

## Building Stronger Communities How Land Use Decisions Affect Our Health

Santa Barbara County  
Air Quality News  
Issue 67  
July–August 2002

Land use choices impact transportation patterns, and air pollution, and thus our health. But these choices also affect our health in other ways. “Land use decisions are among the most profound decisions we make, in that they impact nearly everything that happens in a community,” notes Alex Kelter, M.D., Chief of the Epidemiology & Prevention for Injury Control (EPIC) Branch of the California Department of Health Services. He continues:

“When you think about it, the big risks to public health in our society nowadays are chronic diseases for those over 45, and injuries and violence for those under 45. Both of these risks are very closely related to how our communities are developing.”

For people over 45, says Kelter, physical inactivity and chronic obesity significantly impact the development of chronic diseases. For people under 45, the most serious

injuries are from traffic accidents or from violence. Communities that develop in ways that discourage walking or biking or transit use—or in ways that do not discourage crime and violence—will include more obese and physically inactive children and adults, and will see more injuries from accidents and violence.

APCD and the Santa Barbara County Association of Governments are hosting a

conference, Building Stronger Communities, set for November 7 at the Rancho Santa Barbara Marriott in Buellton. The conference will bring experts like Kelter to the region to share their experiences and perspectives. Says APCD Director Doug Allard, “We’re trying to bring together as many people as possible to hear about ways that good planning can benefit air quality—and help us build stronger communities.”

*(Continued on page two)*

## Fuel Cell Vehicles Road Rally



The California Fuel Cell Partnership will bring prototype fuel cell vehicles from seven manufacturers down the Central Coast in the California Coast 2002 Road Rally.

Fuel cell vehicles will arrive in Santa Barbara County on September 6, as part of the California Coast 2002 California Fuel Cell Partnership Road Rally. The California Fuel Cell Partnership is a consortium that aims to demonstrate fuel cell vehicle technology and infrastructure in California, raise public awareness of these vehicles, and explore the path to

commercialization. The consortium includes auto manufacturers, energy companies, fuel cell technology companies, and government agencies.

Fuel cells produce electric power through chemical reactions involving hydrogen. The by-products of this process are water and heat; very little air pollution is produced. Says

APCD Director Doug Allard, “We’re fortunate here in California that we have the California Fuel Cell Partnership to raise awareness of this important vehicle technology and its clean-air and environmental benefits. There are currently only a few of these prototype vehicles in the entire world—and we’re getting an opportunity to see them soon in our county.”

The current plan is for prototype vehicles from DaimlerChrysler, Ford, General Motors, Honda, Hyundai, Nissan, and Toyota, to start in Monterey on September 4, arrive in San Luis Obispo on September 5, and arrive in our county September 6.

Go to [www.fuelcellpartnership.org](http://www.fuelcellpartnership.org) and [www.sbcapcd.org](http://www.sbcapcd.org) for more information.

### Inside...

- ❖ How Kids Get to School
- ❖ Incentives for Greener Cars
- ❖ R2P2 visits Borders
- ❖ Marine Shipping Update
- ❖ Electric Miata
- ❖ Compliance Advisories



## Stronger Communities (cont'd from page one)

Kelter discusses the efforts of groups working in a field known as “Crime Prevention through Environmental Design.” These efforts focus in two areas: making landscaping and design choices that will make space more observable, so it is harder for people to hide criminal activities; and creating and promoting outdoor spaces that are safer and more inviting to the community, so that more people are outside together and paying attention to what’s happening in the neighborhood.

Kelter also works with the state’s “Safe Routes to School” program, which helps schools

solve traffic issues and create safe paths for children to walk or bike to school (see related article below). “It’s amazing how much walking to school is at the center of this,” he remarks. “In some neighborhoods there may not be a safe path due to traffic conditions and lack of safe crosswalks. In other neighborhoods walking to school may not be the choice due to a fear of violence.”

Kelter’s work as EPIC Branch Chief relies on partnerships: “We’re trying to do prevention work in areas in which the health department has no jurisdiction—so our work depends so much more on

partnerships. We need to work with the people who handle transportation, and air quality; and we need to work with traffic safety divisions, and with agencies that do community planning.”

He adds, “So much of what the public thinks of as health care is treating illness and conditions. We’re the ones who pop up and say ‘Never give up on early prevention. Prevention is possible.’ You don’t have to wait until a kid is killed at an intersection to put up a traffic light.”

