

# Executive Summary

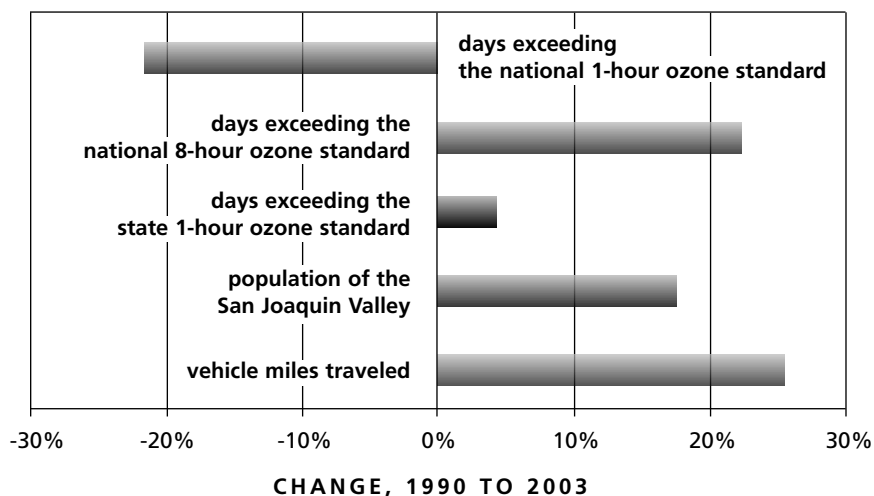
**T**he San Joaquin Valley now officially shares the distinction of having the worst air quality in the nation with the Los Angeles region. Poor air quality is affecting the region's residents, public health, and the economy. Without further action, the problem will only get worse. The population of the region is growing more rapidly than in any other air basin in the state. This growth brings with it increases in vehicle miles traveled and urbanization, both of which counteract progress in emission reductions. As a result, the valley risks becoming the nation's dirtiest region. Strong action by local, state, and federal officials can put the San Joaquin Valley back on the road to clean air, but it will take a coordinated effort and strong leadership that has, to date, been lacking.

## The Problem Is Not Going Away

The San Joaquin Valley air basin has been home to the highest population growth rate in the state and this trend is projected to continue. From 1990 to 2000, the population grew by almost 20% and daily vehicle miles traveled increased more than 25%. Over this time period, violations of the national 1-hour standard for ozone have decreased, but the number of days exceeding the state 1-hour and federal 8-hour standard has increased, as the figure shows.

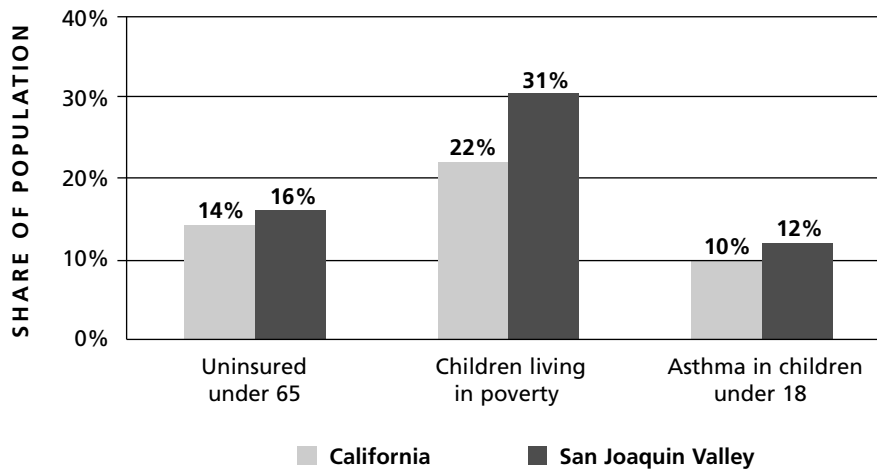
Population growth and its associated pressures are overtaking previous reductions in emissions from a variety of sources. The rate of reduction in days exceeding the federal 1-hour ozone standard has slowed in the past decade, and the decrease since 1990 is much less than has occurred in the

### San Joaquin Valley changes, 1990 to 2003



Note: Population and VMT data for 1990 and 2000  
 Source: CARB, 2004a

**Various indicators comparing the San Joaquin Valley with California as a whole**



*Note: Data on insurance and asthma rates for 2001; data on poverty for 1999  
Source: Porter et al., 2003*

Los Angeles region. No downward trend is apparent in the number of days exceeding either the federal 8-hour or state 1-hour ozone standard, nor are the number of violations of the state and federal particulate matter standards decreasing. This is particularly troubling because projections show that the counties of the San Joaquin Valley are headed for some of the highest population growth rates in the state over the next 50 years.

