

Core Values of the Valley Air District



- Protection of public health
- Active and effective air pollution control efforts with minimal disruption to the Valley's economic prosperity
- Outstanding customer service
- Open and transparent public processes
- Ingenuity and innovation
- Effective and efficient use of public funds
- Respect for the opinions and interests of all valley residents



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Valley Air District

- Regional agency responsible for air quality management in eight counties
 - San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the valley air basin portions of Kern
- Governed by a 15-member Board
 - Board of Supervisor of all eight counties
 - Five council members from Valley cities
 - Two governor-appointed public members
- Regulates stationary sources



Valley Challenges Unmatched

- Surrounding mountains and meteorology create ideal conditions for air pollution formation and retention
- Chronic poverty and unemployment rates
- High rate of population growth
- I-5 and Hwy 99 (major transportation arteries) run all the way through Valley



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Valley's Efforts to Reduce Air Pollution

- Stationary sources including agriculture
 - Toughest air regulations in the nation
 - Adopted over 500 stringent rules and regulations
 - Groundbreaking rules serve as model for others
 - Over 80% reduction in stationary source emissions
- Mobile sources
 - Indirect Source Review rule & active participation in CEQA
 - Employer Based Trip Reduction
 - Voluntary incentive programs (\$1 billion in public and private investment reducing 100,000 tons of emissions)
- Public education and participation
 - Build public support for tough measures adopted
 - Urge air friendly behavior by the public



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Progress to Date

- 80% reduction in emissions from Valley businesses
- Reached attainment of the PM10 standard in 2005
- Valley has experienced two consecutive years with no violations of 1-hour ozone standard
- First and only region in nation to go from “Extreme” classification to attaining the standard
- Population exposure to high ozone has been significantly reduced (90% reduction)
- On the verge of meeting the toughest PM2.5 standard prior to the extreme drought
- Historic progress possible through investment and sacrifice by businesses and residents



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Pollutants of Concern

- Particulate Matter
 - Two sizes: 2.5 and
 - 10 microns
- Ozone
 - Averaged over eight-hour period (previously 1-hr)



Two different pollutants with two different causes, seasons and health effects.

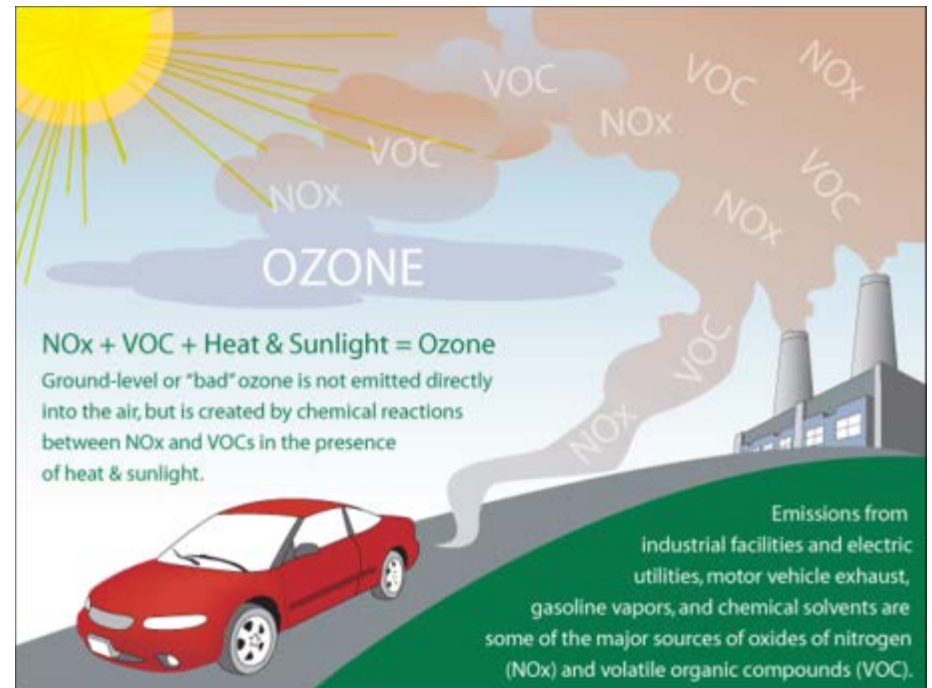


HEALTHY AIR LIVING™

Live a Healthy Air Life!

