



Generation Zero

Submission on

Draft GPS

Land Transport 2021



To Ministry of Transport
May 2020

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Executive summary

New Zealand has less than ten years before its first commitment of emissions reductions is due. Transport makes up a massive portion of our emissions and therefore represents a huge opportunity to help achieve those commitments. Technologically, emissions reductions are easy here - we need to have active and public transport networks people choose to use, electrified public transport fleets and much lower fossil fuel consumption. Culturally and politically, the appetite is there to change to a more sustainable transport system.

COVID-19 has obviously changed things markedly in the last few months and we expect this to have a flow on effects to legislation such as this GPS, however we urge you to remember the decisions made now will have consequences for decades to come. Given the current knowledge you have on climate change, and that this has been acknowledged through setting international and domestic targets, we expect you will respond to COVID-19 with infrastructure that will help us achieve the emissions reductions we require, not hinder it. To do this, an investment principle about induced emissions from infrastructure should be added.

Time and time again New Zealand tells you they want options in how they travel. This means fast, frequent and reliable public transport, cycleways and walkways which users feel comfortable and safe on, railways people can enjoy inter-regional travel on. We already have a road network catering for almost literally every trip possible. It is time we invest in these other modes to give people a truly multi-modal transport system. This should be addressed, along with other things, through a thorough review of the progress indicators and an exercise to set targets for these indicators.

Local governments are key to the transport network as they control their own road networks as well as land use and urban design decisions in their areas. They need to be closely worked with to ensure that infrastructure decisions are made in line with land use planning and urban design principles to get the best outcomes for our people. They should also be empowered to manage their own networks through allowing road user charging to broaden their revenue collection and allow travel demand management.

Community is key to all of these decisions. They are the end-users of the transport networks being developed as a result of this GPS. Today's communities have the privilege of being involved in the decisions now. Many of tomorrow's communities who will be left holding the infrastructure are not able to. We must continue to consult now, but we must also reach out to those we are not hearing from, particularly Iwi and youth, to ensure we are delivering for all. We must remember our commitment to New

Zealand's future. We must uphold Te Tiriti o Waitangi and The Zero Carbon Act to prevent future irreversible environmental crises and ensure social and climate justice.

Key points from our submission:

- The Minister and colleagues in developing this GPS on Transport, must remember their commitment to New Zealand's future. We must uphold Te Tiriti o Waitangi and The Zero Carbon Act to prevent future irreversible environmental crises and ensure social and climate justice.
- Historically investment in transport has focused on roading and highway projects, and minimal investment in public, active, accessible and safe transport outcomes. This approach cannot continue.

Strategic direction

- We support the inclusive of climate change as a strategic direction in the 2021 GPS and all future GPS for transport. Climate change should not just be a mere direction, but should be fundamental and central to all transport decision-making; this recognises the climate change commitments New Zealand has signed up to.
- Greenhouse gas emissions reduction requirements should be mandatory in all infrastructure investment decision making.
- The GPS should also integrate land-use considerations. In particular the GPS should recognise that transport infrastructure is a way of using land that is intergenerational in nature, and impacts on our ability to grow our cities in a compact manner.

Investment principles

- We support the consideration of climate change in this GPS, but recommend it go further and embed climate action as an investment principle alongside value for money;

Funding bands

- The new activity classes are welcome. The inclusion of rail, coastal shipping and the separating of infrastructure and services for Public Transport and State Highways are good.
- However, the funding bands do not accord with the strategic objectives. More allocation is needed for low-emissions activity classes. More allocation to walking, cycling, public transport and rail which reflects the health and environmental

benefits of these modes.

- State Highway infrastructure projects is too high when considering the serious under-investment in low-emissions activity classes and the road heavy investment from the NZ Upgrade package.
- The funding bands should also have novel arrangements to achieve decarbonisation outcomes. NZTA should fund electric PT operating costs at higher than 50% (e.g. 70%) as an incentive to councils. Any road building funding would have to fit within carbon budgets; when those budgets are exhausted, road funding allocation would not be able to be spent.

Who are we?



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 advocate for climate justice and successfully campaigned for the Zero Carbon Act. We believe in solutions-based advocacy and “getting things done”. For more information see: <https://www.generationzero.org.nz/>

1 COVID-19 context



- 1.1 The context in which this draft GPS statement was originally developed has drastically changed. To protect the vulnerable from COVID-19, we have changed the way we work and live. Just as the present crisis demands foresight and prompt action, climate change demands that we respond now to avert future catastrophe. We owe it to each other to stay at home, but the Government owes it to all New Zealanders to lead on climate action.
- 1.2 We understand that building transport infrastructure is an area likely to be called upon to create jobs and we support that and would like to point out that there are no limits to climate friendly infrastructure we could build which would also provide

employment.