He notes, “You can ask yourself, ‘What kind of a community do I want to live

in?’ And then do the work to get there.” The dialogue can start over a traffic issue, or a zoning issue or a siting issue—the important thing is to keep the dialogue going. He sums up: “There isn’t any simple magic answer to the question ‘where do we start?’ But I think there is a simple answer to the question ‘how do we start?’ It’s together. We start together.”

*For more information on these issues, and the Building Stronger Communities conference November 7, visit [www.sbcapcd.org](http://www.sbcapcd.org), or contact Bobbie Bratz at 961-8890 or [bratzb@sbcapcd.org](mailto:bratzb@sbcapcd.org).*

## How Kids Get to School—and How They Want To

The South Coast Safe Routes to School Project polled 70 kids at the Children’s Festival in Santa Barbara in May, asking them how they currently get to school, and how they would like to get to school. Of the kids who answered questions in the survey:

- 60% ride in car
- 14% walk or ride in car (alternating)
- 12% walk
- 10% bike
- 2% take the bus

- 98% say they would like to walk or bike to school more often.

Notes Drusilla van Hengel, PhD, Mobility Coordinator for the City of Santa Barbara, and leader of the Safe Routes to School Project, “It’s very encouraging that so many kids say they want to walk and bike to school more. This result is consistent with the positive experiences we’ve had with bike to school day and walk to school day efforts in the

schools.” The project also works on improving safety in the school zone, working with school and traffic officials.

Van Hengel has studied the distribution of pedestrian and bicycle involved accidents in Santa Barbara, and concluded that because so many collisions are associated with inattention or poor decision-making, more collisions are avoidable with good injury prevention and public health campaigns than with capital improvement

projects, which are location specific. She notes, “The real bang for the buck is in policy change, enforcement, and educational programs that promote the strengths of walking and cycling, and overcome some of the barriers.”

*Walk to School Day is October 2. For more information on the Safe Routes to School Project, contact Drusilla van Hengel at 564-5544.*



### greendifference.org

a coalition of Santa Barbara County organizations helping people make a green difference... at work... and at home.

**Celebrate National Pollution Prevention Week September 16-22, 2002. Visit [www.greendifference.org](http://www.greendifference.org) for ideas on how you can reduce and prevent pollution—at home and at work.**

## R2P2 Visits Borders

### APCD Board Roundup

Following are the highlights of the May, June, and July Board meetings.

#### May

- ✓ Amended APCD Rule 401 – Agricultural and Prescribed Burning
- ✓ Received an update on the Outboard Engine Repower Program
- ✓ Conducted a public hearing and accepted comment on the proposed APCD budget for FY 2002-2003

#### June

- ✓ Approved additional funding of \$215,000 for the Diesel Marine Vessel Repower Program, and executed grant agreements.
- ✓ Approved APCD's participation in the California Energy Commission (CEC) Efficient Vehicle Incentive Program..
- ✓ Adopted the APCD Budget for Fiscal Year (FY) 2002-2003.
- ✓ Received a briefing on recent developments in the Marine Shipping Retrofit Program; and authorized the Chair to sign a letter to EPA commenting on proposed EPA rulemaking.

#### July

- ✓ Executed a Grant Agreement with Cachuma Boat Rentals, Inc. for up to \$83,356 for repowering 70 outboard engines on rental boats at Cachuma Lake.
- ✓ Adopted a Resolution recognizing September 6, 2002 as "Fuel Cell Vehicles Day."
- ✓ Received and filed a report on recent federal and state actions on new particulate matter standards and regulation of agricultural sources of air pollution.
- ✓ Received an update on staff efforts to work with the community to organize a countywide conference on growth, economic development, and jobs/housing balance.

The Borders bookstore in downtown Santa Barbara recently welcomed R2P2, APCD's Robot Resource for Pollution Prevention, an interactive kiosk with information on air pollution narrated by celebrities and local figures. R2P2 will be on display in the children's book section of Borders through the summer, on loan from APCD.

"Little kids love R2P2, and they're not computer shy, so they push all the buttons on the screen," says Borders General Manager Kate Schwab. She adds, "For me, the best part is seeing the parents take their kids over to learn something from R2P2. I see a lot of parents looking at it with their kids." Schwab has been Manager at the store since it opened in November of 1995. Thousands of people come to the store every day; summer is one of the busiest times. R2P2 is made of recycled

equipment that can cause air pollution, including an old gas tank with older gas nozzles, a gas lawn mower, a charcoal grill, and aerosol cans. The robot's face is a touch screen with choices to enter a variety of "Worlds," introduced by a variety of celebrities, including Shelley Long and Michael T. Weiss.

