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To: GPS Team, Ministry of Transport

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Submission by the NZ Centre for Sustainable Cities on the draft Government Policy Statement on land transport 2021

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Main points

- 1 There are many encouraging aspects of the draft GPS2021 in terms of making a start on re-balancing the transport portfolio towards modes other than cars
- There is a disconnect between the aims of the strategy and the funding allocations and mechanisms. This means the transition to a low carbon transport system and the creation of vibrant liveable cities will not be achieved.
- It is short-sighted that the aims of the Climate Change Response (Zero Carbon)

 Amendment Act 2019 and the scope of the changes articulated in that statute relevant to transport are not taken into consideration in the direction, funding allocations and mechanisms of the GPS
- We recommend the full range of health impacts as well as carbon impacts (both embodied and tailpipe) are required to be taken into account in all projects

About the New Zealand Centre for Sustainable Cities

The New Zealand Centre for Sustainable Cities is an interdisciplinary research centre dedicated to providing the research base for innovative solutions to the economic, social, environmental and cultural challenges facing our urban centres. We undertake a range of research, published as journal articles, policy papers, working papers, and blogs, as well as making submissions from time to time to central government and councils on a range of issues relevant to cities, from climate change policy to compact urban development. See http://sustainablecities.org.nz/ and http://resilienturbanfutures.org.nz/

Further points

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There are a number of encouraging aspects of the draft GPS and we fully support many parts of it. However, there are also a number of areas where we believe the draft GPS falls short in terms of creating a transport system that improves people's wellbeing and the liveability of places.

Strategic priorities

- We are pleased to see the strategic priorities of better travel options, safety and climate change feature prominently in the strategic direction of the GPS. It is also very good to see attention paid to the co-benefits of each of these priorities.
- Increased funding for public transport is very welcome and it is great to see that lead investment and support for initiatives such as Transport Demand Management can be used to promote a more sustainable transport system and encourage increased demand for alternative modes to private vehicle travel.

Mode neutrality

- It is also excellent that rail has finally been included in the land transport GPS and it is encouraging to see public transport, metro rail and rapid transit gain a more even footing for funding allocation, supporting the shift towards mode neutrality. Including coastal shipping is a further strength of this draft GPS, with its potential to substantially reduce the movement of heavy vehicles on the road and increase safety for other road users. However, careful assessment and evaluation of the environmental impacts of this industry will be needed to safeguard the valuable and vulnerable coastal environment. It is encouraging to see a focus on funding research and feasibility studies at this stage, but it is vital that this pays due attention to environmental effects.
- We have major reservations, however, about the concept of mode neutrality and caution against an uncritical reliance on it, given the realities of the transport system as it has evolved. Mode neutrality sounds fair and efficient but can ignore the entrenched or existing advantage of private vehicle road travel. The concept's significance in the GPS is underlined by the comment (p.8) that 'The strategic direction is underpinned by the principle of mode-neutrality, which is another central component of the Transport Outcomes Framework', and the statement that 'in setting the funding range for each activity class, the Government has applied the underpinning principle of mode-neutrality.'
- Mode neutrality⁴ would make more sense if we started with from a 'clean slate'. That is, without the existing large stock of transport-related assets, and societal practices, that are oriented towards private vehicle road travel; these assets and practices are reinforced by path dependency. Path dependency means that, in practice, systems, assets and habits tend to perpetuate established patterns which are private vehicle-oriented. A large and deliberately more 'sustainable' infrastructure investment programme will be necessary to rebalance the transport system, and begin to approximate overall neutrality. This would differ from a pattern in which only incremental investments are evaluated for

⁴ See MoT's 2018 Transport Outcomes Framework

neutrality. Neutrality is also an elusive goal in a context where externalities of particular modes are inadequately priced, so that the full cost of their continued operation is not evident. We discuss this more below in considering the treatment of climate change.

The mode neutral approach to planning and investment is also problematic in practice as projects are still required to be justified by a business case and demonstrate value for money. This makes achieving neutrality difficult as the full range of costs and benefits for each mode cannot be fairly valued and accounted for, introducing bias into the decision-making process. We would like to see more explicit ways in which decision makers could approach mode neutrality in investment – especially in ensuring that public and active transport projects receive a fair process.

