

A close-up, profile view of a woman with brown hair and blue eyes. She is holding a black and white breathalyzer device in her mouth. The background is blurred, showing what appears to be a car interior. A large, semi-transparent blue circle is overlaid on the left side of the image, containing the text 'arbo' and 'ROAD USER BEHAVIOUR AND SAFETY'.

arbo

**ROAD USER
BEHAVIOUR
AND SAFETY**

ROAD USER BEHAVIOUR AND SAFETY

- Are drivers who commit more offences at a higher risk of crashing? What types of offence are most closely related to crash risk?
- How can high-risk driving behaviours (such as phone use while driving) be discouraged, deterred, or prevented?
- What factors influence a cyclist's decision to cycle on the road or to limit their cycling to off-road paths?
- What countermeasures have been found to be effective in preventing driver fatigue?
- Is a new sign or a new message likely to be widely understood by its intended audience?
- Are Advanced Driver Assistance Systems (ADAS) widely understood and widely accepted among the driving population? Can drivers be expected to remain alert and focused on the driving task while using ADAS?

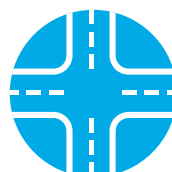
Each year in Australia, over a thousand drivers, riders, passengers, and pedestrians are killed on the roads, and almost forty thousand are admitted to hospital as a result of crash injuries.

Overseas studies suggest road user behaviour makes some contribution to almost all crashes (approximately 19 out of 20 crashes). Factors contributing to crashes include illegal behaviours, such as speeding, impairment by alcohol or other drugs, mobile phone use, and failure to wear a seatbelt or helmet. They also include a range of other factors that can contribute to making unsafe decisions, such as inexperience, fatigue, distraction, and aggression.

The Australian Road Research Board (ARRB), Australia's premier organisation for the resolution of transport issues, has a long history of investigating road user behaviour issues such as these to reduce road trauma. Our studies have generated new knowledge required by road authorities, licensing agencies, and other road safety stakeholders to provide a basis for the development, evaluation and refinement of policies and programs.

ARRB's road user behaviour specialists are members of the Transport Safety team, which uses the Safe System as its guiding principle for understanding road safety issues and developing solutions. Our expert team brings years of experience to bear on every project.

With a focus on relevant, methodologically sound research, communicated in an accessible and timely way, we are dedicated to understanding and meeting clients' needs, and delivering high-quality, evidence-based work to inform road safety policy.



OUR SERVICES

We provide:

- problem definition and quantification
- gap analysis and options analyses
- literature reviews, stakeholder engagement, and benchmarking
- feasibility studies
- design and conduct of trials and evaluations of initiatives and programs, including road safety technologies
- evaluations based on established frameworks, methodologies, and best practice, as well as bespoke and innovative methods to suit project needs
- observational studies, randomised controlled trials, and before/after studies
- data management and validation
- statistical analyses ranging from simple summaries to advanced modelling and prediction
- defining, generating, validating, and analysing safety surrogate measures

- assessments using standardised and validated tools, and/or development of bespoke tools
- surveys and focus groups, including population representative surveys of community opinions
- development or update of safety guidelines
- preparation of corporate and council road safety plans and strategies, and development of safety performance indicators.

We are experienced in working with a wide range of data related to behaviour and road safety, including crashes, offences, penalties (demerit points, licence bans, licence conditions, vehicle impoundments), traffic counts, exposure (VKT), data logged by in-vehicle systems, census data, quantitative and qualitative responses to surveys and focus groups, and more.

ARRB can offer a complete solution with our Road User Behaviour team working closely with our road safety engineers, and vehicle safety specialists. We are also able to call on expertise from across ARRB's full range of operations, including transport economics, road design, surfacings and skid resistance, asset management, intelligent transport systems, vehicle technology, freight and logistics, big data, machine learning and marketing.



SOME OF OUR RECENT PROJECTS

- Review of mobile speed camera site configuration practice for Transport for NSW
- Forest Highway point-to-point speed camera compliance effectiveness trial for Western Australian Road Safety Commission
- Austroads guide to evaluating road safety projects
- Evaluation of Victoria's graduated licensing system
- Redevelopment of Victoria's Occupational Therapy Driving Test
- Unauthorised drivers' involvement in crashes in Victoria
- Study designs to evaluate driver fatigue detection technologies
- Connected Light Vehicle Study for Transport for NSW
- Estimation of the benefits of safety-related Intelligent Transport Systems in Australia
- Australia and New Zealand Driverless Vehicle Initiative (ADVI) Public Opinion Surveys
- Instrumented vehicle and simulator study design to improve driver experience and safety in tunnels for Austroads
- Literature review about driver distraction for the National Transport Commission
- Simulator research to investigate co-location of direction and variable speed limit signs
- User interpretation of pictograms for variable message signs
- Investigation of crashes and countermeasures in roadwork zones, including an instrumented vehicle study for Transport for NSW
- Literature review into safety surrogate measures for the NSW State Insurance Regulatory Authority
- Use of education and enforcement to enhance safety at railway level crossings
- Investigation of crashes while overtaking long vehicles
- Evaluation of the VicRoads Motorcycle Blackspot Program
- Suicide Crashes: Literature review, strategies, and recommendations for Roads ACT
- Development of a model policy on alcohol and other drugs for road transport operators

CONTACT US

FOR MORE INFORMATION
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