



11 August 2014
Ministry of Transport
PO Box 3175
Wellington 6140
New Zealand

Submission to the Ministry of Transport on the Draft Government Policy Statement on Land Transport 2015/16 to 2024/25

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Thank you for the opportunity for OraTaiao: The New Zealand Climate and Health Council to make a submission on the Draft Government Policy Statement on Land Transport.

OraTaiao: The New Zealand Climate and Health Council comprises approximately 240 senior doctors and other health professionals in New Zealand with expertise and concern about the emerging negative impacts of climate change on health, as well as the potential positive co-benefits for people's lives that can be achieved through climate action. The transport sector is one of the three most important areas where these things intersect and is the sector with the fastest growing carbon emissions in New Zealand. It is therefore crucial that our transport policy rapidly shifts to reflect and respond to these realities.

Health starts in our homes, streets, cities and workplaces – and more fundamentally, in stable life-support systems like the climate. We commend the government for recognising the important part that transport plays in accessing the building the blocks for health and look forward to working together towards a transport system that contributes positively to a high quality of life for New Zealanders.

Yours sincerely,

A handwritten signature in blue ink that reads "Alex Macmillan".

Dr Alexandra Macmillan, Acting Co-Convenor, OraTaiao: NZ Climate & Health Council
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Executive Summary and recommendations

Population health and wellbeing relies heavily on well functioning life-support systems like freshwater, clean air and a stable climate. Climate change is widely recognised as one of the leading health threats of the 21st century¹. As a global climate policy “follower”, New Zealand is at significant economic and social risk if we continue to invest heavily in long-term infrastructure that locks us into carbon-intensive transport. Fortunately, there is great potential for easy win-wins for the economy, addressing climate change and improving the livelihoods of New Zealanders. However, this would involve a significant shift in thinking from what is expressed in the draft GPS, as well as a much more profound re-balancing of the investment portfolio towards public and active transport.

We therefore encourage the Ministry to enhance the GPS by taking on board the following recommendations:

1. Rapidly enhance the Ministry’s understanding of the multiple pathways by which transport contributes to strengthening the economy, and will have to contribute to a just transition towards an inevitable low carbon future by 2050. The final version of the GPS can then reflect this up front alongside current statements about the role of freight and congestion
2. Re-prioritise the government’s transport objectives to place public safety ahead of economic growth and value the benefits of modal shift to public transport, walking and cycling for road safety
3. Take a systematic view of the way that public and active transport contributes to the governments transport objectives, and comprehensively include the costs and benefits to all relevant outcomes (economic, social, public health, environmental) in the evaluation of projects and plans through changes to the Economic Evaluation Manual. Communicate these values in the final version of the GPS
4. Go further in re-balancing the investment towards public transport, walking and cycling – these are the modes that will contribute to a resilient and healthy future economy and society. In particular, we recommend increasing the walking and cycling activity class to approximately \$200million each year for the next decade to catch up our infrastructure with other developed nations and make cycling a safe and attractive transport option in NZ cities.

Other specific comments and justification for these recommendations is provided below.

Specific feedback and justification for recommendations

Existing demand and travel forecasts

We commend the Ministry for acknowledging in the draft GPS that there has been flat demand in light vehicle travel over the last decade, and that growth in personal vehicle travel is forecast to remain muted. We note that the GPS makes no reference to NZTA’s figures showing the dramatic reduction in the number of young eligible New Zealanders presenting to take their drivers’ licenses (Table 1). The drop-off in new drivers will inevitably lead to a continued reduction in future private car use. This trend in New Zealand reflects wider international experience, for example in the United States², for a mixture of economic, social and environmental reasons³.

¹ McCoy D, Montgomery H, Arulkumaran S, Godlee F. Climate change and human survival 2014 2014-03-26 11:58:40.

² Shults RA, Williams AF. Trends in driver licensing status and driving among high school seniors in the United States, 1996–2010. *Journal of Safety Research*. 2013;46(0):167-70.

³ Young Driver Licensing in the United States. *Traffic Injury Prevention*. 2013;15(1):6-9.

