**Active Travel in Liverpool: an unmet opportunity for health and wellbeing.**

**Executive summary**

* active travel’s public health benefits outweigh the risks of crashes, pollution, etc. [1]
* cycling and walking are safe in isolation but have perceived and real risks on our roads [2]
* in 1971, 80% children walked to school; in 1990, 9% walked to school [3]
* children and elderly are more fragile and more at risk in road crashes
* worldwide, road crash is the main fatal accident risk in children, 9-17 years [4]
* the lowered risk to drivers from car safety devices induces faster driving [5]
* increased pedestrian and cyclist deaths followed seatbelt legislation [5]
* 52% of Merseyside’s road casualties are pedestrians and cyclists [6]
* road conditions produce fear and withdrawal in walkers and cyclists
* there seems limited protection of vulnerable road users by the judicial system
* deterring active travel removes great benefits, e.g. public health, carbon [1,7]
* by 2050, 90% of adults will be overweight or obese if no action is taken [8]
* our challenge is: ‘safer roads for healthier people’

**Active travel benefits people, environment and economy.** Walking and cycling reduce heart disease, obesity, cancer, diabetes and stress, outweighing the risks from poor air quality and road traffic collisions [1,7]. Indeed, the more we travel on foot or bike, the more we reduce congestion, pollution (particulates, carbon) and road risk, whilst liberating road and parking space.

**There are obstacles to active travel.** Cycling and walking are intrinsically extremely safe, yet over half of British adults feel that local roads are too dangerous to cycle on [2]. *Is this fear justified?* Merseyside’s casualties amongst these vulnerable road users have risen from 47 in 2007 to 85 in 2012 and now exceed the falling risks of vehicle occupants; pedestrians and cyclists thus comprise the majority, 52%, of all road casualties (killed or seriously injured) where the national average is 38% [6]. *Why should this be the case?* In 1983, seatbelt legislation produced more modest reduction in road casualties than expected; while fewer drivers and front passengers died, substantially more pedestrians and cyclists were killed [5]. Risk compensation for ‘safety improvements’ have been blamed, producing higher speeds and faster cornering. Children and elderly are particularly fragile in collisions; road crash leads child deaths by injury for ages 9-17 [4].

*Levels of walking and cycling* are directly related to the speeds and volume of motor traffic [9]. Indeed, an absence of casualties on some of the busiest road sections seems due to withdrawal of people through fear of traffic. That child fatalities have halved over 20 years has resulted, not from any novel interventions, but from withdrawal of children from road space [4]; now they are driven to school, deprived of exercise whilst adding to congestion and road risk [3]. At the same time, a prevailing view that the level of protection of vulnerable road victims by the courts is compromised, gains regular support from newsworthy mitigations of sentencing [10,11].

*The most significant obstacle to active travel in Liverpool* is a toxic combination of poor cycling and walking infrastructure alongside endemic fear, and real risks, of traffic. Further deterrents include obstructing road furniture, pavement parking, poor crossings and junctions, dress code issues, noise, abuse, and pollution. Indeed particulates, implicated in 239 deaths annually (2440 life-years lost) in Liverpool, breach EU standards and are amongst the UK’s highest air quality risks [12].

**Creating opportunities for active travel.** The safety of vulnerable road users should lie at the heart of highways design, education programmes and processes that modify driver behaviour. Implementing EU level, high-quality walking and cycling infrastructure together with targeted behaviour change, amidst Liverpool’s growing 20 mph zones, would address widespread concerns over real and perceived road risks [13-16]. This would, then, free up active travel alternatives to the 53% of car-based urban journeys under 5 miles, a distance easily walked or cycled [14]. That the public health, economic and environmental benefits would be great, is inescapable [15].

**Recommendations and challenges.** Building on the third Local Transport Plan [17], we propose a transformational approach that draws on the wealth of European expertise in road safety:

1. a new target of *zero road deaths*in Liverpool, adopting ‘Vision Zero Merseyside’ [18-20],
2. up to 360 miles of safe, continuous, City-wide and segregated space to cycle and walk [21],
3. taxi, bus, freight, council and police drivers to act as ambassadors for best practice,
4. the Authority to lobby for funding of enforcement of safe driving practices everywhere, including pavement parking, indicated speed limits around schools and on rural B roads,
5. the justice system to empower the courts to fairly address the plight of vulnerable road users.

**What is the future of transport for our children and grand-children?** Indeed, how many of our children should we accept being killed or seriously injured on Liverpool’s roads each year?

**Authors**

Dr Stella C Shackel, Professor Lewis J Lesley, Professor Sophie Wuerger, Don Thompson, Martin Lowe, Philip Spick, Roland Graham, Andrew Grimbly, Professor Derek A Gould, Martin Dunschen.

