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Transport and Infrastructure Council
National Road Safety Strategy

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The Transport and Infrastructure Council

Re - Inquiry into the National Road Safety Strategy 2011-2020

1. Introduction

1.1 The Motor Trades Association Queensland (MTA Queensland or the Association) responds to the Australian Government's announcement of an Inquiry into the National Road Safety Strategy 2011-2020 (NRSS). The comments contained in this submission are confined to the views and issues from the perspective of the MTA Queensland relating to technological advances to Australia's land transport fleet private and commercial which substantially contribute to road safety for the benefit of all stakeholders.

2 Context

2.1 This Inquiry provides the opportunity to reflect on the NRSS and its effectiveness in reducing road deaths and crashes and its long-term vision for the '10-year plan to reduce the annual numbers of both deaths and serious injuries on Australian roads by at least 30 per cent.'

2.2 The economic cost of road trauma in Australia is estimated at \$27billion per annum, and the social consequences are impossible to measure. With that in mind, a common goal unites governments, industry, organisations, the professions and individuals to reduce road trauma and road deaths, ameliorate road safety and injury prevention. Regardless of best intentions, society remains confronted by the horror of road deaths and the consequences of road trauma. The Bureau of Infrastructure, Transport and Regional Economics' (BITRE) latest Australian road fatality data (December 2017) reveals that:

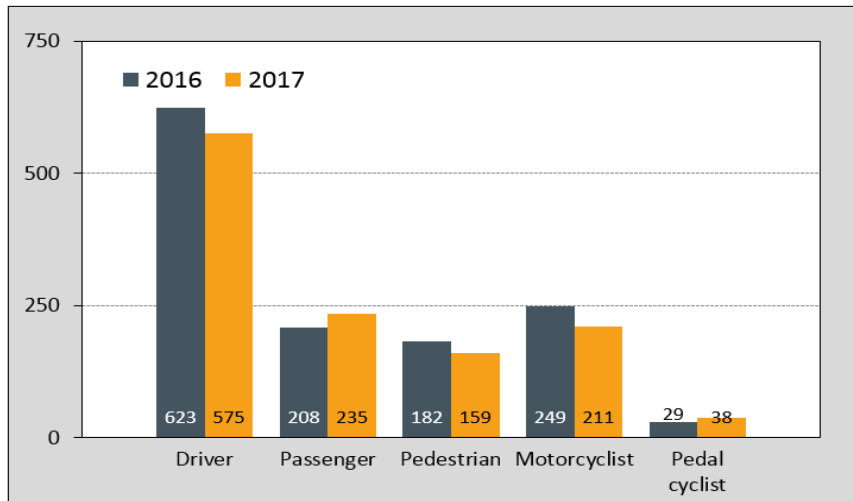
- During calendar 2016 there were 1,293 road deaths (provisional).
- For 2017, there have been 1,225 deaths (provisional). This is 68 deaths (5.3%) lower than the same period last year.

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Road deaths by road user group: 12 months to December



2.3 In 2014 a review of progress was undertaken to assess the NRSS progress. As a consequence, an Action Plan for the three years from 2015-17 was developed and approved by Transport and Infrastructure Council (the Council) to address specific road safety issues. It comprises four broad groupings:

- Prioritising our investments in infrastructure;
- Improving the safety of our vehicle fleet;
- Encouraging safer road use; and
- Advancing the Safer System.

2.4 Underpinning each is a range of actions, totaling nineteen in all, for jurisdictions to implement or undertake to satisfy the requirements of the Action Plan. The implementation status of these across all jurisdictions has been mixed ranging from completed to the majority falling into the category of work remaining in progress.

2.5 The statistical measures of the several actions indicates that continuing high incidents of deaths and crashes defy reduction targets and the aim of reducing the annual numbers of both deaths and serious injuries on Australian roads by at least 30 per cent.'

High level outcome measures

Measure	Baseline 2008-10	2016	% change
Number of deaths resulting from road crashes	1,426	1,296	-9.1%
Number of road crashes resulting in death	1,297	1,203	-7.3%
Number of deaths per 100,000 population	6.6	5.4	-18.7 %
Number of deaths per 100,000 million vehicle - kilometers travelled	0.63	0.52	-18.0%
Number of deaths per 10,000 registered vehicles	0.91	0.70	-22.5%

(National Road Safety Strategy 2011-2020, Implementation Status Report, p. 18)

2.6 Outside of the Action Plan, other influences must be factored into the cause of road trauma levels. These include the overall economy; the economic circumstances of the States and Territories; human behaviour; weather conditions; and vehicular maintenance and standards.

