



Generation Zero

Submission on the Proposed Variations to the Otago Regional Land Transport Plan

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1 Who is Generation Zero?

- 1.1 Generation Zero is a youth-led organisation founded with the purpose of providing solutions for New Zealand to cut carbon pollution through smarter transport, liveable cities & independence from fossil fuels. We believe in solutions-based advocacy and "getting things done", making Generation Zero well regarded amongst local governments around the country. As a Dunedin branch of the organisation, we are supported by resources from around the nation; including our many cities branches' own experiences of successes and failures, as well as strong industry support across Architecture and Urban Planning & Design.

- 1.2 We are a team of young Dunedin locals working towards a flourishing future for our city; through smarter transport, sustainable and thriving urbanism, liveable and loveable cities, whilst embracing our natural environment and local character. We want to stay in this city because we love it, but we depend on our council representing the new basic essentials of the next generation of city residents. Our group varies from young professionals, to long-serving senior practitioners, students and engaged locals.

2 Public Transport in Dunedin

2.1 *Improvements to public transport in Dunedin*

Public transport improvements are important if we are to make Dunedin a multi-modal city and reduce congestion and carbon emissions in the city. Public transport needs to be an attractive and accessible option for transport around the Dunedin. Generation Zero supports the proposed Public Transport Infrastructure

Improvements (Dunedin)¹ and Public Transport Programme of Improvements (Dunedin)² projects proposed in the RLTP. Generation Zero implores the council to learn from the successes³ of the improvements to Queenstown's public transport network, including the introduction of a \$2 flat fare.

2.2 *Public Transport Governance in Dunedin*

A 2013 MR Cagney report, commissioned by the Dunedin City Council, provided advice about how Dunedin's public transport service could be improved.⁴ One of the report's findings was that governance ought to transfer to the DCC for reasons of:

- a) public interest (DCC, as the local authority, being more qualified to understand overall wants and needs, and willingness to pay, of Dunedin citizens)
- b) responsiveness (DCC being the more suitable party to be held to account for the planning and performance of the network)
- c) coordination with other functions (DCC being the entity that plans and operates the local transport network, and plans for broader urban development etc).

Alike the situation in Christchurch, creating a joint committee on Public Transport would also rectify most of the issues addressed by that advice. Progressing with either the creation of a joint committee or, lobbying central government to allow transfer is urgent for the city if it is ever to sensibly align decisions about transport infrastructure, spatial planning and the CBD in respect of public transport. Generation Zero believes the council should prioritise a solution to the disconnect between public transport service delivery and infrastructure decisions.

¹ Item 34 & 35

² Item No 37

³ <http://www.scoop.co.nz/stories/AK1801/S00557/queenstowns-new-bus-service-proves-popular.htm>

⁴ Public Transport Business Case, MR Cagney, July 2013

3 Cycling Around the City

3.1 Generation Zero believes that cycling is a viable and premium form of transport which is not only environmentally friendly, but also fosters a broader range of positive consequences. A holistic cycle network around Dunedin stands to make our communities safer, more accessible, and more connected. This would provide for the increasing demand for active modes of transport whilst making these modes an easy and attractive option especially for those with safety concerns with the current facilities.

3.2 *Cycling Safely in Dunedin*

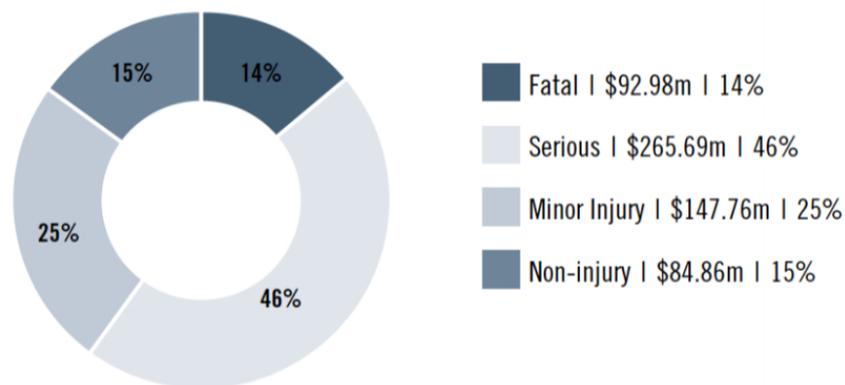
Dunedin has the highest road safety risk for a major urban centre in New Zealand, and has the seventh highest risk of any territorial authority in New Zealand (out of 67).⁵ As such, road safety has been identified as a major transport challenge in Dunedin. Given that cyclists in Dunedin face the fifth highest road safety risk in the country it is clear that a holistic approach to improving transport safety is a must. In order for the streets of Dunedin to be safer for all users it is clear that alternative transport options need to be accessible and safe; street design must accommodate for the protection cyclists and alternative transport users from the hazards posed on Dunedin roads. A street design which values the people using the active transport modes over privately owned car usage will not only make Dunedin a more 'attractive' city but will also reduce barriers to cycling that stem from the inherently risky nature of the roads of Dunedin.

