

Due - 16<sup>th</sup> February 2018

There are several issues that I wish to bring to your attention in regard to the current and future National Road Safety Strategy that I have outlined in this submission. I have been road user for nearly 40 years, 15 years of experience as a NSW Ambulance Paramedic (including 7 years involved with education of traffic offenders in the Hunter Region) and another 15 years in education for primary care; I have some insight into the challenges and ramifications of policy and behaviour on the safety of road users.

It is apparent that the statistical metrics used to measure road deaths and injury have a direct and lasting influence on the public messages and the subsequent focus by the States and Territories. Although the goal of a reduction in road fatalities and injuries may be at the forefront of the vision of the review, the translation of this vision into practical and effective measures has not been commensurate with the funding and State initiatives seem to focus on neutrality of cost rather than maximising the outcomes.

As a resident and motorist in NSW I can speak of this State, but also a more consistent approach to road safety nationally.

1. The first issue associated with NSW and national plans is the issue of “speed”. While this factor is listed and promoted in the top 3 factors in road fatality and injury there are several problems with the simplistic message that “speed kills”. This statement, whilst based on the laws of physics is not intrinsically correct and therefore a misdirected claim. A correct statement would be that “the inappropriate application of speed may lead to death or injury” as fatalities and injury can occur at any “speed” if that is not matched to the conditions, visibility, driver skills or other factors. Racing drivers would all be dead if “appropriateness” is not included in the message. By the same logic; given that all speed kills and therefore the slower the traffic moves the less fatalities and injuries there is; then aircraft should only fly at an altitude of 50ft at this would mean there is less risk of death and injury should they crash. Both logical conclusions are obviously impractical and false but one is used as the predominant message of road safety campaigns.

The fundamental case that still remains unproven at both a National and State level is causation over a simple correlation. It is well known that in the UK when incidents were reassessed looking for causation, the actual importance of “speed” dropped considerably.

The difficulty for States is that speeding has been made a priority as if causation was proven and that it represents one of the few measures that can produce, not only cost neutrality but a positive profit for States under the guise of “safety” of the public.

Fixed and mobile speed cameras in NSW and other States and Territories have seen a boon in recent years, despite road fatality increases over the short term. Revenues are significant, whilst the evidence for overall good is simply not strong. The NSW State Government erected roadside signs to support its use of fixed speed cameras across the state. These

signs included in large letters, that “*fixed speed cameras reduce road fatalities by 50%*”. No evidence is cited for this claim (which convention would dictate in other forum), however if one goes to the website where this claim is extrapolated from we learn that the data actually indicates that “in local proximity of a fixed speed camera, road fatalities are reduced by 50%”. The two claims are quite different and one is designed to misrepresent the significance of the fixed speed camera initiative and its benefit to road users. By my reckoning, if you add up the metres of roads in Australia and then divide this by the 200m around a fixed camera (where behaviour changes) this would mean that in order for the stated benefit of fixed speed cameras to be realised there would have to be over 1.3m fixed cameras installed. It is not surprising therefore that there is some scepticism and casual disregard for these initiatives, when the motive may be disguised by a misrepresentation of the benefits. We can no longer be as simplistic as to promote the notion that “speed” is the root cause as this can prevent appropriate focus on more significant and inherent issues.

In NSW by the Government’s own data, 98% of speeding fines are issues for infringements of less than 15km/h. Given the limitation of mobile and fixed speed camera (including privately contracted agents), most of these are presumably on sections of road that are straight, with good visibility and in good weather. In fact a “fixed” camera should only be used as an interim measure in a “dangerous” location until other measures e.g. road redesign, barriers or other measures are implemented to negate the overall risk.

