



PARLIAMENTARY TRAVELSAFE COMMITTEE

REPORT NO. 53

NOVEMBER 2008

REPORT ON THE CONFERENCE ON HIGH RISK ROAD USERS BRISBANE, 18 – 19 SEPTEMBER 2008

FOREWORD

On the 18th and 19th of September 2008, the Travelsafe Committee, together with the Australasian College of Road Safety Inc, the peak non-government road safety body in Australia and New Zealand, co-hosted a national conference in the Parliamentary Annexe. The conference examined the value of behavioural countermeasures including education, enforcement and encouragement for dealing with high risk road users. High risk road users and behaviours are at the heart of some of the most pressing problems on our roads such as drink driving, drug driving, driving tired, unlicensed and disqualified driving, and speeding.

210 delegates attended the conference from around Australia and other countries including the United States of America, New Zealand, France, Pakistan, Vietnam, China and Fiji. The conference provided a useful and timely forum for researchers and practitioners to share ideas, pool knowledge and challenge current paradigms. This report highlights some of the main issues and discussions from the conference.¹

The committee thanks the Australasian College of Road Safety for co-hosting this important event and the keynote speakers and other delegates who presented papers. The committee also acknowledges the support of conference sponsors - the NRMA ACT Road Safety Trust, Motor Accident Insurance Commission, Queensland Transport, RACQ, COZART and the Centre for Accident Research and Road Safety – Queensland. I commend this report to the House.


Jo-Ann Miller MP
Chair

HIGH RISK ROAD USE

The term 'high risk road users' encompasses a range of groups that, by virtue of their demographics, how they travel or their propensity to engage in illegal or risky behaviours, have significantly increased crash and injury risks. Many high risk road users include ordinary people who take extraordinary risks, for example:

- drivers who speed through school zones;
- drivers who drive through intersections after the lights have turned red;
- drink walkers;
- drivers and passengers who don't wear seat belts;
- drivers who drive despite being impaired by fatigue; and
- young drivers, whose first year on the road will be the most dangerous.

Others take risks as a way of life:

- recidivist drink drivers;
- drivers who have never been licensed to drive;
- disqualified drivers who continue to drive;
- drivers who take drugs to delay the onset of fatigue while driving;
- drivers with total disregard for others; and
- drivers who continue to drive despite dangerous medical conditions that impair their driving.

CONFERENCE OBJECTIVES

Our objectives in co-hosting the conference were:

- to bring together leading road safety researchers and practitioners to share their knowledge about high risk road users and the value of behavioural countermeasures to modify their behaviour; and
- to raise awareness of, and interest in, behavioural countermeasures to address the problems posed by high risk road users.

¹ Conference proceedings are available at:
<http://www.parliament.qld.gov.au/TSAFE>

CONFERENCE SPEAKERS

Hon John Mickel MP, Minister for Transport, Trade, Employment and Industrial Relations opened the conference. The Minister spoke passionately of his desire to alter motorists' attitudes towards speeding so that it carries the same stigma as drink driving.

Four keynote speakers who are experts in designing and implementing behavioural countermeasures for high risk road users delivered the plenary sessions:

- Associate Professor Raymond Bingham, Social and Behavioural Analysis Division, University of Michigan Transportation Research Institute;
- Associate Professor Rebecca Ivers, Director of the Injury Division, The George Institute for International Health;
- Professor Simon Washington, Department of Civil and Environmental Engineering, Ira A. Fulton School of Engineering, Arizona State University; and
- Emeritus Professor Mary Sheehan AO, Former Director of the Centre for Accident Research and Road Safety – Queensland.

The program included a further 40 invited papers by academics and practitioners. A full list of papers is provided at the end of this report.

The invited papers were presented in 10 themed sessions over the two days:

- behaviour change strategies;
- novice driver countermeasures;
- understanding young driver behaviour;
- school and community-based approaches I;
- school and community-based approaches II;
- research methods and prevalence studies;
- impaired driving countermeasures;
- vulnerable road users;
- speeding countermeasures; and
- penalties and sanctions.