**Poor Air Quality Is Affecting the Region’s Residents and the Economy**

Residents of the San Joaquin Valley are particularly vulnerable to the effects of air pollution. Rates of asthma, lack of insurance, and childhood poverty are higher in the region than in the state as a whole, as the figure above shows. Each is an indicator of vulnerability to environmental hazards such as air pollution. Fresno County, the location of the worst air quality in the region, is already home to the highest rate of childhood asthma in the state.

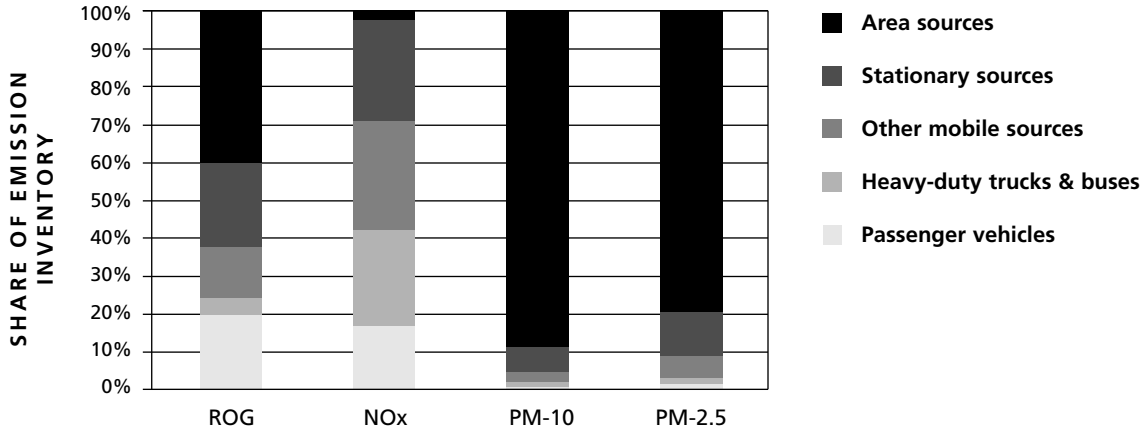
Poor air quality affects the region’s economic base: agriculture. In addition to generating

significant revenue in the region, employment in agriculture in the San Joaquin Valley is well above the state average. Air pollution damages crop quality and reduces yields. Polluted air from the region is also affecting downwind neighbors. Transport from the San Joaquin Valley is causing bad air quality in national parks and the Sierra Nevada Mountains.

**New Emission Control Strategies Are Needed**

The emissions that lead to the region’s air quality problem derive from several categories of sources, as the figure at the top of the next page shows. Reactive organic gases (ROG) and oxides of nitrogen (NOx) are the precursors to ozone pollution. Area sources, including farming operations and consumer products such as paints, are responsible for the largest portion of ROG emissions. Heavy-duty diesel trucks and buses and other mobile sources, including off-road diesel engines, are the principal contributors to NOx emissions. Particulate matter comes predominantly from area sources, including field preparation, road dust, and agricultural burning.

