Air board to vote on smog fee

Not everyone on board with plan to raise car registration fee by $2

By MATT WEISER, Californian staff writer
Bakersfield Californian, Wednesday, Nov. 3, 2004

The valley air district is proposing a $2 vehicle registration increase to pay for pollution-control projects, but not everyone thinks it makes sense.

The increase would raise $4.8 million a year to subsidize clean vehicles and engine replacements in government and private-sector fleets. It would take advantage of a new law, AB 923, signed this year by Gov. Arnold Schwarzenegger, that provides matching funds for such increases.

As a result, if the San Joaquin Valley Air Pollution Control District approves the fee increase at its board meeting Thursday, those matching funds could bring a total of $17 million annually to local clean-air projects.

"This provides incentives for individuals, government agencies and private companies that are interested in reducing emissions, whether it be a garbage truck, a farm pump, a tractor or a school bus," said Jeff Findley, supervising air quality planner for the district. "It provides incentives to allow them to purchase these new types of technologies, whereas otherwise they may not have had funding for that."

Anyone who registers a car or truck in the valley would have to pay the increase starting in April 2005.

The theory is that every vehicle registered in the valley contributes to making it the smoggiest place in America, as measured by the federal eight-hour ozone standard. A registration fee increase to pay for clean-vehicle projects would help reduce that impact.

But the proposal comes on the heels of a $1 increase approved a year ago, as required by another new state law, SB 709 by Sen. Dean Florez, D-Shafter. This increase is also dedicated to clean-air projects and would bring in an estimated $2.4 million annually.

"I think the fees are high enough as they are," said Roy Weygand, president of the Kern County Taxpayers Association. "It's going to hurt everyone who has to pay the fee. You don't clean up the air by charging more money. You clean up the air by taking corrective actions."

Weygand suggests instead that the air district pass rules to make cars cleaner, or regulate driving behavior.

But the district does not have the power to do either. Instead, it can use money to reduce pollution elsewhere. It has spent $42 million since 1993 on incentives to help government and industry purchase cleaner equipment. This has reduced air pollution by more than 7,000 tons.

The district may need to hire additional employees to administer the extra funding, if it is approved by the board. The extra staff would be needed both to process applications for the money and for outreach efforts directed at those who may want to apply for it.

The legislation allows the district to spend up to 5 percent of the revenues on administration, but Findley said it isn't clear yet how many additional employees would be needed.

Kern voters OK school bond; Wasco backs dairy buffer

Bakersfield Californian, Wednesday Nov. 3, 2004

Kern County voters approved a local school bond Tuesday, and Wasco voters sent a clear message that they don't want dairies on the outskirts of town.

But some voters were still waiting in line well past the time polls were supposed to close.

Kern High School District bond

Voters were on a clear track Tuesday to approve a $219 million school bond that will help shape the Kern High School District in coming decades.

With 97 percent of precincts tallied, Measure N had around 66 percent of the vote. The bond needed only 55 percent to pass.

Generating an estimated $160 million in state-matching funds, the bond will help build four high schools and more special education facilities, as well as renovate existing campuses.

It could take taxpayers 35 years to pay off.

To retired Superintendent Bill Hatcher, who campaigned in support of the measure, it's a vote of confidence from the community.

The district has been a good steward of the public's money in the past, he said.

The need for more schools has become steadily clearer in the past five years, said Superintendent Don Carter.

By conservative estimates, the 32,000-student district will grow by 10,000 teens in the next 10 years.

"The students are coming," he said.

Wasco dairy buffer

Wasco residents want dairies to keep their distance.

More than 81 percent of voters in the small agricultural town about 25 miles north of Bakersfield favored Measure U. But no power lies behind those votes.

The advisory measure asked residents if they want a 10-mile dairy buffer zone around their city. It was strictly a way to gauge how residents felt about several dairy projects with possibly 100,000 cows becoming their new neighbors.

The Kern County Board of Supervisors will ultimately determine whether the cluster of dairy projects will move in northwest of town -- a decision that could come years down the road.

