LEGISLATIVE COUNCIL SELECT COMMITTEE INTO RURAL ROAD SPEED LIMITS

SUBMISSION BY MR P.D. LESCHEN

8 JANUARY 2013

Contact Details:

3710 Channel Highway BIRCHS BAY TAS 7162

 Tel:
 03 62675017

 Mob:
 0428 652 608

 E-mail:
 peter.leschen@bigpond.com

I would be pleased to appear in person at a hearing of the Select Committee to further discuss any aspect of the attached submission.

EXECUTIVE SUMMARY / KEY POINTS

The proposed reduction in rural road speed limits from 100 km/h to 90 km/h is designed to reduce the number of accidents on these roads, where 1319 serious casualty accidents have occurred in the last 10 years, of which perhaps 12 percent (about 160) were related to inappropriate speed.

Research indicates that inattention is the root cause of about 80 percent of accidents on all roads, including the single vehicle and head on accidents that make up 83 percent of serious casualty rural road accidents. Thus, about 3800 of the 4749 serious casualty accidents from 1996 to 2005 involved inattention, compared to 563 involving speed.

The danger of inattention is overwhelmingly the most important road safety message of all. The lack of emphasis on the danger of inattention in our driver education programs, where it ranks far behind speed, alcohol and fatigue, is an omission bordering on negligence.

If driver education and other measures reduced the incidence of inattention by even one third, that could be expected to reduce serious casualties over the next ten years by more than 1200, more than twice the total number attributed to speed over the ten years from 1996 to 2005. A proper focus on inattention offers the opportunity to prevent vastly more fatalities and serious casualties than the current focus on speed.

In contrast, the focus on speed is past the point of diminishing returns:

- While lower speed reduces the consequences of accidents, it does almost nothing to address their causes.
- Only 12 percent of accidents are related to speed.
- The danger of low level speeding (5-10 km/h) is greatly overestimated. One or two seconds of inattention always has a vastly greater impact on stopping distances, and is all it takes to run off the road in a single vehicle accident.
- Many speed limits are already artificially low, even on excellent new roads; it makes no sense to claim that low level speeding is dangerous in such circumstances.
- Safer speed demonstrations have provided no convincing evidence that the proposed speed limit reduction will actually reduce casualties.
- Speed limits can never replace driver responsibility to travel at a safe speed for the conditions.

The proposed rural speed limit reduction will be ineffective and should not proceed.

Government should run a vigorous driver education campaign about the dangers of inattention, aimed especially at learner and probationary drivers. It must also target experienced drivers who have never been given the message with sufficient emphasis. Apart from their own safety, they will be the ones who train future generations of drivers. Police and accident investigators also need to be targeted to redress the lack of emphasis over many years.

The campaign must emphasise that driving remains one of the most potentially dangerous things we do, and there is no excuse for failing to give it our complete, undivided attention.

INTRODUCTION

The Legislative Council Select Committee is meeting to consider the proposed rural road speed limit reduction from 100 km/h to 90 km/h on sealed roads, the potential impacts and benefits on communities and any other matters incidental theretoⁱ.

The DIER Non-Urban Road Network Strategyⁱⁱ identifies a road safety problem with Tasmania's rural roads, where 1319 serious casualty accidents have occurred in 100 km/h speed zones in the last 10 years. Among other initiatives, the strategy seeks to address this road safety problem by reducing the speed limit on these roads to 90 wherever they do not meet very demanding DIER criteria for a 100 zone. The map showing roads with the highest crash risk indicates that most of our rural roads away from the main arteries between Hobart, Launceston and Devonport will be affected. Similarly, many urban and semi-urban areas are having lower speed limit zones extended.

While the strategy identifies a correlation between rural 100 km/h zones and high accident risk on these roads, it provides no evidence that the major cause of these accidents was either breaking the speed limit or travelling too fast for the conditions. It states that 65 percent of the crashes involved single vehicles that ran off the road and 18 percent involved head on collisions, totalling 83 percent of these accidents. This raises the question why there are so many single vehicle accidents, and suggests that any road safety strategy that does not address the principal cause of all these single vehicle accidents will fail.

This submission looks at the relationships between inattention, speed and speed limits. It argues that, in by far the majority of rural (and other) road accidents, inattention rather than speed is the root cause. The proposed speed limit reduction does not address this issue so will be ineffective, while turning safe and responsible driving (at 100 km/h) on many sections of our rural roads into an offence. It should not proceed.

