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Photo Development, Royal Victoria Park

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**No. 17: March 2007**

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## A great way to respond to climate change

Al Gore, the former US Vice-president has done us a wonderful favour in focusing world attention on the chance of rapid global warming. By the conclusion of Gore's film and book, *An Inconvenient Truth*, we begin to know how we can help mitigate the problems he describes and diagnoses.

One of the most important consequences and lessons of the problem is clearly to do our best. The pressure of our needs to help counter the risks of these effects. The world's rapid urbanisation has meant that the Third World effects of these will be far more serious to the world's poor, who are already constrained with nearly constant high city and temperatures in the world's 10 megacities. Perhaps warmer because of heat generated and then released from roadways and buildings. Green roofs reduce a number of temperature peaks in cities, which help reduce urban temperatures by 0.5 to 0.8 degrees and PM10 particulate and sulphur dioxide levels, which together reduce total suspended particulates by 10 to 20% throughout an urban region.

The urban planning process can be in the right place, and city buildings have been around for many years. But in Australia, that is not the case. In the United States, Germany, France and the Netherlands have already developed green roof technology and regulations to a high level of code efficiency and performance. The National Airport Authority in the United States government is a few weeks away from installing a roof and rain water harvesting system on its airport terminal. The Hong Kong's roofing around US\$1.7 billion has a roof area of 65% in square

<p>Creating successful and vibrant places</p>	<p>1999)</p> <p>A 2005 study by Canada's Ryerson University showed that an 8% cover of green roofs can actually decrease indoor temperatures year-round effect by up to two degrees Celsius. The Ryerson study also revealed the following equipment technology benefits:</p> <ul style="list-style-type: none"> <li>• reduced energy savings of Can\$10 million a year for buildings from reduced cooling demands in summer months</li> <li>• reduced peak load demands of Can\$10 million a year</li> <li>• avoided annual demand of peak loads of Can\$20 million a year from reduced capital costs for stormwater management systems, ventilation and other equipment</li> </ul>
<p>Defining Good Design</p>	
<p>Is Goolong's renovation complete?</p>	
<p>Love in the City?</p>	
<p>Wrong Way Go Back - Copenhagen 2006</p>	

The City of Toronto has subsequently reviewed its own environmental strategy to design and implement green roofs and to explore green roof benefits. Singapore City Council has to date done the same.

**An ideal plant gene pool**

This is great news for urban planners, as green roofs offer considerable potential to the Australian economy. Key to the full realization benefits to the economy is local government leadership and a community participation process that is geared to help slow down climate change effects. Although there is a lot of talk about urban greening, many people are not working out a vision or strategy, which is the first step. It's time to start working out a vision for the future, which should be a goal for those countries that are out there!

Australia has many big business and export opportunities in its forestry sector, with efforts to quickly to supply raw plants sourced from Tasmania and its trade relations, Japan, America, or Italy, and zones of South Australia and Western Australia to the tropics of Queensland and the Northern Territory.

Australia's major hospital of a low-maintenance and visually attractive forest-planting parks can supply more than 100,000 m<sup>2</sup> of high-quality bushwood. The ground is rich in natural resources. Cities and suburbs are situated in the best places and are not too far from energy use, and more efficient use of water. Two points that should be made across many jurisdictions and federal government

**Notes**

Greenery provides a natural backdrop for a large, high-level business opportunity for many of our key clients. The design will be a complex, integrated language. Other projects in the same space will be more focused by building on the existing, for use from the roof and to make a fully integrated office building environment for various levels of services. The design will be a complex, integrated language. Other projects in the same space will be more focused by building on the existing, for use from the roof and to make a fully integrated office building environment for various levels of services.

What a great team and a great team. The design of a multi-story building.

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## Science News Online

Week of Jan. 20, 2007, Vol. 171, No. 3

### Weighing In on City Planning

#### Could smart urban design keep people fit and trim?

Ben Harder

Lawrence Frank is no couch potato. Taking full advantage of his city's compact design, the Vancouver, British Columbia, resident often bikes to work and walks to stores, restaurants, and museums. That activity helps him stay fit and trim. But Frank hasn't always found his penchant for self-propulsion to be practical. He previously lived in Atlanta, where the city's sprawling layout thwarted his desire to be physically active as he went about his daily business.

"There was not much to walk to," says Frank, a professor of urban planning at the University of British Columbia. For example, he recalls that there was only one decent restaurant within walking distance of his old home. Many restaurants and other businesses in Atlanta cluster in strip malls that stand apart from residential areas.

In Vancouver, by contrast, Frank's neighborhood contains dozens of eateries, and he often strolls to and from dinner. "I'm more active here," he says.

The glaring difference between the two cities' landscapes figures in Frank's professional pursuits as well as in his personal one. Frank is part of an emerging area of cross-disciplinary science that's examining the relationship between the shapes of our cities and the shapes of our bodies.

He and other researchers have evidence that associates health problems with urban sprawl, a loose term for human-made landscapes characterized by a low density of buildings, dependence on automobiles, and a separation of residential and commercial areas. Frank proposes that sprawl discourages physical activity, but some researchers suggest that people who don't care to exercise choose suburban life. Besides working to settle that disagreement, researchers are looking at facets of urban design that may shed change health.

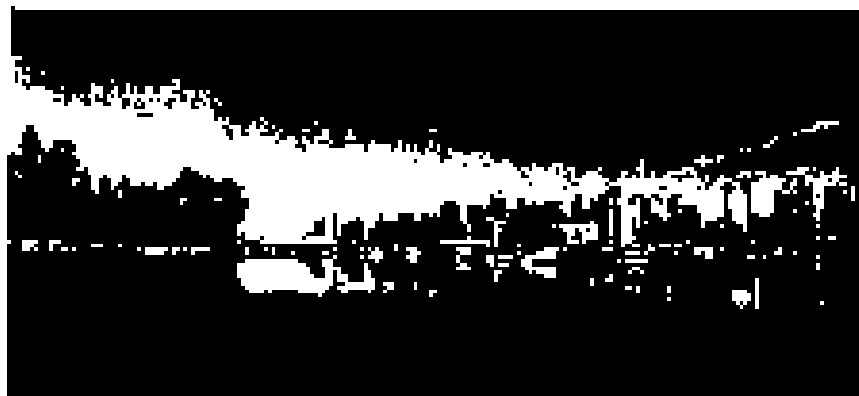


Metropolitan Atlanta, often called a poster child for urban sprawl, has undergone rapid geographic expansion as its urban density is supposed to diminish. One study suggests that urban sprawl contributes to higher rates of obesity and obesity.  
Gerry Lintzer

As so critics insist, given the relationship between sprawl and obesity, a compact style of city development, sometimes called smart growth, might become a tool in the fight for the nation's health. However, University of Toronto economist Matthew Turner charges that "a lot of people out there don't like urban sprawl, and these people are trying to hijack the obesity epidemic to further the smart-growth agenda [and] change how cities look."

### Studying sprawl

For decades, housing and population growth in U.S. suburban areas have outpaced those in city centers. Shifts in commuting patterns reflect the trend toward people residing at a sizable distance from where they work, shop, and play. According to U.S. Census data, the average commute lengthened from 22.4 minutes to 25.1 minutes between 1990 and 2000, and the proportion of workers walking or biking to work dropped by one-quarter.



**RIGHT HERE** Densely built urban areas such as Vancouver's downtown may encourage pedestrian traffic and promote physical activity. In contrast, cities of low density, where people depend on cars to get to stores and other facilities, seem to favor obesity. *Justin*

A few communities buck the national trend. For example, Frank says, "There is a great deal of new development in Atlanta that is walkable."

"That said, the overall trend is not in this direction in that region or most others," he adds. Even Vancouver is embarking on a massive road-building program that threatens (to create) sprawl in the developing parts of the region.

In September 2003, two major studies linked sprawl and obesity. Since these reports, researchers in fields as disparate as epidemiology and economics have generated a spate of similarly themed studies.

In the first of the 2003 reports, researchers analyzed data from a nationwide survey in which each of some 200,000 people reported his or her residential address, physical activity, body mass, height, and other health variables. Residents of sprawling cities and counties tended to weigh more, walk less, and have higher blood pressure than did people living in compact communities, concluding urban planner Reid Ewing and his colleagues at the University of Maryland at College Park's National Center for Smart Growth Research and Education.