Ozone

- Main component of summertime 'smog'
- Odorless, colorless gas resulting from chemicals cooking in sunlight and heat
- Made up of nitrogen oxides (NO_x) and volatile organic compounds (VOCs)
- Produced by internal-combustion engines (mobile sources), industrial processes, agriculture, consumer products (lawnmowers, paints and solvents, etc)
- Vehicle use accounts for up to 80 percent of smog problem



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Particulate Matter

- **PM10**

- Fall problem, mostly dust, larger particles. Also includes PM2.5

- **PM2.5**

- Winter problem, emissions from burning, more dangerous than larger particles
- In winter, wood burning can produce up to 17 tons of PM per day throughout the Valley.
- Triggers heart attacks, aggravates asthma, bronchitis. Susceptibility to respiratory infections. Strong correlation between PM levels, hospital admissions and deaths.

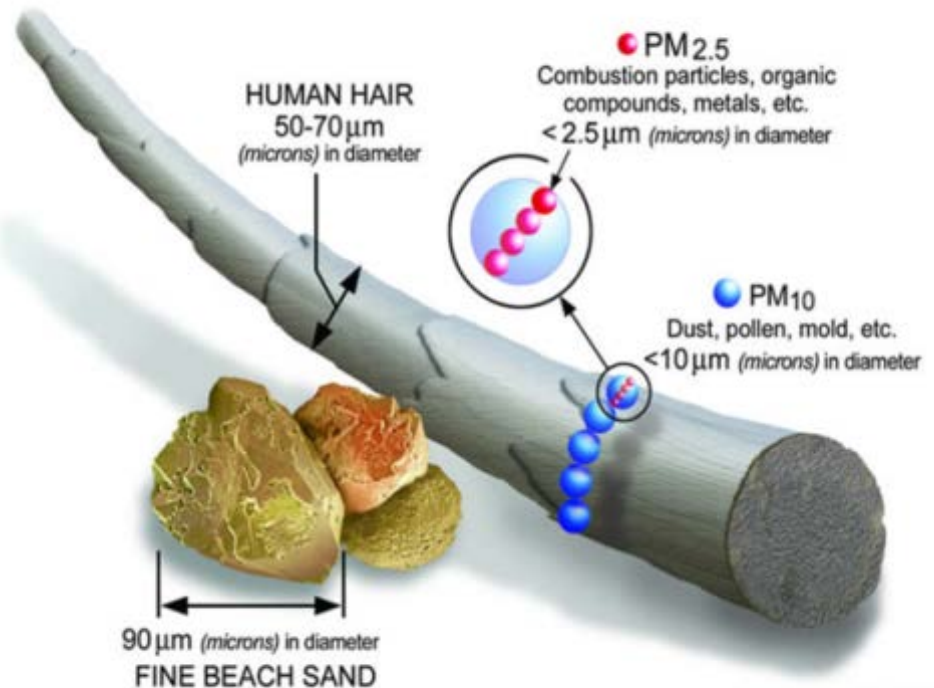


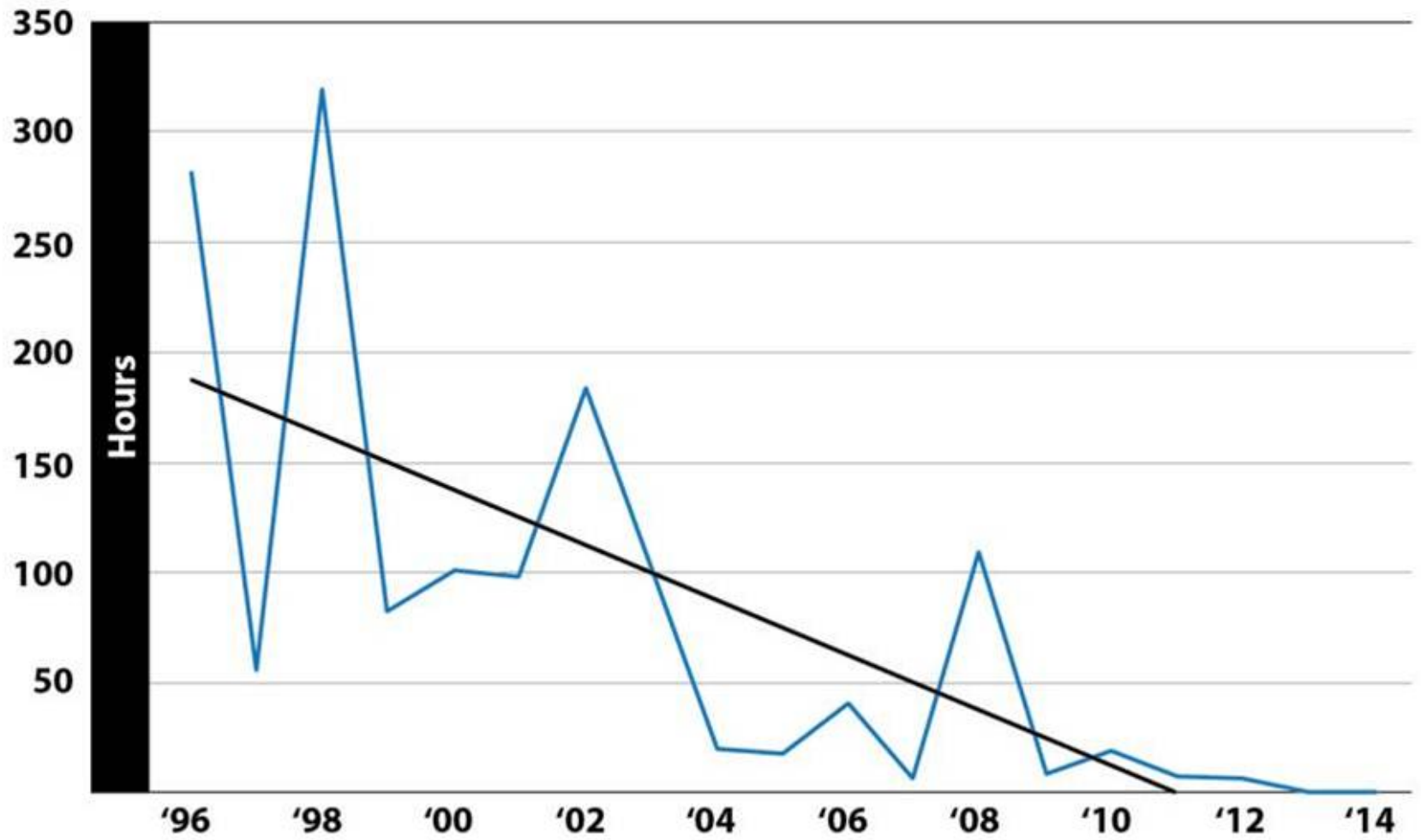
Image courtesy of the U.S. EPA



HEALTHY AIR LIVING™

Live a Healthy Air Life!