In contrast, a proper focus on inattention offers the opportunity to prevent vastly more fatalities and serious casualties than the current focus on speed. The lack of emphasis on the danger of inattention in our driver education programs, where it ranks far behind speed, alcohol and fatigue, is a serious omission that should be rectified urgently.

INATTENTION

The role of inattention

In 2005, a naturalistic driving study was conducted in Virginiaⁱⁱⁱ. It involved 100 instrumented cars with 241 drivers going about their daily business over 12-13 months and 2 million road miles. It recorded 15 police-reported and 67 non-police-reported crashes, 761 near-crashes, 8295 incidents, and many examples of poor road safety behaviour. The study is important because it covers a wide cross-section of drivers in many driving situations, recording actual, in-car driver behaviour at the time of each incident.

In contrast, no amount of post-accident investigation can do this; nor can it address the many accidents and near misses where police are not called.

The most important finding of the study was that nearly 80 percent of all crashes (93 percent for rear-end crashes) and 65 percent of all near-crashes involved driver inattention within 3 seconds of the incident. Prior estimates have suggested inattention was a factor in 25 - 30 percent of crashes^{iv}, but this was based on statistics from crashes attended by police, so does not include near misses or unreported accidents, nor cases where drivers did not admit inattention. The DIER Strategy suggests that inattention was a factor in just 13 percent of serious casualty accidents; this would appear to be a serious underestimate.

The danger of inattention and the Virginia study findings make good sense in the light of my personal experience over 38 years of driving. In all that time, the rare occasions I have come close to an accident through my own fault have always been when I have been distracted for some reason or other and have had to take evasive action, thankfully always successfully. On the one occasion when another driver side-swiped me at low speed it was because he changed lanes without looking properly and I had nowhere to go – in other words he was not paying proper attention. I would be very surprised if Committee Members would not recognise a very similar pattern in their own driving experience.

Likewise, almost any selection of newspaper reports of specific road accidents will contain an overwhelming majority of stories about single vehicle or head on accidents with no obvious cause. With the exception of the occasional 'young male in Nissan GTR doing 200 km/h' type of story, speed is almost never the issue. I suggest inattention is almost invariably the missing cause of road accidents, whether on city, highway or country roads.

The pervasiveness of inattention is a crucial finding. It helps explain why fatigue and at least some aspects of alcohol and drug abuse are so dangerous, as well as mobile phone use, children fighting in the back and a host of other factors; they all make inattention much more likely.

The impact of inattention

A driver who is not paying proper attention will be slow to perceive a developing emergency and therefore slow to react. To quantify the scale of the problem, in one second a car travels 17 metres at 60, 22 metres at 80 and 28 metres at 100 km/h. To use the Virginia study finding about inattention within three seconds of so many incidents, in three seconds a car travels 50 metres at 60, 67 metres at 80 and 83 metres at 100 km/h. These are clearly large distances. At normal road speeds on country roads, the 50 - 83 metre distance covered during three seconds of inattention is more than enough to cross the centre line or drop a wheel off the road; if the driver's subsequent, startled reaction is incorrect a crash is very likely. Just as the Virginia study found that the vast majority of accidents and near misses involved inattention, I suggest it is the crucial factor in most of those single vehicle and head on crashes on our country roads. Any initiative to reduce the road toll on our roads needs to address this issue, yet it is underemphasised. In the section on behaviours contributing to serious road casualties, the DIER Strategy places speed first and inattention last, despite the fact that it states that inattention caused 60 more serious casualties than speed (623 v 563) in the period 1996 to 2005. It is the same story in the Tasmanian Road Rules booklet^v and Government publications and websites around the country^{vi}. That said, 623 casualties is still only 13 percent of the total of 4749 serious casualties in the period. Yet, on the basis of the Virginia study, it is not unreasonable to assume that as many as 80 percent of these accidents involved inattention, in which case it contributed to about 3800 of the 4749 serious casualties.

If that figure is even close to correct, it suggests that the danger of inattention is overwhelmingly the most important road safety message of all. If driver education and other measures reduced the incidence of inattention by even one third, that could be expected to <u>reduce</u> serious casualties over the next ten years by more than 1200, more than twice the <u>total</u> number attributed to speed over the ten years from 1996 to 2005.

Yet inattention ranks far behind speed, alcohol and fatigue in government advertising and road safety literature. The lack of emphasis on the danger of inattention in our driver education programs, especially for learner and probationary drivers, is an omission bordering on negligence. It needs to be rectified urgently.