3 Submission

3.1 The technology disruption that the automotive value chain has begun to experience will change profoundly private and commercial motoring in Australia thus providing a unique and significant opportunity to improve substantially road safety outcomes in Australia. The opportunity presented by the advanced technical changes sweeping the automotive manufacturing sector in response to environmental parameters have the potential to make a quantum change in road safety if they are simultaneously applied to this goal.

3.2 There appears to be four areas where the paradigm shift in technology could deliver substantial benefits in respect of road trauma to Australia's private and commercial motoring. At the same time these technologies properly implemented to enhance road safety outcomes would deliver a positive dividend to the general community and the wider economy by providing relief from the cost of road trauma. These four areas are:

a. Collision avoidance technology

The mandating of collision avoidance technology on all vehicles imported into Australia could have the effect of reducing road trauma. In addition, Australia with an aged motoring fleet by world standards (approximately 10 years) should consider a development program which adapts collision avoidance technology to be retrospectively installed in pre-existing vehicles. Over 80 percent of collisions are 'nose-to-tail'. A considerable improvement in road trauma incidents could be achieved by the mandatory adoption of this technology. Taxation and economic incentives should accompany the mandatory imposition of this technology.

b. Congestion

Road congestion, in particular urban congestion and extreme central business district (CBD) vehicle congestion in peak hours contributes significantly to road trauma. Australia's daily workforce continues to avoid the use of public transport with approximately 13 per cent taking this form of transport to work each day. The profound increase in vehicle congestion in the 21st century, imposes high levels of stress on both private and professional motorists.

There is a correlation between road trauma and the number of motor vehicles registered in Australia. The projected growth in electric vehicles, particularly plug-in electric vehicles, constitutes an opportunity to develop a '*new compact*' between governments and the motoring public.

The forecast gradual demise of federal fuel excise revenue and state and territory fuel taxation revenues together with the development of motor vehicle and tracking technology provide an opportunity to reform and restructure the fiscal architecture in relation to motor vehicle taxation. This provides the opportunity to change the basis of the system to a user-pays fiscal design. This system could be interactive with price signals being used to discourage the operation of private motoring during peak hours on highly congested routes and in CBD locations.

Concomitantly, enhanced subsidisation of public transport could initiate a cultural change which could provide relief from forecast congestion. This in turn should provide some relief from the current forecasts of motoring stress and lead to a reduction in road trauma.

c. Anti-theft technology

The installation of effective vehicle anti-theft technology should be mandated and research undertaken to determine retrospectively the installation of anti-theft technology in Australia's aged fleet. Technology for this already exists. Seemingly, the Original Equipment Manufacturers have not been motivated to install these systems as they do not contribute to the marketing profile of vehicles and therefore the cost is hard to recover in a highly competitive market.

Stolen cars are increasingly being used in anti-social ways that inevitably result in road trauma to motoring and the general public. Further, stolen or illegally acquired vehicles are now a weapon for terrorists and the installation of anti-theft technology would deliver a broad community security dividend as well as relief from road trauma.

d. Jurisdictional differences

Australia is a Commonwealth and much of the regulation of the motoring sector falls within state and territory jurisdictions. This is exacerbated by the differential economic geography Australia's states and territories. It appears important that actions to minimise road trauma and to deliver road safety outcomes should not be comprised by jurisdictional differences. It appears important that taxation architecture and economic signals are used to reinforce regulatory regimes and accelerate their uptake.

The technology disruption that is underway in the automotive sector and the changes to fiscal regimes that currently finance motoring infrastructure services provide an opportunity for road safety to be an important determinant of the ultimate configuration of this technology transformation.

3.4 Discussion

Collision avoidance and anti-theft technologies

3.4.1 Collision avoidance technology should be installed in all vehicles regardless of age and not confined to vehicles in the luxury car tax class. The object of this technology is to improve the drivers' safety awareness and driving habit, fundamentally reducing road accidents and crashes. It has the capability to prevent and reduce unintended lane departure, tailgating, or collision accident caused by fatigue driving, distraction or other unintended incidents.

