

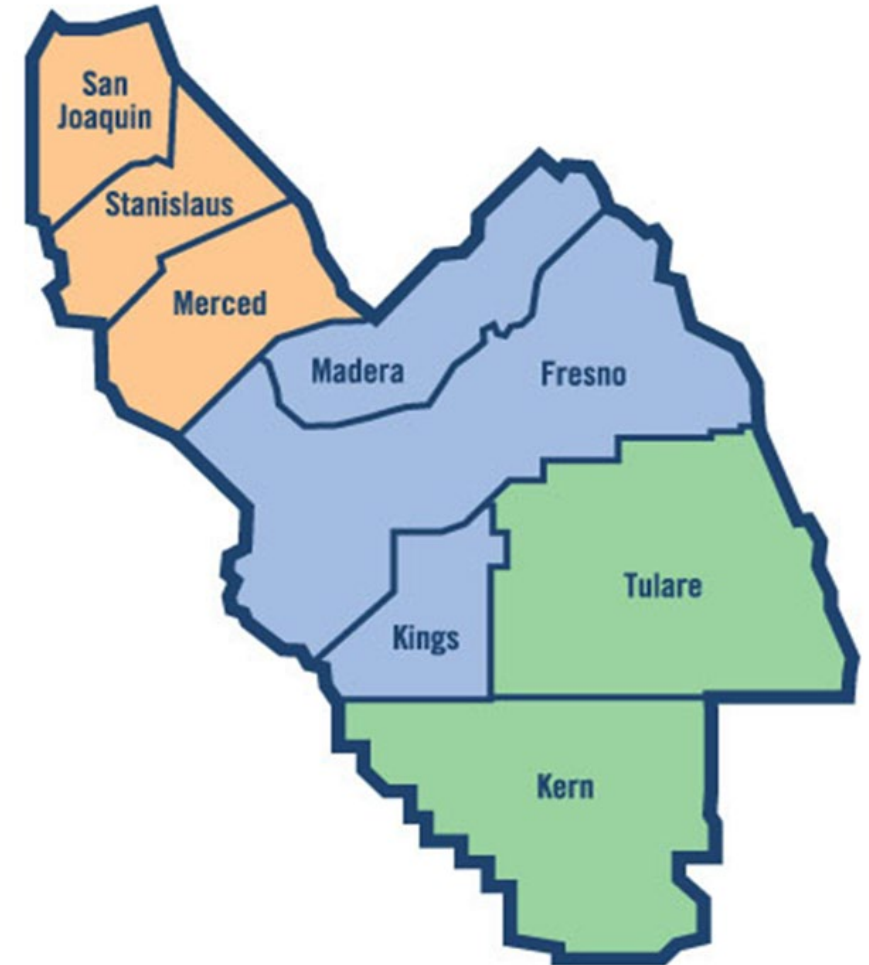


HEALTHY AIR LIVING™

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 PM2.5.