- 1.3 In the wider recovery response to COVID-19 we would appreciate if the Minister, in developing the GPS on Transport, considers the following recommendations and principles;
- 1.4 We recommend during this turbulent time, that the Minister and their colleagues approving this GPS on Transport, remember their commitment to New Zealand's future. We must uphold Te Tiriti o Waitangi and The Zero Carbon Act to prevent future irreversible environmental crises and ensure social and climate justice.
- 1.5 We recommend that a priority for new development is a network of reliable public and active transport options that connect the country. Investment in modern transport infrastructure, for people and freight, lays the building blocks of a zero emissions nation. New infrastructure should support urban, regional and national development, be future-focused, and centred on low-emissions transport.
- 1.6 We recommend the Minister and their colleagues do not rush and commit to infrastructure spending now that we may regret later.
- 1.7 Our response to the economic impacts of COVID-19 today determines the quality of our tomorrow, and we have an opportunity now to rethink and build tomorrow's future. Just as the present crisis demands foresight and prompt action, climate change demands that we respond now with similar urgency, to avert a future catastrophe.

2 Importance of Decarbonising Transport



- 2.1 As the draft GPS indicates, a significant proportion of GHG emissions in Aotearoa are from the land transport sector. However, we have concerns that the scale of change required from the sector is greater than what the current draft GPS can provide. In order to meet our domestic and international climate commitments, the Transport sector needs to make significant emission reductions, rapidly,

otherwise we put the lives of those who live in New Zealand at risk from an unsafe climate.

- 2.2 We agree that intervention is required in order to bring about deep, systemic change to the land transport sector in New Zealand. We agree with the sentiment in the draft GPS that this means prioritising a reduction in greenhouse gases emitted by transport will help to achieve the Government's emission reduction targets and protect public health.
- 2.3 A special report by the Intergovernmental Panel on Climate change, clarified that in order to stay within a 1.5degC temperature goal, global emissions would need to be reduced between 40-60% by 2030. This report, uncharacteristically outspoken in its findings, highlighted the ambition gap we face. A reduction in transport sector emissions in NZ, will contribute to the achievement of our domestic and international commitments and efforts on climate change.
- 2.4 Responding to the climate challenge through transport is going to require doing things differently. Updated principles and strategic priorities are a step in the right direction, but much more is needed. The draft GPS to be published in 2021 is a key opportunity to send a very strong message about the way the transport sector needs to respond to the climate challenge.

High level recommendations for climate outcomes

- 2.5 We recommend the Minister and colleagues in developing this GPS on Transport, remember their commitment to New Zealand's future. We must uphold Te Tiriti o Waitangi and The Zero Carbon Act to prevent future irreversible environmental crises and ensure social and climate justice.
- 2.6 We recommend that an outlook to 2030 be provided that includes transport sector emissions reductions targets, broken down to each of the main activity classes. This activity should align with any approved carbon budgets at the time. With a similar exercise for emission reduction targets for transport out to 2050, this will provide a longer-term view that is currently missing.
- 2.7 We recommend that to do things differently, the Transport GPS could include additional features. Areas Generation Zero would like to see in the draft Transport GPS could include the following;

- The importance of working with Iwi and Māori to make sure transport sector decarbonisation happens in a way that honours Te Tiriti o Waitangi. This could include creating and supporting opportunities for Māori-led and co-designed programmes, projects and greater involvement in decision making. There is also a huge opportunity for the Minister, through the GPS to provide resources to support and enable kaupapa Māori initiatives across the strategic priority themes.
- Develop reporting metrics and targets based on quality independent evidence, that aligns to funding bands.
- Highlight key areas for change e.g. sub-sector breakdown of persistently high emission modes, where innovation and funding could be focused.

3 Strategic Direction



Responding to climate change is a priority

- 3.1 We support the inclusion of climate change as a strategic direction in the 2021 GPS and all future GPS for transport.
- 3.2 We recommend that the strategic direction description could be improved to highlight the pivotal role transport plays in the reduction of greenhouse gas emissions in Aotearoa. For example;

Climate Change priority: Transform Aotearoa's transport network to a low carbon transport system that supports emission reductions aligned with domestic & international commitments, ensuring future safety and inclusive access is improved and emissions fit within the limits of budgets that will come into force in 2021.

- 3.3 We recommend that the strategic direction accurately reflect the climate change commitments New Zealand has signed up to. The 2030 climate target for a 30% reduction of GHG below 2005 levels, is an international commitment as it is a commitment under the Paris Agreement. Our new net-zero 2050 greenhouse gas reduction target is currently a domestic target.

