



To: Neighbourhoods and City Development

From: Adrian Davis

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Subject: Essential Evidence on a page: No. 104 Effectiveness of Safe Routes to School Programmes

Top line: In the US, one of the most car-dominated countries in the world, political commitment has enabled funding of proven safe routes to schools interventions. In New York alone there is potential to prevent 210 child pedestrian injuries per year through Safe Routes to school programs.

In 2011 2,412 0-15 year olds were killed or seriously injured In Great Britain of which 1,602 were as pedestrians.¹ The consequences of child pedestrian crashes extend beyond that of the immediate injury. 23% of all children struck by cars can be expected to experience some psychological impacts, and their parents are at increased risk for psychological symptoms. At the societal level, concern about pediatric pedestrian injury has been linked to declines in children's activity and may contribute to childhood obesity.² Robust evidence exists as to successful interventions to reduce child pedestrian casualties in both the transport and health literatures.³

A study from the US indicates the degree of effectiveness of Safe Routes to Schools interventions in New York.⁴ In 2005, to help address the health and societal consequences of the decline in walking and bicycling to school, the US Congress created the federal Safe Routes to School (SRTS) program as part of the federal Safe, Accountable, Flexible, Efficient Transportation Equity Act. The program allocated £400 million for fiscal years 2005 to 2009 for state departments of transport to build pavements, bicycle lanes, and safe crossings, to improve signage, and make other improvements to the built environment to allow children to travel to school safely.

As of 2010, departments of transport in all 50 states had introduced safety improvements at 10 400 of the nation's 98 706 elementary and secondary schools. Interventions consist primarily of pavement improvements (19%), traffic calming (14%), pedestrian /bicycle access (14%), and education (14%). The distribution of projects mirrored the population density of school-aged children across the United States. In New York, by 2009 all short term safety improvements were implemented.

During the study period, annual pedestrian injury rates in intervention areas in New York decreased 33% in school-aged children but remained fairly stable in other age groups. The authors concluded that the implementation of the SRTS program in New York City contributed to a marked reduction in pedestrian injury in school-aged children. Among school-aged children, the 5- to 9-year-old group experienced the largest decline in pedestrian injury rates (42%) followed by the 10- to 14-year-olds (35%) and the 15- to 19-year-olds (18% respectively). Importantly there was a 44% reduction in school-aged pedestrian injury rates between pre-intervention and post-intervention periods with SRTS interventions sites compared with no change without SRTS interventions.

¹ Dft, 2012 Reported Road Casualties in Great Britain: 2011 Annual Report

² Schieber, R, Vegega, M. 2002 Reducing childhood pedestrian injuries. *Injury Prevention*; 8 (suppl 1):i1-i10.

³ See <http://guidance.nice.org.uk/PH41>

⁴ DiMaggio, C., Li, G. 2013 Effectiveness of a safe routes to school program in preventing school-aged pedestrian injury, *Pediatrics*. (doi: 10.1542/peds.2012-2182).