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Mr Tom Wise
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Dear Mr Wise

Rural Road Speed Limits

This letter responds to the establishment of a Select Committee of the Tasmanian Legislative Council regarding rural road speed limits, and the invitation for written submissions from interested individuals and organisations.

Generally, decisions on speed limits should be left to the roading authority which is responsible for delivering motorists a safe road environment. But elected representatives have a critical role in policy setting, and the Legislative Council is commended for establishing a Select Committee to consider the proposed rural road limit speed reduction from 100 kmh on sealed roads, and the potential impacts/benefits on the communities.

In preparing this submission, I have briefly reviewed the Non-Urban Road Network Strategy published by the Department of Infrastructure, Energy and Resources last year, which appears a well researched and considered strategy, and drawn upon my own professional knowledge and understanding.

My name is Martin Small, and I established myself in the middle of last year as an independent road safety management consultant after 22 years in the public service of New Zealand and, most recently, South Australia where I held for some years the role of Director Road Safety and Registrar of Motor Vehicles. Almost my entire public service career was spent within the transport sector. The last 15 years I worked in the area of road safety, serving many Ministers and Governments of different political background.

Tasmania's road safety efforts first came to my attention as a result of the 2007 Kingborough Safer Speeds Demonstration project where a default limit of 90 kmh on sealed roads and 80 kmh on gravel roads was applied. For Australasia, this was groundbreaking. It combined a preparedness to take a lead in introducing safer speed limits, and a preparedness to work with communities through a change management process.

In an evaluation of the demonstration project dated January 2011, Monash University reported that "Community survey results collectively indicated that the reduced rural speed limits in Kingborough had a positive and substantial impact upon the local community. For both categories of roads, the large majority of respondents either considered the new reduced limits to be appropriate or preferred further reductions." This was a very important

project, and many people within the road safety community look again to Tasmania to take another significant step in road safety and reduce the default speed limit on sealed roads.

The change management approach adopted in Tasmania is critical. Research evidence throughout the world is now unequivocal about the impact upon human health and welfare of the rural speed limits typically applied throughout Australia. Broadly, it can be said that:

- From a purely safety perspective the biomechanical threshold beyond which the human body has little chance of escaping a crash without serious injury is considered to be 70 kmh on an undivided single carriageway road. Not every fatal and serious crash will be avoided by reducing the speed limit on sealed roads, but the inherent risk and the trauma over time will most definitely reduce.
- From an environmental perspective, the direct link between travel speed, fuel consumption, and greenhouse gas emissions means there will be strong environmental benefits from reducing speed limits below 100 kmh.
- From an economic perspective, there will be some losses associated with increased time costs, but these are likely to be best counted in seconds on a route by route basis. As well, there is an economic loss that will be avoided as the safety of employees travelling on these roads will be enhanced. SafeWork Australia reported last year that half of the 367 work related fatalities in Australia in the year to June 2012 occurred on the road. Vehicle operating costs are likely to reduce.

Unfortunately, there is little understanding within the community about the relative benefits of reductions in speed limits. Generations of drivers have survived driving at extremely high speeds because while the collective cost on society as a whole is very high, the individual chances of being involved in a serious crash are very low. Indeed, it is a relatively recent phenomenon that traffic engineers have come as a profession to understand the safety impact of the decisions they make on speed limits and now talk openly and routinely in public forums about the benefits of introducing lower speed limits. The community as a whole need to be provided with opportunities to understand and discuss the impact that travel speeds have on their lives, and to be introduced to important safety initiatives in a manner that builds support for further safety improvements in the future.

You will presumably receive advice and support in your Committee's deliberations from the Department of Infrastructure, Energy and Resources. As South Australia's key advisor in developing a new road safety strategy¹ which was launched in October 2011, I can say that it was important that a credible new approach to managing speed limits was put forward and implemented. Part of this included a reduction in speed limits on 723 km of rural roads.² The change problem in South Australia is that while our default speed limit on rural roads in law is 100 kmh, the default speed limit in practice is 110 kmh.

