

MUARC

2020 Annual Report

YEAR IN REVIEW

Looking back on 2020, a strange and challenging year, MUARC staff and students have my sincere respect and commendation; not just for surviving, but for continuing to achieve the things we do so well. In this year of the pandemic, the Centre has delivered research evidence and advice to governments and industry, mentored a new cohort of PhD graduates and continued to deliver positive safety benefits for our community. Reflecting on just some of the highlights and notable events across the year:

- WHO Collaborating Centre for Injury and Violence Prevention - re-designated "Global status"
- Global Ministerial Road Safety Summit Sweden: MUARC was well represented amongst the leaders, politicians, policy makers, practitioners and researchers; committing with renewed vigour to road safety SDGs
- Refreshed links with Universte Gustave Eiffel in a new H2020 project, City Lab; hosted University of Florence PhD student Cosimo Lucci; contributed expert advice to EU projects iDREAMS, Drive2theFuture and VIRTUAL
- Submissions to Government Inquiries: Victorian and National bushfires; NSW trauma on local roads; and Victorian Parliamentary Inquiry into the increase in Victoria's road toll
- Contributed to National Strategy development: National Preventive Health Strategy; National, Victorian, and NSW Road Safety Strategies
- Secured 15 major grants & tenders and published over 50 peer-reviewed papers, commissioned reports and book chapters
- Welcomed the National Road Safety Partnership Program for workplace road safety initiatives, now hosted by MUARC
- We celebrated the achievements of our Graduate Research students who submitted theses, graduated, and achieved many 'virtual' graduate milestones through the year
- Hosted several important events: Launch of the Injury Prevention - Graduate Research Industry Partnership program in February; the finale of CRC-P Advanced Truck Safety Concept in March; Ozcandrive final presentations in October-November; and the TAC launch of Enhanced Crash Investigation Report in November
- We adapted our professional training programs from face-to-face mode to on-line learning, ready for 2021 delivery
- We farewelled Rachel Osborne, Daniel Griffiths, Steve O'Hern, Bronte Thomas, and Belinda Clark. We recognise and value their significant contributions to the Centre and to saving lives in Australian communities. We welcomed new staff: Jerome Carslake to NRSPP, and interns Caitlin Xavier and Laura Hughes
- Awards and congratulations: to Jennie Oxley on her promotion to full Professor, acknowledging her excellent research achievements. To Brian Fildes on his appointment to the role of Emeritus Professor at Monash as he transitions into retirement - we acknowledge Brian's significant achievements to road safety for over three decades. To Christine Mulvihill on her Monash Green Impact award. To Adjunct Professor Peter Vulcan on the prestigious Institute of Transport Engineers award for Excellent Service in Transport Research

During a year when the university was seriously challenged on multiple fronts, I acknowledge the achievements of MUARC staff and students who generously accommodated work and study into their homes. My personal thanks to all staff and students for your exceptional efforts during 2020; to our Advisory Council for their expert advice; and Professor Rebekah Brown, for her steadfast support to the Centre, in her role as Senior Vice Provost (Research).

Professor Judith Charlton,
Director, Monash University Accident Research Centre

2020 HIGHLIGHTS



SYSTEMS SAFETY

Secured large-scale grants from Australian Automobile Association, ACT Road Safety Trust and Australian-French Association for Research and Innovation

Worked with industry and government stakeholders optimising workplace road safety

Designed two research projects with WorkSafe Victoria on systems thinking approaches to reduce workplace violence and work-related driving crashes in light vehicles

Secured funding to extend Patient Handling Injuries: Review of Systems (PHIRES) project through an app-based Systems Thinking Incident Review (STIR) toolkit



VICTORIAN INJURY SURVEILLANCE UNIT

Produced monthly bulletins on injury rates during COVID-19 pandemic

Published Hazard 87 (adult on-road cycling injuries) and Hazard 88 (child injuries in primary schools)

Second phase of Suicide Data Linkage Study completed, with report on suicide following hospital admission for injury, physical illness and mental health conditions in Victoria

Victorian Injury Atlas expanded to include dedicated Transport Injury Atlas



TRAFFIC ENGINEERING AND VEHICLE SAFETY

Finalised benefit modelling for Victorian Road Strategy (2021 to 2025)

Webinar conducted during 64th AAAM Conference on road safety challenges in low- and middle-income countries over the upcoming decade

