



Distracted Driving

**Proceedings of an international conference on the distractions in driving,
held in Sydney, Australia, 2-3 June 2005**

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Australasian College of Road Safety

Promoting and implementing improved road safety practices

Patron: His Excellency Major General Michael Jeffery AC CVO MC (Retd)
Governor-General of the Commonwealth of Australia

The Australasian College of Road Safety was established in 1988 as an association for individuals and organisations working in or interested in support road safety. The College is multidisciplinary in its membership, and values experience as much as academic qualifications in its members. Members come from a wide range of disciplines including engineers, epidemiologists, road trauma specialists, researchers, driver trainers, enforcement agencies, policy makers, industry representatives, motoring associations, insurance companies and many other who have a stake in road safety.

The objectives of the Australasian College of Road Safety are:

- To foster communication, cooperation and support among workers in road safety;
- To disseminate information on road safety and traffic education;
- To encourage community groups to work for the reduction of the road toll;
- To encourage the professional assessment, evaluation and monitoring of road safety programs and to promote those most effective in reducing road trauma;
- To provide a forum for the promotion of workable road safety programs; and
- To encourage the provision of care and support for victims of road trauma.

To achieve these objectives, the Australasian College of Road Safety undertakes a wide range of activities, including:

- Australasian conferences and seminars, often in partnership with related organisations;
- An annual Visiting Lecture program;
- State Chapter programs such as local seminars, forums, and guest lecturers;
- Workshop series;
- The development and promotion of policies on road safety issues, supported by well-attested evidence, respected research and, where appropriate, acknowledged expertise;
- Submissions to Federal, State and Territory governments on road safety issues; and
- The promotion of best practice in all facets of road safety.

The Australasian College of Road Safety has established several State, Territory and Regional Chapters. Although there are some Australasian-wide activities that are organised each year, most of the College's activities take place at the Chapter level.

The Australasian College of Road Safety annual conference program

An important national activity for the Australasian College of Road Safety is the development of the Australasian conferences and seminars.

The Australasian College of Road Safety annual conference program, in contrast to the annual Road Safety Research, Enforcement and Education conferences and other regular road safety conferences in Australia and New Zealand, provides an opportunity to focus on, and evaluate specific topics. Previous conferences conducted by the College have focussed on issues such as community road safety, young drivers, and pedestrian safety. Some proceeds have been published and are available from the National Office:

Faulks, Ian J., Smith, Ken, B., & Smith, Kerry P. (Editors).(1997). Conference on Young Drivers. Sydney, NSW: Parliament of New South Wales.

Smith, Kerry P., Aitken, Barry G., & Grzebieta, Raphael H. (Editors).(1998). Proceedings of the Conference on Pedestrian Safety. Canberra, ACT: Australian College of Road Safety.

Australian College of Road Safety (1995). Road Safety in the Community Conference Proceedings. Canberra ACT; Australian College of Road Safety.

Foreword

Ian Faulks
Safety and Policy Analysis International

This monograph publishes the proceedings of the first international conference on distractions in driving, held in Sydney, Australia, on Thursday 2 June 2005 and Friday 3 June 2005.

Vehicle telematics are playing a key role in transforming the road transport system. Future vehicles will sense, control, communicate and navigate with increasing levels of autonomy. Satellite navigation systems, digital maps, speed limiting and cruise control are already available in cars and trucks in Australia. These technologies will in turn allow for the development of new concepts in the management of the road transport system ... but will road safety be enhanced by these developments? New technologies can keep drivers aware of their geographic location and guide them to their destination, but can also distract them from the road environment and being alert to risks as they occur. Information, entertainment and communications technologies in the vehicle are making increasing demands on a driver's attention. Also, external demands on the driver's attention are growing with an ever increasing multitude of road signs, traffic signals and advertising billboards.

In the light of these developments, the Australasian College of Road Safety, with its partners— NRMA Motoring & Services, the STAYSAFE Committee, Motor Accidents Authority, the George Institute for International Health, and the Australian Driver Trainers Association—welcomed over 100 delegates from New South Wales, Australia, New Zealand, England, Canada and the United States to the first international conference to examine driver distraction.

The objectives of the conference were:

- To identify the internal and external distractions that should be considered when designing road systems and the ergonomics of the driver environment.
- To explore the future for automation of driver functions and the use of in-vehicle information, entertainment and communications technologies.
- To examine the current research into aspects of driver distraction.
- To discuss possible strategies for road and vehicle design regulation that would enhance road safety.
- To discuss possible enforcement strategies to prevent the new technologies from reducing levels of road safety.

Over two days, conference delegates discussed and debated these issues.