In the second study, health psychologist James Sallis of San

Diago State University and his colleagues reported that residents of “high-walkability” neighborhoods, which have closely packed residences and a mix of housing and businesses, tended to walk more and were less likely to be obese than residents of low-walkability neighborhoods.

In 2004, Frank and his colleagues produced additional connections among urban form, activity, and obesity. The data on more than 10,500 people in the Atlanta area indicated that the more time a person spends in a car, the more obese he or she tends to be. But the more time people spend walking, the less obese they are.

Frank’s team, like the other groups, found that areas with interspersed homes, shops, and offices had fewer obese residents than did homogeneous residential areas whose residents were of a similar age, income, and education. Furthermore, neighborhoods with greater residential density and street plans that facilitate walking from place to place showed below-average rates of obesity.

The magnitude of the effect wasn’t trivial. A typical white male living in a compact, mixed-use community weighs about 4.5 kilograms (10 pounds) less than a similar man in a diffuse subdivision containing nothing but homes, Frank and his colleagues reported.

So far, the dozen strong studies that have probed the relationships among the urban environment, people’s activity, and obesity have all agreed, says Ewing. “Sprawling places have heavier people,” he says. “There is evidence of an association between the built environment and obesity.”

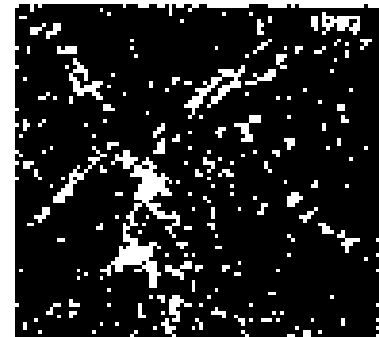
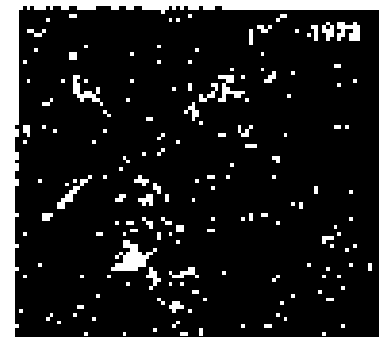
### Cause or coincidence

The evidence for a relationship between physical activity, body weight, and the environmental characteristics called urban form “looks compelling,” adds Ross Brownson, an epidemiologist at St. Louis University School of Public Health in Missouri.

But Brownson, Ewing, and others caution that these associations can’t prove that sprawl causes inactivity or weight gain. Most of the studies provide only a snapshot of different people at a single time. Such studies can’t prove that living amid sprawl leads to inactivity; it may also be that inactive people choose to inhabit areas where driving is the easiest way to get around.

In other words, people with different health habits and different propensities to gain weight may sort themselves into different kinds of neighborhoods.

That’s what Turner suggests is going on. Turner conducted a study that tracked people over



**SPRAWL** Over the years, cities have built up, erasing some of the open space that is a hallmark of metropolitan America. But by 1997, sprawl advanced, and suburbs appeared as a shield against the red brick city of jobs surrounded by trees and parks. *Frank*

time, as some of them moved from one neighborhood to another. He and his collaborators found no change in weight associated with moving from a sprawling locale to a dense one, or vice versa.

"We're the only ones that have tried to distinguish between causation and sorting ... and we find that it's sorting," he says. "The available facts do not support the conclusion that sprawling neighborhoods cause weight gain."

Turner's team analyzed data collected over 6 years on more than 5,000 young adults living across the United States. Most of the volunteers moved at least once during the study. The researchers compared individuals' weights before and after they moved between communities with different degrees of sprawl.

To measure sprawl, they used satellite images to calculate the average distance between residential buildings. They also determined the average density of nonresidential establishments such as churches and shops in each volunteer's zip code.

"We're estimating the effect [of sprawl on weight] to be zero or very close to zero," Turner says. Any weight gain attributable to sprawl, he says, is at most "a couple of ounces."

The authors released the study as a working paper on Oct. 30, 2006.

Other researchers challenge some of the study's analytical methods, particularly the way in which Turner's team assessed sprawl and mixed use. For example, Sallis says, "They assumed that [churches and retail businesses] were equally dispersed around the zip code." The study may therefore have inaccurately estimated volunteers' access to walkable destinations, he says.

Sallis also argues that it could take many years for significant weight gain to develop after a person moves between dissimilar neighborhoods. Moreover, the study didn't assess whether volunteers' degree of physical activity changed when they moved, a measure that would hint at impending changes in weight.

Still, Sallis says, Turner's longitudinal approach to the issue is "definitely an advance. We've been wanting studies like this for some time."

Ewing has also completed a prospective study using a similar set of data, but he declined to discuss his results with *Science News* before the study's publication.

Obesity is not the urban environment's only—nor even necessarily its most likely—potential health effect, says physician Deborah Cohen, a health researcher at the RAND Corporation in Santa Monica, Calif. If a neighborhood's design were to make people less active, they might eat less to avoid obesity but still miss out on other health benefits of physical activity, notes Cohen.

"Physical activity is independently important for health, [and] urban form is important for physical activity," she says.

In 2004, Cohen and Roland Sturm of RAND asked more than 8,000 residents of 38 U.S. communities to list their health problems. The researchers also assessed the degree of



sprawl in each residents' community.

"People reported more complaints—more health problems—when they lived in more sprawling areas," Cohen says. The excess of physical problems such as arthritis linked to sprawl was comparable to the change that would occur if the entire population suddenly aged by 4 years, Cohen and Sturm concluded.

### Setting and sorting

Frank's latest findings could split the ideological difference. By surveying people in a variety of neighborhoods, he learned that people who are less inclined to be active tend to live in less pedestrian-friendly locales—evidence that people are sorting themselves. But he also found that no matter how much people like or dislike being active, they are more active when they live in compact, walkable areas than when they live in sprawling neighborhoods.



**THE DISCONNECT** A community's road network efficiency influences its walkability. In an efficient network, such as in the green residential neighborhood at left, pedestrians can walk relatively directly between any two points. The maze of cul-de-sacs at right forces drivers into only a single route.  
Frank

His study, he says, "demonstrates that both preferences and the neighborhood in which people live impact their behavior." He described the findings at a conference in Atlanta on Jan. 19 and reports them in an upcoming *Social Science and Medicine*.

The people most at the mercy of sprawl, Ewing suggests, are those who have limited access to healthy foods and who can't recognize the importance of fitness.

Children are another group that could be disproportionately affected by urban design, Frank says.

In two recent studies, Cohen and her collaborators examined the relationship between adolescent girls' physical activity and specific aspects of the urban environment. Girls who live near parks and recreational facilities are more physically active than those whose neighborhoods contain no such spaces, the researchers found.

They selected a middle school in each of six metropolitan areas throughout the country. From among the females attending the schools, the team randomly selected 1,556 sixth graders.

In one study, the researchers used maps and government records to locate public parks. On average, 3.5 parks lay within a 1-mile radius of each volunteer's home. That figure varied from about six parks in Minneapolis to about one park in Tucson.

The researchers culled the data with pedometer-aided devices called accelerometers, which record motion and can be used to measure the intensity of physical activity. Each volunteer wore her accelerometer for 6 consecutive days. During that time, the girls performed, on average, the metabolic equivalent of 611 minutes of vigorous physical activity.

The researchers conservatively estimated that each park within a half-mile of home contributes an extra 17.2 minutes of vigorous activity per girl over the course of the study. The team reports its findings in the November 2006 *Pediatrics*.

"Neighborhood parks are particularly important for adolescents who are too young to drive," says Diane Crotwell, a statistician at the University of North Carolina at Chapel Hill who collaborated with Cohen on that study.

In the other study, reported in a 2006 supplement to the *Journal of Physical Activity and Health*, Cohen's team used data on the same girls to show that living in proximity to one's school is also associated with increased levels of physical activity.

"The overarching message is that the built environment is an enabler or a disabler of active transportation—of walking," Frank says.

#### Letters:

Regarding this article, there are also suspected connections between high-impedance commuting and blood pressure, commuting and unhealthy exposure to air pollution, and car commuting and back problems and anxiety. Combined with the effects of auto emissions on global warming, one would think that national debates on sprawl and mass transit are long overdue.

