



To: City Development

From: Adrian Davis

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Subject: Essential Evidence on a page: Car use, weight gain and climate change

Top line: The leading cause of adult obesity is a major decline in physical activity.¹ The substitution of walking by car use is having a major impact on adult body weight and carbon emissions. A return to higher levels of walking would help improve human and planetary health.

In recent years there has been a growing number of studies identifying a link between car use and weight gain.² Separately it is widely understood that the substitution of active travel modes by car use over recent decades has increased carbon dioxide emissions. In 2007 a report researched and analysed the evidence that links climate change and obesity to the decline in walking and its substitution by car use and so addressed linked problems which could be ameliorated by changes in travel behaviour.³

Some key findings from the report:

- 40% of all journeys in the UK are under 2 miles in length – distances easily covered by up to 30 minutes of brisk walking. Nonetheless, 38% of these journeys are currently by car.
- If a typical British adult were to walk just an hour more per week (equivalent to the difference in walking between a typical driver and a non-driver) this would counteract a weight increase of 2 stones over a decade, and a longer-term slide into obesity. This alone could make a major contribution to halting the trend of increasing obesity across the UK.
- The extra walking could displace at least 11 million tonnes of CO₂ from cars – amounting to 15.4% of the total UK emissions from passenger cars.

The report calculated that just by returning to the average distance walked by people in the UK without cars, the rising tide of obesity can be almost halted. Reverting to the walking patterns we had during lower levels of car ownership, when physical activity included more regular walking to work, to the shops and to escort children to school, could therefore be an important part of national programmes to fight both climate change and obesity. The costs of such programmes are likely to be dwarfed by those that would be incurred by the National Health Service and society at large through inactivity, ill-health and premature death as a consequence of obesity (estimated at £8.2 billion per year at 2004 prices). At the same time, a substantial share of individuals' contribution to national carbon dioxide emissions could be avoided.

The report proposed that reducing the burden from obesity and carbon emissions could be achieved through renewed efforts to promote walking as transport. This would be vastly cheaper than dealing with the consequences of the obesity epidemic and climate change.

Conflict of interest declaration: lead author

¹ NHS Information Centre, 2010 *Statistics on obesity, physical activity and diet: England 2010*.

<http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/obesity/statistics-on-obesity-physical-activity-and-diet-england-2010>

² See http://www.bristol.gov.uk/ccm/cms-service/stream/asset/?asset_id=29542007 No 7 as an example

³ Davis, A., Valsecchi, C., Fergusson, M. 2007 *Unfit for purpose: how car use fuels climate change and obesity*, London: Institute for European Environmental Policy.