

TARS Research
Transport and Road Safety Research

UNSW
THE UNIVERSITY OF NEW SOUTH WALES

Never Stand Still

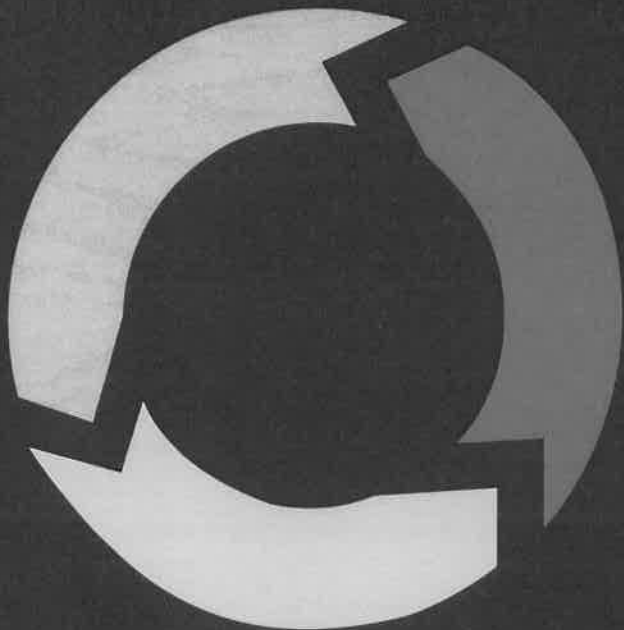
School of Aviation



WHAT IS TARS RESEARCH?

Transport and Road Safety (TARS) Research is a private and publically funded research group in the School of Aviation at UNSW.

OUR OBJECTIVES ARE:



- advancing transport and road safety through high quality research;
- building research capacity;
- translating the results of research into policy and practice.



WHO ARE WE?

Our researchers are professional scientists and engineers with doctoral or masters level qualifications. TARS researchers cover the essential disciplines needed for an effective transport and road safety research centre: safety policy and systems, psychology, human factors, engineering and crashworthiness, information technology, biomechanics, biostatistics, epidemiology, and social sciences.

We are a multi-disciplinary team of highly experienced researchers with excellent track records in road and transport safety research. We take a safe system-based approach to road and transport safety issues that acknowledges the overlap between transport safety, public safety and work-related safety, as well as the economic and social influences on safety. Our research also capitalises on the strong synergies in cross-modal transport safety research through collaborations between the TARS Research team and researchers in the School of Aviation.