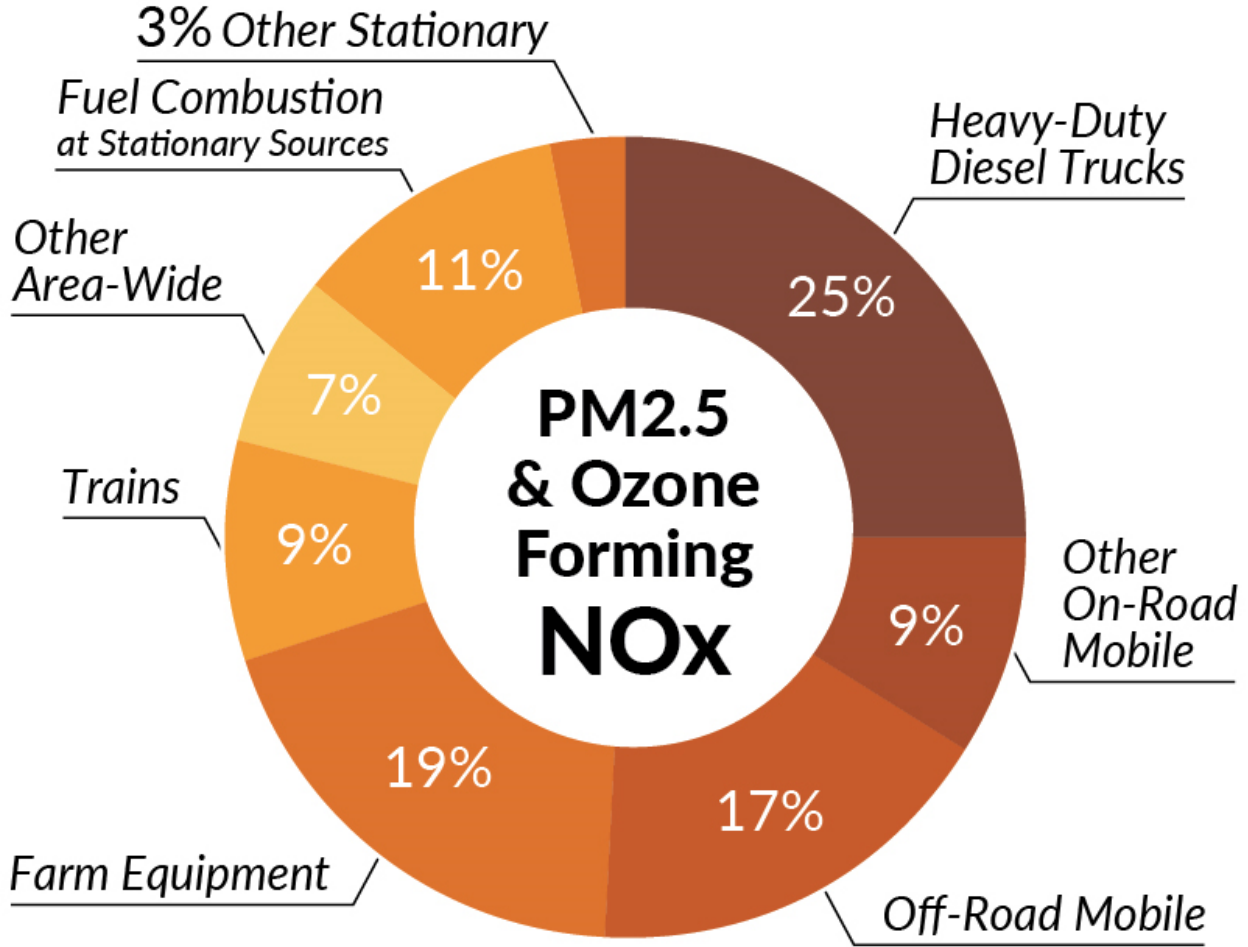
Ozone

- Ozone: Main component of summertime 'smog.'
- Odorless, colorless, corrosive gas, resulting from chemicals cooking in sunlight and heat.
- Made up of nitrogen oxides (NO_x) 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).
- Mobile sources account for up to 85 percent of the Valley's smog.

