



Australian
Automobile
Association

RSP

2019

Road Safety Research Program

an initiative of the Australian Automobile Association







Introduction

Road Safety is a national crisis.

**Every month, about 100 Australians die on our roads.
Every day, about 100 people are hospitalised for road
crash related injuries.**

In 2019, the Australian Automobile Association, representing Australia's motoring clubs, has established the AAA Road Safety Research Program to help make our roads safer and reduce fatalities and injuries.

The new program will collaboratively engage with a wide range of stakeholders who are interested in improving road safety and are working to address some of Australia's most critical road safety issues.

The AAA Road Safety Research Program will support research and translation activities that deliver practical benefits for road users and the community. The Program will fund road safety projects in identified priority research areas that have a strong potential to prevent road fatalities and injuries on Australian roads.

Research Priority 2019/20

For its inaugural year the priority research topic for the AAA Road Safety Research Program will be **fatigued driving**.

Key dates

- September 2019 - Program launch and research concept submissions open
- November 2019 - Stakeholder forum
- January 2020 - Research concept submissions close



Objectives

The AAA Road Safety Research Program aims to:

- foster a collaborative approach to identifying and tackling road safety challenges across a wide range of sectors and disciplines
- identify and prioritise the most pressing problems contributing to poor road safety in Australia
- design, select and fund important road safety research projects that will ultimately deliver practical safety benefits for road users and the wider community
- deliver research that aligns with the latest road safety research strategies and initiatives
- help build Australia's road safety research capacity and capability
- help raise awareness and create a shared understanding of road safety challenges, research priorities and activities in Australia and internationally.

COLLABORATE
PRIORITISE
DELIVER



Program principles

The AAA Road Safety Research Program seeks to operate harmoniously within the broader national Safe System approach to improving road safety.

The program will take a holistic view of the road transport system and the interactions among roads and roadsides, travel speeds, vehicles and road users when considering research concepts and proposals.

The AAA Road Safety Research Program will deliver its objectives and outcomes by adhering to the following principles.

- **Transparency** – all selection processes and all decisions on funding road safety research will be transparently communicated to stakeholders.
- **Collaboration** – the Program will foster collaboration across sectors and disciplines to identify and address road safety challenges.
- **Ethical and responsible research** – the Program will encourage ethical and responsible research consistent with the *Australian Code for the Responsible Conduct of Research*.
- **Quality** – the Program will call upon independent expertise to improve its processes and assess research proposals against its selection criteria.
- **Knowledge sharing** – the Program will share research outputs with the road safety research community to improve collective knowledge.
- **Value for money** – the Program will seek to deliver value for money from its investments in road safety research to help maximise the achievement of its desired outcome and avoid duplicating research.



Scope and funding

Funding of up to \$1 million (AUD) per project will be available for high quality projects that help achieve the Program's identified objectives.

The AAA Road Safety Research Program will consider proposals that:

- focus on the priority area of fatigued driving
- propose innovative research into topics that will lead to improved road safety outcomes, or build our collective understanding of specific road safety challenges, or both
- propose applied research activities that will solve specific road safety problems
- apply or trial the results of existing research to produce practical solutions to known road safety problems.

Multi-year project proposals will be considered up to a value of \$1 million per annum.







Who can participate?

The AAA Road Safety Research Program aims to actively promote collaboration across:

- the diverse range of stakeholder sectors that can contribute to road safety
- disciplines that can help develop solutions to Australia's most pressing road safety challenges.

The AAA Road Safety Research Program encourages all stakeholders with an interest in road safety to:

- participate in activities that will help the AAA identify the areas of greatest need for road safety research
- propose concepts for research projects that address identified areas of need
- submit applications to undertake road safety research projects that will address the areas of need identified and concepts prioritised by the AAA Board and its expert advisors.

There is no limit on the number of concepts for research projects or applications for funding that can be submitted under the Program. However, only applications that focus on the priority area of fatigued driving will be considered.

Participation is not limited to Australian individuals and organisations. Overseas researchers are eligible to receive funding under the Program, but they must be part of a consortium led by an Australian organisation.

Please note: The AAA Road Safety Research Program will not provide a dedicated stream of funding for PhD candidates or early career researchers. However, the Program encourages project applications and methodologies that will help build road safety research capability.





Research cycles

Each research cycle of the AAA Road Safety Research Program will run over a 15-18 month period.

Each cycle will begin with a process to identify a specific road safety challenge. This process will be undertaken by:

- requesting interested stakeholders to visit our website and identify key road safety challenges that should be a priority and research concepts that will help tackle these challenges
- hosting an annual forum involving road safety stakeholders, as well as experts and groups with an interest in the Program's research cycle theme, to further develop research concepts
- selecting a short list of research priorities by the AAA Board that will proceed to second stage, which will involve scoping and costing project/s that will deliver on agreed priorities through mechanisms that may include:
 - » open application rounds
 - » selective application rounds
 - » direct negotiation with identified applicants.