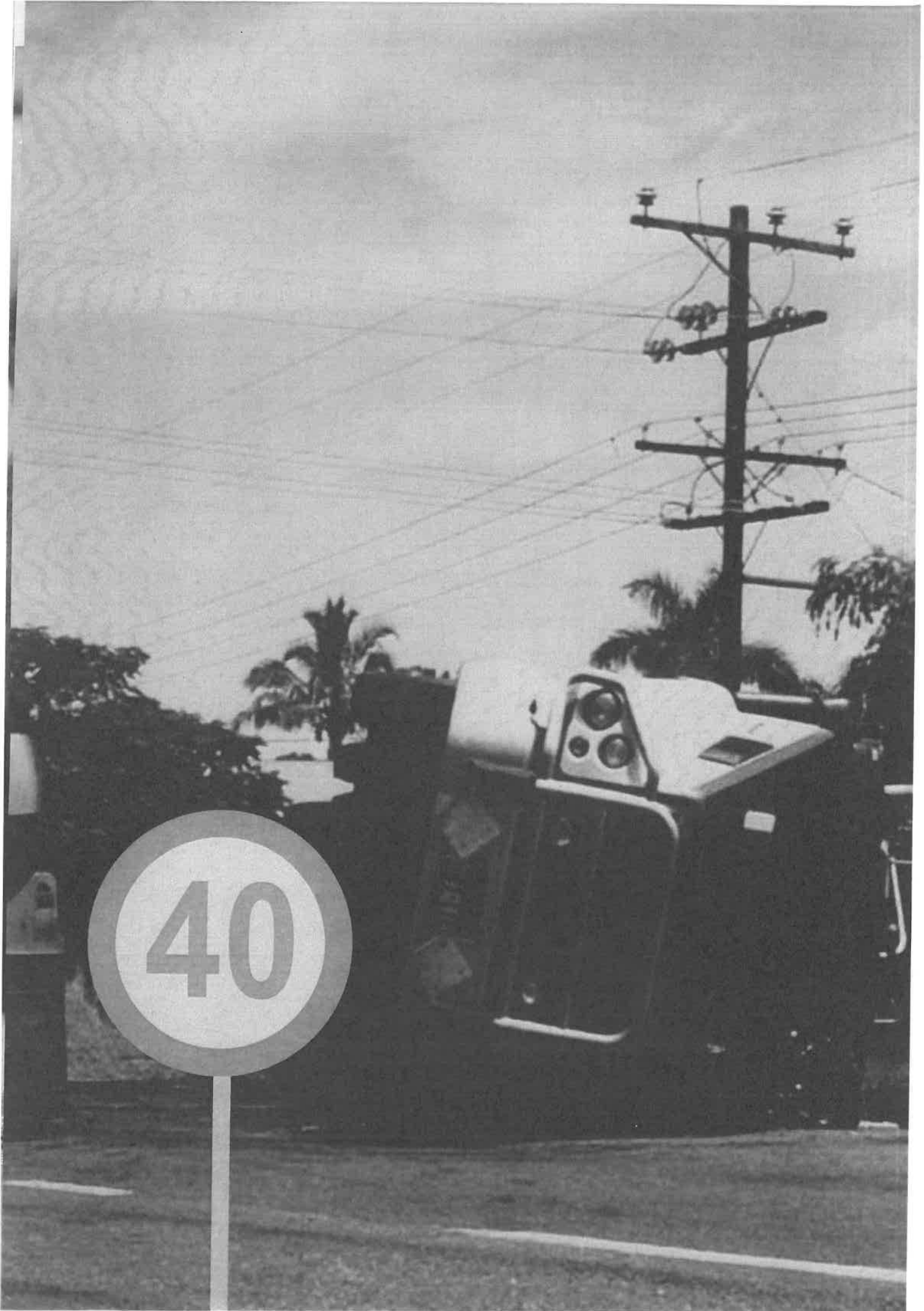
FUNDING OUR RESEARCH

TARS research funding is from grants from the Australian Research Council and the National Health and Medical Research Council, as well as research funding from government and non-government authorities in Australia and internationally.

We also have a strong and consistent history of value-adding financial support from the transport industry. Our research is independent and conducted without fear or favour. We take on some of the most difficult and persistent road and transport safety problems. Our record of research success is recognised in Australia and internationally.



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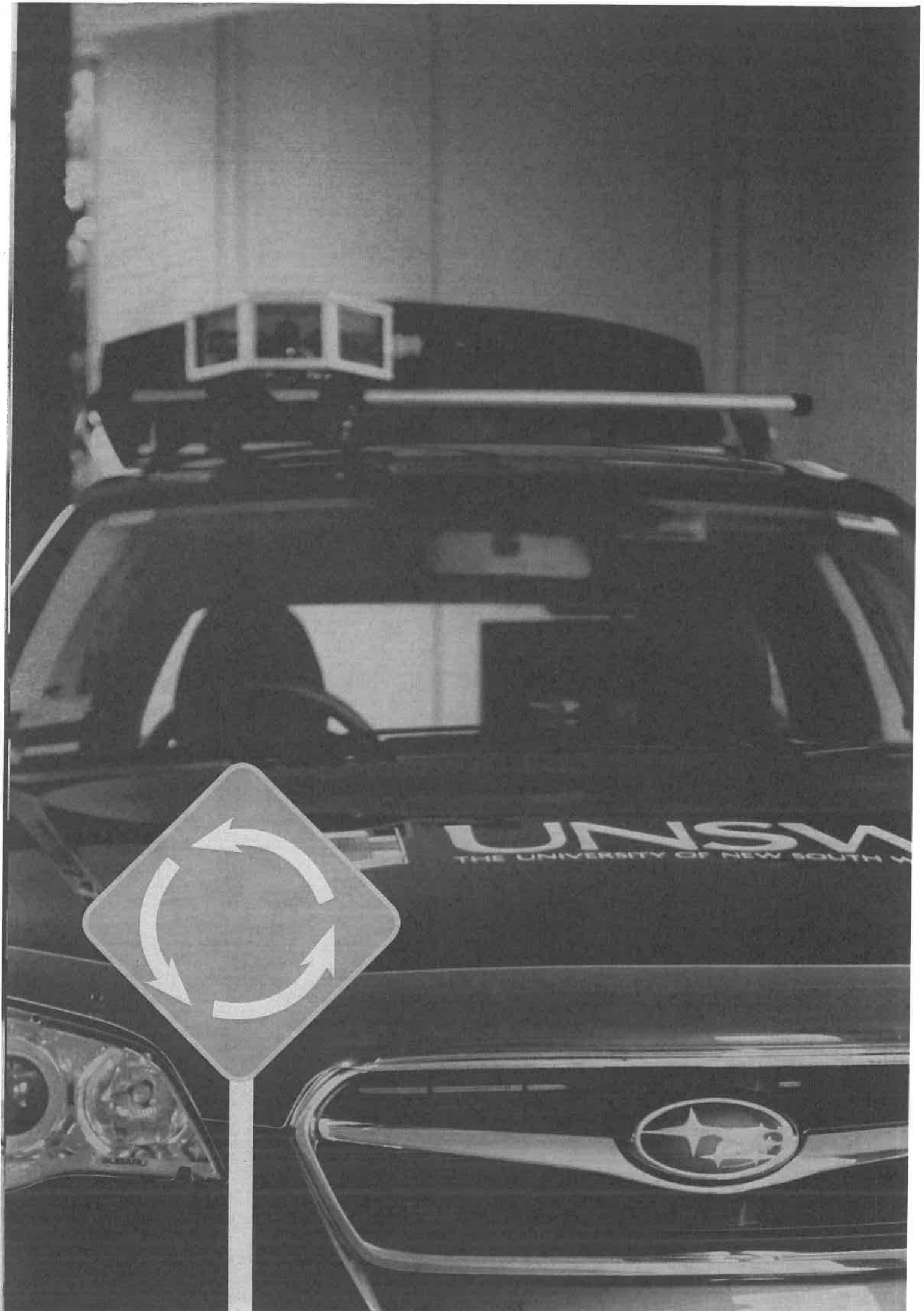


