



Committee Secretary
Transport and Public Works Committee
Parliament House

September 28 2018

Transport and Public Works Committee Inquiry on Transport Technology

We commend the Queensland Government in considering this important topic and appreciate the opportunity for ITS Australia to make a submission to this parliamentary initiative, particularly with regards to the potential transport technology offers to the state's safety, productivity, economic and employment opportunities.

With more than 1,200 people dying and over 30,000 people being seriously injured each year on Australia's roads, the only long-term goal we can have is for zero fatal and serious injuries. To that end, we believe we will only achieve that vital and ambitious goal through connected and automated technology.

Safety needs to be the foundation on which any development of Connected and Automated Vehicles (CAV) rests and we are optimistic about the innovation and expertise in our industry and the functionality that will be available to the wider community.

ITS Australia supports the advancement of connected and automated vehicle technology and see the appropriate deployment of the technology as a pathway to provide safer, more efficient and more sustainable transport.

We know though that technology can save lives today and we support the early adoption of advance driver assistance technologies including; lane keeping, blind spot warning, adaptive cruise control, automatic braking.

There's much discussion these days about once-in-a-generation change; digital disruption, major demographic and societal shifts, and mega-projects offering improvements unimagined by our grandparents or sometimes even parents. What has not been seen before though is the kind of unprecedented potential for change in transport we are currently experiencing.

In undertaking a research project into <u>Mobility as a Service in Australia</u>, ITS Australia conducted interviews with more than 80 leaders in the transport and technology sectors, across government, industry and academia and a strong theme emerged; that not since the mass-production of private vehicles c1920 has there been such potential for revolutionary change in the transport sector.

Innovation like 'Mobility as a Service' (MaaS) offers the potential to drastically improve customer choices, reduce travel costs, increase network capacity and transport sustainability while improving social and environmental outcomes. This will only be achieved through appropriate and effective application of transport technology.

While the mass-production of private vehicles obviously had a stunning impact on society and the built environment, the advent of connected and automated vehicles and other revolutionary technologies offer the potential for even greater levels of disruption.

While this disruption will have positive economic and productivity impacts there is also a real opportunity to leverage these technologies to enable improved employment opportunities for all Queenslanders. Our industry has seen a downturn in the jobs pipeline for a number of roles, with causes ranging from aging

Address: Suite 22, 574 Plummer Street
Port Me bourne VIC 3207
Telephone: +61(0)3 9646 6466
Email: admin@its-australia.com.au
Website: www.its-australia.com.au
ABN: 24 090 235 493

workforces through to automation; this has been challenging for the transport industry, the freight and logistics sectors in particular.

We see major growth potential in new employment opportunities through the application of technology across the life-cycle of transport projects; from planning through construction to asset management. This technological paradigm shift is changing the way our transport networks and infrastructure are managed, developed, and maintained. Traditional roles in construction, logistics, and public transport delivery will evolve, and in speaking with a number of our member organisations we are confident these emerging technologies will offer improved employment outcomes for both this current generation and those that follow.

A strong government role will be critical to ensure that the deployment of these technologies is guided to improve the quality of life for citizens. Governments need to provide strong regulatory oversight to give the public confidence in testing and deployment as well as support collaboration across industry and the community.

To that end we are strongly supportive of existing and emerging pilots and trials underway and proposed both in Queensland and around the country, building a collaborative and transparent understanding of the challenges and opportunities these technologies offer, and ensuring that public safety is always the key consideration. Government should also play a key role in working with the private sector to facilitate deployment and remove unnecessary regulatory barriers to enhance the widespread deployment of proven technologies.

Conclusion

ITS Australia commends the Queensland Government in looking to gain a better understanding of these important once-in-a-generation opportunities and are keenly interested in supporting any efforts to acquire information from industry that will support the on-going planning for these technologies and initiatives that will drive safer and more efficient transport networks in Queensland.

These important areas for consideration also include; getting more drivers into vehicles with technologies that make the roads safer for all users, increasing deployment of road-side and other infrastructure to build a network for connected intelligent transport systems. Gaining a better understanding of emerging employment opportunities should be a key consideration for government and Industry are keen to work with government with ITS Australia being well placed to facilitate those discussions.

Effective policy instruments and cross-border collaboration through bodies such as COAG and those committees that report into it are crucial in planning for the future of transport and crafting the policy and regulatory frameworks in which they operate, and importantly, working with their communities on building understanding and consensus for these exciting opportunities.

As a peak body that represents national and international organisations we also strongly support an approach that works towards harmonisation and cross-jurisdictional considerations and we would be very keen offer you a more detailed briefing on these and other matters that could be of interest to your inquiry on Transport Technology and the Queensland Parliament more broadly.

