

# CASR plays key role in discussing solutions for rural intersections

In October, CASR and the Department for Transport, Energy and Infrastructure (DTEI), convened the inaugural CASR Case Study Workshop.

The workshop used information collected by CASR through its in-depth at-scene crash investigation to examine the key issues contributing to a sample of crashes occurring. A group of road safety stakeholders came together to identify countermeasures suitable for intersections of the same type and assigned follow-up actions to key personnel present at the workshop.

The workshop was chaired by the Director of Road Safety at DTEI, Martin Small. The road safety stakeholders who attended the inaugural CASR Case Study Workshop included various representatives of DTEI, SA Police Major Crash Investigation, Barossa Council and the Country Fire Service.

The idea for the workshop came from the system of crash review used by the Swedish Road Administration, known as OLA. In Swedish, OLA stands for "Objective facts", "solutions" and "intentions". During an OLA meeting a group of key road safety stakeholders discuss a crash at length to determine the key contributing factors ("objective facts"). Next, potential solutions to prevent similar crashes are suggested and

debated ("solutions"). Finally, stakeholders choose the most feasible solutions and develop plans for implementing them ("intentions"). The aim is to involve all relevant experts in tackling road safety issues without any need for criticism or blame, and to develop and initiate new countermeasures.

In setting up this first OLA-style Case Study Workshop, CASR was interested in exploring a common crash type. One crash type that CASR commonly attends is an intersection crash in the non-urban areas north of Adelaide. Looking in its database, CASR staff found an intersection in the Barossa where they had attended three crashes, all with a virtually identical crash configuration. These crashes proved an ideal set to study in the inaugural workshop. The great benefit of the workshop was that a key number of suitable countermeasures were identified by those in a position to implement them.

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# At the scene

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## Showing restraint in South Australia



A recent observational survey of seat belt use in South Australia revealed that although the level of seat belt use is relatively high, there is still room for improvement.

Despite the well-known safety benefits of seat belts, there is still a significant level of non-use in Australia and throughout the world. CASR conducted an on-road observational survey of seat belt/restraint use in South Australia, the first survey in Australia since 2005.

The study found that restraint use for passenger vehicles in the Adelaide metropolitan area was 98.4% and ranged from 96.8% to 98.2% in the five rural regions surveyed.

Principal researcher Lisa Wundersitz said: "The level of restraint use observed in this study was the highest since surveys began in South Australia in 1998. While the rates in the metropolitan area are higher, the rural regions are catching up. However, there are areas where there is some scope for improvement. Rear seat passengers and adult males had the lowest levels of seatbelt use. Future restraint use campaigns should consider targeting these groups."

Child restraint use was found to be relatively high but varied by region. "Given that restraint use was generally higher in the metropolitan area than rural regions, we were very surprised that child restraint use was lowest in metropolitan Adelaide (96.6%)", Lisa commented.

Another unexpected finding was that 20% of children aged 0 to 4 years were inappropriately restrained, either in booster seats or adult seat belts. "This finding is of concern as new national child restraint laws to be introduced in 2010 will require children up to the age of 7 years to be appropriately restrained based on their age. Children up to the age of 6 months will be required to be



restrained in a rearward facing child restraint (e.g. baby capsule) and from 6 months until their 4th birthday, children must be restrained in either a rearward or forward facing child safety seat. From 4 to 7 years, children must be restrained in either a forward facing child restraint or booster seat. These findings highlight the need to educate parents about which restraints are most appropriate for their children."

For more information please contact Lisa Wundersitz, [lisa@casr.adelaide.edu.au](mailto:lisa@casr.adelaide.edu.au)

## CASR presents new forum

In May 2010 CASR will be hosting the inaugural Australia and New Zealand Road Safety Research in Progress Forum, giving researchers the opportunity to present and discuss current research initiatives. While the Australasian Road Safety Research, Policing and Education Conference provides an excellent opportunity to disseminate completed research outcomes it does not provide the opportunity to discuss ongoing research projects and explore issues of research quality and data reliability.

CASR envisages this forum will provide an excellent networking and peer review opportunity for both established and early career researchers.

