“Good Solutions Solve Multiple Problems”

Our shaping of the environment shapes our health, wealth, and future.

- Richard J Jackson MD MPH FAAP
- Professor and Chair, Environmental Health Sciences
- UCLA School of Public Health
- dickjackson@ucla.edu
Good Solutions

• Solve Multiple Problems

• When challenges are interlinked, so must be the solutions.
The collision of health, economic, environmental challenges— all urgent.

“Perfect Storm”
November 1, 1991
The Health and Social Storm
The Check Up

• 48 year old University administrator, father of two children

• complains of “low energy”
“Problem” List

• Physical exam unremarkable but
• 28 pounds overweight
• BP – 155/95
• Blood glucose elevated, urine normal
• Cholesterol – 270
• Signs of Depression
• No exercise … Drives to work 25 miles each way
• Spends 2 to 3 hours a day sitting in a vehicle
Treatment Plan

• Meeting with Nutritionist
• Weight loss program
• Exercise club membership
• Pedometer: 10,000 steps a day
• Getting more control of work and life commitments
Two Months Later…

• Day is already too full
• No Time for exercise
• No place to Walk
2 months later our patient is taking:

- Antihypertensive medication
- Oral Hypoglycemic agent
- Antidepressant
- Cholesterol lowering agent

• Monthly medication costs:
  - $385
• The “environment” is rigged against the patient…
• And the doctor.
U.S. Health Care Expenditures as Percent of GDP Projections

Keehan et al: *Health Affairs*  
March/April 2008 27: 145-155
Health Care Spending as % of GDP

Note: For countries not reporting 2006 data, data from previous years is substituted.
Male Life Expectancy

US Life Expectancy is #49 Worldwide – CIA Chartbook
Medical Care is NOT... Health Care
• “Even under the most optimistic estimates, of the 30 years of increased life expectancy achieved between the 1890s and 1990s, (???) years can be attributed to medical care.”

Bunker cited in Prescription for a Healthy Nation
Farley and Cohn 2004
• “Even under the most optimistic estimates, of the 30 years of increased life expectancy achieved between the 1890s and 1990s, only 5 years can be attributed to medical care.”

Bunker cited in Prescription for a Healthy Nation
Farley and Cohn 2004
CDC Headquarters - Atlanta
The Built Environment – how we build our homes, workplaces, towns, cities and world
10 leading causes of death - United States, 1900

- Pneumonia
- Tuberculosis
- Diarrhea and enteritis
- Heart disease
- Stroke
- Liver disease
- Injuries
- Cancer
- Senility
- Diphtheria
A CLEARING IN THE DISTANCE

FREDERICK LAW OL姆STED
and America in the Nineteenth Century

WITOLD RYBCZYNISKI
AUTHOR OF HOME AND CITY LIFE
England 1855-1964: Decennial Death Rates From Respiratory Tuberculosis

Deaths Per 100,000 Population

Years

1855 1865 1875 1885 1895 1905 1915 1925 1935 1945 1955 1965

1914-1918 World War I
1939-1945 World War II
1944 Antibiotics Introduced
1955 BCG Vaccination
Disease in the 21st Century

- Diseases and costs of care for Aging Populations.
- Overweight: Diabetes II, Heart Disease
- Mental Disorders: Depression, Anxiety, Developmental, Substance Abuse
- Macro-environment: Climate, Conflict
The United States has now paved over the equivalent area of the entire state of Georgia, which is 60,000 square miles.

And Photosynthesis is our friend!
Miles per capita—more than doubled in one generation

Miles per Capita: 1960 to 1995

From 4000 to 9200 VMT per person
Will 23 lanes be enough?

Proposal would put I-75 among country's biggest

By ARIEL HART
ahart@ajc.com

It's wider than an aircraft carrier. Far wider than the carving on Stone Mountain. Wider than the White House stretched end to end, twice.

It's the planned I-75, all 23 lanes, coming soon to Cobb County. As currently conceived it's 388 feet across, wider than a football field is long.

23 LANES: The state Department of Transportation is planning to expand I-75 (below) and I-575 in Cobb and Cherokee counties. The 23-lane stretch would be between Delk and Windy Hill roads on I-75.

Traffic heads north on I-75, just north of I-285, on Thursday. A proposal for the interstate is enough to make a road builder weep with joy, and make others wonder whether it's overkill.
The Leading Causes of Potential Years of Life Lost

*Transportation affects many major health risks. Potential Years of Life Lost (PYLL) takes into account the age at which people die and so gives greater weight to risks to younger people.*
For every age group from 3 through 33--crashes were the No. 1 cause of death
US Traffic Fatalities

Per vehicle-mile traffic fatalities decline, *per capita*—very little.
Automobile fatality rates by city, 1998
(excluding pedestrian fatalities; deaths/100,000/year)

Source: NHTSA
Pedestrian fatality rates by city, 1998
(deaths/100,000/year)

Source: NHTSA

- New York: 2.33
- San Francisco: 4.55
- Portland: 2.58
- Houston: 4.09
- Phoenix: 4.28
- Dallas: 6.44
- Atlanta: 1.88
- Philadelphia: 1.88

Source: NHTSA
Number of Lives Saved per year
if National Car Fatality Rate same as:

- New York City 24,000
- Portland 15,000
- Atlanta None– 15,000 additional
The Heat Island

Sketch of an Urban Heat-Island Profile

Late Afternoon Temperature

°F

°C

Rural  Commercial  Urban Residential  Suburban Residential  Suburban Residential  Rural Farmland

Suburban Residential  Downtown  Park
Federal health agents are in Chicago trying to determine the contributing factors to the more than 500 deaths related to the heat in July. Coffins containing the bodies of unclaimed victims were loaded on a truck by a Cook County morgue worker this summer for a mass burial.
Maximum Daily Ozone Concentrations and Maximum Daily Temperature

![Graph showing the relationship between maximum daily ozone concentration and maximum daily temperature for New York, NY. The graph displays a scatter plot with data points indicating a positive correlation.](image-url)
Asthma outbreak hits kids
RISKS OF THE ‘RED ZONE’

Asthma sufferer Tyrone Johnson, 2, breathes fresh air Friday as his aunt Susan Thomas tends him at Atlanta’s Hughes Spalding Children’s Hospital. Sky-high smog readings in metro Atlanta have produced a flare-up of asthma cases, especially among children.

