

Is 40 the new 50? The case for a national reduction in the local road speed

Marina Alexander^a and Mark King^b

^a University of Queensland (UQ); ^b The Centre for Accident Research and Road Safety (CARRS-Q)

Abstract

Safe speeds are central to reducing road crashes and crash severity (Archer, Fotheringham, Symmons & Corben 2008, Johnston, Muir, & Howard 2013). In the late 90's the NSW, Victorian and Queensland governments led the national reduction from 60 to 50km/h on local roads. This simple and inexpensive policy innovation reduced the road toll by 15% (Haworth, Ungers, Vulcan & Corben 2001). It's time to continue this downward trend. Reducing the local road speed to 40km/h will do two things. First, it will reduce road crashes (Archer et al 2008). Second, it will transform communities by allowing more equitable and safe access to the road system (Welle, Wei, Adiazola, King, Obelheiro, & Sarmiento 2015). This paper presents an argument and conceptual strategy for changing the Australian Road Rules (ARR) to 40km/h on local roads.

Extended Abstract

Safer vehicles and safer roads are key elements to increased road safety for motorists but the effect is marginal for vulnerable road users (VRUs) (Archer et al 2008, Johnston et al 2013). Pedestrians, cyclists and other VRUs are unprotected and do not necessarily benefit from technical improvements in vehicles or road infrastructure. Moreover, road safety experts argue there is a diminishing rate of return to expensive technological fixes for vehicles and road infrastructure (International Transport Forum 2008). It is therefore timely to go back to first principles of injury prevention to develop more cost effective road safety policy that will deliver maximum impact. We argue that speed control is a fundamental element of this approach.

Increased force determines the magnitude of injury on the unprotected human body (Tillgren, Vedung, & Belin 2012). Slower speeds produce less kinetic energy resulting in less serious injuries. Slower speeds also allow for longer reaction time and braking distance, decreasing the likelihood of crashes occurring (Johnston et al 2013). In short, with lower speeds motorists have more time and space to avoid crashes (Tillgren et al 2012, Johnson et al 2013). Moreover, research demonstrates that on most urban trips lowering the speed by 10km/h makes little difference to overall travel time due to improvements in traffic flows (Archer et al 2008, Haworth et al 2001)

More people are choosing to walk, cycle, or use alternative forms of transport (International Traffic Safety Data and Analysis Group 2014). Spurs for this trend include a decrease in car use by young people and an ageing population (Welle et al 2015). Demographers also point to a general increase in inner-city populations aiming to increase 'livability' and work life balance (Welle et al 2015, Lydon et al 2015). Societal change brings new demands on public infrastructure, particularly the road network. The challenge for policy professionals and political leaders is to respond to these demands by designing policy that is innovative, inexpensive, impactful, and evidence based.

We argue that reducing the local road speed will address the dual public demands for safer roads and more 'livable' urban environments. However, political inertia regarding legislating for lower speeds is demonstrated in many local, state and federal jurisdictions. The safer speeds solution must therefore be presented in an innovative, positive way. The positive outcomes of a lower local speed limit include increased access to the road network, increased community connectivity, and a decrease in the road toll (Welle et al 2015, Lydon et al 2015). Economic factors must also be acknowledged as governments are under pressure to do more with fewer resources. Again the message should be framed in a positive way. Although a change in the speed limit is not cost free

(e.g. education, signage and enforcement) these are marginal when compared with more expensive and often less effective technology or infrastructure based policies. In short we claim that foregrounding the positive impacts and the low cost of reducing the local road speed provides an effective antidote to political inaction.

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