



# Quarterly Report

## Australian College Of Road Safety

July 2002

### From the President

#### **PEDESTRIANS AS ROAD USERS**

Stereotypes of people are a convenient and pervasively over-used psychological tool for avoiding complexity when thinking through an issue. One problem with their use arises from the neglect of instances that are in a sense exceptional or do not fit the majority of features of the relevant group. A good example of this arises in the perception of road crash fatalities. The most common single group of fatally injured road users are drivers (who comprise around 45% of fatalities in Australia), followed by passengers (around 25%) and thus unsurprisingly vehicle occupants are our stereotypical victim. The problem with this focus is the neglect of other road user groups, and the primary other group in fatality statistics is pedestrians. Around 18 to 20% of road crash fatalities are pedestrians. This percentage has remained reasonably stable over decades in NSW, possibly due to the conflicting effects of some improvements for pedestrians and the greater urbanisation of the NSW population (20.4% in 1982; 18.6% in 1992, and 20.8% so far this year)<sup>a</sup> but has dropped a little in Australia (e.g., 18.6% in 1986; 17.8% in 1996; and 15.8% in 2000)<sup>b</sup>, suggesting some successes. Despite the large involvement of pedestrians in road trauma, this group has often remained neglected.

In addition to the problem of thinking in stereotypes, I would speculate that there are several reasons for this neglect. First, the basic construction and operation of our roads is the responsibility of traffic engineers. While there has certainly been progress in terms of awareness of pedestrian amenity issues, the basic measures of success for traffic engineers in

the running of the roads reward decisions that do not favour pedestrians. Success is measured in terms of average vehicle speed, or throughput of vehicles for a given section of road. Success is not measured in terms of average walking speed or number of pedestrians crossing a road per hour. The latter measure is sometimes recorded to determine what sort of pedestrian amenity is installed, but it is not employed as a measure of success. Second, pedestrians don't want to use the road and many do not see pedestrians as road users, but rather as inconveniences to the basic purpose of roads - the expedient movement of traffic. Third, pedestrian crashes, perhaps more than most, may be attributed to basic human error. This may arise because pedestrians involved in crashes are more often than other road user groups sufficiently injured as to be unable to put their own case, and because pedestrians cannot blame their vehicle. Fourth, we do not need special licences to walk and we see walking as a basic and pervasive skill (of the stereotypical unhandicapped pedestrian) and so we may be less likely to see the need for special facilities for walking.

Systemic change is needed to ensure that pedestrian amenity is a basic issue in the running of our road transport system. This will require: greater consideration of pedestrians at many levels of decision making; special consideration of less mobile pedestrians, especially the elderly, who, for example, may not be able to cross the road in the time allowed by traffic light phasing; and, inclusion of pedestrian crossing data in the systems by which those who run the roads judge success.

Soames Job, President

- a. Data from the RTA statistical reports for the relevant years.
- b. Data from FORS and ATSB reports for the relevant years.

## News from the College Chapters

### ACT and Region Chapter

The Chapter is planning to produce a newsletter and to organise some workshops and seminars. One will be on drink driving and the other probably on the 50kph limit and the ACT's experience in the last two years' trial.

### NSW (New England) Chapter

The Chapter ran the 'Arrive Alive' Expo from 3-5 June at the Traffic Education Centre in Armidale, and students from ten high schools in the region attended. The Expo covered demonstration of potential hazards of driving around the city, re-enactment of fatal accident scenes by the ambulance service, a lecture by the brain injury unit from Tamworth, and demonstrations on braking and following distances. The Expo was funded by a grant of \$5,000 from the RTA. The Cycle Helmet Fitting Station at a local cycle shop is continuing to function. Plans are in hand for a project on school and club minibus safety. There will also be a discussion on a membership drive at the next meeting.

### NSW (Sydney) Chapter

The Chapter held its first seminar for the year on 'Motorcycle Safety' on 19 June, hosted jointly with the MAA. 74 people attended, of whom 17 were ACRS members. The speaker was Dr Ron Christie. His paper is available on the College website ([www.acrs.org.au](http://www.acrs.org.au)) under 'Publications'. A second seminar on 'Speeding' is planned for later in the year.

### Queensland Chapter

The Chapter held a follow-up meeting in June to the seminar held last year by Dr Will Murray on workplace driver safety. The Chapter has also been active in preparing for the joint conference with the Travelsafe Committee of the Queensland Parliament on 'Developing Safer Drivers and Riders', 21-23 July 2002.

### South Australia Chapter

The Chapter is involved in planning and organising the Research, Policing and Education Road Safety Conference to be held in Adelaide in November 2002. The Chapter also provided a lengthy response to a request for comment on the 'Draft Road Safety SA 2010' document proposed by the Road Safety Executive Group.

