

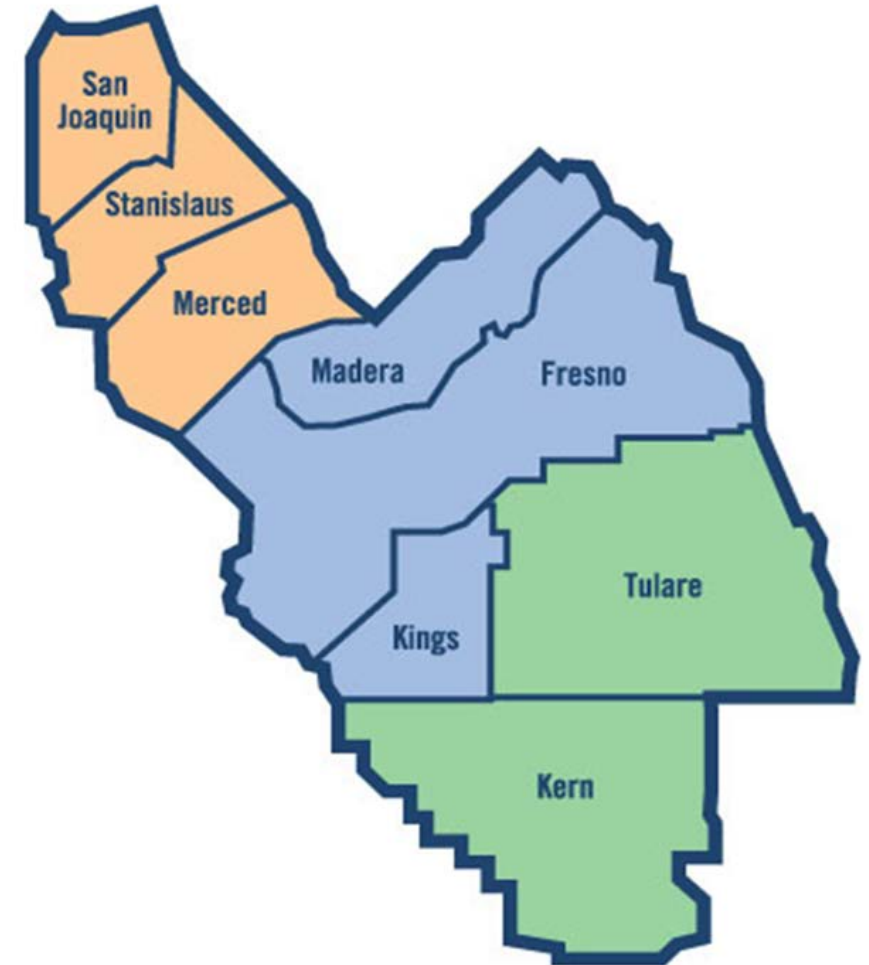


**HEALTHY AIR LIVING™**

# Air quality in the San Joaquin Valley

# Valley Air District

- **Regional agency responsible for air quality in 8 counties**
  - San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare & the valley air basin portion of Kern
- **15 member Governing Board**
- **Regulates stationary sources**
- **Provides grant funding**
- **Responsible for meeting EPA & CARB mandates to improve public health**



# The District's Mission

*The San Joaquin Valley Air District is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality management strategies.*