Transforming the transport sector in Aotearoa

3.4 Generation Zero agrees that the current transport system does need to undergo a rapid transformation in a number of areas. Historically investment in transport has focused on roading and highway projects, and minimal investment in public, active, accessible and safe transport outcomes. This approach cannot continue.

We recommend that greenhouse gas emissions reduction requirements are mandatory in all infrastructure investment decision making.

- 3.5 We recommend that Minister and Officials develop a GPS that integrates land use considerations, in particular;
- a) Recognise that transport infrastructure is a way of using land that is intergenerational in nature, and has impacts much further into the future than the scope of this plan.
 - b) Integrate transport, land use and urban development decisions - recognising well designed transit-oriented developments, enabling cities to grow in a compact form as well as unlocking space for new medium to high density housing.
 - c) Consider how we can best provide low-emission, efficient options for those requiring inter-city connections and connections between cities and rural areas.

Infrastructure locks in an emissions pathway

3.6 Infrastructure locks in a pattern of use, i.e. the more roads we build the more high-carbon transport modes we lock in for decades. This is untenable with a safe-climate future for New Zealand and if we are to meet our domestic and international climate commitments.

3.7 We recommend the strategic direction introduces greenhouse gas reduction targets that need to be achieved by certain dates, and considered as a guiding principle to the type of funding that is provided.

Direct responses to draft strategic response sections - Climate Change Priority

3.8 We recommend revising the statement at para 69.

1. Investment decisions need to ensure the rapid transition to a low carbon transport system, not just support.
2. The GPS needs to take into account the 2030 climate target under the Paris Agreement, and any approved emissions budgets in effect at the time. Three sets of emissions budgets will be approved in 2021.
3. Contribute to a resilient transport sector that reduces harmful emissions, increases safety and increases accessibility;
4. Take into account the domestic and international GHG reduction commitments New Zealand has agreed to.

4 Progress Indicators



- 4.1 We recommend setting measurement and reporting requirements of the progress indicators proposed.
- 4.2 We recommend setting targets to be set based on current performance and desired results so we can see if the investments we are making are shifting the dials far enough in the right directions. Some targets are relatively obvious - indicators A through C may be able to be informed through our Road to Zero strategy, indicator Q should be set by the Climate Commission when their budgets are announced. Other targets will require consideration and input from local governments - particularly G through K.
- 4.3 We recommend more time is spent on these progress indicators to ensure there are no missed indicators and targets can be robustly agreed and set.
- 4.4 While there are undoubtedly more, some suggestions for additional indicators we have come up with are:
 - Strategic Priority 2: number of jobs/essential services that are accessible by mode from consented developments
 - Strategic Priority 2: relative speed of public transport to cars on priority routes

- Strategic Priority 4: tonnes of Nitrous Oxide emitted per year from land transport

5 Investment Principles



5.1 We agree with the four investment principles outlined of:

- Value for money
- Making the most of our existing network
- Continually innovating
- Acknowledging lead investment's value

5.2 We ask that you consider a fifth investment principle:

- Working towards our emissions reduction commitments

Value for money

5.3 This is a basic but important principle which relies on estimates of benefits and costs. It is critical that these benefits and costs show the complete picture including future costs related to climate change. We eagerly await the results of the investment decision making framework review to contribute to what will be defined as value for money. Please see our submission on NZTA's economic manual changes for more recommendations.

Making the most of our existing network

5.4 This also creates huge opportunities with how we use our transport network. Shifting people's time of travel away from peak periods or choice of mode towards higher throughput modes, such as public and active transport, has the potential to increase the capacity of our network several times over. Some applications of this we would like to see are:

- a) Road user charging or congestion charging in the hands of local governments would provide them a travel demand management tool which they could use to pay for their costs as well as nudge behaviour.
- b) Public transport investment in higher density residential or destination areas will provide options for larger numbers of people and therefore will have higher farebox recovery ratios than typical services.
- c) Public transport demand and funding arrangements. This includes off-peak discounts and all-day caps. Value-capture and SPVs for funding mass transit or upgrades should also be considered.
- d) Growing car-share schemes will make these schemes better able to compete with privately owned vehicles and mean they are an option for more people.

Continually innovating

5.5 Innovation is a necessity in today's age so we are glad it has been explicitly acknowledged. Some applications of this we would like to see are:

- a) Smartphones have opened up huge opportunities and this should be capitalised on by using them to integrate accessibility and payments of different travel modes, such as car, e-scooter and bike sharing, ride hailing and different types of public transport, so choosing not to own a car becomes an option for more people.
- b) Insights about where and when people travel should be sought from services operating in the transport network to assist with public transport planning and scheduling.
- c) Locational and timing travel data should be combined with a road user charging scheme to create a powerful travel demand tool which can nudge people away from cars in busy areas and/or at busy times.
- d) Continuing investment in a national electric vehicle charging network will allow us to move away from internal combustion engines faster.