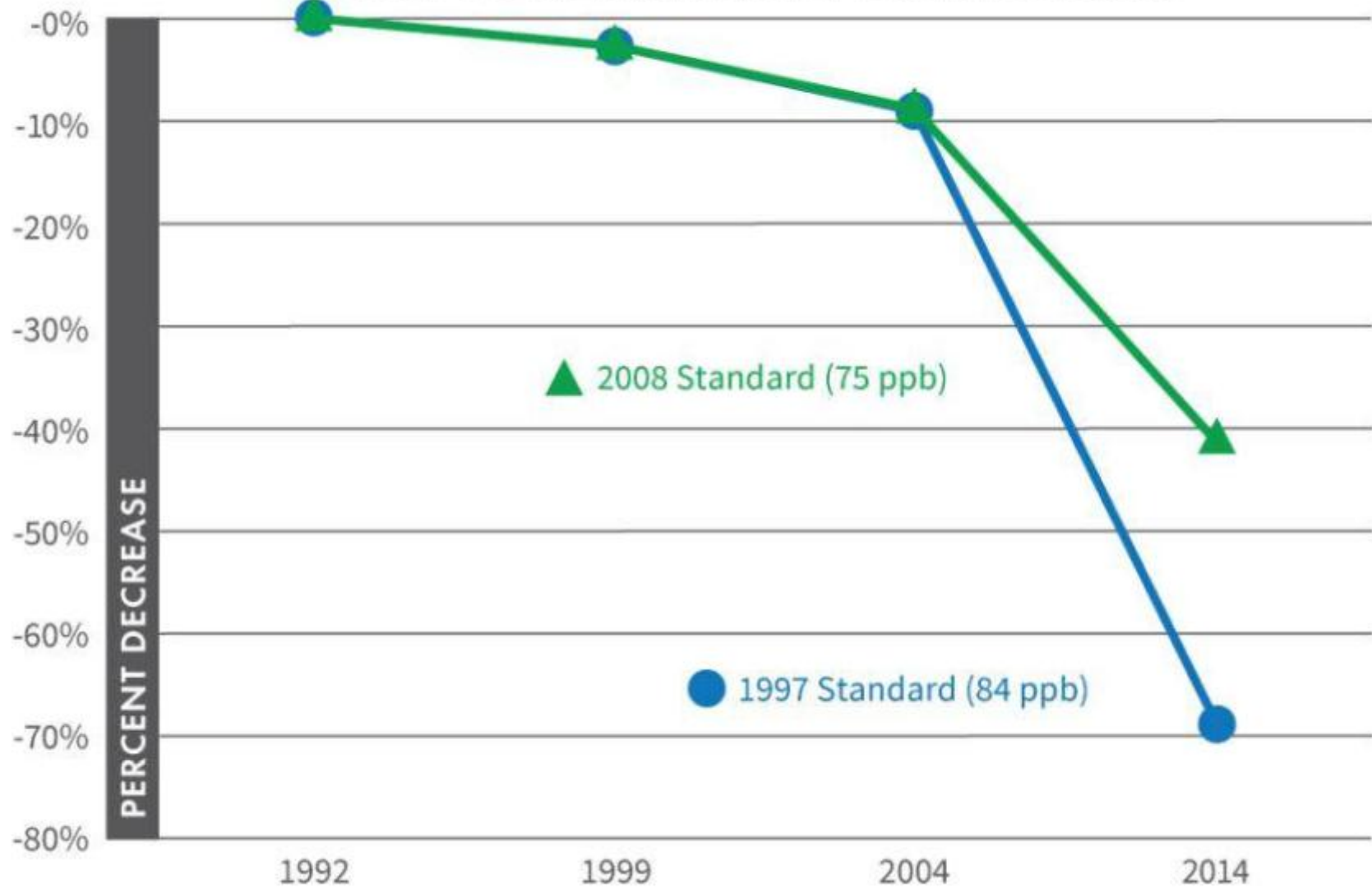
Total Hours over the 1-hr Ozone Standard



HEALTHY AIR LIVING™

Live a Healthy Air Life!