A particular focus of much of the debate about driver distraction has been about the use of mobile telephones, or cell phones. The conference was designed to widen the debate on driver distraction to include a wide range of influences that have the potential to impact on drivers, including in-vehicle technologies, external-to-the-vehicle distractions, and social distractions relating to the presence of children, peer passengers, and the workplace.

Conference presentations explored driver distractions—both in and out of the car—and the impact of these distractions on drivers' performance behind the wheel, over a series of sessions dealing with mobile telephones and traffic law; data collection issues; external distractions; technology issues; and work-related issues.

Driver distraction is increasingly being recognised as a contributory cause of road trauma. As with driver fatigue, driver distraction is notoriously difficult to define and study. While analysis of recorded road crash data indicates that distractions account for at least two per cent of crashes on New South Wales roads, it is likely that this figure does not truly represent the impact of the multiplicity of distractions on driving performance and on crashes. A significant challenge for road safety workers is to develop a crash data records system that allows for the consistent collection of information relating to the role of driver distractions in road trauma.

In all, over twenty papers dealing with issues associated with driver distraction were presented at the conference. These papers are now in the public domain through two means.

First, the conference proceedings were released as a parliamentary paper when the STAYSAFE Committee tabled its report in July 2006. The recommendations made by the Committee are included in this monograph.

Second, this monograph, published by the Australasian College of Road Safety in electronic form as a CDROM, will further assist the ongoing effort involving all Australian jurisdictions to deliver a safe and efficient road transport system to all Australians.

Other recent significant work regarding driver distraction

The Australasian College of Road Safety did not seek to provide a definitive account of issues associated with driver distraction. However, the College noted that following the conference the Victorian government moved to establish a formal inquiry by the Victorian Parliament's Road Safety Committee into distracted driving. The terms of reference established for the Victorian Road Safety Committee's inquiry encompass those issues that were the subject of presentations at the conference.

Inquiry by the Victorian Parliament's Road Safety Committee

The Victorian Parliament's Road Safety Committee is required to inquire, consider and make recommendations on the role of driver distraction in causing crashes. In conducting its inquiry, the Road Safety Committee was asked to seek information from the manufacturers and distributors of mobile telephones and other electronic devices with in-car applications, research organisations, Government and non-government agencies, motoring organisations and the community. In particular, it was indicated that the measures adopted to address the issue of driver distraction in other jurisdictions and countries should be examined. The Road Safety Committee was required to report to the Victorian Parliament by June 2006. The specific heads of inquiry for the Road Safety Committee required consideration of:

- the prevalence of mobile telephone use by drivers and its impact on crash causes;
- the prevalence of in-car video devices, their effect on drivers and impact on crash causes;

- the types of other devices and activities, both inside and outside the vehicle, that may distract a driver's attention from the driving task and lead to unsafe driving;
- the suitability and enforceability of existing laws concerning the use of mobile telephones and other electronic devices by drivers; and
- the possible need for change to legislation or statutory requirements to implement any recommendations made as a result of the inquiry.

The Victorian Parliament's Road Safety Committee commenced public hearings, and in February 2006 took evidence from representatives of a number of research and consulting bodies, as well as from government agencies in New South Wales, during several days of hearings in Sydney. The Committee reported in August 2006. The recommendations made by the Committee are included in this monograph.

Canadian conference on driver distraction

As well, following the Australasian College of Road Safety's conference on distracted driving, the Canadian Automobile Association and the Traffic Injury Research Foundation, also undertook a conference on driver distraction, which was held in Toronto over the period Sunday 2 October 2005 to Wednesday 5 October 2005. The purpose of the Canadian conference was to identify rational and effective programs and policies for controlling the problem of distracted driving, based on solid facts about the magnitude and causes of the problem. Specifically, the objectives were to:

- Determine what is known about the magnitude of the problem, its causes, and consequences;
- Determine what programs and policies can address the problem, and how effective they have been;
- Develop a cooperative plan of action for dealing with distracted driving; and,
- Improve communication, understanding, and awareness of the issue of distracted driving to facilitate cooperation.

The proceedings of this conference, including the conference summary and recommendations arising, have been published on the website of the Traffic Injury Research Foundation: <http://www.distracteddriving.ca/english/index.cfm?url.language=english>

Awards

It is the practice of the Australasian College of Road Safety to acknowledge outstanding contributions to its annual conference program. Two awards are given: best paper presented, and best paper by a young researcher.

The conference organising committee had the difficult task of selecting the winners in these two categories for the 2005 national conference—difficult because of the outstanding quality of some many of the papers and presentations made! The award winners were:

Best paper

Simon Hosking, Kristie Young and Michael Regan, for their paper on the effects of text messaging on young novice driver performance (see pages 155-187).

