Drink driving and Australian alcohol policy developments in 2010

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Drink driving and alcohol-related road trauma continue to be seen as major factors to be addressed in Australian road safety efforts (together with speeding, driver fatigue and distraction, and the non-wearing of seat belts). A new National Road Safety Strategy 2011–2020 canvasses a wide range of countermeasure directions, including approaches focused on general deterrence and prevention of alcohol-related harm and at-risk behaviour, as well as approaches focuses on alcohol control policies. A debate over the adverse health and social effects of the increased availability of alcohol in Australia arising from the liberalisation of state liquor licensing continued in 2010, with studies providing evidence of increasing alcohol-related harm across Australia, and the need for timely and accurate data on alcohol sales and consumption. Surveys of community attitudes to road safety continue to show that there is strong community support for drink driving countermeasures in Australia. A long term trend of a reduction in alcohol-related road fatalities appears to have plateaued since the early 1990s, and there appears to be some loss of momentum in drink driving research and policy development. An ongoing issue is that despite previous national road strategies calling for the development of a uniform suite of performance measures to assess alcohol-related road safety issues and drink driving, there is no nationally aggregated data. Some specific issues that arose in 2010 regarding alcohol control and drink driving were: Raising the minimum drinking age; Zero BAC; Alcohol ignition interlocks; Linking data about alcohol use as a health and crime prevention tool; The range and magnitude of alcohol’s harm to others in the Australian community (including estimates of costs to others; and, The wider policy context for the safe and efficient operation of the Australian road transport system, particularly taxation reform affecting alcohol products.

Keywords
Alcohol, Traffic safety, Australia, Drink driving, Drunk driving, Impaired driving, Policing, Alcohol control, Policy, Alcopops, Binge drinking, Liquor licensing, Wicked problems

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Drink driving and Australian alcohol policy developments in 2010

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This paper provides a brief summary of the major debates, the research, and the policy development that took place in Australia regarding alcohol control and drink driving during 2010. The paper has been prepared for distribution at the meeting of the TRB Committee on Alcohol, Other Drugs and Transportation (ANB50), to be held on Tuesday 25 January 2011 at the Marriott Wardman Park Hotel, Washington, DC, and has been written to provide updated information about the Australian experience and to address aspects of the research priorities and research questions currently included within the research needs statement developed by the Committee.

Our past papers have outlined the approaches to prevention and to enforcement policies regarding alcohol, other drugs and traffic safety in Australia. We consider alcohol-related problems to be examples of 'wicked problems', that is, problems that are seemingly intractable - difficult or impossible to solve - because of incomplete, contradictory and changing requirements that are often difficult to recognise and thus difficult to anticipate. Wicked problems are policy problems where both the ‘nature’ of the problem and the solution are highly contested. Attempts to deal with one aspect of a wicked problem may reveal or create other problems. Typically, the approach to addressing public health problems is authoritative, that is, the approach to policy development is scientific, evidence-based, and predominantly reliant on expert knowledge (what are the issues, what are the potential problems, what does the evidence say about strategies, interventions and countermeasures). However, such an authoritative stance is often not well received in the area of alcohol control. Policy development to address alcohol-related social problems necessarily involves friction and debate, particularly concerning the tension between collective good for the whole of society and individual freedom of action and responsibility. Many of these issues can be associated with access to and use of the road transport system. Some of the very problematic issues for alcohol include the early age of

introduction to drinking; association with unwanted sexual involvement; trauma impacts (presentations to emergency departments); and crime impacts.

In our most recent paper to the TRB Committee on Alcohol, Other Drugs and Transportation\(^4\) we noted that the countermeasures designed to address drink driving and alcohol-related road trauma in Australia have proven resilient in the face of recent major challenges, including the development of a binge drinking culture among young Australians, the extension of trading hours of licensed premises, continued problems with the secondary supply of alcohol to minors\(^5\), increases in the marketing of alcopops and ready-to-drink spirit-based beverages, and significant cost discounting of domestically-produced wines due to oversupply (e.g., high quality ‘cleanskin’ or unlabelled wines selling for less than A$2-3/bottle). We noted that in 2008-2009 the major policy debates over alcohol use and alcohol control shifted from drink driving to a focus on alcohol-related social harms, particularly binge drinking and violence. Significant contributions to alcohol policy development in Australia were the release in 2009 of revised Australian guidelines to reduce health risks from drinking alcohol\(^6\), and the report of the Commonwealth government’s Preventative Health Taskforce (2009)\(^7\).

Nonetheless, drink driving and alcohol-related road trauma continue to be seen as major factors to be addressed in Australian road safety efforts (together with speeding, driver fatigue and distraction, and the non-wearing of seat belts), and this is reflected in national, state and territory, and local road safety strategies.