KEYNOTE PRESENTATIONS

Associate Professor Ray Bingham

Associate Professor Bingham discussed parental influences on children's driving behaviour. He suggested that parental interventions for driving behaviour could be modelled on interventions used to reduce smoking and drinking, and to boost school performance and self-esteem.

Governments and agencies in the United States are seeking to increase parental involvement in driver training through a program called 'Checkpoints'. This is a self-administered program designed to assist parents to work with their children to increase positive driving behaviour. Under the program, parents and children co-sign a behavioural contract and periodically review their behaviour (checkpoints). The program complements the limits imposed through graduated driver licensing. Initial trial evaluations have shown that the Checkpoints program increases parents' awareness of driving risks and reduces traffic violation rates among young drivers.

Associate Professor Bingham also spoke of the importance of supervised driving practice for young novice drivers, and the feasibility of developing an intervention for parents to guide them through the supervised driving task. He also suggested further research of the different approaches to supervised driving and their effects on driving experience. In his closing summary, Associate Professor Bingham stressed the importance of evaluating road safety programs.²

Associate Professor Ivers

Associate Professor Ivers also addressed young driver safety in terms of current knowledge and practice, what could be enhanced, and future developments. 389 (or 24 per cent) of the 1,616 road fatalities that occurred in Australia during 2007 were young drivers. Although the number of road fatalities has fallen over the last 25 years, young drivers are still over-represented, and motor vehicle crashes remain the leading cause of death in young people. Young drivers at greatest risk are indigenous, from low socioeconomic backgrounds or living in rural areas. On a gender basis, males of all ages have significantly higher fatality rates as passengers, pedestrians and motorcyclists compared to females.

² Bingham, R. (2008) 'Parental influences on their children's driving outcomes: Research and applications'. In *Proceedings High risk road users - Motivating behaviour change: What works and what doesn't work?*, Brisbane.

Associate Professor Ivers suggested that, from a developmental psychology perspective, managing the risk in young drivers stems from managing the transition phase to adulthood. Countermeasures that target the increased risk taking associated with this period are needed to ensure young drivers make the transition safely.

Graduated licensing systems have proven to be effective in reducing fatal and injury crashes in young people by up to 30 per cent during the provisional licensing stage. More specifically, passenger and night driving restrictions have reduced fatal and injury crashes by 20 per cent. Associate Professor Ivers suggested there remains a need for further research of towing and speed restrictions for young drivers as well as hazard perception testing.

Associate Professor Ivers also noted the importance of reviewing road safety interventions, and stressed the need for programs to be designed for evaluation. She stressed the need for road safety programs that are cost-effective and address the needs of disadvantaged groups.³

Professor Simon Washington

Speaking on the morning of the second day of the conference, Professor Simon Washington discussed his work on a fixed-camera speed enforcement program in Arizona in the United States. The program was implemented on a stretch of highway in the city of Scottsdale.

The trial evaluation found the cameras reduced average travelling speeds by ten miles per hour (16 kilometres per hour) and led to less speeding and dramatic reductions (50 percent) in all categories of crashes except 'rear-enders'. The study also noted that the reduced average traffic speeds actually improved traffic flow and reduced travel times. Professor Washington raised the issue of public acceptance of speed camera programs. Despite a high level (70 percent) of public acceptance of the program, a vocal minority remained opposed. He also noted operational concerns such as an increase in the number of rear-end crashes at the start and finish of the enforcement zone.⁴

³ Ivers, R. 'Young driver countermeasures: What does the future hold?', In *Proceedings High risk road users - Motivating behaviour change: What works and what doesn't work?*, Brisbane.

⁴ Washington, S. 'Impacts of automated speed enforcement on freeways: Initial US evidence and international comparison', In *Proceedings High risk road users - Motivating behaviour change: What works and what doesn't work?*, Brisbane.

Emeritus Professor Mary Sheehan

Emeritus Professor Mary Sheehan addressed high risk road use from a different perspective, drawing on her work on the Rural and Remote Road Safety Research Program.⁵ This work provided her with an intimate knowledge of the personal circumstances of people involved in crashes.