	16 year olds	17 year olds	18 year olds	19 year olds
	2008	2013	2008	2013
Auckland	10,594	5,504	14,105	10,514
Wellington	1,959	527 -73%	2,562	1,025 -60%
Christchurch	2,751	1,373	3,484	2,597
National	36,637	18,713	45,730	34,041

Table 1 Declining young drivers. Source: NZTA, Sunday Star Times 2 May 2014

We also recommend that other trends be reflected. The growth in cycling and public transport patronage in New Zealand cities is an important part of the recent story about changing travel demand.

On the other hand, to avoid locking in fossil fuel reliance, transport planning will need to make a shift away from relying on forecasting current trends and begin to set a future vision for the transport system, then backcast to understand the stepwise investments needed to achieve it. These methods are now well established in both developed and developing countries⁴.

Strengthening the economy

As a proportion of GDP, land transport expenditure is at its highest levels since 1960s. It's not surprising that this is the case. As long as we continue to attempt to appease freight's insatiable appetite for new road capacity, the New Zealand taxpayer will continue to fork out for expensive redundant transport infrastructure with low returns on investment and significant negative consequences for health and the climate.

On the other hand, investments in public transport, walking and cycling are cost effective, particularly when the broader benefits to the economy and safety are included along with the other large benefits to people's health and wellbeing. Although reducing freight journeys and congestion are currently included in the economic evaluation of transport project, there are many wider benefits to the economy of public transport, walking and cycling which are not currently included. These are likely to outweigh the congestion and freight benefits by an order of magnitude and include the following:

- reducing unemployment, particularly long-term and youth unemployment by addressing lack of car ownership as a barrier to accessing employment⁵
- increased spending at local businesses by those using active transport modalities⁶
- creating cities with excellent quality of life where high value employers and employees want to live
- improving workplace productivity through increased physical activity in people's daily lives
- providing a larger number of construction and service jobs than roading construction
- reducing spending on fuel by households, who can then increase their discretionary spending within the NZ economy

⁴ See for example Banister, D Chapter 11: Visions for the future, in *Unsustainable Transport: City Transport in the New Century*, Routledge 2005

⁵ Parker B. Very long-term job seekers' barriers to employment: A nationwide survey. *Labour Market Bulletin*. 1997;1:63-79.

⁶ Clifton K, Morrissey S, Ritter C. Catering to the bicycling market. *Transport Research News*. 2012; 280 May-June

- reducing the significant health sector costs of air pollution; road traffic injury and physical inactivity

All of these impacts can be valued and accounted for in improved cost-benefit analysis. One example where this has been done is the cost-benefit analysis of specific policies to increase commuter cycling in Auckland, where it was demonstrated that for a similar cost to one of the Roads of National Significance, the entire road network of Auckland could be successfully turned into a world-class cycling city, with benefits in the tens of dollars for every dollar spent⁷

Recommendation 1 Rapidly enhance the Ministry's understanding of the multiple pathways by which transport contributes to strengthening the economy and will have to contribute to a just transition towards a low carbon future. The GPS can then reflect this up front along with the current statements about the role of freight.

Public Expectations

The public would like land transport in NZ to be less congested, safer, more resilient, and to mitigate environmental impacts. The Ministry is to be commended for recognising the desire among New Zealanders for a range of outcomes from their transport system. However, the funding split proposed by the draft GPS will not realise these objectives without significant rebalancing.

Providing for increased motor vehicle and freight traffic by prioritising funding to increasing the capacity of the road network sets us out to fail on all these fronts. Locking New Zealand into very longterm infrastructure instead will induce further traffic (ref); increase road traffic injuries; increase air pollution and fail to address the negative environmental impacts of our current patterns of travel.

New Zealanders have also demonstrated a strong desire to use public transport, walking and cycling to get where they need to go – for example, responding to the modest improvements in the quality, frequency and reliability of trains and the rapid bus network in Auckland with a year on year growth in patronage⁸, and responding to the very modest improvements in cycling infrastructure in the model communities with significant increases in cycling trips⁹. On the other hand, the recent decision by the Environmental Protection Agency to decline the resource consent for the Wellington Basin Bridge reflects public disinclination for large new roading infrastructure projects.

