

MUARC

2019 Annual Report

YEAR IN REVIEW

Looking back on 2019, I have a sense of pride in the achievements of the Centre and the collective effort of MUARC staff to its successes. We have again demonstrated an adaptive edge, we have provided advice to governments, created new collaborations, and attracted a diverse range of projects that have had many positive safety benefits for our community.

As MUARC enters the final phases of its three-year Strategic Plan 2018-2020, the Centre has accomplished many of the goals for excellence, international, enterprising and inclusiveness in our research, education and training.

You will see an impressive overview of our teams' accomplishments within this Annual Report. Centre-wide highlights include successful ISO 9009001 accreditation for Quality Management of the MUARC platform. With this certification, MUARC will become one of the University's Research Platforms overseen by the Office of the Vice Provost (Research & Research Infrastructure).

The Centre twice met with the Advisory Council, chaired by Ms Anna Burke, with Mr John Merritt, Ms Jillian Kilby, Judge Frances Millane and Mr Ken Lay. The Council engaged enthusiastically with researchers and have committed to work with us in facilitating several new initiatives, including an Injury Data Hub; an industry-led simulation showcase linked to Monash Precinct developments; and an Emergency Management Research Hub for Victoria.

MUARC also contributed to the Victorian Ministers' Road Safety Summit, Minister Pulford's Roundtable on connected and automated vehicles in November; and Federal forums including a Road Safety Roundtable in September and a Federal Office of Road Safety's Stakeholders Roundtable meeting in December hosted by Deputy Prime Minister and Minister for Infrastructure, Transport and Regional Development, Hon Michael McCormack MP.

The achievements featured in this report are testament to a successful year in which the Centre continued to provide real-world solutions that drive us closer to an injury-free society. For that, I extend my gratitude to our hard-working MUARC staff and our valuable partners and collaborators across governments, industry and Universities.

Professor Judith Charlton
Director

EXCELLENT



MUARC Best Paper

Amanda Stephens, Associations between self-reported mindfulness, driving anger and aggressive driving

Best Student Paper

International Symposium on Naturalistic Driving Research

Renée St. Louis, The relationship between resilience and real world driving patterns of older adults in the Ozcandrive study

Monash Advancing Women's Research Success Grant

Amanda Stephens

Intelligent Transport Systems (ITS Australia) National Research Award

Steve O'Hern, part of winning wMonash team

Resilient Australia Awards

National and Victorian Community winners

3

Road Safety Management Leadership Programs

89

Graduates

9

Countries

INTERNATIONAL



8th

International Symposium

on Naturalistic Driving Research (NDRS 2019) in partnership with the Virginia Tech Transportation Institute (VTI)



Evaluated Thailand's Road Safety Status

against the UN Voluntary Road Safety Goals



Joined two EU H2020 projects as expert advisors



Developed training programs

addressing transport-related deaths and serious injuries to women working in the garment and footwear industry in Cambodia



World Health Organisation Collaborating Centre

contributed to capacity building through the Road Safety Management Leadership Program which offered a full LMIC scholarship; a two-day Road Safety Forum and Workshop in Cyprus; and a symposium in Edinburgh focusing on road policing in LMICs and HICs

ENTERPRISING



Publications exceeded current
3 year annual average



Completed data collection and study reports on the largest naturalistic study of truck drivers in the world – the CRC-P funded Advanced Safety Truck Concept (ASTC)



100 active projects and research income exceeded
4.5M



National Road Safety Partnership Program (NRSPP) partnership to bring industry/government partners and stable funding of \$350k p.a. for 5 years



Secured significant partnerships during 2019 with prospects for large-scale research and/or training income generation in 2019-2021



Used Car Safety Ratings secured combined partner contract with **ANCAP**

INCLUSIVE



2

writing workshops

that provided professional development for staff and students



Research Seminars

featuring MUARC and international presenters, enriching the academic experience for staff and students



Connect @MUARC

continued its commitment to improving social cohesion by creating an 'inclusive' environment through activities catered to a diverse group



MUARC News

provided a weekly newsletter informing staff and students of Centre, Monash and global activities



REGULATION AND IN-DEPTH CRASH INVESTIGATION

- ▶ Continued research on the causes and consequences of serious injury crashes through the TAC-funded Enhanced Crash Investigation Study. Results are expected in 2020.
- ▶ Teamed with University of Florence to research motorcycle active safety systems and rider responses to unexpected hazard events.
- ▶ Examined drug-driving offences and crashes in Victoria and conducted a large-scale survey on community attitudes toward drug-driving behaviour.
- ▶ Commenced research on the crash reduction benefits of Acoustic Vehicle Alerting Systems for the Australian Government following work on the safety impacts of Quiet Vehicles for people who are blind or have low vision.