The corollary of reducing the road safety risk on Dunedin roads is the reduction of the 'cost' that arises from road accidents. The Communities at Risk Register

⁵ Dunedin City Intergrated Transport Strategy 2013, p. 14

highlights Dunedin as over-represented in terms of the 'social cost' of crashes.⁶ The Ministry of Transport, in June 2012, estimated the average social cost per fatal crash at \$4,445,600, per serious injury crash at \$772,000, and per minor injury crash at \$85,000. During the period 2008— 2012 the social cost of crashes in Dunedin totalled \$591.21 million.⁷ The prioritisation of cars, the wide, high-speed urban street environment of Dunedin's roads, and the poor provision for alternative transport options (such as cycling) have been identified as factors contributing to the compromised road safety seen on Dunedin streets.⁸ Therefore, we advocate for a change in this car-centrist perspective to Dunedin transport and propose changes be made to the current provision of safe cycle transport. We believe that by providing safer cycle-ways (through the implementation of the proposed changes — in accordance with our proposed changes) we will not reduce the social cost of crashes but will also make cycling a more accessible and appealing transport option.

Social cost of all crashes in Dunedin 2008–2012 \$m



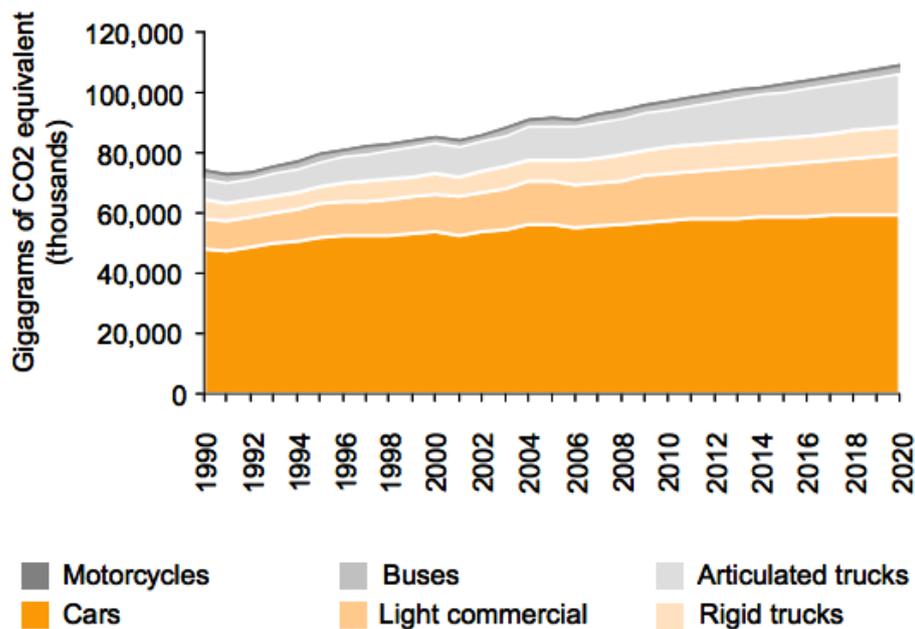
⁶ 'Social Cost' means the total cost of road crashes to the nation, including loss of life and life quality, loss of productivity, medical costs, legal costs, and vehicle and property damage costs; Dunedin City Integrated Transport Strategy (2013) p 15.