It's easy for people to say no to something, but decisions should be based on facts, Supervisor Ray Watson said. "It doesn't change my basic philosophy, and that is I would never do anything that I felt was going to be harmful to the people of Wasco," he said.

Though it carries no legal weight, the measure has garnered attention.

Some residents voiced concerns of water pollution, smell and flies, while others considered dairies an economic boost for the city of 22,000.

City Council incumbent Larry Pearson also worried dairies could drive away potential homeowners.

Voters sent a clear message to supervisors Tuesday, Pearson said.

"They have a responsibility to protect these people and their health," he said. "I would hope they wouldn't ignore it."

Late voters

Millions of Americans had already punched cards, pulled levers and gone home for the night.

But almost an hour after California's polls were supposed to have closed, a modest line of voters still snaked out of an auditorium at northwest Bakersfield's Freedom Middle School.

Polling site supervisor Cheri Walker said some people waited as long as one hour and 45 minutes to cast their ballots. More than 800 people voted at Freedom, she said.

Construction worker Ulysses Aquino watched the line from his home across Noriega Road. He hoped to sneak in right at the end and not wait. But shortly before 8 p.m., he decided the line wasn't going to get any shorter.

"It's been like this pretty much all day," he said of the heavy voter turnout.

Angie Lopez made it into the voting line just under the wire at about 7:50 p.m.

"It's not done till it's done," she said.

Peering at the Sticker on a Cleaner Car

By DANNY HAKIM
Monday, Nov. 1, New York Times

DETROIT, Nov. 1 - How much will it cost Californians to buy cooler cars?

The Golden State's roads are known for vintage T-birds, customized muscle cars and the Bentleys in Beverly Hills. But the state's regulators have a different kind of cool in mind - cars that emit significantly lower amounts of the gases that have been linked to global warming.

When California adopted the nation's first automotive greenhouse gas regulation in September, the auto industry and state regulators disagreed over how much it would all cost. The new regulation would require a 30 percent reduction, on average, in automotive greenhouse gas emissions - carbon dioxide, nitrous oxide and methane - by the 2016 model year.

The regulation, though directed at greenhouse gases, would probably demand an improvement in fuel economy of more than 40 percent. While smog-forming pollutants have been regulated for decades, catalytic converters can neutralize those emissions. But no filtration technology exists for greenhouse gas emissions, so cutting those emissions would have to come almost entirely from better fuel economy, though a modest amount could be cut by overhauling a car's air-conditioner.

The staff of the California Air Resources Board says the new regulation will add about $1,000 to the cost of an average vehicle, but they said they believed that cost could be made up in five years in savings at the gasoline pump. The industry, by contrast, said it would add $3,000, a cost that would never fully be made up by fuel savings.

If the regulation survives a legal challenge from the auto industry, New York has indicated it wants to follow California's lead. Several other Northeastern states that hew closely to California's air quality standards may also follow suit.

So how would cars and trucks have to change?

The Union of Concerned Scientists, a leading environmental group lobbying for the regulation, recently issued a report on how six specific vehicles could be modified to reduce global warming emissions by 40 percent or more, exceeding the California standards.

The group projected that, for a cost of $1,960 per vehicle, the 2003 model Ford Explorer XLT, with a V-6 engine, could be modified to reduce its greenhouse gas production by 43 percent, a change that would improve fuel economy by more than 70 percent. (California's standards require that emissions from vehicles in the Explorer's weight class be reduced by 24.5 percent by 2016.) The report contends that buyers could make up that added cost in a little over three years by spending less on gasoline.

Thomas C. Austin, the consultant employed by the Alliance of Automobile Manufacturers, an industry lobbying group, to argue against the California regulation, conducted an analysis of the environmental group's projections. (The Ford Motor Company declined to offer its own analysis, referring questions to the alliance.)

Mr. Austin said that according to his analysis it would cost $4,361 a vehicle to make the modifications proposed by the environmental group, and that some changes were not feasible. He also projected a somewhat lower reduction in greenhouse gas emissions. The two sides disagreed about almost every aspect of cost projections because of different methodologies and sources.