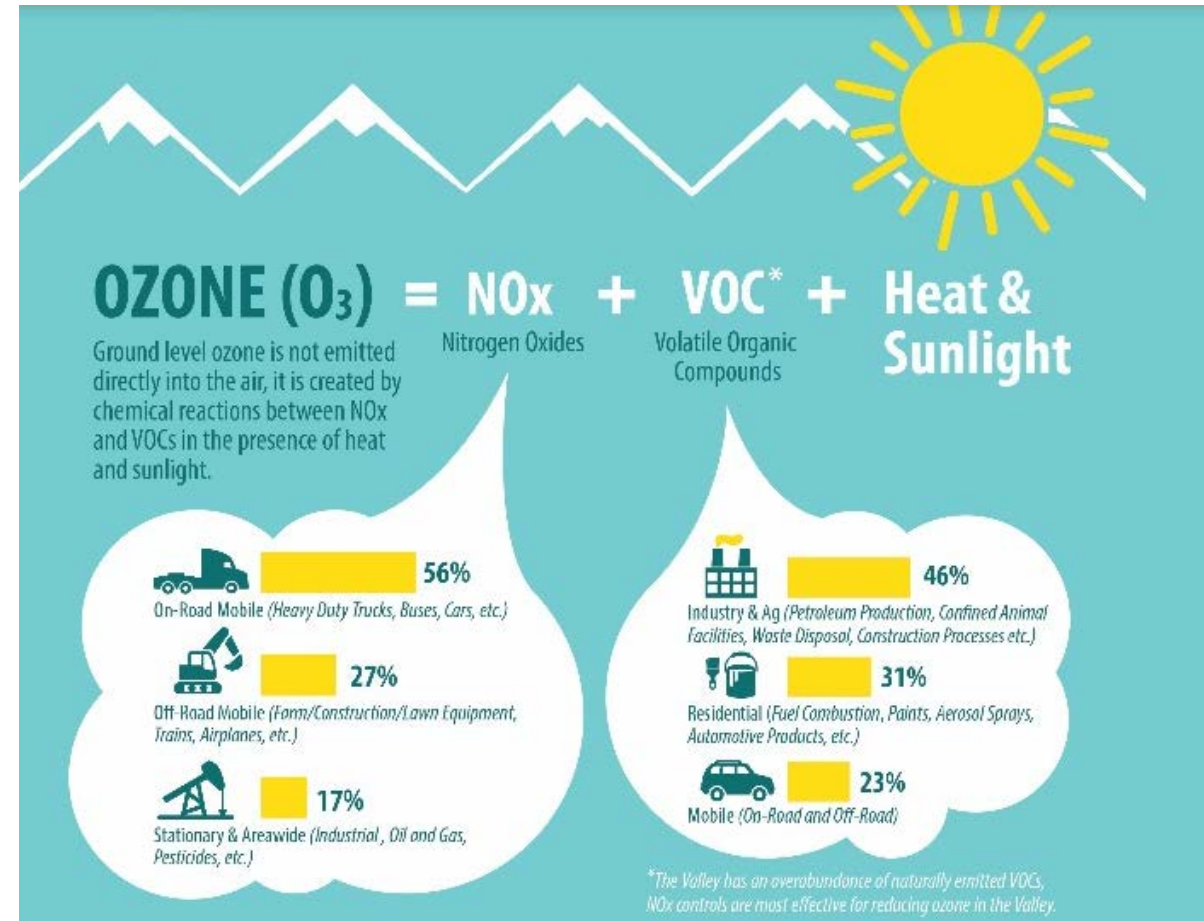
# Valley Challenges Unmatched

- Surrounding mountains and meteorology create ideal conditions for air pollution formation and retention.
- High rate of population growth, I-5 and Hwy 99 (major transportation arteries) run all the way through Valley.
- These challenges make it exceedingly difficult to meet federal, health-based ambient air quality standards for Ozone and PM 2.5.