Best paper by a young researcher

Luke Fletcher, for his paper with Alex Zelinsky on driver state monitoring to mitigate distraction (see pages 487-523).

Acknowledgments

The Australasian College of Road Safety is pleased to acknowledge the support of its sponsors and partners, including:

- NRMA Motoring & Services;
- the STAYSAFE Committee;
- Motor Accidents Authority;
- The George Institute for International Health; and
- Australian Driver Trainers Association

These organisations all contributed to the successful staging of the conference. The College is very grateful for their assistance.

It was my privilege to chair the conference organising committee. In addition to managing the logistics involved in the administration of this international conference, the conference organising committee selected the papers for presentation, and reviewed the manuscripts in accord with the appropriate national tertiary education and research guidelines.

It was also my privilege to be asked to be the editor of this monograph of the conference proceedings. I was assisted in this task by:

- Dr Michael Regan, Monash University Accident Research Centre;
- Mr John Brown, NRMA Motoring & Services;
- Professor Mark Stevenson, The George Institute for International Health;
- Mr Allan Porter, Australian Driver Trainers Association; and
- Dr Julia Irwin, Department of Psychology, Macquarie University.

During the conference, Mr Jim Jefferis, Ms Millie Yeoh and Ms Ashika Cyril provided me with administrative assistance, as did Mr Geoff Horne, then Executive Officer of the Australasian College of Road Safety national office. Following the conference, Mr Bjarne Nordin and Ms Annette Phelps, again with Ms Yeoh, assisted me in the preparation of the conference proceedings.

I am particularly grateful to the STAYSAFE Committee members, and my then Chairman, Mr Paul Gibson MP, for their trust and guidance in supporting and endorsing the conference. The conference proceedings were first released as the STAYSAFE 67 report in July 2006. Since then the report and recommendations made by the Committee have been recognised as important contributions to gaining a better understanding of driver distraction and its roles in driver performance and crash causation.

Finally, I acknowledge the speakers and participants in the conference on driver distraction. In the end, it was their efforts which made the conference an important contribution to understanding distracted driving. For my colleagues and I on the organising committee, their contributions made the event an informative and rewarding experience.

Driver distraction—an introduction

Ian Faulks
Safety and Policy Analysis International

&

Julia Irwin
Department of Psychology
Macquarie University

Lunacy on the road

This morning I drove seven kilometres along the highway to our rural city [Bathurst]. The person I followed adjusted the rear vision mirror, ate breakfast, attended to her hair and make-up, and answered the obligatory phone call.

We wonder why we have accidents on our highways. No amount of government money can prevent accidents when this type of behaviour is common.

(Letter to the Editor, Sydney Morning Herald, Thursday 25 May 2006, p. 10)

So wrote a recent correspondent to a major Sydney metropolitan newspaper. Her comments provide a pithy summary of the kinds of behaviour in which drivers after often observed engaging during their trip, and yet they still arrive at their destination after juggling safety and risk on the road. This is the challenge facing road safety workers—drivers are either ignorant of, or discount, the risks to their own safety and the safety of others due to distractions when driving.

The problems associated with driver distraction are now being recognised as an emerging road safety issue. There is now a large and converging body of evidence that indicates that driver distractions of various kinds may—and often do—degrade driving performance, increase crash risk, and cause crashes. Driving is a complex task and can be dangerous. Advances in in-car technology do add to driver comfort and improve the conduct of the driving task, but these advances must also improve driver and passenger safety and the safety of other road users, such as cyclists and pedestrians, outside the motor vehicle.

A general working definition of driver distraction could be:

Distraction involves a diversion of attention from driving, because the driver is temporarily focusing on an object, person, task, or event not related to driving, which reduces the driver's awareness, decision-making, and/or performance, leading to an increased risk of corrective actions, near-crashes, or crashes.

This definition was developed by Hedlund, Simpson and Mayhew (2006), and seems sufficient to allow further research and debate.

Different activities by a driver do degrade safe performance of the actual driving task of controlling the safe movement of a vehicle along a roadway. There are a wide variety of everyday activities that may contribute to driver distraction-related crashes. The continuing introduction of new electronic devices into vehicles provides additional sources of potential driver distraction.