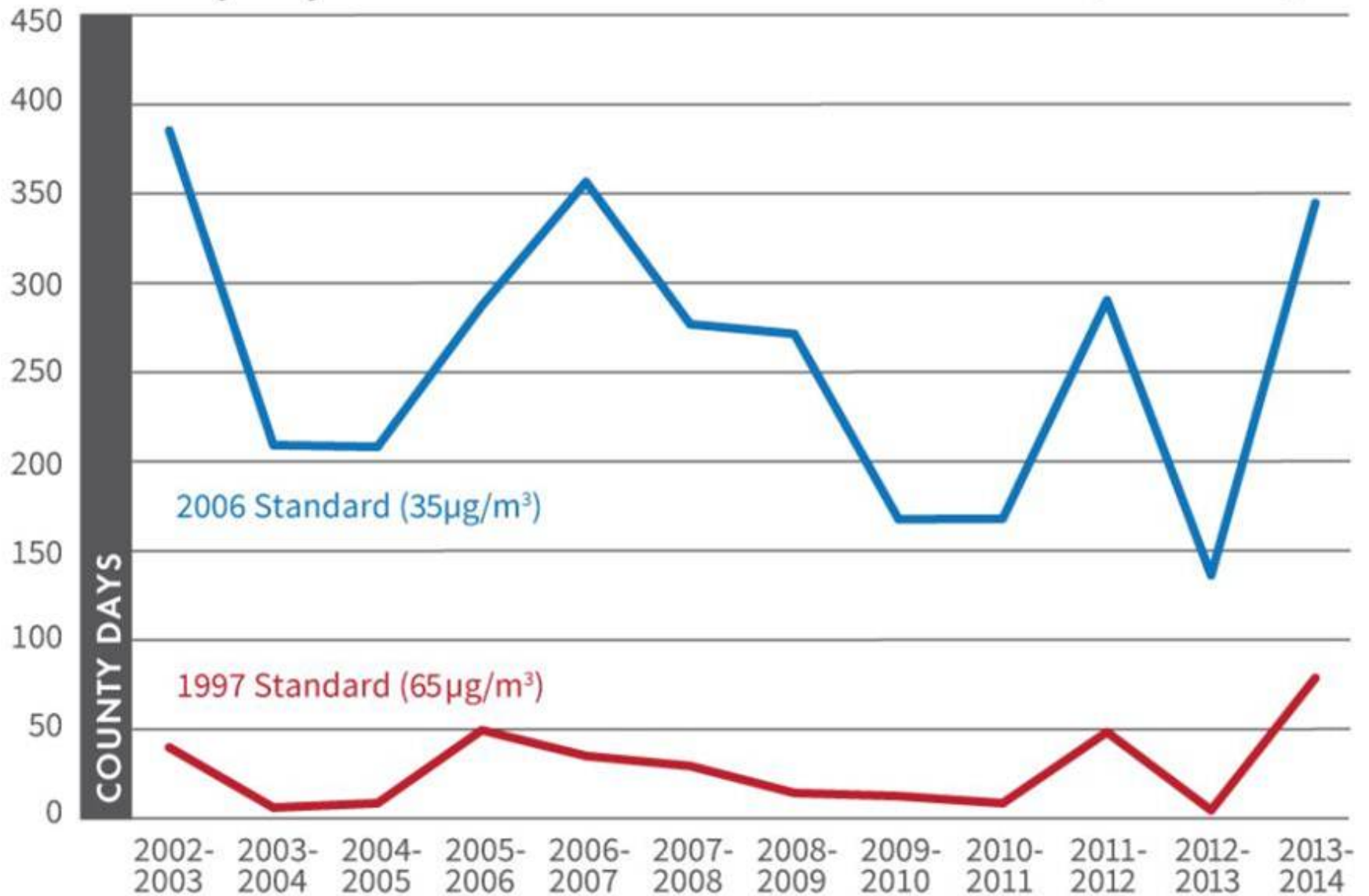
8-hour Ozone Exceedance Percent Decrease



HEALTHY AIR LIVING™

Live a Healthy Air Life!