In the Road Safety Strategy under the heading of “*Safe Speeds*” there are 3 stated goals related to “speed” (although contextual) as a risk factor, these are:

1. *Speed limits that reflect a better balance between safety and mobility objectives.*

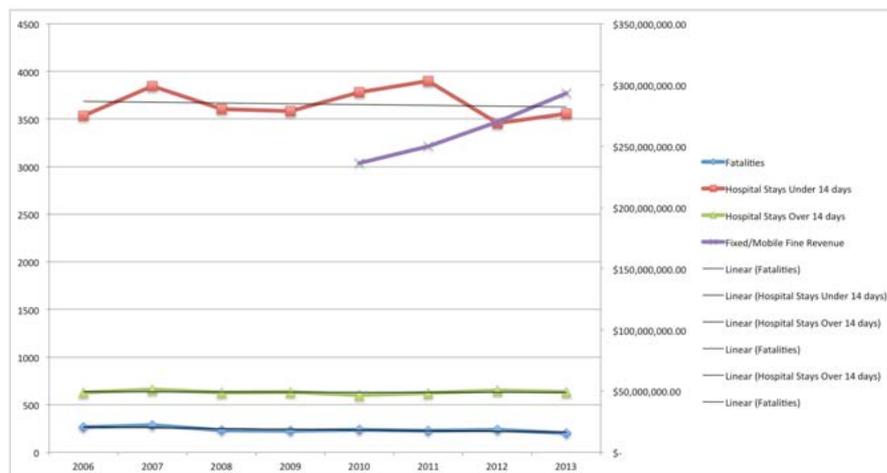
While it is unclear from this goal, which side of the equation is believed to be in deficit, it is clear that the overall interpretation by states is additional control, restriction and policing of marginal speed related “infringements” under the “association” rather than “causation” hypothesis and the belief that eventual compliance will naturally be the result of consistent, punitive measures. Statistically the 95<sup>th</sup> percentile is probably the group that warrants focus, where “causation” is more likely.

2. *A substantial improvement in overall compliance with speed limits, particularly on highly trafficked and/or higher-risk sections of the road network.*

As already argued, there is a serious credibility issue with state-based implementation of objectives such as these. If enforcement is inconsistent and/or illogical i.e. the risk is not relative to the focus; road users will continue to use their own discretion over posted limits. This objective again rests on the belief that all “speed” is the root cause of road trauma and compliance with blanket rules will result in zero trauma.

The WHO states that the average rate was 17.4 per 100,000 people. Low-income countries now have the highest annual road traffic fatality rates, at 24.1 per 100,000, while the rate in high-income countries is lowest, at 9.2 per 100,000.<sup>[2]</sup> Further, that Seventy-four percent of road traffic deaths occur in

middle-income countries, which account for only 53 percent of the world's registered vehicles. In low-income countries it is even worse. Only one percent of the world's registered cars produce 16 percent of world's road traffic deaths. So interestingly developed countries with better road infrastructure and more modern cars have lower fatality/injury rates. Although one could argue this was also a product of more well-structured compliance structures, this is likely only to be the littlest of the 3 factors with 95% of the effort expended in the hope of catching and changing the 5% who generate significant risk. Road fatalities in Australia are relatively low by world standards with (2013 data), 5.4 per 100,000 inhabitants and 7.3 per 100,000 motor vehicles. Of course the argument will be that the UK (a country seen as similar in many ways to Australia) on has 2.9 deaths per 100,000 inhabitants and 5.1 deaths per 100,000 motor vehicles, however the UK has a better motorway system, shorter journeys and a sophisticated public transport system that allows citizens to forgo car ownership all-together. They do have a similar unhealthy relationship with speed compliance to Australia.



We notice of course in Victoria (a statistic that would probably be replicated in other States and Territories), the revenue from cameras and serious injury (longer-term hospitalisation of casualties) was not commensurate. The most significant outcome therefore is revenue and the activity, rather than effective reductions in road trauma. At least in Victoria fines go into a road safety trust, whereas in other States and Territories, the revenue is put back into consolidated revenue.

3. *Network-wide alignment of speed limits with the inherent risk and function of the road and roadside environment.*

One may ask of the correlation between road safety “blitzes” and the road fatality/injury rate. When statistics go down then it is touted as a successful and worthy investment, however when there is an unexpectedly high rate (as was the case in the 2017/18 Christmas/New Year period) then the responsibility is put onto motorists, rather than failures in the efficacy of targeted campaigns. Record fines for speeding and other offences do not seem to necessarily directly correlate to decreased road deaths and injuries or even the accident rate. Perhaps the greatest factors that influence driver behaviour (and

propensity for incidents) is not those that receive the greatest emphasis, funding and publicity, otherwise cost spent would consistently have an inversely proportional relationship to deaths and injuries. Factors such as fuel pricing, weather, changing vehicle mix, societal factors, congestion, driver training and others, could play a more significant role but are harder and more costly to measure and influence than the low hanging fruit of speeding for example.