The Atlanta Journal-Constitution SATURDAY, AUG. 19, 2000
Impact of Changes in Transportation and Commuting Behaviors During the 1996 Summer Olympic Games in Atlanta on Air Quality and Childhood Asthma

Michael S. Friedman, MD
Kenneth E. Powell, MD, MPH
Lori Butzweiler, MS
Lori M. Graham, MD
W. Gerald Teague, MD

Despite advances in asthma therapy, asthma remains a substantial public health problem. In the United States, asthma is a leading cause of childhood morbidity, with an estimated prevalence of 6.9% in children and youth younger than 18 years.1 Numerous studies have documented a rise in the morbidity, mortality, and prevalence of asthma in different populations.2-11 The causes or causes of this trend remain controversial.12-21

Experimental, laboratory, and epidemiologic studies in the last several years have linked high concentrations of known air pollutants to respiratory health problems, most notably exacerbations of asthma.22-25 However, opportunities to study the health effects of air quality are rare. One study found a decrease in particulate pollution and respiratory hospital admissions associated with the closure of an industrial factory in that community.14 To our knowledge, no study has examined the impact of improved ozone pollution for an extended period of time on asthma exacerbations or other markers of asthma morbidity. Also, the extent to which moderate concentrations of ozone (i.e., daily peak of 50-100 ppb) during various exposure lengths affects asthma morbidity remains controversial.12-16

Contest. Vehicle exhaust is a major source of ozone and other air pollutants. Although high ground-level ozone pollution is associated with transient increases in asthma morbidity, the impact of citywide transportation changes on air quality and childhood asthma has not been studied. The alternative transportation strategy implemented during the 1996 Summer Olympic Games in Atlanta, Ga, provided such an opportunity.

Objective. To describe traffic changes in Atlanta, Ga, during the 1996 Summer Olympic Games and concomitant changes in air quality and childhood asthma events.

Design. Ecologic study comparing the 17 days of the Olympic Games (July 19-August 4, 1996) to a baseline period consisting of the 4 weeks before and 4 weeks after the Olympic Games.

Setting and Subjects. Children aged 1 to 16 years who resided in the 5 central counties of metropolitan Atlanta and whose data were captured in 1 of 4 databases.

Main Outcome Measures. Citywide acute care visits and hospitalizations for asthma (asthma events) and nonsesame events, concentrations of major air pollutants, meteorological variables, and traffic counts.

Results. During the Olympic Games, the number of asthma acute care events decreased 41.6% (4.23 vs 2.47 daily events) in the Georgia Medicaid claims file, 44.1% (1.36 vs 0.76 daily events) in a health maintenance organization database, 11.1% (4.77 vs 4.24 daily events) in 2 pediatric emergency departments, and 19.1% (2.04 vs 1.65 daily hospitalizations) in the Georgia Hospital Discharge Database. The number of non-asthma acute care events in the 4 databases changed -3.1%, +1.3%, -2.3%, and +1.0%, respectively. In multivariate regression analysis, only the reduction in asthma events recorded in the Medicaid database was significant (relative risk, 0.48; 95% confidence interval, 0.44-0.86). Peak daily ozone concentrations decreased 27.9%, from 81.3 ppb during the baseline period to 58.6 ppb during the Olympic Games (P<.001). Peak weekday morning traffic counts dropped 22.5% (P<.001). Traffic counts were significantly correlated with that day's peak ozone concentration (average r=0.36 for all 4 roads examined). Meteorological conditions during the Olympic Games did not differ substantially from the baseline period.

Conclusions. Efforts to reduce downtown traffic congestion in Atlanta during the Olympic Games resulted in decreased traffic density, especially during the critical morning period. This was associated with a prolonged reduction in ozone pollution and significantly lower rates of childhood asthma events. These data provide support for efforts to reduce air pollution and improve health via reductions in motor vehicle traffic.
Results: Acute Care Visits for Asthma
1-16 year old residents of Atlanta

- Medicaid Claims*
- Kaiser HMO
- Pediatric ER's
- Hospital Admissions

Mean Daily Number of Events

- Baseline Period
- Olympic Period†

* p = 0.01
† July 19 – August 4, 1996
Source: Friedman, et al, JAMA, 2001
Results: Total Non-Asthma Related Acute Care Visits
1-16 year old residents of Atlanta

† July 19 – August 4, 1996
Asthma Study in 12 Southern California High Schools

- 3535 children with no history of asthma in 6 high and 6 low air pollution high schools

- 5 years later: 265 developed asthma.
  - High ozone high schools:
    - asthma rate was 3.3x higher in children playing three or more sports.
  - Low ozone high schools:
    - sports had no effect on asthma rates
30% Less Ozone Air Pollution with Compact Development

![Bar chart showing maximum 8-hour ozone level in the ten most sprawling areas vs. ten least sprawling areas. The chart indicates that the maximum ozone level in the top ten sprawling areas is 97.6 parts per billion, while in the ten least sprawling areas it is 69.9 parts per billion.]
Overall: Compared to 1969
Americans drive:
- 88% farther to shop
- 137% farther for errands

Mega-Mileage Moms
- Family “chauffeur”

• Average minutes per day spent in car:
  - Women overall: 64 minutes
  - Single mothers: 75 minutes

Surface Transportation Policy Project: 2000
Less Density = More Driving
Rising Sea Levels — An Alternative Theory
Obesity Trends* Among U.S. Adults
BRFSS, 1986
(*BMI ≥30, or ~ 30 lbs. overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 1991

(*BMI $\geq 30$, or $\sim 30$ lbs. overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 2000

(*BMI ≥30, or ~30 lbs. overweight for 5’4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 2005

(*BMI ≥30, or ~ 30 lbs. overweight for 5’ 4” person)
Obesity Trends* Among U.S. Adults

BRFSS, 2009

(*BMI ≥30, or ~ 30 lbs. overweight for 5’ 4” person)
BMI US Females 1988-1994

NHANES -- Measured

NHANES – In person interview-- self-reported

BRFSS – Telephone Interview
Supersizing Jet Fuel Use

- Mean weight gain of Americans in 1990s: 10 pounds
- Airline distance flown in 2000 in US: 515 billion passenger-miles
- Weight transported 1 mile by 1 gallon of fuel: 7.3 tons (passengers or cargo)
- Jet fuel to transport added weight in 2000: 350 million gallons
- Cost of extra fuel: $1.4 billion
  - (Sept 2008 prices)
- CO$_2$ emissions from extra fuel: 3.8 million tons

Data sources: NCHS; US Dept. of Transportation
Where Were We 25 Years Ago?

• In 1985, of the 21 states reporting data on obesity prevalence:
  – 0 states had more than 15% obese adults

Where Are We Today?

• In 2008, all 50 states reported data on obesity prevalence:
  – Only 1 state had less than 20%
  – 32 states had at least 25%
  – 6 states had at least 30%

Weight Gain

• Rates of overweight and obesity have **tripled** among 12-19 year olds and **quadrupled** among 6-11 year olds in the last three decades.