John Jorgensen  
Houston, Texas

I think there could be some truth to the thesis, but I would urge caution in imposing dictates to change the current situation. Obesity is so growing in European cities without any significant change in settlement patterns. Perhaps a better idea would be to reduce restrictions on commercial and retail development in residential areas. The idealized mixed-use village of generations past was largely the result of unregulated order.

Eloise Hedder  
South Ham, VA

Does it make a difference where you were brought up? If I'm born in a small country town where everyone knows everyone, the community is safer, there are more open spaces, and children ride bikes or play baseball. I grow up being more active. Then,

schools I later move to urban sprawl, I may be more inclined to look for ways to continue my active lifestyle. Likewise, if I grow up where there are fewer open spaces and a less safe environment, I simply don't get used to activity. I use my car to drive everywhere and tend toward being more sedentary.

Carl Corbett Owen  
Napa, Calif.

If you have a comment on this article that you would like considered for publication in *Science News*, send it to [edit@sciencenews.org](mailto:edit@sciencenews.org). Please include your name and location.

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### References:

Cohen, D.A., et al. 2008. Public parks and physical activity among adolescent girls. *Pediatrics* 121(5)(November):e1381-e1389. Available at <http://pediatrics.aappublications.org/cgi/content/full/121/5/e1381>

Cohen, D.A., et al. 2009. Proximity to school and physical activity among middle school girls: The trail of activity for adolescent girls study. *Journal of Physical Activity and Health* 3(Suppl. 1):S129-S139. Available at [http://www.acta.livingresearch.org/downloads/pah\\_9\\_cohen.pdf](http://www.acta.livingresearch.org/downloads/pah_9_cohen.pdf)

Ed. J., et al. 2008. and M.A. Turner. Proportional City. Questioning the relationship between

urban sprawl and obesity. Working paper. Available at <http://www.cuh.usc.toronto.ca/funding/bis-%20Fat%20City.pdf>

Ewing, R., et al. 2003. Relationship between urban sprawl and physical activity, obesity, and mortality. *American Journal of Health Promotion* 18(September/October): 47-57. Available at <http://www.smartgrowthamerica.org/report/JournalArticle.pdf>

Frank, L.D., et al. 2004. Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventive Medicine* 27(August): 87-96. Available at <http://www.ajph.org/pubs/ajpm/ajpm-aug04.cfm>

Frank, L.D., et al. In press. *Social Science and Medicine*.

Spatens, B.F., J.F. Sallis, et al. 2003. Neighborhood-based differences in physical activity. An environment scale evaluation. *American Journal of Public Health* 93 (September): 1552-1558. Available at <http://www.ajph.org/cgi/content/full/93/9/1552>.

Sturm, R., and D.A. Cohen. 2004. Suburban sprawl and physical and mental health. *Public Health* 119(October): 493-496. Abstract available at <http://dx.doi.org/10.1016/j.puhe.2004.02.007>

#### Sources:

Ross C. Brownson<sup>a</sup>  
Department of Community Health and Prevention Research Center  
Saint Louis University School of Public Health  
St. Louis, MO 63104

Diane J. Cato<sup>b</sup>  
University of North Carolina, Chapel Hill  
School of Public Health  
107 E. Franklin Street, Suite 203  
Chapel Hill, NC 27599

Deborah A. Cohen<sup>c</sup>  
RAND Corporation  
1700 Main Street  
Santa Monica, CA 90401

Roid Ewing<sup>d</sup>  
National Center for Smart Growth  
University of Maryland, College Park  
1112J Prentker Field House  
College Park, MD 20742

Lawrence D. Frank<sup>e</sup>  
School of Community and Regional Planning  
University of British Columbia  
1933 West Mall Annex #231  
Vancouver, British Columbia V6T 1Z2

Canada

James F. Sallis  
Department of Psychology  
San Diego State University  
3900 5th Avenue, Suite 310  
San Diego, CA 92103

Matthew Turner  
Department of Economics  
University of Toronto  
150 Saint George Street  
Toronto, Ontario M5S 3G7  
Canada

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## Regulating Spray

The time has come for America's states—and counties—to take a hand in spray.

For the past few years, I have been an active participant in the development and use of the new regulations on pesticides. I have been fortunate to meet and work with some of the best people in the industry. I have seen the good and the bad of the industry. I have seen the good and the bad of the industry. I have seen the good and the bad of the industry.

There are many people in the industry who are doing a good job. There are many people in the industry who are doing a good job. There are many people in the industry who are doing a good job. There are many people in the industry who are doing a good job.

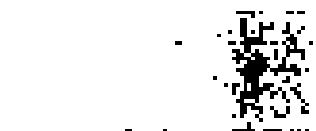
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staff, employees, and vendors, and setting priorities, budgets, and what to target. It also involves providing feedback to staff, and making a variety of ways to track and improve performance. Some of the ways to improve performance are:

- **Performance appraisal:** A process of measuring and evaluating an employee's performance against a set of objectives and standards.
- **Goal setting:** A process of setting specific, measurable, achievable, relevant, and time-bound (SMART) goals for an employee.
- **Feedback:** A process of providing information to an employee about their performance, both positive and negative.

### Handing that companies locate their workplaces within reach access of public and alternative transportation will reduce passenger vehicle commutes, which will save energy and reduce greenhouse gas emissions.

There was a significant increase in the number of people who used public and alternative transportation in the United States in 2018. This was due to a variety of factors, including a growing awareness of the benefits of public and alternative transportation, and a growing number of companies that are offering incentives to encourage their employees to use public and alternative transportation.

For example, some companies offer incentives such as parking discounts, transit passes, and flexible work schedules to encourage their employees to use public and alternative transportation. These incentives can be very effective in reducing the number of cars on the road and reducing greenhouse gas emissions.

Another way that companies can reduce the number of cars on the road is by providing alternative transportation options. This can include things like carpooling, vanpools, and bike-sharing programs. Companies can also encourage their employees to use public and alternative transportation by providing information about these options and by making it easy for them to use them.

By providing these incentives and alternative transportation options, companies can help to reduce the number of cars on the road and reduce greenhouse gas emissions.

There are many other ways that companies can reduce the number of cars on the road and reduce greenhouse gas emissions. For example, companies can encourage their employees to use public and alternative transportation by providing information about these options and by making it easy for them to use them.

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# DIALOGUE ENVIRONMENT

RICHARD H. POSAN

## Land Use and Climate Change

**For an effective climate  
policy, the dependence  
of the global temperature  
on land use must be  
integrated across regions,  
especially in developing  
areas of the 2000's  
(developing regions)**

The massive loss of the Amazon rain forest has provided a natural laboratory for studying the dependence of the global temperature on land use. The rain forest is a major source of the methane and carbon dioxide that contribute to the warming of the atmosphere. In fact, the rain forest is the largest natural source of methane in the atmosphere. The loss of the rain forest will lead to a significant increase in the concentration of methane in the atmosphere. The loss of the rain forest will also lead to a significant increase in the concentration of carbon dioxide in the atmosphere. The loss of the rain forest will also lead to a significant increase in the concentration of nitrous oxide in the atmosphere.

While the loss of the rain forest is a major source of methane, it is not the only source. The loss of the rain forest is also a major source of carbon dioxide. The loss of the rain forest is also a major source of nitrous oxide. The loss of the rain forest is also a major source of methane. The loss of the rain forest is also a major source of carbon dioxide. The loss of the rain forest is also a major source of nitrous oxide.

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RICHARD H. POSAN  
Agricultural Scientist

## DIALOGUE ENVIRONMENT

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## DIALOGUE ENVIRONMENT

It's not just about the building, it's about the people who are building it. The way that we build is a reflection of the way that we live. The way that we live is a reflection of the way that we think. The way that we think is a reflection of the way that we feel. The way that we feel is a reflection of the way that we are. The way that we are is a reflection of the way that we are built. The way that we are built is a reflection of the way that we are made. The way that we are made is a reflection of the way that we are born. The way that we are born is a reflection of the way that we are created. The way that we are created is a reflection of the way that we are loved.