Evaluation of Raised Safety Platform project (in collaboration with with ARRB Transport) completed, successful webinar held with more than 85 attendees



REGULATION AND IN-DEPTH CRASH INVESTIGATION

Held media event for results of Advanced Safe Truck Concept. Papers submitted to multiple journals and conferences

Completed report on crash reduction benefits of the fitment of Acoustic Vehicle Alerting Systems, commissioned by Department of Infrastructure, Transport, Cities and Regional Development

Three reports completed on illicit drugs and driving

Undertook commissioned analysis of the safety of Transurban's road assets in Australia



STUDENTS

Twelve students successfully completed milestones

Eleven contributed to publications, including nine as first author

Four PhD candidates were conferred

Launched the Injury Prevention Graduate Research Industry Partnership (IP-GRIP)



BEHAVIOURAL SAFETY SCIENCE

Commissioned by Road Safety Victoria to undertake a comprehensive review of the scientific evidence on selected medical conditions and motor vehicle crash risk. Summarised and interpreted key findings which will inform the National Australian Fitness-to-Drive guidelines

Undertook research on a new motorcycle study, funded by the Department of Health and Human Services, providing evidence to inform public awareness campaigns to increase off-road rider safety

Commenced a new cross-team initiative, under the Baseline Road Safety Research Program, addressing safe design for high risk complex urban intersections



INJURY ANALYSIS AND DATA

Completed world-first evaluation of the impacts of roadside drug and alcohol testing of vehicle controllers on drug and alcohol presence in crash involved controllers

Published first broad real-world crash-based evaluation of the effectiveness of whiplash-reducing head restraint systems across wide range of applications in vehicle fleet

Completed comprehensive study for the Country Fire Authority identifying key risk factors associated with the risk and severity of non-residential fires in Victoria

Final stage of MICIMS motorcycle in-depth study examined road environment related crash risk factors for motorcycles



MONASH UNIVERSITY DISASTER RESILIENCE INITIATIVE

Contributed to *Royal Commission on National Arrangements for Natural Disasters*, and the Victorian-based Inspector General for Emergency Management Inquiry into the 2019/20 summer season

Taught graduate unit *Guiding Principles for Professionals Engaged in Disasters and Humanitarian Crises*

Led successful community grant to develop ecological approach to ascertain priorities and management of fuel with Beaconsfield Upper community and Department of Environment Land & Water

Promoted our *Victorian Disaster Resilience Case Studies Online Compendium* through the first, successful and well-attended online Community Resilience Forum featuring the 14th Annual Professor Frederick 'Skip' Burkle Keynote Lecture

ACHIEVEMENTS



EXCELLENT

Launched MUARC-led Injury Prevention Graduate Research Industry Partnership with seven industry partners and Faculty links

Adjunct Professor Peter Vulcan AM honoured by Institute of Transportation Engineers for “Contribution to the Transport Profession”

\$8m
Enhanced Crash Investigation Study
released first report

15 Major grants and tenders each valued at more than \$100,000

OVER 50 Major research reports, projects, publications



INTERNATIONAL

Refreshed links with IFSTTAR/Universte Gustave Eiffel with new H2020 project called City Lab and contributed to other H2020 transport projects iDREAMS, Drive2Future and VIRTUAL

WHO Collaborating Centre for Injury and Violence Prevention achieved global status

Represented at Global Ministerial Road Safety Summit in Sweden



INCLUSIVE

Continuing provision of a supportive and stimulating academic and work environment for research and professional staff and Graduate Research students



Upgrade of Graduate Research students' offices and meeting room and staff/student IT conferencing facilities



Establishment of Staff Consultative Forum and improved social connectedness and flexibility to accommodate pandemic working from home conditions

Early Career Research

offered a purpose-developed workshop program, career mentoring, and manuscript, grant writing and seeding grant support



ENTERPRISING



Submissions to Government Inquiries: Victorian and National bushfires; NSW trauma on local roads; and contributed to National Strategy development: National Preventive Health Strategy; National, Victorian, and NSW Road Safety Strategies



Engaged with colleagues across Monash through the Melbourne Experiment, coursework contributions in the Faculty of Arts, Monash Heart Institute, Provost's Research Strategy Group, and Vice Chancellor's Leadership Summit

New host of the National Road Safety Partnership Program (NRSPP) with over 130 new industry partners

FURTHER INFORMATION

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