The computer system was originally developed by Ventura County Air Pollution Control District, and customized by APCD with information specific to Santa Barbara County. Local artist Daniel Girard designed and constructed R2P2's body. R2P2 was on display at the Santa Barbara Museum of Natural History September-December of 2001, and at the Santa Maria Valley Discovery Museum January-June of 2002.

For more information on R2P2, visit [www.sbcpd.org/r2p2.htm](http://www.sbcpd.org/r2p2.htm).



Kate Schwab, General Manager of the Borders Santa Barbara store, welcomes R2P2, APCD's Robot Resource for Pollution Prevention, on display in the store for the summer.

### County Commute Patterns 1990-2000

Santa Barbara County Association of Governments (SBCAG) recently received data on county commute patterns between 1990 and 2000 compiled from U.S. Census data.

#### The Good News

Commuters carpooling increased by 7.7%

Commuters riding public transit: increased by 29.6%

Commuters working at home: increased by 26.5%

Commuters driving alone to work: decreased by 1.3% (note: this is particularly encouraging, compared to a whopping 39.8% increase in this number in the 1980-1990 timeframe)

#### The Bad News

Commuters walking to work: decreased by 11.4%

Commuters biking to work: decreased by 22.7%

Average commute time: increased by 7.2%

Average commute time for residents of Lompoc, Guadalupe, Buellton: 25 minutes

Average commute time for residents of Goleta, Santa Barbara: 16 minutes

Dominant mode of travel to work: single-occupant-vehicle commuting – 69.4% of all commuters

Says Mindy Norris, Program Administrator of Traffic Solutions, a division of SBCAG, "Some of these results are encouraging, for instance, Santa Barbara County has the lowest drive-alone rate south of Monterey County. Our drive-alone rate actually declined during a time when many regions of the country experienced an increasing rate. It will take considerable effort to continue to develop viable and convenient alternative transportation options for Santa Barbara County commuters."

For more information, visit [www.trafficsolutions.info](http://www.trafficsolutions.info) or [www.sbcpd.org](http://www.sbcpd.org).



## APCD Board Calendar

### Air Pollution Control District Board

Supervisor Naomi Schwartz

*First District  
Santa Barbara County*

Supervisor Susan Rose

*Second District  
Santa Barbara County*

Supervisor Gail Marshall

*Third District  
Santa Barbara County*

Supervisor Joni Gray

*Fourth District  
Santa Barbara County*

Supervisor Tom Urbansky

*Fifth District  
Santa Barbara County*

Mayor Russ Hicks

*City of Buellton*

Councilmember Dick Weinberg

*City of Carpinteria*

Councilmember Cynthia Brock

*City of Goleta*

Mayor Sam Arca

*City of Guadalupe*

Councilmember DeWayne Holmdahl

*City of Lompoc*

Councilmember Gregg Hart

*City of Santa Barbara*

Councilmember Larry Lavagnino

*City of Santa Maria*

Councilmember Ed Andrisek

*City of Solvang*

*All meetings start at 2 p.m.  
For final meeting agendas,  
call the APCD Board Clerk,  
961-8853.*

#### September 19

Board of Supervisors'  
Hearing Room  
511 East Lakeside Parkway  
Santa Maria, CA 93455

#### October 17

Board of Supervisors'  
Hearing Room  
105 East Anapamu Street  
Santa Barbara, CA 93101

#### November 21

Board of Supervisors'  
Hearing Room  
511 East Lakeside Parkway  
Santa Maria, CA 93455

#### December 19

Board of Supervisors'  
Hearing Room  
105 East Anapamu Street  
Santa Barbara, CA 93101

## Community Advisory Council

The APCD Community Advisory Council meets the second Wednesday of every month at the Days Motor Inn in Buellton. The public is welcome. For more information, call Linda Beard, 961-8853.

## Incentives for Greener Cars



In June, APCD launched a local program of incentives to encourage consumers to buy low-emission, energy-efficient vehicles, part of a statewide initiative sponsored by the California Energy Commission (CEC). Two hybrid electric models, the Honda Insight and the Honda Civic Hybrid, qualify for a \$1,000 incentive under the program. These vehicles are 50-90% cleaner than the average new car on the road. The hybrid electric vehicles use much less gasoline than typical gas vehicles, offering consumers fuel savings, and reducing emissions of greenhouse gases.