"They look for what's been published to support the case to encourage government agencies to further regulate," Mr. Austin said of the Union of Concerned Scientists, noting that to make its

case, the group used "the most optimistic projections of fuel economy improvements and the most optimistic projections of cost."

Environmentalists and California regulators argue that the industry's recalcitrance is no surprise, citing its history of opposing everything from safety belts to small increases in fuel economy standards.

"The industry has a long track record of underestimating potential and overestimating cost," said Louise Bedsworth, the senior vehicles analyst at the Union of Concerned Scientists, who wrote the report. "We've seen it on many safety regulations; we continually see this pattern of pushing back, but in most areas we've seen them come through and succeed in the end."

Here are major modifications that Ms. Bedsworth would make to an Explorer to reduce greenhouse gas emissions and Mr. Austin's comments on those proposals.

Aerodynamics

For starters, the Explorer, a sport utility vehicle, would need to be a lot rounder. Ms. Bedsworth said automakers could modestly reduce emissions by improving aerodynamics because cars and trucks that are less wind resistant are more fuel efficient.

"The Explorer is a pretty boxy S.U.V.," she said, a shape that makes it less aerodynamic.

Two current S.U.V.'s, Honda's Acura MDX and the Volvo XC90, made by Ford, are significantly more aerodynamic than the Explorer because of more rounded styling. The company could also cover the underside with paneling to smooth over nooks that hinder wind flow.

Mr. Austin said that Ms. Bedsworth's proposals would make the Explorer an ugly duckling. Some of the most iconic vehicles of the day are characterized by boxiness, from the Hummer to the Chrysler 300C.

"It's been decades since the auto industry showed you could produce vehicles that had half the drag coefficient than vehicles do today," he said. "But look at them. To most people, they're not the kind of cars they want to drive."

Ms. Bedsworth said Ford could also extend the Explorer's steel body over the tops of the tires to improve wind resistance, the way Honda designed the body of its tiny hybrid electric car, the Insight. But Mr. Austin said "most people think the Honda Insight is an ugly car."

Tweaking the Tires

Some new tires improve fuel efficiency with designs and materials that lessen the force needed to propel them down the road. Ms. Bedsworth says she believes further improvements are possible, but Mr. Austin said new federal tire pressure regulations might induce automakers to use larger tires that would impede efficiency gains.

Mike Wischhusen, the director of industry standards and government regulations at Michelin, said changing tire size would not necessarily change fuel economy performance by itself. His company's chief executive, Eduoard Michelin, recently outlined a goal of improving tire performance, as it relates to fuel economy, by 50 percent by 2020.

Under the Hood

Ms. Bedsworth said a variety of technologies could be combined to improve efficiency under the hood. A 42-volt starter generator, a mild form of hybrid technology, would allow the Explorer to shut down at stoplights.

The modified Explorer's engine would also combine three technologies that are in use today, though not all in one vehicle. The altered S.U.V. would have a diesel-like direct-injection gasoline engine that puts air and fuel directly into the engine cylinders rather than into precombustion chambers. The engine would also employ variable valve timing, a technology that ensures that the engine valves open and close in the most efficient manner, and cylinder deactivation, which shuts down one-half of the engine if it's not needed.

Mr. Austin said the last two technologies "don't make engineering sense" when packaged together because they were so similar in nature that using them jointly would not be worthwhile.

Ms. Bedsworth said Honda employed both technologies in its Odyssey minivans, but only one technology - variable valve timing or cylinder deactivation - was used in each minivan, depending on the version.

Ms. Bedsworth said there would still be some added benefit to using both. "The package still comes out to be cost effective," she said.

Increased engine efficiency would slightly increase, to 230 from 210, the horsepower of the 2003 model Explorer used in the study.

Improved Air-Conditioning

The industry is almost certain to argue in its legal challenge that the California regulation is pre-empted by Washington's authority to regulate fuel economy. But environmentalists point out that tweaking a vehicle's air-conditioning system is one way to get modest emissions reductions independent of fuel economy improvements.