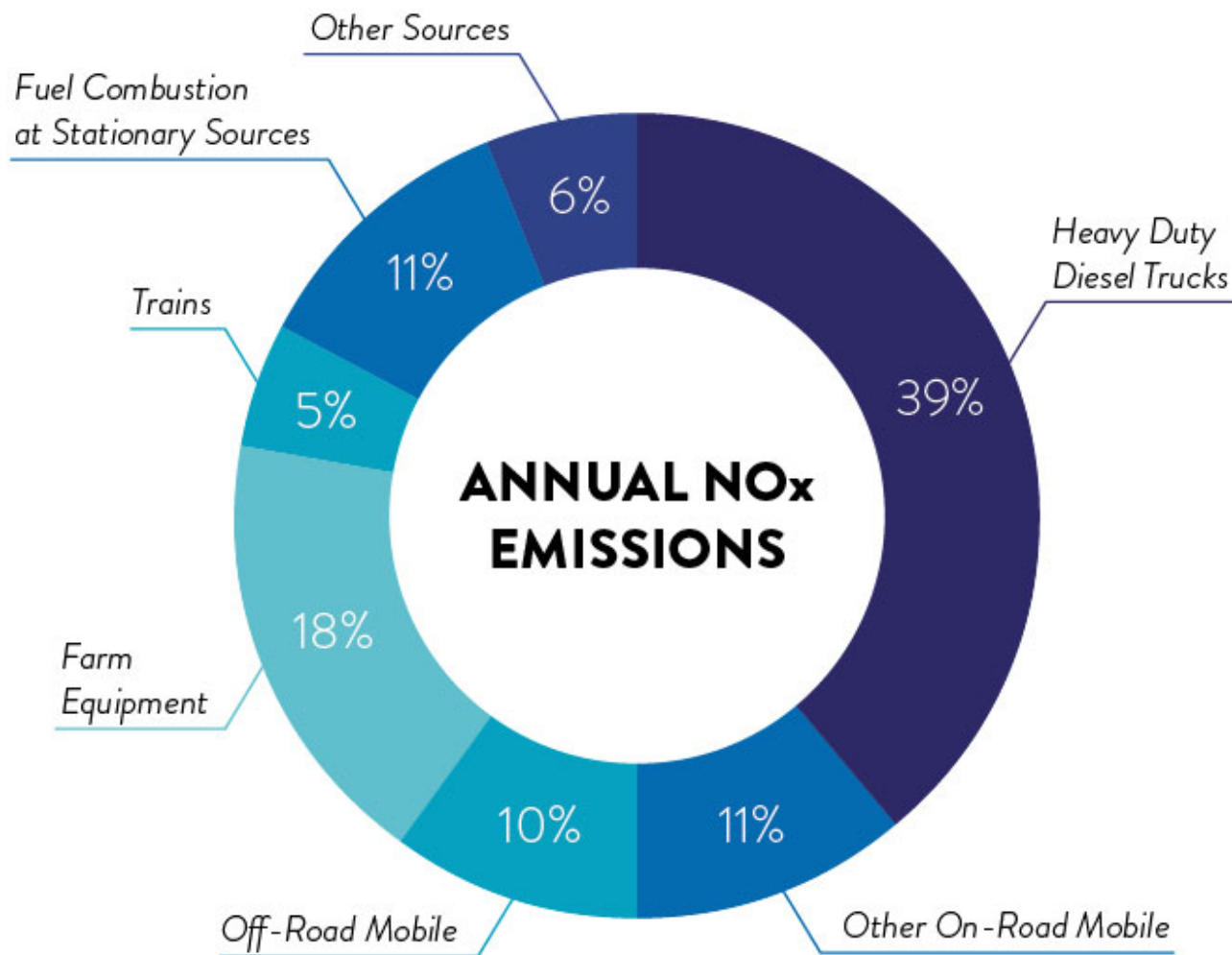


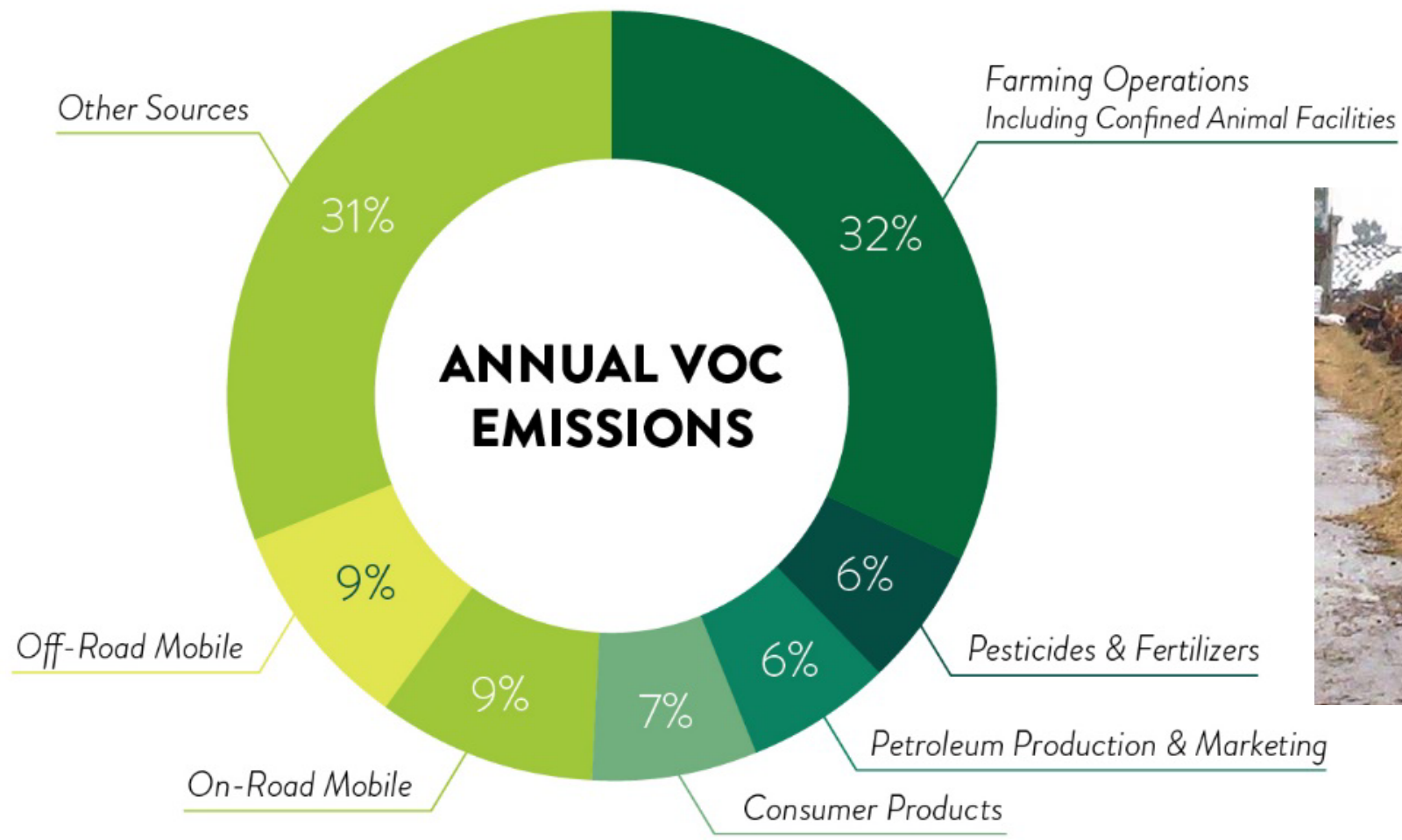
# Ozone

- Ozone: Main component of summertime 'smog.'
- Odorless, colorless, corrosive gas, resulting from chemicals cooking in sunlight and heat.
- Made up of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs).
- Most of the precursor emissions come from internal-combustion engines (mobile sources), industrial processes, agriculture, consumer products (lawnmowers, paints and solvents, etc).
- Motor vehicles account for up to 80 percent of the Valley's smog.



