

Hobart City Council's proposal for a blanket 50km/h speed limit reduction

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This paper was prepared in response to some questions from a University of Tasmania student who was looking at the Hobart City Council's proposal in the context of a "controversial media topic".

For background: *The Australian Automobile Association* (AAA) and its constituent Clubs (of which the RACT is one) collectively represent, through public advocacy, the interests of over six million members across Australia. The AAA manages and supports a number of national and international programs and initiatives aimed at promoting road safety, driver safety, safer cars, environmental protection and sustainable mobility. These programs include: The Australasian New Car Assessment Program (ANCAP) <http://www.ancap.com.au> The Australian Road Assessment Program (AusRAP) <http://www.ausrap.org/ausrap> the learner driver program *keys2drive* <http://www.keys2drive.com.au> and Australia's Best Cars <http://www.australiasbestcars.com.au>

The RACT's public advocacy is on the basis of representing motorists and their interests in Tasmania. The RACT's role as an apolitical, independent voice for motorists in the public debate over road safety and transport infrastructure in Tasmania is well-recognised.

This is demonstrated through the RACT's input as a member of the Tasmanian Road Safety Council, as a Board member of the Road Safety Task Force, a member of the TCCI's Infrastructure Committee and involvement in a range of other stakeholder representative groups. More at:

www.ract.com.au/news_and_issues

- 1. What are the problems, for the RACT with the proposed speed limit reduction?**

2. Why does the RACT disagree with a blanket approach reduction of speeds across Hobart?

[We will answer these two questions together, as they are essentially the same]:

RACT believes that in general terms, the option of *improving road infrastructure* is preferred ahead of measures to reduce speed, in order to generate safety outcomes. This is especially the case when some of the road infrastructure in question is not up to standard in basic measures of road safety such as pavement quality and delineation.

The fact is that speed limit reductions are a far lower-cost measure, than improving infrastructure. A concern is that speed limit reductions – justified on the basis of generalised potential ‘crash savings’ generated from external speed limit reduction evaluations not specific to the roads in question - will become more widely used as a cost-effective measure to replace proper and adequate expenditure on the maintenance and replacement of infrastructure assets.

A recent independent professional think-tank report on Tasmania’s infrastructure puts some credence to this view, reporting deterioration in the overall infrastructure value of Tasmania’s local roads over the past five years.

The *Engineers Australia Infrastructure report card 2010 Tasmania* awarded local roads (Council responsibility) in Tasmania the second-lowest possible score of a “D” rating. This rating is explained as “poor” with “critical changes required to enable infrastructure to be fit for its current and anticipated future purposes.” Of concern is the fact this rating has dropped from the “D+” the *2005 Report Card* recorded for Tasmanian local roads five years ago.

Nearly two-thirds of Tasmania's road network is "local roads". In the opinion of Engineers Australia then, Tasmania's local roads are simply sub-standard; as a consequence they must by definition be unsafe.

As the *Infrastructure report card 2010 Tasmania* states:

"Funding for replacement or rejuvenation of assets such as road pavements needs to be adequately planned and reviewed...While infrastructure is only one aspect of road safety, *it is commonly accepted that improving road infrastructure is the most effective way of reducing the incidence and severity of road crashes* (emphasis added)." (Page 9)

The Clubs together with the AAA have previously initiated world-leading research on road safety infrastructure through the *Australian Road Assessment Program* (AusRAP) that "star rates" roads for safety based on a road's engineering features. AusRAP's objectives are:

- to reduce deaths and injuries on Australia's roads by systematically assessing risk and identifying safety shortcomings that can be addressed with practical road-improvement measures; and
 - to put **risk assessment** at the heart of strategic decisions on road improvements, crash protection and standards of road management.
- (Accessed at <http://www.ausrap.org/ausrap/aboutus.htm>)

- and the RACT supports these objectives fully.

RACT acknowledges research that shows the greatest gains in road safety will come from improved road infrastructure. Underpinning the recently-completed National Road Safety Strategy to 2010 was research that showed nearly half of Australia's targeted improvement in road trauma (336 of 700 lives per year) could be achieved by *upgrading Australia's infrastructure*. (see <http://www.ausrap.org/ausrap/howtosavelives.htm>)

The motoring Clubs have a historical record of responsible advocacy in respect to speed limits. For example: supporting appropriate use of speed cameras, advocating for reduced speed limits outside schools, use of technology in variable speed limits, etc.

