

Submission to Wellington City Council on car sharing facilitation

3 May 2017

Attention: Tom Pettit, Sustainability

Wellington City Council

PO Box 2199

Wellington 6140

electricvehicles@wcc.govt.nz

Submission by Ralph Chapman, Lucia Sobiecki, Ed Randal, Philippa Howden-Chapman¹

Traffic Resolutions - Electric vehicle charging and car sharing (April 2017)

Wellington City Council is seeking feedback on proposed new traffic resolutions to enable electric vehicle charging and car sharing in Wellington.

About NZ Centre for Sustainable Cities

The New Zealand Centre for Sustainable Cities is an inter-disciplinary research centre dedicated to providing the research base for innovative solutions to the economic, social, environmental and cultural challenges facing our urban centres. As well as undertaking research, we make submissions from time to time to central government and councils on a range of issues relevant to cities, from climate change policy to transport policy and urban planning.

Our view on the proposals

We strongly support the traffic regulation changes proposed, specifically the changes related to parking spaces to enable car sharing. Regardless of the car sharing provider, whether this be Mevo, City Hop or other businesses, we support moves to make more dedicated parks and 'pods' available across the city. We also strongly support the provision of facilities for EV charging at some sites.

¹ Ralph Chapman is Associate Professor and Director of Environmental Studies at Victoria University of Wellington and the NZ Centre for Sustainable Cities: <http://www.victoria.ac.nz/sgees/about/staff/ralph-chapman>. Lucia Sobiecki is a master's student at Victoria University of Wellington and the NZ Centre for Sustainable Cities. Ed Randal is a Research Fellow at the NZ Centre for Sustainable Cities. Professor Philippa Howden-Chapman is at University of Otago, Wellington and is Director of the NZ Centre for Sustainable Cities.

We see at least four main benefits to increased car sharing in Wellington, as with other densely populated cities.

First, sharing can reduce the number of vehicles that need to be owned by Wellingtonians, and provided for on the streets in Wellington, reducing demand for parking overall, and thereby the cost of provision of parking in apartment buildings and townhouses, the housing typologies now dominating central Wellington. This amounts to a land use and building cost saving of real significance. Car sharing has been found in other cities to take several cars off the street for every car-share. Car share experts Shaheen and Cohen suggest that a car share vehicle reduces the need for 4 to 10 privately owned cars in continental Europe, 6 to 23 cars in North America, and 7 to 10 vehicles in Australia (Shaheen and Cohen, 2007).

Second, the direction of travel of car sharing is towards both more modern vehicles and electric vehicles in particular, as these are well suited to car sharing. This will help to reduce carbon emissions, consistent with Wellington City's Low Carbon Capital Plan. It will also help to reduce ambient air pollution and noise pollution in the city. We support the Council's plan to have a mix of EV sites among the parking places for car share use.

Third, car sharing is understood internationally to be associated with increased use of complementary modes that are active – i.e. walking, cycling – and the use of public transport. The behaviour is observed because the price of car sharing gives users a reason to limit their vehicle use and to rely on other travel options as much as possible. Car sharing typically reduces average vehicle use by 40 to 60 percent among drivers who rely on it, according to Litman (2000).

Car sharing is very likely to have longer term health benefits. All studies in a review by Kent pointed to car sharing reducing vehicle ownership and/or changing travel behaviour in ways that are likely to generate health benefits (Kent, 2014).

Fourth, car sharing can improve mobility and equity, giving non car owners the opportunity to use a car occasionally. Car sharing improves the mobility options of people who are transportation disadvantaged (Litman, 2000).

As to the opportunity cost of diminished parking revenue for the Council, we understand that this is significant, but do not believe this cost is an unreasonable price to pay in order to encourage car sharing in the city. It is also important the City be seen to be supportive of transport system innovation.

We do not have developed views about the location of the car share parking places proposed, but consider (1) that it is important to have some experimental sites available in city fringe/inner suburbs such as Newtown; and (2) that on-street car parks should be visible in order to encourage the uptake of car sharing.

We also strongly agree with Council support for electric vehicle charging stations. There is growing demand for EVs, which have a well demonstrated potential for CO₂ emissions (and ambient emissions to air) reduction (Clover, 2013).

Thank you for the opportunity to make a submission.

References

Clover, D., (2013) The Market for Electric Vehicles in New Zealand: Using stated choice methods to evaluate the implications for electricity demand and carbon emissions to 2030, Environmental Studies. VUW, Wellington.

Kent, J.L. (2014) Carsharing as active transport: What are the potential health benefits? Journal of Transport & Health 1, 54-62.

Litman, T. (2000) Evaluating carsharing benefits. Transportation Research Record: Journal of the Transportation Research Board, 31-35.

Shaheen, S., Cohen, A. (2007) Growth in worldwide carsharing: An international comparison. Transportation Research Record: Journal of the Transportation Research Board, 81-89.