The refrigerant used in automobile air-conditioners, known as HFC-134a, is a heat-trapping gas that is even more damaging than carbon dioxide. An improved air-conditioner could contain the gas better, or alternatively, a different type of refrigerant could be used.

Weight Loss?

Mr. Austin said to achieve the kind of emissions reductions proposed by the Union of Concerned Scientists, or the lesser reductions required by the California regulation, the Explorer would have to be significantly lighter. "Our analysis indicates that weight reduction is a more cost-effective way to improve fuel economy than some of the other measures that would otherwise be required," Mr. Austin said.

The use of lightweight materials like aluminum, and the cost of redesign, would add more than $1,000 to the vehicle cost, he said. But Ms. Bedsworth disagreed, saying that the Explorer's weight would not have to change to meet the emissions standards.

Savings at the Gas Pump

Mr. Austin disagreed with projections used by California regulators to gauge how many miles the average vehicle in the state is in service. Those projections are critical to making a cost-benefit analysis of the new standard. He also disputed the discount rate the Union of Concerned Scientists used to calculate the current value of future fuel savings.

Ms. Bedsworth said her projections were conservative, pointing to the $1.68-a-gallon gas price used in her analysis. Gasoline costs $2.39 a gallon, on average, in California, according to the most recent estimate from the Energy Information Administration.

Traffic polluting learning environments

By Edie Lau -- Bee Science Writer
Sunday, October 31, 2004, Sacramento Bee

The traffic brings noise and hazards to pedestrians and bicyclists. Less obviously but perhaps more ominously, it also raises the risk of sickness and early death to those who breathe its pollution day in and day out.

Mounting scientific evidence shows that exposure to traffic is bad for people's health. That recognition is drawing attention to the dangers posed to schoolchildren in heavily traveled neighborhoods.

A state law passed last year requires school districts to analyze and address the effects of vehicle pollution on school sites proposed within 500 feet of a freeway or thoroughfare.

"We need to design communities in such a way that schools are tucked away," said Kori Titus, director of communications and policy at the American Lung Association of Sacramento-Emigrant Trails.

But what about schools that already are smack in the midst of traffic?

An analysis published this year by researchers at the California Environmental Protection Agency and the Lawrence Berkeley National Laboratory identified 709 public schools located near busy streets - streets with 25,000 or more vehicles passing daily. Those schools combined enroll more than 720,000 students, representing 12 percent of the state's public school population.

Put another way, more than 1 out of 10 California public school students attend class in a micro-environment polluted by traffic.

The exposure takes a toll.

A related study by Cal-EPA and the Berkeley lab researchers published this fall found the prevalence of asthma and bronchitis was 7 percent higher among children attending school in high-traffic neighborhoods, compared with children in schools on quieter streets.

That's high, in the estimation of Bart Ostro, chief of Cal-EPA's air pollution epidemiology unit and an author on both traffic-and-student-exposure studies.

"There are a lot of factors that go into whether someone has an asthma attack," Ostro said. "Attributing 7 percent of the increase to a source like traffic is a pretty significant public-health impact."

A chief finding of the survey examining proximity of California schools to busy roads is that neighborhoods in high-traffic areas tend to be populated by low-income and minority students. But that's not universally so.

"This issue spares no one," said Titus of the local American Lung Association.

Arden Middle School is a classic example.

Located at one of the busiest intersections in Sacramento County, the school serves sixth-, seventh-and eighth-graders from neighborhoods that include Arden Oaks and Arden Park, leafy, well-to-do enclaves with evocative street names such as Rolling Hills Road and Riding Club Lane.

Moreover, Arden Middle has a reputation as an excellent school. Its consistently high test scores bespeak a learning environment so stimulating that parents take their children there from miles away. That exacerbates the traffic problem.

"Out of our 700-something kids here, not even half come from our attendance area," said Bonnie Reynolds, a secretary at Arden Middle.

