10 questions about *Cascadia Scorecard 2006: Focus on Sprawl and Health*

1. What are the main points of this year's Scorecard?

We shape our cities and our neighborhoods—and thereafter, they shape us (to paraphrase Winston Churchill). This year's Scorecard reports the region's progress in seven key trends, focusing on a growing body of research that establishes a connection between community design and human health.

Studies show that well-designed, compact communities can promote good health by:

- reducing car crashes;
- promoting exercise and thus reducing the risk of obesity;
- reducing vehicle-related air pollution;
- and (possibly) by promoting social ties that buoy health.

In addition to sprawl and health, the book also covers five other indicators of progress: energy consumption; economic security; pollution; wildlife populations; and human population.

2. How is the Northwest doing overall?

- Human communities continue to do reasonably well: We're living longer, we're healthier, and the economy is, in most cases, not worsening.
- But the region could do a much better job of designing communities that give residents more—and healthier—choices of how to live and move around.
- If the Northwest were to curb sprawl by a modest amount, residents could save tens of millions of dollars in medical and other costs related to obesity, physical inactivity, and car crashes.
- But the Northwest's impacts on nature continue to pose pressing challenges to the region's well-being, such as high energy use. Partly as a result, several key wildlife species including orcas and caribou are struggling, as the Scorecard's new wildlife index indicates.

3. What are your top findings about community design, health, and obesity?

Many studies have found a significant association between low-density sprawl and poor health.

- Living in a neighborhood where walking is convenient and destinations are nearby can **encourage active transportation** in daily routines—boosting physical activity and reducing obesity. Residents of compact, walkable neighborhoods walk more and weigh less.
- Studies of metropolitan areas have found that where stores and homes are mingled and streets form grid patterns that create direct routes between destinations **residents of these "walkable" neighborhoods are less likely to be obese** than are residents of more-sprawling locales.
- In Atlanta, for example, **people who live in the least walkable neighborhoods are about one-third more likely to be obese** than residents of neighborhoods that best supported foot traffic. San Diego residents of neighborhoods with ample pedestrian amenities get **10 extra minutes** of

physical activity per day, and are 40 percent less likely to be overweight than residents of sprawling neighborhoods.

- And Frank's study in King County, Washington, found that pedestrian-friendly neighborhood design is associated with up to a one-point reduction in the body mass index. For someone who is 5 feet 9 inches tall, living in a low-walkability neighborhood translates into up to **7 pounds of extra body weight**.
- Once income, education, and other relevant factors are taken into account, people living in sprawling areas tend to suffer **substantially more chronic ailments**—including diabetes, asthma, and hypertension—than people in more compact, transit- and pedestrian-friendly locales. More compact metropolises have about one fewer chronic illness for every 10 residents.
- Furthermore, compact neighborhoods **allow people to drive less.** Less driving reduces the risk of car crashes—the number-one killer of young people in the Pacific Northwest. Low-density sprawl forces residents to drive longer distances to stores, schools, jobs, and services.
- When it comes to **air quality,** residents of low-density suburbs may no longer have an advantage over city dwellers: air monitoring stations in some suburbs find more smog, and comparable levels of other pollutants, than in urban areas. Driving long distances, particularly on crowded highways, may expose drivers to elevated levels of pollution from cars and trucks.

4. Are sprawl-related health problems getting worse?

- Obesity is clearly on the rise in the Northwest; rates in the Northwest states of Oregon, Washington, and Idaho have more than doubled since 1990 and estimates suggest that obesity-related ailments kill 4,300 residents of the states each year, and 112,000 nationally. Obesity trends in British Columbia are moving in the same direction as in the Northwest states, though only about one-fourth as fast; still, about 1 in 9 residents of the province is obese.
- And obesity rates are rising particularly fast among children; in Washington State, 1 child in 7 is obese. Meanwhile, nearly half of adults in the Northwest states fail to get even the recommended 30 minutes of moderate daily exercise.
- Some diseases related to obesity and sedentary lifestyles—including diabetes—are clearly on the rise. Type II diabetes used to be called "adult onset" diabetes, but no longer: it is being detected earlier and earlier in life.