Professor Sheehan suggested that there has been an over-reliance on coercive measures in road safety in Australia, and that coercive controls may not be ideal for addressing impairing behaviours such as illicit drug use, inattention, driving tired, distraction, and physical conditions or ailments. Instead, she suggested people need to take responsibility for, and control, their own risk taking.

Professor Sheehan proposed that road safety initiatives and campaigns need to create a community awareness of impairment problems and a strong consensus that impaired driving is not acceptable. Community education could play a central role in creating this consensus and communicating the important message that drivers must be physically and mentally fit to drive safely. She also raised concerns about the lack of progress in implementing alcohol interlock programs in Australia, the value of audio-tactile road markings, the lack of a common accepted definition of fatigue crashes and the absence of specialised training for police to better identify the signs of fatigue crashes. Professor Sheehan also noted the significance of driver distractions as a cause of crashes.⁶

In terms of personal responsibility for road safety, Professor Sheehan offered the following advice she received from a miner in Mount Isa about how miners plan for and take responsibility for their actions and safety underground:

I think the way to make things safer is to come at driving the way we come at going underground for the day at our mine. Before you start you need to think for a few minutes about the job ahead. You know, what you have to do, what you might need and what could go wrong and how you could watch out for it and if the worst comes to the worst how you could pull out of it as safely as possible. I reckon if we did that before every drive out here we wouldn't come a cropper.⁷

⁵ Completed in 2008, the Rural and Remote Road Safety Research Program was a five year program of research into serious crashes in North Queensland funded predominantly by the Queensland Government. The final report is available at http://www.carrsq.qut.edu.au/documents/Monograph_3.pdf

⁶ Sheehan, M. 'Impaired driving – Current priorities and challenges for the future,' In *Proceedings High risk road users - Motivating behaviour change: What works and what doesn't work?*, Brisbane.

⁷ Sheehan, Conference Transcript, 19 September 2008, p. 10.

CONFERENCE OUTCOMES

For the closing session on the second day, the conference organising committee invited four delegates to form a panel to identify the conference outcomes and key themes from the discussions. The panel members were:

- Associate Professor Raymond Bingham, Social and Behavioural Analysis Division, University of Michigan Transportation Research Institute;
- Emeritus Professor Mary Sheehan AO, Centre for Accident Research and Road Safety - Queensland;
- Mr David Healy, Senior Manager of Road Safety, Traffic Accident Commission; and
- Ms Pam Palmer, Senior Manager (Policy) Land Transport and Safety Division, Queensland Transport.

Associate Professor Barry Watson of the Centre for Accident Research and Road Safety – Queensland chaired the panel session and also contributed to the discussions.

A key observation from the panel discussion is the need for a national road safety agenda, and consistent national approaches to initiatives/countermeasures and their evaluation and research. Graduated licensing, while effective, would benefit from further research conducted at a national level and a consistent national model for its implementation. Panel members acknowledged the broad range of behavioural countermeasures presented at the conference and efforts to evaluate them. Evaluation holds the key to good policy development and recognising the possible unintended consequences of road safety programs.

In terms of identifying a priority high risk road user group for further work, there was a consensus of views from the discussions that young drivers remain a priority high risk road user group, despite licensing reforms already implemented to reduce their elevated crash risks in Australia. Also related to young drivers, there is a need for further work on the role that parents and parenting play in improving young driver safety. In order to make improvements to road safety practice, panel members acknowledged the need to foster greater collaboration between researchers and practitioners, and that this had been an aim of the conference. A mix of inputs from researchers and practitioners is critical for achieving good programs.

Finally, the panel acknowledged the importance of parliamentary involvement and support to achieve progress in road safety.

CONCLUSIONS

As the title of the conference reflected, the sessions sought to identify the value of behavioural countermeasures in modifying the behaviour of high risk road users, and to identify those countermeasures which are working and those that require modification.

The papers and presentations provided at the conference confirmed repeatedly that the majority of behavioural countermeasures work very well and are the backbone of road safety programs in Australia and elsewhere. The value of some community-based countermeasures is less convincing, in part because they haven't been properly evaluated or at least designed for evaluation. Often it comes down to the lack of resources. Despite this, community-based initiatives remain a vital link between road safety and the community.