OUR RESEARCH RESOURCES

We use world's best practice facilities and tools for transport and road safety research including:

- Car, train and aircraft simulators for assessment of operator performance;
- Computer simulation software and laboratory crash test facilities for simulating and reconstructing crashes, including vehicle crashworthiness and biomechanics injury mechanisms;
- Instrumented vehicles for driver performance studies and Naturalistic Driving Studies and instrumented aircraft for Naturalistic Flying Studies (under development);
- Video/photographic equipment for site investigations and audits; and access to equipment via Crashlab for crash, stability, biomechanics and dynamic handling tests;
- Access to population-based information on Australian road and transport-related mortality including the National Coronial Information System, injury morbidity and mortality data from police-reported crashes and third party compensation claims following trauma as well as hospital and emergency department (ED) data on road trauma in NSW.

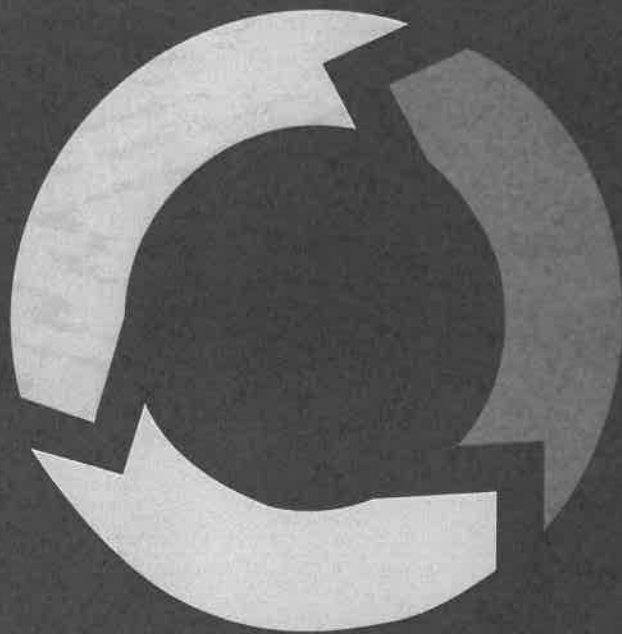




OUR STRATEGY

The future strategic direction of TARS Research focuses on the key areas of research, capacity building and community engagement.