In late 2010, the Australian federal government released a draft National Road Safety Strategy 2011–2020\(^8\), contains a range of initiatives and interventions under four headings – Safe Roads, Safe Speeds, Safe Vehicles and Safe People. The new strategy recognises that Australia has a


\(^5\) Secondary supply generally refers to the sale or supply of alcohol to people under the age of 18 years (minors) by adults or other minors. The legal drinking age in most states is 18 years. It is illegal in most Australian states and territories for someone under the age of 18 to drink or buy alcohol, or have alcohol supplied to them by an adult in a licensed venue or public place. There are currently no laws in Australia that makes it an offence for a person under 18 to drink alcohol in a private home.

\(^6\) National Health and Medical Research Council (NHMRC) (2009) Australian guidelines to reduce health risks from drinking alcohol. Canberra, ACT: Commonwealth of Australia.


strong record of road safety achievement, and has been a world leader in some areas, particularly in introducing key behavioural measures such as compulsory seatbelt wearing for vehicle occupant protection, random breath testing and associated legal and technological reforms to address drink driving, intensive speed management and control programs (including lowering urban speed limits; introducing special speed zoning in high-risk areas of the road transport system, e.g., in areas of high pedestrian activity, within school precincts, and variable speed limits in areas affected by adverse weather conditions; and the strategic use of fixed and mobile speed cameras), and roadside drug testing to address drug-driving. The new strategy is especially focused on addressing systemic problem areas in the road transport system, with the adoption of the ‘Safe System’ approach\(^9\). This approach accepts that people using the road network will make mistakes and therefore those responsible for the management of the road transport ‘system’ need to act to make it as safe as possible in order to ensure it is as forgiving as possible of such errors being made by users. This means, for example, actions to facilitate compliance with traffic law and ensure that there are both appropriate sanctions and rehabilitation measures for road users who demonstrate irresponsible and illegal behaviour, to add safety features to cars, and to improve the safety of roads through major rebuilding and realignment as well infrastructure additions such as barrier systems.

The draft strategy proposes that most road users respect the law, have good safety awareness and use the roads in a sensible manner. But even these people make unintended mistakes – and sometimes those mistakes result in death or serious injury. Improved road safety systems can be developed to reduce the level of road user error and provide greater forgiveness or protection in the event of a crash occurring – primarily through improvements in vehicle safety technologies and road infrastructure, but also through the way in which the road transport system itself is managed. But it is also the case that people do not always use roads in a responsible way, with some people frequently breaking the road laws, putting themselves and others at unacceptable risk, and all too often contributing to deaths, injuries and crashes. Thus there is a need to reduce dangerous behaviours on the roads through enforcement and through effective penalties and the availability of rehabilitation and relearning of safe behaviours. Australia has been successful in reducing both community, and in large part, individual acceptance of dangerous road behaviours, with community attitudes and social norms shifting markedly in areas such as drink driving and not wearing a seatbelt – these behaviours are now widely regarded as unacceptable in our community and road users are generally more compliant with traffic laws. However, risky behaviours continue to play a big role in serious crashes resulting in death and injury. While the responsibility of the various state and territory roads agencies is to provide safer road infrastructure and to ensure safer vehicles enter onto the roads, there is a complementary aim to increase support for responsible road use while toughening responses towards those who use the roads irresponsibly. Traffic enforcement, such as random breath testing, is necessary to maintain deterrence as many responsible drivers are kept responsible by the threat of detection and sanctions. Nonetheless, there will be significant challenges; for example, indigenous Australians have three times the rate of road death compared with non-Indigenous people. There is a complex range of factors involved, including over-representation in crashes involving alcohol and non-wearing of seatbelts, in crashes on lower-standard remote roads, and in vehicles that are often of lower safety rating. The new

strategy makes specific provision for a suite of countermeasures that are intended to influence the general population of drivers (such as random breath testing) as well as target identified at-risk drivers, including recidivist drink driving offenders and other specific groups (such as novice drivers who are first time drink driving offenders).

Advances in automotive safety design have already contributed significantly to road trauma reduction, including occupant protection performance, braking, handling and lighting and the inclusion of life saving safety features such as seatbelts and airbags. Advances in computing and sensor technologies have paved the way for new primary safety systems such as lane departure warning devices, collision avoidance warning and other advanced braking and driver management systems. There are also a number of vehicle safety technologies currently available or under development with the potential to target illegal driving behaviours, including intelligent speed adaptation (ISA), alcohol ignition interlocks, seatbelt reminders and interlocks, and in-vehicle data recorders. It is thought that continued progress will be achieved through a combination of manufacturers’ evolving designs, consumer information programs and other non-regulatory means, such as fleet purchasing policies and industry codes of practice, as well as mandated standards. Interestingly, the new strategy does not propose any significant new regulatory initiatives, instead seeming to propose that regulators should be responsive to desirable and proven advances in vehicle safety design and technology from within the ever-increasing range of features being promoted by vehicle manufacturers.

