

CAN WE IMPROVE AIR QUALITY?

The Challenge

Accommodating growth and addressing air quality



Source: Environment Canada

RESPIRATORY DISEASE. Childhood asthma rates are higher in the San Joaquin Valley than anywhere in the state—children living here are 66% more likely than average to develop asthma.

Source: California Health Interview Survey, 2007



Source: flickr - aesegars

ECONOMIC IMPACTS. Our air quality impacts the economic health of the community through increased health care costs and reduced investment by companies deterred by unhealthy air. Health-related impacts of particulate matter (PM) costs the San Joaquin Valley \$3 billion each year.

Source: Central Valley Air Quality Coalition; Cal State Fullerton, 2006.

One in five children in the Fresno area have asthma.

Source: California Health Interview Survey, 2007



FEDERAL FUNDING AT RISK. Fresno is currently in serious nonattainment with Federal air quality standards. Continued failure to comply with standards could result in the loss of over \$2 billion in federal funding for road projects.

Source: U.S. Environmental Protection Agency (EPA), 2008; Fresno Bee, 2002

Where does our pollution come from?

Pollution in the Fresno area is among the worst in the country.

Source: U.S. EPA, 2007

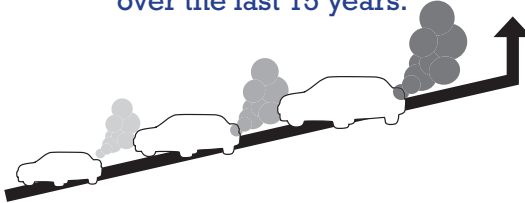


Source: flickr - JStar

CARS and TRUCKS. Transportation is the primary source of harmful ozone-forming emissions. Nearly 80% of nitrogen oxides (NOx) and 64% of carbon monoxide (CO) in the Valley are emitted by cars and trucks. Vehicles also produce other pollutants, including more than 50% of greenhouse gases like CO₂.

Source: California Air Resources Board, 2007

Vehicle Miles Traveled (VMT) has increased three times faster than the U.S. population over the last 15 years.



VMT is projected to increase another 59% between 2005 and 2030.

In the San Joaquin Valley, VMT is growing at twice the rate of population growth.

Source: Fresno COG



Source: flickr - Anna L. Conti

AGRICULTURE and INDUSTRY. Industrial activity and agriculture produce high levels of dangerous particulate matter (PM). Efforts have brought PM levels in the Valley down since 1990, but Fresno still significantly exceeds state and federal standards.

Source: San Joaquin Valley Air Pollution Control District, 2008

OTHER REGIONS. Not all of our air pollution is home-grown. Airborne emissions blown in from the coastal parts of California account for some Valley pollution, though experts on both sides of the Coastal Range agree the Bay Area's smog is not the key to the Valley's dirty-air problems.

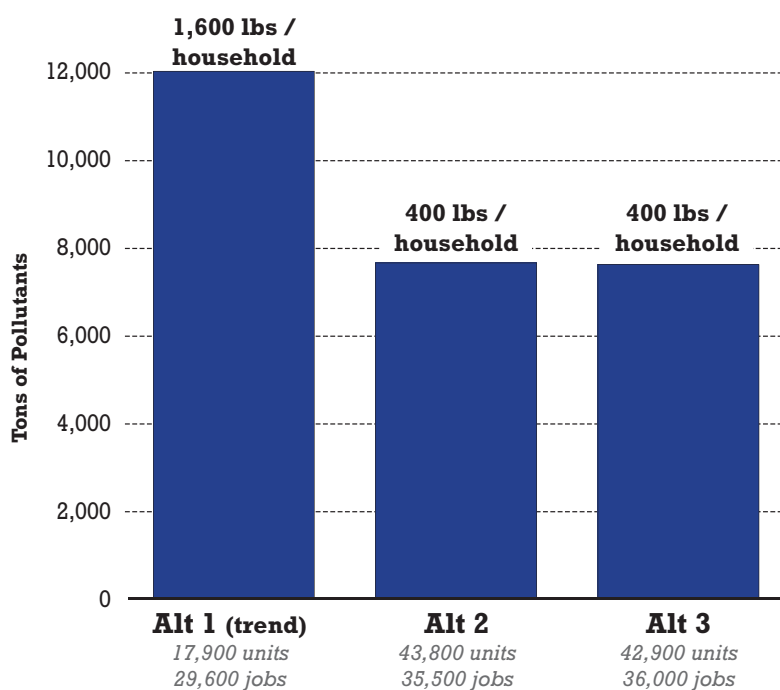
Source: Fresno Bee 2002



Source: flickr - dmealiffe

How can SEGA help?

Better Air Quality By Design



Annual Pollutant Emissions From Transportation

This chart shows the total annual emissions from mobile sources (cars and trucks) for each SEGA alternative

Totals include NOx, CO, PM, Sulfur Dioxide (SO₂), and Reactive Organic Gases (ROG).

SEGA Alternatives 2 and 3 significantly reduce air pollution from cars and trucks.

LESS DRIVING:

The mix of land uses in Alternatives 2 and 3 are organized to reduce reliance on the automobile. More everyday needs are within walking or biking distance, or a short drive or transit trip. Less driving means people use and spend less on fuel, and produce less pollution.