**The connection between land use and climate change comes down to building sustainable communities that understand the fact of time and change. It is about building for people, and building in harmony with our natural environment—not despite of it.**

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The connection between land use and climate change comes down to building sustainable communities that understand the fact of time and change. It is about building for people, and building in harmony with our natural environment—not despite of it.

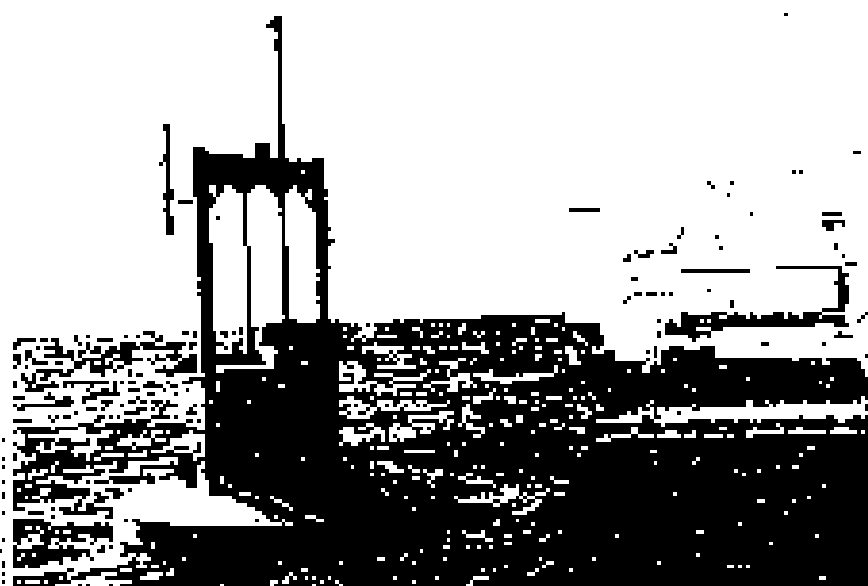


# Earth, Wind

Even the threat of global warming could not help Al Gore get around some inconvenient zoning.



Renewable energy sources still have a long way to go.



**T**he world's population is growing at an estimated rate of 1.2 percent annually, and the world's energy needs are growing at an estimated rate of 1.5 percent annually. The International Energy Agency (IEA) estimates that the world's energy needs will increase by 50 percent by 2025. The IEA also estimates that the world's energy needs will increase by 100 percent by 2050. The IEA estimates that the world's energy needs will increase by 150 percent by 2100.

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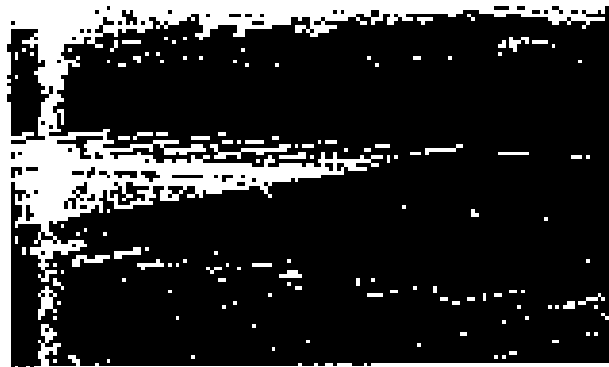
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## From hippie to main street

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# and Fire

By George Homsey, ACP



go in meeting our energy needs.



the fact that we are not going to have a major energy crisis in the next few years. The energy crisis is a long-term problem, and we need to start planning now. We need to start investing in alternative energy sources, such as wind, solar, and geothermal. We need to start conserving energy, and we need to start reducing our dependence on fossil fuels.

There are many ways we can conserve energy. We can turn off the lights when we leave a room. We can use energy-efficient light bulbs. We can use energy-efficient appliances. We can use public transportation. We can carpool. We can walk or bike. We can use energy-efficient windows. We can use energy-efficient doors. We can use energy-efficient roofs. We can use energy-efficient insulation.

There are many ways we can reduce our dependence on fossil fuels. We can use alternative energy sources, such as wind, solar, and geothermal. We can use public transportation. We can carpool. We can walk or bike. We can use energy-efficient windows. We can use energy-efficient doors. We can use energy-efficient roofs. We can use energy-efficient insulation.

There are many ways we can invest in alternative energy sources. We can invest in wind energy. We can invest in solar energy. We can invest in geothermal energy. We can invest in hydroelectric energy. We can invest in biomass energy. We can invest in nuclear energy.

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Special Advertising Section













# The Ahwahnee Principles



In the fall of 1933, some of the leading professionals in urban design and planning (Peter Katz, Andres Brouno, Elizabeth Plater Zylberk, Michael Corbett, Stefanos Polyzoides, Elizabeth Moule and Peter Calthorpe) met to develop a set of community principles based on new and emerging ideas in community design and planning. For a detailed article on the following, "Ahwahnee Principles" see (Cohen, Jozoff, and Velezquez, Inc. September 1994, "The Ahwahnee Principles: Toward More Livable Communities," Western City - Article copy is available through the Center for Livable Communities, Local Government Commission, Sacramento, CA).

## The Ahwahnee Principles

### Preamble

Existing patterns of urban and suburban development seriously impact our quality of life. The symptoms are: more congestion and air pollution resulting from our increased dependence on automobiles; the loss of precious open space; the need for costly improvements to roads and public services; the inequitable distribution of economic resources; and the loss of a sense of community. By drawing upon the best from the past and present, we can first, uplift existing communities and, second, plan new communities that will more successfully serve the needs of those who live and work within them. Such planning should adhere to these fundamental principles:

1. All planning should be in the terms of complete and integrated communities containing housing, shops, work places, schools, parks, and civic facilities essential to the daily life of the residents.
2. Community size should be designed so that housing, jobs, daily needs, and other activities are within easy walking distance of each other.
3. As many activities as possible should be located within easy walking distance of transit stops.
4. A community should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
5. Businesses within the community should provide a range of job types for the community's residents.
6. The location and character of the community should be consistent with a larger transit network.
7. The community should have a center focus that combines commercial, civic, cultural, and recreational uses.
8. The community should contain an ample supply of specialized open space in the form of squares, greens, and parks.

whose frequent use is encouraged through placement and design.

9. Public spaces should be designed to encourage the attendance and presence of people at all hours of the day and night.

10. Each community or cluster of communities should have a well-defined edge, such as agricultural greenbelts or wildlife corridors, permanently protected from development.

11. Streets, pedestrian paths, and bike paths should contribute to a system of fully connected and interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and visually defined by tree lines, trees, and lighting and by discouraging high-speed traffic.

12. Whenever possible, the natural terrain, drainage, and vegetation of the community should be preserved with superior examples contained within parks or greenbelts.

13. The community design should help conserve resources and minimize waste.

14. Communities should provide for the efficient use of water through the use of natural drainage, drought-tolerant landscaping, and recycling.

15. The street orientation, the placement of buildings, and the use of shading should contribute to the energy efficiency of the community.

## Regional Principles

1. The regional land use planning structure should be integrated within a larger transportation network built around transit rather than freeways.

2. Regions should be bounded by and provide a continuous system of greenbelt/wildlife corridors to be determined by natural conditions.

3. Regional institutions and services (government, stadiums, museums, etc.) should be located in the urban core.

4. Materials and methods of construction should be specific to the region, exhibiting continuity of history and culture and compatibility with the climate to encourage the development of local character and community identity.

## Implementation Strategy

1. The [comprehensive] plan should be updated to incorporate the above principles.

2. Rather than allowing developer-initiated, piecemeal development, local governments should take charge of the planning process. [Comprehensive] plans should designate where new growth, infill or redevelopment will be allowed to occur.

3. Prior to any development, a specific plan should be prepared based on these planning principles. With the adoption of specific plans, competing projects could proceed without mutual delay.

4. Plans should be developed through an open process and participants in the process should be provided visual models of all planning proposals

**Back to the [Walkable Streets](#) home page.**





## Local Government Commission

*The City's permanent agency for setting out its future development*

### Advanced Principles for Resource-Efficient Communities

#### Preamble

Existing patterns of urban and suburban development have led to an ever-growing dependence on the automobile, which consumes valuable space, the need for costly infrastructure to support a car-centric culture, and the need for a constant flow of economic resources and the loss of a sense of community. By thinking upon the land from the past and the present, we can plan communities that will meet our needs today, while the needs of those who will live in our communities in the future. Such planning should adhere to certain fundamental principles.