County Days over Federal 24-hour PM2.5 Standard (Nov - Feb)



HEALTHY AIR LIVING™

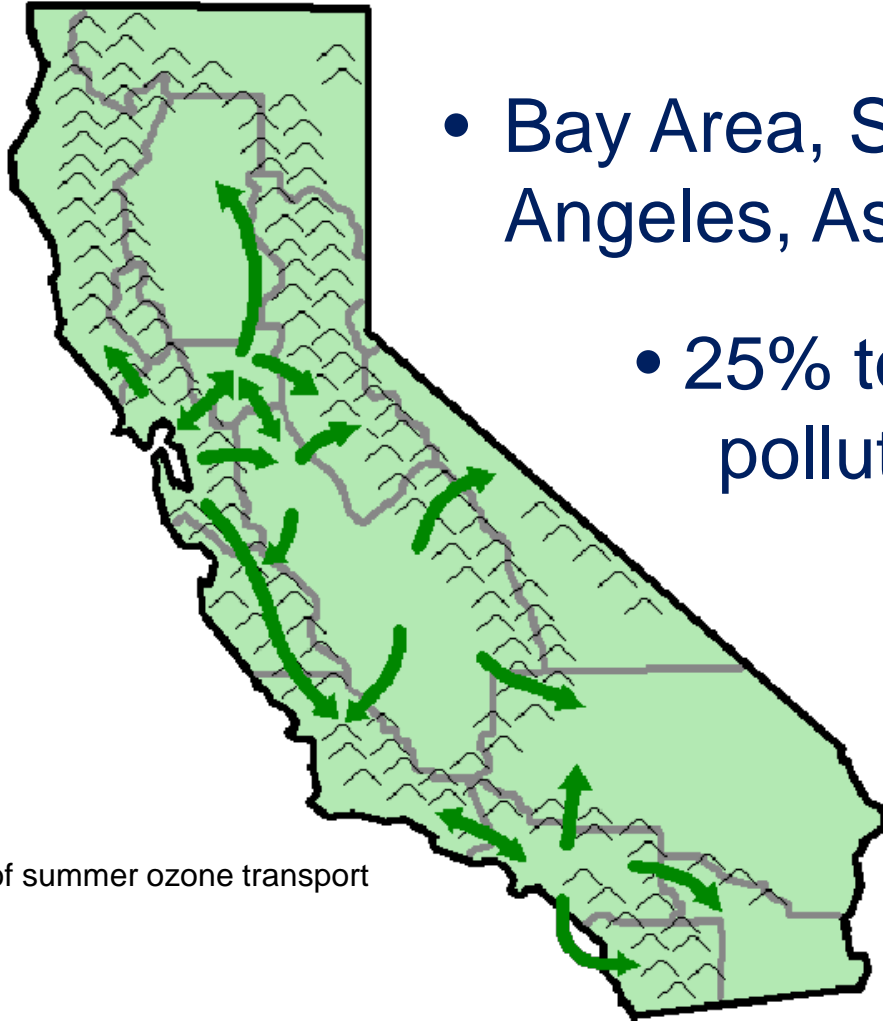
Live a Healthy Air Life!