For more information please contact Leonie Witter on (08) 8303 3114 or at [leonie@casr.adelaide.edu.au](mailto:leonie@casr.adelaide.edu.au)

## Current projects

Effect of speed limits on travel times in rural areas  
Clear zones and barriers  
Relationship between vehicle performance and young driver crash involvement  
Easing pedestrian standards



## 2010 CASR seminar series

Following on from the successful 2009 seminars, the CASR seminar series will continue in 2010. The seminars address major topics in the fight to reduce road trauma and highlight the latest research in the area.

3 February **Making a difference – what's happening in road safety research?**  
Professor Mary Lydon

The seminars are held in The Art Gallery Auditorium on Wednesdays from 4.00 to 5.30pm..

For more information please contact Leonie Witter on (08) 8303 4114 or email [leonie@casr.adelaide.edu.au](mailto:leonie@casr.adelaide.edu.au)



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# Message from CASR



Welcome to our final newsletter for 2009. This has been an exciting year at CASR particularly in forming new collaborations and relationships. Working with others and sharing knowledge is vital in the multi-disciplinary and complex world of road safety research and I believe we are making progress in forming links between the research groups.

Last month the RSRPE Conference in Sydney brought together over 500 road safety professionals including eight of us from CASR. We were all impressed with the quality of the papers and organisation and would like to congratulate the NSW organising committee on producing such a successful conference. Of course we were also very pleased that CASR staff received the awards for best paper and best paper by a new researcher and we thank the conference organisers and the judging committee.

We hope you have found our newsletters interesting and, as always, we would be pleased to receive your feedback and suggestions. Finally we wish all our colleagues and customers a safe and happy holiday and look forward to working with you all again next year.

Mary Lydon, Director, [mary@casr.adelaide.edu.au](mailto:mary@casr.adelaide.edu.au)

## CASR researchers acknowledged by their peers



Jeremy Woolley accepting award on behalf of Jeff Dutschke

CASR staff won two awards at the recent Australasian Road Safety Research, Policing and Education Conference in Sydney.

Robert Anderson and Sam Doecke won the Peter Vulcan Award for Best Paper for his paper titled 'The relative age related crashworthiness of the registered South Australian passenger vehicle fleet'.

Jeff Dutschke won the John Kirby Memorial Award for Best Paper by a New Researcher for his paper on 'Simulation of rural travel times to quantify the impact of lower speed limits', co-authored by Jeremy Woolley.

## CASR rides with Motorcycle Australia

CASR is pleased to announce the establishment of the Motorcycling Australia Postgraduate Scholarship. This scholarship is being generously funded by Motorcycling Australia and is for candidates interested in completing a PhD on the topic of motorcycling safety. Those with a background in psychology, public health or statistics and who are eligible to enrol for a PhD are welcome to apply. The scholarship will be for 3 years and has a tax-exempt stipend of \$26,669 per annum. Application forms are available from the web page: <http://www.adelaide.edu.au/graduatecentre/scholarships/postgrad/pgforms.html>

For more information please contact Matthew Baldock, [matthew@casr.adelaide.edu.au](mailto:matthew@casr.adelaide.edu.au)

## New postgraduate students



### RAA scholarship to study older driver safety and mobility

James Thompson is commencing his PhD after receiving the Road Safety Research Scholarship generously provided by the Royal Automobile Association of South Australia. His research will be in the area of older driver safety and mobility. James intends to examine the importance that sustained mobility and safety have for the well-being of older drivers. Matthew Baldock, Associate Professor Mathias and Lisa Wundersitz will supervise James in his PhD.



### Benefits of reducing speeds on rural roads

Blair Turner has commenced his PhD at CASR on the topic of reducing road casualties on rural roads through reduced speeds. Blair has extensive research experience from New Zealand, the United Kingdom and Australia and is known to many in his current role at ARRB. He will be conducting his research part time and will be supervised by Jeremy Woolley and Mary Lydon of CASR and Dr Peter Cairney of ARRB.



## In the spotlight – Robert Anderson

Robert Anderson has been at CASR since 1993.