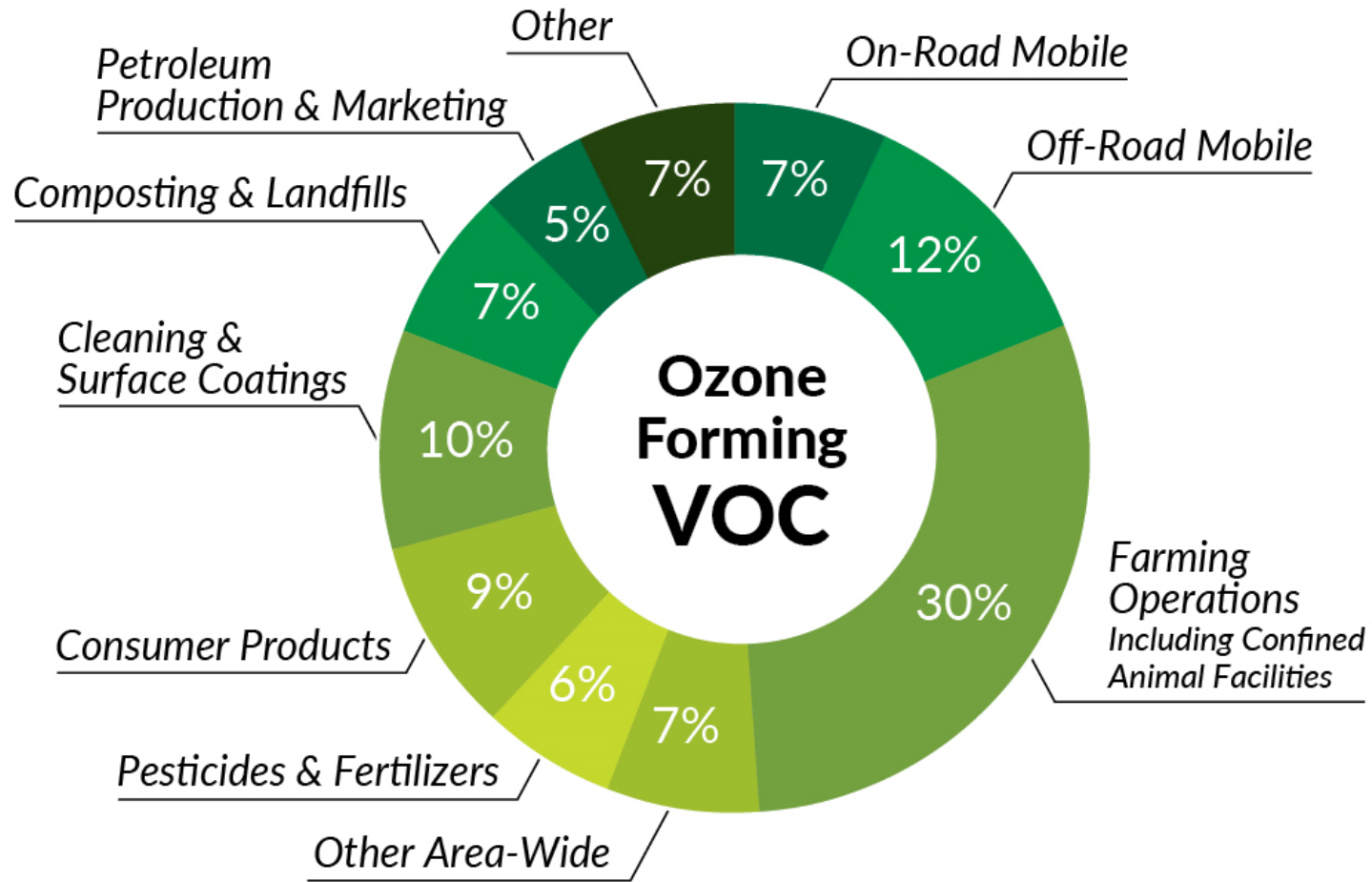


Industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors and chemical solvents are major sources of oxides of nitrogen (NO_x) and volatile organic compounds (VOC).