### Victorian Chapter

The Chapter recently ran two very successful seminars, a half-day one on fleet safety and one on drugs and driving. The fleet seminar attracted about ten new members. The Chapter is planning another seminar this July about crash investigation and the legal consequences of crashing. Also, a lot of effort is being put into the Older Road Users Conference planned for 26-27 August 2002.

### Western Australian Chapter

This year the Chapter is focusing on a regional youth workshop with the venue being an Agricultural College where two people have died in road accidents.

## National Conference on 'Developing Safer Drivers and Riders' 21-23 July

Over 150 registrations have been received for this joint conference organised by the College and the Travelsafe Committee of the Queensland Parliament. Proceedings on CD will be available for purchase from the National Office.

## New Software for Managing Road Safety Risk

Following extensive prototype trials in Australia and New Zealand, the ARRB Transport Research and Austroads are jointly releasing for sale this July a computer program to provide road authorities with a powerful tool to manage, prioritise and track the status of road safety issues on their road networks. The 'Road Safety Risk Manager' focuses on providing road safety professionals with a tool to proactively assess road safety hazards and treatments for the purpose of prioritising actions. To register an interest in the software, email ARRB Transport Research on [rsrm@arrb.com.au](mailto:rsrm@arrb.com.au).

## Walk Safely to School Day Success

Registrations in NSW for Walk Safely to School Day (WSTSD) 2002 were up 42% on last year, with over 250,000 children, parents and carers from 735 primary schools taking part. WSTSD is an initiative of the Pedestrian Council of Australia aimed at helping parents and carers develop their child's vital road-crossing skills at an early age. Through WSTSD more parents and children are receiving the message that children under the age of 10 years should hold the hand of an adult when crossing the road. From 1996 to 2000 over 1,700

child pedestrians (aged 5 – 12) were killed or injured on NSW Roads. (*From InforMAAtion May 2002*)

### **Whiplash most reported crash injury**

The Motor Accidents Authority of NSW reports that whiplash, an injury that occurs when the head is forced forwards and backwards quickly, is the most frequently reported car crash injury in NSW, representing 39% of Green Slip claims.

Recognising the prevalence of whiplash associated disorders (WAD) and the potential benefits of having an agreed approach to managing this type of injury, the MAA recently convened a working party to develop guidelines to improve WAD management. The MAA encourages health care workers and the insurance industry to consult the guidelines whenever they are dealing with a person with a WAD.

### **Device to reduce whiplash**

In Sweden trials are being conducted on a device designed to reduce whiplash by automatically adjusting to cushion the driver's and front seat passenger's head. The pop-up headrest is triggered when the driver's or front seat passenger's body is forced back into the seat during a crash. Trials have shown that the device reduced the risk of whiplash injuries by 75%. The developers of the device claim that it will especially benefit women, who tend to be more vulnerable to whiplash because of their thinner necks and preference to sit in an upright position. (*From Road Safety NZ June 02*)

### **Students invited to have their say**

Queensland Transport is giving students the opportunity to compete for attractive prizes by creating road safety messages for their peers. The 'Road Safety Challenge' asks students to develop an idea or campaign on key road safety messages through video, a piece of music, a photo essay, advertisement or multimedia piece.

The competition is aimed at enhancing awareness of key road safety issues among young motorists and is being promoted in all Queensland schools. For more information see [www.roadsafety.net](http://www.roadsafety.net). (*From Queensland Transport's 'Road Sense'*)

### **Positive results for 50 kph limit**

The Victorian Government has reported that the introduction of the 50 kph speed limit on

residential streets has resulted in a reduction of 40-46% reduction in crashes where a pedestrian was killed or injured. Based on an evaluation by the Monash University Accident Research Centre, the Government report also stated that there had been an overall 13% reduction in all casualty crashes involving all road users. The MUARC evaluation was conducted from January to June 2001.

The Queensland Government has also reported positive outcomes from their introduction of the 50 kph zones. Since the lower speed limit was introduced in SE Queensland in March 1999, initial road crash data analysis has shown an 18% fall in fatal crashes on local streets, when compared with the five year average.

### **Truck safety causes concern**

The National Road Transport Commission has expressed concern that its Truck Safety Benchmarking Study has revealed that there are significantly more truck fatalities on Australian roads per kilometre travelled than in the USA or UK. The study found that Australia's heavy vehicle fatal crash rate per kilometre travelled was 47% higher than the USA and 39% higher than the UK. However, it was comparable with Germany and Canada, 20% lower than Sweden and 45% to 55% lower than France and New Zealand.

"While it's generally accepted that we've not made a lot of progress with the heavy vehicle road toll in Australia in recent years, this gap between our performance and the best countries still comes as a surprise. It is a cause for some concern and we will need to do more," said NRTC Safety Director, Peter Makeham.