We will do this through:



Research

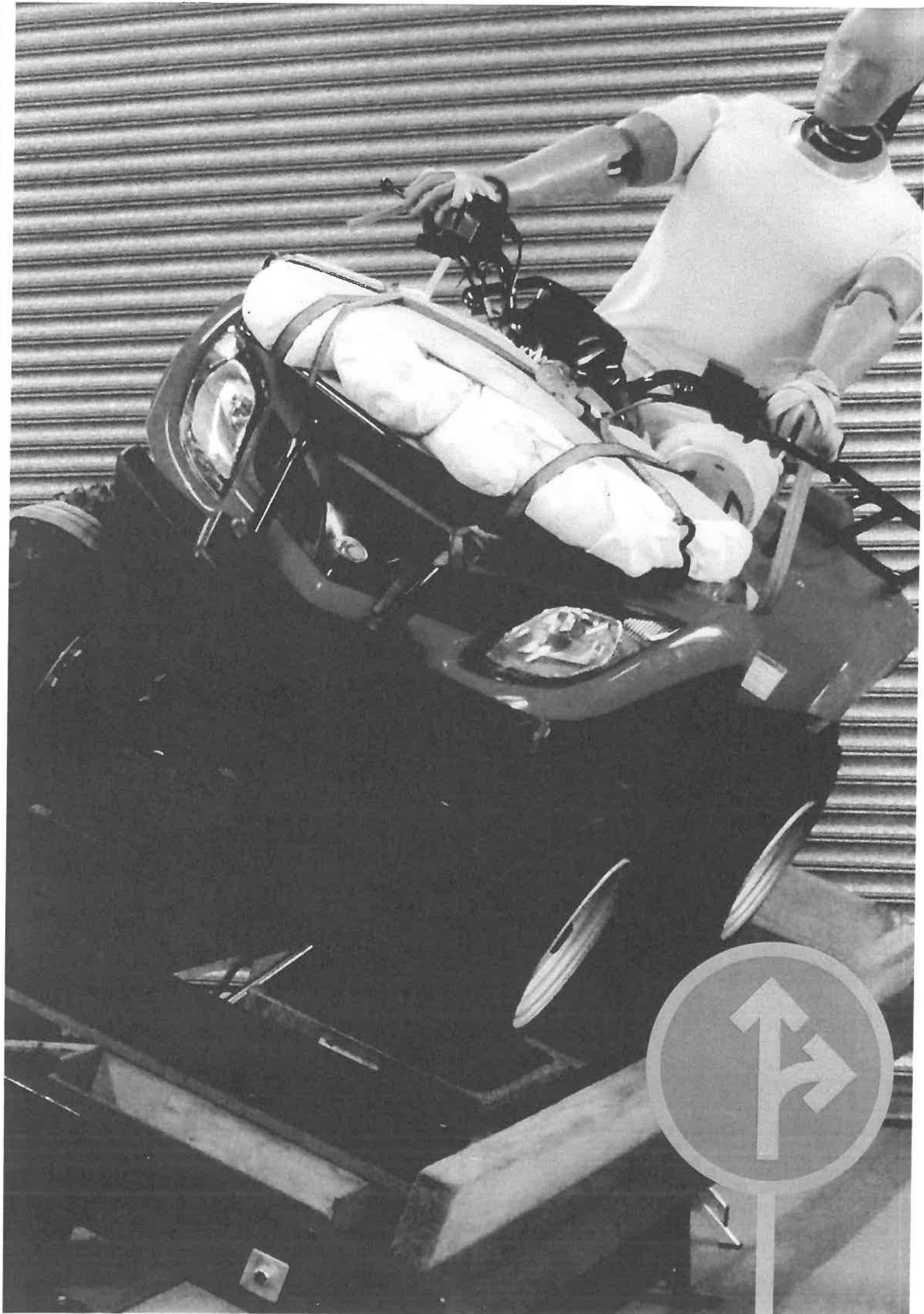
- Undertaking high-quality research that benefits society;
- Being recognised as a world-class transport and road safety research group;
- Building on our current strong capacity to attract ARC, NHMRC and industry funding for strategic road and transport research.

Capacity Building

- Maintaining and extending our position as a leading Australian research centre for road safety research output;
- Being recognised as the research centre of choice for high quality, transport and road safety expertise;
- Attracting and fostering exceptional students seeking to undertake higher degrees in areas relevant to transport and road safety;
- Maintaining and enhancing an environment that promotes collaboration between the range of disciplines required for high-impact and innovative road and transport safety research.

Community Engagement

- Translating fundamental safety science into new policy and practice;
- Working with government, industry and the broader community to improve transport and road safety in NSW, Australia and the world;
- Continuing to promote injury-prevention initiatives in all transport environments.





