



Bicycle Network

Safe Street Neighbourhoods

GTA's Dick van den Dool, together with colleagues Paul Trantor from UNSW and Adrian Boss from BIKEast, has just had a paper published in the Journal of the Australasian College of Road Safety on the role of lower speed limits in residential streets¹.

I caught up with Dick recently to discuss their conclusions.

Over recent decades much of the focus has been on improving safety outcomes for vehicle occupants. While this programme has been very successful, the techniques we have adopted are approaching a point where the maximum possible benefits have been realised, other than on-going advancements in car technology. In thinking about what's next, maybe we should turn our attention to other road users.

How best can we tackle that problem? Lowering residential speed limits to 30 km/h is one approach that Dick thinks would be highly effective. Dick noted that the key benefit of reducing speed limits on local streets to 30 km/h would be in road safety, and resulting in a possible 13% reduction in the Australia's national road toll, valued at A\$3.5B per year.

We know that lower speeds correlate strongly with fewer and less severe accidents. For example, in response to an unexpected event such as a child running into its path, a vehicle travelling at a slower speed can stop in a

shorter distance therefore avoiding impact, or lessening any impact that might occur. Dick also noted that research suggests that those who live on streets with low speed limits feel much safer and have a much stronger sense of those streets as community open space. Other benefits have also been observed: generally improved liveability, lower crime rates, increased levels of physical activity, increased levels of access to local goods and services and lower pollution levels.

Given lower speeds correlate to increased road safety, Dick notes that the accepted wisdom amongst traffic engineers is that the best way to get drivers to travel more slowly is to design the streets so drivers feel uncomfortable at higher speeds. Tools like horizontal and vertical deflection, and introducing visual cues through tree planting close to the travel lanes are commonly used to achieve this outcome. In contrast, simply erecting (lower) speed limit signs is recognised as much cheaper but seen as not nearly as effective.

¹. Journal of the Australasian College of Road Safety, Volume 28, No3, 2017, pp55-63

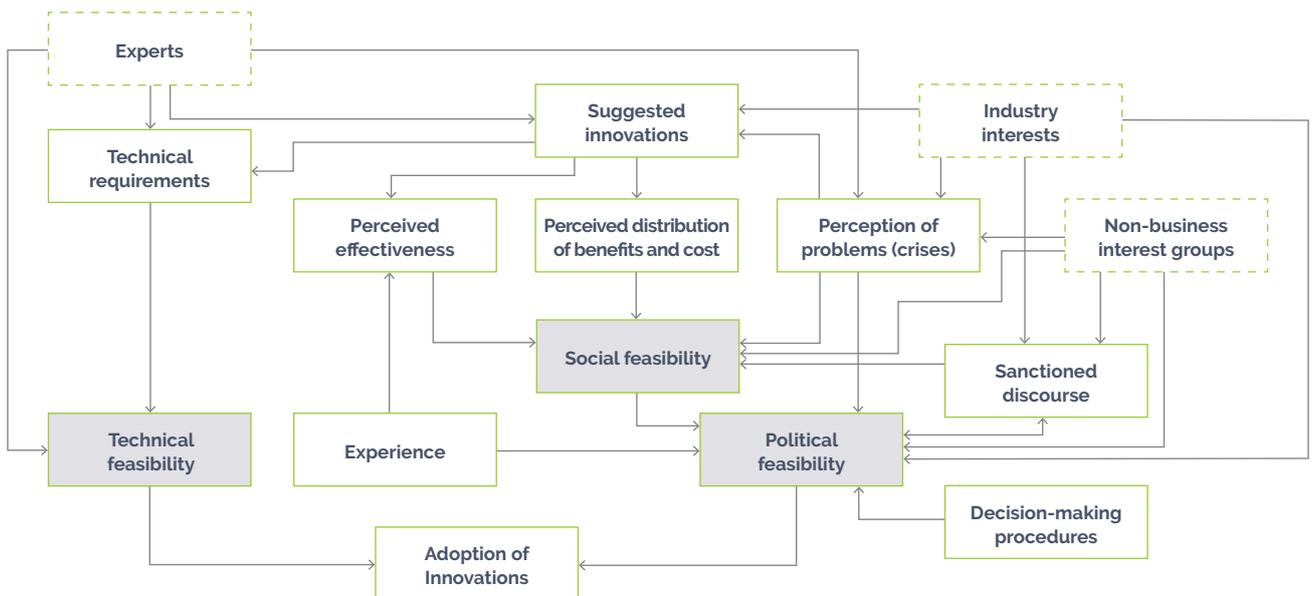
Dick challenges this approach. He argues that while simply erecting lower speed limit signs may not be as effective in reducing accidents as changing the physical street environment, if implemented over a large area the net benefits to the community may be higher than physical redesign in a small area. He cites the effectiveness of the blanket implementation of 50 km/h speed limits in residential streets throughout Australia between 1995 and 2005 as evidence of the value of this approach. Many studies from around the world support this view.