The strongest evidence of the worth of behavioural countermeasures comes from studies of programs that target speeding (speed cameras) and alcohol impairment (random breath testing). These road user behavioural problems have received solid attention from researchers and practitioners over many years. The countermeasures are also relatively straightforward to evaluate.

There will always be a place for coercive measures but they are not the only answer. It is time to think outside the box. The conference featured some excellent papers considering different forms and approaches to behavioural countermeasures. Of particular note was a program to provide courtesy buses to separate drinking from driving and reduce drink driving in rural areas, and the Pinkie campaign, an advertising campaign targeted squarely at perilous driving behaviour by young males.

Looking to the future, we were inspired by the keynote presentation provided by Professor Mary Sheehan. Professor Sheehan proposed simply that people need to be encouraged to take responsibility for, and control, their own risk taking on the road. We look forward to exploring this further in the future. From the discussions, we also note the importance of adopting a national approach to road safety in Australia and the need for further work to tackle the very high risks faced by young drivers on our roads.

THE TRAVELSAFE COMMITTEE

The Travelsafe Committee is a select committee of the 52nd Parliament. The committee is required to monitor, investigate and report on all aspects of road safety and public transport in Queensland, particularly:

- Issues affecting road safety including the causes of crashes and measures aimed at reducing death, injuries and economic costs to the community;
- The safety of passenger transport services, and measures aimed at reducing the incidence of related deaths and injuries; and
- Measures for the enhancement of public transport in Queensland and reducing dependence on private motor vehicles as the predominant mode of transport.

COMMITTEE MEMBERS

Mrs Jo-Ann Miller MP (Chair)	Member for Bundamba
Mr Chris Foley MP (Deputy Chair)	Member for Maryborough
Dr Bruce Flegg MP	Member for Moggill
Ms Lillian van Litsenburg MP	Member for Redcliffe
Mr Ted Malone MP	Member for Mirani
Mr Phil Reeves MP [until 28 Oct 2008]	Member for Mansfield
Mr Jim Pearce MP [from 28 Oct 2008]	Member for Fitzroy
Mrs Desley Scott MP	Member for Woodridge

COMMITTEE SECRETARIAT

Mr Rob Hansen	Research Director
Ms Erin Pasley	A/Senior Research Officer

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CONFERENCE PROGRAM

Day 1

18 September 2008

Plenary Session

Parental influences on their children's driving outcomes: Research and applications. *Bingham, R.*

Young driver countermeasures: What does the future hold? *Ivers, R.*

Behaviour change strategies

Can we rely on Deterrence Theory to motivate safe road user behaviour? *Elliott, B.*

Psst – you know they're not the same as us: A psychologist's view of motivation and behaviour change in relation to high risk road users. *Harrison, W.A.*

Predicting future speeding behaviour: The appeal of positive emotional appeals for high risk road users. *Lewis, I., Watson, B., & White, K. M.*

Experienced Driver Behaviour Change – A review of approaches used in United States, Sweden, Denmark and the Netherlands, and some recommendations for action in Australia. *Waldock, J.*

Novice driver countermeasures

The structure of the learner licence affects the type of experiences novices gain during this phase: Examples from Queensland and New South Wales. *Bates, L., Watson, B., & King, M.*

A trans-disciplinary community-based approach to education for positive behavioural change in young drivers as high risk road users. *Nalder, G., Menzies, V., & Kendall, E.*

New licensing laws for young drivers in Queensland. *Stapleton, M.*

Reaching young drivers: Fire services contribution to a community based approach. *Hale, J.*

Understanding young driver behaviour

The role of risk-propensity in the risky driving of younger and older drivers. *Hatfield, J., & Fernandes, R.*

Recent findings on developmental issues and the role of parents. *Senserrick, T.M.*

Can personality characteristics and attitudes predict risky driving behaviour among young drivers? *Wundersitz, L., & Burns, N.*

Gender, age and motor vehicles - which combination is highest risk? *Redshaw, S.*