Transport and Road Safety (TARS) Research

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CRICOS Provider Code 00098G

Staff and Student List

Academic Staff

Prof Ann Williamson, Director, NHMRC Senior Research Fellow (0.8 FTE)
Prof Raphael Grzebieta, Professor of Road Safety (1.0 FTE)
A/Prof Teresa Senserrick, Deputy Vice-Chancellor (Research) Fellow (1.0 FTE)
Dr Julie Hatfield, Senior Research Fellow (1.0 FTE)
Ms Lori Mooren, Senior Research Fellow (1.0 FTE)
Dr Mike Bambach, Senior Research Fellow (1.0 FTE)
Dr Rena Friswell, Research Fellow (1.0 FTE)
Dr Soufiane Boufous, Postdoctoral Research Fellow (1.0 FTE)
Dr Mario Mongiardini, Postdoctoral Research Fellow (1.0 FTE)

Professional Staff

Mr Jan Eusebio, Senior Technical Officer (1.0FTE)
Mr Nick Pappas, Research Business Manager (0.8FTE)
Ms Sussan Su, Finance Manager (1.0 FTE)

Adjunct Appointments & Visiting Research Fellows

Dr Anne-Marie Feyer, Adj. Professor	Dr George Rechnitzer, Adj. A/Professor
Dr Soames Job, Adj. Professor	Dr Bruce Simons-Morton, Adj. Professor
Dr Mike Regan, Adj. Professor	Dr Victoria Kendrick, Endeavour Fellow

Research Assistants

Amy Chung	Rainer Zeller
WuYi Zheng	

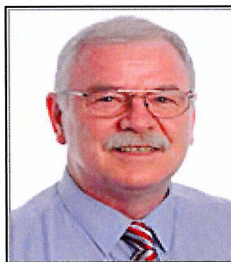
Postgraduate Students

Mr Thomas Bayley	Ms Nikki Olsen
Ms Amy Chung	Ms Louise Raggett
Mr David Hicks	Ms Louise Shaw
Ms Nurul Ikhmar Ibrahim	Ms Vivien Shi
Mr Faisal Magableh	Mt Keith Simmons
Mr Garrett Mattos	Mr Tana Tan
Mr Mat Petrenko	Ms Kim Thai

TARS Researcher Profiles



Prof Ann Williamson: has a PhD in behavioural science and has worked in government and academia in research and policy development in injury prevention for over 30 years. She has a national and international reputation for research in road and occupational safety. This is due in part to contributions to the fields of fatigue and human factors and safety, using innovative methods.



Prof Raphael Grzebieta: obtained his PhD in engineering focussing on crashworthiness. He has 28 years of research and professional experience in road safety, road and vehicle crashworthiness, and crash investigations and reconstruction. His work has influenced policy in the areas of motorcyclists impacting roadside barriers, installation of wire-rope barrier systems, roadside barrier crashworthiness, rollover crashworthiness, heavy vehicle safety, bicycle and cycling infrastructure safety, motorcycle safety and occupant crashworthiness.



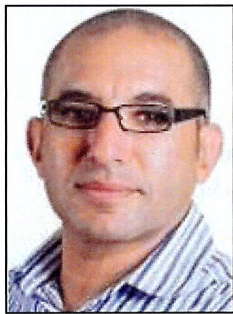
A/Prof Teresa Senserrick: has a PhD in Psychology with over 20 years of experience in health and safety research. She is nationally and internationally renowned for her expertise in driver education, training and licensing. Her research includes psychological and epidemiological studies with a particular focus on policy and practice relevant research and on disadvantaged groups, including youth, Aboriginal, low socio-economic, rural and remote road users and vulnerable road users, including pedestrians, cyclists and motorcyclists.



Dr Julie Hatfield - Senior Research Fellow: has a PhD in Psychology and 20 years' experience of health and safety research. Her innovative behavioural research has contributed to understanding of risky driving behaviour, young driver safety, and safety of active transport (walking and cycling). She has extensive experience with conducting and communicating research to address policy needs.



Dr Mike Bambach - Senior Research Fellow: has a PhD in Engineering and has substantial experience with regard to vehicle rollover crashes, motorcyclist impacts into roadside infrastructure, injury biomechanics and deformation of vehicle structures in collisions. He has recently also gained considerable experience in the 'Health data and epidemiology' stream, particularly with regard to the linking and epidemiological analyses of large administrative databases.