The report focuses on a range of areas that have the potential to improve the safety performance of the heavy vehicle industry. These include: a) road standards; b) targeted low-cost road safety treatments; c) analysis of single vehicle crashes; d) day and night time driving comparisons; e) improved underrun protection and occupant protection; and f) heavy vehicle speed limits.

"High quality roads and divided highways may be a major reason why the heavy vehicle industry performs better overseas than here. We have to bear in mind, however, that this sort of infrastructure is extremely expensive and the report recommends lower cost improvements that

could bring potential benefits. Higher speed limits in Australia than in Europe and parts of the USA, particularly for articulated trucks on roads of less than freeway standard, may also be a contributory factor to the higher Australian crash rate," said Mr Makeham. (*From the NRTC May 02 'Reformer'*)

## **NZ establishes truck stability rules**

New Zealand became the first country in the world requiring trucks to meet minimum standards for stability when the Vehicle Dimensions and Mass Rule came into effect on 1 July 2002. The rule is aimed at reducing the number of truck rollover crashes, a problem that has been more severe in New Zealand than in other countries. Trucks rolled over in 29% of heavy vehicle crashes attended by the police Commercial Vehicle Inspection Union from July 1996 to November 1999. This compared to just over 3% in the United States.

Under the *Vehicle Dimensions and Mass Rule*, heavy vehicles will be required to undergo stability testing, and trailers will need to be certified. The stability checks will be carried out using a 'static roll threshold' calculator developed in New Zealand. This indicates how much force a vehicle can withstand in a steady curve without flipping over. (*From Road Safety NZ June 2002*).

## **Four wheel drive safety**

The popularity of 4WDs has led the Australian Transport Safety Bureau to publish a monograph on 'Four Wheel Drive Crashes' (Monograph 11, February 2002). Key findings are that: a) the incidence of 4WD crashes increased by 85% between 1990 and 1998. By comparison, the incidence of all fatal crashes decreased by 25% in this period.

b) The increase in fatal 4WD crashes is likely to be due to the growing number of kilometres travelled by 4WDs, rather than any decrease in the safety of 4WDs. 4WDs almost doubled their kilometres travelled between 1995 and 1998, compared with an increase of 4% for all vehicles.

c) For those crashes where the 4WD driver contributed to the crash, road user impairment (eg. fatigue, alcohol, other drugs, etc) was the most common contributory factor involved ( 54%).

d) The proportion of alcohol intoxication amongst 4WD drivers involved in fatal crashes (29%) was

higher than for all other types of vehicle operators.

e) In all fatal crashes, a significantly higher proportion of 4WD vehicles rolled over compared with passenger cars (35% and 13% respectively).

f) In 4WD crashes involving multiple vehicles, passenger car occupants accounted for the largest proportion of fatalities (64%). 4WD occupants accounted for the second largest but a significantly lower proportion of fatalities (18%).

## **Community Roadwatch 4 years on**

Since Community Roadwatch (dial \*555) was introduced in New Zealand four years ago, the unit has received 50,000 reports from members of the public. Community Roadwatch is a small branch of the Police Infringement Bureau that logs and follows up complaints and compliments about other road users' driving. A staff member notes the registration number of the vehicle, and the owner is sent a letter outlining what another motorist has reported about their driving. The letter doesn't identify the complainant. Community Roadwatch Senior Sergeant, Kevin Knox, said the letter to the owner is remarkably effective and a complaint is seldom heard again about the vehicle. If a vehicle is reported more than three times within about two years by different drivers, another letter is sent to the owner, and the local police are notified. Each police station is given a poster showing the vehicle's registration number and a basic description, the owner's name and licence number, details of all other vehicles associated with the owner, and a request that patrols look out for the vehicle. Kevin said there have only been six vehicles that have reached that stage and police have never heard any reports of unsafe driving as associated with those vehicles since then – a testament to the scheme's success. Kevin said, "We usually find it's not the vehicle owner who's doing the bad driving. In some cases the vehicle is registered in the parent's name and the child is using it. In one case, a son was driving his father's company vehicle in an unsafe way. The guy's father banned him from driving it for a year."

Police don't look on the vehicle owner as an offender. "We aren't trying to charge people with anything, we're just trying to bring about awareness. And we have members of the public who have strong road safety concerns who help us out," Kevin said. "The program doesn't replace

the ways in which police deal with traffic violations, but supplements them.” (From ‘Road Safety NZ’ May 02)

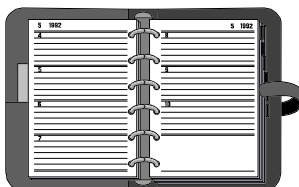
## News from the European Community

The European Transport Safety Council (ETSC) is pushing for coordinated workplace legislation that will result in less driver fatigue and hence less accidents. Given that around 18% of road deaths across the European Community (EU) involve commercial transport vehicles, the ETSC believes that reducing driving fatigue has a role to play in reaching the ambitious new EU target to reduce deaths by 50% by the year 2010.