In addition, motoring Clubs do not represent the “hoon” element. RACT has been an advocate of harsh penalties for excessive speeding and impoundment of motor vehicles for “hooning” offences, and the extension of these penalties to include steering-wheel clamping of other serious offences including excessive speeding.

The RACT accepts that the laws of physics dictate that lower speeds can lead to improved safety outcomes through lower severity, should a crash occur. One fundamental assumption that must hold true is that if speed limits are reduced, that drivers will in fact adhere to those newly-lowered speed limits. Compliance is everything.

To infer that the results of one set of speed limit reduction measurements - under that set of discrete circumstances - can be applied across the board to a range of other different circumstances and jurisdictions is dubious.

MUARC’s Langford and Fildes (2007) in “Road safety benefits of an across-the-board 50km/h urban speed limit” state:

Based on the underlying set of assumptions, extension of the 50km/h default urban speed limit to all undivided streets and roads with a posted limit of 60km/h would result in an overall 12% reduction in casualty crashes for those roads and streets – and a crash reduction of 6% for all urban crashes.

But they go straight on to admit that:

Any precise estimate of crash reductions arising from a change in speed limits requires careful consideration of a wide range of factors, many of which will vary from location to location. The above estimates must be regarded as general, especially as many of the underpinning assumptions have been either challenged or remain largely untested. (emphasis added)

(Accessed at <http://www.rsconference.com/pdf/RS07035.pdf?check=1>)

Imprecise estimates of “potential crash savings” based on findings in some other similar jurisdictions are simply not enough justification for blanket speed limit reductions.

RACT believes that before speed limit reductions are considered, the road authorities must provide specific evidence of that road’s higher-than-average crash history (serious and fatal). This must include data by location and cause of crash (alcohol, sub standard curves, collisions with power poles, poor delineation etc) and cover a period of at least the last 5 years, to cover statistical variation.

In addition, proper comparative data on the traffic volumes, pedestrian movements, and actual travel speeds should be collected and transparently presented, under a range of traffic conditions and times-of-day, to ascertain whether motorists *are* in fact presenting over-speed-limit risks to vulnerable road-users on the streets under consideration.

Finally, the Australian research evidence base is incomplete and not definitive or comprehensive enough in this area. Rather than relying on international studies and constantly referring to overseas cities (and their speed limits etc) to justify measures, there should be a national study of Australian data (based on the above) to provide a baseline for local comparison. A literature survey of Australian reports will demonstrate that this crucial part of the research is absent. Such a report should have links to Google Earth or similar to illustrate its findings.

A case-by-case approach to reducing speed limits is preferable. As previously stated, *risk assessment* should be at the heart of strategic decisions on road improvements, crash protection and standards of road management.

RACT considers that any changes to speed limits need to take into account a number of factors including:

- the inherent safety of individual roads, as distinct from a road hierarchy;

- traffic volume, crash history and the associated risk of casualty crashes;
- the acceptance by motorists of any reduction in speed limits (speed limit credibility);
- the self-enforcement of speed limits under different traffic and road conditions; and
- the potential to introduce, via Intelligent Transportation Systems (ITS), variable speed limits to reflect prevailing conditions (as has already been done in Tasmania at Constitution Hill).

It makes more sense to take a case-by-case approach to speed limit reductions on sections of the network, where there may be “black spots” or higher risk evaluations, rather than imposing a blanket reduction. The community expects to have, and requires a reasonable level of mobility, at an acceptable risk, and expects governments to provide both mobility and safety - not one, at the expense of the other. It is incongruous to suggest that by simply reducing speed limits to 50 km/h across the municipality, some homogeneous level of “potential crash savings” will be realised at each point of the network.

Reducing speed limits across the board on main travel routes will lead to delays, and frustration could creep in. Drivers will try their hardest to stick to new lower speed limits when a wider road environment (such as Sandy Bay Road or Augusta Road) intrinsically tells them it is still safe at a relatively-higher speed.