For more information and to see the general terms and conditions visit aaa.asn.au/research/



What are the assessment criteria?

Research ideas and proposals will be assessed by representatives of our motoring clubs and an independent Expert Advisory Panel.

The AAA Road Safety Research Program will be looking for research proposals that:

- have a real **IMPACT** in improving road safety outcomes and reducing our road toll
- demonstrate **QUALITY** research methodologies and approaches
- propose **COLLABORATION** between stakeholders across traditional sectors
- represent **VALUE FOR MONEY**.

For more information and to see the Assessment Framework visit aaa.asn.au/research/

IMPACT
QUALITY
COLLABORATION
VALUE-FOR-MONEY





How can you get involved?

Anyone interested in getting involved in the AAA Road Safety Research Program is encouraged to visit our Program website.

Through the AAA Road Safety Research Program, the AAA and Australia's motoring clubs are interested in hearing people's views on the most pressing road safety challenges and potential ideas for research (research concepts) that can help solve these challenges and make significant improvements in our nation's road safety.

We encourage individuals and organisations with an interest in improving road safety to have their say and participate in the AAA Road Safety Research Program. If you have a particular road safety challenge you are passionate about solving through innovative or applied research, we want to hear from you, regardless of your area of expertise, or the sector you work in.

There are several ways to get involved in the Program:

- submit your thoughts on priority areas to be addressed by road safety research through the online form on our website
- submit proposals for priority research projects under the program
- register as an independent expert on any aspect of road safety research that the Program might call on for advice.

Connect with us by subscribing to our email updates
aaa.asn.au/research/



Inaugural Research Priority Topic

2019 – Fatigued Driving

Fatigue is a major cause of road crashes and related injuries and fatalities worldwide.¹ While estimates vary, in Australia approximately 20–30 per cent of all car crashes are thought to be attributable to fatigue.² Research indicates that ‘the need for transport managers to understand and tackle fatigue for the purposes of safety is greater than ever’.³

Fatigue is a more complex concept than just being “sleepy”.⁴ While the effects of sleep (or lack of) are a key component, fatigue is a more expansive concept that can be influenced by a person’s rest and sleep habits and cycles, their physiological and psychological traits as well as their environmental conditions.⁵

Fatigue can reduce attentiveness, slow a driver’s reaction times and affect judgement – all of which can result in catastrophic consequences. In fact, research has shown after 17–19 hours without sleep, driver performance is equivalent to or worse than that of a driver with a blood alcohol concentration (BAC) level of 0.05 per cent.⁶ If a driver falls asleep for just 4 seconds while travelling at 100 km/h, the car will have travelled 111 meters without driver control.⁷

Addressing fatigued driving is a major challenge when considering road safety. Fatigue can affect all types and levels of drivers and fatigue-related crashes can happen on any trip – no matter how long or short the trip is or what time of day it is. The AAA Road Safety Research Program will use quality research and translation activities, to better understand fatigued driving and develop effective ways to address this problem.

[1] Guangan Zhang et al. 2016. *Traffic accidents involving fatigue driving and their extent of casualties*. *Accident Analysis and Prevention*. 87, 34–42. doi:10.1016/j.aap.2015.10.033

[2] Megan D Mulhall et al. 2019. *Sleepiness and driving events in shift workers: the impact of circadian and homeostatic factors*. *Sleep*. 42(6), 1–13. doi:10.1093/sleep/zsz074

[3] Ross O Phillips. 2015. *A review of definitions of fatigue—And a step towards a whole definition*. *Transportation Research Part F*. 29, 48–56. doi:10.1016/j.trf.2015.01.003

[4] Phillips. 2015. *A review of definitions of fatigue—And a step towards a whole definition*.

[5] Phillips. 2015. *A review of definitions of fatigue—And a step towards a whole definition*.

[6] Ann M Williamson and Anne-Marie Feyer. 2000. *Moderate sleep deprivation produces impairments in cognitive and motor performance equivalent to legally prescribed levels of alcohol intoxication*. *Occupational and Environmental Medicine*. 57(10), 649–655.

[7] Transport for NSW. 2014. *Science of sleep*. Centre for Road Safety. Accessed 10 September, 2019. <https://roadsafety.transport.nsw.gov.au/stayingsafe/fatigue/scienceofsleep.html>



Key dates



Program launch
Concept submissions open
September 2019

Stakeholder forum
November 2019

Concept submissions close
January 2020

Questions?

Ms Michelle Quester

National Program Manager

research@aaa.asn.au
02 6261 4420

aaa.asn.au/research



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