APCD and the CEC are funding the program, and the incentives are available to Santa Barbara County consumers and fleet operators through local auto dealers. More vehicles and additional manufacturers may join the program in coming months. Some automakers, including Toyota, will not be participating due to contracting restrictions.

For more information, see [www.sbcapcd.org](http://www.sbcapcd.org) or contact Gary Hoffman at [hoffmang@sbcapcd.org](mailto:hoffmang@sbcapcd.org) or 805-961-8818 or Bobbie Bratz at [bratzb@sbcapcd.org](mailto:bratzb@sbcapcd.org) or 805-961-8890.



Santa Barbara County  
Air Pollution Control District

#### Main Office

26 Castilian Drive  
Goleta, CA 93117  
(805) 961-8800

#### Business Assistance

(805) 961-8868

#### Daily Air Quality Report

[www.sbcapcd.org](http://www.sbcapcd.org)

#### Complaints/Public Information

(805) 961-8800

#### World Wide Web

[www.sbcapcd.org](http://www.sbcapcd.org)

#### E-Mail

[apcd@sbcapcd.org](mailto:apcd@sbcapcd.org)

*On the Air* is a bimonthly newsletter published by the Community Programs Section of the Santa Barbara County Air Pollution Control District. For further information on items in this newsletter, or to be added to our subscription list, please call Bobbie Bratz, 961-8890 or Email [bratzb@sbcapcd.org](mailto:bratzb@sbcapcd.org).

Our Vision: Clean Air



## Marine Shipping Emissions Update

**M**arine shipping is the largest uncontrolled source of nitrogen oxide (NOx) emissions in Santa Barbara County—and in many coastal areas of the country. While the impacts of these emissions on onshore air quality may vary, this emission source is growing rapidly. If left uncontrolled, these emissions pose a long-term threat to our ability to meet health-based air quality standards.

In June, the APCD Board approved a letter to the U.S. Environmental Protection Agency (USEPA) with comments on proposed rules in this area. APCD comments called for USEPA to:

- ❖ Set stringent new standards for NOx emissions from marine engines that will encourage technology advancement in this area.
- ❖ Apply new standards to both U.S. and foreign flagged ships.
- ❖ Identify and encourage incentive programs to reduce air emissions from the existing fleet.
- ❖ Set fuel sulfur limit requirements for both U.S. and foreign-flagged ships.
- ❖ Actively pursue international agreements to take advantage of a crucial

opportunity to set the stage for international emission-reduction efforts.

Reducing emissions from these marine vessels is more cost-effective than pursuing additional reductions from onshore industry, and setting stringent standards for new engines now is more cost-effective than retrofitting those engines years from now.

The clean-air benefits from stricter standards for new engines will not be realized for many years however, as existing vessels continue to operate with high-polluting engines. APCD is also working with partners on a project led by the

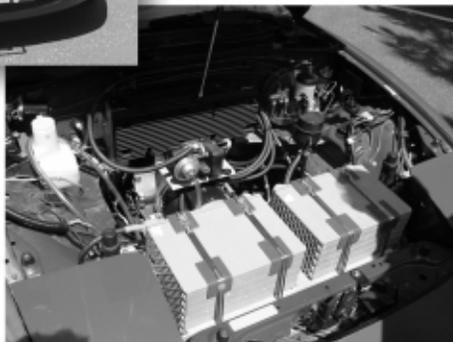
U.S. Maritime Administration to evaluate retrofit technologies that could reduce emissions from existing vessels in the near term. A cooperative pilot project under consideration will install and test an emission-reduction system on a large marine vessel that travels through the Santa Barbara Channel to a number of ports, including the Ports of Long Beach and Los Angeles.

*For more information, contact Tom Murphy at (805) 961-8857 or [murphyt@sbcapcd.org](mailto:murphyt@sbcapcd.org)*

## An Electric Miata



*Engineer Bill Theeringer shows off his electric Miata, which he converted in his garage from a gasoline-powered Miata, using off the shelf equipment.*



*Some of the lead-acid batteries are located under the hood.*

**E**ngineer Bill Theeringer recently converted a 1990 gasoline Miata to an electric Miata in his garage. The vehicle uses a total of eleven lead-acid batteries: four

installed where the spare tire used to be, two behind the front seats, and five under the hood. The electric motor is rated at about 20 horsepower, with 85 peak horsepower for short spurts. Top speed is about 85mph; it accelerates well in manual 5th gear. Total weight is 2860 lbs. The car can

go up to 50 miles before recharging, but he typically recharges at less miles. A charge at 25 miles typically takes four hours, at 240 volts. The cost of the project was about \$3,000, not including the cost for the batteries (\$1,300), which were donated to the project by Hendry

Telephone Products (the batteries had minor defects that made them unsuitable for telecom service).