School and community-based approaches I

The relevancy of 'mates don't let mates..' as a key strategy for a school curriculum-based road safety program. *Buckley, L., & Sheehan, M.*

Keeping it real: an education program where the presenters are the power. *Haffke, C.*

Attitudinal Driving Workshops. *Hayes, D., & Flanders, F.*

An evaluation of attitudinal driving workshops. *Champness, P.*

Research methods and prevalence studies

What makes a behaviour 'risky'? Measurement issues and methods. *King, M.*

Motor vehicle theft and road crashes in New South Wales. *Hedayati, H. & Ziersch, E.N.*

Development of a proactive brief road safety intervention for industry: Identifying issues associated with implementation. *Rowland, B., Davey, J., Freeman, J., & Wishart, D.*

Screening for drugs in oral fluid: Illicit drug use and drug driving in a sample of metropolitan versus regional Queensland motorists. *Davey, J., & Freeman, J.*

School and community-based approaches II

Overcoming the Cultural Divide Part II - Lessons unlearned. *Somssich, E.*

Motivating behaviour change in young drivers: What role can education, trainers and parents play? *Saville, T.*

The Fatality Free Friday road safety campaign - A strategy for mobilising the community ownership to improve road safety. *White, R.*

Motivating behaviour change among high risk road users: Why is there no science of driving? *Smith, G.*

Plenary Session

Impacts of automated speed enforcement on freeways: Initial US evidence and international comparison. *Washington, S.*

Impaired Driving – Current priorities and challenges for the future. *Sheehan, M.*

Impaired driving countermeasures

“Pubs and Clubs” Project – modifying risky alcohol-related on-road behaviours. *Healy, D., Cockfield, S., Mallick, J., & Banfield, K.*

Catch Ya Later Condo - an alternative transport option for rural communities. *Suitor, M.*

The impact of new oral fluid drug driving detection methods in Queensland: Are motorists deterred? *Freeman, J., & Davey, J.*

An evaluation of the ‘Skipper’ designated driver program: Preliminary results. *Watson, B., & Nielson, A.*

Vulnerable road users

Motorcycle safety apparel wearing among commuter and recreational riders. *Wishart, D., & Watson, B.*

Addressing road user behavioural changes at railway level crossings. *Taylor, K.*

How much does disregard of road rules contribute to bicycle-vehicle collisions? *Schramm, A., Rakotonirainy, A., & Haworth, N.*

Extending the Useful Field of View paradigm for screening older drivers. *Hatherly, C., & Anstey, K. J.*

Speeding countermeasures

Speed enforcement – Effects, mechanisms, intensity and economic benefits of each mode of operation.
Cameron, M.H., & Delaney, A.K.

Speed enforcement programmes in France and Queensland: First elements for a systematic comparison.
Carnis, L., Rakotonirainy, A., & Fleiter, J.J.

The success of the ‘Pinkie’ campaign - Speeding. No one thinks big of you: A new approach to road safety marketing. *Watsford, R.*

Evaluating the impact of ‘Speed Kills Kids’ campaign in New Zealand school zones. *Antoun, F.*

Penalties and sanctions

Victoria’s Anti-Hoon legislation and policing methods used to prevent hooning behaviour. *Perry, S., & McGillian, T.*

Immediate licence suspension to deter high-risk behaviours. *Sooile, D., Haworth, N., & Watson, B.*

Driving while disqualified or suspended in Victoria: When little works. *Hoel, A., & Freiberg, A.*

Targeting unlicensed and disqualified drivers: Furthering vehicle impoundment legislation in Queensland. *Cross, C.*

