

## Submission on Draft Government Policy Statement on Land Transport: 2018/19 - 2027/28

- **Congratulations** - the draft GPS 2018/19 represents a substantial change in direction from previous policy statements. We support the aims and direction of this GPS and think it represents the most innovative approach to transport policy that NZ has ever seen. The alignment of the spending activity classes with the objectives is particularly welcome.
- We support the holistic approach articulated in the strategic direction of the GPS; which considers a broader role of transport in society than previously. However, in light of this and other factors, such as Government's adoption of the UN Sustainable Development Goals and the OECD well-being framework for the budget, we would like to see two changes. Firstly **the environment** should be **elevated to a key strategic priority** rather than a supporting one. We see this as essential to achieving net zero carbon by 2050. Secondly, given the importance of the role the transport sector has for health and wellbeing (both improving and harming it)<sup>1-3</sup> and the theme of health running through this GPS we suggest that **enhancing health and wellbeing** is included as an explicit strategic direction of the GPS.
- The inclusion of health and the environment as high level objectives in the strategy will be particularly important when decisions are made that require trade-offs between various objectives. For example emphasising EV take-up without an accompanying strategy to reduce car ownership, increase active transport modes and public transport use will fail to achieve the maximum health gains that could be achieved. Biofuel uptake may worsen air pollution and cause health harm.<sup>4</sup> Including high-level health and environmental objectives will require these **trade-offs to be explicitly considered and managed**.
- There needs to be a **research and evaluation agenda** to accompany this new strategy. Internationally, the evidence around the effectiveness of policies implemented successfully achieving environmental goals, such as reducing carbon emissions, is limited.<sup>5,6</sup> In addition, the evidence around policies that have actually been implemented reducing both carbon emissions and improving health is even more limited.<sup>7</sup> In this absence, careful thought needs to be given to how we can best collect information to evaluate how effective policies are, and identify any unintended consequences.
- There needs to be **alignment between the GPS objectives and the investment analysis system** used by the transport sector. This will involve including a full range of health benefits when assessing projects (e.g. physical activity rather than just injury and air pollution). In addition, other anomalies such as the higher valuation of time of individuals in vehicles compared to those who cycle, walk or take public transport needs to be eliminated.
- The identification of **land use as a key determinant** of transport demand is welcome; this is key to decoupling access and mobility.<sup>8</sup> However, further work needs to be done aligning the legislative and policy framework of land transport planning with the other legislation that governs urban planning. The different aims and processes of the Local Government Act, Resource Management Act and Land Transport Management Act do not provide the aligned approach needed to develop resilient, liveable and low carbon cities with sustainable and environmentally-friendly transport systems.
- The discussion of access in the GPS is welcome; however there needs to be wider consideration of equity than just in relation to access. There are **inequities in exposure to traffic related air pollution, in injury deaths, and in transport use by gender** in NZ.<sup>9-11</sup> In addition, fuel tax is regressive and relying on this as a major source of funding for additional transport investment is likely to place an unfair burden on low income families who more commonly drive older cars,

live further from places of employment and lack the disposable income to take up subsidies on EVs, for example.

- The focus on the provision of **cycle and walking infrastructure** in cities and towns is welcome. Local evidence shows this is an effective and cost-effective intervention to change mode distribution and improve health.<sup>12-14</sup> However, recent experience tells us that actual or perceived community resistance is an important barrier to local Councils implementing these approaches; more needs to be done to enable and require Councils to deliver infrastructure.
- **Active transport to school for children** (page 15) is an excellent goal but one that should be deferred until a later time. While we acknowledge that school-related trips are contributing to congestion and pollution, focusing on interventions to change school transport (particularly for primary school aged children) does not represent value for money. Multiple reviews show that school travel planning is ineffective.<sup>15,16</sup> This is more understandable when the complexity of school transport decision-making is apparent.<sup>17</sup> In addition, these interventions have the potential to cause harm to children through increasing road injury, given children's inability to make decisions in complex, dynamic traffic environments. We suggest that any funding into this is deferred until more comprehensive infrastructure is in place that children can safely use and evidence of effective approaches to changing children's travel. We suggest it is currently more appropriate ethically and better value for money to focus on changing the travel patterns of adults at this time.
- The theme of **mode neutrality seems suboptimal**. The rest of the 2018/19 GPS is not 'mode neutral', as enhanced funding is going into rail, rapid transit, walking and cycling. This is entirely appropriate given the range of issues that we face in terms of congestion, transition to a zero carbon economy and what the evidence tells us about effective approaches to transport. Given the focus on achieving a zero carbon economy by 2050 and the role the transport sector will need to play in this 'mode neutrality' is not an optimal approach. We suggest that a better theme would be 'efficient low-carbon solutions'; it is essential that minimising carbon emissions should underpin all transport planning and policy in perpetuity if we are to deliver on our carbon commitments.
- We suggest that on page 26 under the **safety item** that there is acknowledgment that the enhanced public transport, transit and rail funding will also contribute to this objective. Recent research shows that net injury deaths would decrease with a mode shift to more walking, cycling and public transport use.<sup>18</sup>
- Finally, we support a **review of the land transport funding mechanisms** mentioned on page 40. We suggest that it probably needs to have greater scope than the text indicates. To support a transition to a low-carbon transport system, a pay-as-you-go scheme, based largely on the use of roads and motor vehicles, is unlikely to be fit for purpose in the long term. In addition, as mentioned previously this is a regressive system with lower income families likely to be penalised financially as a result of increases in fuel or carbon taxes. We suggest that a broader review of funding of the transport system taking into account the new strategic priorities and incorporating advice from the Tax Working Group would be useful.