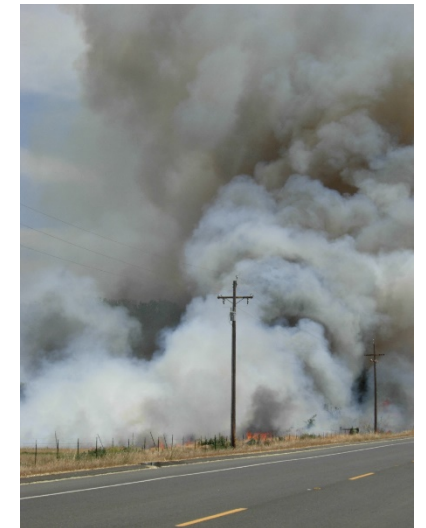
# Sources of Air Pollution



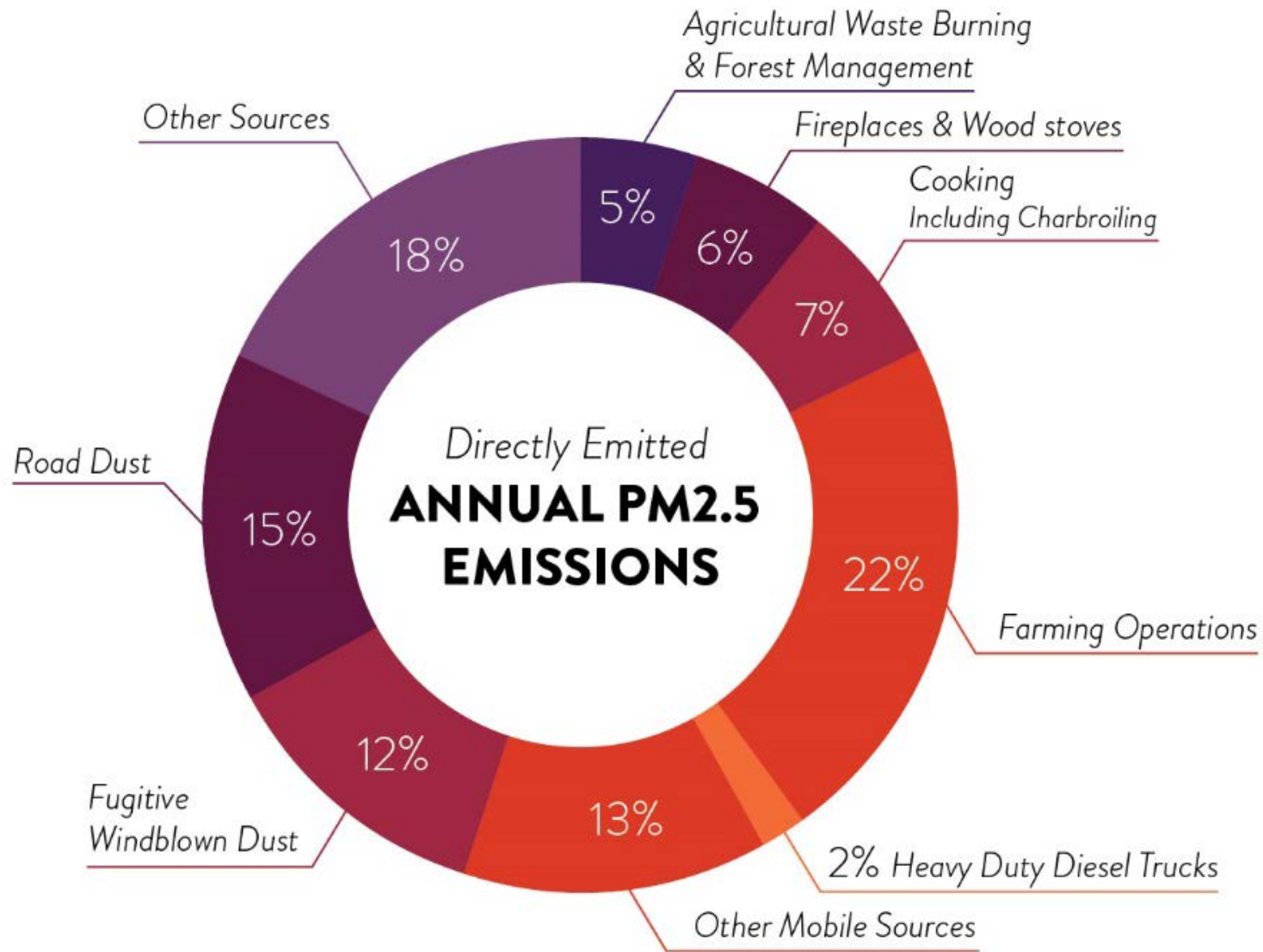


# Particulate Matter

- **PM2.5 (Particulate Matter, 2.5 microns and smaller)**
  - Winter problem: Emissions from burning in fireplaces and wood stoves.
  - Also generated during wildfires.
  - More dangerous than larger particles because PM2.5 can travel deeper into the lungs.
  - High concentrations can trigger heart attacks, strokes, aggravate asthma and bronchitis; and increase susceptibility to respiratory infections.
  - Strong correlation between PM levels, hospital admissions and premature death.
- **PM10 (Particulate Matter, 10 microns and smaller)**
  - Fall problem. Mostly dust and larger particles.



