



To: Neighbourhoods and City Transport

From: Adrian Davis

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Subject: Essential Evidence on a page: No 113 City-wide residential streets 20mph speed limits

Top line: A strong case has been made that the single most effective method for improving public health is the introduction of 20mph speed limits, not least in order to help reduce the numbers of injuries among those aged 0-25, and among those in poorer areas.

Graz, Austria, introduced a city-wide 30kph trial limit between 1992 and 1994. It may have been the first such intervention or the first to be evaluated. Speed measurements for pre & one year post implementation detected 'relatively small reductions in average speed'. However, there was a strong measured reduction in high speeds in that the proportion of those travelling at more than 50kph in the 30kph limits fell from 7% to 3%. A 12% reduction in collisions with slight injury and a 24% reduction in serious injury collisions were also attributed to the trial. The reductions were most significant at junctions and crossings. Evidence from video cameras at three junctions led researchers to conclude that drivers and pedestrians were more considerate to each other.¹

Since 2010 many UK urban areas have voted to implement city-wide signs-only 20mph residential streets, and some include shopping streets. Highway authority decisions to make these speed limit changes are supported by British Social Attitudes Surveys. For example, in 2010 71% of the population were found to support 20mph limits with signage only, with only 15% against; indeed support has remained consistently at these levels for a decade.²

One of the UK's most eminent human geographers, Professor Dorling, has today presented a powerful case that the implementation of 20mph speed limits is *the most effective* method for improving public health.³ He highlights that slowing-down vehicles would reduce inequalities within cities because it tends to be in the poorer parts of cities that people are at most risk of being hurt or killed by vehicles. Also, in urban areas the majority of people killed or seriously injured are pedestrians and cyclists. By grouped cause of death, the biggest killer in Britain of children between 11-16 years old (and anyone between the ages of 5 and 25) is road traffic crashes. This includes a vehicle hitting a pedestrian, a pedal cyclist being hit by a vehicle, or the death of a passenger or driver in a vehicle during a crash. For children, the risk of injury is higher in faster traffic environments because their eyes are not developed enough yet to be able to judge speeds over 20mph.⁴ He also cites 10 other benefits, including for drivers, older people fearful of leaving their homes, those who'd like to cycle more, and improved social connectivity as additional reasons to adopt 20mph speed limits. This corresponds with a Local Government Information Unit policy briefing which is strongly in favour of 20mph because of a myriad of 'win-win' outcomes.⁵

¹ Wernsperger F., Sammer G. 1995 *Results of the scientific investigation accompanying the pilot trial of 30kph limit in side streets and 50kph limit in priority streets*. 23rd European Transport Forum, PTRC, Proceedings Seminar G, Traffic Management and Road Safety.

² Dept for Transport 2011 *British Social Attitudes survey: attitudes to transport*, London, DfT.

³ Dorling, D. 2014 *20mph Speed Limits for Cars in Residential Areas, by Shops and Schools*, in British Academy, *If you could do one thing...* "Nine local actions to reduce health inequalities". London: BA.

⁴ Wang, J., Poulter, D., Purcell, C. 2011 Reduced Sensitivity to Visual Looming Inflates the Risk Posed by Speeding Vehicles When Children Try to Cross the Road, *Psychological Science*, 22, 4, 429-434.

⁵ LGIU Policy Briefing 2012 Area-wide 20mph neighbourhoods: a win, win, win for local authorities <http://www.lgiu.org.uk/wp-content/uploads/2013/12/Area-wide-20mph-neighbourhoods-a-win-win-win-for-local-authorities.pdf> accessed 13th January 2014.