The primary aspect of safer roads in addressing drink driving and alcohol-related road trauma is through the provision of road infrastructure that is more ‘forgiving’ to impaired drivers and which minimises or removes exposure to risk for other road users. Thus programs to seal road shoulders (increasing road space), installation of roadside and centre-line barrier systems (preventing run-off-the-road and cross over crashes, respectively), as well as enhancements to road markings and signage to facilitate drivers perception of the road delineation are all likely to contribute to general safety, and as a consequence contribute to reductions in alcohol-related crashes.

Alcohol consumption in Australia

The debate over the adverse health and social effects of the increased availability of alcohol in Australia arising from the liberalisation of state liquor licensing continued in 2010. A study\textsuperscript{10} that reviewed estimates of the national trend in per capita consumption of alcohol for Australians aged 15 years and older reported that until recently, official national annual totals of per capita consumption of alcohol were underestimated and have led to the mistaken impression that levels of alcohol consumption in Australia had been stable since the early 1990s. In fact, Australia’s total per capita consumption of alcohol has been increasing significantly over time because of a gradual increase in the alcohol content and market share of wine and is now at one of its highest points since 1991–92. This study is consistent with the evidence of increasing alcohol-related harm across Australia, and highlights the need for timely and accurate data on alcohol sales and consumption.

Trends in impaired driving in Australia in 2010

Together with colleagues from the Centre for Accident Research and Road Safety – Queensland, we reported on trends in impaired driving in Australia in 2010 to the International Council on Alcohol, Drugs and Traffic Safety meeting held in Oslo, Norway, 22-26 August 2010[11]. The paper builds on previous presentations given at earlier ICADTS conferences, continuing a series looking at worldwide trends in impaired driving that was instigated by the late Barry Sweedler and his colleagues. This is now the eighth occasion where experts from around the world have met to continue discussions that were first begun in 1993.

National data from the Commonwealth Department of Infrastructure, Transport, Regional Development and Local Government in 2009 shows that, over the period 1981-2006 and for where the BAC is known, the percentage of fatally injured motorists with a BAC of .05 or more in Australia fell from almost half to just over a quarter, overall a reduction of 35%. This trend appears to have plateaued since the early 1990s. These results are supported by similar data from individual Australian jurisdictions. For example, data from the Roads and Traffic Authority in New South Wales in 2009 shows that, over the period 1997-2008 and for where the BAC is known, the percentage of fatally injured NSW motorists with a BAC of .05 has varied from 25% to 19%, but the overall trend is for little or no reduction over the decade. The trend appears to have stalled since the late 1990s. In Victoria, data from the Transport Accident Commission in Victoria in 2009 shows that, over the period 1987-2009 and for where the BAC is known, the percentage of fatally injured motorists with a BAC of .05 or more initially fell in the late 1980s and early 1990s (a reduction of over 40%) but has reduced little since 1994. The overall reduction is about 35%. This trend appears to have plateaued since the early 1990s, but is variable across the years (with increases in six of the years over the period 1993-2009).

The 2009 survey of community attitudes to road safety[12], part of a regular series of community surveys about attitudes to road safety that are conducted nationally in Australia. There is strong community support for drink driving countermeasures in Australia. Almost all drivers (98%) agree that random breath testing operations by police are beneficial to road safety. Overall, agreement that random breath testing is beneficial has not dropped below 96% since 1997; 75% had seen police conducting random breath tests in the last six months (unchanged from 2008), and 28% of the community report having been breath tested in the previous six months. The proportion of active drivers who don’t drink and drive at all is on par with previous years (58%), and this group is comprised of non-drinkers (19%) and those that don’t drink at all when driving (39%).

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While there has been considerable long-term reduction in alcohol-related fatalities in Australia, these reductions appear to have plateaued between 25-30%, although there is considerable variation within and across the different jurisdictions. Drink driving law enforcement and countermeasure implementation is primarily a state and territory responsibility, and this can be a mixed blessing: on one hand, there is a lack of co-ordination in policy and program development; on the other hand, there is a capacity for a flexible, localised response that can give rise to innovative policies and programs. That said, overall, there appears to be some loss of momentum in drink driving research and policy development. In part, this would appear to be because drink driving – the act of driving a vehicle while impaired by alcohol - is primarily seen as a transport rather than health problem.

