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Infrastructure Victoria
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Ask for: Patricia Fitzsimons
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Our Ref: A2803018

To whom it may concern,

Advice on infrastructure needs to enable automated (self-driving) vehicles and zero emission vehicles

Hobsons Bay City Council is pleased to provide input to the development of Infrastructure Victoria's advice on the target outcomes and key areas of consideration for infrastructure to enable automated vehicles and zero emission vehicles.

Our submission supports work by the Victorian Government to facilitate a greater and faster uptake of automated vehicles and zero emission vehicles. It is essential for local governments and communities to be fully engaged in the planning, establishment and operation of new technologies. In addition it is important to ensure that the supporting infrastructure is in place to facilitate and prepare for the associated cultural change.

If you would like to discuss this submission further, please contact Patricia Fitzsimons, Coordinator Sustainability on 9932 1622 or email pfitzsimons@hobsonsbay.vic.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Chris Eddy', written over a light grey circular stamp.

Chris Eddy
Chief Executive Officer



Submission to infrastructure needs to enable automated vehicles and zero emission vehicles

Council's Integrated Transport Plan 2017-30 provides a vision for transport in Hobsons Bay: "An integrated, innovative and equitable transport system, providing a range of sustainable, efficient, accessible and safe ways for people and goods to reach their destination." The plan states that Council will act to take advantage of emerging transport models and technologies as well as support travel methods and projects that reduce car dependency and complement the natural environment. More specifically Council also plans to investigate the feasibility of (and priorities for) new and emerging transport models and technologies within Hobsons Bay.

Reducing greenhouse gas and noxious emissions through a range of measures will provide the greatest opportunity for the Hobsons Bay community and Australia to avoid potentially significant economic, social and environmental impacts as a result of climate change. Council's Community Greenhouse Strategy 2013-30 identifies several elements of transport emissions, including freight and residential travel, as crucial to assisting the community to reduce its greenhouse gas emissions by 2030. Key actions include advocating for major public transport improvements, implementation of the integrated transport plan and highlighting the importance of a low carbon vehicle future.

Work by the Victorian Government to facilitate greater and faster uptake of automated vehicles and zero emission vehicles is therefore supported.

Hobsons Bay City Council's response to questions posed in Infrastructure Victoria's (IV) request for contributions on the target outcomes Victoria should aim to achieve and the key areas that they should consider are summarised below.

Target outcomes

Do you consider any of these outcomes to be more important than others?

Victoria is already experiencing significant extreme weather and climate events. Governments across Australia should be making every effort to decrease carbon emissions to ensure that we avoid potentially catastrophic impacts as a result of increasing sea level rise, heatwaves, droughts and floods. The impacts of climate change have the potential to negatively affect the physical, social and financial systems referred to in the remainder of the target outcomes outlined by IV, hence it is seen that decreasing carbon emissions should be a priority outcome.

Areas of focus

Do you have any views or insights on these areas of focus?

Changes to travel and land use patterns

Effective planning for and placement of infrastructure to support autonomous vehicles may provide the opportunity to activate spaces in activity centres currently assigned to individual car parking spaces. This could promote increased economic activity and a stronger sense of community.



There may also be an opportunity to develop at higher densities in key strategic locations due to lesser space being required for public and private car parking. This could also facilitate more sustainable development through more productive use of space and encouraging less private car dependency. This is particularly important considering that there is also a risk of undesirable increased low density development in the metro fringe areas due to potential lower transport costs and the ability to be productive whilst riding in an autonomous vehicle.

There is a possibility that additional travel demand through induced traffic resulting from autonomous vehicle technology may actually increase traffic congestion. Travel (or transportation) demand management measures should be considered such as congestion pricing (dynamic and/or distance based).

Energy supply and charging capacity

New multi-dwelling developments should require electric vehicle charging infrastructure. In large developments it should be mandated that the electrical infrastructure has capacity to accommodate charging stations in the future, if not provided at the outset.

Given the higher cost of retrofitting into the existing built form it is particularly important for these requirements to be incorporated within planning legislation to ensure that installation and establishment costs are minimised.

Interface with physical infrastructure

The Victorian Government should collaborate all of the states and territories, the Australian Government and zero emission vehicle stakeholders to develop standards requiring charging infrastructure to be universally compatible and as accessible as possible for consumers.

Public acceptance and government policy

Council understands that people whose place of work provides charging infrastructure are significantly more likely to own and drive an electric vehicle than work places without the associated infrastructure. In order to facilitate an increase in the uptake of EVs, the Victorian Government should consider providing incentives to work places who install charging infrastructure.

As stated in a report published by the Electric Vehicle Council of Australia in July 2017, "One broad and comprehensive policy that could encourage the uptake of electric vehicles is the introduction of light vehicle carbon dioxide emissions standards. Australia is one of the few remaining developed countries without light vehicle carbon dioxide emissions standards in place." Council requests that IV and the Victorian Government advocate for the introduction of such standards by the Australian Government.

A strong and targeted marketing and education program should be rolled out with any new policy direction or legislative change. Behaviour change programs should complement the overall strategic direction of integrated planning and the development of new infrastructure.



Environmental and human health impacts

There is a need to ensure that active transport modes, pedestrians and cyclists are not compromised in the creation of an efficient autonomous vehicle system. An integrated transport planning approach is essential and is underpinned by a 'sustainable transport hierarchy' which prioritises transport modes such as walking, cycling, public transport and freight. It is based on a network planning approach that takes account of the needs of all transport users across all transport modes, in the context of specific neighbourhoods, the municipality and the wider metropolitan network.

Economic impacts

There are a number of economic benefits associated with the uptake of automated and zero emission vehicles which include:

- supporting industries should be encouraged and established to assist the sustainable transition to a new economy
- activities such as data management and analytics, optimising autonomous vehicle utilisation, repurposing EV batteries for use in homes after life in vehicles, sharing economy and delivery services, to name a few potential industries
- the cost to move to new technologies (and maintain it) will be significant – clear funding streams will need to be identified and clearly communicated
- it is particularly relevant given an increase in electric and hydrogen vehicles and the resulting loss in government fuel taxes from a decline in fossil-fuelled vehicles and other forms of user pays system will be required
- Councils should not bear the cost of providing charging infrastructure or retrofitting roads for automated vehicles

Is there any local or international research or evidence that you'd like to draw our attention to?

Consideration should be given to the evidence and conclusions provided by the International Council on Clean Transportation's [*White Paper Emerging Best Practices for Electric Vehicle Charging Infrastructure*](#), published in October 2017.