#### Community Principles

1. A community should have the form of a compact and integrated community centering housing, shops, work places, schools, parks and other facilities essential to the daily life of the residents.
2. Community sites should be designed with sufficient job, daily needs and leisure activities and a strong walking culture of each other.
3. As many facilities as possible should be located within easy walking distance of transit stops.
4. A community should contain a diversity of housing types to include a range of housing choices for diverse income levels and age groups to live with their families.
5. A community within the community should provide a range of housing types for the community's residents.
6. The location and orientation of the community should be consistent with a city's transit network.
7. The community sites should be centered around a commercial, civic, cultural and recreational core.
8. The community should contain an ample supply of well-located open space in the form of boulevards, streets and parks where the quality of life is enhanced through site context and design.
9. Public spaces should be designed to encourage the attention and presence of people at all hours of the day and night.
10. Each community or district of a city should have a well-defined edge, such as agricultural, green belts or wild lands, which are carefully protected from development.
11. Streets, pedestrian paths and bicycle paths should contribute to a sense of place, character and meaningful public life and destinations. The design should encourage pedestrian and bicycle use by being safe and clearly defined both through street layout and lighting, and by discouraging high-speed traffic.
12. Whenever possible, the natural terrain, drainage and vegetation of the community should be preserved with superior drainage contained within parks or green belts.
13. The community design should not consume resources and materials unnecessarily.
14. Communities should provide for the efficient use of water through the use of native drought-tolerant plants and water saving devices.
15. The street profile, the placement of buildings and the use of shading should contribute to the energy



effectiveness of the communities.

### Regional Principles

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1. The regional and local planning structures should be integrated with a large regional or network but not national level rather than hierarchy.
2. Regional structures are necessary and provide a comprehensive system of processes with the capacity to be determined by the local authorities.
3. Regional structures and services government institutions, mechanisms etc. should be created in the urban area.
4. Major and intermediate level structures should be specific to the region, understanding a variety of history and culture and merged with a strong multi-disciplinary structure of local, state and community identity.

### Implementation Principles

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1. The general plan should include programs to incorporate the above principles.
2. Further planning and implementation programs development including implementation of the planning process. General plans should designate urban growth, and the most important will be allowed to occur.
3. There is a requirement to specific plan should be required based on three planning principles.
4. Plans should be developed through an open process and participants in the process should be provided with a model of a plan implementation.

**Author:** Peter Schreier, Michael Corbett, Andrew Dwyer, Andrew Mulla, Elizabeth Jones, Robert and Patricia Prineas

**Editor:** Peter Schreier, Lucy Corbett, and Steven Prineas

Revised in 1997.

For more information on background information on the Abwässer Principles, including where the name came from, please contact us at [1007@abwasserprinciples.com](mailto:1007@abwasserprinciples.com) or [www.abwasserprinciples.com](http://www.abwasserprinciples.com) (1007@abwasserprinciples.com)

### • Back

For more information contact the 1007 Committee:  
 Suite 600, 1007 Committee, 910 148 1198, 6th Fl.  
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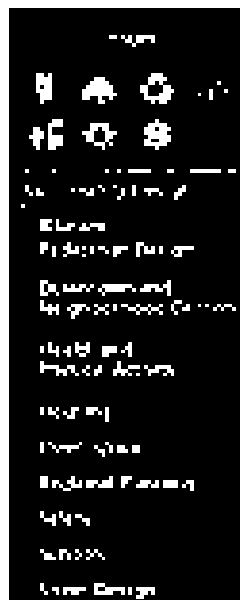




**Local Government Commission**  
The LGC is a special commission within the local health department.

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## Health and Physical Activity



The national urban obesity epidemic of the last 20 years has limited and reversed gains in progress and has compromised physical activity in the daily routines of 11% of the U.S. adult population, a growth of more than 70 million people and nearly 70 percent of the population. Obesity is a leading cause of death and cost to the U.S. population, with the burden of cardiovascular disease, diabetes, and obesity-related 30 percent of cancer deaths increasing. Obesity is a preventable cause. A national investment in physical activity programs for a minimum of 200,000 miles each year in cities and states.

20 percent of people and the low levels of physical activity among urban and rural populations of both genders and low income. Only about one half of young people regularly participate in vigorous physical activity and 14 percent of all Americans undertake 30 minutes per week of such activity. Additionally, in urban and inner city settings, African American women, and people of low income and high stress exposure are more likely to be sedentary and overweight.

An overwhelming majority of people are sedentary, and the nature of many urban environments for recreation (in walking, jogging, biking, swimming, etc.) is not available and 70 percent of those who are less than one mile from a park, and 60 percent of those who are less than one mile from a walking path, and 60 percent of those who are less than one mile from a walking path, and 60 percent of those who are less than one mile from a walking path, and 60 percent of those who are less than one mile from a walking path.

In recent years, public health professionals have been recognizing that the key to preventing and reducing obesity lies in a more coordinated effort to address the built and social environments. In 2001, the Centers for Disease Control and Prevention (CDC) introduced a secondary strategy to combat obesity and low physical activity patterns, which have a goal to build that people are more physically active in the region or just of moderate physical activity. They can increase the level of physical activity. A national public health professional program has been developed to encourage and encourage people to walk and bike a minimum of 30 minutes each day. A study published in the January 2002 Journal of the American Medical Association stated that:

"Reducing physical activity is an alternative to increasing it, with the goal of many cities and states to encourage and encourage or encourage to permit walking and cycling. The solution of reducing walking and cycling by more than 2000 miles in 100 cities is essential to improve health and physical activity."

### LGC Projects

- Public Health Government Commission, City of Los Angeles working partnership with the City of Los Angeles Department of Public Health and City of Los Angeles and Los Angeles County Health Department to develop a program to reduce obesity. The LGC is a part of the City of Los Angeles.

created offices and the staff in late 1998 found that the key factors for improving the environment for pedestrians and bicyclists were local business and property owners increasing sense of community, traffic calming, providing expert technical assistance for design through the state, and public education through signage, distribution of materials, and presentations on pedestrian and bicyclist safety and the importance of walking and bicycling in vibrant, active, engaged, and walkable communities.

**Resources**

The Local Government Conference has developed best guidelines that can be used to design and build streets and bike routes to make them more supportive of walking and bicycling.

- **Street Design Guidelines for Healthy Neighborhoods** was written by Dan Roper, director of Healthy Communities, with assistance from a working group of local planning teams in different urban and suburban settings. It provides how-to for design, engineering, and special treatment of several streets.
- **Streets and Schools: People and Cars: A Citizen's Guide to Traffic Calming** is a city and county process for bike information for local government officials and residents on how to build streets for walking and bicycling.

Our series of reports, **Walkable Communities** is a model of a walkable community provided a list of recommendations and a set of ideas for implementation by neighborhood committees.

- **The Economic Benefits of Walkable Communities**
- **Why People Don't Walk and What City Planners Can Do About It**
- **Land Use Planning for Safe, Car-Free Neighborhoods**
- **Designing Safe Streets and Neighborhoods**
- **New Transportation Thinking for a New Transportation Age**
- **US DOT Supports Walking and Bicycling**

Single copies of these fact sheets are available for from the LAHC and can be downloaded from the National Center for Safe Routes to Schools page. If all reports for a certain area are needed, contact us at 916.224.2100.

April 2004 LAHC Street: **The "Transportation Tools to Improve Children's Health and Mobility"** highlights program solutions for more walkable communities.

**Web Links**

- **America WALKS**, <http://www.americawalks.org/>
- **CA Department of Health Services - Safe Routes to Schools**, <http://www.dhs.gov/caschools/index.html>
- **California Walk to School Day (CWD)**, [www.cowalktoaction.com/](http://www.cowalktoaction.com/)
- **Center for Disease Control, Department of Nutrition and Physical Activity**, <http://www.cdc.gov/ncepd/odn/odn.htm>
- **Health Policy Coach**, <http://www.healthpolicycoach.org/>
- **National Center for Bicycling and Walking**, <http://www.bicycling.org/>
- **Walk to School Day - USA**, <http://www.walktoschoolusa.org/>
- **Walkable Communities, Inc.**, <http://www.walkable.org/>

Project Page: <https://www.gsa.gov/records-management/foia/foia-requests>  
13.33 of 13.33. Submitted: 06/21/2016 10:42:16 AM. See also: <https://www.gsa.gov/records-management/foia/foia-requests>







another, but the street design creates a fully connected network with multiple routes to destinations. The one going to the bank doesn't need to deal with a by E, D, C, B, and A street network and can comfortably walk or ride a bike.