In NSW it is impossible to credibly accept that speed check have a pure safety motive when private contractors, acting for the RMS are paid to check speed on safe sections of road as a dividend to the Government with no perceivable difference in road fatality/injury rates as a result. In WA where speed camera detection units are legal, theoretical the injury, death and incident rate should be significantly worse than any other State.

4. The second issue is the notion that punitive measures will eventually change behavioural at a core level in drivers. Once again, policing the margins of offences in the hope that:
  - a. By the laws of probability an outlying behaviour will be identified and corrected. In the medical field, this rationale led to the now disproven practice of GPs believing that by measuring the blood pressure of every patient in an appointment, they would capture the rare individual with an undetected issue. Likewise no matter how large the penalty basic human psychology tells us that the individual has already assessed their behaviour and considered it safe and reasonable (under the circumstances) and a penalty is a function of an acceptable random chance rather than an indictment on their own behaviour (particularly if it is in the “marginal” category).
  - b. Individual behavioural change over time (in relation to all “offences”) will result in fundamental society-wide attitudinal change. While this notion may be true for aberrant behaviours e.g. DUI; it is not as effective as a strategy in speeding for example. Each year motor vehicles become safer, give more special feedback to the driver, handle road conditions better, are capable of greater speeds and acceleration and are more comfortable. In contrast speed limits are governed by determinations that are fundamentally unchanged (other than metrification in 1974 and the introduction of slower limited for “built-up” and school/shared zones). The 35 mph urban limit for instance was introduced last in NSW in May of 1964, when road, vehicle quality, road congestion and driver training were much different. This does not necessarily mean the limits are “wrong”, but that they are seen as generally irrelevant in the modern age as blanket rules rather than reflecting the actual risk.

An iconic example of a failure to reflect the risk profile is corner speed advisories. Other than metrification, these suggested safe “limits” have remained (and still remain unchanged), regardless of road surface changes and vehicle capabilities since they were first erected. By way of contrast, the modern motor vehicle with superior suspension, traction control, tyre design and grip can easily navigate these at the posted speed in mph i.e. a 40km/h advisory can be safely taken an 40 mph i.e. 65km/h by any reasonably modern vehicle, without risk. This disconnect between historical risk and current risk is seen as a further reason to treat speed settings as conservative historical suggestions (perhaps for the poorest of drivers) rather than

the modern motorist and a further reason why societal behavioural change in adults is ineffectual with the current strategies and reflective of a missing mutual respect for drivers as adults.

5. The third issue is value. Motorists pay an endless series of tolls, taxes, fees, levies and fines for the privilege of having autonomy of transport. This fosters two strong underlying feelings that impact road safety. Firstly a sense of entitlement, in that the pay-off achieved for the cost of autonomy is the freedom to decide when and if and under what terms compliance should take place as compliance only has a loose association with safety. Secondly, the frustration created by the costs associated with moving around and the value scene in the experience created by compliance against the magnitude of costs that do not result in a consistent and lasting improvement in the quality of the experience.

The notion that cost will elicit a sense of “value” and therefore responsibility is over-ridden in many cases by this sense of frustration with the delivered result and the entitlement resulting from increasing costs levied. Examples of this would include registration and mandatory insurance costs that motorists would see fall under a deregulated system but have only risen without a clear articulation of the benefit gained by such fees other than cost recovery. A second example is roadworks, where no visible consistency or logic is evident in the organisation, standardisation or practices between States, areas or even individual sites. Reduced speed areas (e.g. 40km/h) are enforced even when no hazards exist i.e. workers are protected behind concrete barriers, there is no entering construction traffic, no workers are present, the works have finished days or even week previously or the road has actually been made safer by the works. In addition some sites are set up in such a way as to create hazards i.e. insufficient warnings of lane closures, queues on blind corners or conflicting lane direction and/or posted speeds. The collective effect is that motorists do not generally see roadwork signage or warnings as a trustworthy source of risk advice. This may be how the industry of traffic control is regulated, policed or training standards or all three.

