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JFA Purple Orange Submission to the National Transport Commission's Discussion

Paper: Review of guidelines for trials of automated vehicles in Australia

About JFA Purple Orange

Thank you for the opportunity to comment on the National Transport Commission's Review of guidelines for trials of automated vehicles in Australia.

By way of background, JFA Purple Orange is an independent, social-profit organisation that undertakes systemic policy analysis and advocacy across a range of issues affecting people living with disability and their families.

Our work is characterised by co-design and co-production, and includes hosting a number of user-led initiatives.

Much of our work involves connecting people living with disability to good information and to each other. We also work extensively in multi-stakeholder consultation and collaboration, especially around policy and practice that helps ensure people living with disability are welcomed as valued members of the mainstream community.

Our work is informed by a model called Citizenhood.

Submission

1. Summary Recommendation:

The key management criteria in the Guidelines for trials of automated vehicles in Australia should require applicants to describe how the their trial considers and addresses the needs of people living with disability. Safety issues should also be addressed by the applicant.

2. Background

Article 20 of the United Nations Convention on the Rights of Persons with Disabilities places an obligation on State Parties to “take effective measures to ensure personal mobility with the greatest possible independence for persons with disabilities.” JFA Purple Orange believes the trials of automated vehicles in Australia is an important step for our country to explore innovative solutions to the issues associated with our transport system, including road safety and the changing accessibility needs of our population.

According to the latest Census data, there were 4.4 million Australians living with disability in 2018, representing 17.7 per cent of our population. That year 53.4 per cent of people living with disability were in the labour force, compared with 84.1 per cent of those without disability.ⁱ In 2018, 67.6 percent of people living with disability participated in social or community activities, down from 76.6 percent in 2009.ⁱⁱ While there are many factors that influence the ability of people living with disability to lead a meaningful life and to engage with their communities, access to transportation, and in particular public transportation, is an important determinant for engaging in work and a social life.

3. Automated vehicles and people living with disability

There are high hopes automated vehicles will improve the lives of all commuters, particularly those who live with disability. A 2018 survey by the Australia & New

Zealand Driverless Vehicle Initiative found that 76.7 per cent of respondents believed that the greatest perceived benefit of driverless vehicles would be that they allow for “mobility for people with driving impairments or restrictions.”ⁱⁱⁱ Whether these perceived benefits will become a reality is yet to be seen, however the current trials of automated vehicles in Australia are an opportunity to maximise the chances for this emerging technology to improve the lives of people living with disability.

The foreword of the current Guidelines for trials of automated vehicles in Australia, first published in 2017, specifically references “increased mobility for an ageing population and people with a disability” as a potential benefit of driverless technology. JFA Purple Orange agrees that driverless technology does hold many potential benefits for road users who may have difficulty accessing traditional transport options. However, disability is not referenced again in the remainder of the current guidelines, including in the key management criteria applicants must address when applying to hold a trial of automated vehicles. We are concerned this may lead to these potential benefits being unrealised, as autonomous vehicle trial applicants are not specifically required to address how they are considering and addressing the needs of people living with disability through the trial.

The May 2020 Discussion Paper for this review of the current guidelines makes reference to compliance with “disability standards” as a consideration for allowing automated vehicles to be used in trials that are commercial in nature, such as passenger ride-sharing services. While compliance with standards is of course an important consideration, JFA Purple Orange believes this review is an opportunity for the National Transport Commission to go above and beyond advocating for basic compliance with disability standards and consider how trials of automated vehicles could properly contemplate and test driverless vehicles for the benefit of people living with disability.

If properly thought through and implemented, this technology presents an opportunity for people living with disability to be supported to exercise greater choice in how and when they travel and to enhance their inclusion in community life. In relation to the importance of transport, the National Disability Strategy 2010-2020 states:

“The ability to move around the community underpins all aspects of life for people with disability and is essential to achieving all the policy outcomes outlined in this strategy—from learning and skills, to employment and to the enjoyment of rights.”^{iv}

This sentiment is supported by the evidence presented to the Standing Committee on Industry, Innovation, Science and Resources’s 2017 inquiry into the social issues relating to land-based driverless vehicles in Australia. For example, the ARC Robotic Futures Research Team told the committee that mobility:

... (enables) people to thrive in everyday life—how mobility relates to access to services, how mobility relates to access to employment, how mobility relates to access for leisure. Mobility is not just about getting from A to B; it is about opening up and enabling people’s capacities in all kinds of ways.^v

The Australian Institute of Family Studies reports that difficulties maintaining private transport, including the cost of purchasing a vehicle and maintaining it contribute to “transport disadvantage” in Australia which can be commonly experienced by families with young children, people living with disability, indigenous Australians and people living in rural and remote areas.^{vi} A number of organisations, including the Australian Human Rights Commission, have identified that a lack of access to transport is a barrier to employment, particularly for people living with disability.^{vii} The benefits of engaging in paid employment are well known and include greater sense of wellbeing, purpose and connection with others. When people living with disability are deprived of the opportunity to work through structural barriers such as a lack of transport they are less likely to experience these positive outcomes. Automated vehicles could remove the barrier traditional forms of transport have posed while simultaneously reducing the amount of support hours a person needs by way of a paid driver. This will in turn increase the financial and social independence of a person living with disability, helping to pave the way a good life.

