



# Office of the Mayor

Redland City Council

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27 September 2018

Committee Secretary  
Transport and Public Works Committee  
Parliament House  
George Street  
Brisbane Qld 4000

Dear Secretary

## RE: Transport Technology Inquiry

Redland City Council appreciates the opportunity to make a submission to the Transport and Public Works Committee in relation to the Transport Technology Inquiry.

As a city of islands with significant populations living on unbridged islands, transport challenges along the Redlands Coast require innovative solutions.

On 5 September 2018, Redland City Council endorsed the draft Redlands Coast Transport Strategy (The Strategy) for the purpose of going to community consultation from October to December 2018. The Strategy is aimed at guiding the advancement of the Redlands Coast transport network for the next 20 years. A key objective of the Strategy is adopting technology, innovative thinking and alternative solutions tailored to the Redlands Coast context.

At this meeting Council also unanimously supported a Mayoral Minute for Council to make a submission to this inquiry. Please find Redland City Council's submission attached for your consideration.

Yours sincerely

Mayor Karen Williams  
**Redland City Council**

## Redland City Council

### Submission to the Transport and Public Works Committee

#### Inquiry into Transport Technology

27 September 2018

Transport is one of the most significant challenges across the Redlands Coast, as reflected in the development of a Redlands Coast Transport Strategy (Transport Strategy) as one of Redland City Council's key priorities. With six residential islands and significant coastal populations, transport needs in the Redlands Coast are unique and present difficulties that require innovation and new technologies to overcome.

In addition, the Redlands Coast has demographic challenges that increase the need for innovative transport solutions to service the community. This includes one of the fastest ageing populations in South East Queensland, with a median age of 41 higher than that of our neighbours (Gold Coast at 38 years, Logan at 34 years and Greater Brisbane at 35 years).

These demographic and social challenges are particularly evident on our Southern Moreton Bay Islands, which have:

- **A higher rate of unemployment**
  - *In 2016, Redland City had an unemployment rate of 6%, whereas SMBI had an unemployment rate of 16%.*
  - *At the SA1 (meshblock data level) several areas on Russell Island had upwards of 20% unemployment in 2016.*
- **A higher median age**
  - *In 2016, one 25% of SMBI residents were aged between 60 and 69. This is double mainland Redlands at 12%.*
  - *The median age for Redland City and the SMBI in 2016 was 41, and 57 respectively. For Queensland in 2016, the average age is 36.*
- **A higher population percentage of persons with a disability**
  - *In 2016, 13% of the SMBI population identified need for assistance due to a severe or profound disability. For mainland Redlands, 5% of the population identified need for assistance.*
- **A higher rate of crime, with specific regard to drug offences, and domestic violence breaches**
  - *In 2016, the Russell island drug offence rate (or offence level per 100,000 people) was double that of mainland suburbs including, Capalaba, Cleveland, and Redland Bay.*
  - *Whilst the rate of domestic violence breaches has decreased over time*

The combination of isolation, social and demographic challenges for our islands makes the need for transport innovation to overcome these challenges imperative.

The vast majority of transport routes in and out of the city are managed by the State Government; this includes the major state controlled roads, the Cleveland rail line and other public transport routes. The marine infrastructure and services that helps our island-based residents access employment opportunities and social services are provided either by the State Government or private transport operators.

Despite many years of advocacy by Redland City Council, as well as offers of innovative funding solutions, there is currently little by way of committed State Government funding for the transport projects needed to manage growth across the city.

In the coming months, the Redlands Coast Transport Strategy will provide a basis for strengthening community understanding and advocacy to address the absence of state funding for essential transport infrastructure that serves our City.

Redland City Council has been a leader in looking at innovative transport solutions to help meet our residents' needs and we have been actively advocating to the State Government through organisations like the South East Queensland Council of Mayors and Local Government Association of Queensland to remove the barriers preventing this sort of technology from being rolled out across the region. We are currently investigating hosting a long term trial of an autonomous vehicle on one of our islands to help meet our unique transport challenges and are requesting the support of the Transport Minister Mark Bailey and Department of Transport and Main Roads to help facilitate this trial. This trial has the potential to create a new transport model that could ultimately support our isolated and ageing population.