MONASH UNIVERSITY DISASTER RESILIENCE INITIATIVE

- ▶ Refreshed the Compendium of Victorian Community-based Resilience Building Case Studies.
- ▶ National winners of the Resilient Australia Awards in Projects of National Significance for the Gender in Disaster Pod; and Victorian Community Winner for the Long Term Disaster Resilience Study, both in partnership with Women's Health in the North and Women's Health Goulburn North East.
- ▶ Contributed to the MUARC graduate research program with two PhD completions, four MPhil completions and delivered the Guiding Principles for Professionals Engaged in Disasters and Humanitarian Crises within the Faculty of Arts.
- ▶ Published 8 peer-reviewed publications. Presented 13 conference presentations. Led two international workshops at WADEM World Congress, and successfully guided the adoption of the WADEM Position Statement on Gender in Disasters.



INJURY ANALYSIS AND DATA

- ▶ Undertook 'Vehicle Identity Theft and Misuse' study aimed at understanding the prevalence and impact of vehicle number plate theft and misuse in Victoria
- ▶ Completed an Australian-first evaluation of the effectiveness of Autonomous Emergency Braking to inform development of a Regulatory Impact Statement for the future mandating of fitment of AEB in Australia.
- ▶ Presented results of the decade-long P Drivers Project, a behaviour change program for young drivers, at Australasian Road Safety Conference.
- ▶ Conducted evaluations of the potential benefits of automated mobile phone detection cameras; both for the Victorian Government and Transport for NSW resulting in NSW being the first jurisdiction in the world to implement the program in December 2019.



SYSTEMS SAFETY

- ▶ Received funding from Department of Education and Training to develop a training program designed to improve the safety of incident responders on high-speed roads. This 3-year project is in collaboration with Eastlink, Holmesglen Institute and the Emergency Services in Victoria.
- ▶ With an award from the ACT Road Safety Fund project, the team will develop a program to reduce aggressive driving in young drivers in the ACT.
- ▶ Completed pilot for the Patient Handling Injuries: Review of Systems (PHIRES) project. The Toolkit is currently being implemented within 10 health services in Victoria.



STUDENTS

- ▶ Seven successful completions and graduations.
- ▶ Record number of new students commencing: The Injury Prevention Graduate Research Industry Program began, seeing MUARC welcome the first six students receiving industry co-sponsored scholarships and four additional students sponsored through Monash Faculty partners.
- ▶ A number of alumni started successful careers in government, industry and academic positions, and are making significant and distinctive contributions to injury prevention.



VICTORIAN INJURY SURVEILLANCE UNIT

- ▶ Ran a strategic planning workshop to outline the directions of VISU over the next three-year period.
- ▶ Hazard 86 on opioid-related harm was released in collaboration with Monash Addiction Research Centre (MARC). It drew national coverage including Herald Sun, WIN TV, and news.com.au, with a total reach of over 600,000 people.
- ▶ Completed the first of three reports of the Victorian Suicide Registry Data Linkage Study



TRAFFIC ENGINEERING AND VEHICLE SAFETY

- ▶ Completed 30km/h speed limit trial evaluation in the City of Yarra.
- ▶ Completed eMETS modelling projects for a Road Safety Strategy Action Plan for NSW and a report to Department of Transport documenting a new technique for evaluating cyclist injury severity with vehicle impact speed.
- ▶ Commenced a partnership with Australian Road Research Board (ARRB) for Department of Transport, to evaluate the safety benefits of a 2018 trial of Raised Safety Platforms.



BEHAVIOURAL SAFETY SCIENCE

- ▶ Data collection formally concluded for the Ozcandrive older driver cohort study – an 8-year longitudinal study (ARC LP 2010-2015; TAC 2015-2019; with Eastern Health, VicRoads, DoJ, VicPol) monitoring the health and driving of 257 Melbourne-based older drivers, resulting in 12.8 million km of driving data for in-depth analysis. Co-authored 17 peer-reviewed publications from the project to date.
- ▶ Contributing partners in the ARC LP funded Australian Naturalistic Driving Study (ANDS) which is monitoring driver behaviour of 379 drivers in Victoria and NSW. Project outputs in 2019 include co-authored peer-reviewed paper on driver distraction and presentations at the MUARC-hosted NDRS 2019.
- ▶ Commenced ACTOD project, funded through a research grant from NRMA ACT Road Safety Trust, will monitor real-world driving of older residents in Canberra to understand their travel patterns and evaluate feasibility of alternative transport options to support their ongoing mobility.



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