Reynolds said the worst times of day for traffic are just before school begins and right as school lets out. Parents picking up their children line up bumper-to-bumper, engines idling.

Besides school congestion, high traffic levels along Watt persist throughout the day. Arden Middle's unfortunate location has caught the eye of the local American Lung Association's Health Effects Task Force.

In 2002, the task force enlisted Tom Cahill, an atmospheric physicist and international expert on air pollution at the University of California, Davis, to measure the particulates coming from Interstate 5. Out of curiosity, the task force asked Cahill to put a monitor at Arden Middle School, too.

The results surprised and alarmed them: The traffic at Arden and Watt subjects the school to levels of particle pollution comparable to or greater than the levels seen from I-5.

The exposure is worsened by the fact that the outermost school building lies close to the roads. At its nearest point, the building is but 45 feet away from traffic, by Cahill's measure.

A rule of thumb for avoiding direct exposure to street pollution is to move 500 feet or more away. At that distance, studies have shown, the effects of traffic exhaust fade to background levels.

"Why did you build the school in such a busy intersection?" people have asked Reynolds, a secretary at the school for 31 years. She tells them, "It wasn't a busy intersection when it was built."

Not at all. Arden Middle dates back to 1914, when the only traffic that passed did so on hoof or foot.

As late as 1953, Watt Avenue was still a two-lane gravel road, according to a history of the school compiled by its PTA.

By 1963, that had changed: Watt near Arden was seeing 27,630 vehicles a day, Sacramento County Department of Transportation records show.

Now, Watt has six lanes of traffic at the intersection, not counting turn lanes, and the load has increased inexorably, to 61,775 vehicles a day in 2003.

While no one would argue in favor of putting a school on a busy street, concerns about traffic pollution are new and barely registering in the general public.

"I don't know if I ever thought about it in terms of air quality," said Lynn Jacoby, who was principal of Arden Middle for 14 years before taking a job in the district office this year. "I thought about it in terms of crossing the street."

School librarian Gena Higgins, who presides over a room with a wall of windows looking out on Watt Avenue, has considered the noise more than the fumes.

"When there are sirens, I notice the kids don't even look up," Higgins said.

Reynolds, the secretary, observed that diesel trucks use Watt Avenue as a connector between Highway 50 and Interstate 80. "I never thought about the trucks," Higgins said, just as one rumbled past.

In response to the Lung Association findings, released last fall, the school district installed filters on the heating, air conditioning and ventilation system capable of removing small particles - although the finest particles still can pass through.

Also, the school PTA is planning to plant more trees on campus, following construction scheduled next spring by the county to beautify that stretch of Watt.

While the beautification has been planned for some time, Jim Schubert, a senior landscape architect in the county Department of Transportation, said in light of the Lung Association study, the county and school negotiated a plan to plant a buffer of trees and shrubs on the perimeter of the school.

The Lung Association plans within weeks to release a follow-up study of Arden Middle, with greater detail on the nature and extent of pollution exposure and a calculation of the overall health risk to the school community.

The latest research on the subject confirms the issue deserves attention. A state-funded study of the effects of children's exposure to air pollution in Southern California, for example, found a heightened risk of permanently stunted lung function, a condition that can lead to respiratory disease in the future and even shortened life span.

The study looked at exposure to ambient levels of pollution; presumably, exposure to traffic nearby would be worse.

The local Lung Association also is teaching high school students to measure air pollution at their schools. Mira Loma and Davis High students began training last week.

The idea is this, said Cahill: "We'll have a template by which we can quickly evaluate any school, and that template will be in the hands of the high school students. They'll be able to do the calculation on their own little laptops. ... If the high school students do the work themselves, it's enormously more powerful."

Kaitlyn Kelly-Reif, a Mira Loma junior who recruited eight other students for her school's monitoring team, remembers as a student at Churchill Middle School being made during P.E. class to run alongside the road.

"You'd, like, inhale fumes from buses and stuff," she said. "You don't want to complain because you don't want them to think you can't run."