THE ROLE OF SPEED

Across Australia, Governments focus heavily on speed and speed enforcement. The DIER Strategy states that, on Tasmanian roads during the period 1996 to 2005, 563 serious casualties involved excessive speed (either exceeding the speed limit or excessive speed for the conditions), representing 12% of the total number of serious casualties. This certainly indicates that inappropriate speed is a problem, but it also suggests that it is not as big a problem as it is made out to be.

The DIER strategy states that 'speeds just 5 km/h above the speed limit in urban areas and 10 km/h in rural areas are sufficient to double the risk of a casualty crash occurring. This is roughly equivalent to the risk associated with driving with a blood alcohol concentration of 0.05'. This is quoted from the National Road Safety Action Plan 2007-2008, but I believe the underlying research comes from the University of Adelaide in 1997^{vii}. Their headline finding was that 'in a 60 km/h speed limit area, the risk of involvement in a casualty crash doubles with each 5 km/h increase in travelling speed above 60 km/h'.

This finding is not disputed, but the wording is crucial. It does not say that the risk of a crash doubles with each 5 km/h above the speed limit, but that, in the event of a crash, the risk of there being a serious casualty doubles. This makes sense for two reasons. First, excluding pedestrian accidents, a crash at 60 km/h or less is likely to be survivable with only minor injuries; above that speed the risk of serious injury certainly increases rapidly. Second, and in partial explanation of the first point, the energy to be dissipated in an accident increases by the square of the speed increase. So whereas going from 60 to 65 km/h is an 8 percent

increase in speed, it results in a 17 percent increase in energy. If you double the speed, you quadruple the energy involved. It is obvious and incontestable that the consequences of an accident will be much worse at higher speeds than at lower speeds.

It does not follow that the probability of having an accident increases in the same way with speed. An Australian review (Fildes and Lee 1993) found that 'The relationship between travel speed and injury severity is considerably more convincing than for crash involvement'. An American review (Transportation Research Board 1998) found that 'Speed is also linked to the probability of being in a crash, although the evidence is not as compelling because crashes are complex events that seldom can be attributed to a single factor'.^{viii} To some extent increased speed, especially in relation to the speed of surrounding traffic, will increase the risk of having an accident, but it is most unlikely that the risk increases at anything like the rate for the probability of serious casualties when an accident does occur.

The Power Model

Governments use the Power Model^{ix} to estimate the safety benefits likely to result from a reduction in average travel speeds. The model provides a mathematical correlation between increased or reduced speeds and the probable severity of an accident, with fatalities being represented by the fourth power and serious casualties being represented by the third power. The correlation occurs because, as described above, reducing speed by a factor reduces kinetic energy by the square of that factor, and thus reduces the consequences of an accident significantly. Using this model:

- Serious casualty accidents are represented by the third power, so a reduction from 100 to 90 should reduce casualties by $1-(0.9)^3 = 27$ percent.
- Likewise, a reduction from 100 to 60 should reduce casualties by accidents by $1-(0.6)^3 = 78$ percent.

By this logic, therefore, the proposal currently under consideration should be to reduce rural road speed limits to 60 rather than 90 km/h, as this should result in a reduction in serious casualties nearly three times greater than the reduction to 90. I imagine that almost everyone would agree this was a ridiculous proposition, so the question becomes 'what is a reasonable speed limit that balances efficient and enjoyable travel speeds against the risk of accidents and other safety concerns?'

The Power Model and statistical analysis of the relationship between speed and serious casualties are certainly useful, but have little to say about the causes of accidents and nothing about what the speed limit should be. These models will always tell you that the speed limit should be lower, at least until you get down to about 60 km/h, that being the point when almost any accident not involving pedestrians is survivable. Thus, the same argument being used to support the reduction from 100 to 90 km/h on our rural roads will work just as well to argue for subsequent reductions from 90 to 80, or 70, or 60 km/h speed limits, which surely negates its value in determining what the speed limit should be.

Decisions about speed limits, therefore, are decisions about acceptable levels of risk. As the Adelaide research states, 'the risk of being involved in a casualty crash is (already) very low. In South Australia in 1994, there were 556 casualties per 100,000 population, and 88 casualties per 10,000 vehicles during that year (Office of Road Safety, 1996). In Tasmania, around 160 of 1319 serious casualties on our rural roads over the last ten years were attributed to speed. Many of the 160 will have involved inappropriate speed rather than exceeding the speed limit. While every single road casualty is a serious matter, the proposed speed limit reduction is focussed on a tiny part of the overall road safety problem.