For your consideration we have also attached the ITS Australia Statement on Connected and Automated Vehicles following the page showcasing our members across the breadth of the transport and technology sectors.

Yours sincerely,

Susan Harris

Chief Executive Officer

Usan Havis

ITS Australia Background

ITS Australia is the peak group representing over 100 public and private organisations delivering on transport solutions and technology improving Australia's road and transport networks and promotes the development and deployment of advanced technologies to deliver safer, more efficient and sustainable transport across all public and private modes – air, sea, road and rail.

Established in 1992, ITS Australia is an independent not-for-profit incorporated membership organisation representing ITS suppliers, government authorities, academia and transport businesses and users. Affiliated with peak ITS organisations around the world, ITS Australia is a major contributor to the development of the industry.

As set out in the Strategic Plan 2018-2021 our vision is to shape future transport to be safe, efficient and environmentally sustainable through the implementation of Intelligent Transport Systems. Our mission is to:

- Advocate for, and inform discussion about, ITS;
- Facilitate collaboration and partnering amongst industry, government and researchers;
- Support research, development and the deployment of ITS technologies;
- Influence and guide the successful development of the ITS industry.





ITS Australia Statement on Connected and Automated Vehicles

ITS Australia supports the advancement of connected and automated vehicle technology and see the appropriate deployment of the technology as a pathway to provide safer, more efficient and more sustainable transport.

Safety needs to be the foundation on which any development of Connected and Automated Vehicles (CAV) rests. We are optimistic about the innovation and expertise in our industry and the functionality that will be available to the wider community.

These technologies have the potential to revolutionise transport in a way not seen since the mass-production of the private vehicle more than 100 years ago and to save thousands of lives.

A strong government role will be critical to ensure that the deployment of CAV is guided to improve the quality of life for citizens. Governments need to provide strong regulatory oversight to give the public confidence in CAV testing and deployment as well as support connectivity and access to governments real time data systems.

To that end we are strongly supportive of existing and emerging pilots and trials underway and proposed around the country, building a collaborative and transparent understanding of the challenges and opportunities these technologies offer, and ensuring that public safety is always the key consideration.

Government should also play a key role in working with the private sector to facilitate deployment and remove unnecessary regulatory barriers to enhance the widespread deployment of proven technologies. While ensuring all elements are safely assessed and fully tested in controlled pilots and trials before publicly deployed.

ITS Australia is a membership based peak body representing Australian industry, government and research organisations in promoting Intelligent Transport Systems initiatives. We are a Not for Profit association and serve the interests of our members in Australia and globally. We represent the Australian ITS sector within Australia and Australian ITS interests internationally.

As such we recognise the importance of these technologies and work with our members and the wider community to ensure safe and responsible development and deployment of these potentially life-changing transport innovations.

To build understanding, and collaborative approaches, and work towards broad community consensus we support the following key messages, while appreciating that our position will evolve as these technologies and the market mature.

Address: Suite 22, 574 Plummer Street
Port Me bourne VIC 3207
Telephone: +61(0)3 9646 6466
Email: admin@its-australia.com.au
Website: www.its-australia.com.au
ABN: 24 09 235 493



Key messages:

- 1. More than 1,200 people die and over 30,000 people are seriously injured each year on Australia's roads. The only long-term goal we can have is for zero fatal and serious injuries.
 - We believe we will only get to zero fatalities and serious injuries through CAV technology.
- 2. Technology can save lives today.
 - We support the early adoption of advance driver assistance technologies lane keeping, blind spot warning, adaptive cruise control, automatic braking—should be on all new vehicles.
- 3. Performance based regulation with safety systems validated by manufacturers is essential.
 - New technologies must be evaluated in real-world conditions, but only after they have been fully tested in off-the-road environments. We support controlled and transparent pilots and trials, with government oversight, of tried technologies.
- Cooperative systems achieved through communication between vehicles, infrastructure, and other users will provide an enhanced layer of safety and must be pursued.
 - This ability to communicate will be essential for extending the range of vehicle-based sensing and delivering maximum safety benefits with high levels of automation.
 - Initially additional research and testing is needed concerning the driver's ability to remain vigilant and take over the driving task when required with the current levels of new technologies which have low levels of automation.
 - As increasing levels of automation are achieved these systems will fully automate the driving task under most conditions, but do not preclude the vehicle being operated by a human driver in unusual or emergency situations.

Acknowledgement

ITS Australia would like to acknowledge that this statement builds on the work of the Institute of Transportation Engineers, adopted for the Australian context.