After reviewing the conference presentations, a ranking of distractions deriving from within the vehicle from the most degraded (risky) to least, would likely be:

- vehicle-based internet and email (when widely available, either as onboard displays or a handheld device such as a personal data assistant—PDA).
- mobile telephone – text messaging
- mobile telephone – talking (both hand-held and hands-free)
- DVD displays (if portable and poorly located)
- talking to passengers (if driver is young/older, with increased risk associated with activities such as argument or emotive discussion, location finding, or the management of passengers)
- route navigation (if poorly designed, particularly if a component of a handheld device such as a personal digital assistant—PDA or mobile telephone)
- radio/cassette/CD operations
- in-vehicle climate controls (vents, demisters, air conditioning)
- eating/drinking
- smoking
- adjustment of internal and external mirrors, seating, windows, etc.
- operation of wet weather controls/driving in rainy conditions
- operation of vehicle controls (gears, turn indicators, lighting, cruise control, etc.), particularly during novice driver phase or when using an unfamiliar vehicle
- monitoring of typical cockpit instrumentation (speedometers, tachometers, operational warnings such as fuel, temperature, etc.)

It is generally agreed that it was not possible to place a ranking for different kinds of external-to-the-vehicle distractions, given how little is actually known about the influence of such distractors on driving behaviour. The recent Canadian conference on driver distraction (Hedlund, Simpson & Mayhew, 2006) concluded:

The available evidence paints a suggestive but incomplete picture of the risks posed by distracted driving.

Laboratory-based simulator studies show that distractors can affect the skills and capabilities needed for driving. Observational studies show that such distractions do occur in real world settings and that they do impact driver performance. Crash-based studies show that distractions are present in a substantial number of collisions.

The convergence of the evidence clearly shows that driver distraction is an important issue for road safety. At the same time, the quality and quantity of the existing evidence is insufficient to state with confidence how risky distracted driving is, and among the many distractions, which pose the greatest risk, and under what circumstances. (Summary of proceedings and recommendations, p.v)

Moreover, technology advances are allowing innovation at a rapid pace, and are placing demands on policy and program development processes that have not been hitherto

seen. For example, there is increasing integration of advertising, and this is expected to lead to the merging of advertising messaging involving outdoor advertising (fixed and mobile billboards) with mobile telephones and personal data assistants (PDAs) utilising Bluetooth wireless connections. It is not unreasonable to foresee that a person (pedestrian, vehicle driver or passenger) may, in the vicinity of a fixed billboard or when a mobile billboard passes by, receive a mobile telephone call, text message, or image directly to their individual devices. Modern billboard advertising now allows for a rolling sequence of different advertisements, and so the messages broadcast could well change according to the billboard display. As well, data logging of communication traffic to specific mobile phones or PDAs can allow subsequent filtering of advertising messages based on the frequency that a person passes by or is exposed to a particular advertisement, and prevent an inundation of otherwise salient messages. The effect of such systems—and it is likely they will emerge—has not yet been considered in discussions of distraction and road use.

While there may be insufficient knowledge at this time to allow the development of detailed policies and programs to address driver distraction issues in a comprehensive manner, Some programs are emerging, and are discussed in the papers included in this conference proceedings.

Road safety activities relating to driver distraction

There have, to date, been few road safety activities specifically directed to driver distraction issues.

However, in the United States, the National Highway Traffic Safety Administration has created a new pilot public information and education campaign "Smart Drivers Just Drive" designed to educate young drivers about the causes and consequences of driver distractions, while empowering them to make safe and informed decisions behind the wheel.

The screenshot shows the 'Smart Drivers Just Drive' website interface. At the top, there are navigation links: 'campaign materials | press room'. Below this are three tabs: 'what's your story?', 'did you know?', and 'spread the word!'. The main content area features a testimonial from Jennifer R. of Cincinnati, OH, with a photo of her and the text: "We were on the phone. I guess he wasn't paying attention to the road. I heard him crash. I think about it all the time." To the right is a poll titled "What distracts you most on the road?" with options: Talking on the phone, Eating, Reading, Changing a CD, Tuning the radio, Talking with friends, Applying makeup, and Reaching into the backseat. Below the testimonial are three boxes: "WHAT'S YOUR STORY?" with a sample story about Jason and a link to "Add your story to our bulletin board"; "SPREAD THE WORD!" with a question about worried friends and a link to "Send them the message"; and a statistics box stating "1 in 4 crashes is caused in part by a distracted driver" with a link to "Want more facts?". The footer includes the NHTSA logo and navigation links: 'home | what's your story? | did you know? | spread the word! | campaign materials | press room | NHTSA home | privacy policy | contact us'.