Pollution Transport

- Bay Area, Sacramento, Los Angeles, Asia

- 25% to 5% of pollution in the Valley

- Increasingly important as goals become tighter



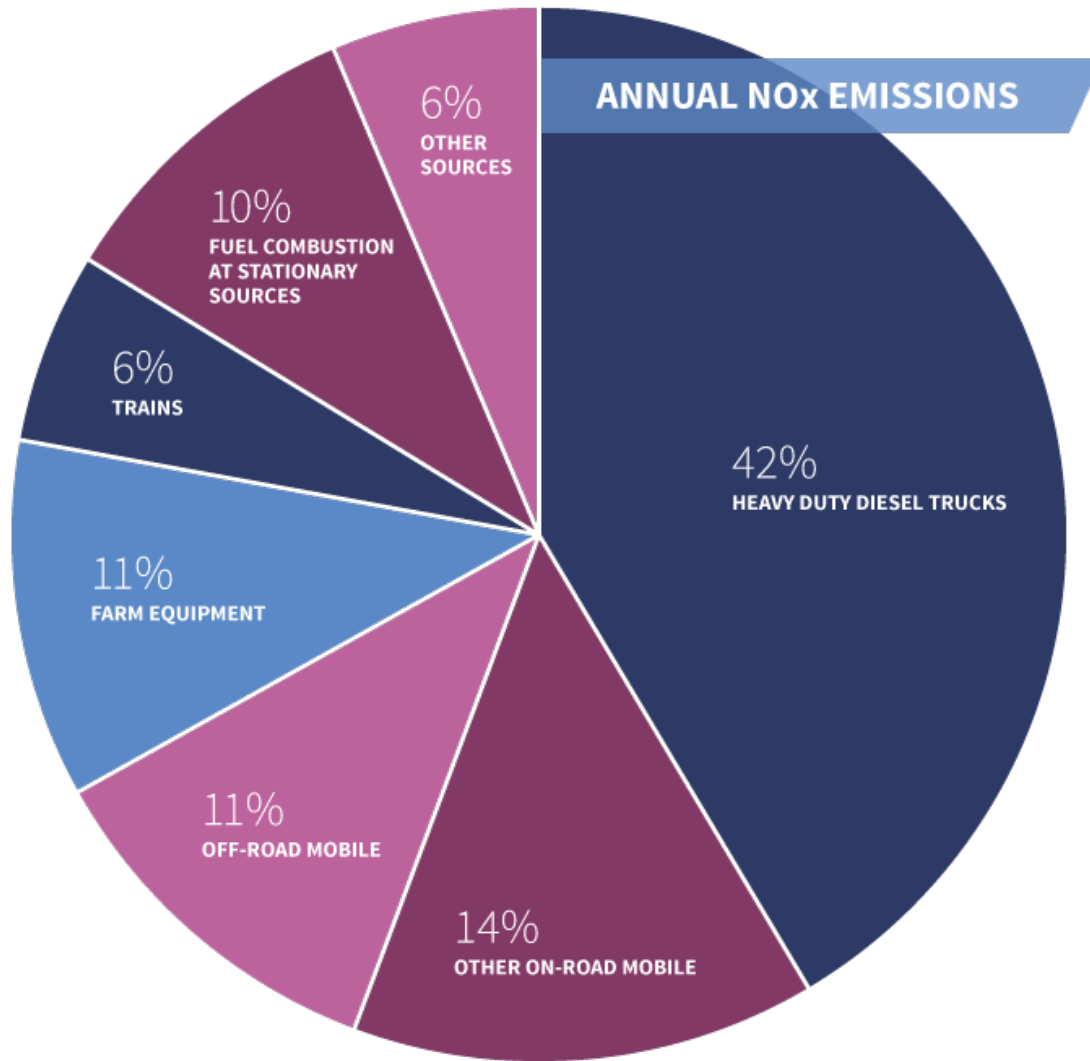
Example of summer ozone transport



HEALTHY AIR LIVING™

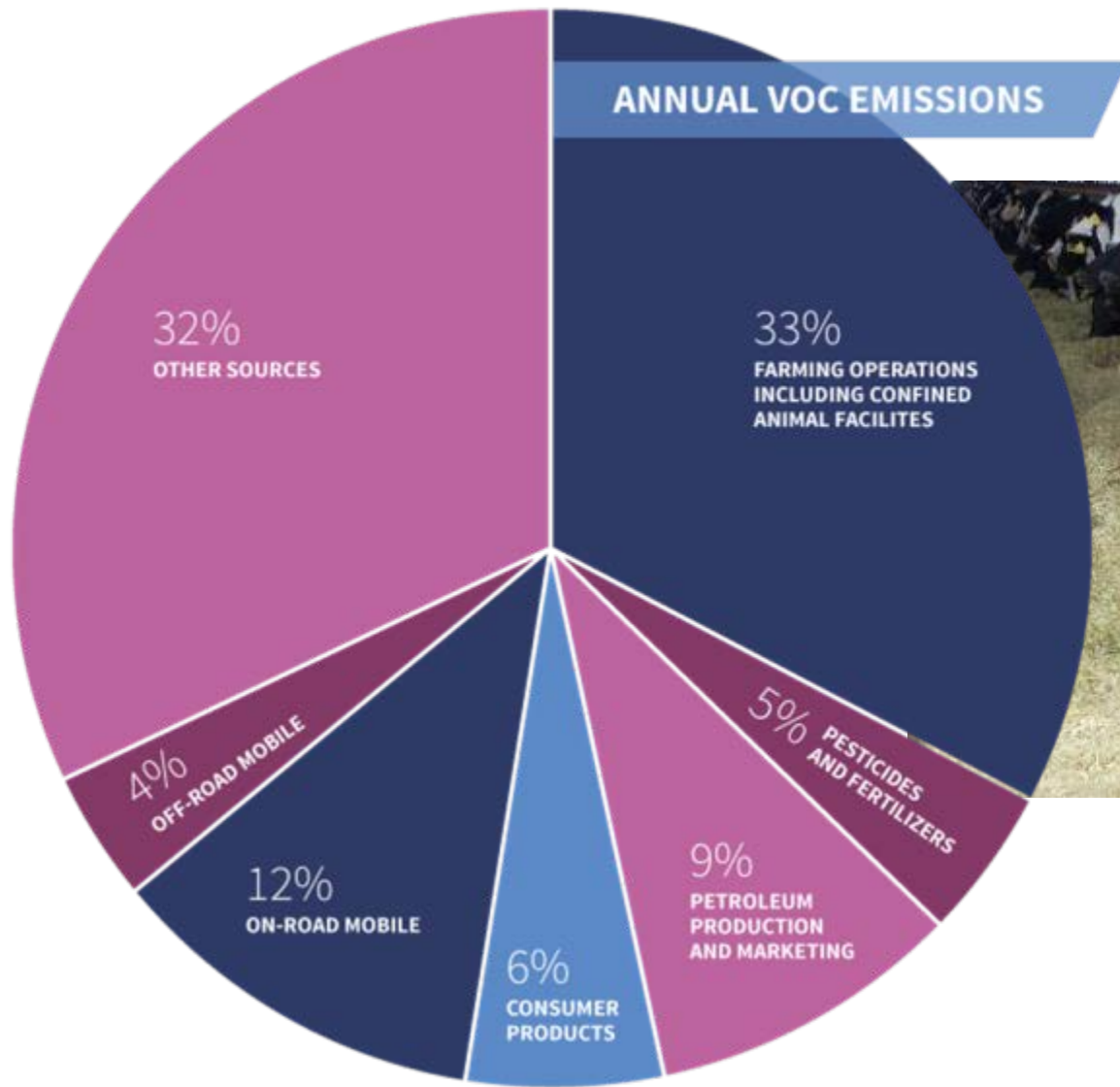
Live a Healthy Air Life!