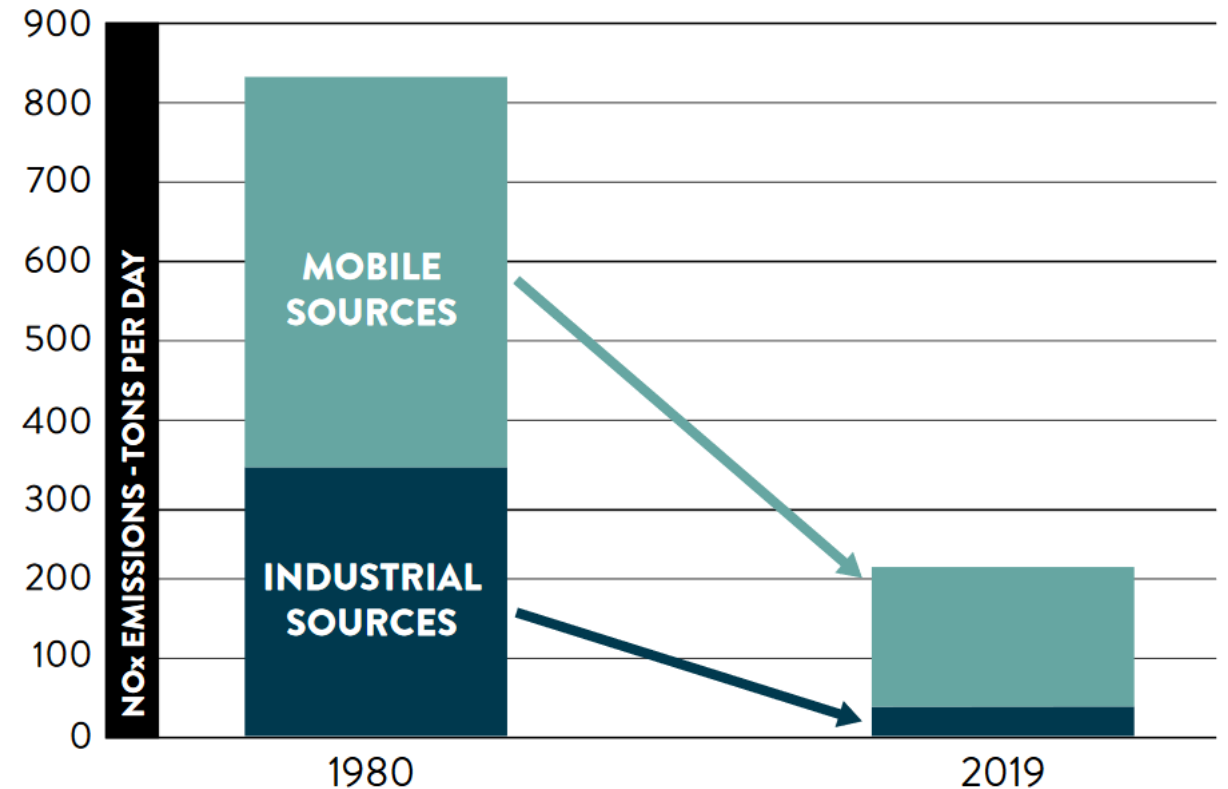




# Progress to Date

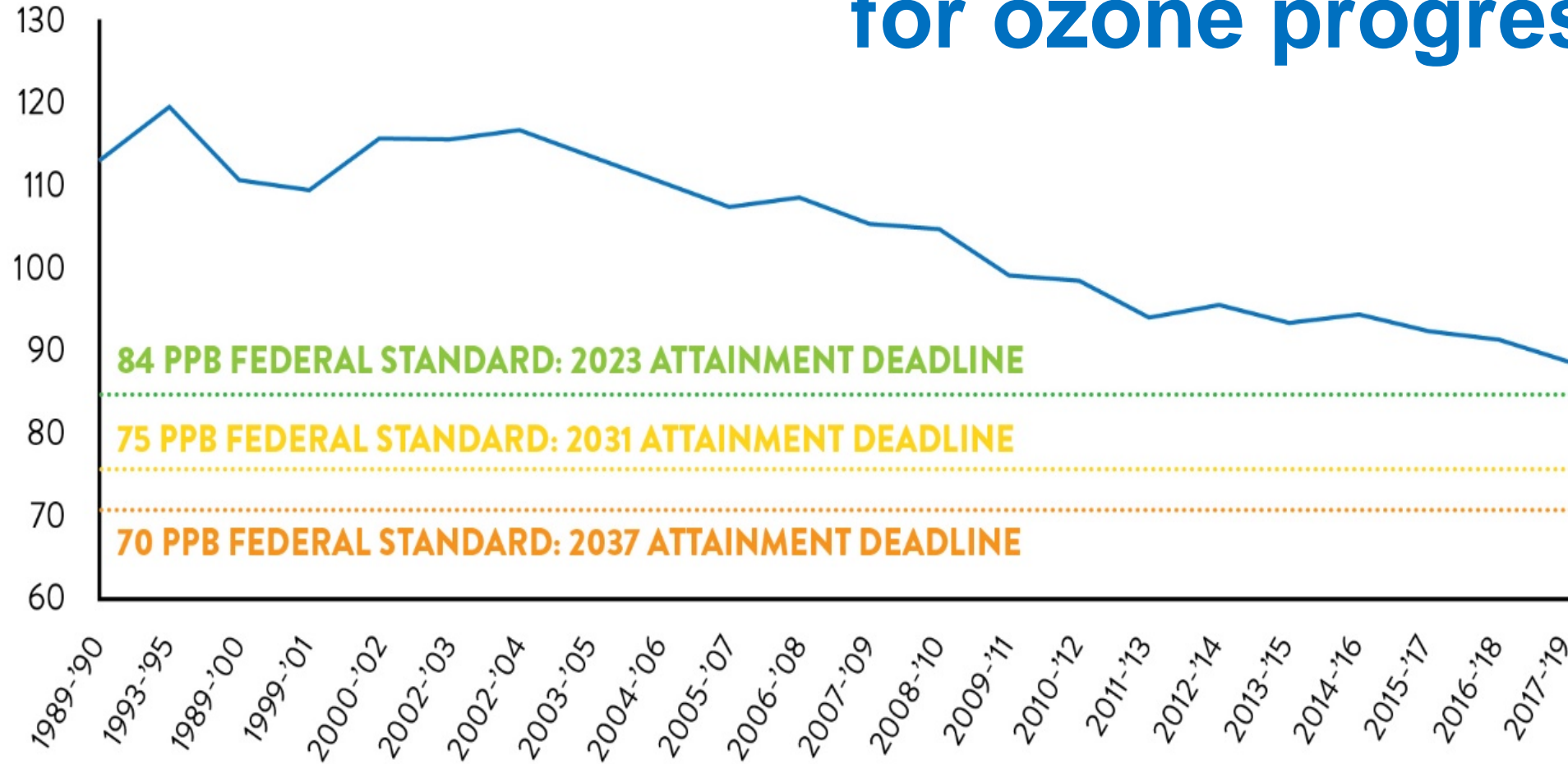
- 92% reduction in emissions from Valley businesses
- Reached attainment of the PM10 Standard in 2005
- First and only region in nation to go from “Extreme” classification to attainment of 1-hour Ozone Standard
- Historic progress possible through investment and sacrifice by businesses and residents
- 2018 PM2.5 Plan demonstrates strategies for attainment by 2025 deadline

**MAJOR REDUCTIONS IN POLLUTION**



# 2019 record-setting year for ozone progress

8-HOUR OZONE DESIGN VALUE (PPB)



