

## Safety by Design: Sprawl, cars, and your health

When choosing a place to live, people rarely weigh the risk of automobile accidents in their decision. But perhaps they should. An emerging body of research demonstrates that, when it comes to protecting your family from car crashes, choosing the right neighborhood can be as important as choosing the right car.



Car crashes are a major public health risk. In the Northwest states, for example, vehicles are the leading killer of people under the age of 45. But good neighborhood design can lower that danger. Accident risk adds up by the mile, so residents of compact neighborhoods, who typically drive less, face lower crash risk. Compact, transit-friendly neighborhoods, especially places that mix homes, services, and stores, make it possible for many residents to get around without putting as many miles on their car.

In contrast, sprawling neighborhoods impose extra crash risk on their residents. A spread-out, low-density neighborhood places destinations farther apart, adding miles to work commutes and daily errands. And those extra miles mean extra risk.

The link between sprawl and accident risk is more than just a theory. It's confirmed by the numbers. A study of 448 metropolitan counties in the United States found that the more sprawling a metropolitan county was, the more likely were its residents to die in a transportation-related accident, whether as a driver, passenger, or pedestrian. The increased crash risk in sprawling counties was likely due to extra driving.

And as a recent US transportation survey shows, people who live in the lowest-density suburbs drive nearly twice as far, on average, as residents of more compact, pedestrian-friendly neighborhoods, and nearly four times as much as people who lived in urban downtowns or compact town centers.

Compact neighborhoods also tend to be better serviced by transit, since higher population density makes bus and train service more cost effective. Transit riders reap an extra safety bonus: measured per passenger mile, riding public transit is less than a tenth as risky as driving a car.

Better neighborhood design is a key reason that residents of British Columbia have fewer fatal car crashes than their counterparts south of the 49th parallel. The cities of Vancouver and Victoria, BC, are the Northwest's smart-growth leaders, with far more compact land-use patterns than the major urban centers of Washington, Oregon, and Idaho. And largely as a result of the extra driving they do, residents of the Northwest states are about one-third more likely than their BC residents to die in a car crash.

Consumer surveys show that creature comforts—such as CD players and air conditioning—carry more weight than safety features for most prospective car buyers. Still, there is a

segment of the car-buying market for whom crash safety is paramount. Recognizing an opportunity, automakers now offer advanced safety features, ranging from anti-lock brakes to “curtain” airbags, on many new car models.

Now that research has clearly identified neighborhood design as a key ingredient to reducing crash risk, perhaps the real estate industry will take a page from the automakers’ book—and begin to market the enhanced safety offered by compact, transit-friendly neighborhoods.

[http://www.northwestwatch.org/publications/CS\\_news\\_10\\_05\\_cars.asp](http://www.northwestwatch.org/publications/CS_news_10_05_cars.asp)

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