The contrasting approach to street design is what urban designers call the "two-lane speed limit neighborhood." Because the streets in the neighborhood go straight and wide they reduce travel time. It's hard to be wider and slower for faster speeds. The emphasis on the width of the lane has encouraged traffic engineers to design streets with minimal speed limit changes and, in some cases, no speed limit changes for how the roadway and/or street layout is designed. The result is a road network of very straight, flat, two-lane roads going straight and slow, except with frequent turning. A study of 20,000 streets in six major U.S. metropolitan areas from 1990 to 1999 found a strong correlation between street width and speed limits. The widest streets were narrow, 40-foot wide streets. As street width was the number of intersections per mile per year increased, the narrower the road, the slower the speed limit and the more likely to go to a dead end.

The traditional neighborhood street in Berkeley, based on narrower and slower width lanes that are not too close together, the result of a complete neighborhood design for walking and cycling. Today many residential and urban streets are designed that these traditional streets help create more livable neighborhood. An important difference is that traditional streets or design have lanes that manage their characteristics. The engineering approach creates a road that is effective in managing and operating as traffic carrying resources. Traffic lane is composed of areas of roadway, yield treatments on the right side of the lane that help manage the flow of traffic, while reducing the ability to be used in a traditional way of crisscrossing streets, lanes, and the greenways. Traffic lanes, those and so on are often reduced and a more even distribution of traffic is achieved through these measures. The LGC has published a guide to traffic engineering that describes these techniques in detail and provides available information on the collaborative process often necessary to get them implemented.

At the same time, there is a growing movement that advocates the design of neighborhoods or new urban neighborhoods that emulate the best features of older, traditional, urban communities. In 2001, the LGC published a groundbreaking document on how to design livable, healthy, neighborhoods that focused on one: how these streets and neighborhoods can be designed.

### LGC Projects

In 1998 the Local Government Commission (LGC) started working in partnership with the California Department of Health Services and its Physical Activity and Health Promotion programs to research, develop and bring in practical experiences. Through this project, the LGC provides expert technical assistance to local governments throughout the state. The foundation has shared its lessons on walkability and traffic calming and has supported local streets and a variety of projects related to walkable communities.

### Resources

The Local Government Commission has developed several publications that describe how to design livable streets and neighborhoods to make them more supportive of walking and cycling.

- **Street Design Guidelines for Healthy Neighborhoods** was written by Lou D'Amico, Director of Alternative Communities, with assistance from a team that included transportation engineers, urban designers and a city planner.

- discusses how to fund new sidewalks and how to fund traditional residential streets
- **Streets and Sidewalks, People and Cars: A Citizen's Guide to Traffic Calming** by Sam Buckner provides detailed information for residents and most of those interested in how to retrofit streets to slow the traffic
- **Emergency Response, Traffic Calming and Traditional Neighborhood Streets** by Sam Buckner with Paul Fitch (SA) is a design tool addressed to users who are used by the department and other emergency responders to improve school safety and design efforts. It also helps explain the traffic engineering, law enforcement and residents what the emergency responders' concerns are all about
- **Walkable Streets and the Fire Department** by Thomas W. Lawrence and others discusses how to coordinate with other emergency services when planning for prompt emergency response. It includes information on fire department of use and maintenance in California and Florida. (Great discussion about walkability and safety)

For more information on related topics, visit [www.leed.com/resources](http://www.leed.com/resources) and click on the following key topics related to LEED for Communities:

- **The Economic Benefits of Walkable Communities**
- **Why People Don't Walk and What City Planners Can Do About It**
- **Land Use Planning for Safe, Crime-Free Neighborhoods**
- **Designing Safe Streets and Neighborhoods**
- **New Transportation Thinking for a New Transportation Age**
- **US DOT Supports Walking and Bicycling**

Simple diagrams of street layouts and illustrations from the LEED and LEED for Communities R2011 Manual from the user page. It also helps for a good overview and a comparison of how to go to:

Appendix A of LEED for The Transportation Tools to Improve Children's Health and Mobility. It highlights systems responsibility for more walkable communities

**Web Links**

- **Narrow Streets Database** (<http://www.secd.net/leed/leednew.htm>)
- **Federal Highway Administration, Context-Sensitive Design** (<http://www.fhwa.dot.gov/leed/index.cfm>)
- **Federal Highway Administration, Traffic Calming** (<http://www.fhwa.dot.gov/leed/leednew.htm>)
- **Institute of Transportation Engineers** (<http://www.itpe.org>)
- **Municipal Research and Service Center, Traffic Calming Bibliography** (<http://www.msrc.org/calming/bibliography>)
- **Traffic Reduction / Street Reclamation Made Easy** (<http://www.cawnyr.com>)
- **Conservation Law Foundation, Transportation Advocacy** (<http://www.clf.org/transportation>)
- **Victims Transportation Policy Institute** (<http://www.vtpi.com>)
- **Walkable Communities, Inc.** (<http://www.walkable.com>)

30012700

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Project Name: LEED for Communities 2009, LEED for Communities 2009, LEED for Communities 2009  
 Project Number: LEED for Communities 2009, LEED for Communities 2009, LEED for Communities 2009





**Local Government Commission**  
The Oregon Local Government Commission is a public body established by the Oregon Constitution to advise and assist local governments in their mutual interests.

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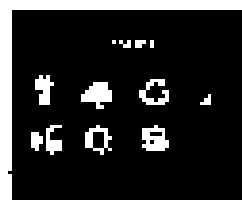
Center for Healthy Communities - Energy Information and eCampus.org  
Contact: 503.686.1000 - 503.686.3000 - 503.686.3000

**Free Resources | Land Use | Model Projects**

**Beaverton, OR**

**Transit-Oriented Development Adds Urban Amenities to Portland Suburb**

Beaverton has the distinction of being the only city in Oregon that is a high-street city, with a downtown area that is a mix of residential, commercial and office uses. A large amount of new development has taken place in the downtown area of the Beaverton. When the city voters passed the city plan in 1996, the city was at an inflection point. Beaverton had a population of about 100,000 and had a reputation for being a suburban city. Beaverton is looking for a way to change that and to become a city that is more urban. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class. Beaverton is looking for a way to become a city that is more urban. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class. Beaverton is looking for a way to become a city that is more urban. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class.



**Free Resources & Publications**

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**Make Presentations**



Today, Beaverton is a vibrant city with a mix of residential and commercial uses. The city has a reputation for being a suburban city. Beaverton is looking for a way to change that and to become a city that is more urban. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class. Beaverton is looking for a way to become a city that is more urban. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class.

In the 1970s, the first water treatment plant was located. The city was a mix of residential and commercial uses. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class. Beaverton is looking for a way to become a city that is more urban. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class.

After years of planning, the city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class. Beaverton is looking for a way to become a city that is more urban. The city was effectively incorporated with the passage of 40.1 in 1996. The city was incorporated as a city of the first class.



agreement with the new developer (Smith) that supports the cost of financing for the \$100 million project with a condition of the sale. Completion of the expansion will include construction of a commercial parking garage.

The Board includes 200 apartments, 375,000 sq ft of commercial space, and 100,000 sq ft of retail space. Apartments are located in two-story buildings with 10 units per floor. Commercial space includes office space and a two-level underground parking garage with a heavy slip on the top floor. Other elements include a parking lot by Beverly Hills Hotel (open in Europe and Asia) and a parking lot which will be open to the city's tourism community, and paved. The parking level will be enclosed around the perimeter of the site.

The first phase of construction will include removal of a two-story office building for office and retail use, and a modern multi-family building. The new building will include health club and more housing. A concrete parking structure and office, retail, and residential construction of the project is well in the sub-division.

The Board will conduct a new audit to determine whether and what steps to be taken in a pending agreement, based on the fact that the project has been delayed. An audit is being conducted by Reversion, the city has come forward with a new focus on it.