⁷ See Figure 3: sourced from Dunedin City Integrated Transport Strategy (2013) p 15.

⁸ Litman, T. and Fitzroy, S. (2009) Safe Travels – Evaluating Mobility Management Traffic Safety Impacts. Injury Prevention, Vol 15, Issue 6. Online: www.vtpi.org/safetrav.pdf.

3.3 Environmental Benefit of Cycling

The use of cycling as a mode of transport has well documented positive environmental effects as it does not produce large amounts of emissions like other modes of transport such as motor vehicles. With each person who chooses to cycle there is one less car on the road producing carbon emissions and smog which has detrimental effects on the environment. In fact it has been found that “the combined environmental benefits of reducing noise and greenhouse gas emissions, and improving air quality”.⁹ With a small reduction in those using vehicles as their mode of transport there could be a potentially significant reduction in carbon emissions. One study found this reduction could be up to 8% which is important given the projected increase in carbon emissions around the world.¹⁰



Past and projected vehicle emissions in Queensland Australia

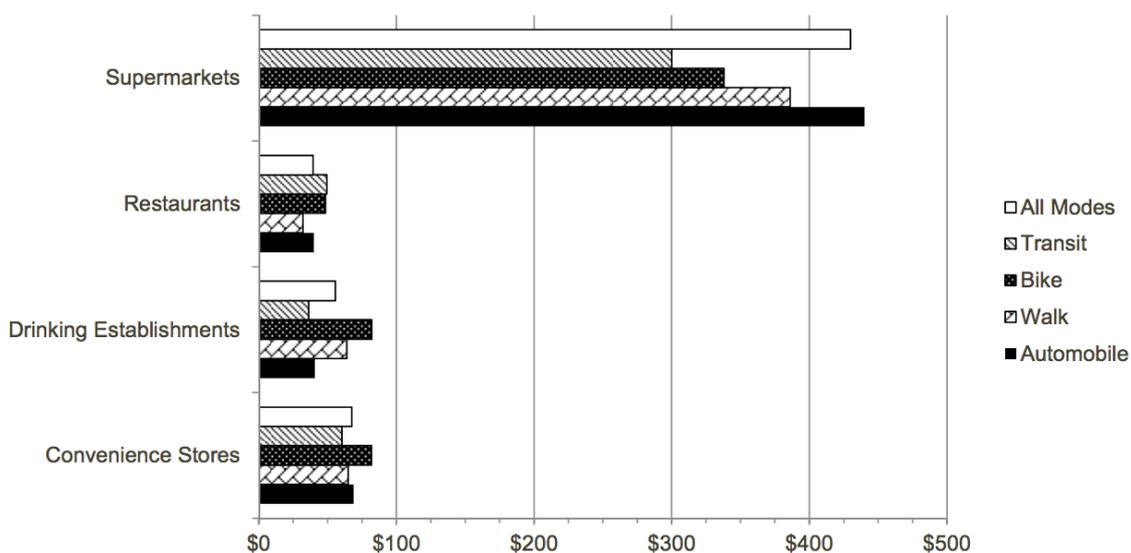
⁹ Queensland Department of Transport and Main Roads 2011, Benefits of inclusion of active transport in infrastructure projects, prepared by SKM and PWC, Table EX.1: Benefits summary.

¹⁰ See Figure 8 and Australian Bicycle Council, National Cycling Strategy 2011-2016: Gearing up for active and sustainable communities, Austroads, p.9.

Given the reduced environmental impact of cycling as opposed to other forms of transport, we support the implementation of the proposed urban cycleways as they would provide for environmentally friendly modes of transport around Dunedin.

3.4 Economic Impact of Cycling

Increasing cycling has been shown to be good for the local economy. By reducing the costs travel, residents have more disposable income which is increasingly likely to be incidentally spent at local retailers as “people who cycle have been found to be more likely to stop and visit shops ore often, and to spend more money at those shops over time, than people who drive”.¹¹ Therefore, the implementation of the proposed urban cycleways and the subsequent increase in those who cycle will increase the amount spent in local retail and convenience stores, restaurants, and drinking establishments; boosting the local economy.¹²



¹¹ Benefits of Investing in Cycling in New Zealand Communities, New Zealand Transport Agency, page 10; see also Clifton, K.J., Muhs, C.D., Morrissey, S., Morrissey, T. and Currans, K.M. 2013 Examining Consumer Behaviour and Travel Choices, Civil and Environmental Engineering Faculty Publications and Presentations, Paper 145, http://pdxscholar.library.pdx.edu/cengin_fac/145, and Central City Plan, page 12.