Climate change

- 9 There are a number of aspects to this draft GPS that need to be addressed in order to fulfil the strategic priorities and improve wellbeing and liveability. While moving to a low carbon transport system to help address climate change is positioned as a strategic priority, the importance of achieving this goal does not appear to be reflected in the proposed funding ranges. A vital component of the shift to a low carbon transport system is reducing private vehicle use. Any real shift in mode share will need a substantial reconfiguration of transport investment, shifting money away from roads and towards public and active transport infrastructure. While there is an increase in the allocation of funds to public transport, road improvements still make up a very large proportion of the total budget and walking and cycling investment is still very low at 2% of the total. Such large investments in road building will continue to lock in private vehicle use for decades to come, making it very difficult to achieve carbon reduction targets in the transport sector, even with relatively high levels of EV take-up. It should be borne in mind that GHG emissions must fall in each country by at least 7.6% every year from 2020 to 2030 to keep temperature increases to less than 1.5°C (UNEP, 2019). A reduction in GHG emissions by around 8% is expected in 2020 as a result of the Covid-19 pandemic: this serves to underline the scale of the transformation needed each year, to achieve climate stability.
- There is no doubt that the price of carbon delivered through the ETS (around NZD 25 per tonne of CO2 at time of writing) is a long way short of a realistic estimate of the social cost of carbon. This can be seen in Fig. 1, reproduced from a recent paper in *Climate Policy* (Hasan, Frame, Chapman, & Archie, 2020).

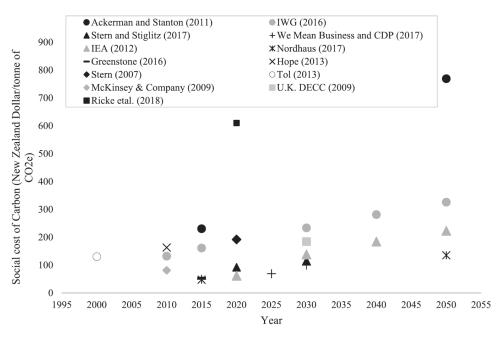


Figure 1. Estimates of the social cost of carbon by different researchers (source: various).

The shortfall in the ETS price relative to the social cost of carbon means that petrol and diesel prices, in particular, are too low, by a substantial margin (given that the price of CO_2 per tonne should probably be in the range of NZD 100 - 200), and fail to discourage emission-intensive mode choices. With such a backdrop, and failure to reflect full costs, mode choices and travel projections are currently highly distorted, and if policy and investment choices are driven by recent mode choices and travel projections, then those policies and investments will deliver a distorted and undesirable future transport system.

Safety and health

- There is also a lack of attention to the potential health benefits of increasing active travel as well as the health benefits of reducing private vehicle and heavy freight traffic on the road. It is good to see the Road to Zero mentioned as a separate activity class that is given specific funding, but within this strategy there should be specific policies designed to reduce the primary risk factor that is causing death and serious injury on our roads exposure to private motorised vehicles. The most effective way to reduce this risk factor is to reduce the use of private motorised vehicles by either shifting as many trips as possible to public and active transport or reducing the need to travel.
- Finally, it is very encouraging to see the shift in the roles and responsibilities of Waka Kotahi to focus more on mode shift and long-term integrated planning that acknowledges the influence of the transport agency on urban development and takes into account the trade-offs between greenfield development and intensification. Supporting this, for example, we were pleased to see the statement (para 98, p.30) that 'GPS 2021 expects that demand management initiatives (including promotional activities) will be developed as part of transport planning and business case processes.'

References

Hasan, M. A., Frame, D. J., Chapman, R., & Archie, K. M. (2020). Curbing the car: the mitigation potential of a higher carbon price in the New Zealand transport sector. *Climate Policy*, 1-14. Retrieved from https://www-tandfonline-com.helicon.vuw.ac.nz/doi/pdf/10.1080/14693062.2020.1750334

UNEP. (2019). *Emissions Gap Report 2019*. Retrieved from Nairobi, Kenya: https://www.unenvironment.org/resources/emissions-gap-report-2019