Speed limit reductions are already past the point of diminishing road safety returns. There are much more important initiatives to be pursued to promote improved driver behaviour and safety.

SPEED V INATTENTION

Notwithstanding the above arguments, the Power Model and research from the Adelaide and Monash Universities Road Accident Investigation Units are used to argue for and justify speed limit reductions, not just on rural roads but around the state. This section looks at the impact of differences in speed against the impact of inattention.

Our governments argue the case that a 5 km/h difference in speed makes a major difference to the risk of accidents. The Victorian TAC road safety advertisements^x with one car doing 60 km/h and the other doing 65 km/h are probably best known examples of this line of argument. Both drivers react and brake at the same time, and both fail to avoid the truck (or pedestrian) about 45 metres in front of them. However, the car doing 60 km/h only hits at 5 km/h whereas the car doing 65 km/h hits at 32 km/h. This is because from 60 km/h you shed half your speed in the last 5 metres of braking. This advertisement and others like it are used to convince us of the dangers of even minor infractions of the speed limit and they are accurate, so far as they go.

Using Tasmanian and Federal Government assumptions a driver's average reaction time is 1.5 seconds. In this time, a driver will travel 25 metres at 60 km/h and 27 metres at 65 km/h, with subsequent braking distances of 20 metres and 24 metres and total stopping distances of 45 metres and 51 metres respectively. This gives us the 6 metre difference in stopping distance and the 27 km/h difference in speed of impact shown in the advertisement. The TAC 'Wipe off 5' campaign specifically states 'it follows that a driver travelling at 60 km/h will be involved in fewer crashes by avoiding those in the zone from 45 to 51 metres'.^{xi}

Now consider the impact of inattention. Leaving everything else unchanged, let us say the driver doing a legal 60 is distracted for an additional 1.5 seconds by a mobile phone ringing. This driver will now take 3 seconds before starting to brake, in which time the car will cover 50 metres, finally stopping 70 metres down the road. This driver will not even have started to brake when hitting the hazard at 45 metres, so impact speed will be 60 km/h.

The difference in stopping distances between 65 and 60 km/h is 6 metres, but 1.5 seconds inattention in a car doing 60 km/h increases the stopping distance by 25 metres, more than

four times as much. The alert driver doing an illegal 65 km/h will stop 19 metres short of the distracted driver doing a legal 60 km/h. That extra 1.5 seconds of inattention is vastly more important to the probability of having an accident than the initial 5 km/h difference in speed.

If we change reaction time to one second (quite realistic for a properly alert driver), and now do a comparison with an inattentive driver who is distracted for 2 seconds, the alert driver will stop from 65 in less distance (about 40 metres) than the distracted driver can stop from 40, or from 100 in the same distance (about 75 metres) as the distracted driver can stop from 65^{xii} . At any speed, the impact of even momentary inattention is much greater than the difference in stopping distance caused by a 5 - 10 km/h difference in speed.

In almost all circumstances on our roads, visibility is measured in hundreds of metres, so it is highly unlikely that an alert driver could be surprised by the sudden appearance of a truck or other hazard just 40 or 50 metres in front of them. For the driver who is not paying attention, however, all bets are off. This probably explains why the Virginia study found that the role of inattention rose to 93 percent for rear end collisions. While hazards don't usually suddenly appear 50 metres in front of you, there will frequently be fellow road users ahead, often much closer than that; in that situation, even brief inattention combined with sudden braking by the car ahead makes a rear end collision highly likely.

There is no question that inattention combined with excessive or inappropriate speed is a lethal combination. Provided a driver is alert, however, I suggest that increased risk of accident associated with an additional 5 km/h is greatly exaggerated in most circumstances. Inattention is much more dangerous, and should be at the centre of our road safety campaigns.

SPEED LIMITS AND ENFORCEMENT

To this point, this submission has said little about speed limits, beyond the observation that that research into the consequences of speed in an accident tells us little about the causes of accidents or at what speed the limit should be set. Yet the assumption that the speed limit has been sensibly set underlies all the discussion of the dangers of speeding. It is illogical to argue that exceeding the speed limit by 5 km/h is dangerous if the speed limit is 10 or 20 km/h slower than is reasonable.