¹² See Figure 8 sourced http://pdxscholar.library.pdx.edu/cgviewcontent.cgi?article=1142&context=cengin_fac, page 25

The introduction of cycling as an accessible and preferred form of transport will also help diversify the economy by fostering bike related economic ventures. Increasing the cycling sector could also have positive effects on tourism in the city as marketing Dunedin as a cycling destination may increase the the number of people who visit Dunedin and the amount of money they spend while here. The positive effects on the local economy therefore provide another basis of our support for the implementation of the proposed urban cycleways.

3.5 *Social Accessibility of Cycling*

According to the Dunedin City Intergrated Transport Plan “having reliable, affordable access to a variety of transport options is important if people want to make the most of Dunedin’s economic and social opportunities”.¹³ It is undeniable that Dunedin’s transport network has focused heavily on private car use,¹⁴ resultantly, developments in transport have been primarily surrounded one transport option: the use and ownership of motor vehicles. This narrow focus has often to the detriment of other modes of transport, not only has the development and promotion of alternative transport options been neglected but the optimisation of car based transport infrastructure has increased the number of cars on the road, the speeds at which people drive, and the noise and emissions that driving creates which “can all disrupt access and limit people’s ability to make the most of these transport options”.¹⁵

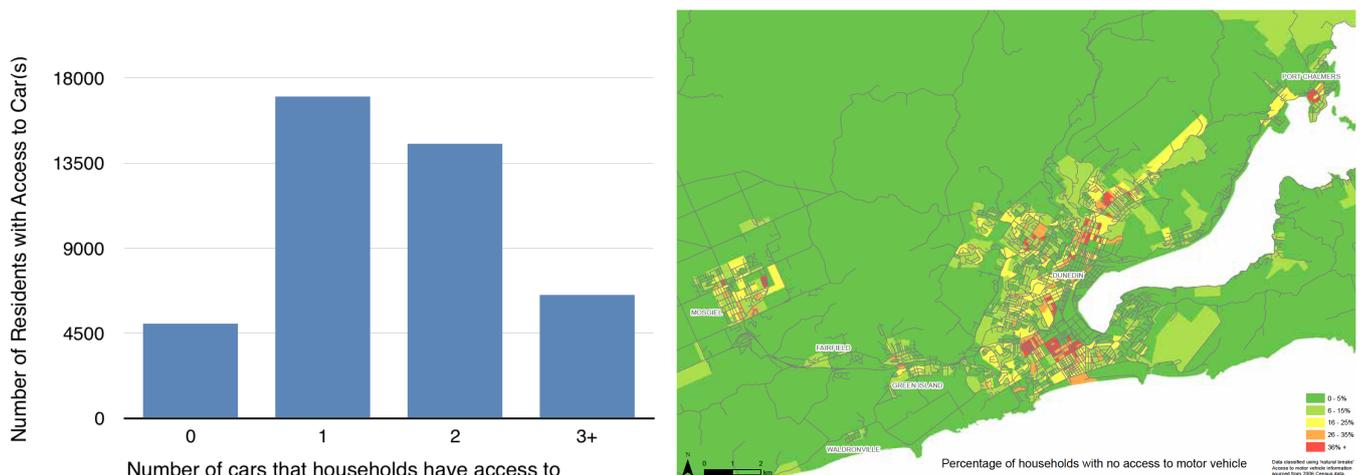
The corollary of this is that many Dunedin residents face some form of transport exclusion¹⁰, though this is disproportionately faced by residents in lower socio-economic communities.¹¹ Those in the 12% (approximately 5,000 households)

¹³ Dunedin City Intergrated Transport Plan, page 23.