Acknowledging lead investments value

5.6 We appreciate that you have pulled out acknowledging lead investments value as an investment principle as we know that our current behaviour is unsustainable by looking at the costs of our land transport network as is - financial costs, social costs and environmental costs. Behaviour change will not happen without incentives to lead the way. If we continue as we are, the incentives will simply

eventually become that not changing will cost too much, whereas lead investments are able to shift these incentives at the root and save us incurring significant cost. Working with local governments to ensure lead investments in the transport network are made in an integrated manner with land use and urban planning will lead to the best long-term outcomes for society.

Add emissions-reductions as an investment principle

5.7 If we are not working towards our emissions reductions targets though we are in serious risk of moving ourselves further into a corner where behaviour change will become painful to achieve our emissions reductions commitments. Given that our commitment is now due within the timeframe of this GPS and we still have significant progress to make, it is time to set a line in the sand and say that no new investments will be made which will increase our emissions profiles. In your GPS at a glance presentation you note that value for money has been moved to being an investment principle from being a strategic priority as it should underpin every investment made - it's not a strategic priority to change as GPS's change. We ask for the same treatment here.

6 Funding



The new activity classes

6.1 The new activity classes are welcome. The inclusion of rail, coastal shipping and the separating of infrastructure and services for Public Transport and State Highways are good. This makes it clear what money is allocated for new infrastructure versus maintenance.

Funding bands do not accord with strategic objectives: More allocation needed for low-emissions activities

6.2 Overall, there needs to be a much improved allocation to the walking and cycling improvements and public transport services and infrastructure activity classes that reflects the health and environmental benefits of these modes. There is serious under-investment in these activity classes compared to other activity classes (like State Highway infrastructure), especially when the investment in

transport infrastructure through the NZ Upgrade Programme is taken into account.

- 6.3 We recommend a significant rebalancing of funding away from State Highway infrastructure and towards PT infrastructure, walking and cycling and rail.

Consider novel funding arrangements to drive better outcomes

- 6.4 The funding bands should also have novel arrangements to achieve decarbonisation outcomes.
- 6.5 NZTA should fund electric PT operating costs at higher than 50% (e.g. 70%) as an incentive to councils. As much as possible, all new strategic public transport infrastructure should be electrified. We urge NZTA to consider different funding arrangements for public transport that allow for 100% central government funding (like for State Highways) for strategic parts of the public transport network. This would include any rapid transit (LGWM and ATAP) and any interregional public transport (e.g. Hamilton to Auckland commuter train).
- 6.6 Carbon budgets should link to funding. For example, any road building funding would have to fit within carbon budgets; when those budgets are exhausted, road funding allocation would not be able to be spent
- 6.7 Road building funding should be tied to electrification of the private vehicle fleet. State Highway funding contributes to increase vehicle kilometres travelled of existing vehicles and often induces new trips to be made. With our ageing vehicle fleet, it is imperative that State Highway funding should also contribute to electrification/decarbonisation of the private vehicle fleet. Research should be undertaken of buy-back or rebate options for EV purchases, and mass importation deals for EVs. A total GHG vehicle importation ban should be implemented as per expert advice to the government. Public authority vehicles and light vehicles should be the first priority for 2030.

Activity Classes - Planning

- 6.8 Often projects are discovered through a deficiency in the current network - an intersection has reached capacity, a road is congested, an area has had a lot of accidents. Particularly for smaller projects, the natural response is to gravitate towards what is familiar and quick - a capacity increase/direct safety

improvement. Our approach over the last 30 years has led to an aggregation of institutional knowledge of roading over other modes, so this also leads to primary consideration being making a change to the road network to address the problem.

6.9 There are two structural responses which should be undertaken to ensure the best solutions from problems are sought:

- Put significant resource into upskilling project managers and transport planners at local and central government level, as well as the private sector, in areas such as rail, other public and active transport, coastal shipping, travel demand management and network operations;
- Ensure sufficient budgets are available for transport planning to consider less obvious solutions that require time to step back and approach problems from a different angle.

6.10 When it comes to major projects there are already a number of partially complete business cases for major roading projects in the infrastructure pipeline which are called on when stimulus is needed for the economy. We have seen this being called upon twice in 2020 already with the majority of the first stimulus package going to roading projects. Significant investment in forward planning of a number of active transport, public transport and freight projects now would provide upskilling opportunities for industry and create a pipeline of alternatives to rival existing roading business cases which can be called on when required.