Notwithstanding the substantial and consistent evidence that reducing speeds brings safety benefits, many communities around the world instinctively oppose introduction of lower speed limits. This is primarily because of the mistaken belief that lower speed limits equate to longer travel times. Yet research indicates that in practice lower speed limits on residential streets have either no effect on total travel times or a very marginal one. One way to help mitigate this issue is the establishment of a good road hierarchy, whereby no one lives more than 500m from the nearest 50km/h road. This would limit travel time impacts to less than a minute on the journey to work. In transport economic terms, this would amount to the same cost to each traveller as a single cup of coffee for a month.

Selling this idea is not so easy. Dick suggests appointing and resourcing political champions to lead the debate at state and national levels and to drive a comprehensive education programme. This is no doubt part of it but I am thinking it may take more than this. Feitelson and Salomon's 'The Political Economy of Transport Innovations,'² and their assessment of how transport decision making occurs, provides a framework for action.

² Feitelson, Eran & Salomon, Ilan. (2004). The Political Economy of Transport Innovations. 11-26



- Legend:**
- Active agents
 - Requisites for adoption
 - Factors

They identify three requisites for adoption of any innovation: technical feasibility, social feasibility and political feasibility. They also indicate the need for three groups, which they call active agents, to be responsible for driving the decision-making process; - experts, industry interests, and non-business interest groups. Interestingly, this model suggests that only industry interests and non-business interest groups can determine what constitutes sanctioned discourse – experts do not have a voice in determining this, although they can participate in shaping the perception of the problem as well as the suggested innovations.

Dick's suggested political champions belong to the industry interest group. They can influence our perception of the problem and what becomes sanctioned discourse ('This is a discussion about child safety' rather than 'This is a conversation about getting to work on time'); they can also work with technical experts to devise changes to the way we use our streets (say, a blanket reduction in speed limits) to tackle the problem.

The industry interests box would also be populated by local councils, organisations like NRMA, RACV, RACQ, RAC in WA, and others whose work is affected by possible change. This may demand sharp elbows from the political champions to ensure they owned both the perception of the problem and what constitutes sanctioned discourse.

One of the key drivers of change will be to create awareness and buy-in around the need for change.

From Herald Sun – digitally altered

Looking at the economic benefits to Just NSW of converting to a 30km/h speed limit they have been identified as being in the region of \$886M - \$13M from reduced fatalities, \$864M in savings from Injuries and \$9M in savings from property damage. These savings are based on Transport for NSW data, and assumptions of crash reductions based on Dutch research.

Despite the clear evidence, relatively 'dry' economic arguments can be ineffective in changing attitudes and hence behaviour change. Any program will need to develop a more resonant emotional line of argument which can bring to life the real human cost – our children are being killed and injured unnecessarily. A similar program in the Netherlands focused on child safety, which acted as a big driver of community support for the 30km/h speed limit in Holland. This was framed, inter alia, as the 'Stop De KinderMoord' action group (Stop Child Murder).

Regardless of how the program is represented to the public, the move to the 30km/h limit is beginning to gather impetus in councils and transport authorities. Several WA Councils are interested in the 30km/h debate. MRWA and WA DoT are already introducing 30km/h sections as part of their Safe Active Streets program, which the new Minister Introduced on the first day of her appointment at the National Workshop on Safe Active Streets. Yarra City council in Melbourne has adopted the 30km/h recently by unanimous vote. Within this context there is hope that the movement can drive real change and make local streets a safer place for all.