Current countermeasure directions include approaches that might classed as focused on general deterrence and prevention of alcohol-related harm and at-risk behaviour:

- ongoing enhancement of random breath testing, e.g., deployment methods, intelligence-led policing at times and locations of high risk for drink driving;
- growing interest in venue-based programs, e.g., designated drivers, with a nominated non-drinker to be the driver in a group, often with support from the venue such as free soft drinks;
- responsible service of alcohol as mandatory training for venue staff regarding appropriate drinking, not serving drunken patrons, refusal of service to underage patrons;
- courtesy shuttle buses by venues, or local councils, providing alternative transport to patrons;
- patrolled taxi ranks (to address alcohol-related antisocial and violent behaviour after patrons have left a venue);
- liquor accords (also known as alcohol accords or licence accords) which are voluntary agreements about ways to improve the operation of liquor businesses and liquor licensing within local communities in order to minimise alcohol-related antisocial behaviour and improve community safety; liquor accords are used to support drink spiking campaigns, staff training for responsible service of alcohol, and safe transport strategies);
- implementing compulsory carriage of licence and blood testing laws, which combined with increased ability for police to access driver licensing databases enable better enforcement for drivers subject to lower BAC laws (e.g., novice drivers under graduated driver licensing systems) and detection of drivers who are unlicensed; and consideration of lower BAC (zero BAC for car drivers, motorcyclists)

Other countermeasure directions are focused on alcohol control policies, including:

- restrictions on alcohol access, availability and management - possible countervailing negative effects on safety
- challenging the emergence of a “binge drinking” culture with engages in at-risk levels of alcohol consumption;
- challenging the emergence of ‘new’ alcohol products (e.g., alcopops, or ready-to-drink spirit-based beverages) which are marketed for young drinkers, and are subject to a different taxation regime than spiritous liquors;
- reform of taxation policy relating to alcohol content; and
• addressing legislation relating to alcohol possession and consumption in public places, and public drunkenness.

One ongoing issue is that despite previous national road strategies calling for the development of a uniform suite of performance measures to assess alcohol-related road safety issues and drink driving, there is no nationally aggregated data. This has been highlighted in previous ICADTS workshops on worldwide trends in impaired driving. Unfortunately, the draft National Road Safety Strategy 2011–2020 does not address this issue, suggesting that performance indicators in the area of drink driving should be just the number of police alcohol tests at high alcohol times and high alcohol locations, and the proportion of drivers/riders under legal limits (alcohol) from police testing. The collection of national data on alcohol involvement in fatally injured drivers, and other data on alcohol-impairment and road trauma, is needed.

Raising the minimum drinking age

The minimum legal drinking age in Australia is 18 years in all states and territories. Towards the end of 2010, the issue of raising the minimum drinking age was addressed in the context of a discussion of ways to reduce alcohol-related road crash deaths among young Australians. Citing the experience of the United States in reducing road crash deaths among young adults by raising the minimum legal drinking age to 21 years, it is argued that if all Australian jurisdictions had adopted a policy 21 years minimum legal drinking age in 2003, 17 deaths could have been averted among young Australians as they aged from 18 to 21 years and many more serious injuries could have been prevented each year. If a zero BAC had been enforced until age 25, the number of deaths averted until age 25 years could have been as high as 50. A recent evaluation of the cost-effectiveness of policies for reducing alcohol-related harm in Australia found that, if the US experience were to be replicated in Australia, raising the minimum legal drinking age would be more cost-effective than random breath testing and drink-driving campaigns. Given the major political obstacles to increasing the minimum legal drinking age, it was suggested that an alternative policy that could achieve a similar reduction in road crash deaths — requiring licensed drivers to maintain a blood alcohol concentration (BAC) of zero until at least the age of 21 years (close to the current policy of zero BAC until age 22 years in Victoria), and preferably until 25 years. This would allow young Australians to drink or drive but not to combine these activities for at least the first several years of driving.

Zero BAC

Across Australia, a zero BAC provision applies for some drivers. As well, a 0.02 BAC (sometimes referred to as an “effective zero” BAC) applies to many other drivers: novice drivers, drivers of heavy vehicles, drivers of public passenger vehicles. States and territories continue to modify and refine their practices in terms of BAC limits for drivers, for example, Queensland amended its traffic law in July 2010 to require a zero blood alcohol concentration (0.00 BAC) for all learner, provisional and probationary licence holders regardless of age.

The draft National Road Safety Strategy 2011-2020 suggests that reducing the legal BAC limit from 0.05 to zero (or 0.02) for young drivers up to the age of 26 would prevent a significant number of deaths and serious injuries each year. As noted in the preceding section, this would have a similar benefit as amending the minimum legal drinking age from 18 to 21 years without the same level of impact on the community. Extending the application of zero (or 0.02) BAC limits to all drivers, or at least to all young drivers has the potential to reduce the incidence of alcohol-related crashes and consequent trauma. The evidence that would support such action will be examined in greater detail, including the benefit of removing ambiguity and sending a strong statement that drinking and driving should be separated. There is a current project to reduce existing BAC limits for all motorcyclists being undertaken in Queensland, but no report is yet available.