Sources of Air Pollution

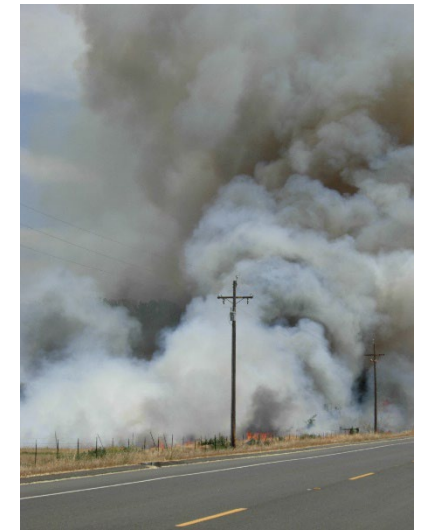


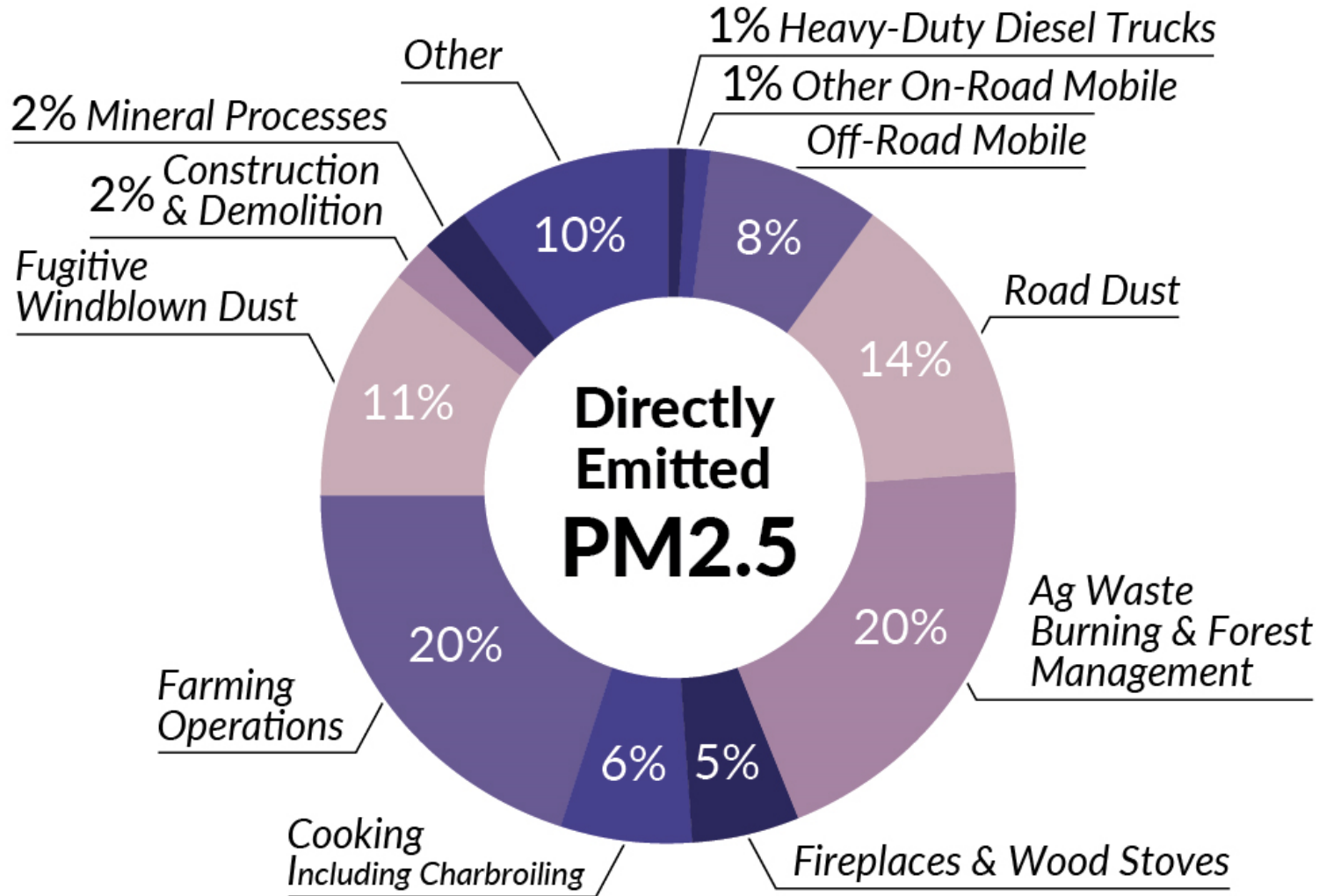
Sources of Air Pollution (cont.)



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.