Many speed limits in Tasmania (and across Australia) are quite ad hoc and inconsistent. Here are just a few examples:

• The new Brighton Bypass is probably the best and safest road in the state, built to freeway standards. Yet the speed limit is 100 km/h, whereas most of the Midland highway, of far lower standard, has a 110 km/h limit. I recall reading that the Minister has said there is no intention to reduce the limit on the Midland Highway, despite research from MUARC showing that it would be justified to do so^{xiii}. This simply reemphasises the earlier point that setting speed limits requires judgments about acceptable levels of risk. The bypass should have a 110 km/h limit, as it is certainly safe to drive at that speed.

- The new Kingston Bypass, an excellent road flowing into the Southern Outlet, with freeway style on and off ramps, has a speed limit of 80 km/h, less than most of the Channel Highway which has a 90 km/h limit under the Kingborough Safer Speeds Demonstration. There is no apparent reason why the bypass limit should not be 100 km/h.
- South of Margate, the Channel Highway speed limit has been reduced from 80 to 60 km/h following a fatal accident outside Meredith's a few years ago. My understanding is that the reduction was imposed despite the accident in question being unrelated to speed and DIER advice that 80 was the appropriate limit in this location. This limit is regularly and tightly policed so people are now being stopped and presumably being issued infringements for doing 65-70 km/h down a hill where until recently 80 km/h was considered both safe and legal. I suggest it is still safe.
- In Hobart, Kingston, Margate and Woodbridge (my local area) a number of 50 and 60 km/h zones have been extended on wide roads with good visibility and good separation from pedestrians. The bottom of the Southern Outlet leading into the top end of Macquarie Street and Summerleas Road in Kingston are just two examples. With the exception of the extended 60 km/h zone immediately north of Margate, these reductions are unnecessary.

With the exception of the Channel Highway, these roads would not be affected by the proposed rural speed limit reductions. However, they are relevant because they establish a pattern of ongoing reductions and new, low limits, almost all of which are below speeds that a reasonable, competent driver would consider safe. I do not know of any instance where a speed limit has actually been increased.

The arguments provided to justify these reductions are the same arguments that I have discussed earlier. I suggest that in cases like these, the apparent problem of speeding (meaning breaking the speed limit rather than inappropriate speed in this instance) is created by the imposition of inappropriate speed limits. Despite regular claims to the contrary, exceeding the limit by 5 km/h when the limit should be significantly higher is not unsafe, even if it is illegal.

Enforcement Policy

Based on Victorian figures, about 80 percent of infringements are for less than 10 km/h over the limit while only one percent are for more than 25 km/h over the limit^{xiv}. Tasmanian figures do not seem to be published in the same way, but I expect that they are comparable. If so, and extrapolating very roughly, this suggests that the Tasmanian Government collects about \$30m a year from drivers fined for doing less than 10 km/h over the speed limit. Across Australia the figure is probably well over one billion dollars.

Now, if all those drivers are genuinely driving dangerously, fair enough. For all the reasons I have discussed, however, I suggest that many of them would have been driving quite safely

and responsibly. The limitations of speed enforcement equipment mean that most infringements will be not issued in congested areas with lots of pedestrians – areas where a 5 – 10 km/h difference in speed really would have a safety impact. Rather, most infringements are likely to be issued in areas where a little extra speed has minimal impact. For example, I understand the Tasman Bridge speed cameras are the most active in the state; they are situated on the downhill side of the bridge in both directions and you need to brake if you are not to exceed the 70 km/h limit. If I remember correctly, some years ago the bridge speed limit was 80 km/h.

For drivers fined in such situations, it is quite reasonable, even inevitable, that they would think that this kind of speed enforcement has more to do with revenue raising than road safety. Doubtless the revenue is a key part of State budgets and would be difficult to replace, but this does not justify fining people who are behaving safely and responsibly.

In some cases such limits and lack of flexibility in enforcement actually encourage unsafe driving, preventing expeditious overtaking and causing cars to bunch up just under the speed limit, rather than using a little extra speed to gain a safe air gap between cars.

None of this is an argument against the need for sensible speed limits or enforcement. It is an argument that speed limits that are set too low, especially when combined with rigorous enforcement of even very small infringements, frustrate and penalise the vast majority of safe and responsible drivers, discourage proper levels of driver responsibility and alertness, and lead to disrespect for the law and law enforcement.

