Fat city: does urban sprawl lead to human sprawl?

As health spending on obesity-related illnesses continues to rise in the United States and parts of Europe including the UK, many suggest that urban planning geared towards active and healthy living could be an important tool to curb obesity.

But does urban sprawl really cause human sprawl? Not according to research by CEP’s Henry Overman and colleagues at the University of Toronto and the Universitat Pompeu Fabra in Spain. Their recent study finds no evidence that urban sprawl affects people’s weight.

What the research does confirm is the commonly reported view that people living in sprawling neighbourhoods tend to be heavier than those living in neighbourhoods where development is compact and there are plenty of shops and amenities within walking distance. But this is not because sprawling neighbourhoods cause people to gain weight. Populations in sprawling neighbourhoods are heavier because individuals with an innate propensity to be obese tend to live in such neighbourhoods. Thus someone with an idiosyncratic distaste for walking is both more likely to be obese and to prefer living where one can easily get around by car. If this is the case, the finding that people in sprawling neighbourhoods are heavier does not imply that sprawl causes obesity.

To study the role of this sorting process, the researchers matched recently available satellite images of the United States to confidential survey data that reports the weight and address of a sample of nearly 6,000 individuals for six years. Since approximately 80% of the people in the sample changed residences during that period, the researchers could check whether people actually gained weight when they moved to a more sprawling neighbourhood. If sprawl causes people to gain weight, then people who move from compact to sprawling neighbourhoods should gain weight. They don’t. This means that plans to redesign the environment will not lead to cities that cause people to be thin. Rather, they are likely to create cities to which thin people move.

The results provide a basis for thinking that ‘smart growth’ type designs will not cause people to be thinner, so that policy-makers who hope to combat the obesity epidemic with these designs are wasting tax dollars. The public health battle against obesity should be fought on other fronts.

Other experts have hailed the research as significant in fighting popular misconceptions about the causes of obesity. Matthew Kahn, economics professor at Tufts University and author of Green Cities, said the researchers employed statistics to challenge conventional wisdom:

‘They used sophisticated econometrics to take a more careful look at whether suburbanisation does indeed make us fatter. Hopefully their methods will be adopted by public health researchers seeking to tease out causality based on raw correlation.’

Henry Overman is a reader in economic geography at LSE and deputy director of CEP’s globalisation programme. Jean Eid and Matthew Turner are at the University of Toronto. Diego Puga is at the Universitat Pompeu Fabra.