It must be recognised that arguments in support of a lower BAC for drivers has been put on a number of occasions over the past two decades, but there has been a reluctance in the community and in the media to support such proposals. For example, over a decade ago the concept was discussed after the 1997-98 Christmas-New Year period in Victoria, where editorials were published commenting:

It would make sense to reconsider the .05 limit if most of those killed while under the influence of alcohol were hovering just above the limit. But in most cases they were well above the limit. It is difficult to see how punishing people who drive while having a blood-alcohol level of .03 is going to deter the minority of people who are irresponsible enough to drive with levels of .15 or more. Indeed, there is a risk that such a punitive restriction would be counter-productive, given the near impossibility of staying below .02 while having even one drink. The Premier, Mr Jeff Kennett, has ruled out a zero blood-alcohol limit. Yet a limit of .02 is effectively a zero alcohol limit. People could register .02 if they have taken alcohol-based medications, eaten desserts or chocolates containing alcohol or even, in some cases, if they were drinking the day before being tested. Victoria's road toll last year was 376, the lowest since records began. As we have argued recently, this is no reason for complacency and efforts must continue to reduce the tragic and unnecessary number of deaths. But the limit of .05 was set many years ago after a great deal of discussion and research which found that this was the level above which impairment began to occur. A recent Medical Journal of Australia editorial points out the cost to the community of alcohol abuse and calls on those who drink in excess to behave more responsibly. We concur. But a person who has a blood alcohol level of .03 or .04 is not acting irresponsibly. In moderation, the consumption of alcohol is an enjoyable social activity which has proven beneficial health effects. It is as unreasonable to expect that no one who has consumed any
amount of alcohol may drive as it is to punish moderate drinkers for those who
drink immoderately. The legal blood-alcohol limit for drivers must continue to be
strictly enforced. But instead of going through a process of reviewing a limit that is
accepted in most Western countries, the Government would do well to target
speed, aggression and poor roads, which are equally significant factors in road
trauma.16

Alcohol ignition interlocks

As with a zero BAC provision, states and territories continue to modify and refine their
practices in terms of dealing with high risk drink drivers, for example, Queensland, in late 2010,
introduced an alcohol ignition interlocks (“I”) licence condition, making it mandatory for high
risk drink drivers to either pay to have an alcohol ignition interlock fitted to their vehicle for 12
months or if they choose to not fit an interlock they will be required to abstain from driving for
two years. High risk drivers include first time offenders with a blood alcohol reading 0.15 BAC
or more, repeat offenders (a person convicted of two or more drink driving offences of any kind
within a five year period), offenders convicted of dangerous driving while adversely affected by
alcohol, or drivers who fail to provide a specimen of blood or breath for analysis when
requested.

As well, Australian jurisdictions with alcohol ignition interlock programs are expanding17, for
example, in New South Wales the Alcohol Interlock Program is available for courts as an option
in sentencing drivers convicted of certain serious drink driving offences. The program allows
convicted drivers to suspend part of their licence disqualification period if they install an
alcohol interlock device, with a pre-set limit of 0.02 BAC, in their car and obtain an interlock
driver licence. Offenders in the program are able to continue to drive legally and have a greater
chance of maintaining employment if they need to drive a car as part of their job. In 2009-2010
more than 1,500 interlock licences have been issued to New South Wales drivers, a more than
fourfold increase from 2008-2009.

The draft National Road Safety Strategy 2011-2020 noted that a substantial proportion of drink
drivers – particularly repeat or recidivist offenders – are not responsive to mainstream
deterrence measures because they have serious alcohol abuse and broader social problems.
Alcohol ignition interlock programs are identified as one measure to address this issue, as
interlocks have had some success in changing the behaviour of serious drink driving offenders.
It is argued that there is scope to extend the application of alcohol ignition interlocks to cover a
wider segment of the driver population, continuing the initial focusing on recidivist offenders
but targeting other higher-risk groups such as novice drivers as first-time drink driving
offenders. The majority of the community ride or drive responsibly, but may lapse occasionally.
If the community supported the widespread implementation of alcohol ignition interlocks, then

17 For a historical overview of the development of alcohol ignition interlock programs in Australia, see:
Paper presented at the 17th International Conference on Alcohol Drugs and Traffic Safety, T2004, held in
Glasgow, Scotland, 8-13 August 2004
in the next ten years drink driving could almost be eliminated. Some countries are creating initial markets to support the eventual widespread uptake of alcohol ignition interlocks through car fleets, in buses, taxis, and in trucks, as a quality assurance action by responsible companies as employers and for their employees.

