On the Right PATH to BETTER

Smart Growth has the potential to improve your health

By Heidi Johnson-Wright

There was a time when Americans put more shoe leather to the sidewalk and bicycle wheels to the road. Mom and Dad were more likely to walk a few blocks to get out of the house, to pick up a loaf of bread at the local IGA, or to visit with neighbors around the block. Junior and Sis rode their bikes or hoofed the half dozen blocks to the neighborhood school.

But times—and transportation modes—have changed. Today, Americans find it almost a necessity to drive to any final destination. Because of unplanned development, neighborhood sprawl, and pedestrian-unfriendly streets, we have little choice but to drive through winding streets of suburban developments in order to get to the main arterial. We wait our turn to pull out onto six lanes of traffic, drive through several monstrous intersections then into the massive parking lot of a strip mall. Now we wouldn't even consider letting our children walk or bike along the pedestrian-unfriendly or downright dangerous streets to get to the regional school on a large parcel at the edge of town. Mom and Dad chauffeur them.

But these aren't the only changes in American life. Adults and children are packing on the pounds to the detriment of their health. Are the changes connected? If so, what can and should we do about it?

"In 1978, 15 percent of Americans were not just overweight but clinically obese, and by 2002 it was 31 percent. One in seven youths is classified as obese," said Dr. Richard Joseph Jackson in a 2006 speech delivered in London, England.

HEALTH

"Overweight and obesity increase the risks of cancer, heart disease, stroke, high blood pressure, gall bladder disease, joint and bone disease, and many other afflictions."

"But the obesity epidemic also is because we and our children increasingly cannot walk to where we need to do our life work—schools, sports fields, friends' homes, libraries, shops or churches. The difference between highly walkable and non-walkable communities is an average of seven pounds of body weight," said Jackson, an adjunct professor in both the department of environmental health science and in the City & Regional Planning College of Environmental Design at the University of California at Berkeley.

"The other side of the obesity epidemic is the mix of good and bad news brought to us by technology. Technology has eliminated a lot of the really backbreaking labor from our lives. But we have also 'designed' a lot of incidental exercise out of our lives, such as walking. In 1969, 48 percent of students (90 percent of those who lived within one mile) walked or cycled to school. In 1999, only 19 percent of children walked to or from school and 6 percent rode bicycles to school. Overall, Americans walk or cycle a trivial amount—only about 6 percent of our trips—as compared to almost 50 percent for the people of Scandinavia."

"The current low-density, car-requiring building styles of the 20th century in the face of immense population growth are not sustainable. The solution, in my opinion, is high-quality density—safe, clean, quiet and healthy—with high energy and resource efficiency," Jackson said.

Atlantic Station

Dr. Lawrence Frank, a professor in the Sustainable Urban Transportation Systems in the School of Community and Regional Planning at the University of British Columbia, agrees with Jackson.

In a paper titled "Promoting Public Health Through Smart Growth," which Frank co-authored for Smart Growth BC, he states: "Our built environment shapes our transportation choices, and in turn, human health."

"Land-use patterns, because they relate with transportation behavior, subsequently affect public health in a number of ways: through physical activity levels, availability of health food choices, exposure to crashes, air pollution and noise, and community interaction and mobility."

"Compact land-use patterns with high-quality pedestrian environments and a mix of land uses can improve public health by promoting active forms of transportation, reducing per capita air pollution and associated respiratory ailments, and lowering the risk of car accidents."

"Smart Growth communities—those that are compact with a mix of land uses, well-connected street and sidewalk networks, a supportive pedestrian environment—can help to achieve various health objectives primarily by affecting people's travel behavior."

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"Research has documented that, all else being equal, residents of Smart Growth communities walk and bicycle more and drive less than residents of more isolated automobile-dependent locations. This results in measurably better physical fitness, reduced likelihood of obesity and traffic crash risk, and fewer air pollutants per capita than residents of more automobile-oriented communities."

Frank believes that the solution boils down to Smart Growth principles applied to a variety of different settings such as small villages, developing suburbs, old town centers and central cities, such as:

- Integrating land uses with one another, so that people can easily accomplish basic utilitarian needs on foot and bicycle;
- Locating retail such as small shops and services near where people live to attract more walking trips as opposed to having a few large shopping centers or a mall;
- Designing compact residential developments to put more people within walking distance of

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parks, schools, transit, shops and services;
- Building streets and buildings with a pedestrian perspective thereby creating places that are safe, vibrant and interesting for walkers, bicyclists and transit users; and
- Linking street and trail networks, which will reduce the time and distance needed for pedestrians and cyclists to get from point A to point B.

But not everyone believes that Smart Growth is the answer to America's obesity and health crisis. Matthew Turner, professor of economics at the University of Toronto is one of them.

"You walk by a school and an old folks' home next door. You notice young people in one building and old people in the other. You ask yourself, 'what about these buildings make some of the people young and the others old?' Now picture two buildings, but in one building the people are heavy and the other building the people are thin. What is it about the buildings that make people thin or heavy?