Kelly-Reif said she hopes the student study, beyond producing useful data, will cause students to think about their driving habits and the effects of those habits - "being aware," she said, "of how our surrounding affects us."

TOO CLOSE FOR COMFORT

Concerned about students' exposure to traffic pollutants, researchers at the California Environmental Protection Agency and Lawrence Berkeley National Laboratory identified public schools in the state located within 500 feet of busy roads. Below are schools in the region on the list.

Schools on roads with 50,000 vehicles or more per day:

Arcade Fundamental: 3500 Edison Ave., Sacramento; San Juan Unified
Arden Middle: 1640 Watt Ave., Sacramento; San Juan Unified
Babcock (D.W.) Elementary: 2400 Cormorant Way, Sacramento; North Sacramento Elementary District
River City Senior High: 1100 Clarendon St., West Sacramento; Washington Unified
San Juan Choices Charter: 2220 Watt Ave., Carmichael; San Juan Unified

Schools on roads with 25,000-49,000 vehicles per day:

Bella Vista High: 8301 Madison Ave., Fair Oaks; San Juan Unified
Bowman Elementary: 13777 Bowman Road, Auburn; Ackerman Elementary District
Burbank (Luther) High: 3500 Florin Road, Sacramento; Sacramento City Unified
Cain (E.V) Middle: 150 Palm Ave., Auburn; Auburn Union Elementary District
Cambridge Heights Elementary: 5555 Fleetwood Drive, Citrus Heights; San Juan Unified
Citrus Heights Elementary: 7085 Auburn Blvd., Citrus Heights; San Juan Unified
Foothill Farms Junior High: 5001 Diablo Drive, Sacramento; Grant Joint Union High School District
Foothill High: 5000 McCloud Drive, Sacramento; Grant Joint Union High School District
Frederick Joyce Elementary: 6050 Watt Ave., North Highlands; Rio Linda Union Elementary District
Howe Avenue Elementary: 2404 Howe Ave., Sacramento; San Juan Unified
Madison Elementary: 5241 Harrison St., North Highlands; Rio Linda Union Elementary District
Maple Elementary: 3301 37th Ave., Sacramento; Sacramento City Unified
Mesa Verde High: 7600 Lauppe Lane, Citrus Heights; San Juan Unified
Mission Avenue Elementary: 2925 Mission Ave., Carmichael; San Juan Unified
Morse (John F.) Elementary: 1901 60th Ave., Sacramento; Sacramento City Unified
Options for Youth: 6110 Fair Oaks Blvd., Suite E, Carmichael; San Juan Unified
Pacific Elementary: 6201 41st St., Sacramento; Sacramento City Unified
Rocklin High: 5301 Victory Lane, Rocklin; Rocklin Unified
San Juan High: 7551 Greenback Lane, Citrus Heights; San Juan Unified
Sunrise Elementary: 7322 Sunrise Blvd., Citrus Heights; San Juan Unified
Sylvan Middle: 7137 Auburn Blvd., Citrus Heights; San Juan Unified
Village Elementary: 6845 Larchmont Drive, North Highlands; Rio Linda Union Elementary District
Visions in Education: 6939 Sunrise Blvd., Suite 207, Citrus Heights; San Juan Unified

Note: Information is based upon state education data from 2000 and Caltrans traffic data from 1997. The data does not account for other factors associated with exposure to traffic pollutants, such as prevailing wind direction, topography or climate.

Source: California Environmental Protection Agency Office of Environmental Health Hazard Assessment.

Megadairies not needed

Bakersfield Californian, Letter to the Editor, Wednesday, Nov. 3, 2004

The dairy industry has made it very clear they are against controlling their pollution of our air, ground and water.

The manure from Chino has preceded the hundreds of thousands of cows on the way. Soon there will be more cows than people in Kern County.

Perhaps controlling cattle sewage like human sewage would stop this insane pollution of our area, already the worst in the nation.

Wake up, Kern County. Being anti-megadairy does not mean anti-ag. We're all living in the same bathtub (tolietn bowl) with nowhere for the pollution to go.

-- TOM SPECHT, Bakersfield