**Policing drink drivers: Operation RAID, Operation Unite.**

We have previously commented\(^\text{18}\) that interventions to reinforce responsible sale of alcohol such as server intervention training and liquor accords between licensees, police and health advocates are well known and attempt to address the harm associated with consumption of alcohol on licensed premises. An important evaluation that demonstrated that these interventions reduce alcohol-related harm was the Alcohol Linking Project\(^\text{19}\), which was a systemic intervention implemented in the Hunter region of New South Wales to enhance police enforcement of liquor laws by providing data-based feedback to police and licensees about alcohol-related crime following drinking on specific licensed premises. The Alcohol Linking Project data were shown to contribute to a reduction of alcohol-related crime and this approach has been adopted into routine practice by the New South Wales Police Force state-wide. We note that this approach is accepted as a significant alcohol-related health policy research intervention\(^\text{20}\). This work also underpins the Operation Unite, a national policing program launched in December 2009 and targeting alcohol and other drug-related behaviour across Australia and New Zealand. Operation Unite is a co-ordinated policing blitz over a weekend that targets street offences and traffic offences associated with alcohol and other drugs. Operation Unite was run again successfully in December 2010. Operation Unite is an extension of the combined state and territory police forces’ Operation RAID (Remove All Impaired Drivers) traffic campaign which is an annual program that runs from late November each year and is aimed at detecting and removing all alcohol and drug-impaired drivers from the roads of the four eastern Australian police jurisdictions (Victoria, New South Wales, Queensland, and the Australian Capital Territory) in the period leading up to the busy Christmas-New Year holiday driving season. Several times during the three-week Operation RAID program, police combine to implement border "lockdowns", in which all drivers and motorcycle riders travelling across state and territory borders are subject to random breath tests. Operation RAID is seen as a vital tool by police in all states and territories as a means of focusing the motoring public on safer driving practices and specifically to curb dangerous drink-driving in the lead-up to the festive season. Public advertising is also used, featuring police from all four jurisdictions.

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The range and magnitude of alcohol’s harm to others

An important research report in 2010 was the release of a study of the range and magnitude of alcohol’s harm to others in the community (family, work colleagues, friends and acquaintances, and strangers). Data was collected through a survey of the general Australian population, and additional information was obtained from relevant agencies in across a range of sectors. The study reveals some of the interconnections between areas such as child protection, family services, health services, and law enforcement, and provides insight into how individual acts of alcohol misuse can ripple through families and communities, affecting domestic situations, work, and strangers. These effects range from nuisance inconveniences, such as street noise or having to avoid public parks, or petty costs from damaged property through to severe harms such as child abuse, physical violence, unintentional trauma, and death. The study supports a view that the substantial scope and magnitude of alcohol’s harm to others is an important aspect to be considered in making policy decisions about the availability and control of alcoholic beverages in Australia.

Measured within the small time frame of one year, it appears that a large proportion of the Australian population has had an adverse experience because of others’ drinking. A substantial minority report that they have been adversely affected ‘a lot’ by the drinking of others. It appears that younger Australian adults bear much of the brunt of the drinking of others: younger women are more likely to report harms from the drinking behaviour of family members, whereas both younger men and younger women were more likely to report harms from the drinking of friends or strangers. The types of harms experienced when the drinker was someone known to them were quite diverse. The most common response was that the drinker had negatively affected social occasions, but emotional hurt or neglect, involvement in serious arguments, or that the drinker had “failed to do something they were being counted on to do” were also reported. Some who reported that they had been negatively affected by the drinking of someone they knew indicated that they had to stop seeing the person who had most affected them because of their drinking. Many reported that they had been affected by strangers’ drinking. These harms range from minor annoyances, such as, those who report being kept awake, to more severe harms such as physical violence. Almost half of respondents reported that they had been threatened, physically assaulted, or had their property or belongings damaged as the result of a stranger’s drinking.

An important aspect of the study is that not only has it has quantified the amount of harm that has occurred because of alcohol in a given year, but has also been able to map the social location of the harm, both for the drinker and for those adversely affected. The picture as seen through the frame of the general population survey is complemented with the pictures that appear through the frames of the social response agencies – the police, health services, treatment agencies, child protection agencies, helplines, and so on. The harm to others for drinking can be very severe, and it is widespread and broad-ranging in the population.

This research has also developed novel methods for costing different aspects of alcohol’s harm to others, and applied these methods to estimate costs to others from the alcohol-related behaviour of heavy drinkers. This is a novel finding, as costs attributable to alcohol that are incurred to others around the drinker are estimated. In terms of tangible costs, as reported by a representative sample of the Australian population, heavy drinkers are estimated to have cost others around them in excess of A$13 billion per annum in out-of-pocket costs and in forgone wages or productivity. Hospital and child protection costs to the society due to another’s drinking sum to a further A$765 million. In addition, there are large intangible costs, estimated at a minimum of A$6 billion dollars. These negative externalities or ‘passive drinking’ costs of alcohol need to be factored into debates regarding implementation of effective alcohol policies. As a general observation, it would seem that the current systems of estimating health, social or legal costs have failed to account for the real costs of alcohol-related harm. It is hoped that the research approaches and tools used in this study will find further application in future studies.

The wider policy context for the safe and efficient operation of the Australian road transport system

Australia has, to date, withstood the 2008 Global Financial Crisis well, and has remained relatively prosperous despite global economic challenges. The level of consumption of goods and services has remained high within the Australian economy, continuing to maintain strong levels of consumer purchases (including alcohol products), as well as high levels of motor vehicle usage and distances travelled by vehicle.