3.4.2 It is incongruous that vehicles with leading edge environmental and safety innovations invariably are associated with vehicles at the upper end of the market and subject to the luxury car tax (LCT). In the interest of road safety, the LCT should be abolished.

3.4.3 The average age of Queensland's passenger fleet at 9.5 years should not be an impediment to the installation of the system. Anecdotally, older cars can be upgraded for far less outlay than buying an all-new vehicle. The Australian Bureau of Statistics (Motor Vehicle Census, Australia 31 January 2017) reports that the estimated average age of Queensland's registered passenger fleet is 9.5 years compared with the national average of 9.8 years. The average age of all vehicles registered in Australia was 10.1 years, unchanged since 2015.

3.4.4 The cost of upgrading a vehicle should not inhibit the vehicle owner if Governments are 'fair dinkum' about reducing road deaths and crashes. In mandating the introduction of collision avoidance and anti-theft technologies discounts for registration, compulsory third party and licensing fees and other motoring imposts could apply. The cost of the discounts would be offset by savings from the need for emergency service (police, ambulance etc.) attendance at crashes and accident sites and any hospitalisation.

Congestion

3.4.5 Urban congestion in all major Queensland cities is reaching serious levels and is apparent. It is estimated the cost of South East Queensland urban congestion will increase from a base of \$1.9 billion per annum in 2011 to exceed \$9 billion per annum by 2030 (Source: Infrastructure Australia analysis of data from ACIL Allen Consulting (2014b) and Veitch Lister Consulting (2014a). This has impacts on social and economic outcomes, community standards of living and quality of life.

3.4.6 Congestion levels and delay costs are projected to worsen significantly to 2031, with Queensland set to experience the second highest level of population and employment growth in Australia after Western Australia (Australian Infrastructure Audit, *Our Infrastructure Challenges*, Volume 2, April 2015 p.189). Currently, Queensland highways, city and urban roads are experiencing increasing congestion and are not coping with the incremental increase in the volume of traffic.

3.4.7 This is highlighted by the Australian Road Assessment Program analysis that the M1 (from the Gateway Merge to the Logan River; Logan River to Smith Street; and Smith Street to the New South Wales border) has been rated the three worst routes in Queensland for accident risk. Each of these feature in the worst ten roads across the nation. Between 2012 and 2016, for this 79 kilometer stretch there were 17 deaths and 1131 casualty crashes. This was despite that each of the three, rated highly for inherent design and safety features (Passmore, D., 'Driven to Death', The Sunday Mail 11th February 2018).

3.4.8 The Royal Australian Club Queensland analysed Department of Transport and Main Roads crash and death data between the Gateway Motorway Interchange and Tugan over the past 3½ years. It was of the view that traffic congestion was a factor. 'Congestion in itself can cause crashes. Crashes can kill' (Ibid).

3.4.9 Congestion should be addressed in the context that transportation both commercial and private will undergo major disruption due to the introduction of vehicle and infrastructure technologies and the change in the architecture of vehicle ownership and usage.

Technological change

3.4.10 The automotive industry is amidst its most dramatic period of change as electrification, connected and automated driving technologies make a significant progress. Experts predict that by 2030 there will be some five million electric cars on the nation's roads and a significant proportion of these will be driverless. Indeed, 'in 10 or more years, smart cars and infrastructure will be commonplace' (The Future of Compulsory Third Party in Queensland, prepared for the Motor Accident Insurance Commission, PwC Chair of Digital Economy at QUT, p. 14). These vehicles will introduce exponentially profound economic and societal changes that can contribute to improved road safety, mobility, productivity and outcomes.

3.4.11 The expectation is that autonomous vehicles will improve road safety outcomes by preventing a high proportion of road collisions, reducing deaths and avoiding a considerable number of serious injuries. Studies estimate that road accidents maybe reduced by as much as 90 percent by removing human error (Chester, D, MP, Road Trauma Oped, The Australian, 4th January 2017). Tesla in the United States has collated empirical data for its autonomous and driver operated vehicles and determined that the accident rate for autonomous vehicles is forty per cent lower than for driver operated vehicles.