Relationship Between BMI and Risk of Type 2 Diabetes

Percentage of US Adults with Diagnosed Diabetes - 1994
Percentage of US Adults with Diagnosed Diabetes - 2001
Percentage of US Adults with Diagnosed Diabetes - 2007

The map illustrates the percentage of US adults with diagnosed diabetes across different states, with various color codes representing different percentage ranges: missing data, 4.5 - 5.9%, 6.0 - 7.4%, 7.5 - 8.9%, and 9.0%.
Diabetes Projected Risks:
For Babies Born in 2000

Girls: 38% lifetime risk
  - If diabetic before age 40, Lifespan shortened by 14 years (Quality of life by 19 years)

Boys: 33% lifetime risk
  - If diabetic before age 40, Lifespan shortened by 12 years. (Quality of life by 22 years)

About 26 Million Americans Have Diabetes, Up 9 Pct

By THE ASSOCIATED PRESS
Published: January 26, 2011

Filed at 11:23 a.m. EST

ATLANTA (AP) — U.S. health officials have raised their estimate of how many Americans have diabetes to nearly 26 million.

The Centers for Disease Control and Prevention released the new estimate Wednesday. It means about 1 in 12 Americans have diabetes, a disease in which the body has trouble processing sugar.

The new figure marks a 9 percent increase from the 2008 estimate of 23.6 million.

Health officials believe diabetes is becoming more common for two reasons — more people are developing obesity-related Type 2 diabetes, and people who have it are living longer.

But CDC officials say an additional blood sugar test that's now used more widely may be responsible for as much as half of the increase.
ONE 20 oz SODA per day

- 17 teaspoons of SUGAR
- 250 calories
- 40 minutes of hard basketball
High Fructose Corn Sugar

• US annual per capita consumption of HFCS

• 63 pounds
High Fructose Corn Sugar

- US annual per capita consumption of HFCS
  - 63 pounds
  - 114,545 calories
    - Can convert to 28 pounds of body fat
- You Can Burn this Off!
  - with 318 hours of Intense Exercise
Nurse Study 1976-2000

Risk of Death

Nurse Study 1976-2000

Risk of Death

- Lean: 1
- Obese: 1.9

Nurse Study 1976-2000

Risk of Death

Nurse Study 1976-2000

Risk of Death

Lean

Obese

<table>
<thead>
<tr>
<th>Lean Active</th>
<th>Lean Inactive</th>
<th>Obese Active</th>
<th>Obese Inactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1.9</td>
<td>2.4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

“Old” Schools

Credit: Manitovic Public School District

Credit: Hummel Architects, Boise, ID
“Modern” Schools

Credit: Constance E. Beaumant, NTHP

Credit: South Carolina Coastal Conservation League
Schools

- Since World War II Average School Size grew fivefold, from 127 to 653 students
- Number of Schools declined 70%

Credit: Constance E. Beaumant, NTHP
We have changed how much we walk or bike

- Percent of children who walk or bike to school:
  - 1974 → 66%
  - 2000 → 13%

(CDC, 2000)
“the number of cars on the road between 7:15 a.m. and 8:15 a.m. increases 30 percent during the school year”

--Gene Benton, city traffic engineer
– Santa Rosa, California
THERE IS TOO MUCH TRAFFIC FOR BILLY TO WALK TO SCHOOL; SO WE DRIVE HIM.
Fitness of California’s Children

Annual California Fitnessgram

• Conducted in Grades 5, 7, and 9
• Measures 6 major fitness areas
  (e.g. aerobic capacity, body composition, flexibility)
• 2004 Results: Who passed all standards?
  
  Grade 5 ➔ 25%
  Grade 7 ➔ 29%
  Grade 9 ➔ 26%
Percentage of Trips in Urban Areas Made by Walking and Bicycling: North America and Europe 1995

Pucher J and Dijkstra L. Promoting Safe Walking and Cycling to Improve Public Health: Lessons From The Netherlands and Germany. AJPH, September 2003;93(9):1509-16.
Percentage of Trips in Urban Areas Made by Walking and Bicycling: North America and Europe 1995

Pucher J and Dijkstra L. Promoting Safe Walking and Cycling to Improve Public Health: Lessons From The Netherlands and Germany. AJPH, September 2003;93(9):1509-16.
More time in a car $\rightarrow$ Higher probability of obesity

Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars

Lawrence D. Frank, PhD, Martin A. Andresen, MA, Thomas L. Schmid, PhD
More walking → Less obesity

Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars

Lawrence D. Frank, PhD, Martin A. Andresen, MA, Thomas L. Schmid, PhD
Higher density and connectivity $\rightarrow$ Lower obesity

Atlanta study 2004

**Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars**

Lawrence D. Frank, PhD, Martin A. Andresen, MA, Thomas L. Schmid, PhD
The Perfect Storm

- Social and Health Challenges
- Economic Challenges
- Environmental Challenges
“Liquidation Nation”
Expenditure Cascades

By

Robert H. Frank,¹ Adam Seth Levine,² and Oege Dijk³

¹ Cornell University, Johnson Graduate School of Management, Ithaca, NY 14853
² University of Michigan, Department of Political Science, Ann Arbor, MI 48109
³ European University Institute, Department of Economics, Fiesole, Italy 50014

Changes in Before Tax US Household Incomes 1949-1979

- Bottom 20%: +116%
- Second 20%: +100%
- Middle 20%: +111%
- Fourth 20%: +114%
- Top 20%: +99%
- Top 5%: +86%

- Bottom 20%: +3.5%
- Second 20%: +9.1%
- Middle 20%: +12.6%
- Fourth 20%: +21.5%
- Top 20%: +45.7%
- Top 5%: +68.0%
Changes In After-Tax US Household Income 1979-2000
The bar chart shows the percentage of income after taxes for different income groups:

- $0 to $11,943: 36%
- $11,944 to $22,945: 27%
- $22,946 to $38,204: 19%
- $38,205 to $60,534: 18%
- $60,535 and Greater: 14%

Source: http://www.transact.org/report.asp?id=41
How about the environmental challenges?

“Perfect Storm”
November 1, 1991
Monthly Mean CO2 at Mauna Loa
1/2005-1/2009

http://www.esrl.noaa.gov/gmd/ccgg/trends/
What the world needs to watch

Global warming is mainly the result of CO₂ levels rising in the Earth’s atmosphere. Both atmospheric CO₂ and climate change are accelerating. Climate scientists say we have years, not decades, to stabilize CO₂ and other greenhouse gases.

To help the world succeed, CO₂Now.org makes it easy to see the most current CO₂ level and what it means. So, use this site and keep an eye on CO₂. Invite others to do the same. Then we can do more to send CO₂ in the right direction.