The National Highway Traffic Safety Administration (NHTSA) launched *Smart Drivers Just Drive*, a campaign to help educate young drivers about the dangers of distracted driving. The campaign website, www.distracteddriving.org, provides young adults with information to make their own decisions behind the wheel. Six cities have been selected in 2005 for the campaign: Sacramento, CA; Austin, TX; Gainesville, FL; Richmond, VA; Sioux Falls, SD; and Springfield, MO. The campaign showcases the stories of young drivers who have had significant or frightening experiences with distractions behind the wheel, and the website offers a place for young adults to share their own personal stories.

In an accompanying fact sheet, the National Highway Traffic Safety Administration provides the following traffic safety facts to support the 'Smart Drivers Just Drive' campaign:

"The National Highway Traffic Safety Administration (NHTSA) launched *Smart Drivers Just Drive*, a campaign to help educate young drivers about the dangers of distracted driving. The campaign website, www.distracteddriving.org, provides young adults with information to make their own decisions behind the wheel.

Smart Drivers Just Drive offers concerned partners materials for conducting a safe driving campaign within local communities. Visit www.distracteddriving.org/materials.htm.

NHTSA estimates that distracted driving is a factor in one out of every four automobile crashes. (Source: NHTSA Driver Distraction Research: Past, Present and Future). Distracted driving is defined as failure to pay attention while driving. It occurs anytime motorists take their concentration away from the road or oncoming traffic hazards. Some common distractions among young drivers include driving and/or riding with friends, eating, reading, drinking, changing a CD, tuning the radio, talking on the phone, applying makeup, yelling out the window, reaching in the backseat and looking at something or someone outside while driving. (Source: based on research conducted by NHTSA)

Motor vehicle crashes are the leading cause of death for 15-20 year olds, causing roughly one third of all deaths in this age group. (Source: NHTSA Traffic Safety Facts, 2003 Data, Young Drivers (National Center for Statistics and Analysis). In 2003, 7,884 15-20 year old drivers were involved in fatal crashes – a 5 percent increase from the 7,484 involved in 1993. (Source: NHTSA Traffic Safety Facts, 2003 Data, Young Drivers (National Center for Statistics and Analysis). In 2003, 3657 drivers 15-20 years old were killed, and an additional 308,000 were injured, in motor vehicle crashes. (Source: NHTSA Traffic Safety Facts, 2003 Data, Young Drivers (National Center for Statistics and Analysis). Driver fatalities among 15-20 year old motorists increased by 13 percent between 1993 and 2003. (Source: NHTSA Traffic Safety Facts, 2003 Data, Young Drivers (National Center for Statistics and Analysis)

The National Highway Traffic Safety Administration also provides some suggested Smart Drivers Just Drive awareness activities for those who would like to help spread the word about the dangers of distracted driving:

Operation Saturation

This activity may be conducted by an individual or by a group. Download and print out Smart Drivers Just Drive materials from the website and distribute throughout the local community where allowed, such as in shopping centers, schools, community centers, grocery stores, etc. Also, participants can approach local businesses to include Smart Drivers Just Drive flyers with pizza delivery boxes or video store movie rentals. Use your creativity!

Operation Co-Pilot

Drivers should turn over distracting activities such as dialing the phone, tuning the radio and changing CDs to the “Co-Pilot,” also known as the front seat passenger. Some ideas for spreading distracted driving awareness include conducting an “Operation Co-Pilot Day” or “Operation Co-Pilot Week” throughout local schools and communities.

Car Wash

Partners and volunteers may approach a school, gas station, church or local business about using its parking lot to conduct a Smart Drivers Just Drive car wash, providing a perfect opportunity to distribute distracted driving awareness materials to local motorists. While vehicles are washed, volunteers can conduct a brief distracted driving awareness “tutorial” with car owners. Local sponsors for the event may include law enforcement agencies, automotive dealers and auto supply stores. Keep in mind that conducting a car wash near high-traffic areas can actually cause driver distractions, so plan the proper location accordingly. Car wash participants are encouraged to publicize the event beforehand through local media outlets such as radio stations or daily newspapers (See “Media Tips” web page for instructions).

Distracted Driving Presentations

Student leaders and volunteers at colleges and universities may consider getting in touch with their campus RAs about developing Smart Drivers Just Drive presentations. This presentation may include inviting an Emergency Medical Technician or distracted driving crash victim to speak with college students about the dangers of distracted driving.

Mock Crash

Simulate the causes (and potentially deadly effects) of a distracted driving “crash” by arranging four chairs similar to the interior of an automobile. The driver can pretend to be distracted by a variety of factors (answering a cell phone, eating, talking with friends, changing a CD, etc.) while the passengers react to oncoming danger (another vehicle, tree, building, etc.). This skit allows for audience participation with either questions or suggestions on how distracted driving can be avoided.

