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Submission to the Greater Wellington Regional Council on the Draft Regional Land Transport Plan

Prepared by:

Ralph Chapman¹, Kate Whitwell¹, Nadine Dodge¹ on behalf of the New Zealand Centre for Sustainable Cities²

The NZ Centre for Sustainable Cities would like to make an oral submission to Council.

About the 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 facilitation of the economic, social, environmental and cultural development of 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. The Centre is currently running a 4-year Resilient Urban Futures Programme, funded by the Ministry of Business, Innovation and Employment, which began in October 2012.

Introduction

This submission provides commentary on three aspects of the Draft Regional Land Transport Plan: the goals GWRC has adopted in regard to envisioning a desirable transport future, the methodological framework used to analyse transport problems, and the funding allocation decided upon to achieve the desired outcomes.

Vision and goals

The type and quality of urban transport networks within an urban area have a large impact on quality of life for residents. For regions such as Wellington, looking to support future sustainable development of the region and a transformation to a low-carbon economy, a critical element is planning to support public transport, walking and cycling networks. Based on this, we support the overall stated vision of the plan *“to deliver a safe, effective and efficient land transport network that supports the region’s economic prosperity in a way that is environmentally and socially sustainable”* (GWRC, 2015, p.7).

The stated goals of increasing public transport, walking, and cycling mode share are encouraging and well founded: increasing the shares of trips made by public transport, walking and cycling is known to have positive environmental, quality of life and public health outcomes. However, the goals for walking and cycling are too low, in our view, considering both recent trends in walking and cycling,

¹ Victoria University of Wellington.

² <http://sustainablecities.org.nz/>

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as well as the many benefits to be gained from increasing walking and cycling rates.

For example, the stated goal of 3.7% of journeys to work being completed by bike in 2025 (p.40) is unambitious, as it is merely what would be expected if current rates of increases in cycling continue in the future. Given that these recent increases in cycling have happened in the context of an almost complete absence of investment in cycling infrastructure, it is reasonable to expect that much greater increases in cycling could be achieved with appropriate investment in cycling infrastructure. In our view the stretch target of an increase to at least the 4.6% of commute trips outlined in the Targets Working Paper 5 (p.64),³ and preferably a more ambitious target closer to 10% (and consistent with active TDM programmes and supportive infrastructure), should be adopted.

Internationally, many cities have shown that investment in cycling infrastructure can significantly increase cycling mode share (Dill and Carr, 2003; Yang et al., 2010). And the health benefits of cycling are highly significant (Chapman et al., 2014)⁴. Given this, a substantially higher target for cycling rates, as well as plans for cycling infrastructure and TDM programmes to achieve those targets, is warranted.

While it is encouraging to see a section in this document on climate change and carbon dioxide emissions that recognises fossil fuel use for transport as a key source of emissions for the Wellington Region (p. 28), there is little direct reference to the ability of policies and activities of this plan to contribute to either emissions reductions (or increases) over time. Furthermore, the target to reduce absolute CO₂ emissions by 10% in 2025 (relative to 2013 levels) is unambitious at best.

UNFCCC and IPCC guidance on emissions reductions recommend that wealthy countries should be aiming to cut greenhouse gas emissions by around 80% or more by 2050 (UNFCCC, 2007), and cities, as primary sources of emissions, have a key role to play in meeting targets such as these.⁵ New Zealand is already coming under increasing international pressure not only to put policies in place to meet existing targets (central government has a target of a 50% reduction relative to 1990 levels by 2050), but to increase the ambition of these targets. In order to ensure these do not place unnecessary economic burdens on regional populations of the future, long-term transport infrastructure planning, in particular, should be making emission reduction policies a cornerstone.

³ i.e. an increase in the cycling mode share of journey-to-work trips from 2.9% to 4.6%, between 2013 and 2025.

⁴ See especially references 9-11 of this paper.

⁵ In the US, the White House has come to a similar conclusion about delay, i.e. that delay in cutting emissions is so costly that delay cannot be justified. (US Council of Economic Advisers, (2014) *The Cost of Delaying Action to Stem Climate Change*. The White House, Washington, D.C.) It estimates "that the cost of hitting a specific climate target increases, on average, by approximately 40 percent for each decade of delay." (p.5). As we come closer to the critical 2 degrees C threshold, those costs will rise faster.

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Moreover, we consider it is not appropriate to omit emission reductions from the key strategic objectives (starting on p.7). The last strategic objective, the one which appears to mention the environment merely as an 'add-on' (p.9) short-changes the goal of emission reduction – indeed, it is prominent in its absence. We consider this an abrogation of the Plan's responsibility.

We also believe that long-term targets require meaningful interim targets, and concrete policy measures, to support and deliver them. Consequently, we believe it is important that the RLTP set out meaningful interim goals for emissions of carbon dioxide from land transport. Moreover, the implications of specific planned improvements (and the overall programme) should be translated explicitly into quantified contributions to these interim goals. It is not possible to properly evaluate the draft RLTP without such data.

In our view, appropriate goals should include a focus on significantly improving Wellington's environmental impact and liveability by including strong goals for greenhouse gas emission reductions and more ambitious (but still feasible) targets for public transport and active travel mode share increases than are currently included. We consider that a Plan which does **not** contain such goals would be inconsistent with the Land Transport Management Act (LTMA) 2003 and the GPS 2015, in **not** being in the 'public interest' (see p.5 of the Plan). Additionally, it is clearly inconsistent with the direction greater Wellington residents have said they wish GWRC to follow with regard to climate change. Eighty five percent of submissions on the development of GWRC's Climate Change Strategy stated that they thought future climate change effects should be a high, very high, or top priority for GWRC's planning and decision-making processes going forward.