Motorists using one section of the network which has a lower risk assessment than other points - where, for example, there are much higher concentrations of pedestrians or riskier junctions – should not be penalised with the same lower speed limit which is not justified on safety grounds.

This sort of case-by-case methodology is enshrined in one of the most effective crash-reduction programs in the country. The Australian Government’s *Black Spot Program* has been successfully operating for more than a decade and funds projects which target those road locations where crashes are occurring.

By funding measures such as traffic signals and roundabouts at dangerous locations, the program reduces the risk of crashes. Programs of this sort are very effective, saving the

community many times the cost of the relatively minor road improvements that are implemented.” (Accessed at <http://www.nationbuildingprogram.gov.au/funding/blackspots/>)

This is not to exclude however, the options that a “local area traffic management plan” will present for the application of a wider-area single-speed limit approach, especially in lower-speed areas.

The RACT, for example, was included in recent consultations carried out by the Sullivans Cove Authority who sought changes to the speed limits in the “waterfront apron” area of Hobart’s docks. A variety of speed limits existed in the area including some areas of 20, 30, 40 and a short stretch of 50km/h. A posted 30 km/h “Area Limit” has now been signed to cover the waterfront vicinity; this was considered by the RACT’s Southern Regional Advisory committee and supported, recognising the much-higher-than-average numbers of pedestrians and other vulnerable road users in the area, the types of ingress/egress available, as well as the inconsistent nature of the limits in the same general area.

3. Why does this plan not meet with approval from the RACT, when a previous push for a lower speed limit was supported? What is the alternative?

This blanket speed reduction “plan” is not so much a plan to “improve safety across all transport modes” (Goal C4), as it is a tactic to help achieve the overall strategy goals, underpinned by the thinking that “continuing solely on our current car dependant pathway is no longer an option.” (page 4)

Goal C.4: Improve safety across all transport modes - Goal C.4.1 Reduce posted road speeds in urban areas. Hobart City Council will request DIER to implement blanket 50km/hr speed zones in all urban areas, including the few remaining arterials. Local area 40km/hr speed zones, such as exist in Battery Point for example, will be requested from DIER in other high pedestrian and cycling local areas. (page 11)

The implementation of a reduced speed limit – where the reduction really isn’t needed – would be met with hostility from some motorists. Speed limits need

to realistic, or compliance levels will fail. It is vital that the community maintains respect for appropriate enforcement (Police with speed cameras) on the roads.

We already know that low speed camera tolerances have been reduced even further. Incurring more low-level speeding infringements where unrealistic speed limits have been set will simply increase the cynicism (“revenue-raisers”) with which many road users already treat enforcement operations.

This would be a bad result overall for road safety – so unrealistic speed limits on roads which don’t need a speed limit reduction should be avoided, in spite of any claims that “automatic” crash savings will follow any and all speed limit reductions (as opposed to reduction in average real speed).

“...when a previous push for a lower speed limit was supported” (?) – I’m not sure what this is in reference to: it may refer to the consultation process around 2001-02 in which RACT participated after which the “local roads” urban default speed limit in Tasmania was reduced from 60 km/h to 50 km/h.

To clarify: YES, the RACT supported the reduction of the default urban “local streets” limit to 50 km/h *provided that* “arterial and main feeder roads were to remain signed at 60 km/h or above prior to the implementation of the new lower default.” However, this proposal suggests that a number of the arterial and feeder roads, those that had previously remained at 60 km/h after the introduction of the reduced urban default, are now to be reduced as well.

RACT accepts that there have been benefits in the pursuit of national urban default uniformity, reduced death and injury rates in some areas and increased amenity in residential streets with an urban speed limit of 50 km/h.

There are several alternatives; status quo (in terms of the speed limits), being one of them.

A more sensible alternative, from the RACT's perspective, would be to consider by a thorough analysis which streets *actually warrant* a speed limit reduction based on “black spots” or higher risk evaluations on sections of the network, rather than simply imposing a blanket reduction without considering individual risk evaluations.

