Planning the Driverless City: public-policy perspectives on emerging business models for new transport technologies in Australia

Abstract

Autonomous vehicles (AVs) and associated shared mobility economies are emerging fast, but their impacts are unclear, with possibilities ranging from utopian to regressive. Already, they are bringing uncertainly to transport and urban planning. As disruptive innovations, they could unleash changes which threaten the ability of government agencies to plan and regulate for the common good of urban dwellers.

The primary purpose of planning is to manage emergent challenges, but it can only do this under conditions of relative certainty.

To assist government agencies and industry facing the impending arrival of shared mobility and autonomous vehicles, research is needed to:

- build knowledge about the new ways that the private sector might seek to commercialise road space and transport systems; and the complex ways AVs might affect the city and its inhabitants at different spatial scales.
- understand the role that the public sector can (or should) play in planning, shaping and facilitating the rollout of AVs by private-sector actors.

In previous work that used interviews with public-sector transport planners and regulators to explore ways in which individual/collective & private/public tensions might influence AV deployment (Stone et al., 2018; Legacy et al., 2018) we have identified two dominant questions that underpin uncertainty about AV and shared mobility futures.

These are:

- 1. the extent and speed of the transition of individual vehicle ownership to a 'shared economy';
- 2. the balance of influence and control between the public and private sectors.

This paper reports on qualitative-research interviews with 12 leaders in private-sector AV technology development in Australian cities. These interviews explored the nature of emerging business models and the actions the businesses are seeking from government through policy and regulation to enable profitable deployment of new technologies. This evidence is used to refine our framework for critically analysing the impacts of AV business models and trials from a public-policy perspective.

Legacy, C et al. (2018), 'Planning the Driverless City', Transport Reviews, DOI. 10.1080/01441647.2018.1466835

Stone, J et al. (2018), 'Planning for disruptive transport technologies: how prepared are Australian transport agencies?', in Marsden, G & Reardon, L (eds), *Governance of Smart Mobilities*, Emerald Publishing, UK.

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