Methodological approach

One of the key methodological tools used to underpin this plan is vehicle kilometers travelled or VKT. The plan itself states that "*VKT have been relatively flat over the past decade ...*", but then continues with a statement that VKT "*... are likely to increase in line with growth in population and employment*" (GWRC, 2015, p.30).

We argue that the latter statement regarding VKT is not necessarily true. There is a world-wide trend towards VKT becoming decoupled from economic growth and models based solely on population and employment growth are less likely to accurately predict future growth (Millard-Ball and Schipper, 2011; The Economist, 2012). Even advice on the Ministry of Transport website comments that '*we can no longer rely on traditional forecasting models alone to help us to decide how to invest*' (Lyons, 2015).

Rather than relying on the 'predict and provide' modelling from the last century, the Wellington Region should be much more actively deciding which transport future we want to achieve and then focus policy and action towards those goals. A 'predict and provide' approach denies the reality that transport investments are not merely reactive to transport trends, but are also critical to shaping

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transport trends (Hickman et al., 2014; Kenworthy, 2012).

Modern transportation modeling must, as a necessity, recognise the interconnectedness of transport and land use, and the complex system that is an urban environment. Transport investments influence both human transport behaviour and land use patterns, which in turn influence transport outcomes. Given this reality, increasing road investment can no longer be viewed simply as a solution to the problems of congestion and slow vehicle speeds, as is stated in the Plan. Numerous international studies have demonstrated that increasing road space induces an increase in driving, which negates the impact that road improvements might have on congestion (Hymel et al., 2010). Inducing an increase in driving will also lead to greater carbon emissions, making emissions reduction targets even harder to reach.

In contrast, a backcasting approach allows policymakers to determine what transport investments need to be made in order to achieve the desired environmental, social, and economic goals by a certain future date. This backcasting approach, which allows for setting a serious carbon emissions target, would be consistent with recommendations from the Ministry of Transport's *Future Demand* report which concludes:

"Our transport system's nature and scale partly determine the demand placed on it. Therefore, ... when evolving our transport system we should have in mind providing for the demand we believe is appropriate (and feasible) rather than providing for the demand we may be tempted to predict." (Lyons et al., 2014).

Funding

We are concerned that the details of the plan and the strategic activities currently proposed are not consistent with the stated vision of the desired transport future for the Wellington Region. While we support the focus on safety and resilience improvements for roads and other networks, it is not clear that such a focus requires that the majority of investment be directed towards roading, as is currently the case. A critical proviso is that this network includes all transport network types, and does not short-change some.

We submit that the list of significant activities be revised to ensure that a much higher proportion of future investment be focused on the public transport, walking and cycling networks to support and increase the latter mode shares. We would argue for a transition towards a 50:50 modal funding split (i.e. attaining a balance of 50% to roading, and 50% to other modes) over the six years of the plan.

The draft Regional Land Transport Plan is well short of this. It indicates that the vast majority of new investment in transport networks is directed towards roads: 85% of funding for new significant activities is planned to go to local road or state highway improvements, 12% to public transport and only 3% to active

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transport network enhancements over the next six years, 2015-2021 (Fig 51., p.161-162). Leaving aside for the moment any aspiration to *cut* road funding, this allocation is inconsistent with the *current* modal split in the Wellington Region: roading improvements under the Plan would receive a disproportionate share of funding relative to the private motor vehicle's share of trips (the car share of trips has been measured at 71% across the Wellington Region⁶, while car/motorcycle trips represent 66% of work commute trips⁷). Even lifting the combined share of significant activity funding for *public and active* transport from its current level of 15% to a level of 20% would result in an increase from \$211 to \$278 million over the next six years. Such an increase should, in our view, be the minimum reallocation, on the way to a 50:50 split.

The proposed inequitable allocation of funds under the draft Plan necessitates a strong rationale, which is not provided. Furthermore, it is fundamentally inconsistent with the stated goals of increasing mode shares for public transport, walking, and cycling. It is well known that demand for travel by mode is responsive to the investment that is put into that mode. Therefore, the disproportionate planned spending on roads can be expected to increase demand for vehicle travel and VKT, an undesirable outcome.

Conclusion

With regard to transport goals, we agree that the draft Plan is moving in the right *direction* in terms of mode share, emissions reductions, and a focus on safety. However, we find that the emission reduction and mode share goals in particular are *insufficient* in magnitude to meet either New Zealand's emission reduction goals, or the level of ambition which is necessary to keep our global climate stable.

With regard to the methodological framework, it appears that some of the methods which sit behind the draft Plan are outdated and have yet to incorporate the latest international (and even local) knowledge and experiences, particularly in regard to VKT and travel demand modelling.

The funding allocation proposed in the Plan is the most worrying aspect, as it appears to be fundamentally at odds with the current reality and the goals proposed in the Plan.

The NZ Centre for Sustainable Cities would welcome the opportunity to work with the Council by providing further information on evidence-based transport policies that can contribute to emissions reduction, both in the short and long-term.

⁶ NZ Household Travel Survey data, 2010-2013

⁷ NZ Census 2013: Main means of travel to work for the Wellington Region

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