It is worthy to note that in New South Wales, Youthsafe—a not-for-profit organisation focused on the prevention of injury amongst young people—has adapted these materials as part of a presentation to teenagers in Years 10-11 of secondary schooling, through the Rotary Youth Driver Awareness initiative.

What can be done to address driver distraction?

There have now been three major actions to review and address driver distraction:

- STAYSAFE Committee report on the first international conference on driver distraction;
- Road Safety Committee of the Victorian Parliament inquiry into driver distraction; and
- Canadian conference on driver distraction

There have been a series of recommendations arising from these conferences and inquiries. These are listed, in full, in the following sections.

STAYSAFE Committee of the New South Wales Parliament

Based on the conference presentations, the STAYSAFE Committee, a parliamentary committee of the New South Wales legislature, formulated fourteen general recommendations for action by New South Wales government agencies to allow for a better dealing with the problems posed by driver distractions (STAYSAFE 67, 2006).

STAYSAFE COMMITTEE RECOMMENDATION 1

The Roads and Traffic Authority and the Motor Accidents Authority should conduct research into the relative crash risk associated with different kinds of distracted driving.

STAYSAFE COMMITTEE RECOMMENDATION 2

The Roads and Traffic Authority should conduct research into methods to protect drivers against the risks of distractions.

STAYSAFE COMMITTEE RECOMMENDATION 3

The Motor Accidents Authority, in consultation with the Roads and Traffic Authority, needs to conduct research into the personal, social and economic costs of distracted driving.

STAYSAFE COMMITTEE RECOMMENDATION 4

The Roads and Traffic Authority should conduct research into driver knowledge of and attitudes toward distracted driving, with particular attention to assessing effects on driving while making telephone calls, text messaging, and using other communication or internet devices.

STAYSAFE COMMITTEE RECOMMENDATION 5

The Roads and Traffic Authority should conduct research to identify factors that would motivate drivers to change their behaviour regarding driver distraction, particularly regarding driving while making telephone calls, text messaging, and using other communication or internet devices.

STAYSAFE COMMITTEE RECOMMENDATION 6

The Roads and Traffic Authority should develop public awareness and educational campaigns to address the problems of driver distraction, including but not limited to specific targeted programs for young drivers and drivers at work (fleet drivers).

STAYSAFE COMMITTEE RECOMMENDATION 7

The Roads and Traffic Authority and the Motor Accidents Authority should conduct research into external distractions that affect driving.

STAYSAFE COMMITTEE RECOMMENDATION 8

The Roads and Traffic Authority should establish mechanisms for ongoing monitoring of new vehicle, electronic and communications technologies that may distract or adversely affect attention to driving tasks, both as original equipment manufacturer (OEM) in new vehicles and as aftermarket fitments.

STAYSAFE COMMITTEE RECOMMENDATION 9

The Roads and Traffic Authority should establish mechanisms for ongoing monitoring of new vehicle, electronic and communications technologies that may distract or adversely affect safe pedestrian behaviour.

STAYSAFE COMMITTEE RECOMMENDATION 10

The Roads and Traffic Authority and the New South Wales Police should review the adequacy of existing legislation relating to driver distraction.

STAYSAFE COMMITTEE RECOMMENDATION 11

The New South Wales Police should review existing enforcement policies and practices relating to driver distraction.

STAYSAFE COMMITTEE RECOMMENDATION 12

The Roads and Traffic Authority should investigate the potential role of motor vehicle insurers and insurance underwriters in reducing distracted driving.

STAYSAFE COMMITTEE RECOMMENDATION 13

The Roads and Traffic Authority, in consultation with other States and Territories and the Commonwealth, should establish cooperative methods for research, public awareness, and education about distracted drivers.

STAYSAFE COMMITTEE RECOMMENDATION 14

The Roads and Traffic Authority, in consultation with other States and Territories and the Commonwealth, should develop appropriate national legislation, standards and guidelines to maximize the safety of new vehicle telematics and aftermarket products that may distract drivers.

STAYSAFE COMMITTEE RECOMMENDATION 15

The Roads and Traffic Authority, Motor Accidents Authority and the New South Wales Police report to the STAYSAFE Committee within 6 months regarding the above recommendations.