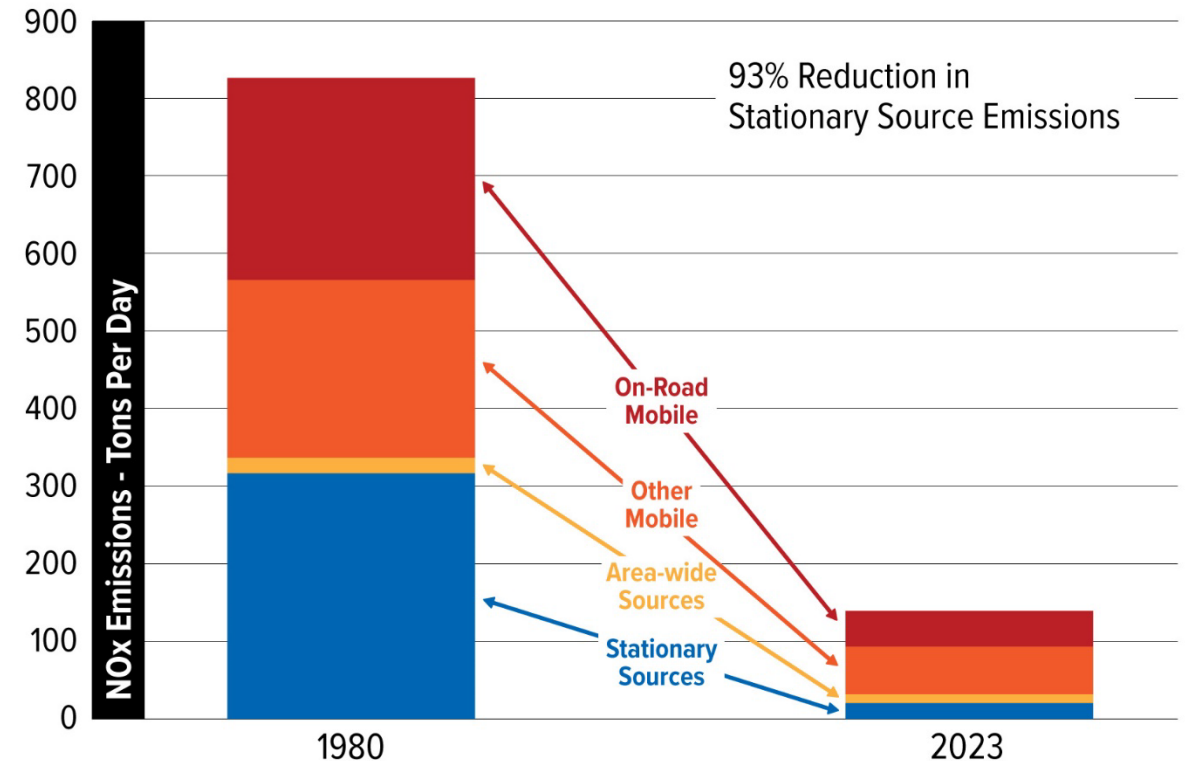




Progress to Date

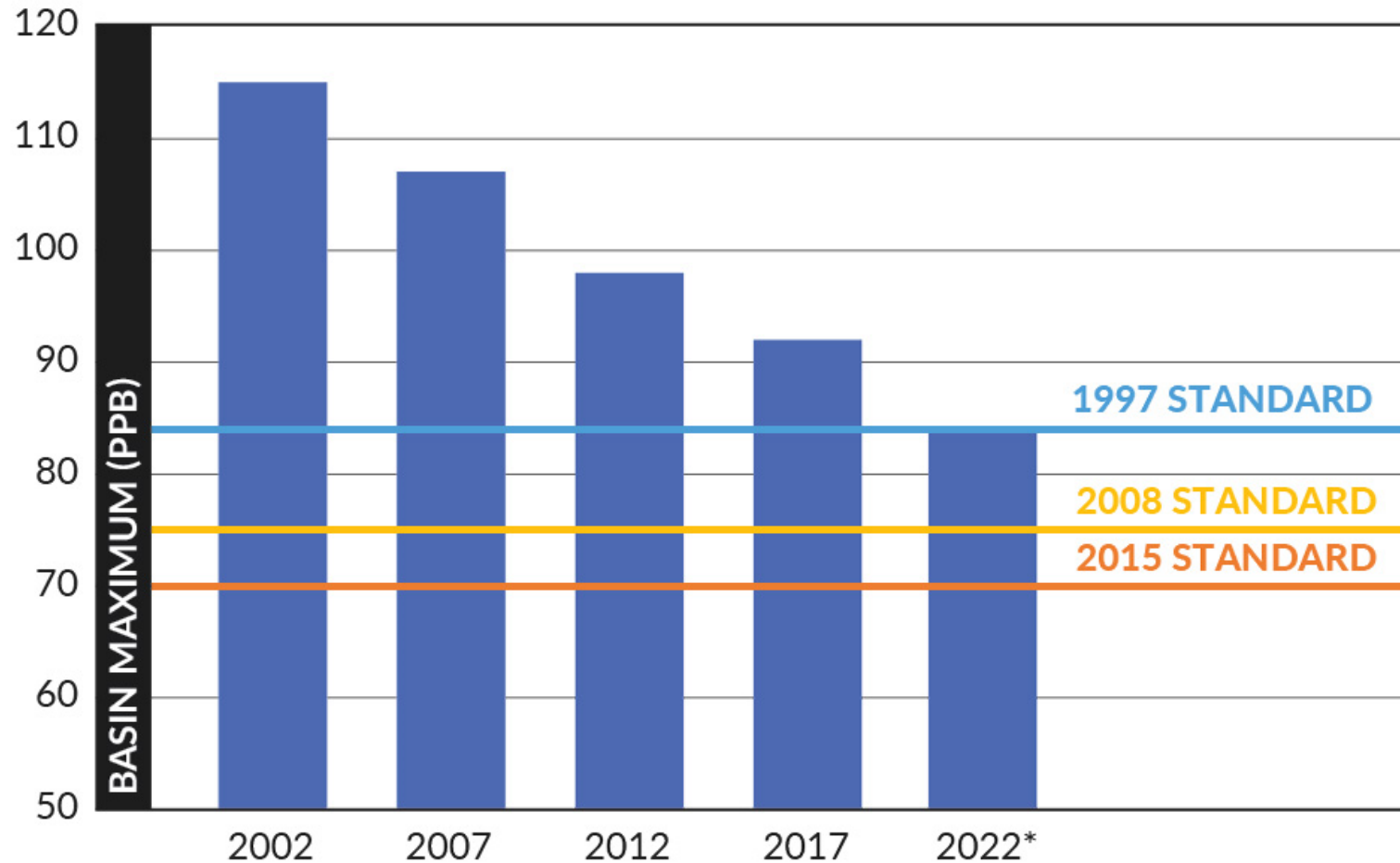
- 93% reduction in emissions from Valley businesses
- Reached attainment of the PM10 Standard in 2005
- First and only region in nation to go from “Extreme” classification to attainment of 1-hour Ozone Standard
- Historic progress possible through investment and sacrifice by businesses and residents

Major Reductions in Pollution



Progress to Date (cont)