The use of variable-speed-limit technological solutions is certainly an option that should be considered to address the perception that on some of the municipality's roads at least, there are many hours during a 24-hour period in which it would be safe and efficient to have a 60 km/h posted limit. Conversely, there would other times at which congestion and traffic patterns simply wouldn't allow actual travel speeds anywhere near that posted limit. A variable speed limit solution using readily available technology could address the need for more than one speed limit during any one day on some sections of the network.

We should also consider other options that target the safety, regulatory compliance and personal responsibility (let's be frank here) of the vulnerable road user groups themselves, but measures that avoid having a blanket effect on motorists.

For example rather than reducing speed limits on urban arterials, install proper barriers between moving traffic and pedestrians/cyclists, or invest ratepayers' funds in more frequent pedestrian refuges or centre hatches.

Lawful movements of pedestrians and cyclists – especially on busy CBD streets – should also be enforced to help protect those involved, and help deter other offenders. These groups should also be the focus of an education and awareness campaign about “safe movements in the city.”

The safety of roads – especially for pedestrians – can be increased through a range of simple solutions such as clearer and longer-lasting line markings, safer crossing facilities, intelligent on-road/in-road warning mechanisms, and

safer roadsides; not just through speed limit reductions. See the International Road Assessment Program (iRAP) Road Safety Toolkit:
<http://toolkit.irap.org/default.asp?page=roaduser&id=7>

Despite the Council document's ambit claim (without any further explanation or evidence) that a blanket speed limit reduction would lead to "improved safety across all transport modes" (Goal C4) – the RACT believes that the state road authority (DIER) would also more likely support a risk-assessment-based appraisal of proposed speed limit reductions.

4. How would the implementation of this plan increase safety for road users?

If these lower speed limits actually lead to lower real travel speeds in higher-risk sections of the network, then the assumption can be made that safety will be increased for vulnerable road users including pedestrians, motorcyclists and cyclists. It is these groups of vulnerable road users that the Hobart City Council's Sustainable Transport Strategy 2009-2014 is aimed at.

The level of increased safety for motor vehicle drivers or passengers – *as a direct result of a speed limit reduction* - would be less clear. The value of "safer vehicle" factors (such as ESC and airbags) and "safer driver" factors (such as a driver not fatigued, impaired or inattentive) would be far more easily measured and demonstrated than the imprecise estimate of a 'crash saving' due wholly and solely to a speed limit reduction. And what if there was a tragic loss of life or significant injuries on a previously fatality/injury-free road *after* the speed limit was reduced? How, exactly, had the speed limit reduction made that road safer?

Crash causation statistics are reliant on police reporting, which is subjective and often resulting from observational investigation. It is often unclear at a crash investigation whether a vehicle was speeding above the posted speed

limit, marginally or excessively, or whether the vehicle was speeding excessively for the conditions, ie. road conditions, weather, etc.

Again, if a vehicle on a 60km/h road crashed at a particular intersection doing 40km/h, then a blanket speed limit reduction applied to that 60 km/h road (making it 50 km/h) would have no effect whatsoever on that particular crash, which may have been due to distraction, failure to observe another vehicle, and so on.

Compliance with any new speed limit regime would be critical in order to realise any safety benefits related to actual reductions in real travel speeds. The enforcement of any new speed zones would be crucial to ensure compliance and this would govern whether or not there were any actual increases in safety for road users.

In April this year, the ABC reported on departmental figures (DIER) showing that most of the state's top 10 crash locations were not on the list of the top speed detection sites. Rather, Police appeared to be targeting relatively low speed urban roads. The Police data shows that most speeding drivers are detected in urban Hobart, particularly on the Tasman Bridge and the Brooker Highway (70km/h and 60/70/80 km/h zones respectively).

5. What is the likelihood of people using alternative transport to cars due to the decrease in the speed limit?

The RACT sees very little evidence that a speed limit reduction on some roads in the Hobart municipal area to 50 km/h would make it any more likely that people will choose to use alternative transport to cars, other than the potential for lower vehicle speeds making cyclist feel safer and therefore potentially more likely to use bicycles for transport.