6. The issue of “accepted risk” is another factor in road safety. The simple but inevitable fact is that driving a motor vehicle is inherently risky. Large metal boxes moving at speed in opposite direction, often separated by centimetres of lane marking will result in collisions, regardless of the relative speed of the objects. Some road users carry an increased risk over others. From a purely WHS perspective, if in 2017, there was a proposal to introduce motorcycles as a transport method, the proposal would fail. The notion of placing an unprotected rider on an unstable, two-wheeled chassis, which we also strap an exposed fuel tank and engine, capable of propelling the rider at a faster acceleration to most motor vehicles. The reason motorcycles are still part of the transport system is that there is an emotive notion attached to “freedom” and danger of motorcycling. The primary factor that allows the motorcycle to still be a road-user is that riders have and do accept the personal risk associated with the mode of transport. Conversely, motor vehicle drivers (although intrinsically more protected by a significant magnitude) are subject to a plethora of rules, requirements, compliances and mandatory equipment; in other words they have little choice as to accepted risk, this is mandated to a level far beyond that of motorcyclists.

The anomaly is compounded when we consider varied rules in regard to motor vehicle modification. Compliance in this case is not a template for safety. In NSW illogical rules currently exist that place restriction on certain modifications that make vehicles safer on the road e.g. better tyres, better suspension, better brakes, better seat belt and strengthening roll cages. In NSW a driver who wants to install a harness seat belt has to also have a standard lap sash belt to comply with regulations unless the harness is for an infant or child, then in order to comply the standard the harness (which works in the same way for an infant/child as for an adult) is a requirement to improve safety. As a former Ambulance Paramedic and Medic for national and international rally events, the stated reason for this, the notion that harnesses and full roll cages in motor vehicles in some way inhibits the removal of injured occupants from a vehicle are erroneous and illogical. Being able to enhance the engine output of a motor vehicle but being deemed illegal to upgrade the braking or tyre/wheel configuration from standard are at best nonsensical and at worst a significant and contradictory detriment to road safety.

The target to reduce road deaths to zero is noble but practically impossible. This is regardless of the rollout of autonomous vehicles, regulation, design standards, fines, charges, road engineering or advertising. This is a simple reality and all motorists and Government can do is mitigate the issue over the longer term.

7. Another significant factor in the control of Government is the vehicle mix and sharing on road in Australia. Roads are shared by motor vehicles, pedestrians, cyclists, motorcyclists and heavy vehicles. Without duplicated roadways this situation has limited scope for improvement and impact on road safety. Much of the infrastructure in Australia has historically, organically grown rather than as a result of a master plan and there has and is no funding to separate road users via infrastructure.

Local Government approves a growing number of retail and business developments with no pedestrian access. My local Bunnings has no pedestrian access and pedestrian must walk on busy roadways to access the facility. While this is presumably because walking is no longer the major means of transport used to move around, the pedestrian using public transport has become marginalised as road users. Not prioritising pedestrians in planning and engineering also has a direct impact on road injuries and deaths. Pedestrian deaths nationally are higher than motor and pedal cyclists and only marginally lower than passengers in motor vehicles. The high rate in drivers is predictable considering all cars will have at least a driver and most motor vehicle trips are made with a single occupant. Interestingly there is no disincentive for single occupant travel in Australia and very limited advantages by the use "transit lanes".

At per recent statistics, SUV sales in Australia account for some 37.4% and increasing each year. This ratio is of growing concern as an influence in road trauma. These vehicles (whether classified as small, medium or large; van or ute/tradesman type vehicles) are beginning to dominate the roads, particularly in metropolitan areas where the requirement for these vehicles would logically be less. Authorities traditionally have fixated on GVM as the sole determinate for licensing, taxes and tolls rather than the actual designation of the

vehicle and its intended purpose. This has resulted in an unbalanced profile of road users. SUV's create several issues in road safety, these include:

- Increased wear and tear on road surfaces.
  - Obstructions to the view of traffic by regular motor vehicles. Being unable to see past or through higher vehicles (that the typical sedan) means drivers are unable to proactively see impending hazards in traffic and react early enough. This has led to a new style of driver who is merely reactionary to the brake lights in front of them.
  - Without a classification system a new learner or inexperienced driver (particularly if they have never driven a larger, higher vehicle before) is able to purchase and drive these vehicle without any specific orientation, endorsement or familiarity with the size, weight and height differences, braking capabilities or behaviour under emergency braking conditions.
  - Due to the higher seating position (but commonly poorer rearward vision), the drivers of these vehicles tend to generally behave with more of an intimidating driving style.
  - The instability of some of these larger SUV's is evident on the road's particularly when raised or suspension has been modified (apparently legally) and present a real danger to themselves and other road users in an emergency collision avoidance manoeuvre and braking. Again no special licensing or instruction is required to own or drive one of these vehicles as they fit within the GVM profile.
  - The larger general size and height of these vehicle, coupled with various "add-on" accessories like "bull-bars" make the result of an impact with another car is predicably unfavourably.
8. The next issue is one of driver training. Despite changes in NSW to increase the complexity of the initial licensing, there are still fundamental anomalies that exist in Australia. Learner licensing in NSW has theory testing, computer-based simulation of "hazards" and compulsory (self-reported) driving experience. Experience that is accurately reported by responsible learner drivers and supervisors, but open to fraud and misrepresentation by irresponsible road-user (who are not incidentally the drivers involved in proportionally more road incidents). There are also no requirements for differing types of vehicles or emergency situations. Once a driver's licence is obtained, other than temporary suspensions or bans (which serve to reduce experience exposure) as a punitive measure, there is no structured process for drivers to be retrained and/or retested as part of a pathway once poor driving has been identified. Police should have the ability to identify and impose retraining/retesting upon drivers where they are observe poor driving, rather than merely fining as a punitive measure that does nothing to improve long standing poor skills, poor knowledge or behaviours. This would more broadly target driving behaviour i.e. rather than just excessive speed, this could include drivers who drive too slowly for traffic flow and create hazards, drivers that take unnecessary risks (with or without an offence occurring), drivers who consistently fail to signal or hold lane position appropriately, failure to move to the left lane in freeways and toll ways and the list goes on. This retraining/retesting would be as the drivers expense so as to act as a further incentive. This strategy would be enacted before the driver has multiple offences or a serious offence threatening their licence and necessitating court involvement. From a cost benefit perspective this strategy would pay large dividends

over the long term, however is State Governments tend to focus on short term strategies that result in immediate cost offset i.e. compliance only.

International visitor requirements for driving in Australia are generally more lax than the learner driver process. In NSW If you hold an overseas licence, you are allowed to drive the vehicles covered by your overseas licence in NSW **indefinitely**, as long as:

- You remain a temporary overseas **visitor**
- Your overseas licence **remains current**
- You have **not been disqualified** from driving in NSW or anywhere else
- You have not had your licence **suspended or cancelled**, or your visiting **driving privileges withdrawn**
- You **carry your overseas driver or rider licence**. If your licence is not written in English, you must also carry an English translation, or an International Driving Permit.

This includes drivers from countries where there are significantly different road rules and road conditions. Where a driver does not necessarily have any experience or ownership of a motor vehicle of any type; has not been through a robust licensing system that assesses competence in their own country, let alone no requirement to read, understand or demonstrate any knowledge of Australian road rules or understanding of the English language (in which all traffic signs and instructions are written). In contrast an Australian visiting China for example would not be automatically able to drive using an International Licence.

While the aspiration targets of the National Road Safety Strategy are noble in intent, the practicalities of implementation at a State level, that are constrained by political and financial priorities, rather than purely a safety agenda will mean that on a national basis we will continue to fall short of any sustainable outcome. Funding for safer roads and infrastructure will still be seen as a (at least partial) Federal responsibility by the individual States and Territories. Each State will independently and arbitrarily continue to enact the same strategies that cost positive (but visible) evidence of activity in the area of road safety, without compelling evidence of efficacy. With a road injury and death toll increasing once again in the last 2 years it is time not to commit to doing “more of the same” in the hope that eventually we will see a paradigm shift. It is the time and opportunity for States like NSW to think a little more globally on causes and move away from capitalising on pseudo measures. It is also time to look at rules nationally to determine and ensure that we are fixing the process rather than focusing on the end problem and not creating further issues as we chase the elusive and fanciful, perfect panacea.

Yours faithfully,

**Simon Gould**

12<sup>th</sup> January 2018