#### **A. Identifying trends and changes in fuel type usage in the sectors of personal transport, freight transport and public transport, such as the increasing uptake of hybrid and electric vehicles**

Redland City Council supports further development and research of these innovative technologies to replace fuel-based transport. This includes but is not limited to:

- Supporting the uptake of e-bikes, e-scooters and other forms of 'urban-tech';
- Identifying opportunities to support electric vehicles in the Redlands Coast, such as strategically located charging stations and supporting sustainably powered infrastructure in tourism hubs like North Stradbroke Island and Coastal precincts such as Toondah Harbour and Weinam Creek;
- Opportunities for improved public transport services and supporting infrastructure to incorporate electric and autonomous vehicle technologies;
  - Redland City Council (together with South East Queensland Council of Mayors and RACQ) are investigating an Electric and Autonomous vehicle trial in the Redlands Coast Southern Islands community;
- Incorporating electric vehicle provisions such as charging stations and vehicle-share initiatives as part of new developments.
  - Where possible Redland City Council includes innovation-enabling infrastructure in projects to facilitate future transport innovation. This includes installing conduit and connections in hard infrastructure to allow smart transport technology and data capture when such technology becomes available in the future.

#### **B. Examining the readiness of the transport network for increasing electrification of vehicles in coming years**

The Redlands Coast Southern Islands community have access to electricity, while fuel is less accessible for residents, making electrification of vehicles particularly suitable

for these island communities. With water-based transport the only possible way on and off the islands, it makes for an expensive and long barge trip to fuel vehicles for some residents without access to fuel stations.

The remoteness and poor accessibility to key community services for the island community is exacerbated by high transport costs, particularly water-based transport.

This has also been a discouragement for growth on the islands, and a provocation for social disadvantage with the cost and time losses in water-based transport creating a financial challenge for individuals, for Council and for private companies transporting materials and personnel to our islands. Such vulnerable communities are a perfect example of where innovative technologies can help access economic and social opportunities.

### **C. Identifying other emerging technological factors which will impact on transport networks into the future, such as driver aid technology and 'driverless car' technologies**

It is imperative that legislation is quickly introduced in Queensland to facilitate the rollout of autonomous vehicles. Many other Australian states have already developed or are in the process of developing legislation to guide how their states progress and deal with this emerging technology.

Autonomous vehicles also have the potential to be deployed to water-based transport such as barges and ferries, which in the future may provide economical and efficient transport options for island based communities such as the Redlands Coast islands.

Continuous trials and demonstrations across Queensland of autonomous vehicles reflect a genuine desire for this type of technology. There are many desired advantages that autonomous vehicles will potentially bring to the table, such as improved road traffic performance and economic productivity.

However, Council recognises that in the absence of network readiness and legislative framework to embark on this, it may be more reasonable for autonomous technology to be prioritised in more sustainable and achievable modes such as public transport. Closed networks such as rail and busway corridors provide a more controlled environment, in which to demonstrate the benefits of new technologies.

As the public transport service provider in south east Queensland, State Government leadership in pioneering such change would pave the way for adoption of innovative technologies and help demonstrate achievability of smart city outcomes across south east Queensland.

So far the Redlands Coast Southern Islands have no on-island public transport service. This is despite a coroner's report recommending a public transport service be introduced on Russell Island. Council's advocacy for innovative transport technologies such as electric and autonomous vehicles is a potential solution to the public transport deficiencies on the islands.

Redlands Coast is one of the most unique local governments in Queensland, having a significant island population that is dependent on water transport to access the mainland and essential services. The unique demographic and socio-economic profile of the island communities make for an ideal environment to roll out continuous autonomous technology with limited on-road vehicular traffic conflicts due to the more closed and less trafficked road network.

**D. Examining how technology is affecting employment arrangements in the transport industry, particularly in the food delivery area**

Autonomous vehicles are likely to be of large benefit to innovative food delivery companies, who are already heavily reliant on personnel being available to manage increasing demand. If and when autonomous technology on the roads is adopted, it will see heavy road-based freight displaced with more efficient delivery of goods and services.

As a part of the draft Redland Coast Transport Strategy, it is council's objective to support and encourage the use of such new technologies in the region, not only to boost efficiency of the transport network, but also for the economic benefits to local businesses and Redlanders.