The major review of Australia’s taxation regime – formally, the Future Tax System Review, but informally known as the Henry tax review after its chairman, Ken Henry, the Secretary to the Treasury – has potential impacts in the longer term. The goal of the review was to make recommendations to position Australia to deal with future demographic, social, economic and environmental challenges. The review examined Australia’s national and State or Territory government taxes, and the interactions of these taxes within the broader economy. Some relevant policy issues identified that broadly affect the road transport system include the likely introduction of road pricing regimes (congestion pricing, parking levies, etc.), the effect of granting road tolling concessions to promote construction and enhancement of the road network, taxation of fuels, and licensing and vehicle registration charges. Such broader policy

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24 See: http://taxreview.treasury.gov.au for full access to the review reports, transcripts of speeches, submissions received, and associated documentation.

issues designed to address economic efficiencies will, no doubt, impact on the safe operation of the road transport system. However, it remains difficult indeed to forecast the effect of any such changes on road safety and road trauma. Despite this uncertainty, our view is that the situation appears positive.

In 2010, the number of deaths on Australia's roads was the lowest annual count since 1949\(^{26}\), despite there being three times as many people on our roads and thirteen times more vehicles than in 1949. In the shorter term, there was an 8.2% reduction compared to 2009, and over the past five years, all Australian jurisdictions, except Western Australia, have evidenced road toll reductions. There has been a 24.7% reduction in Australian road deaths compared to 2000, a decade ago, with, in particular, a reduction of 34.6% in the number of deaths among road users aged 25 years and under. As indicated earlier, unfortunately no general information is available about trends in drink driving (and drug driving) within these statistical reporting mechanisms. Yet, such information would seem crucial; the general reductions in road trauma have not been reflected for particular road user classes (motorcycles, bicycles), so, for example, the observed increases in motorcycle-related trauma might well be related to alcohol factors\(^{27}\).

A particular element of the review of Australia's taxation regime that could potentially be very beneficial to address alcohol-related harm is the reform of taxation of alcohol products. In particular, volumetric taxing of alcoholic products can provide a fairer way of addressing alcohol pricing. A modified volumetric alcohol tax enables the targeting of the most harmful drinkers and allows for the compensation of societal costs of harmful alcohol use in proportion to the amount that drinkers consume\(^{28}\), having its largest effect on heavy drinkers who put their own health at risk and who also affect the health of non-drinkers as a consequence of alcohol-related road crashes, assaults, neglect of children, and the costs of policing public nuisance arising from intoxicated behaviour.

Overall, it is considered that the reductions point to the success of the many road safety programs implemented as part of the National Road Safety Strategy 2001-2010 by all levels of government over the last 10 years. Research in 2009\(^{29}\) had indicated, through an analysis of the Victorian road fatality rate, that a combination of increased seat belt wearing, random breath testing, and deployment of speed cameras could explain almost all of the reduction in the Victorian road fatality rate since the late 1960s. In 2010, this approach was extended to an analysis of road fatalities in all Australian states and territories, using actual measurements of state rates of seat belt wearing, as well as random breath testing and speed camera enforcement back to the inception of the programs in each state, as well as estimates of vehicle kilometres travelled (used to derive an 'exposure to death' variable). The results of this analysis confirm the


findings of the earlier paper: seat belt wearing, random breath testing, and speed cameras can explain almost all of the variation in fatality rates in all Australian states and territories since the late 1960s:

The overall effect of the three countermeasures was truly tremendous. The absolute number of fatalities per quarter in Australia in 2010 was less than 40 per cent of the number per quarter in the late 1960s. This was in the face of traffic growing by a factor of more than three and a half times. Thus the fatality rate has fallen to about 1/10 of its value in the late 1960s. Another way of saying this, is that the absolute number of road deaths per quarter would be 10 times the current value, if these successful countermeasures had not been put in place. The modelling of that process of fatality reduction presented here shows promise in allowing an understanding of the short-term dynamics of state fatality rates, as well as of the implications for long-term policy targets. (p. 17) 30

Interestingly, when considering the longer term outlook, an important question arises as to whether continuing improvements in road infrastructure and vehicle safety will result in a further downward trend in road fatality rates, or be counterbalanced by increases in unsafe behaviour, unsafe infrastructure or unsafe technologies (e.g., driver distraction resulting from in-vehicle technologies such as mobile phones, social and cultural perspectives as to what may be dangerous or at-risk driving, changes to road usage patterns associated with road pricing, etc.):

In the last five years, seat belt wearing has probably peaked at a high 90 per cent level in most states. Thus if RBT and speed camera enforcement grows only enough over the next decade to accommodate traffic growth, then the forecast is for fatality rates to remain constant. But if the absence of a downward trend has been due to negative trends in driver behaviour balancing improvements in roads and vehicles, that analysis might change. Because if it is assumed that negative trends like mobile phone usage are near some saturation point, then positive trends in road and vehicle safety (e.g. electronic stability control) may come through in the next decade unmasked. In addition, if negative driver behaviours can in fact be reduced through enforcement efforts, this could make the expected downward trend in the net effect even more pronounced than shown. (p. 16) 31

With the new National Road Safety Strategy 2011-2020 now substantially complete, some, if not most of the road safety policy and program development pathways for the next 10 years are about to be put in place.