Dr Soufiane Boufous - Postdoctoral Research Fellow: has a Masters in Public Health (Sydney University) and a PhD in Epidemiology (UNSW). His research focuses on developing innovative methods to assess the burden and risk factors of injury and evaluate injury prevention programs in road safety. He has developed methods based on the use of data linkage to integrate relevant data systems and undertaken observational studies and randomised trials to examine risk factors of road trauma and assess the impact of preventive strategies.



Dr Mario Mongiardini - Research Fellow: has worked in the field of roadside safety barrier systems and complex finite element (FE) computer simulations of crash events for 10 years. He has specialised in both testing and simulating vehicle full-scale crash tests of roadside safety hardware. In particular, he has actively worked on the development of various vehicle and barrier FE models as well as preparation of the US standard for Verification and Validation (V&V) of numerical FE models for roadside safety barriers throughout the USA.



Dr Rena Friswell - Research Fellow: has worked as a behavioural scientist in road and occupational safety research for over 15 years, both in university and government organisations. Her primary research interest is driver fatigue, but she has also investigated aspects of driver distraction, fleet safety, repeat offending and the effects of public safety interventions. She has expertise across a range of methodological approaches for understanding road users (broad scale surveys, dataset analyses, and laboratory and workplace studies).



Lori Mooren - Senior Research Fellow: Lori has been working in road safety for 25 years. She was awarded a Fellowship in 2012 by the Australasian College of Road Safety for her outstanding achievements. Lori was Project Manager for the production of a Global Good Practice Manual on Speed Management and is a member of the UN Road Safety Collaboration, and co-chairs the Pillar 1, Road Safety Management Project. She has established a research program that aims to develop and test safety management systems and interventions to improve work related road safety, particularly in heavy vehicle transport operations.

Adjunct Researcher Profiles



Prof Mike Regan: is a psychologist with 25 years' experience in transportation safety, in Australia and in Europe - as a researcher, research manager and policy maker. He has specialist research expertise in driver distraction and inattention, human interaction with intelligent transport systems, use of instrumented vehicles and simulators to study driving behaviour and performance, and driver and rider training. He has authored more than 160 peer-reviewed publications, including 3 books, sits on the Editorial Boards of 5 peer-reviewed journals, and is currently the 25th President of the Human Factors and Ergonomics Society of Australia.



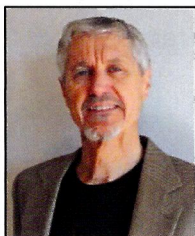
Prof Soames Job: Soames is nationally and internationally road safety expert with 33 years of road safety experience. He is recognised for his achievements in road safety management, delivery, policy and research, and for noise effects research and policy. Soames brings a unique combination of skills in consulting, policy, road reviewing, regulation and legislation creation and management, and direct delivery of road safety programs and projects as well as recognised expertise and success in road safety research and evaluation, teaching, group leadership, and mass media messaging for behaviour change.



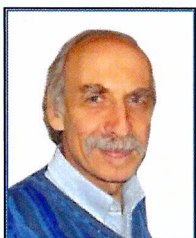
Prof Anne-Marie Feyer BA (Hons) PhD GAICD:

Dr Feyer is a national and internationally renowned expert on public health and occupational health and safety policy. Until 2010, Dr Feyer was as a senior partner at PricewaterhouseCoopers (PwC) where she established the Firm's National Health Advisory Practice. She was appointed to the Board of PwC's Global Health Research Institute and established PwC as a leading advisor in the health, disability and compensation arena.

Prior to joining PwC in 2001, Dr Feyer held academic appointments in both Australia and New Zealand. In her last academic post, she was Director and Professorial Research Fellow of the New Zealand Environmental and Occupational Health Research Centre at the University of Otago, Dunedin, which she established. This Centre was the first centre of excellence in research in environmental and occupational health in New Zealand.



Prof Bruce Simons-Morton: Dr Simons-Morton is both Associate Director for Prevention as well as Chief of the Health Behavior Branch of the Eunice Kennedy Shriver National Institute of Child Health and Human Development. He is also Chair of the Committee on Operator Education and Regulation of the Transportation Research Board (TRB; Board of the National Research Council and National Academies of Science) in the United States; the peak international body for academics specialising in road safety.



A/Prof George Rechnitzer: has over 40 years of professional engineering experience, academic and research expertise, as well as extensive industry affiliations both nationally and internationally. He has expertise in forensic and safety engineering, road safety and workplace safety, accident investigation and collision reconstruction.