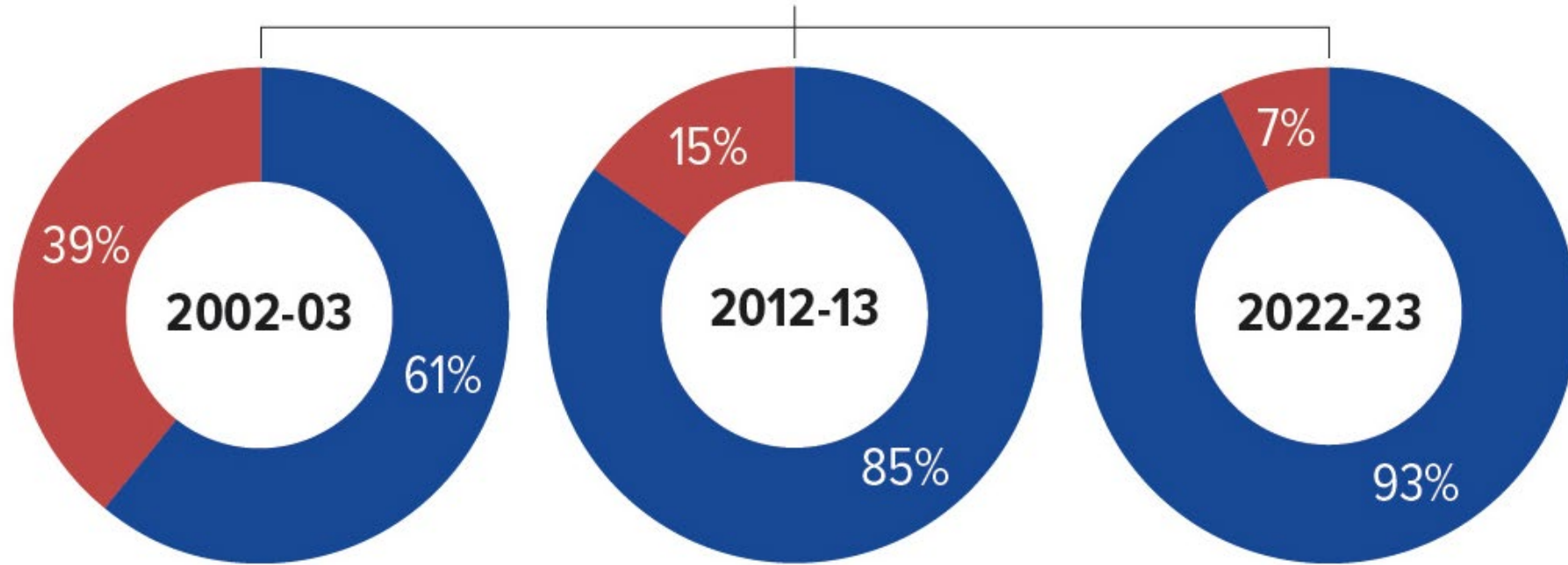
8-HR OZONE DESIGN VALUE PROGRESS



The Valley is on the verge of attaining the 8-hour standard of 84 ppb, while progressing towards the more stringent standards of 75 ppb and 70 ppb.

Progress to Date (cont)