**Inventory of emissions in the San Joaquin Valley, 2003**



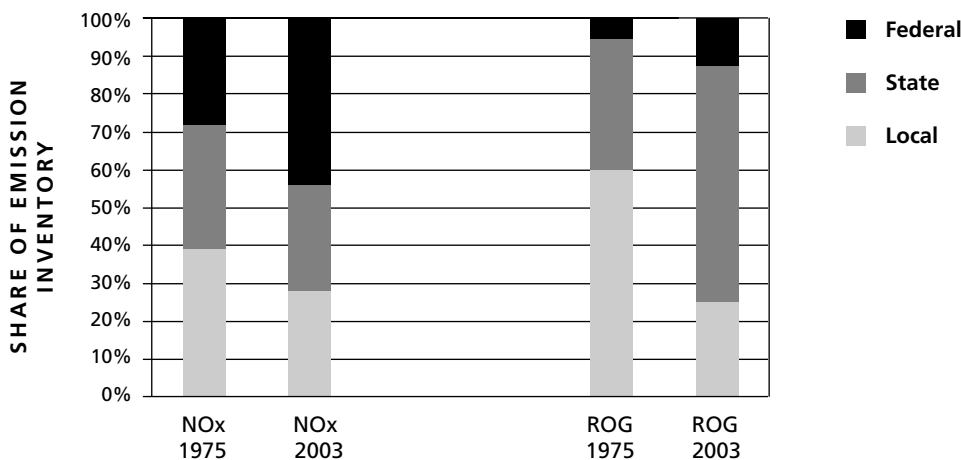
Source: CARB, 2004d

As the region has grown and emissions from local stationary sources of pollution have been controlled, the effects of increased population, vehicle miles traveled, and greater heavy duty truck travel have come to account for a larger share of the emission inventory. These sources, with their heavy contribution to ROG and NOx pollution, are outside the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). As the figure

below shows, state and federal authorities are responsible for regulating a much larger portion of the emission inventory in 2003 than they were in 1975.

Projected growth in passenger and heavy-duty vehicle travel in the region will only exacerbate the valley’s air problem. This shift emphasizes the importance of putting pressure on state and federal regulators to reduce emissions from sources under their jurisdiction.

**Inventory of emissions of ozone precursors by jurisdiction, 1975 and 2003**



Source: Data from Carb, 2004a

## The Work Is Just Beginning

Local, state, and federal regulators have displayed a pattern of neglect and inaction when it has come to taking adequate measures to improve air quality in the San Joaquin Valley. A series of lawsuits by medical, environmental, and community groups have documented a pattern of missed deadlines, inadequate filings, and neglect on the part of regulators. Recent legal victories have brought about some important changes, such as the regulation of agricultural sources of air pollution emissions.

Prompted by these legal victories and growing public concern about the region’s air quality problem, state legislators and state and local regulators have taken some steps to address the air quality problems in the San Joaquin Valley. Legislation has been drafted that targets sources of emissions that have not been regulated before, provides greater funding for air quality improvement programs, and improves the air quality planning process. The California Air Resources Board and SJVAPCD are implementing rules to control emissions from significant sources of pollution in the valley. But the work is just beginning.

The coming years will require coordinated actions on the part of local, state, and federal lawmakers and regulators to attain clean air standards. Over the coming year, the three top priorities for cleaning the air in the San Joaquin Valley should be:

1. Create more public accountability for the SJVAPCD by passing legislation to create seats for public members on the governing board
2. Establish a secure funding mechanism for clean air programs in the region through legislation and local programs, such as the indirect source mitigation fee program

3. Create an institutional mechanism, such as a regional transportation planning agency, to coordinate regional transportation and air quality planning

These priorities are part of a comprehensive air quality action plan (detailed in the table below) that calls for actions on the part of state lawmakers and regulators as well as local elected officials and regulators. Combined with an active and engaged public, this action plan should put the valley on the road to cleaner air.

### An Air Quality Action Plan for the San Joaquin Valley

#### State Legislature

Pass legislation to create three public seats on the governing board of the SJVAPCD.

Establish fee mechanisms to secure funding for air quality improvement programs.

Pass legislation to enable control of emissions from sources outside of the SJVAPCD’s jurisdiction.

#### California Air Resource Board

Develop and implement strong emission control regulations under the Diesel Risk Reduction Plan, in particular regulations for on- and off-road fleets and locomotives.

Continue to develop new stringent regulations for passenger vehicles, including tighter tailpipe standards and continued updates of the zero emission vehicle program.

Implement on- and off-road diesel emission rules and ensure appropriate monitoring and compliance.

Develop and implement strong regulations to limit greenhouse gas emissions from passenger vehicles sold in the state, including aggressive future regulatory updates.

#### SJVAPCD and other local officials

Develop and implement an effective, comprehensive, and stringent indirect source mitigation fee program.

Coordinate land use, transportation, and air quality planning through a regional institution.

Improve outreach to the public and seek public input on rule development.