COMMITTEE REPORTS

1. Annual Report for the period 10 May 1990 to 30 June 1990 – Tabled 05/09/90
2. The need for some form of compulsory periodic inspections of passenger vehicles as an effective means of reducing road crashes and the severity of associated injuries, and the need to improve the standards of motor vehicle repairs as a means of improving vehicle and road safety – Tabled 04/12/90
3. Road Safety Education and Traffic Law Enforcement – Tabled 04/09/91
4. Annual Report 1990/91 – Tabled 02/10/91
5. Bicycle Safety – Tabled 28/11/91
6. Achieving High Levels of Compliance with Road Safety Laws - a review of road user behaviour modification – Tabled 18/03/92
7. Road Environment and Traffic Engineering – Tabled 28/04/92
8. Annual Report 1991/92 – Tabled 25/08/92
9. Pedestrian and Cyclist Safety – Tabled 15/07/93
10. Annual Report 1992/93 – Tabled 18/11/93
11. The Safety and Economic Implications of Permitting Standees on Urban and Non-Urban Bus Services – Tabled 18/11/93
12. Local Area Traffic Management – Tabled 28/04/94
13. Annual Report 1993/94 – Tabled 27/10/94
14. The Desirability of Requiring Compulsory Third Party Insurance Cover for Boats and Trailers – Tabled 22/11/94
15. Speed Cameras: Should They Be Used in Queensland – Tabled 24/11/94
16. Report on Driver Training and Licensing – Tabled 03/04/96
17. Annual Report 1995/96 – Tabled 04/09/96
18. Queensland's Road Toll: An Overview – Tabled 08/12/96
19. Queensland's Road Toll: Drink Driving (Part 1) – Tabled 08/12/96
20. Unsecured Loads – Tabled 16/05/97
21. Annual Report 1996/97 – Tabled 18/11/97
22. Compulsory BAC Testing – Tabled 12/12/97
23. Brisbane's Citytrain Network - Part One - Safety of the Rail System and Infrastructure – Tabled 15/12/97
24. Brisbane's Citytrain Network - Part Two - Passenger Safety – Tabled 08/05/98
25. Shared Bikeways – Tabled 05/06/98
26. Annual Report 1997/98 – Tabled 15/09/98
27. Unlicensed, Unregistered and on the Road and Executive Summary – Tabled 22/07/99
28. Annual Report 1998/99 – Tabled 16/09/99
29. Drug Driving in Queensland and Conclusions and Recommendations – Tabled 09/11/99
30. Report on the meeting of Australasian Parliamentary Road Safety Committees and Ministerial Advisors - Brisbane 13 May 1999 – Tabled 10/12/99
31. Report from a symposium on international visitors and road safety in Australia - Brisbane 14 May 1999 – Tabled 21/01/00
32. Report on Queensland Transport's Road Safety Statistical Methodologies – Tabled 14/07/00
33. Annual Report 1999/2000 – Tabled 05/10/00
34. Report on the symposium on work-related road trauma and fleet risk management in Australia, Brisbane 10 August 2001 – Tabled 18/04/02
35. Annual Report 2000/01 – Tabled 09/08/01
36. Rural Road Safety in Queensland – Tabled 16/05/02
37. Annual Report 2001/02 – Tabled 29/10/02
38. Public Transport in South East Queensland – Tabled 04/12/02
39. Annual Report 2002/03 – Tabled 16/10/03
40. Reducing the road toll for young Queenslanders – is education enough? – Tabled 22/12/03
41. Provisional driver and rider licence restrictions – Tabled 22/12/03
42. Annual Report 2003/04 – Tabled 05/10/04
43. Driving on empty: fatigue driving in Queensland – Tabled 06/10/05
44. Annual Report 2004/05 – Tabled 08/11/05
45. Annual Report 2005/06 – Tabled 10/08/06
46. Getting Tough on Drink Drivers – Tabled 31/10/06
47. Report on the Inquiry into Q-RIDE – Tabled 25/06/07
48. Investigation into the road safety implications of mandatory 12 hour shifts for Jilalan Traincrew – Tabled 29/06/07
49. Annual Report 2006/07 – Tabled 10/08/07
50. Investigation into child deaths and injuries from low speed vehicle run-overs – Tabled 6/08/07
51. Report on the Inquiry into Automatic Number Plate Recognition technology – Tabled 11/09/08
52. Annual Report 2007/08 – Tabled 9/10/08

AVAILABILITY OF COMMITTEE REPORTS

Copies of committee reports and other Travelsafe publications are available on the Internet via the Queensland Parliament's home page at: www.parliament.qld.gov.au/tsafe.htm