Sources of Air Pollution



HEALTHY AIR LIVING™

Live a Healthy Air Life!



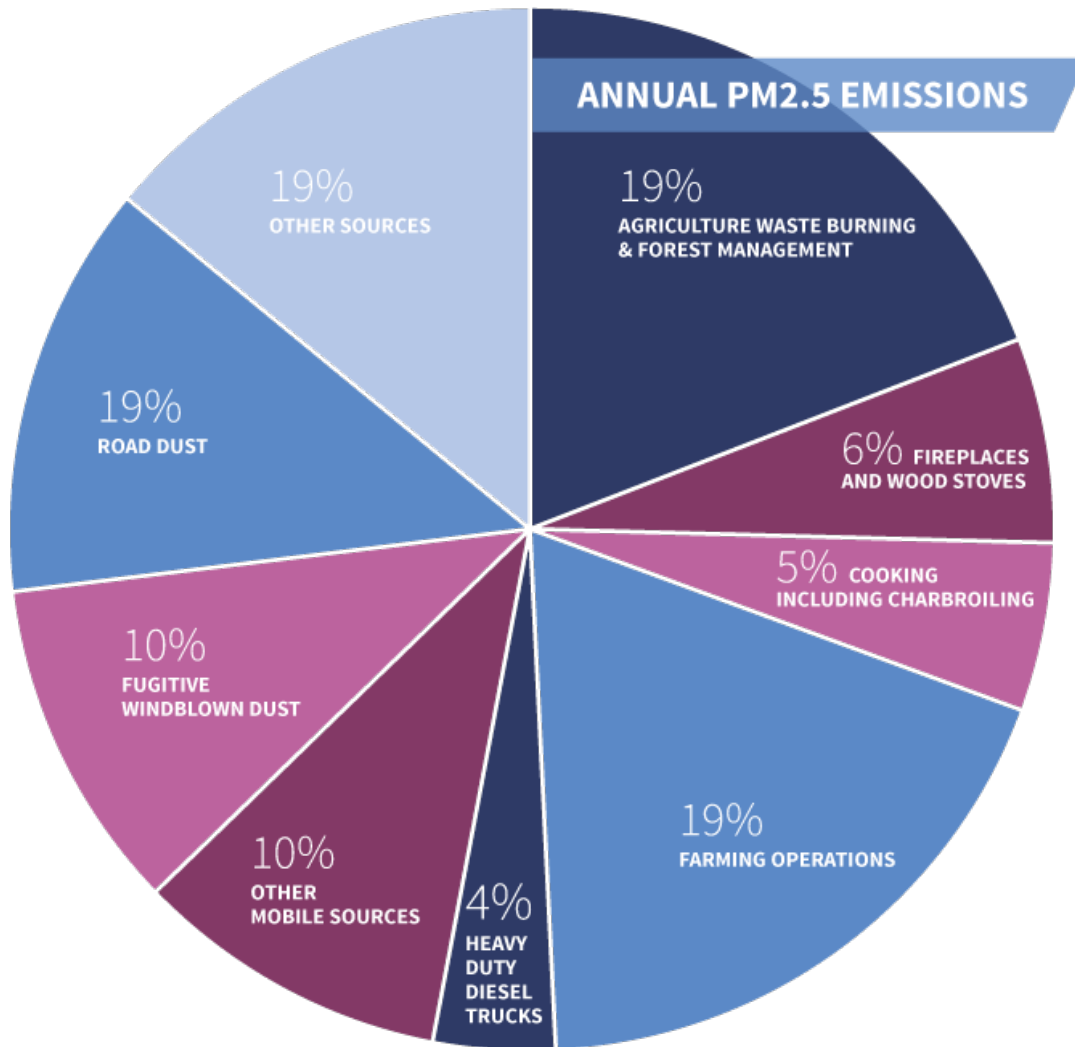
Sources of Air Pollution



HEALTHY AIR LIVING™

Live a Healthy Air Life!

Sources of Air Pollution



Need more information?

Contact Outreach and Communications

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 our websites:

www.valleyair.org

www.healthyairliving.com



HEALTHY AIR LIVING™

Live a Healthy Air Life!