He recalls his first project at CASR as a new engineer, collecting crash data for Holden on crashed Commodores. "Holden were interested in whether airbags, recently introduced into the Commodore, were making a difference." The effectiveness of vehicle safety systems and their penetration into the fleet is of continuing interest. "In the next year or two, we will be focusing on how effectively new safety technologies are protecting drivers and particularly those drivers at risk of being involved in a crash."

In 1994, Robert began a PhD on the biomechanics of injury, investigating the tolerance of brain tissue to forces in a head impact. Again, those interests will resurface with two head injury projects getting underway in 2010 thanks to recent grants from the Brain Foundation and the NHMRC.

Robert has been Deputy Director of the Centre since 2002, and has eclectic interests in road safety, from brain injury tolerance to pedestrian impact biomechanics to the analysis of mass crash data. "Fundamentally, I am interested in the effectiveness of road safety measures. But I am also interested in the large scale trends that we can see in vehicles, road crashes and injuries. We've come a long way in reducing road deaths since the 1970s, but we have to admit that the reasons for that progress are less than clear. Understanding those reasons may be the most effective way of working out how to further improve the safety of our road transport system."

Robert has had a successful year, winning several government research contracts in addition to the grants for his brain injury research. He was also recently promoted to Associate Professor by the university, and won the best paper award at the Australasian Road Safety Research, Policing and Education Conference in Sydney.

"It's gratifying that pursuing research with intensity and commitment can bear fruit. CASR seems to be in a unique position with the breadth of disciplines represented amongst its staff and students. Interchanges with the other researchers often generate exciting new ideas and approaches. Beyond the Centre, our collaborations across the University, the country and overseas mean that we are never short of research ideas to pursue. It's been a good year, and much of the reason for that has been due to the collaborative spirit that exists within and outside the Centre."

## Motorcyclist safety in Victoria

The Community Policing and Education Project has been launched by VicRoads and Victoria Police in 2009 to reduce the likelihood of motorcycle crashes in Victoria through a combination of enforcement and education countermeasures.

CASR has been chosen to evaluate the effectiveness of the Project using a range of methods. These methods include a process evaluation, analysis of crash and offence data, an internet survey of motorcyclists, an on-road speed survey and roadside traffic observation. The ultimate outcome of the evaluation will be a determination of the success of the Project and recommendations for future enforcement and education strategies to reduce motorcycle crashes.

The Project is designed to decrease the behaviours that commonly lead to motorcycle crashes and motorcyclist injuries. These behaviours include excessive riding speed, lack of appropriate protective clothing and hand-held mobile phone use by car drivers. A particularly interesting component of the Project is the use of police to speak to riders about their clothing and how it might put them at greater risk of crash involvement (inconspicuous) or at greater risk of injury in a crash (inadequate protection). Additionally, police talk to riders about other risks, riding skills and road craft.

CASR's evaluation will involve analysis of two years of crash and offence data prior to and following the commencement of the two-year Project. All registered motorcycle owners in Victoria will be contacted to complete a survey on a variety of motorcycling issues, including enforcement and road infrastructure. Roadside observations will focus on motorcyclist protective clothing and car driver hand-held mobile phone use. Observations will be undertaken in both regional areas of Victoria, focusing on weekend riders, and Metropolitan Melbourne, focusing on weekday commuters. On-road speed surveys will also be conducted in regional areas.

For more information please contact Matthew Baldock, [matthew@casr.adelaide.edu.au](mailto:matthew@casr.adelaide.edu.au)

## Inaugural ARRB/CASR seminar

Jeremy Woolley presented the inaugural ARRB / CASR joint seminar in Perth on 4 November on the topic of collisions with roadside hazards.

The seminar represents the first in a series in collaboration with the ARRB Perth office and was timed to provide a prelude to the Australasian College of Road Safety (ACRS) Annual Conference held on the following two days. Some 30 guests from Western Australia, interstate and overseas attended, representing various State Road Authorities, Local Government Authorities, the Police

and various road safety committees and organisations. The opportunity was used to promote the joint capabilities of ARRB and CASR and future seminars will be scheduled for both Adelaide and Perth on various road safety topics. Jeremy is currently the State president of the ACRS in South Australia and represents the State on the National Executive.