

Victorian Based Autonomous and Connected Vehicle Trials and Provision of Related Public Advice and Advocacy

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Abstract

RACV has commenced a program of large scale investment and participation in four Victorian based Autonomous and Connected Vehicle trials to underpin development of an information, advice and advocacy framework. As part of RACV commitment to member and community engagement, advice and education RACV will promote public interest and discussion in these trials and distribute associated advocacy.

Building on existing RACV research into the impact of Autonomous and Connected Vehicles RACV new program analyses data from the trials to define the issues and benefits of autonomous vehicles and promote the safety and mobility benefits to the broader motoring public.

RACV's Role in Connected and Autonomous Vehicle Information & Advocacy Autonomous and Connected Vehicle Trials

RACV represents the interest of over 2.1 members and acts as a well-respected advocate for vehicle technology and road safety. RACV is now expanding this role of engagement, credibility and leadership into the area of Vehicle Automation.

The RACV engagement in Victorian based Autonomous and Connected vehicle trials will allow continued and relevant provision of related advice and advocacy to Members.

- RACV is now involved in four connected and autonomous vehicle trials in Victoria:
 - HMI Technologies has procured a NAVYA autonomous bus to be deployed in Melbourne to trial usage at airports, universities and last-mile transport connections.
 - Melbourne University National Connected Multimodal Transport Test Bed (NCMT) developing the world's first urban laboratory for testing of emerging connected transport technologies at a large scale and in a complex urban environment
 - Eastlink Trial involving VicRoads (grant), La Trobe University with AARB as project manager. Using current production vehicles in addition to technology demonstrators all with high level automated features the trial is intended to gain an understanding of how current technology fares in a modern Australian major arterial road environment. Essentially representing a best case environment in terms of road infrastructure, issues apparent in this trial will almost certainly manifest in other less optimal roads.
 - Transurban (Citylink) Trial with the Victorian Government to better understand how automated vehicle technology works with roadside equipment. Testing a similar environment to the Eastlink trial, the Transurban trial, also using highly automated production vehicle will face a higher traffic load with more diverse operating environment.

RACV's role in each of these trials is to provide engagement with the community, information and advocacy through our various media and connection with the vehicle industry. All trials involve partnerships, research, expertise and development of advocacy positions.

RACV also believes that looking forward beyond trials, there needs to be debate as to which set of legislative instruments are the most appropriate to capture Automated vehicles and the presentation will outline RACV's extensive advocacy efforts in lobbying for efficient and enabling legislation framework that enables a safe and structured adoption of Autonomous vehicle technology. This involves continued engagement with the federal Government of Australia and the Government of the State of Victoria through their respective Agencies.

RACV has considerable reach to the motoring public and is well placed to become a major source of reliable information on what is a complex and many faceted issue. RACV approaches the advocacy role with dedicated teams concentrating on vehicles, Roads, Road, Users, Environment and broader transportational perspectives.

Technology Acceptance Research

However it is far from clear how well this is understood or accepted by the larger non-expert population whose involvement will be ultimately essential.

Leveraging the considerable expertise of engaging a non-expert audience on complex and multi-faceted technology issue RACV has developed a program to educate and promote discussion on a topic that will extend far beyond the typical road safety aspects of emergent vehicle technologies. This program consists of blend of media to involve as broad a spectrum of the community as possible ranging from traditional print media platform, web based activities, extensive social media engagement and a virtual reality demonstrator road show designed to attend community events.

Previous research on user acceptance such as the 'University of Michigan Survey of Public Opinion about Autonomous and Self-Driving Vehicles in the U.S The U.K and Australia', the 'Opinium Survey in the U.K.' commissioned for the Observer Newspaper and the 'ThinkGoodMobility' Survey have indicated a genuine consumer interest in Automated Technologies, however viewpoints tend to be significantly polarised.

RACV is currently undertaking fresh research in this area and associated mobility topics and will be in a position to share this information with conference delegates at the 2017 ACRS in October. Of particular interest will be to understand if there is a shift in public sentiment since user acceptance is transient. Such studies inevitably can be viewed as a snapshot.

Such snapshots are valuable however since they can be used to identify the success or otherwise of existing education programs and identify areas that it can be expanded to.