**Appendix**

**References**

1.  [de Hartog](http://www.ncbi.nlm.nih.gov/pubmed/?term=de%20Hartog%20JJ%5Bauth%5D) JJ, [Boogaard](http://www.ncbi.nlm.nih.gov/pubmed/?term=Boogaard%20H%5Bauth%5D) H, [Nijland](http://www.ncbi.nlm.nih.gov/pubmed/?term=Nijland%20H%5Bauth%5D) H, [Hoek](http://www.ncbi.nlm.nih.gov/pubmed/?term=Hoek%20G%5Bauth%5D) G. Do the Health Benefits of Cycling Outweigh the Risks? Environ Health Perspect. Aug 2010; 118(8): 1109–1116. Published online Jun 30, 2010. doi:  [10.1289/ehp.0901747](http://dx.doi.org/10.1289/ehp.0901747%22%20%5Ct%20%22pmc_ext)

2. BBC website; News England: <http://www.highwaysmagazine.co.uk/local-roads-too-dangerous-to-cycle-on-poll-suggests-20140703> and <http://www.bbc.co.uk/news/uk-england-28093374> (Accessed 3rd July 2014).

3. Hillman M, Adams J, Whitelegg J. In: One False Move. ISBN 0 85374 494 7

4. Wikipedia website: List of Preventable Causes of Death. <http://en.wikipedia.org/wiki/List_of_preventable_causes_of_death> (Accesed 17th June 2014).

5. McCarthy M. The benefit of seatbelt legislation in the United Kingdom. Journal of Epidemiology and Community Health, 1989, 43, 218-222

6. Travel independent website. <http://www.travelindependent.org.uk/> (Accessed 17th June 2014).

7. Sustrans website; Health and Active Travel: <http://www.sustrans.org.uk/policy-evidence/related-academic-research/health-and-active-travel> (Accessed 3rd July 2014).

8. UK Government, Department of Health website: [http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publichealth/Healthimprovement/Obesity/DH\_079713](http://webarchive.nationalarchives.gov.uk/%2B/www.dh.gov.uk/en/Publichealth/Healthimprovement/Obesity/DH_079713) (Accessed 3rd July 2014)

9. Jacobsen,PL; Racioppi,F; Rutter,H (2009) Who owns the roads? How motorised traffic discourages walking and bicycling, Injury Prevention, v15, pp369-373.

10. BBC website: Cyclist killer Gary McCourt: Crown loses appeal against ‘lenient’ sentence. <http://www.bbc.co.uk/news/uk-scotland-edinburgh-east-fife-24240127> (Accessed 17th June 2014).

11. The Jewish Chronicle Online: Mr Loophole defends rabbi death claim. <http://www.thejc.com/news/uk-news/119731/mr-loophole-defends-rabbi-death-claim> (Accessed 17th June 2014).

12. Public Health England website: <http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317141074607> (accessed 30th April 2014)

13. Ogilvie D, Egan M, Hamilton V, Petticrew M. Promoting walking and cycling as an alternative to using cars: systematic review. Br Med J. 2004;329:763–766. [[PMC free article](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC520994/)] [[PubMed](http://www.ncbi.nlm.nih.gov/pubmed/15385407%22%20%5Ct%20%22pmc_ext)]

14. National Travel Survey; Department for Transport. Statistical Release, 30th July 2013 (revised 19/9/13). <http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/divisionhomepage/028941.hcsp> (Accessed 14th July 2014).

15. Lindsay G, MacMillan A. Moving urban trips from cars to bicycles: impact on health and emissions. Australian and New Zealand Journal of Public Health. Feb 2011; Vol 35 (1) 54-60.

16. Bristol Local Government Website; City Council Cabinet minutes: https://www.bristol.gov.uk/committee/2012/ua/ua000/0726\_7.pdf (Accessed 3rd July 2014).

17. Merseyside Local Transport Plan website; LTP3: <http://www.letstravelwise.org/content206_Local-Transport-Plan-3.html> (Accessed 03/07/14)

18. Whitelegg J, Haq G. Vision Zero: Adopting a Target of Zero for Road Traffic Fatalities and Serious Injuries (2006), for the Stockholm Environment Institute, produced under a contract with the Department for Transport. <http://sei-international.org/mediamanager/documents/Publications/Future/vision_zero_FinalReportMarch06.pdf>

19. Vision Zero Merseyside; pdf document. [www.wirralpedestrians.org.uk/files/vision\_zero\_merseyside.pdf](http://www.wirralpedestrians.org.uk/files/vision_zero_merseyside.pdf) (Accessed 17th June 2014).

20. Hong Kong Road Safety Council website; <http://www.roadsafety.gov.hk/en/campaign/campaign20140502.html> (Accessed 3rd July 2014)

21. CTC website; Space for Cycling: [www.ctc.org.uk/spaceforcycling](http://www.ctc.org.uk/spaceforcycling). (Accessed 3rd July 2014).