

**Communities By Design**, a  
nonprofit 501c(3) training and education  
organization, in cooperation with the  
**City of Redwood City**,  
is pleased to present:

# The Forum *at Redwood City*

A CONTINUING CONVERSATION ON CITY DESIGN

## CREATING HEALTHIER COMMUNITIES : UNDERSTANDING THE LINK BETWEEN URBAN DESIGN & PUBLIC HEALTH



2005-06 SEASON: FORUM #5  
WEDNESDAY, FEBRUARY 1, 2006  
LITTLE FOX THEATER  
2209 BROADWAY  
REDWOOD CITY  
6:00 P.M. - 7:45 P.M.

On February 1, 2006, the City of Redwood City and the nonprofit "Communities By Design" hosted the fifth presentation of the 2005-2006 Forum season, with a presentation by Dr. Richard Jackson. A pediatrician by training, Dr. Jackson is a Professor of Environmental Health at the UC Berkeley School of Public Health and the co-author of "Urban Sprawl and Public Health: Designing, Planning & Building for Healthy Communities." He is the former State Public Health Officer for the State of California and the former Director of the Center of Disease Control and Prevention's (CDC) National Center for Environmental and Health. Dr. Jackson spoke about "Creating Healthier Communities: Understanding the Link Between Urban Design & Public Health."

### **A Time for Action**

Dr. Jackson began his presentation by pointing out how community planning can have profound effects on personal, local, and universal health. Designing our communities around the automobile has contributed to current health epidemics such as obesity, diabetes, heart disease, asthma and depression.

### **The Parallel to Lead**

Lead poisoning was a significant health threat here in America, even just a generation ago. Earlier in his career, Dr. Jackson spearheaded a study and solution program to significantly

lower the levels of lead in American's bloodstreams. To successfully address this issue, Dr. Jackson required the cooperation of various advocate groups who were not used to working together, including: concerned parents, doctors and nurses, environmental regulators, plaintiff attorneys, housing advocates, consumer product regulators, and political leaders. A powerful tool in their arsenal to address this issue was communicating the benefits of lowered exposure to lead. Aside from the health benefits, a reduction of blood levels of lead was found to raise I.Q. by as much as a couple of points. To put this in economic terms: assuming each I.Q. point is worth \$14,500, with 3.8 million births per year, the combined lifetime income benefit of the increased I.Q. is \$213 billion. Their success in dramatically reducing lead in our environment has been phenomenal - through things like the elimination of lead-based paint and the shift to unleaded gasoline, lead blood levels in the United States have been reduced from about 16mg/dL in 1976 to 2 mg/dL in 1999.

### **The Impacts of Sprawl on Public Health**

Our health care costs in America are rising rapidly. The amount of the Gross Domestic Product that the U.S. spends on health care now is almost 15%, as opposed to only 7% in 1970. People who live in sprawled regions weigh on average six to seven pounds more than individuals living in dense urban environments. Diabetes, named the "silent killer" by Newsweek Magazine, and heart disease caused by obesity, are putting a heavy dent in our health care system, especially with a growing aging population. Not only are senior citizens in a dire situation, but as Dr. Jackson puts it, "it starts with our children." The average 11-year-old in America now weighs eleven pounds heavier than they did in 1973. Currently, twenty-one percent of US children between the ages of nine to seventeen suffer from diagnosable mental or addictive disorders. Depression – a disorder that is impacted by both our environment and physical activity – is currently the most common disease in the U.S.

### **Sprawl and Income Inequality**

Typical sprawling patterns of development reinforce a rigid separation of income levels. Nature thrives on diversity, said Dr. Jackson, and so do communities. As developments are specifically tailored for different income levels, more and more people are becoming isolated. "Old people need young people and young people need old people... and rich people need poor people, and poor people need rich people," Dr. Jackson remarked.

### **The Supersizing of Land Consumption**

Dr. Jackson partly attributes our public health dilemma to what he dubs "the supersizing of land consumption." California alone is being paved over at a rate of 400 acres each day. The Central Valley, home to some of the world's most fertile soils, is now producing more and more housing developments and in turn yielding less abundant crops as prime farmland is being lost. The result is that newly urbanized areas have higher temperatures, less ozone protection, more air pollution and increased cases of asthma.

### **The Costs of Driving**

With seemingly abundant land on the outskirts of town, schools and office complexes are often built at the edge of our communities on more affordable marginal lots that can only be accessed by the automobile. The resulting costs include a loss in our quality of life. The average trip to work was 37% longer in 1995 than it was in 1983. The vast majority of children are no longer biking or walking to school but are driven, costing school districts \$1,000 per child per year to be bused to school. Moms today are driving double the number of miles each year than their mothers did, and their mothers drove twice as many miles as their mothers did before them. Consequently long lengths of time spent in the car have replaced daily exercise, healthier meals, and quality time at home.

Longer commutes have other risks associated with them as well. For every sixty-six miles driven, Dr. Jackson warns, the chance of being killed in a car accident is 1 in 1 million. Automobile accidents are now the leading cause of death among people between three and thirty three years of age.

### **Global Implications**

As our communities continue to sprawl and pave over more land, we are experiencing the impact on global climate as well. Dr. Jackson quoted James Hansen, “The Earth’s climate is nearing, but has not passed, a tipping point at which it will be impossible to avoid climate change with far reaching consequences. This includes not only the loss of the Arctic as we know it, but losses on a much vaster scale due to rising seas.” We are losing astounding amounts of glaciers in Greenland, not by inches but by feet and miles. With just a two-meter sea-level rise, the tip of Florida will be completely submerged.

### **Solutions**

After offering these sobering facts about the threats to public health and our environment, Dr. Jackson told the audience, “There are lots of things that we can do to change the way we live.”

From small solutions – things like making stairs in buildings more safe, accessible and prominent (taking one flight of stairs per day results in one pound loss of body weight) – to larger changes like designing all communities so that every child in America could walk or bike to school – Dr. Jackson believes we can make a difference.

With lead poisoning, it took an unlikely coalition of people working together. Those same resources for change exist today, including: concerned and informed citizens and health professionals, cost-effective technologies, the redirection of capital, new codes (for housing, buildings, and urban plans), powerful messages, lawsuits, and political leadership.

We need to remember that there are implications for our health in almost everything we do. As Dr. Jackson said, “Agricultural policy is health policy. Transportation policy is health policy. Housing policy is health policy. Urban planning policy is health policy.”

In conclusion, he said, “What’s good for us as individuals is good for us as communities, as a planet, and for our children and grandchildren.”