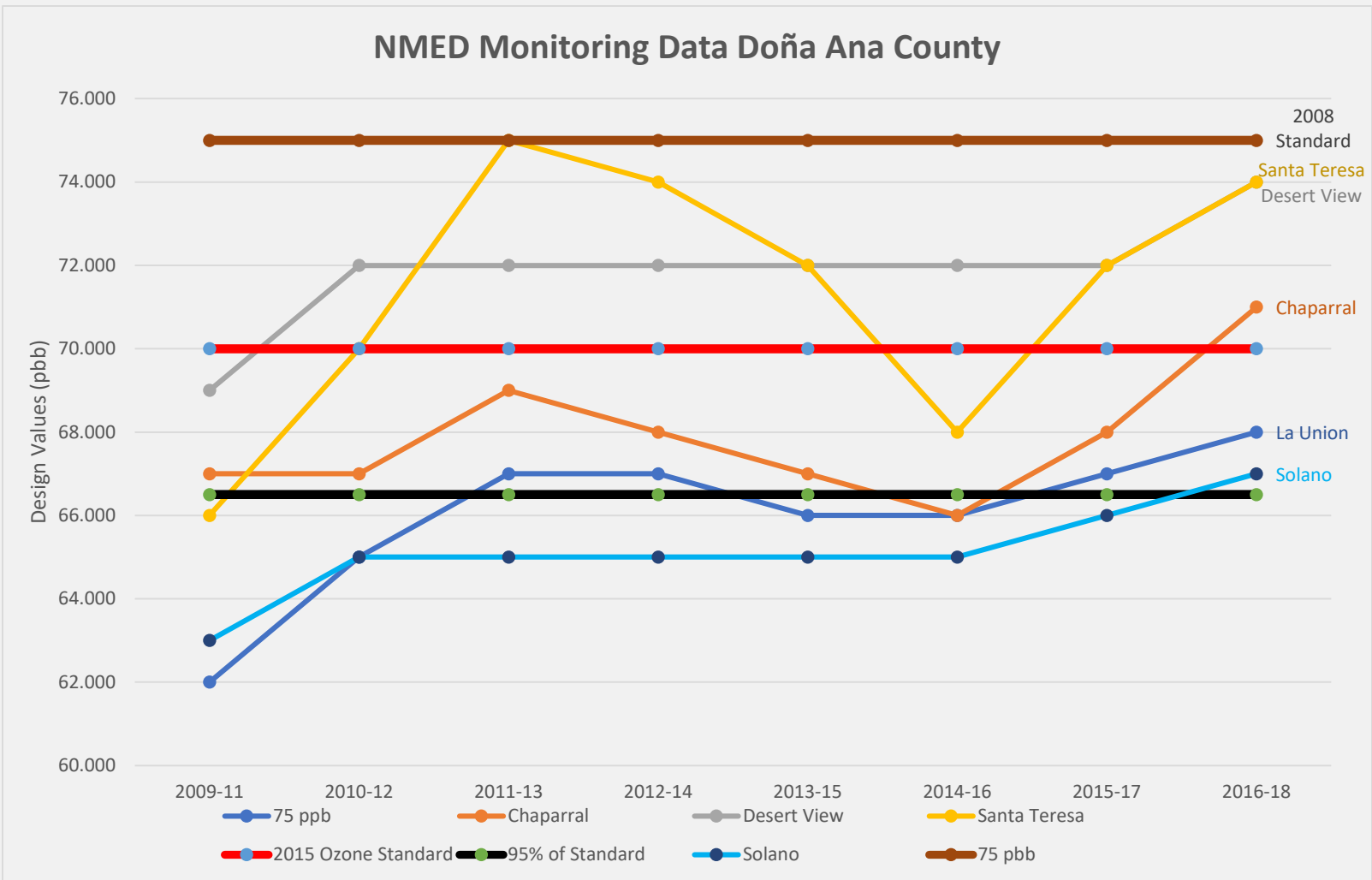


- Counties within 95% of the standard:
  - ▣ San Juan (Navajo Lake, 70 ppb)
  - ▣ **Doña Ana** (several monitors, 74 ppb)
  - ▣ Eddy (Carlsbad, 74 ppb)
  - ▣ Lea (Hobbs, 70 ppb)
  - ▣ Rio Arriba (Coyote, 67 ppb)
  - ▣ Sandoval (Bernalillo, 68 ppb)
  - ▣ Valencia (Los Lunas, 67 ppb)

\*Parallel planning is occurring for Bernalillo County through the Albuquerque/Bernalillo County Department of Environmental Health



# NMED Ozone Monitoring Doña Ana County



95% of the 70 ppb standard  $\geq$  67 ppb



# Project Development

- Science will be the basis for project development
- Stimulate Innovation
- Initiate Collaboration
- Ensure Compliance



# How Will NMED Implement the OAI?

- **Data Gathering**
  - Emissions Inventories, Modeling and Continued Monitoring
    - O<sub>3</sub> and NO<sub>x</sub> Concentrations
    - Source sector contributions
    - Ozone formation and transport
- **Mandatory and/or Voluntary Measures**
  - Plan/Regulation Development
  - Normal NMED rulemaking process
- **EPA's Ozone Advance Program**
- **Robust stakeholder involvement**



# Ozone Advance



Currently, 38 areas are actively participating in Advance. These areas are located in 21 states and 9 of the 10 EPA Regions. They include 21 Ozone Advance areas, 7 PM Advance areas, and 10 areas that are participating in both Ozone and PM Advance.