*More information about the conversion project is posted on the web here:*

*[http://149.174.34.11/home-pages/Composite\\_Aircraft\\_Accessories/electric.htm](http://149.174.34.11/home-pages/Composite_Aircraft_Accessories/electric.htm)*



*The vehicle can travel up to 50 miles before recharging.*

## Compliance Advisories

APCD recently issued the advisories listed below.

### *Welders and Metal Fabricators*

❖ All welders and metal fabricators are required to use compliant coatings. Rule 330 applies to Surface Coating of Metal Parts and Products, and Rule 323 applies to Architectural Coatings. These rules are available for download from APCD's website at [www.sbcapcd.org](http://www.sbcapcd.org).

❖ Equipment that applies the most paint with minimal overspray is required for most paint spraying projects; an "HVLP" gun is the recommended device. This device may save money by

applying more paint with less waste.

❖ Welders and metal fabricators that use less than 55 gallons combined of primers, paints, and thinners per year are not required to have an APCD permit; however, they must keep receipts or invoices to demonstrate that less than 55 gallons were used in a year to support their exempt status.

### *Building Departments throughout Santa Barbara County*

❖ APCD is responsible for enforcing the federal law regulating the treatment of asbestos, a federally listed Hazardous Air Pollutant, in

renovations and demolitions of buildings. Demolition is defined under the federal regulation as the removal of "a load-bearing wall."

❖ The state Health & Safety Code requires building departments to obtain a copy of an asbestos notification or an exemption declaration before issuing demolition permits and some renovation permits.

❖ Structures that require notification include (but are not limited to): commercial buildings; schools; apartments, condominium complexes, or single-family residences with five or more units; structures having past or future commercial use; bridges;

commercial or private residences to be burned as part of a fire training exercise; urban renewal projects; industrial complexes such as oil and gas facilities.

❖ Contact APCD Inspector Fred White (North County) at 938-7918 or [whitef@sbcapcd.org](mailto:whitef@sbcapcd.org) or APCD Inspector Michael Zois (South County) at 961-8869 or [zoism@sbcapcd.org](mailto:zoism@sbcapcd.org) with questions about the asbestos program.

*Compliance Advisories are posted on the website at [www.sbcapcd.org/eng/dl/compad\\_v.htm](http://www.sbcapcd.org/eng/dl/compad_v.htm). Call APCD's Business Assistance Line at 961-8868 with additional questions.*

## WasteWise



As a member of the U.S. Environmental Protection Agency

voluntary program WasteWise, APCD tracks and reports the amount of materials we recycle annually, such as office paper, newspaper, cardboard, aluminum and glass.

Greenhouse gases, which cause global climate change, are emitted at nearly every stage in the life cycle of products including the solid waste stage. Recycling reduces greenhouse gas emissions because, generally, less energy is consumed when products are made with recycled rather than virgin materials. According to USEPA calculations, through

recycling, in one year APCD reduced greenhouse gas emissions by 5 Metric Tons Carbon Equivalent (a measurement of the atmospheric warming potential of greenhouse gases such as carbon dioxide or methane).

*For more information on WasteWise, visit [www.epa.gov/wastewise](http://www.epa.gov/wastewise).*

*For ideas on how to recycle and information on local resources visit [www.greendifference.org](http://www.greendifference.org), or call our Business Assistance Line at 961-8868.*

## P2 West Conference Comes to Santa Barbara

The Western Regional Pollution Prevention Network will hold its fall conference in Santa Barbara October 23-25 at the Radisson Hotel. APCD's Business Assistance Representative

Frances Gilliland is helping to coordinate the gathering of pollution prevention (P2) representatives from western states. Conference sessions' topics range from alternative fuels to water quality.

*For more information, visit [www.westp2net.org](http://www.westp2net.org), or contact Frances Gilliland at 961-8838 or [gillilandf@sbcapcd.org](mailto:gillilandf@sbcapcd.org).*

Dry Cleaner Air Toxic Control Measure (ATCM) recertification training will be held Thursday, September 26 at the Days Inn in Buellton. There will be two sessions, one at 8:30 am, and one at 1:30 pm; space may be limited depending on demand. This will be the only recertification course offered in Santa Barbara County this year.

For more information, contact John Garnett at 961-8835 or [garnettj@sbcapcd.org](mailto:garnettj@sbcapcd.org)