Earth's CO₂ Home Page

<table>
<thead>
<tr>
<th>Atmospheric CO₂ for February 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary data released March 8, 2011 (Mauna Loa Observatory: NOAA-ESRL)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUSE AND EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate System</td>
</tr>
<tr>
<td>Climate Changes</td>
</tr>
<tr>
<td>Effects</td>
</tr>
<tr>
<td>Scientific Predictions</td>
</tr>
<tr>
<td>Climate Science</td>
</tr>
<tr>
<td>Temperature</td>
</tr>
<tr>
<td>Climate FAQs</td>
</tr>
<tr>
<td>Presentations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KNOW CO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Need to Know CO₂</td>
</tr>
<tr>
<td>CO₂ Monitoring</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KNOW GHGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions</td>
</tr>
<tr>
<td>Methane</td>
</tr>
<tr>
<td>All Greenhouse Gases</td>
</tr>
</tbody>
</table>
NOAA-measured Global Temperature Change

- The atmosphere and the earth’s surface have become hotter over the last 25 years.

*Science* 12 May 2006: Vol. 312. no. 5775, p. 825
“Perfect Storm”
November 1, 1991

“Cross-Domain Solutions”
The purpose of public health is to fulfill society’s interest in assuring the conditions in which people can be healthy.
The purpose of public health is to fulfill society’s interest in assuring the conditions in which people can be healthy.
"...sound as a bell"

More Doctors Smoke Camels than any other Cigarette

"Everybody's doing it!"

7 out of 10 smokers inhale knowingly — the other 3 inhale unknowingly.

DO YOU INHALE?

"It's toasted" — Joe Pastore.

Lucky Strike Cigarettes
• Intervening at the personal level is important, but so are the population interventions
California vs. Rest of US: Adult Cigarette Consumption 1984 to 2004

California State Board of Equalization (packs sold) and California Department of Finance (population). U.S Census, Tax Burden on Tobacco, and United States Department of Agriculture. Note that data is by fiscal year (July 1-June 30).
Lung Cancer Incidence: California vs. Rest of U.S.

1988-2003

Rate per 100,000

U.S. minus CA (SEER) ↓ 4%
California ↓ 21%!

*SEER includes 14 cancer registries from across the U.S.

American Cancer Society, CA Division and Public Health Institute, CA Cancer Registry, California Cancer Facts and Figures 2007, September 2006.
Mindfulness about Food

The CIA wants to help us to eat more healthfully.
Culinary Institute of America
Food
Doof
1 cent per teaspoon HFCS?

• Average American consumes 63 pounds of HFCS each year (6,048 teaspoons).
• US population: 300 million
• $0.01 per teaspoon HFCS would generate...

$18 billion a year
Always good, but especially as we age, what is the best exercise?
10,000 Steps a Day
Originated from Japanese: “Manpo-Kei”
10,000 steps

• 3234 people with IGT (Pre-Diabetes)
• walked or exercised five times a week for 30 minutes
• lost 5% to 7% of their body weight
• reduced their risk of diabetes by 58%
Survival of 1263 men with Type 2 Diabetes: Fit vs Unfit

Low Cardiorespiratory Fitness and Physical Inactivity as Predictors of Mortality in Men with Type 2 Diabetes." 18 April 2000 Annals of Internal Medicine 132, pp 605-611  M. Wei et al
“These stairs have become a gathering, meet and greet space for us as well as a way to get from the first to the third floor. Since we moved into our new office with its convenient, attractive stair, almost no one uses the elevator.”

Thompson E. Penney, FAIA  President/CEO  LS3P ASSOCIATES LTD.
TAKE THE PATH OF MOST RESISTANCE.

KAISER PERMANENTE® thrive
Educational Benefits of Walking and Biking to School

• Increases concentration
• Improves mood and ability to be alert
• Improves memory and learning
• Enhances creativity
Fairfax, California
After Starting Program for Safe Routes to School

<table>
<thead>
<tr>
<th>Manor School</th>
<th>Drive Alone</th>
<th>Walk/Bike/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>62%</td>
<td>39%</td>
</tr>
<tr>
<td>After</td>
<td>38%</td>
<td>61%</td>
</tr>
</tbody>
</table>
Cost
PDE’s experience has shown it is generally less expensive to renovate an existing school than build a new one, especially considering the cost of land acquisition and development. Renovations in 2000 to Pottstown’s 1932 middle school, right, cost $108 per square foot, while an addition cost $136 per square foot.
More Daylight = Healthier Classroom

Students with the most daylight progressed 20% faster on math and 26% on reading.

Energy Savings with Daylighting

– Save 30% to 80% in lighting energy costs
– Reduce whole building energy costs by 5% to 60%
– Reduce peak electricity demand 5% to 40%
– And it works for the life of the building…
  even when the power goes out
743 Kilowatt Solar System in City of Industry
Without “net metering”, owners are discouraged from building the largest system the site will accommodate.

And it generates more local employment
Kaiser Permanente...

- Nation’s 5th largest stand-alone construction company

- $11 billion real estate portfolio: more than 62 million sq ft, and the largest in California

- $27 billion* building program: one of the largest construction programs in the history of American health care

* 2006-2014 Facility Capital Expenditures (Forecasted)
Increasing Bicycle Use, Portland, OR

Bridge Bicycle Traffic
2,850 3,555 3,885 3,830 3,207 4,520 5,225 5,690 5,910 6,015 7,686 8,250 8,562 8,875 10,192 11,956
Bikeway Miles
78 83 86 103 113 144 166 183 213 222 235 252 254 260 262 263

1991: 78 miles of bikeways 2,850 daily trips
2006: 263 miles of bikeways 11,956 daily trips
THE OPTION OF URBANISM
INVESTING IN A NEW AMERICAN DREAM

CHRISTOPHER D. LEMEINERGER
Charlotte, NC, Light Rail Opened November, 2007
The Effect of Light Rail Transit on Body Mass Index and Physical Activity

John M. MacDonald, PhD, Robert J. Stokes, PhD, Deborah A. Cohen, MD, MPH, Aaron Kofner, MS, Greg K. Ridgeway, PhD

Background: The built environment can constrain or facilitate physical activity. Most studies of the health consequences of the built environment face problems of selection bias associated with confounding effects of residential choice and transportation decisions.

Purpose: To examine the cross-sectional associations between objective and perceived measures of the built environment; BMI; obesity (BMI > 30 kg/m²); and meeting weekly recommended physical activity (RPA) levels through walking and vigorous exercise. To assess the effect of using light rail transit (LRT) system on BMI, obesity, and weekly RPA levels.

Methods: Data were collected on individuals before (July 2006 – February 2007) and after (March 2008 – July 2008) completion of an LRT system in Charlotte NC. BMI, obesity, and physical activity levels were calculated for a comparison of these factors pre- and post-LRT construction. A propensity score weighting approach adjusted for differences in baseline characteristics among LRT and non-LRT users. Data were analyzed in 2009.