Finally one or more of us may be available to answer clarifying questions. In the first instance please email Dr Shaw at [caroline.shaw@otago.ac.nz](mailto:caroline.shaw@otago.ac.nz).

#### Contributors to this submission:

- Dr Caroline Shaw, Department of Public Health, University of Otago Wellington (lead author)
- Professor Nick Wilson, Department of Public Health
- Professor Philippa Howden-Chapman, Director New Zealand Centre for Sustainable Cities, University of Otago, Wellington

- Ed Randal, Department of Public Health, University of Otago Wellington
- Associate Professor Ralph Chapman, Victoria University of Wellington
- Professor Richard Edwards, Department of Public Health, University of Otago, Wellington
- Associate Professor Michael Keall, Department of Public Health, University of Otago, Wellington
- Hilary Day, Department of Public Health, University of Otago Wellington
- Dr Richard Jaime, University of Otago Wellington
- Dr Cristina Cleghorn, Department of Public Health, University of Otago Wellington
- Dr Anja Mizdrak, Department of Public Health, University of Otago Wellington
- Dr Richard Jaime Department of Public Health, University of Otago Wellington

## References

1. Shaw C, Keall M, Guiney H. What modes of transport are associated with higher levels of physical activity? Cross-sectional study of New Zealand adults. *J Transp Health* 2017; **7**: 125-33.
2. Celis-Morales CA, Lyall DM, Welsh P, et al. Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *BMJ* 2017; **357**.
3. van Schalkwyk MCI, Mindell JS. Current issues in the impacts of transport on health. *Br Med Bull* 2018; **125**(1): 67-77.
4. Jacobson MZ. Effects of ethanol (E85) versus gasoline vehicles on cancer and mortality in the United States. *Environ Sci Technol* 2007; **41**(11): 4150-7.
5. Gross R, Heptonstall P, Anable J, et al. What policies are effective at reducing carbon emissions from surface passenger transport? London: UK Energy Research Centre, 2009.
6. Sims R, Schaeffer R, Creutzig F, et al. Transport. In: Edenhofer O, Pichs-Madruga R, Sokona Y, et al., eds. *Climate Change 2014: Mitigation of Climate Change Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press; 2014.
7. Shaw C, Hales S, Howden-Chapman P, Edwards R. Health co-benefits of climate change mitigation policies in the transport sector. *Nature Climate Change* 2014; **4**(6): 427-33.
8. Chapman R. Access and land use: a brief exploration Wellington: New Zealand Centre for Sustainable Cities, 2018.
9. Kingham S, Pearce J, Zawar-Reza P. Driven to injustice? Environmental justice and vehicle pollution in Christchurch, New Zealand. *Transportation Research Part D-Transport and Environment* 2007; **12**(4): 254-63.
10. Hosking J, Ameratunga S, Exeter D, et al. Ethnic, socioeconomic and geographical inequalities in road traffic injury rates in the Auckland region. *Aust N Z J Public Health* 2013; **37**(2): 162-7.
11. Shaw C, Russell M, van Sparrentak K, et al. Benchmarking cycling and walking in six New Zealand cities: Pilot study 2015. Wellington: New Zealand Centre for Sustainable Cities, 2016.
12. Chapman R, Howden-Chapman P, Keall M, et al. Increasing active travel: aims, methods and baseline measures of a quasi-experimental study. *BMC Public Health* 2014; **14**: 935.
13. Keall M, Chapman R, Howden-Chapman P, et al. Increasing active travel: results of a quasi-experimental study of an intervention to encourage walking and cycling. *J Epidemiol Community Health* 2015; **69**(12): 1184-90.
14. Chapman R, Keall M, Howden-Chapman P. A cost benefit analysis of an active travel intervention with health and carbon emission reduction benefits. . *International Journal of Environmental Research and Public Health* Under review
15. Macmillan AK, Hosking J, L. Connor J, et al. A Cochrane systematic review of the effectiveness of organisational travel plans: Improving the evidence base for transport decisions. *Transport Policy* 2013; **29**(0): 249-56.
16. Chillon P, Evenson KR, Vaughn A, Ward DS. A systematic review of interventions for promoting active transportation to school. *Int J Behav Nutr Phy* 2011; **8**.
17. Badland H, Kearns R, Carroll P, et al. Development of a system models to visualise the complexity of children's independent mobility. *Children's Geographies* 2015: 1-10.
18. Shaw C, Randal E, Keall M, Woodward A. Health consequences of transport patterns in New Zealand's largest cities *New Zealand Medical Journal* 2018; **131**(1472).