5. Is there a connection between community ties (social capital) and health?

- The gradual **unraveling of social bonds** in the United States may be shortening our lives. Residents of states with high levels of interpersonal trust (a sign of high social capital), for example, tend to report better health. Conversely, in states where people think others will take advantage of them (a signal of low social capital), residents tend to have higher mortality rates.
- Pedestrian-friendly community design seems to help foster neighborhood ties. A comparison of two demographically similar neighborhoods in Portland, Oregon, found that **a safe and interesting walking environment** was linked with higher levels of social capital.

- Studies have also found that for each ten additional minutes a person spends in a daily commute, the time spent involved in community activities **falls by 10 percent**.
- Compact neighborhoods with a mix of housing types may also meet the **housing needs of residents over many stages of life,** whether as singles, families, or empty nesters. Maintaining such social ties can be particularly effective at buoying the health of the elderly.

6. Which part of Cascadia ranks best at healthy community design?

- British Columbia. The province's cities are the region's most compact—particularly Vancouver. The province's obesity rate is about half that of the Northwest states, and its car-crash fatality risk is one-third. And its residents live an average of more than two years longer (81.1 compared to 78.8 years).
- Vancouver, BC, for example, has been careful to promote diverse forms of transportation—including walking—and has kept major highways out of its center city. More people in Vancouver walk to work than anywhere in North America except New York City. It also has preserved farmland on the urban fringe through its Agricultural Land Reserve system.
- But health trends vary widely. King County, for example, has the lowest car-crash fatality risk of Washington counties. And relatively sprawling suburbs in BC have a crash fatality risk that's as much as one-third higher than the province average.

7. Which Northwest area is doing worst?

- Idaho has the region's worst record for car-crash fatalities (21.6 annual deaths per 100,000 people, compared to 9.8 for BC); and uses the most energy per person. While the state's high car-crash fatality rate can be partly attributed to the fact that it is more rural than, say, Washington, it appears that suburban dwellers also share a much higher risk than people in urban areas.
- Based on Census data, Boise remains the Northwest's most spread-out major municipality. Abundant land for development, sufficient supplies of water, and liberal zoning practices and transportation and road investments have facilitated sprawl.

8. What factors in a neighborhood besides density encourage physical activity?

- An interconnected street grid that provides direct routes to nearby destinations;
- A mixture of residences, stores, and businesses, that bring destinations close to homes;
- A safe and pleasant streetscape with pedestrian amenities such as sidewalks, shade trees, moderate traffic, and shops lining sidewalks.

9. What are the most important solutions for the region to adopt?

(See also "*Cascadia Scorecard 2006*: Solutions for Healthier Communities.")

- Policy innovations that encourage compact, walkable design, including: fostering a blend of stores and services in residential areas, creating better street connections, easing parking requirements, and allowing infill development.
- As a region, when we make planning and transportation decisions, we should consider the long-term health effects. We may find that some projects don't merit the expense, and that investments in interconnected streets and sidewalks may be surprisingly cost-effective. King County is developing an assessment tool to measure health impacts of road and land use projects.

10. What kinds of steps can ordinary citizens take?

- When you move, think about the layout of the community where you'd like to live. Are there stores and services close by, or within a short drive? Are the streets designed to be pedestrian-friendly?
- Pay attention to zoning decisions and other policies that affect the shape of your community and support efforts to increase infill, add pedestrian amenities, and mix residences and shops.
- Walk! Burning just ten extra calories per day—the amount burned during a two- to three- minute walk—can prevent a pound of weight gain per year.

What do we mean by. . .

Compact/sprawling communities: A "compact community" gives residents a choice about transportation. Shops, jobs, and services are close and neighborhoods are dense enough to make transit viable—usually about 12 people or more per acre. By sprawling, we mean places where residents have few choices about mobility, except to drive—often for long distances.

Obesity: The Body Mass Index (BMI) is the most widely accepted indicator of weight conditions. Medical researchers classify a person as obese if their BMI is greater than 30; overweight if it's between 25 and 30; and normal if it's between 20 and 25. BMI is calculated as weight (in kilograms) divided by the square of the height (in meters). The CDC has an online calculator here: http://www.cdc.gov/nccdphp/dnpa/bmi/index.htm.

Walkable: A walkable neighborhood is usually compact, but it must also be accompanied by other features of good community design, such as infrastructure that supports walking (sidewalks, crosswalks, street trees, etc.) and zoning that encourages a mixture of residences with shops and services.