Results: More-positive perceptions of one’s neighborhood at baseline were associated with a −0.36 (p < 0.05) lower BMI; 15% lower odds (95% CI = 0.77, 0.94) of obesity; 9% higher odds (95% CI = 0.99, 1.20) of meeting weekly RPA through walking; and 11% higher odds (95% CI = 1.01, 1.22) of meeting RPA levels of vigorous exercise. The use of LRT to commute to work was associated with an average −1.18 reduction in BMI (p < 0.05) and an 81% reduced odds (95% CI = 0.04, 0.92) of becoming obese over time.

Conclusions: The results of this study suggest that improving neighborhood environments and increasing the public’s use of LRT systems could provide improvements in health outcomes for millions of individuals.

Before and After the Charlotte Light Rail Began Service

Interviewed People at 839 Locations years before and after Charlotte Light Rail Service Began
• Significant increase in meeting the weekly Recommended Physical Activity
• … through walking (Odds Ratio 1.09)
• …and through vigorous exercise (OR 1.11)
• The use of Light Rail Transit to commute to work was associated with an average reduction of 1.18 BMI points ($p < 0.05$) and 81% reduced odds of becoming obese over time.

• For a person who is 5’5” --equivalent to a relative weight loss of 6.45 lbs.
Cumulative Government Capital Investment in Transit and Highways Since 1956

China has become the global leader in HSR and is looking to extend the network all the way to Europe, the UK and Southeast Asia.

NYC launches "Schoolyard to Playground" Initiative

Contact:
Susan Clark, The Trust for Public Land, (212) 677-7171/ (347) 675-5824, susan.clark@tpl.org

New York, NY 7/2/2007: Mayor Michael R. Bloomberg announced today that the City of New York will transform 290 schoolyards into vibrant community parks by 2010 with the help of The Trust for Public Land (TPL), a nonprofit organization dedicated to providing parks for people. This begins a $111 million investment from the Bloomberg Administration towards the improvement of schoolyards, which will significantly advance the mayor’s PlaNYC goal of having every New Yorker live within a 10-minute walk of a park or playground.

"Today marks the start of realizing a central goal of the PlaNYC agenda-making sure all New Yorkers live within a 10-minute walk of a park or playground," said Mayor Bloomberg. "I want to thank The Trust for Public Land-through their Parks for People program, they are a great partner in building and preserving open space across the city."

TPL Senior Vice President Rose Harvey announced the new initiative with Mayor Michael R. Bloomberg.

Photo: Avery Wham

August 2007   Trust for Public Land
10% increase in urban parks = 4°F decrease in urban surface temperature
Welcome to MillionTreesNYC News!

Almost one year has passed since MillionTreesNYC was launched by Mayor Michael R. Bloomberg and New York York Restoration Project (NYRP) Founder Bette Midler. With your help, we are well on our way to planting one million new trees by 2017 and making our city cooler and greener. The MillionTreesNYC one-year anniversary is a chance to reflect on the many accomplishments achieved thus far, and to honor the individuals, community groups and corporations who have joined us to dig in and make the beginning of this ambitious initiative such a tree-mendous success.

Over the past year, we have planted 3,639 trees on 11 New York City Housing Authority (NYCHA) campuses, planted 45,141 trees in parks as part of our citywide reforestation projects, and planted 21,441 trees along our city’s streets. This fall, look for new trees in schoolyards and playgrounds, hospitals and health centers, faith-based and cultural institutions, college and university campuses, cemeteries and other publicly accessible land throughout the City’s five boroughs.

Additionally, this fall we are launching the MillionTreesNYC Training Program, which will train a group of dedicated young adults in urban forestry and landscaping techniques. We are also piloting a new, integrated education program in 5th grade city classrooms entitled RespecTree, which combines an 8-month arbor education curriculum with on-site tree planting. In addition, the MillionTreesNYC team has
Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. Instituting a complete streets policy ensures that transportation agencies routinely design and operate the entire right of way to enable safe access for all users.


http://www.completestreets.org/complete-streets-fundamentals/complete-streets-faq/
Linking Our Food, Farms & Future

SAGE (Sustainable Agriculture Education)

SAGE is a pioneer in connecting rural and urban interests for their mutual benefit.

To preserve regional agriculture, while meeting the equally urgent need for equitable, sustainable urban development, SAGE has developed an holistic approach to establishing multifunctional agriculture at the metropolitan edge, and fostering linkages between rural farmers and urban city dwellers.

Services & Projects

SAGE develops projects and participates in collaborations to support sustainable regional food and agriculture.

Urban Edge Agriculture Parks - part working agriculture and part parkland, our successful Sunol Water Temple Agricultural Park is a model of this approach

New Ruralism Framework: Metro Region Ag Planning & Foodshed Assessments - developing frameworks and projects for bridging smart growth and local food systems

Public & Farmers' Markets – bringing farmers and the community together

Public Education – engaging the public in sustainable agriculture
School Gardens

Exercise, Learning, Cooperation, Fun, and

It Tastes good
Dear Mr. President-Elect,

It may surprise you to learn that among the issues that will occupy much of your time in the coming years is one you barely mentioned during the campaign: food. Food policy is not something American presidents have had to give much thought to, at least since the Nixon administration — the last time high food prices presented a serious political peril. Since then, federal politics to promote maximum production of the commodity crops (corn, soybeans, wheat and rice) from which most of our supermarket foods are derived have succeeded impressively in keeping prices low and food more or less off the national political agenda. But with a suddenness that has taken us all by surprise, the era of cheap and abundant food appears to be drawing to a close. What this means is that you, like so many other leaders through history, will find yourself confronting the fact — so easy to overlook these past few years — that the health of a nation’s food system is a critical issue of national security. Food is about to demand your attention.

Complicating matters is the fact that the price and abundance of food are not the only problems we face; if they were, you could simply follow Nixon’s example, appoint a latter-day Earl Butz as your secretary of agriculture and instruct him or her to do whatever it takes to boost production. But there are reasons to think that the old approach won’t work this time around; for one thing, it depends on cheap energy that we can no longer count on. For another, expanding production of industrial agriculture today would require you to sacrifice important values on which you did campaign. Which brings me to the deeper reason you will need not simply to address food prices but to make the reform of the entire food system one of the highest priorities of your administration: unless you do, you will not be able to make significant progress on the health care crisis, energy independence or climate change.

Unlike food, these are issues you did campaign on — but as you try to address them you will quickly discover that the way we currently grow, process and eat food in America goes to the heart of all three problems and will have to...
Certified Farmers' Markets

Buy Local San Diego Produce

Visiting one of the Farmers' Markets in San Diego County allows you to experience agriculture. These Farmers' Markets are certified by the State, ensuring that the produce is being sold by the grower, is grown in California and meets all California quality standards. These criteria ensure that you receive the freshest produce for the right price.