"This conclusion is perfectly consistent with the observation. But to really get a true understanding of what's going on, you must watch people coming and going from the buildings, otherwise you can't draw a valid conclusion," said Turner.

"Planners are carrying out really bad science. They go to the suburbs and weigh people, then they're weighing people downtown. You can't tell from the data if suburban folks are heavier or if heavier people happen to be moving to the suburbs. It's junk science—there's no evidence for an association between obesity and suburban sprawl. There's an inference problem," he said.

Turner claims to be one of a small group of researchers who have collected data that observes the same set of people as they move around. His research is focused on whether the same person's weight changes when he moves from the city to the suburbs.

"If you do that type of study, you'll find the movement of the same person from one environment to the other has no effect on his or her weight," Turner said.

Turner agrees that people living in suburbs are generally heavier than people in cities, but he believes there's a different explanation than Smart Growth makes people healthier.

"Why are people in suburbs heavier? Because of different habits, like walking less and driving more. Overweight people in cities move to the suburbs and people who are predisposed to gain weight move to the suburbs. They like to be reliant on cars," he said.

Turner agrees, however, with the Smart Growth proponents that Americans are too reliant on their autos. To counteract this, he believes it comes down to hitting people in the pocketbook with things such as specific time of day tolls on roads, charging more for parking and auto insurance premiums based upon the number of miles driven.

"Since people are driving too much, they should pay for this privilege. If they have to pay for it, people will want to stop organizing their lives

around cars. People choose what they want to do, and should not have to be told where to live and work. I'm not comfortable telling people where to live. But I'm pretty comfortable telling people they drive too much," Turner said.

Dr. Howard Frumkin, of the Centers for Disease Control and Prevention, understands Turner's skepticism and acknowledges some contradictory findings, but believes this is typical with any emerging field of science.

"Opponents of the theory that Smart Growth and better health are linked point to limitations in the research. Many of the studies have been cross-sectional, involving the study of two groups; one of which lives in walkable communities and the other which doesn't. Such studies don't irrefutably prove that one's environment affects one's travel behavior. It may simply be that people who enjoy walking move to Smart Growth neighborhoods. To find a link between environment and travel behavior, you need to approximate a randomized trial, much like those used in experimental drug studies," said Frumkin, director of the National Center for Environmental Health and Agency for Toxic Substances and Disease Registry at the CDC.

"In Atlanta, there's an infill development called Atlantic Station being built that's also the subject of a research project focused on the health effects of Smart Growth. Through a collaboration between the developer, academics and public health professionals, homeowners who are coming from sprawled communities and have purchased homes in Atlantic Station pre-construction are being studied in regard to their weight and general health. It will provide an excellent opportunity to look at the same people before and after they've moved to a Smart Growth community," Frumkin said.

Soon, Georgia just might have the evidence of positive health changes that a dose of Smart Growth can affect.

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Childhood Obesity and Safe Routes to School Program

Established in 2005 by federal legislation, the Safe Routes to School (SRTS) Program was created to address the growing problem of childhood obesity and the health issues it gives rise to. According to the SRTS Web site, in 1969 about half of all students walked or bicycled to school. Today, fewer than 15 percent of all school trips are made by walking or bicycling, one-quarter are made on a school bus and more than half of all children arrive at school in private automobiles.

The decline in children walking and bicycling to school has not only added to traffic congestion and air quality around schools, but also sedentary lifestyles of American children. This puts them at risk for obesity, diabetes and cardiovascular disease. SRTS also addressed safety issues of concern to parents, who cite traffic danger as a reason why their children are unable to bicycle or walk to school.

The program's main goal is to empower communities to make walking and bicycling to school a safe and routine activity. The program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.

"Communities can use the money to fix existing problems, such as schools near major arterials without sidewalks. To make it work, it's important to gain community support by bringing school and city officials and stakeholders together to set goals," said Deb Hubsmith, coordinator for the SRTS National Partnership, a coalition of 250 nonprofits, governments, schools and private organizations.

Most communities are getting a positive reception to these programs; many communities believe that 20 to 30 percent of morning traffic consists of parents driving kids to school each day," said Hubsmith.

Fred Boykin, chairperson of the Metro Atlanta SRTS coalition and a city commissioner in Decatur, Ga., helped organize a very successful four-year pilot program implemented in four schools.

The goals of the program were to promote physical activity in order to reduce childhood obesity, improve air quality and reduce traffic congestion—a big issue in greater Atlanta.

"We've done a lot of safety training, including organizing bike trains and walking school buses led by parents and volunteers," Boykin said.

"The program has resulted in an 86 percent increase in walking and biking at one elementary school and a 22 percent drop off in afternoon school pick ups using cars."

For an SRTS on-line guide, including a reference manual designed to support the development of programs and links to other SRTS publications and training resources, visit: http://www.saferoutesinfo.org/guide/index.cfm.

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