

Testimony of Professor Reid Ewing before the Subcommittee on Children's Health,
Senate Committee on Environment and Public Works, Tuesday, September 29, 2009

Madam Chairman and Subcommittee Members

I am Reid Ewing, a professor of City and Metropolitan Planning at the University of Utah. Thanks for the opportunity to appear before the Subcommittee. I can only speak to the issue of children's health from the limited perspective of urban planning. But from that perspective, I will tell you what is known from the research literature.

The most heavily researched subject in urban planning is the relationship between community design and people's travel choices. From dozens of studies, I can say with assurance that people living in compact urban areas walk more than those living in suburban sprawl. The key variables are density of population, diversity of land uses, and design of streets, the so-called 3Ds. From about 20 studies, I can say with some assurance that people living in compact urban areas are less likely to be overweight than comparable individuals (same age, ethnicity, education, income, etc.) living in suburban sprawl. The literature strongly suggests that community design and development patterns make a difference when it comes to travel, physical activity, and obesity.

Having made these declarative statements, I need to provide some caveats. First, the vast majority of studies conducted to date relate to adults, not children. Second, the few studies that have looked at overall physical activity suggest that people living in suburban sprawl can compensate for the lack of walking by engaging in other physical activity. Third, while development patterns are correlated with physical activity, the nature of most study designs prevents us from making strong cause-effect statements. It is possible, in particular, that some of that strong relationship between community design and walking is due to something referred to as self-selection, where people who want to be physical active chose to live in walkable neighborhoods as opposed to the neighborhoods changing the behavior of people.

Now to my own studies. I have researched children's likelihood of walking or bicycling to school. I have done this in three very different metropolitan areas: Gainesville, Houston, and Portland. In the Gainesville study, the two most important factors in the decision to walk to school were living close to school and having sidewalks on the major streets. In Houston, distance to school was significant, as was population density. In Portland, distance to school was significant, as was presence of sidewalks. These results argue for neighborhood schools (smaller schools drawing from nearby neighborhoods) and for safe-route-sidewalk improvements.

I have also studied childhood obesity (risk of being overweight) and found that, as with adults, after controlling for income and other differences, children living in sprawling suburbs are more likely to be overweight than those living in compact cities. This argues for the three Ds, higher population density, greater diversity of land uses, and pedestrian-friendly urban design, meaning short blocks, relatively narrow streets, buildings close to the street, sidewalks, street trees, and the like.

Thanks for the opportunity to speak today, and I would be happy to answer any questions you may have.

Reid Ewing
Professor of City and Metropolitan Planning
University of Utah