Where a person lives can compound the impact of a lack of transport. Rural and remote communities in Australia have low levels of access to public transport and can have low levels of vehicle ownership.^{viii} Automated vehicles have the potential to address transport deficits like these. Combined with other factors like wide roads,

fewer traffic lights and intersections and less traffic, regional communities may present fewer risks in trials of automated vehicles.

The likelihood of the potential benefits of automated vehicles being realised is highly dependant on their safety. JFA Purple Orange believes that should the trials of automated passenger carrying vehicles continue, there must be an emphasis on safety, in particular any practical challenges relating to securing people living with disability in a driverless vehicle. This is relevant where the passenger uses a wheelchair or other mobility device that they are unable to secure safely inside the vehicle themselves.

These trials are also an opportunity to consider and resolve how the passenger and vehicle will communicate with one another, such as through words, sounds and electronic displays. Related to this is the role dispatching systems could play in selecting suitable vehicles for passengers that live with disability.^{ix}

4. Conclusion and recommendation

JFA Purple Orange believes trials of automated vehicles should be designed and rolled out in such a way so as to ensure the needs of people living with disability are accommodated so that this technology does not have to be retro-fitted like so many existing private vehicles and public transport solutions. Updating the key management criteria in the Guidelines for trials of automated vehicles in Australia to specifically include consideration of people living with disability will assist in achieving this.

Recommendation: The key management criteria in the Guidelines for trials of automated vehicles in Australia should require applicants to describe how the their trial considers and addresses the needs of people living with disability. Safety issues should also be addressed by the applicant.

Should you wish to discuss our submission further please do not hesitate to contact
Skye Kakoschke-Moore, Policy & Research Leader on (08) 8373 8317 or
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We wish you all the very best with this important work.

Best regards,

Robbi Williams

CEO, JFA Purple Orange

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- ⁱ Australian Bureau of Statistics. 2019. 4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2018. [ONLINE] Available at: <https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4430.0Main%20Features52018>. [Accessed 1 July 2020].
- ⁱⁱ Productivity Commission. 2020. Performance Reporting Dashboard - Disability. [ONLINE] Available at: <https://performancedashboard.d61.io/disability>. [Accessed 1 July 2020].
- ⁱⁱⁱ Ledger, S., 2018. Public Opinion about Automated and Connected Vehicles in Australia and New Zealand: Results from the 2nd ADVI Public Opinion Survey. Australia & New Zealand Driverless Vehicle Initiative, p. 17.
- ^{iv} Council of Australian Governments, National Disability Strategy 2010-2020, p. 32.
- ^v Stand Committee on Industry, Innovation, Science and Resources, inquiry into the social issues relating to land-based driverless vehicles in Australia, Dr David Bissell, Chief Investigator, ARC Robotic Futures Research Team, *Committee Hansard*, 24 May 2017, p. 12.
- ^{vi} Australian Insitute for Family Studies. 2011. The relationship between transport and disadvantage in Australia. [ONLINE] Available at: <https://aifs.gov.au/cfca/publications/relationship-between-transport-and-disadvantage-austr>. [Accessed 2 July 2020].
- ^{vii} Australian Human Rights Commission. 2020. 9 Barriers to Employment. [ONLINE] Available at: <https://humanrights.gov.au/our-work/9-barriers-employment>. [Accessed 2 July 2020].
- ^{viii} Australian Insitute for Family Studies. 2011. The relationship between transport and disadvantage in Australia. [ONLINE] Available at: <https://aifs.gov.au/cfca/publications/relationship-between-transport-and-disadvantage-austr>. [Accessed 2 July 2020].
- ^{ix} See the following article for these and other issues relevant to automated vehicles and people living with disability: Saripalli, S., 2020. Are self-driving cars the future of mobility for disabled people?. *The Conversation*, [Online]. Available at: <https://theconversation.com/are-self-driving-cars-the-future-of-mobility-for-disabled-people-84037> [Accessed 1 July 2020]