This measure received considerable attention when it was announced, but following the approach demonstrated in Tasmania careful thought had been given to how the measure would be introduced, and how it would be communicated and supported. It is too soon to say what the results have been, but it is highly likely that drivers on those roads are taking notice of the speed limit that is posted on the signs and are moderating their driving speeds as a result. Undoubtedly the risk of serious crashes on those roads has been lowered, and I have not seen a total economic analysis that indicates anything other than that the safety

¹ see www.towardszerotogether.com.au

² see http://www.dpti.sa.gov.au/roadsafety/safer_speeds/speed_limits_and_penalties/nw_100

benefits of a measure such as this outweighs any costs. This was one measure of many that has seen South Australia's road toll fall in successive years from 118 in 2010, to 103 in 2011 and 94 in 2012.

The Select Committee will also presumably receive input about expenditure on rural roads as an alternative to reducing speed limits. The safety of motorists on roads with speed limits of 100 kmh or higher are heavily compromised unless the road is of freeway standard, fully protected on the roadside and the median with barriers, and grade separated junctions. The highest priority for the large expenditures required to retrofit rural roads to these speed limits is therefore likely to be the highest order of roads with the highest traffic volumes such as the Midland Highway and the Bass Highway.

This is similar to the situation in South Australia, where rural road investment needs to concentrate on those roads with the highest volumes such as the Dukes and Sturt Highways to Victoria and New South Wales and the Augusta Highway north of Adelaide. The sustained insurance-based investment in road safety infrastructure in Victoria demonstrates the ongoing value of safety retrofits with safety barriers etc off these major routes, but economically they can be difficult to justify and short length retrofits on particularly hazardous sections cannot compensate for speed limits originally set for a road in an era when we simply did not understand their effect on safety across the community.

There are of course many things that contribute to significant improvements in road safety, including the system of laws and their enforcement, the design and management of the roads, and the safety of the vehicle fleet, and action is required in all areas. Speed management is the factor that connects all these together, and the safety of a community on the road is inextricably tied to the limits a community places on how fast motor vehicles may travel on the road.

As the House of Review, the Legislative Council is ideally placed to understand the impact that road trauma has on rural communities, to consider the legacy of trauma associated with current speed limits, and to review how change may best be implemented in Tasmania. Recent research from the University of Adelaide highlighted that only a very small minority of the trauma on our roads is associated with extreme risk taking behaviours. Almost all non-fatal injuries and over half of all fatalities on the road are caused by ordinary people making simple errors. I note that Monash University modeling projects 126 fewer serious casualties over six years from reducing the speed limit on sealed rural roads from 100 kmh to 90 kmh. In South Australia rural people make up approximately three quarters of serious casualties on rural roads, and it is people living in rural Tasmania who are most likely to benefit from a measure such as this.

The single most important piece of information the roading authority can provide the driver at any time is the maximum speed at which it is safe and reasonable to travel, and the direction published by the Department of Infrastructure, Energy and Resources is clear. The bigger issue is perhaps how this change should be implemented.

A clear statement of purpose and direction is important in resetting driver expectations about what is a safe and reasonable speed to drive on rural networks. But there are many options in implementing this change. In South Australia, we focused on speed limits in the area of the state where the trauma was highest. Other options would have been to focus on the highest risk roads throughout the state, or to introduce change over a longer time period. In any scenario, it is important to be able to explain how the available safety funds

will be allocated to improve the safety quality of the road infrastructure. The implementation section of the strategy document published in Tasmania presents a good high-level outline of how this process can be managed, and it may be that this Select Committee of the Legislative Council can make a telling contribution in this area.

Decisions in the past have left us with our current burden of road trauma, and I encourage the Select Committee to consider the ongoing impact of its review. I also encourage the Select Committee to take the opportunity to both make an important contribution to the safety of motorists today, and build support for further safety improvements in the future.

I would be happy to answer any questions, and pleased to present via an electronic mechanism such as Skype if the Committee wishes to speak directly with me.

Yours sincerely

A handwritten signature in black ink that reads "Martin Small". The signature is written in a cursive, flowing style.

Martin Small
Principal
Martin Small Consulting Pty Ltd