For information about how to become Certified by the State to sell your produce at a Farmer's Market call the County of San Diego Department of Agriculture Weights & Measures.

San Marcos Office: 760-752-4700
San Diego Office: 858-694-2778

New Market Coming Soon

Thursday, September 4th will be the inaugural day for the Farm Bureau sponsored Valley Center Farmers’ Market. The weekly market will start at 3:00 p.m. and run until sunset. The location is the parking lot between the Upper and Lower Elementary Schools on Cole Grade Road. If you want to be a part of this market, give Casey Anderson a call at 760-745-3023.
Vehicle Miles Traveled vs Gross Domestic Product 1960-2010

Growing Wealthier  Kooshian & Winkelman  Jan 19, 2011
Walk Score™: How walkable is your house?

Why Walking Matters | Walkable Neighborhoods | What is Walk Score?

Address: 120 Spindale Court 30350

Walk Score: 0 out of 100

Worst Best What it means

Expand all

Grocery stores
Kroger Co the: Info 1.05 Mi

Restaurants
Oscar's Villa Capri 1.05 Mi

Coffee shops
Starbucks 1.05 Mi

Bars
Timmy's Village Pub 1.05 Mi

Movie Theaters
Jewish Theatre of t 1.82 Mi

Schools
Holcomb Bridge Midd 1.9 Mi

Libraries
Dunwoody Library 3.18 Mi

Parks
Horseshoe Bend Coun 1.11 Mi

Bookstores
Smythe Books 1.18 Mi

What is Walk Score? Walk Score helps people find walkable places to live. Walk Score calculates the walkability of an address by locating nearby stores, restaurants, schools, parks, etc.
www.walkscore.com
A Model Curriculum for a Course on the Built Environment and Public Health
Training for an Interdisciplinary Workforce

Neha D. Bochove, PhD, Susan E. Hobson, MPH, Andrew L. Dannenberg, MD, MPH, Karen G. Minneci, PhD, Cheryl K. Conant, PhD, Tracy E. McMillan, PhD, MPH, Richard J. Jackson, MD, MPH, Rustell Lopez, PhD, Curtis Winkle, PhD

Abstract: Despite growing evidence of the direct and indirect effects of the built environment on public health, planners who shape the built environment, and public health professionals, who protect the public’s health, rarely interact. Most public health professionals have little experience with urban planners, zoning boards, city councils, and others who make decisions about the built environment. Likewise, few planners understand the health implications of design, land use, or transportation decisions. One strategy for bridging this divide is the development of interdisciplinary courses in planning and public health that address the health implication of the built environment. Professional networking and interest-based search in 2007 led to the identification of six primarily graduate-level courses in the U.S. that address the links between the built environment and public health. Common content areas in most of the identified courses included planning and public health histories, health disparities, interdisciplinary approaches, air and water quality, physical activity, social capital, and mental health.

Instructors of these courses collaborated on course content, assignment, and evaluations to develop a model curriculum that follows an active learning-centered approach to course design. The proposed model curriculum is adaptable by both planning and public health departments to promote interdisciplinary learning. Results show that students gain planning and public health perspectives through this instruction, benefiting from active-learning opportunities. Faculty implementation of the proposed interdisciplinary model curriculum will help bridge the divide between the built environment and public health and enable both planners and public health professionals to value, create, and promote healthy environments.

© 2009 American Journal of Preventive Medicine

Introduction

A century ago, planning and public health professionals worked together to protect the public’s health and prevent the spread of disease by developing zoning laws to influence the built environment.1,2 However, the disciplines soon diverged: public health followed a classical model, and planning focused on policy development and physical form. These two fields are re-converging because many chronic diseases are associated with both the built environment and the individual behaviors that cumulatively lead to negative health outcomes.5–8

Traditionally, planning and public health are taught and practiced with little coordination. Most community-design and transportation-planning decisions are made by urban planners, zoning-board members, and city councilors—seldom by public health professionals. Most public health professionals have little contact with planning professionals, except in relatively narrow domains such as water- and sewer-infrastructure-review processes. The model of social determinants of health and environmental health promotion describes health and disease outcomes resulting from the built environment and social context as well as community-level factors. These include infant and child health, obesity, cardiovascular diseases, diabetes, cancer, injuries and
APHA National Meeting 2002
Abstracts with “land use” - 0
Search Results

Search for: land use
Match: All words
Sort by: Relevance

Restrict to E-ssential Learning Recorded Presentations
Virtual Expo

Found 55 matches
Displaying 1 to 10

1. 100% Session: Built Environment Institute III: Building partnerships in land use and community design decision-making... PA APHA 2005 5097.0: Wednesday, December 14, 2005: 12:30 PM-2:00 PM Oral Built Environment Institute III: Building partnerships in land use and community design decision-making Decisions about the built urban environment are often made without regard for their potential impact on a community ...

2. 75% Using Community-Identified Health and Environmental Indicators for Land Use Advocacy: Exposition December 10-14, 2005 Philadelphia, PA APHA 2005 5096.0: Wednesday, December 14, 2005 - 1:42 PM Abstract #116620 Using Community-Identified Health and Environmental Indicators for Land Use Advocacy Margaret Gordon, West Oakland Environmental Indicators Project/Pacific ...

3. 70% Transportation, land use, and public health: Opportunities for designing and building healthy places Howard Frumkin, MD, DrPH, Director, NCEH/ATSDR/Centers for Disease Control ...

4. 53% Air toxics and land use in the urban environment: Neighborhood exposures and inequalities Howard Frumkin, MD, DrPH, Director, NCEH/ATSDR/Centers for Disease Control ...

5. 52% Environmental Justice and Children's Health: Linking Land Use Issues to Create School Air Quality Policies Sylvia Hernandez, PhD, People Organized in Defense of Earth and Her Resources, PO Box 6237, Austin, TX 78762 ...

6. 52% Protecting the Agricultural History and Cultural Identity of the South Valley Through a Public Health, Environmental Research and Land Use Redevelopment Collaboration: Abstract #116768 Protecting the Agricultural History and Cultural Identity of the South Valley Through a Public Health, Environmental Research and Land Use Redevelopment Collaboration Sylvia Ledesma, Kalpali Izkali, 1028 Apt. C, Anne Avenue, SW, Albuquerque, NM 87105, 505.804.4602, izkali@comcast ...

7. 48% Historical losses and feelings about those losses and alcohol use and abuse among a random sample of American Indians in the northern plains of the U.S Philip A. May, PhD, Margaret Anne Yellow Kidney, BSN, and J. ...

8. 43% Community Profiles and Priorities MICA: Using evidence to understand community needs Beth Baker, PhD, MPH 1, Garland Land, MPH 2, Laura K Brennan Ramirez, PhD, MPH 3, and Julie M. Bender, MPH, CHES ...