DAYS MEETING vs DAYS EXCEEDING the PM2.5 STANDARD DURING WINTER MONTHS



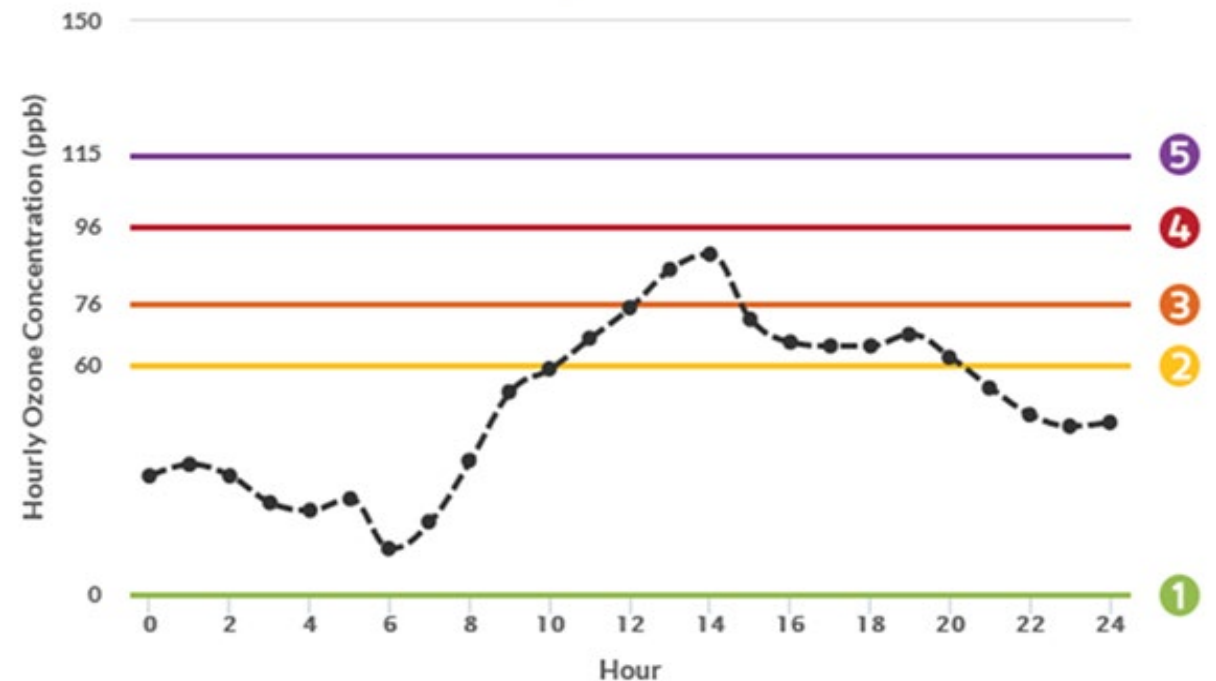
Through the implementation of air quality improvement strategies in the Valley over the past 20 years, concentrations of PM2.5 have decreased significantly across the region, as displayed above.

Receive current air quality information

- **RAAN** – Real-Time Air Advisory Network
 - myRAAN.com or the Valley Air App
 - 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

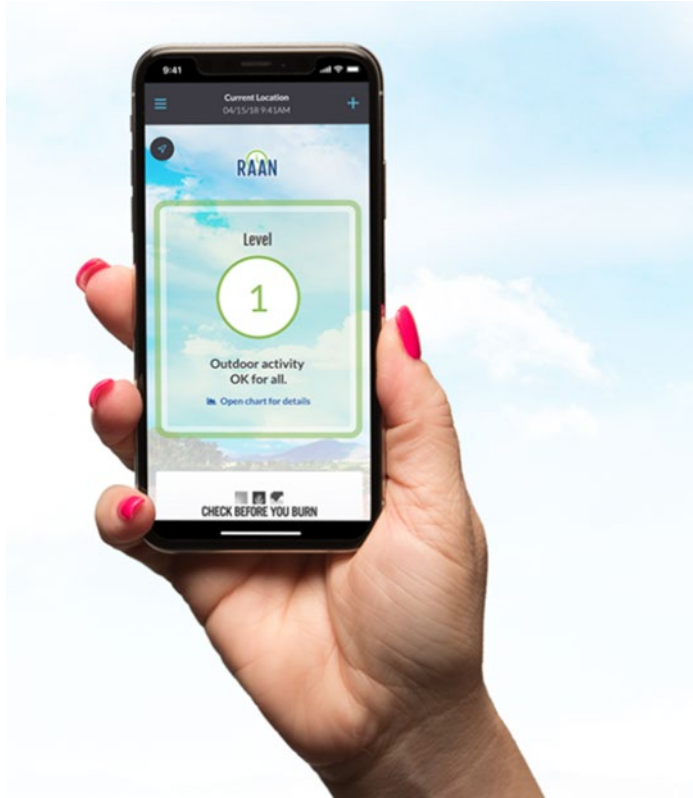
Additional air quality tools available, including:

Airnow.gov



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

Through a combined public/private investment of more than \$2 billion to date, the District has been able to reduce tens of thousands of tons of harmful emissions through a variety of cost-effective, voluntary incentive programs.



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
- Refrain from burning wood and never burn trash

- 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/



Need more information?

Contact Outreach and Communications

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Modesto office (209) 557-6400

Bakersfield office (661) 392-5500

www.valleyair.org



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Download the Valley Air app