84 PPB FEDERAL STANDARD: 2023 ATTAINMENT DEADLINE

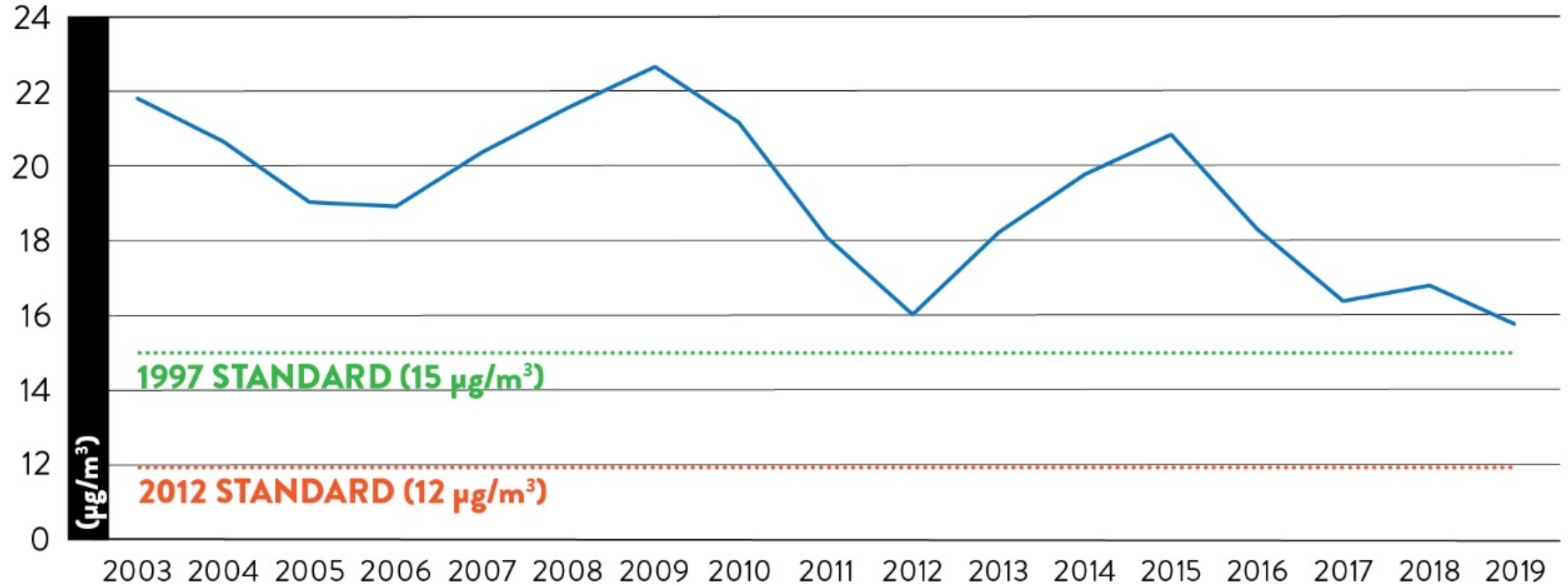
75 PPB FEDERAL STANDARD: 2031 ATTAINMENT DEADLINE

70 PPB FEDERAL STANDARD: 2037 ATTAINMENT DEADLINE

Design value describes the air quality status of a given location relative to the level of the National Ambient Air Quality Standard (NAAQS).

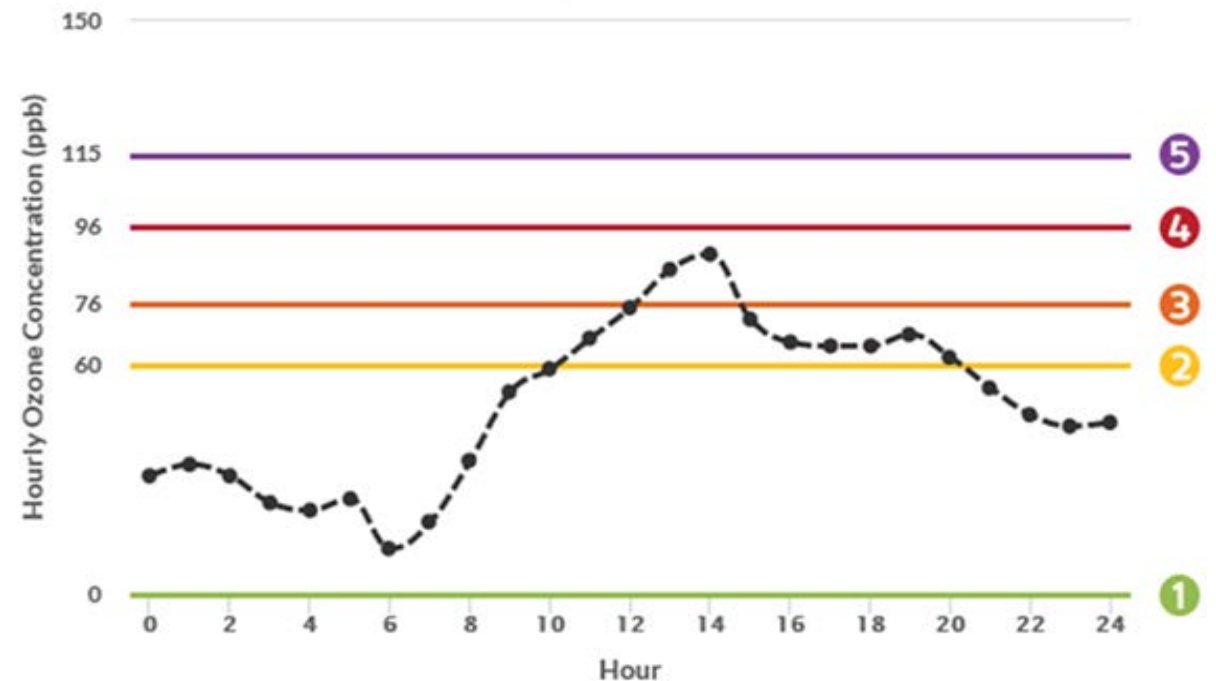
# 2019-2020 winter season cleanest on record