The Employment and Social Affairs Committee wants to limit driving time for commercial drivers to 9 hours per day or a weekly maximum of 45 hours. However, the ETSC has concluded that this legislation will not necessarily reduce driver fatigue, because under other work legislation a person may be at work for much longer hours doing non-driving activities. Dr Nick McDonald, Chairman of the ETSC’s working group on Driver Fatigue explained: “If drivers drive to the limits permitted in the draft proposal, it is inevitable that their working time will exceed by a large amount the limitations of the working time Directive. The evidence shows that driving time takes up only about two thirds of working time in road transport because of the other duties of drivers. The draft proposal allows an average of 45 hours per week and up to 56 hours of driving per week and a daily work span of 13 hours. Accident risk data demonstrate that after an 11-hour work span the risk of being involved in an accident is doubled.

Thus the current instruments – the Working Time Directive and the proposed Regulation – will do little to curb driving fatigue associated with excessive working hours unless the proposed legislation is made compatible with the Working Time Directive and both are equally enforced.

## For your Diary



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**16-17 July 2002: ‘Saferoads-turning plans into action’** at the Grand Hyatt, Melbourne. For information: [www.saferoads2002.com](http://www.saferoads2002.com)

**21-23 July 2002: ‘Developing Safer Drivers’ and Riders’ Conference**, Brisbane, organised jointly by the Australian College of Road Safety and the Travelsafe Committee of the Queensland Parliament. For information: [eo@acrs.org.au](mailto:eo@acrs.org.au)

**7-9 August 2002: Local Government Road Safety Conference**, Newcastle. For information call 02-8267 3012; website: [www.pco.com.au/lgrsc2002](http://www.pco.com.au/lgrsc2002)

**8-9 August 2002: AITPM National Conference – ‘Travelator’ – Traffic and Transport on the Move.** For information visit the web site: <http://www.aitpm.org.au/conference/> or contact Dan Sullivan on Tel: 08 9323 4162

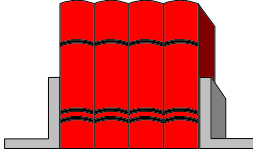
**26 – 27 August 2002: ‘Older Road Users’ joint conference** with the Australian College of Road Safety and the Victorian Parliament Road Safety Committee. Contact: Greg Rowe: tel: 03 9854 2655 or email: [Greg.Rowe@roads.vic.gov.au](mailto:Greg.Rowe@roads.vic.gov.au)

**12 – 13 September 2002: ITE 2002 International Conference**, Melbourne, organised by the Institution of Transportation Engineers, Australia and New Zealand Section Inc. For information contact Irene Thavarajah tel: 03-9905 1344 or email: [irene.thavarajah@adm.monash.edu.au](mailto:irene.thavarajah@adm.monash.edu.au)

**2-4 October 2002: The 25th Australasian Transport Research Forum**, Canberra, hosted by the Bureau of Transport Economics.

**3-5 November: 2002 Road Safety Research, Policing and Education Conference**, Adelaide Convention Centre. For information contact Plevin and Associates tel: 08 8379 8222; email: [events@plevin.com.au](mailto:events@plevin.com.au)

**New to the ACRS Library**



The following publications have been received recently in the National Office Library. If members would like more information about them, please contact the National Office.

1. **'Evaluation of an Insight Driver-training Program for Young Drivers'** - Monash University Accident Research Centre, December 2001, Report No. 186
2. **'Benefits of a 64 kph Offset Crash Test in Australia'** - Monash University Accident Research Centre, 2000, Report No. 173
3. **'Benefits of Airbag Refitment in Second-hand Cars in New Zealand - -'** Monash University Accident Research Centre, August 2001, Report No. 174
4. **'Police Vehicles: Rollover Stability Analysis (Phase 1 Project) –'** Monash University Accident Research Centre, March 2002, Report No. 184.
5. **'An Evaluation of the Effectiveness of Overt and Covert Speed Enforcement Achieved Through Mobile Radar Operations'** – Monash University Accident Research Centre, March 2002, Report No. 187.
6. **'The Relationship Between Fuel Economy and Safety Outcomes'** – Monash University Accident Research Centre, December 2001, Report No. 188.
7. **'Driveway Deaths – fatalities of young children in Australia as a result of low-speed motor vehicle impacts'** - Australian Transport Safety Bureau, report CR 208, April 2002.

### Available from the Internet

The Monash University Accident Research Centre has a number of papers available for download from their web site at [www.general.monash.edu.au/muarc](http://www.general.monash.edu.au/muarc). One of the latest is an **'Investigation of Audience Perceptions of Transport Accident Commission Road Safety Advertising'**.

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