

California economy loses \$28 billion yearly to health effects of pollution

Most of the losses are attributable to 3,000 annual deaths, a Cal State Fullerton study says. The study underscores the economic benefits of meeting federal air quality standards.

Louis Sahagun
November 13, 2008

The California economy loses about \$28 billion annually due to premature deaths and illnesses linked to ozone and particulates spewed from hundreds of locations in the South Coast and San Joaquin air basins, according to findings released Wednesday by a Cal State Fullerton research team.

Most of those costs, about \$25 billion, are connected to roughly 3,000 smog-related deaths each year, but additional factors include work and school absences, emergency room visits, and asthma attacks and other respiratory illnesses, said team leader Jane Hall, a professor of economics and co-director of the university's Institute for Economics and Environment Studies.

Diesel Trucks



Diesel trucks are a significant contributor to ozone and particulate pollution in the South Coast air basin. A new study says such pollution costs the state economy \$28 billion a year. (Al Seib / Los Angeles Times) November 11, 2008

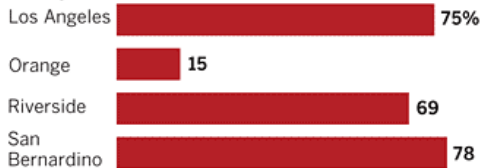
The problem of particulate pollution

Southland and San Joaquin Valley residents are exposed to particulate pollutant levels above the federal standard.

Percent of population exposed to particulate concentrations above the standard*

South Coast Air Basin

County



San Joaquin Valley Air Basin



* PM_{2.5} concentrations above the average annual federal standard in 2005-07

Source: Study funded by the William and Flora Hewlett Foundation

PAUL DUGINSKI Los Angeles Times

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The study underscores the economic benefits of meeting federal air quality standards at a time when lawmakers and regulators are struggling with California's commitment to protecting public health in a weak economy.

The \$90,000 study does not propose any particular action. But in an interview, Hall said, "We are going to pay for it one way or the other. Either we pay to fix the problem or we pay in loss of life and poor health. . . . This study adds another piece to the puzzle as the public and policy-makers try to understand where do we go from here."

The California Air Resources Board is scheduled to vote Dec. 11 on whether to adopt broader rules that would force more than 1 million heavy-duty diesel truckers to install filters or upgrade their engines. Truckers and agribusiness have argued against stricter regulation, saying it is too expensive for them to invest in clean vehicles at a time of economic uncertainty.

Mary Nichols, chairman of the air resources board, said the findings will "be useful to all of us. Our board members hear on a regular basis from constituents who are concerned about the costs of regulations, and seldom hear from people concerned about their health because they are collectively and individually not as well organized."

In the meantime, the two regions continue to pay a steep price for generating air pollution ranked among the worst in the country. In the South Coast basin, that cost is about \$1,250 per person per year, which translates into a total of about \$22 billion in savings if emissions came into compliance with federal standards, Hall said. In the San Joaquin air basin, the cost is about \$1,600 per person per year, or about \$6 billion in savings if the standards were met.

The savings would come from about 3,800 fewer premature deaths among those age 30 and

older; 1.2 million fewer days of school absences; 2 million fewer days of respiratory problems in children; 467,000 fewer lost days of work and 2,700 fewer hospital admissions, according to the study.

The study noted that attaining the federal standard for exposure to particulates would save more lives than lowering the number of motor vehicle fatalities to zero in most of the regions examined.

The hardest hit were fast-growing communities in Kern and Fresno counties, where 100% of the population was exposed to particulate concentrations above the average federal standard from 2005 to 2007. High rates of exposure were also found in San Bernardino and Riverside counties, where diesel soot is blown by prevailing winds and then trapped by four mountain ranges.

Considered the most lethal form of air pollution, microscopic particulates expelled from tailpipes, factory smoke stacks, diesel trucks and equipment can penetrate through the lungs and enter the bloodstream. Exposure to these fine particles has been linked to severe asthma, cancer and premature deaths from heart and lung disease.

"In the South Coast basin, an average 64% of the population is exposed to health-endangering annual averages of particulates," Hall said, "and in the most populated county -- Los Angeles -- it is 75%.

"In most years, the South Coast and San Joaquin basins vie with the Houston, Texas, area for the worst air pollution trophy, but this year we took it back," she said. "That's not a prize you want to be handed. Essentially, imported T-shirts and tennis shoes are being hauled to Omaha and the big-rig diesel pollution stays here."

Nidia Bautista, community engagement director for the Coalition for Clean Air, described the findings as "staggering, and a reminder that health is too often the trade-off when it comes to cleaning the air."

Angelo Logan, spokesman for the East Yard Communities for Environmental Justice, put it another way: "At a time when government is handing out economic stimulus packages, we could use an economic relief package to help us deal with environmental impacts on our health, families and pocketbooks."

Hall agreed. "This is a drain that could be spent in far better ways," she said.

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