Safe and responsible driving should not be made an offence through the imposition of speed limits that are lower than necessary. Enforcement policy should be flexible enough to give police discretion to penalise genuinely unsafe driving but, where appropriate, simply issue a warning for minor violations that have no safety impact.

Rural Speed Limit Reductions

All of the above applies, directly or indirectly, to consideration of the specific proposal to reduce rural speed limits from 100 to 90 km/h.

In addition to the arguments that apply on all our roads, the DIER strategy suggests that many rural roads are not capable of supporting a 100 km/h limit. This is certainly true on many sections of these roads. Yet, with the exception of freeway style roads, any country road or highway, whether it meets DIER criteria or not, will have twisty or otherwise hazardous sections that will not support 100 and straights and other sections where 100 is quite safe in the right conditions. No speed limit can replace the requirement for drivers to judge when they need to slow down for a particular section of road. Advisory speed and other hazard signs are placed precisely in order to assist drivers in making these judgments.

A blanket reduction from 100 to 90 km/h will further undermine the role of driver judgment and responsibility on those sections of our roads where 100 km/h remains safe, even if the road doesn't meet the very tough DIER criteria for a 100 km/h limit. For example, it seems destined to affect large sections of the Lake, Lyell, Tasman, and Bass Highways as well as the Esk, Poatina and many similar roads. Many sections of these roads will not meet DIER 100 km/h limit criteria, even where they have excellent visibility, long straights and minimal traffic. I would strongly argue that 100 km/h on those roads in good conditions is much safer than even 100 km/h on those 110 km/h limited sections of the Midland Highway when traffic is heavy or conditions are bad. At the least, it is inconsistent to impose blanket speed limit reductions on such sections of our rural roads. More importantly, it is quite unnecessary.

The Kingborough and Tasman Peninsular Safer Speed Demonstrations could have provided empirical evidence to support to likely impact of the proposed speed limit reductions, yet reports of the results^{xv} show they have provided no convincing evidence of casualty reductions. This should be enough in itself to raise questions about the need for and wisdom of speed limit reductions on rural roads across the state.

The proposed rural speed limit reduction from 100 to 90 km/h is an unnecessary imposition based on questionable premises and arguments. Even if its theoretical benefits appear attractive on some grounds, its practical impact will be to turn safe and responsible driving behaviour into an offence. Moreover, in remote areas with very low traffic flow it is likely to be virtually unenforceable and widely disregarded. It should not proceed.

CONCLUSIONS

Reducing vehicle speed will almost always result in a reduction in the severity of those accidents that do occur and, to a much lesser extent, may also reduce the probability of an accident occurring. This fact, however, tells us very little about the causes of accidents. Nor does it provide any guidance as to what the speed limit should be. By this argument, if a reduction from 100 to 90 km/h is good, a reduction from 100 to 60 km/h will be much better, reducing serious casualties by a factor of almost three.

Nevertheless, in theory the proposed reduction to 90 km/h should reduce the consequences of accidents, and thus may reduce the number of serious casualties and fatalities that occur to a small extent. However the results of the Kingborough and Tasman Peninsular Safer Speed Demonstrations suggest that even this is unlikely.

In practice, the focus on lower speed limits and tighter enforcement is past the point of diminishing returns, and the proposal to reduce rural speed limits from 100 to 90 km/h should be seen in this light. It fails to target the crucial cause, inattention, of so many of the single vehicle and head collision accidents on these rural roads.

Inattention is probably the root cause of around 80 percent of all road accidents, in which case it contributed to about 3800 of the 4749 serious casualties that occurred on Tasmanian roads between 1996 and 2005. If driver education and other measures reduced the incidence of inattention by one third, that could be expected to <u>reduce</u> serious casualties over the next ten years by more than 1200, more than twice the <u>total</u> number attributed to speed over the ten years from 1996 to 2005.

Yet inattention ranks far behind speed, alcohol and fatigue in government advertising and road safety literature. The lack of emphasis on the danger of inattention in our driver education programs, especially for learner and probationary drivers, is an omission bordering on negligence. It needs to be rectified urgently.

All drivers are responsible to drive their vehicles safely at speeds appropriate for the conditions at the time. Speed limits are necessary, but limits that are set too low frustrate and penalise the vast majority of safe and responsible drivers, discourage proper levels of driver responsibility and alertness, and lead to disrespect for the law and law enforcement.