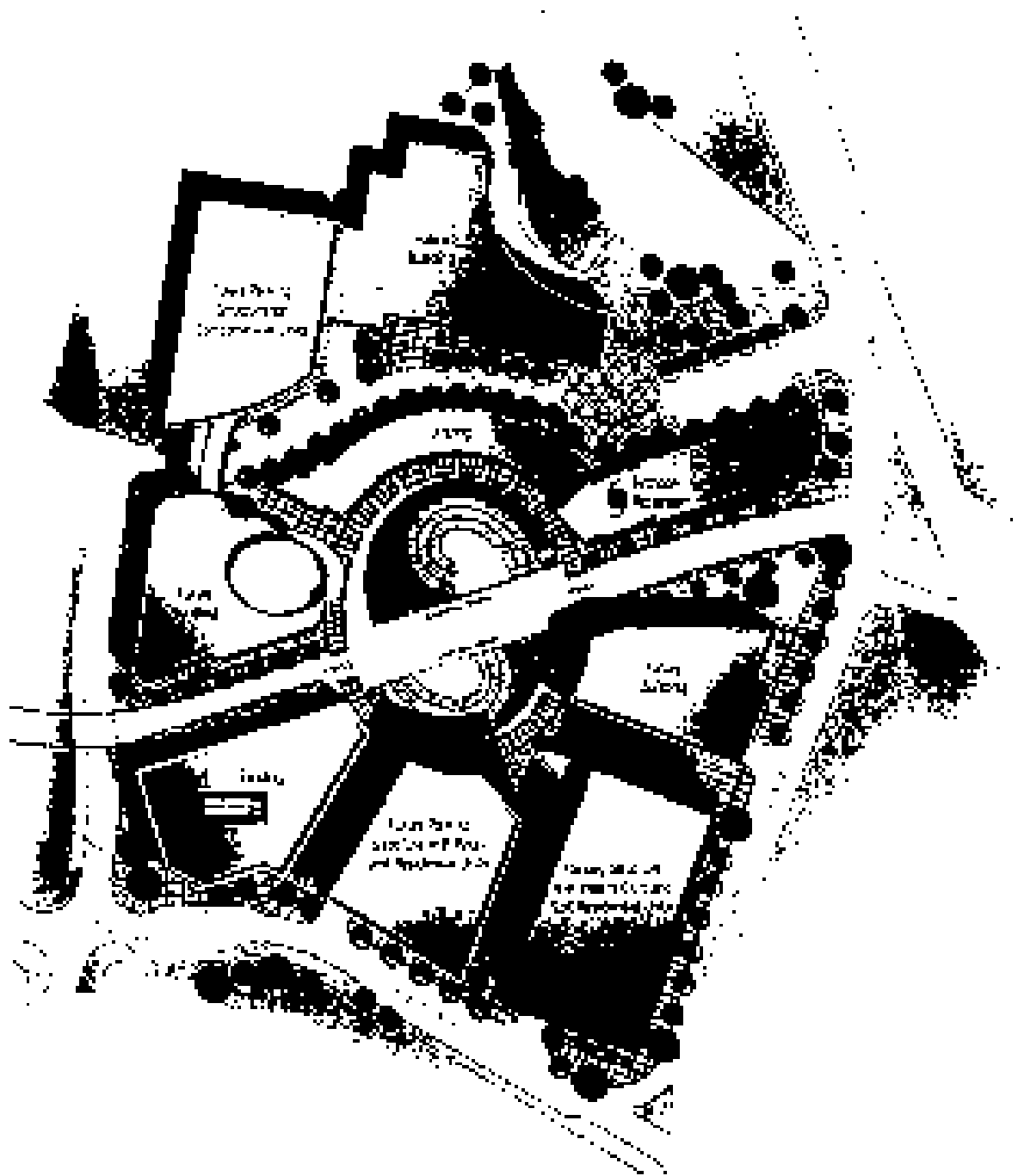
for more information on the Reversion project, contact the Department of Departmental (970) 536-5476

#### ➤ [Reversion Model Projects Reports](#)

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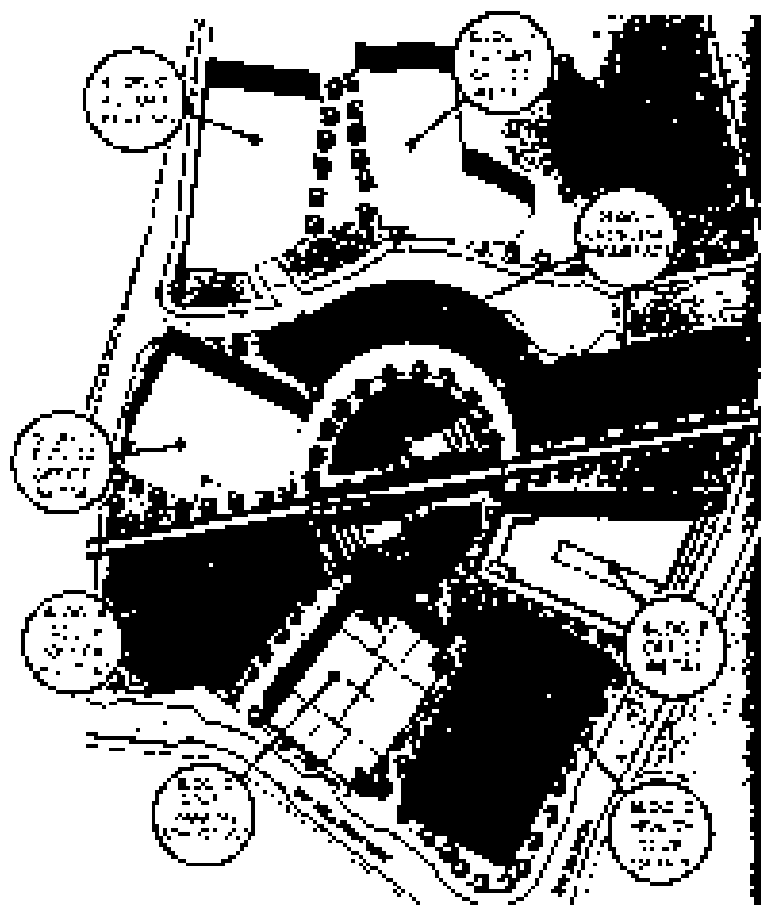
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## Commercial Property Available for Lease at The B Round

The Beaverden Round, establishing Beaverden's new downtown core, business and community destination brings together work, shopping and living space within the West Side Light Rail Corridor with first class business, commercial and recreational amenities. Round features a business center, executive suites, restaurants, and community events.

The Beaverden Round has Commercial and Retail properties available for leasing. Please view more information on available properties.



**Our Current Listings of Available Properties:**



**Building A - Crescent/Promenade:**

1200 SW Crescent Blvd, Houston, TX 77004

Square Footage: 45,711 & 2247 square feet

Lease price: \$0.00 per square foot

Call available immediately

Contact: Steve Norris, New & Used Real Estate Services

Request

**Building B - Executive Suites**

1275 SW Main Way, Houston, TX 77004

Square Footage: N/A

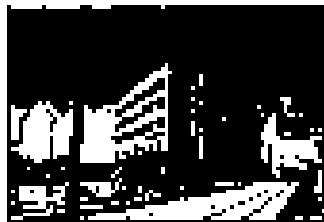
Call price: \$0.00 per square foot





Data available immediately

Contact: Rhonda Swartz, JTD Business Center @ The Rouse  
Read more



### Building B - Office Space Availab

12725 SW Commercial Street, Beaverton, OR 97005

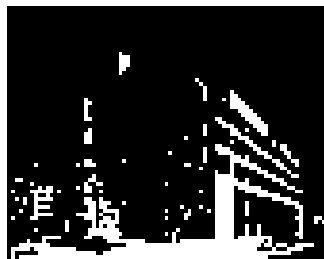
Square Footage: 2467

Lease price: (call for pricing)

Data available: Immediately

Contact: Buzz Eng & Ben Munro, Pacific Real Estate Partners

Read more



### Building C - Office Space Availabl

4145 SW Madison Street, Beaverton, OR 97005

Square Footage: 26,503 square foot

Lease price: (call for pricing)

Data available: Immediately

4th and 5th Floor

Contact: Buzz Eng & Ben Munro, Pacific Real Estate Partners

Read more



### Building D - Retail / Parking Stru

12855 SW 7th Near 70th, Beaverton, OR 97005

Square Footage: 15,000 square foot

Lease price: (call for pricing)

Data: To Be Announced

Coming soon? The parking structure is under construction. Off available

Contact: Steve Newell, New & Home Real Estate Services

Read more



### Building E - Office/Retail

4100 SW 41st Street, Beaverton, OR 97005

Square Footage: 15,050 Gross Square Footage

Lease price: (Call for pricing)

Hold in mind: To be announced

Construction underway. Office/retail space is available in Building E.

