



Mr Bill Pender
The Secretary
House of Representatives Standing Committee on Infrastructure, Transport and Cities
Parliament House
Canberra ACT

Via email: itc.reps@aph.gov.au www.aph.gov.au/Committee/Submissions

Dear Bill,

PIA SUBMISSION TO AUTOMATED MASS TRANSIT INQUIRY

The Planning Institute of Australia (PIA) are pleased to offer a brief submission to the House of Representatives Standing Committee on Infrastructure, Transport and Cities Inquiry into current and future developments in the use of automation and new energy sources in land-based mass transit.

The PIA submission is not intended to be comprehensive and only seeks to establish a strategic context for considering the role and impact of various forms of autonomous vehicles (AVs). PIA is concerned that a forensic assessment of the transport task and the problems various AVs are intended to solve is lacking from the public discourse and is being lost in the hype generated by global vehicle makers.

PIA assert that the starting point for the Inquiry should be asking '*what performance do we want of our cities?*' - and thence: '*how can various transport / energy / digital innovations contribute to achieving these goals?*'. Currently we have this the other way around and are highlighting some mobility roles and benefits of connected and autonomous vehicles (AVs) in mass transit applications - but ignoring whether they help or hinder the achievement of broader liveability, accessibility and productivity expectations of our major cities and their communities into the future.

PIA also highlights the links between this inquiry and the recent recommendations of the 'Alexander Inquiry' *Building Up and Moving Out* which demonstrated the need for a national framework for infrastructure decision making and services investment based on a national vision for the performance of our cities and regions. A *National Settlement Strategy* advocated by PIA ([link](#)), would be an important step in determining what outcomes we want for our growing cities and how might future transport contribute to their achievement.

In preparing their response to the Terms of Reference (overleaf) PIA urge the Committee to structure its advice to Parliament around its answers to the following questions:

- Definitions are important up-front. Mass transit, also called public transport, can be defined as the movement of people within urban areas using group travel technologies such as buses and trains. The essential feature of mass transit is that many people are carried in the same vehicle (e.g., buses) or collection of attached / connected vehicles (eg trains). The most commonly discussed car-style AV's do not necessarily fall into this mass transit definition unless connected.
- What are the outcomes sought for cities? (including what does success / failure look like? – and how should a National Settlement Strategy framework contribute in identifying these outcomes?)
- How can automation and new energy sources be harnessed to support the outcomes sought for a settlement strategy? (Note. The options for a National settlement Strategy would be very different if we could assume fast safe affordable and sustainable mass transit in regional Australia)
- In relation to the identified strategic outcomes:
 - how would automated transit assist in strengthening the economic, social and environmental values of a well networked urban structure?
 - How would the spatial / city structure effects of mass transit in strengthening city structure continue to be achieved (ie anchoring nodes / town centres and enabling diverse housing and urban forms)
 - how could disbenefits of automated transit be avoided? (eg impact on public transport services, congestion from AVs – would AVs lead to the loss of some trunk transit services and have an equity effect)
 - Would AVs promote sprawl in outer urban areas? (and reduce community resilience even though individual mobility could be improved)
- How might 'mobility as a service' (and specific transport/energy technologies) impact city living (parking, pedestrian environment, land use patterns)?
- What are the implications of AVs for land use planning and integrated infrastructure and service planning and delivery?
- Can the role of AVs be established in the different contexts offered by 'movement' and 'place' planning theory?
- How might AVs enable reclamation / decluttering of road space for improved pedestrian scale / use of our cities?
- Should AVs be privately owned or shared (and which ones/what circumstances)?
- Are there implications for regions?
- How might AVs contribute to a sustainable power grid for an urban area (energy storage and harvesting)?
- How should road pricing be applied for an AV network?
- What principles should apply regarding access to data generated by AV systems? (PIA strongly supports open data and open access to algorithms)
- What are the planning policy shifts and regulatory reforms needed to achieve sustainable / liveable cities along with the development of automated transit (and what should be avoided)?

The planning profession are concerned that these questions are not being asked or answered – with the potential for any early and appropriate regulatory controls being lost.

PIA asserts that the achieving of the adopted strategic planning and transport goals for cities, regions and places should be the starting point for this inquiry – rather than what attributes AVs offer in isolation. PIA

would appreciate the opportunity to expand on our submission but do not propose to offer detail on the implications of various technologies.

Yours sincerely

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ATTACHMENT A: INQUIRY TERMS OF REFERENCE

House of Representatives Standing Committee on Infrastructure, Transport and Cities Inquiry into current and future developments in the use of automation and new energy sources in land-based mass transit.

The Committee to inquire into and report upon current and future developments in the use of automation and new energy sources in land-based mass transit, including:

- Rail mass transit
- Road mass transit
- Point-to-point transport using automated vehicles
- Commonwealth roles and responsibilities in the development of these technologies.