3.4.12 Currently, it seems that the motor vehicle technological advances, are outstripping the regulatory requirements, the investment in smart roads and comprehensive planning. The MTA Queensland notes however, that Federal Government has legislative requirements underway relating to vehicle emission standards for cleaner air and improving the efficiency of new light vehicles and has consulted on the social implications of driverless vehicles. At present some local governments and industry groups are trialing driverless shuttle buses in tourism and retail precincts. The Queensland Government has completed the electric super highway of charging stations from Cairns to Coolangatta.

Balance penalties with rewards

3.4.13 Recently, in Queensland debate with differing outlooks has ensued about the effectiveness of unmarked and marked mobile speed cameras. Statistically, during the 2016-17 financial year 106,741 notices were issued by unmarked mobile speed cameras and 163,176 notices issued by marked mobile speed cameras.

3.4.14 On the one hand, unmarked and marked mobile speed cameras have been criticised as 'government revenue raising' and 'do nothing to affect the road toll'. On the other, research from the Monash University Accident Research Centre indicated that both a mix of both covert and overt mobile speed cameras would produce the best road safety outcomes. This was due to the strong effect that covert cameras have on fatality crashes as their unknown nature suppresses vehicle speeds across the road network.

3.4.15 For the 12-month period, 1 January to 31 December 2017 there were 248 fatalities within Queensland, which is three fatalities (or 1.2%) less than the previous 12-month period (251). Anecdotally, a popular view in the motoring public is that in the suite of road safety policies non-punitive measures should apply that favour safe driving to deter crashes, accidents and speeding. The cost could be offset by discounts on yearly registration, license renewal, compulsory third-party insurance and other related imposts for proven safe driving.

Harmonisation of road rules, vehicle regulations, licensing and registration fees

3.4.16 The harmonisation of road rules, vehicle regulations and registration and licensing fees across the states and territories of the Commonwealth has consequential road safety benefits. This is particularly relevant in the context of the new generation of technology being introduced e.g. hybrid, plug-in-electric and autonomous vehicles. In the interest of road safety and the national motoring public, this technological revolution would benefit from harmonisation.

3.4.17 Through the Council of Australian Governments an effective program to deregulate and to dismantle compliance regimes and costs that do not contribute to the protection of stakeholders should be initiated.

5. Conclusion

5.1 Technological advances should be used to minimise the general societal impact of injuries and permanent disabilities.

5.2 Road safety should be evaluated in its broadest context with recognition of the consequential costs to the economy, infrastructure and society as a whole. Without a comprehensive analysis of road trauma, road safety will continue to be regulated as a secondary issue. The analysis of road safety costs should include the dividends that can be secured from lower hospitalisation and long-term disabilities; emergency turnouts; the opportunity cost of lower insurance premiums; fewer vehicle repairs; and the impact on the national medical scheme.

5.3 The MTA Queensland acknowledges the high-quality research, education and advocacy submitted to the Transport and Infrastructure Council for its consideration. These will contribute concepts with the objective to supplement the Council's holistic *Safe System* principles and the agreed set of national road safety goals, objectives and action priorities.

6. The MTA Queensland background

6.1 The MTA Queensland is the peak organisation in the State representing the specific interests of businesses in the retail, repair and service sector of Queensland's automotive industry located in the State. There are some 15,500 automotive value chain businesses employing approximately 88,500 persons generating in excess of \$20 billion annually. It is an industrial association of employers incorporated pursuant to the *Fair Work Act 2009*. The Association represents and promotes issues of relevance to the automotive industries to all levels of Government and within Queensland's economic structure.

6.2 The Association is the leading automotive training provider in Queensland offering nationally recognised training, covering technical, retail and the aftermarket phases of the motor trades industry through the MTA Institute - a registered training organisation. It is the largest automotive apprentice trainer in Queensland employing trainers geographically dispersed from Cairns to the Gold Coast and Toowoomba and Emerald. The MTA Institute last financial year accredited courses to in excess of 1,600 apprentices and trainees.

6.3 We would be please to provide further comment on any matters in our submission that may require further clarification or amplification.

Thank you for your consideration.

Yours sincerely



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