The Northern Territory – a particular challenge

Australia’s good road safety record has one aspect that remains of major concern: the Northern Territory performs markedly poorly compared to other Australian jurisdictions. The road toll for the Northern Territory for 2010 was 50 deaths, whereas in 2009 the road toll was 31 deaths (the lowest toll for three decades). Alcohol-related harm is of major concern in the Northern Territory. During 2010, a study of alcohol consumption and its associated harm over the 2004-2006 period reported that Territorians outdrink the rest of the nation every year by twofold, and they are three times more likely to die from an alcohol-related cause. People in the Northern Territory drink about 14 litres of pure alcohol over a year, or about twice as more than that consumed by Australian drinkers in general. Territorians also die from alcohol-related causes at more than three times the rate seen across the rest of the country, and with about 2,400 alcohol-related admissions to Northern Territory hospitals each year this is more than double the population rate seen nationally. There were about 120 alcohol-related deaths in the Northern Territory in 2004-05 and again in 2005-06, corresponding to a rate of about 7.5 deaths per 100,000 in the population - about 3.5 times the rate of alcohol-related deaths seen across Australia generally. Cirrhosis of the liver, suicide and road crashes are the three most common alcohol-related causes of death in the Northern Territory. Drink driving is a significant issue, with 48% of the Northern Territory’s road fatalities involving an illegal blood-alcohol concentration (compared with less than 30% in the other Australian jurisdictions, e.g., in 2009 in New South Wales about 21% of road fatalities were the result of a crash involving a driver or rider with a blood alcohol level above the legal limit). The Northern Territory has a high indigenous Australian population, but excessive alcohol consumption and harm were evident across the whole Northern Territory community, not just in indigenous communities. People in the Northern Territory are characterised by fewer abstainers, fewer low-risk drinkers and more risky and high-risk drinkers compared with Australian averages.

The situation is not completely bleak, however. The 2010 Operation RAID policing blitz found that the number of drink drivers on Northern Territory roads had dropped dramatically. Police said they believed Northern Territory motorists may be getting the message about drink driving. More than 10,000 drivers across the Territory were breath-tested as part of the operation, which was conducted nationwide and in New Zealand, and 163 motorists returned a positive result above 0.08 BAC - a drop of 39% compared to 2009. Nationwide and in New Zealand, the numbers of offenders also dropped with 35% less drivers caught drink driving.

Nonetheless, a particular challenge facing the new National Road Safety Strategy 2011-2020 will be to ensure that the road safety policy and program development pathways for the next 10 years support the Northern Territory community as much as the remainder of Australia.

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32 Ian Faulks, together with Rebecca Ivers and Mark Stevenson, was appointed as the Northern Territory Road Safety Expert in 2007. Associate Professor Ivers and Professor Stevenson were from the George Institute for International Health, University of Sydney (now renamed the George Institute for Global Health; Mark Stevenson is now at the Monash University Accident Research Centre)


Concluding comments

Much of this paper has focused, and we would argue correctly so, on the development of the new National Road Safety Strategy 2011-2020 for Australia. In its current draft form, the National Road Safety Strategy 2011-2020 aims to achieve, by 2020, the elimination of driving while impaired by alcohol as significant contributors to road trauma in Australia. The first steps – proposed actions for the first three years, 2011-2013 are:

- to work in partnership with police to strengthen the deterrence effect by refreshing the scale, time and location targeting, and awareness of random breath testing and random roadside drug testing programs;
- to review, in consultation with stakeholders and the community, the application of BAC limits currently applying to certain licence categories;
- to require demonstrated rehabilitation from alcoholism before removal of alcohol ignition interlock conditions (for repeat offenders); and
- to expand the use of vehicle sanctions for repeat drink driving offences.

Further steps that may be considered include:

- consultation with stakeholders and the community in order to examine the scope to reduce the legal blood alcohol concentration (BAC) limit for all drivers;
- extending the application of alcohol interlock technology to cover a wider segment of drink driving offenders, through commissioning research on options to extend alcohol interlock applications to other high-risk road user groups and potentially to the broader driver population;
- encouraging the voluntary use of alcohol interlocks by corporate fleets and other drivers;
- reviewing (with liquor control commissions and the health and police sectors) the adequacy of operating responsibilities applying to venues for responsible alcohol serving;
- compulsory blood testing for alcohol for all drivers involved in serious casualty crashes in all Australian jurisdictions; and
- investigating the use of new technologies to minimise driver error and automatically monitor driver performance, including performance affected or impaired by alcohol.

The wider context of alcohol use across Australian communities remains important, but a critical step in addressing alcohol control and drink driving is to establish a robust strategic policy context.