- Collaborative effort by EPA to encourage emission reductions to help areas continue to meet the NAAQS
- Take near-term steps to improve local air quality and ensure continued health protection
- Flexibility, participant determine their own goals and the measures
- Actions taken could better position an area to handle nonattainment requirements.



# Path Forward and Next Steps

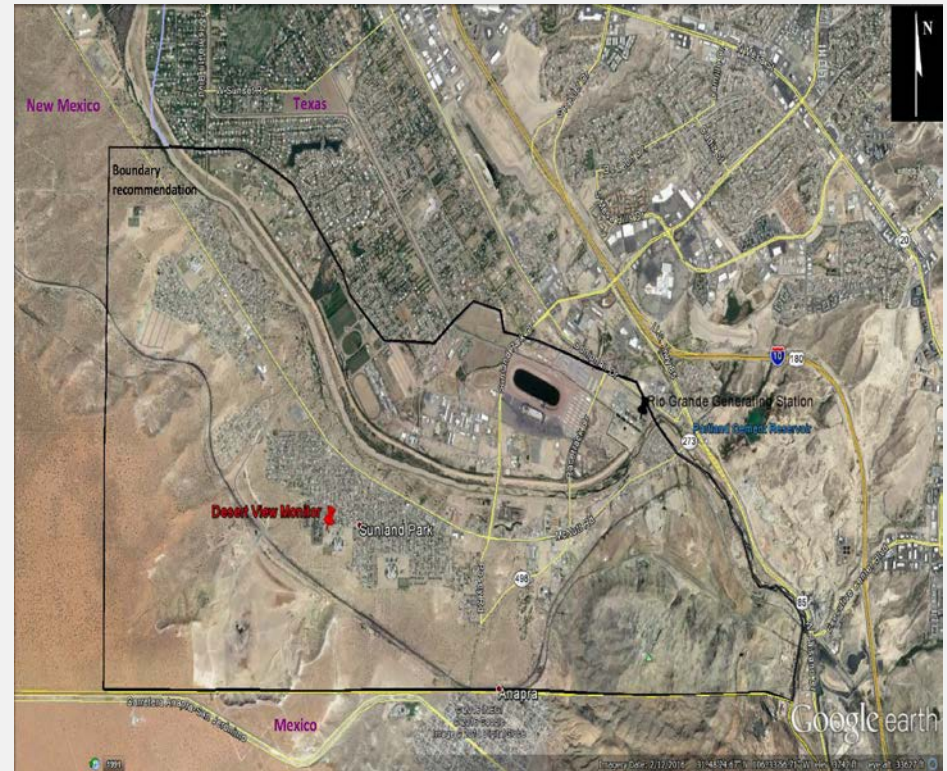
- Modeling and Data Analyses
  - ▣ Identify source categories causing elevated ozone
  - ▣ Predict effectiveness of a proposed strategy or control measure
- Control and pollution reduction measures
  - ▣ List of potential air quality improvements
  - ▣ Emission reduction options
- Ozone Advance
  - ▣ Project partners
    - JAC and Members
    - Local governments





# SLP Nonattainment Area

- SIP Development
  - ▣ Transportation Conformity
    - EPMPO Lead Agency
    - Complete July 2019
  - ▣ Emissions Inventory
    - August 3, 2020
  - ▣ Nonattainment Permitting
    - August 3, 2021





# How can stakeholders get involved?

NMED is committed to a robust, transparent process where feedback and suggestions are encouraged.

## □ Provide input!

- Attend public meetings
- Share comments and suggestions

## □ Stay current

- OAI webpage: [www.env.nm.gov/air-quality/o3-initiative/](http://www.env.nm.gov/air-quality/o3-initiative/)
- OAI Listserv: [public.govdelivery.com/accounts/NMED/subscriber/new](http://public.govdelivery.com/accounts/NMED/subscriber/new)
- Air Monitoring Network: [nmaqinow.net/](http://nmaqinow.net/)



# Projected Timeline\*

## □ 2018

### ▣ Spring

- Kick off OAI planning meeting; and
- Development of outreach and educational materials.

## □ 2019

### ▣ Summer

- Initial public outreach including education and initial input request.

### ▣ Fall/Winter

- Conduct modeling;
- Research and review mandatory or voluntary control measures; and
- Additional public outreach.

## □ 2020

### ▣ Winter/Spring

- Gather input; and
- More public comment opportunities.

### ▣ Summer

- Analyze input;
- Develop rules; and
- Other measures for inclusion in programs.

### ▣ Fall/Winter

- OAI Plan drafted and released with formal comment period; and
- EIB hearing to adopt proposed plan/rules.

\*Note that NMED is in the initial stages of planning, which only includes the educational component and planning for public outreach. No rules/programs have yet been discussed.



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## Questions or comments?

Thank you. We look forward to working with our stakeholders.

OAI Project Manager

Robert Spillers, [robert.spillers@state.nm.us](mailto:robert.spillers@state.nm.us), (505) 476-4324

OAI Doña Ana County Contact

Armando Paz, [Armando.Paz@state.nm.us](mailto:Armando.Paz@state.nm.us), (575) 449-2983