

The Obesity-Sprawl Connection

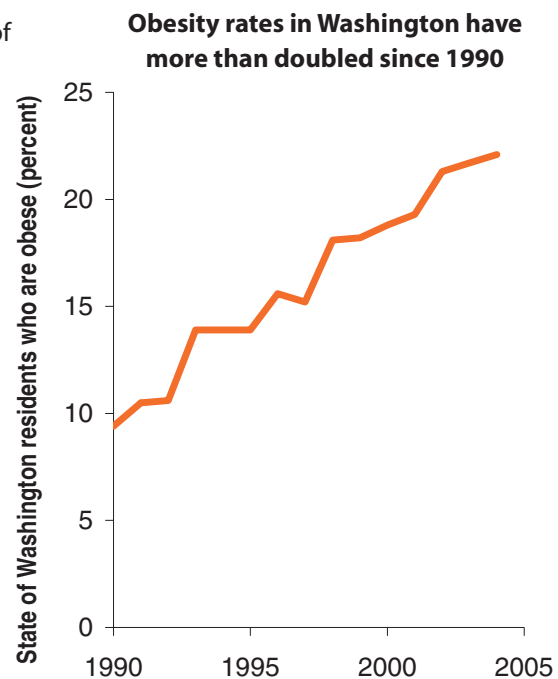
WASHINGTON TRANSPORTATION FACTS • FACT SHEET #2

Obesity and sedentary lifestyles are emerging as major threats to the health of Washington residents. New research suggests that sprawling suburbs—where most destinations are too far to be reached on foot, and a car is a necessity for virtually every trip—may contribute to the obesity epidemic by limiting opportunities for regular daily exercise.

Pedestrian-friendly neighborhood design, on the other hand, can encourage walking and reduce obesity rates. Cities that have curbed suburban sprawl tend to have lower rates of obesity and chronic illness. Similarly, residents of neighborhoods designed to accommodate pedestrians are less likely to be obese, and more likely to engage in moderate physical activity, than residents of more sprawling areas. Designing communities for walking can yield tangible health benefits for Washington residents.

OBESITY AND PHYSICAL INACTIVITY ARE A RISING BURDEN FOR WASHINGTON RESIDENTS' HEALTH—AND POCKETBOOKS

- Since 1990, the share of Washington residents who are obese has more than doubled—one of the fastest increases in the country. Today, **more than one in five residents are obese** and an additional 36 percent are overweight. And nearly half of Washington residents fail to engage in regular moderate exercise.¹
- At least **one out of every seven Washington children** is now overweight.²
- Obesity **increases the risk** of high blood pressure, diabetes, heart disease, stroke, gallbladder disease, osteoarthritis, breast cancer, and colon cancer, among other ailments.³
- Treating the diseases caused by obesity and physical inactivity **costs at least \$1 billion each year** in Washington state—and possibly much more. The comprehensive economic costs of obesity and inactivity are even higher: sedentary lifestyles, for example, tend to make workers less productive and more prone to absenteeism. By some estimates, the productivity losses stemming from physical inactivity sap more than \$4.6 billion each year from Washington's economy.⁴



GOOD NEIGHBORHOOD DESIGN CAN ENCOURAGE WALKING AND REDUCE OBESITY

- Nationwide studies find that the most **sprawling metropolitan counties tend to have the highest rates of obesity** and the lowest levels of physical activity.⁵
- People who live in neighborhoods designed to encourage walking **get more exercise, and are less likely to be obese**, than are people who live in sprawling suburbs with poor pedestrian facilities.⁶
- Elements of community design that encourage walking include:
 - an **interconnected street grid** that provides direct routes to nearby destinations;
 - a **mixture of residences, stores, and businesses**, that provides destinations within an easy walk of homes;
 - a **safe and pleasant streetscape** with pedestrian amenities such as sidewalks, shade trees, little traffic, and shops lining sidewalks.
- In a San Diego study, people who lived in traditional neighborhoods (where the street grid was designed for pedestrians and many stores and services were a short walk from people's homes) walked significantly more for errands than did residents of sprawling neighborhoods. As a result, the **residents of the pedestrian-friendly neighborhoods got 70 extra minutes of physical activity per week** and were 40 percent less likely to be overweight or obese.⁷
- If the greater Puget Sound region were to curb sprawl by even a modest amount, residents could **save tens of millions of dollars in annual medical costs** for treating the effects of obesity and physical inactivity.⁸

Sources on following page, or visit http://www.northwestwatch.org/sprawl_health/

SOURCES

¹US Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System Survey Data, 1990-2004, www.cdc.gov/brfss/index.htm; trends data for 1990 through 2002 from apps.nccd.cdc.gov/brfss/Trends/TrendData.asp; prevalence data for 1995 and 2004 from apps.nccd.cdc.gov/brfss/index.asp.

²US Dept. of Agriculture and CDC as cited in Children's Alliance, "Childhood Obesity: A Growing Risk to the Lifelong Health of Washington's Children," www.childrensalliance.org/4Download/childhood_obesity.pdf.

³CDC, "Overweight and Obesity: Home," www.cdc.gov/nccdphp/dnpa/obesity/index.htm.

⁴Eric A. Finkelstein et al., "State-Level Estimates of Annual Medical Expenditures Attributable to Obesity," *Obesity Research*, Jan. 2004, v.12, n.1, pp.18-24; Michael Pratt et al., "Higher Direct Medical Costs Associated with Physical Inactivity," *The Physician and Sportsmedicine*, Oct. 2000; v.28, n.10; pp.63-70; Chenoweth & Associates, Inc., "The Economic Cost of Physical Inactivity Among Washington State Adults," Washington Dept. of Health, Feb. 2004; Active Living Leadership, "Quantifying the Cost of Physical Inactivity," www.activelivingleadership.org/costcalc.htm; and current data from the US Census Bureau and US Bureau of Labor Statistics.

⁵Reid Ewing et al., "Relationship Between Urban Sprawl and Physical Activity, Obesity, and Mortality," *American Journal of Health Promotion*, Sept./Oct. 2003; vol.18, n.1; pp.47-57; Russ Lopez, "Urban Sprawl and Risk for Being Overweight or Obese," *American Journal of Public Health*, Sept. 2004; v.94, n.9; pp. 1574-1579.

⁶Lawrence D. Frank et al., "Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars," *American Journal of Preventative Medicine*, 2004, v.27, n.2, pp. 87-96; Brian E. Saelens, "Neighborhood-Based Differences in Physical Activity: An Environment Scale Evaluation," *American Journal of Public Health*, Sept. 2003, v.93, n.9; Lawrence D. Frank et al., "Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTAQ," *American Journal of Preventative Medicine*, 2005, v.28, n.2S2; and Billie Giles-Corti and Robert J. Donovan, "Relative Influences of Individual, Social Environmental, and Physical Environmental Correlates of Walking," *American Journal of Public Health*, Sept. 2003, v.93, n.9, pp. 1583-15.

⁷Brian E. Saelens et al. op. cit. note 6.

⁸Reid Ewing et al. op. cit. note 5; Russ Lopez op. cit. note 5; Eric A Finkelstein op. cit. note 4; Ian C. Fiebelkorn and Guijing Wang, "National Medical Spending Attributable to Overweight and Obesity: How Much, and Who's Paying?" *Health Affairs* - web exclusive, May 2003; Michael Pratt et al. op. cit. note 4; and Chenoweth & Associates, Inc. op. cit. note 4.

⁹Photo credit: Dan Burden, www.bikepedimages.org.