9. 36% Session: Using Technology to Promote Evidence-based Needs Assessment, Priority Setting and Intervention Planning at the State and Local Levels; a Descriptive Study December 10-14, 2005 Philadelphia, PA APHA 2005 3268.0: Monday, December 12, 2005 - 2:30 PM Abstract #112474 Community Profiles and Priorities MICA: Using evidence to understand community needs ...
1. **100%** 136th APHA Annual Meeting & Exposition (October 25-29, 2008): Reduced Infectious Disease Risk among Recent Border Crossing Injection Drug Users along the Mexico/U.S. Border

   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 187232 Reduced Infectious Disease Risk among Recent Border Crossing Injection Drug Users along the Mexico/U.S. Border Tuesday, October 28, 2008 Kimberly C. Brouwer, PhD , Division of International Health & Cross-Cultural Medicine

2. **98%** 136th APHA Annual Meeting & Exposition (October 25-29, 2008): Role of Health in San Francisco Bay Area Community Development and Land Use Efforts

   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 186912 Role of Health in San Francisco Bay Area Community Development and Land Use Efforts Monday, October 27, 2008: 5:20 PM Jee McLean, MPH, MCP , Center for Health and Policy, PolicyLink, Oakland, CA Victor Rubin, PhD , Center... 


   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 184618 Evaluating a Movement: Using Systems Change Outcomes Tuesday, October 28, 2008: 5:15 PM Mary Kueger, Dr PH , Philip R. Lee Institute for Health Policy Studies, UCSF, University of California, San Francisco, San Francisco

4. **77%** 136th APHA Annual Meeting & Exposition (October 25-29, 2008): Port, air quality, and land use planning in the San Diego context

   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 189440 Port, air quality, and land use planning in the San Diego context Monday, October 27, 2008: 10:30 AM Joy Williams, MPH , Environmental Health Coalition, National City, CA Audio (mp3) recording Multimedia recording The...

5. **75%** 136th APHA Annual Meeting & Exposition (October 25-29, 2008): Crossings administrative borders and using GIS to effectively target risk dwellings for a lead abatement program: Riverside County, California

   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 177950 Crossing county administrative borders and using GIS to effectively target risk dwellings for a lead abatement program: Riverside County, California Tuesday, October 28, 2008: 2:56 PM Wayne Hamis , Epidemiology


   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 178995 A Community guide to environmental health: Improving human health through sustainable use of ecosystems Wednesday, October 29, 2008 Pam Fadem , Esperian Foundation, Berkeley, CA Public health is facing increasing threats in every continent...

7. **38%** 136th APHA Annual Meeting & Exposition (October 25-29, 2008): Knowledge, attitude and practice of using information technology to seek health care information: Results from a telephone survey in the Central Valley, California

   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 178486 Knowledge, attitude and practice of using information technology to seek health care information: Results from a telephone survey in the Central Valley, California Wednesday, October 29, 2008: 12:30 PM Mohammad Rahman...


   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 176210 Validation of self-reported occupational exposures in meatpacking workers Sunday, October 26, 2008 Lina Lander, ScD , Department of Environmental Health, Harvard School of Public Health, Boston, MA Gary S. Sorensen, PhD , Health Policy and Management, Johns Hopkins...


   [Visit Client Website ] Home | Browse by Day | or Program | Author Index 175842 Implementing a Medicaid Cessation Benefit: The Massachusetts Experience Wednesday, October 29, 2008 Gary W. Leibowitz, Department of Health Policy, Boston, MA Donna Wang, MA/MBA , Tobacco Control Program, Massachusetts Department of Public Health, Boston, MA Thomas Land, PhD , Tobacco Control Program, Massachusetts Department of Public Health, Boston, MA Ayessa Camerata, MBA , Office of Medicaid, Chief of Staff...

10. **32%** 136th APHA Annual Meeting & Exposition (October 25-29, 2008): Geographical patterns of malaria - can climate alter malaria patterns in the Amazon?

    [Visit Client Website ] Home | Browse by Day | or Program | Author Index 175254 Geographical patterns of malaria - can climate alter malaria patterns in the Amazon? Sunday, October 26, 2008 Linna G. Chaves, ScD , Department of Public Health, Boston, MA Emma Voller, PhD , Department of International Health, Harvard School of Public Health, Boston, MA Thomas Land, PhD , Tobacco Control Program, Massachusetts Department of Public Health, Boston, MA Ayessa Camerata, MBA , Office of Medicaid, Chief of Staff...

   ...
1. 137th APHA Annual Meeting (November 7-11, 2009): Lessons learned in applying a community initiated land use policy to mitigate the impact of alcohol sales and alcohol use
   [Visit Client Website] Home | Browse by Day | or Program | Author Index 204997 Lessons learned in applying a community initiated land use policy to mitigate the impact of alcohol sales and alcohol use Tuesday, November 10, 2009: 10:48 AM Melinda Martin, MPH, Community Health Promotion & Prevention ...

2. 137th APHA Annual Meeting (November 7-11, 2009): Land Use and Children's Respiratory Symptoms in Connecticut
   [Visit Client Website] Home | Browse by Day | or Program | Author Index 204986 Land Use and Children's Respiratory Symptoms in Connecticut Tuesday, November 10, 2009: 10:35 AM Keita Ebisu, School of Forestry and Environmental Studies, Yale University, New Haven, CT Theodore R. Holford, Department ...

3. 137th APHA Annual Meeting (November 7-11, 2009): Transforming the Built Environment Through Land Use Policy Innovation: Two Case Studies
   [Visit Client Website] Home | Browse by Day | or Program | Author Index 205656 Transforming the Built Environment Through Land Use Policy Innovation: Two Case Studies Monday, November 9, 2009: 5:15 PM Deborah A. Howe, PhD, FAICP, Department of Community and Regional Planning, Temple University, ...

4. 137th APHA Annual Meeting (November 7-11, 2009): From crisis to opportunity: Using land-use tools to educate and engage vulnerable populations in environmental health policy development
   [Visit Client Website] Home | Browse by Day | or Program | Author Index 206149 From crisis to opportunity: Using land-use tools to educate and engage vulnerable populations in environmental health policy development Monday, November 9, 2009: 8:30 AM Lark Galloway-Gilliam, MPA, Community Health Councils ...

http://apha.confex.com/apha/137am/webprogram/start.html#srch=words%7C%22land%20use%22%7Cmethod%7Cand%7Cpge%7C1
Medline Search: Land Use and Health
1900 citations
Designing and Building Healthy Places

The way we design and build our communities can affect our physical and mental health. Healthy community design integrates evidence-based health strategies into community planning, transportation, and land-use decisions.