This submission is not intended to undermine the many sensible initiatives in the DIER Non-Urban Road Network Strategy. From the Government's perspective, however, I believe there has to be a better way of bringing together sensible policies to make roads safer and reduce the consequences of accidents, while also working to reduce the causes and thus frequency of accidents. Blanket speed limit restrictions and draconian enforcement policies that put sensible and safe driving outside the law regardless of specific road conditions are a poor and ineffective answer. We should not regulate in a way that makes any safe and reasonable behaviour an offence.

RECOMMENDATIONS

If there is to be a particular focus on speed limits, it should be on rationalising existing limits and removing inconsistency and complexity. The current default answer is that a lower limit is always better; in many cases, this makes no sense. Speed limits should not be any lower than absolutely necessary, especially beyond the confines of urban areas.

Policy and driver education should focus on the danger of inattention when driving on any road in any conditions. What is needed is a vigorous driver education campaign about the dangers of inattention, aimed especially at learner and probationary drivers. It must also target experienced drivers who have never been given the message with sufficient emphasis. Apart from their own safety, they will be the ones who train future generations of drivers. Finally, it should target police and accident investigators to ensure that they are looking for evidence of inattention in addition to the other factors currently emphasised in Government road safety information.

This submission contains many of the relevant ideas that need to be spread, discussed and understood. Experts can work out the best way to do this through government information literature and advertising. Some existing TAC advertisements already cover the issue well, but the 'inattention' message is almost always swamped by the 'speed' message.

Speed limits on our rural roads should not be reduced. Instead, we should be emphasising that driving remains one of the most potentially dangerous things we do, and there is no excuse for failing to give it our complete, undivided attention.

Biographical Details

Peter Leschen retired from the RAN in 2010 after a 38 year career in the Permanent Naval Forces, and is now a Commodore in the Naval Reserve and a consultant to Defence Industry. He is a motoring enthusiast who has done a significant amount of both theoretical and practical advanced driver training, and has a keen interest in road safety. Among other things, he has recently taught his two daughters to drive, and is passionately concerned that they remain safe on our roads.

References and Footnotes

^{xi} 'Wipe off 5 – a case study', TAC 2002, accessed at

http://www.tacsafety.com.au/data/assets/pdf_file/0018/5904/TAC-Wipe-Off-5-Campaign.pdf ^{xii} National Motorists Association – reaction time and braking performance calculator,

http://www.aussiemotorists.com/braking/index.htm

http://www.camerassavelives.vic.gov.au/home/statistics/fines+by+category/speeding+categories/

ⁱ Rural Road Speed Limits, Terms of Reference, Legislative Council Tasmania

ⁱⁱ Non-Urban Road Network Strategy, September 2012, DIER, Tasmanian Government

^{III} 100-Car Naturalistic Driving Study, Virginia Tech Transportation Institute (VTTI), 10 June 2005

http://www.vtnews.vt.edu/articles/2005/06/2005-834.html

^{iv} Wang, Knipling, and Goodman, 1996

^v Tasmanian Road Rules, 8 Apr 11, on the DIER website, which has one paragraph on inattention after all the other safety information

^{vi} For example, see National Road Safety Strategy 2011-2020, Australian Transport Council, 20 May 2011

vii Travelling Speed and the Risk of Crash Involvement, Kloeden CN, McLean AJ, Moore VM, Ponte G, NHMRC Road Accident Research Unit, The University of Adelaide, November 1997

viii Both reviews quoted from 'Speed and road accidents, An evaluation of the Power Model', by Rune Elvik,

Peter Christensen, Astrid Amundsen, TOI Report 740/2004, Oslo, December 2004

^{ix} Nilsson, G. (2004A). Traffic safety dimensions and the Power Model to describe

the effect of speed on safety. Bulletin 221. Lund Institute of Technology,

Department of Technology and Society, Traffic Enginering, Lund

^x See "Slo-Mo" TAC Anti Speed TV Ad with Professor Ian Johnston of MUARC on Youtube

xiii MUARC, Economic Evaluation of the Introduction of Lower Rural Default and National Highway Speed Limits in Tasmania, Max Cameron October 2009. Also advice from Jim Langford of MUARC, quoted in The Mercury, 'Call to cut speed limit', Michael Stedman, 18 Dec 2009

^{xiv} Victorian Government figures for FY2011/12 accessed on 29 Sep 12 at

^{xv} KiSS Demonstration Evaluation Report after 24 months, MUARC, March 2010.