Contact: [Katie Donohue](mailto:Katie.Donohue@beaverbrook.com), [Ben Hartung](mailto:Ben.Hartung@beaverbrook.com), [Randy Roy](mailto:Randy.Roy@beaverbrook.com), [Edyta Paterson](mailto:Edyta.Paterson@beaverbrook.com)

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12721 SW Market Way, Beaverton, OR 97005







## Local Government Commission

*"The difference between a government and a good one is a better one."*

### Why Build Near Transit?

by Paul Zientara, AICP Director, Center for Urban Growth Studies

Updated: From the Author, December 1995 to June 1999

Transit improvements give places the means to get on and off the bus of our

recent past. Communities have been able to take better advantage of the transit systems and the transit system itself. Transit systems have been able to help cities, communities and counties and to help people live better. Transit systems have been able to help cities, communities and counties and to help people live better.

The transit systems have been able to help cities, communities and counties and to help people live better. Transit systems have been able to help cities, communities and counties and to help people live better.

### The Economic Reasons

One of the most important reasons to build near transit is the fact that the transit system is one of the most important reasons to build near transit. Transit systems have been able to help cities, communities and counties and to help people live better.

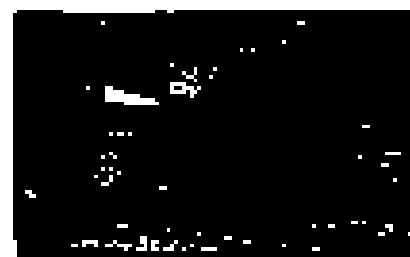
Buildings near transit are built near transit and they are built near transit. Transit systems have been able to help cities, communities and counties and to help people live better.

Similar findings have been made in the case of commercial properties. The fact that transit systems have been able to help cities, communities and counties and to help people live better.

Development near transit is not only a good thing – it also means that revenues for cash-strapped local governments. As noted by the 4,000 or so professors Peter Newman and I interviewed, what if transit actually lower the value of land and buildings nearby, and disperses commercial developments to the inner-urban systems, integrating a new, a mixed-use, and commercial centers as development to develop potential around stations? As the value of property near transit appreciated, property taxes collected by local government also increase. In fact, some states have advantages of 2.5% led by the commuter financing to help fund expansion of the transit system.

A 1994 study prepared by the Urban Center for the United States and the Urban Center, analyzed property values of transit areas in ten cities and found that, on average, the increase in land value near the station of approximately 100 percent of the total contribution value of the transit system investment.<sup>14</sup>

In Chicago, the general idea study found that the assessed value of different station area properties that increased by 112% to 441% from 1980 to 1987 compared to a national average of 10% to 12%.<sup>15</sup> Chicago's transit system, together with other that developed in the 1980s generated over \$1.2 billion in additional tax revenue, including the additional square feet of residential, equivalent to 100,000 sq ft to 100,000 sq ft of commercial improvements and being completed. And in just eight years during the first three years of operation the National Center attracted \$900 million in new development. Business near transit grew. The new investment raised an average of \$50 million to \$100 million in revenue in 1985 alone.<sup>16</sup>



Redistributing transit around your city can be a major investment for the assets. It may seem that improve the viability of transit bus services, but it also can also increase sales tax revenues for local governments. A study prepared in 1997 found that in Atlanta, Georgia approximately 67 percent of bus routes located at downtown stations received an increase in 1997 sales tax revenues during the first year of transit system operation.<sup>17</sup>

### The Social Reasons

Investing in the program is not only for the financial development but also help improve the social conditions. A decade ago, downtown and downtown neighborhoods. Now an old neighborhood during the past 10 years has received many opportunities with the station and has created a museum at the heart of many communities. A growing numbers of citizens, community centers and business the importance of the program to the community after the station being completed.

Portland Oregon received downtown new jobs in downtown. The 1980s through a well-planned station, centered on important transit services and focusing development near transit stops. The focus planning in City, a member of the Urban Center planning for the regional transit agency. The Urban Center staff also have been involved by the TriMet and MTA (the regional, same). The downtown area has grown from some 40,000 jobs in 1970 to over 600,000 jobs today. Transit has done to share transit 60% of downtown with the private business.<sup>18</sup> This and other transit-related program have of the public transit in downtown by connecting a network of the transit system, the job-generating and the citizens from all across the region. It has some ideas that transit security is bounded by all the urban centers. City, the bus is 100% of the 1980s.

The City of Denver received new jobs downtown by building a program through transit, which water rail transit bus system along the rail, together with the private development of transit stations along the rail and in the Lower Downtown district to encourage the area's diverse and vibrant urban center. Transit is the key to the development and plan.

Smaller cities and towns have a number of other transit stations and transit stops of the urban center oriented development. City of Portland, Oregon a well-planned transit system around the BART transit stop with the building of the center of the downtown area. Downtown center with several major shopping centers of the City of Portland, Portland Center, which is the construction of a new downtown center to move to the City Center.



**Conclusion**

There are only some of the many compelling economic and social benefits of our communities on a compact. But as the saying goes "anything worth doing is worth doing well." The more creative we are, the more we can make sure that our development that brings people near our transit stops is of the highest quality and contributes to creating more vibrant communities.

David Lyall, a Director of the Center for Urban Transportation in a Division of the Iowa Department of Commerce, is a non-profit membership organization of people who are active in transportation in Iowa. He is the co-author of *Building a Compact Community: A Policy Manual for Local Transit Oriented Development* from which this article is adapted.

**Footnotes**

1. General Robert H. Anderson, *Impacts of Transit-Oriented Development in California*, National Transit Access Project, University of California, Berkeley, November 1997, p.4.
2. *Learning Associates: Development Related Ridership Survey*, prepared for the Washington Metropolitan Area Transit Authority, September 1997. Available at <http://www.transpaction.net/learn/learn.htm>.
3. *Transportation Research Board of the National Academy of Sciences*, *Transit-Oriented Development: A Review of the Literature*, prepared for the Urban Consulting Group and City of Portland, January 2000, p. 5.
4. Lyall, Robert. "Rail Transit and Land Use Management: Land-Use Impacts in Washington, DC and Seattle." *Journal of the American Planning Association*, Vol. 66, 3, Winter 2000, p.30.
5. Kennedy, Paul and Richard, Peter. *Art & Economics: Why? Why not? How? The Cities*. Australian Consumers Association, Melbourne, Australia, 1992, p.26.
6. *Assessment of Changes in Property Values in Transit Areas*, Prepared by the Urban Group for Urban Transit, Research Institute for the Urban Mass Transit Administration, July 1987. Available at <http://www.ustransit.org>.
7. Anonynous. *GIS: The road to the next millennium - spatial and Growth Management in England*, 1999, p.17.
8. <http://www.ustransit.org>.
9. <http://www.ustransit.org> and [www.ustransit.org](http://www.ustransit.org).
10. *Sustainable Regional Form: A Planning Manual for the 21st Century*, Prepared by, Francis & Taylor, Inc., Daniel Yonah & Associates, Inc., SA Communications, and MITA Consulting, July 2000. Available at <http://www.ustransit.org>.
11. Anonynous. *GIS: The road to the next millennium*, p. 18.
12. Economic Research Associates, 2000, p. 16.
13. *Journal of the American Planning Association*, *Transit-Oriented Development*, pp. 4-5.
14. *National Bureau of Economic Research*, *Urban Mass Transit News*, December 18, 1994, p. 12.
15. *Washington Post*, *The New American*, *Urban Mass Transit News*, December 18, 1994, p. 14.

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