¹⁴ See Figure 5, sourced from data in Dunedin City Intergrated Transport Plan

¹⁵ Dunedin City Intergrated Transport Plan, page 24

without access to a privately owned car rely on access to other modes of transport, including cycling, to get to work, shop, and to attend social and community events. The lack of adequate provision for cycling in Dunedin's current infrastructure needs to be addressed in order to mitigate the impediments to mobility faced by Dunedin residents. As an affordable and reliable form of transport, cycling should be promoted and made safer by the introduction of protected cycleways. By providing an accessible alternative, protected cycleways will ensure that "Dunedin residents have equitable access to the economic, social, educational and recreational opportunities the city offers".¹² Therefore, Generation Zero supports the implementation of the proposed cycleways on the basis that it would improve social accessibility in accordance with the principles of the Dunedin City Intergrated Transport Plan.



Under the Spatial Plan is the aim to make Dunedin an accessible and connected city. Accessibility is determined by the number of transportation options available, and the quality of those options. The Spatial Plan acknowledges that "low levels of accessibility will generally spend more of their household budget on transport costs and experience fewer opportunities for education, employment and recreation".¹³ In order to increase accessibility and mitigate these barriers to connectivity the Spatial Plan lays out a number of objectives to be achieved by 2050. One of these objectives is to ensure that Dunedin has a safe, affordable, and effective road

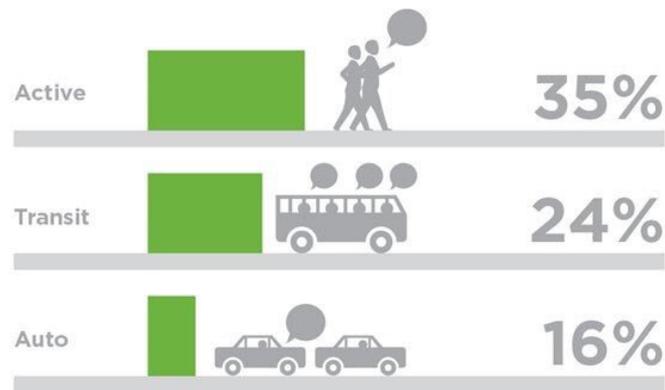
network; the prioritisation of vulnerable groups such as cyclists has been an accepted policy in relation to this objective. Another is to make Dunedin a pleasant and safe place to cycle, by making alternative travel modes well provided for. By achieving these objectives Dunedin will become a more accessible place for all of its residents; connecting those within and between central hubs. We believe that the implementation of the proposed urban cycleways will help achieve these objectives, making Dunedin a more socially accessible city, and further support their implementation on these grounds.

Furthermore, we believe that the implementation of the proposed urban cycleways will help address a number of the challenges identified in the Central City Plan. By providing safe and accessible cycleways around the city we believe this will reduce the car dominance in the central city which has been identified as a challenge in the Central City Plan.¹⁴ The provision of accessible cycleways will likely increase the number of cyclists in Dunedin, reducing the number of those who drive in the city. With each person who uses an alternative transport method, there is one less car in the central city; reducing congestion in the city and the need for a large amount of space dedicated to parking. The implementation of the Harbourside connection cycleway would further mitigate the challenges identified in the Central City Plan by improving the connection between the central city and the waterfront. We therefore support the implementation ¹⁵ of the proposed urban cycleways on the ground that it would help tackle the challenges identified in Central City Plan.

The proliferation of cycling as an accessible way for people to get around would also increase the sociability of Dunedin residents, making it a more pleasant live, work and play. Cycling, as with other forms of active transportation, increases the likelihood of friendly social interactions during a persons travel.¹⁶ With people being

able to get around more easily and them being more socially connected they are more empowered to make positive lifestyle choices that increase their social wellbeing.

Likelihood of a Friendly Social Interaction During Trip by Mode



Source: 2016 Transportation Panel Survey

3.6 As such Generation Zero supports the inclusion of the City to Harbour Cycle / Pedestrian Connection,¹⁶ Tertiary Precinct (Dunedin)¹⁷ and the Dunedin Urban Cycleways¹⁸ as high priority projects under the Regional Land Transport Plan. .

¹⁶ Item No 26

¹⁷ Item No 60

¹⁸ Item No 27