As Goal C of the Hobart City Council's *Sustainable Transport Strategy 2009-2014* itself states, there are a range of demand-side issues (other

than vehicle speed limits) that impact on people using alternative transport:

Safety is a key concern that some individuals cite for not considering the use of more sustainable transport options. For walking this may include lighting and ‘feel’ of an area; for cycling this may include vehicle speed; and for public transport this may include unsociable behaviour by other users. (page 11)

In addition, there are the very real *supply-side* issues that relate to why people do not use “alternative transport to cars.” For example: that because public transport is inadequate or non-existent there is no genuine, valid alternative for a large number of individuals other than the car. From this perspective then, the private motor vehicle remains, realistically speaking, the fundamental element of community mobility in Tasmania.

Of course, personal mobility comprises not only automobile travel, but also public transport, walking, cycling. Nevertheless, cars are likely to remain a choice of many people, because in the dispersed settlements around Tasmania they are a lifeline to work, markets, education, medical care, leisure activities and provide the flexibility, convenience and independence that people need, want and increasingly expect.

It is self-evident that we need more investment in public transport in Tasmania and a recent address by public transport expert Professor Graham Currie at the Tasmanian Bus Association forum focused specifically on this. A recent press release (24 May) from new Sustainable Transport Minister The Hon Nick McKim MP speaks of how “passenger transport should be affordable, flexible and efficient” and how the Minister wants “to work with all Tasmanians to deliver a joined-up, fast and low-carbon transport network.”

The Hobart City Council *Sustainable Transport Strategy* is very dependent on an upgrading of public (bus) transport, although no cost is included. It is also dependent on the promotion of behavioural change by people to take up walking and particularly cycling, and to some extent other initiatives such as ferry services (no costs provided) and car pooling.

Whereas in Melbourne, large numbers of people rely on trams and passenger trains to regularly commute to and from work, in Tasmanian urban centres those two modes of transport don't even exist.

It is ludicrous for anyone to suggest that Tasmanians are any more a mob of greedy car exploiters, than any other community. The car has *had* to be king in Tasmania: that is the social and economic reality.

Demonising motorists and blaming them for historically chronic underinvestment in public transport, or for failures by successive State Governments to integrate land use planning and infrastructure planning, is just a weak cop-out and counter-productive in the overall debate.

The key challenge in our State, as in Australia, is to harness the enormous benefits of cars, while at the same time making significant reductions in the negative impacts caused by motoring: such as death and serious injury, and greenhouse gas emissions.

At the ATSE Alternative Transport Fuels Symposium that RACT attended in Melbourne recently, the Director of the CSIRO's Energy Transformed program, John Wright, estimated that vehicle kilometers travelled in Australia would increase from around 200 billion km to about 325 billion km by 2050.

Of this, however, he estimated that only 50 billion km would be travelled by solely internal combustion powered vehicles. According to Wright's model, by 2050 at least 125 billion km (or 40%) would be travelled by 100% electric and hybrid-electric vehicles.

Wright argued that electricity as a transport fuel "will steadily grow and in the very long term will become predominant." The huge advances in global and local electric vehicle markets in the year or so since this statement confirm its accuracy.

Wright's view is shared by everyday motorists. Increasingly, alternatively-powered vehicles are seen as a solution to our dependence on conventionally-fuelled vehicles.

In a national survey by ANOP Research Services Pty Ltd in 2007, motorists were asked about 'realistic solutions' to reduce the impact of cars on the environment. "Driving less" (12%) and "improving vehicle emissions" (13%) were favoured by some respondents, while "alternative fuels" (29%) and "improving public transport" (30%) were considered to be more important in addressing the impact.

43% of respondents nominated "developing alternative cars" as their number one realistic solution to reducing the effect of cars on the environment.

It is odd, then, that the Hobart City Council's *Sustainable Transport Strategy 2009-2014* makes no mention of this. There is a strong focus on cycling – however this is quite simply at the expense of motor vehicle mobility. The developers of the plan make no excuses for implementing a strategy which will benefit in particular cyclists at the expense of the mobility of many other people. And let's be quite clear about this – blanket speed limit reductions to 50km/h and in some places, 40 km/h, fit perfectly with this strategic direction.

It is the RACT's view that the mobility future for Tasmanians – at least in the near-term – will out of necessity feature cars at its centre. For this reason, the RACT continues to deliver strong public advocacy for more investment in Tasmanian road safety measures – and infrastructure improvements, in preference to blanket speed limit reductions.