Road Safety Committee of the Victorian Parliament

In late 2006, the Road Safety Committee of the Victorian Parliament handed down its report of an inquiry into driver distraction. The Road Safety Committee (2006) made over thirty recommendations for action, derived from submissions received, the conference proceedings of the first international conference on driver distraction, expert testimony, and an international study tour.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 1

That VicRoads adopt a clearer concise definition of driver distraction, consistent with the definition arising out of the 2005 Toronto conference on driver distraction, and establish a range of categories of distraction sources. Any definition and categorisation should distinguish distraction from other driver behaviours such as fatigue and inattention.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 2

That VicRoads and Victoria Police develop methods to enable the future assessment of the role of distraction in crashes on Victorian roads including a review of existing traffic crash reporting systems. Consultation should take place with other Australasian jurisdictions and the Australian Transport Safety Bureau on appropriate methods and classification of distraction.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 3

That VicRoads undertake a comprehensive roadside observational study to determine the prevalence of both hand-held and hands-free mobile phone use by drivers in Victoria that

will provide a benchmark for future studies and a basis for measuring the effect of any countermeasures.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 4

That VicRoads continue to monitor research on the effects of various aspects of mobile phone use on driving performance, with a particular emphasis on:

- the context, duration and content of conversations;
- experimental validity and repeatability;
- age-related differences;
- phone design and new technology; and
- experience with using a mobile phone while driving.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 5

That VicRoads and Victoria Police improve crash data systems on mobile phone use, including type of device and the context in which it was being used when the crash occurred.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 6

That the State Government work with the vehicle industry to encourage development of safer in-car mobile phone technology including integrated speech-controlled phone communication systems.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 7

That relevant State Government agencies implement targeted publicity campaigns warning drivers of the dangers of mobile phone distraction, including:

- the use of hands-free phones in hazardous traffic conditions;
- the dangers of text and video messaging; and
- the greater risks associated with complex phone conversations.

In developing publicity campaigns, the Government should examine the recent '*Switch off before you drive off*' campaign undertaken in the United Kingdom.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 8

That VicRoads review the results of the NSW Roads and Traffic Authority study of the distraction from in-vehicle videos and possible subsequent Australian Transport Safety Bureau investigations for their implications in addressing driver distraction in Victoria.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 9

That VicRoads undertake a survey on the current use of video, audio and other electronic devices by drivers in Victoria to establish a benchmark for future usage surveys and a basis for measuring the effect of any countermeasures.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 10

That VicRoads and Victoria Police improve crash data systems on video, audio and other electronic device use, including the type of device and the context in which it was being used when the crash occurred.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 11

That VicRoads and the Transport Accident Commission undertake a publicity campaign warning of the dangers of drivers being distracted by 'everyday' activities and the need to remain alert to the driving task.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 12

That VicRoads, in consultation with local councils, develop a set of guidelines to regulate the location, size and content of all road authority and other signs within road reserves. Such guidelines will be designed to minimise potential driver distraction and will apply to individual signs as well as the total signscape along a road. That following the implementation of the above guidelines, VicRoads and local councils aim to remove superfluous and obsolete signs.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 13

That VicRoads, the Department of Sustainability and Environment and municipalities develop a more consistent and stringent approach to the installation, use and content of scrolling, moving and video-style advertising within and adjacent to road reserves. Any installations should be monitored for their effect on road safety.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 14

That VicRoads, the Department of Sustainability and Environment and municipalities develop more prescriptive regulations and guidelines controlling advertising in or near road reserves, including the need to control the content of advertisements.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 15

That any future consideration of the laws dealing with mobile phone use while driving, take into consideration the potential safety and economic benefits to be gained from using hands-free mobile phones.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 16

That VicRoads monitor, evaluate and publish the results of the impact on road crashes and driver performance of a ban on all mobile phone use while driving by learner permit and first year probationary licence drivers under Victoria's revised Graduated Licensing System.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 17

That in relation to the road rule on the use of television and video-screen devices in vehicles, Victoria Police and VicRoads implement separate penalties for installations which could distract the driver and those which may distract drivers of other vehicles.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 18

That VicRoads develop, in conjunction with the automotive manufacturer and aftermarket motor accessory industry, a verification process for the installation of video and TV screens in motor vehicles so that vehicle owners and potential purchasers can be assured that the installation satisfies Australian Design Rules.

RECOMMENDATION 19 That VicRoads review the intent of Australian Road Rule 299 (television receivers/visual display units) and Australian Road Rule 300 (use of hand-held mobile phones) in view of emerging technologies and consider the appropriateness of having two separate rules.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 20

That following the development of a clear definition and categorisations of driver distraction (see Recommendation 1), Victoria Police and VicRoads introduce an appropriate road rule to prohibit driving while undertaking activities which could distract from safe driving.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 21

That following the implementation and evaluation of the recently announced changes to the Graduated Licensing Scheme, the Government reconsider the issue of restricting the carriage of multiple passengers by novice drivers.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 22

That VicRoads liaise with the Australian Transport Council with a view to further research and development into the potential benefits to be gained from various emerging driver assistance technologies including:

- Electronic Stability Control
- Driver Workload Managers
- Speech recognition devices.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 23

That VicRoads liaise with the Australian Transport Council with a view to further research and development to ensure that driver assistance technologies minimise potential driver distraction through appropriate system integration, driver-machine interfaces and the positioning of vehicle displays and controls.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 24

That the Minister for Transport raise at the Australian Transport Council the need to undertake public and industry consultation leading to a Memorandum of Understanding between governments and industry to reduce driver distraction from in-vehicle electronic devices.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 25

That the Government increase the profile of driver distraction as a road safety issue. This should include:

- addressing the issue in the forthcoming Victorian road safety strategy;
- school road safety programs; and
- development of suitable publicity for use by the rental car industry.

RECOMMENDATION 26: That VicRoads develop a comprehensive and prioritised program of research and policy initiatives on driver distraction to improve road safety in Victoria.

RECOMMENDATION 27: That VicRoads and the driver training industry incorporate driver distraction material in driver training and licensing processes and publications.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 28

That VicRoads and Worksafe encourage an occupational health and safety approach to driver distraction for people who drive as part of their work.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 29

That the State Government implement vehicle safety policies to encourage government and vehicle fleet drivers, while driving, to:

- minimise hands-free mobile phone use;
- more safely use other electronic devices, such as navigation systems, and
- avoid or minimise non-electronic distractions.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 30

That VicRoads and Victoria Police investigate how information from Event Data Recorders in modern motor vehicles can be used to provide new insights into the role of driver

distraction in crashes and other information to improve road safety in Victoria. This should include data access, privacy and resourcing issues.

VICTORIAN ROAD SAFETY COMMITTEE RECOMMENDATION 31

That VicRoads investigate how video camera event recordings of driver behaviour and traffic conditions when collisions or near-misses occur can be used to provide new insights into driver distraction and other aspects of road safety.

Canadian conference on driver distraction

The Canadian Automobile Association conference on driver distraction identified priorities for action in five broad areas (see Hedlund, Simpson & Mayhew (2006)). These are:

Research and evaluation

- More research on a broad range of driver distractions – better documentation of the presence of different distractions in everyday driving (exposure data) and in crashes (crash data), and the crash risks associated with these various distractions.
- Continued research and development of vehicle technology to inform drivers of crash risks (collision warning, lane departure) or to take corrective action if needed.
- Continued evaluation of the effects of existing laws regarding distracted driving, especially the variety of laws involving cell phones.

Public awareness and education

- Develop and implement activities to increase the driving public's understanding and awareness of distracted driving and of steps drivers can take to reduce risky distractions.
- Use media and messages that target specific high risk groups, including beginning drivers and senior drivers.
- Provide education and training on effective distraction-prevention strategies through driver education classes, employers, and licensing agencies.
- Summarize and synthesize current information regarding distracted driving, to share and expand on the wealth of knowledge provided by the speakers and delegates at this conference.
- Encourage cooperation among stakeholders to maximize the sharing of resources and enhance the outreach to as broad an audience as possible.

Laws and enforcement

- Consider prohibiting cell phone and other electronic communication device use by youth with graduated driver license learner's permits or provisional licenses.

Incentives and penalties

- Encourage employers to adopt policies for their employees to reduce potential driving distractions.
- Investigate the role of automobile insurance in reducing distracted driving.

Industry-government cooperation

- Establish methods for both traditional (auto manufacturers and aftermarket suppliers) and nontraditional (consumer electronics, food service) industries to work cooperatively on public awareness, the research needed to understand distracted driving, strategies and products to minimize or compensate for its effect, and the

standards and guidelines to maximize the safety of new vehicles, aftermarket products, and nomadic telematics.

Concluding comment

The first international conference on driver distraction, held in Sydney on 2-3 June 2005, was an opportunity to establish the facts about issues where there has been considerable public and media comment, and, through the mechanisms of a report to Parliament and the publication of an electronic record, allow those facts to be recorded and disseminated to the wider community, and provided a unique opportunity to bring together researchers and policy makers with expertise in road safety from academe, government, non-government organisations, and advocacy groups from around the world.

The recommendations arising from the conference, together with recommendations for action arising from the Victorian Parliamentary inquiry into driver distraction and the Canadian Automobile Association's subsequent conference on distracted driving, provide a roadmap for future activity to better understand and address the problems posed by driver distraction within the road transport network.

References

Hedlund, J., Simpson, H. & Mayhew, D. (2006). International Conference on Distracted Driving—Summary of Proceedings and Recommendations. Toronto, Ont.: Traffic Injury Research Foundation.

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