## ANNUAL PM2.5 DESIGN VALUE TREND



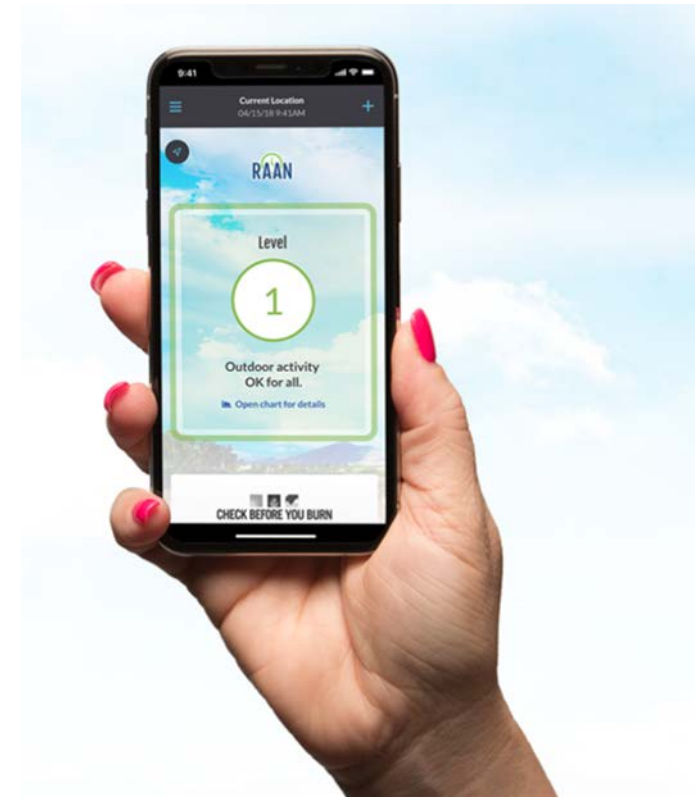
# Receive current air quality information

- **RAAN** – Real-Time Air Advisory Network
  - Online or mobile device access to real time, hourly air-quality information for your area, 24 hours a day
  - Access to actual concentrations of ozone and PM2.5
  - Outdoor activity recommendations based on five different levels
- Access RAAN
  - [www.myraan.com](http://www.myraan.com)
  - Free “Valley Air” app



ROAR Level	Guidelines
<b>LEVEL 1</b>	Outdoor activity OK for all
<b>LEVEL 2</b>	Sensitive individuals should consider reducing prolonged and/or vigorous outdoor activities.
<b>LEVEL 3</b>	Sensitive individuals should exercise indoors or avoid vigorous activities.
<b>LEVEL 4</b>	Sensitive individuals should exercise indoors. Everyone should avoid prolonged or vigorous outdoor activities.
<b>LEVEL 5</b>	Everyone should avoid outdoor activity.

# Valley Air App





# HEALTHY AIR LIVING™ SCHOOLS

- Engagement with Valley schools
- Educating children, parents and teachers on air quality and District programs
- Protecting health and well-being of Valley children/students
- Encourage use of District's RAAN (Real-time Air Advisory Network) as a tool to modify outdoor activities based on air quality
- Anti-idling campaign (Eng/Sp signs available)
- Annual calendar contest
- Healthy Air Heroes Activity Kits for grades K-6



# Grants and Incentives

- Business
- Public agencies
- Residents
- Technology



In 2019, the District invested more than \$250 million in clean air projects. To date, the District has committed more than \$2 billion, helping reduce approx. 140,000 tons of emissions.





# What you can do



- Reduce vehicle emissions by carpooling, riding the bus, walking or riding your bike
- Avoid vehicle idling
- Seek ways to reduce energy at home and work
- Check Before You Burn or refrain from burning

- Use air-friendly lawn equipment
- Consider switching to an electric vehicle
- Keep gasoline vehicles well-tuned
- Take advantage of the many Air District grant programs: [valleyair.org/grants/](http://valleyair.org/grants/)



# Need more information?

Contact Outreach and Communications  
[public.education@valleyair.org](mailto:public.education@valleyair.org)

Fresno office (559) 230-6000

Modesto office (209) 557-6400

Bakersfield office (661) 392-5500

For information on District rules and programs visit:

[www.valleyair.org](http://www.valleyair.org)

[www.healthyairliving.com](http://www.healthyairliving.com)

Follow us on  
social media



Use the Valley Air  
App for the latest  
air quality info.