Road safety

We complement the Ministry for taking a systems approach to road safety. In doing so, the effectiveness of modal shift for reducing road traffic injury and keeping the NZ population safe from other kinds of transport harm, cannot be underestimated.¹⁰

In fact, public safety should be a top priority for investment in the transport system, and certainly should not be compromised in decisions where there are potential trade-offs between reducing congestion or making freight passage more convenient, and safety. This trickles down from high level investment choices to the design of a specific intersection through the use of the Economic Evaluation Manual.

⁷Macmillan A, Connor J, Witten K, Kearns A, Rees D, Woodward A. The Societal Costs and Benefits of Commuter Bicycling: Simulating the Effects of Specific Policies Using System Dynamics Modeling Environmental Health Perspectives. 2014. <http://ehp.niehs.nih.gov/1307250/>

⁸ <https://at.govt.nz/media/655723/Item-9-June-PT-patronage-report.pdf>

⁹ <http://www.nzta.govt.nz/planning/nltp-2012-2015/walking-cycling.html>

¹⁰ World Health Organization. Global status report on road safety: time for action. Geneva: WHO, 2009.

Recommendation 2: Re-prioritise the government’s transport objectives to place public safety ahead of economic growth

Although the relationship is non-linear, road traffic injury remains a function of vehicle kilometres travelled. Within a safe system, shifting trips to modes which are safer for the user as well as the wider community. Widening the Ministry’s current idea of “safety” to ensure that the transport system contributes to keeping New Zealanders safe from the devastating impacts of climate change, safe from the mortality and morbidity associated with air pollution (about the same toll as the road traffic injury one), and safe from the impacts of physical inactivity (an estimated burden of approximately 1% of New Zealand’s GDP¹¹) would be in keeping with its up front stated objectives. This would require including the costs of all these in the valuation of projects and plans using the transport Economic Evaluation Manual.

Recommendation 3: Take a systematic view of the way that public and active transport contributes to the governments transport objectives, and improve the valuation of those contributions in the evaluation of projects and plans through changes to the Economic Evaluation Manual. Communicate these values in the final version of the GPS

Value for money

We support the government’s aim to ensure that transport investments represent value for money.

Investment in the most climate and health-friendly transport modes (walking and cycling) represent significantly improved value for money compared with large infrastructure investments. For the cost of a single Road of National Significance the whole of Auckland’s road network could be transformed to be safe and attractive for cycling, returning in the order of \$20 for every dollar spent, as well as having knock-on benefits for walking and public transport¹². Furthermore, cycling related infrastructure as well as costing less to construct, also lasts much longer before needing repair or replacement than infrastructure for cars and trucks.

The current methods for evaluating public transport projects significantly underestimate their wider economic, social, health and environmental benefits. If these were included as suggested in our recommendations, then the competitiveness of projects to improve public transport would also be demonstrated.

Taken together, the evidence about public demand, as well as economic, safety, climate and health benefits of greater investment in walking, cycling and public transport is compelling. In particular, with the success of the model communities; the New Zealand population’s demand for safer and more cycling, combined with New Zealand’s poor safety record for cycling; and the demonstrated benefits of cycling for health and climate make the case for increased investment in cycling is difficult to argue with.

Recommendation 4: Go further in re-balancing the investment towards public transport, walking and cycling – these are the modes that will contribute to a resilient and healthy future economy and society. In particular, we recommend increasing the walking and cycling activity class to approximately \$200million each year for the next decade to catch up our infrastructure with other developed nations and make cycling a safe and attractive transport option in NZ cities.

¹¹ Greater Wellington Regional Council 2013 The costs of physical inactivity. Towards a regional full-cost accounting perspective <http://www.aucklandcouncil.govt.nz/EN/planspoliciesprojects/reports/technicalpublications/Documents/costsofphysicalinactivityreport.pdf>

¹² Macmillan A, Connor J, Witten K, Kearns A, Rees D, Woodward A. The Societal Costs and Benefits of Commuter Bicycling: Simulating the Effects of Specific Policies Using System Dynamics Modeling Environmental Health Perspectives. 2014. <http://ehp.niehs.nih.gov/1307250/>