Healthy community design can improve people’s health by:
- Increasing physical activity;
- Reducing injury;
- Increasing access to healthy food;
- Improving air and water quality;
- Minimizing the effects of climate change;
- Decreasing mental health stresses;
- Strengthening the social fabric of a community; and
- Providing fair access to livelihood, education, and resources.

CDC’s Healthy Community Design Initiative is part of the National Center for Environmental Health’s Division of Emergency and Environmental Health Services. The Initiative works to improve public health by:

Site Resources
- About Healthy Places
- Additional Resources
- Conferences & Events
- Fact Sheets
- Image Libraries
- Key Resources
- News Releases
- Podcasts
- Publications & Selected Current Projects
- Press Materials

www.cdc.gov/healthyplaces
The Built Environment: Designing Communities to Promote Physical Activity in Children

Committee on Environmental Health

ABSTRACT
An estimated 32% of American children are overweight, and physical inactivity contributes to this high prevalence of overweight. This policy statement highlights how the built environment of a community affects children’s opportunities for physical activity. Neighborhoods and communities can provide opportunities for recreational physical activity with parks and open spaces, and policies must support this capacity. Children can engage in physical activity as a part of their daily lives, such as on their travel to school. Factors such as school location have played a significant role in the decreased rates of walking to school, and changes in policy may help to increase the number of children who are able to walk to school. Environment modification that addresses risks associated with automobile traffic is likely to be conducive to more walking and biking among children. Actions that reduce parental perception and fear of crime may promote outdoor physical activity. Policies that promote more active lifestyles among children and adolescents will enable them to achieve the recommended 60 minutes of daily physical activity. By working with community partners, pediatricians can participate in establishing communities designed for activity and health. Pediatrics 2009;123:1591-1598
That CMA support legislation that maximizes physical activity opportunities when funds from voter-approved infrastructure funding measures are allocated.
California Medical Association – Resolution 11  January, 2007

That CMA support legislation that enhances the role of public health in local planning, zoning and the school siting process to facilitate the design of communities which foster and support physical activity.
That CMA seek opportunities to educate its members and the public about the potentially negative effects of the consumption of high fructose corn syrup.
Yes, people do want density
Envisioning Change
Envisioning Change
Governor Schwarzenegger Signs Sweeping Legislation to Reduce Greenhouse Gas Emissions through Land-Use

Continuing California’s environmental leadership in fighting global warming, Governor Arnold Schwarzenegger announced that he has signed SB 375 by Senator Darrell Steinberg (D-Sacramento), which builds on AB 32, California’s first-in-the-nation law to reduce greenhouse gas emissions, by adding the nation’s first law to control greenhouse gas emissions by curbing sprawl.
AB 1358 - Complete Streets Act

This bill prompts cities and counties to plan for the accommodation of all users of the roadway including motorists, bicyclists, pedestrians, seniors, children, and the disabled. Planning for these accommodations before construction begins is cheaper than retrofitting existing infrastructure and will give Californians real options for getting out of their cars. The resulting reduction in vehicle miles traveled will reduce California’s greenhouse gas emissions and help us meet standards set by AB 32.
Making Healthy Places
Designing and Building for Health, Well-being, and Sustainability

Andrew L. Dannenberg, Howard Frumkin, and Richard J. Jackson

Urban Planning / Health

Expected Shipping Date: June 15, 2011

Editors' Residences:
Atlanta, Georgia
Seattle, Washington
Los Angeles, California

R.J. Books, 200 pages,
Cloth $80.00 \(978-1-59726-726-7\)
Paper $40.00 \(978-1-59726-727-4\)
E-book: $40.00 \(978-1-51075-096-1\)

Andrew L. Dannenberg, M.D., M.P.H., serves as a consultant to and formerly was team leader of the Healthy Community Design Initiative in the National Center for Environmental Health at the CDC. He is an affiliate professor at the University of Washington, Seattle. Howard Frumkin, M.D., Ph.D., is dean of the School of Public Health at the University of Washington. Richard J. Jackson, M.D., M.P.H., is professor and chair of the Department of Environmental Health Sciences at UCLA. Frumkin and Jackson are coauthors of Urban Sprawl and Public Health.

The environment that we construct affects both humans and our natural world in myriad ways. There is a pressing need to create healthy places and to reduce the health threats inherent in places already built. However, there has been little awareness of the adverse effects of what we have constructed—or the positive benefits of well-designed built environments.

This book provides a far-reaching follow-up to the pathbreaking Urban Sprawl and Public Health, published in 2004. That book sparked a range of inquiries into the connections between constructed environments, particularly cities and suburbs, and the health of residents, especially humans. Since then, numerous studies have extended and refined the book's research and reporting. Making Healthy Places offers a fresh and comprehensive look at this vital subject today.

There is no other book with the depth, breadth, vision, and accessibility that this book offers. In addition to being of particular interest to undergraduate and graduate students in public health and urban planning, it will be essential reading for public health officials, planners, architects, landscape architects, environmentalists, and all those who care about the design of their communities.

Like a well-trained doctor, Making Healthy Places presents a diagnosis of—and offers treatment for—problems related to the built environment. Drawing on the latest scientific evidence, with contributions from experts in a range of fields, it imparts a wealth of practical information, with an emphasis on demonstrated and promising solutions to commonly occurring problems.
In five vital arenas, the environment, education, public health, arts and culture, and food and organic living, the MPC has developed essential multi-media to inspire effective local action for change.

**designing healthy communities**

How do we address public health epidemics like obesity, heart disease, depression, and diabetes? The answer may lie in the environments we inhabit. In Designing Healthy Communities, community leaders and citizens alike construct roads, parks, schools, and offices to transform our lives.
DESIGNING HEALTHY COMMUNITIES

RICHARD J. JACKSON
Our Patient starts to bicycle 5 miles to the Transit Center 3 days per week
Savings

- The family car ran 1500 less miles
- Saved 64 gallons of gasoline and $704
The New Bicycle Commuter

• 30 minute bicycle trip burns 250 calories each way (for a 190 pound man)
• 3 days per week = 1500 calories per week, 78,000 calories/year.
• Converts to 22 pounds of body fat.
The New Bicycle Commuter

• 30 minute bicycle trip burns 250 calories each way (for a 190 pound man)
• 3 days per week = 1500 calories per week, 78,000 calories/year.
• Converts to 22 pounds of body fat.
The New Bicycle Commuter
One year follow up

• Weight - 168 pounds (BMI 24.5)
• BP - 130/78
• Blood sugar – Normal
• Cholesterol – 175
• Energy level and Mood - Good
Good Solutions

• Solve Multiple Problems

• When challenges are interlinked, so must be the solutions.
"Soaring Health and Energy Costs, Crashing Economies and Ecosystems: the built environment must be a major part of the solution"

• Richard J Jackson MD
• dickjackson@ucla.edu