



Generation Zero

Submission on

Draft NZ Rail Plan



To Ministry of Transport
May 2020

Executive summary

Transport represents a massive proportion of Aotearoa New Zealand's emissions profile. It also is one of the easiest areas to reduce if we are to meet our 2030 and 2050 targets.

Rail also plays a massive role in ensuring a better transport system for all. It improves safety, access, cost, urban form and health.

We applaud that the draft NZ Rail Plan has been developed, and a new sustainable funding stream from the NLTF has been secured.

However, we have some critical recommendations and observations:

- 1) Emissions reductions and mode shift should be a crucial objective in the NZ Rail plan
- 2) The Plan should be more ambitious in light of COVID-19 and the need for a sustainable recovery
- 3) We are pleased with the recognition of wider benefits of rail in the strategic context

Freight rail

- 4) The timeline for freight improvements is inadequate and does not accord with our climate goals. We must remedy past neglect of the network over the next 5 years and then move into future opportunities in 2025
- 5) Future improvements to be fast-tracked before 2030 include: Electrification of NIMT, ECMT and key South Island sections, extra track in Auckland, Wellington and Christchurch, demothballing old lines, expanding the network to all coastal ports.

Metro rail

- 6) The timeline for metro rail improvements is inadequate and does not accord with our climate goals or address our urban sprawl issues. Bring forward maintenance improvements and increase reliability
- 7) Metro networks in Auckland and Wellington are seeing massive increases in patronage, this trend will increase post-CRL and LGWM completion. Improvements to be fast-tracked before 2030 must include: Third and fourth main, Wellington double tracking, grade-separation and level crossing removal.
- 8) Enabling works for rapid regional rail should be undertaken. This would allow tilt-trains to operate in the 'golden triangle', lower North Island and around Christchurch.

- 9) Development of Christchurch’s metro rail network is a glaring omission. Christchurch badly needs a funding stream for commuter rail to be set aside to remedy its congestion, sprawl and emissions problems.
- 10) Major future expansions of the rail network need to have their designations protected now.

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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/>

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1 Importance of Decarbonising Transport



- 1.1 As the Plan indicates, a significant proportion of GHG emissions in Aotearoa New Zealand 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 Plan 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.
- 1.2 We agree with the sentiment in the draft Plan 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.
- 1.3 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.
- 1.4 Responding to the climate challenge through transport is going to require doing things differently. Updated strategic priorities are a step in the right direction, but much more is needed. The draft Plan is a key opportunity to not just remedy past neglect to the rail network, but to use as a primary means of rapidly decarbonising the transport system.

2 Impact of COVID-19 on the Plan



- 2.1 The context in which this Plan 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.

- 2.2 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.
- 2.3 In the wider recovery response to COVID-19 we would appreciate if the Minister, in developing the Plan, considers the following recommendations and principles;
- 2.4 We recommend during this turbulent time, that the Minister and their colleagues approving this Plan, 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.
- 2.5 We recommend that a priority for new development is a network of reliable freight, metro and regional rail 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.
- 2.6 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.

3 Strategic context



- 3.1 We agree that rail contributes significant value to New Zealand and applaud the inclusion of rail into the NLTF by Parliament.
- 3.2 We are also heartened to see the acknowledgement of the benefits of rail: safety, health, inclusive access, resilience and emissions reduction. We urge MoT to also acknowledge the dynamic effects rail plans in mode shifting away from road

freight which includes reduced fiscal spending on road maintenance and upgrades. Furthermore, we urge MoT to acknowledge the role of rail as mass transit in positively shaping urban form in a sustainable manner - this includes the social, fiscal, health, biodiversity and reduced embodied carbon of transit-orientated urban form. The inclusion of these wider measures are important to include.

- 3.3 The plan should also acknowledge the commercial benefit New Zealand can gain from creating a low-carbon supply chain to export hubs. Increasingly global consumers are looking for transparent supply chains that ensure sustainability - we can double down on our 100% pure brand.

4 Freight Rail



Inadequate and unambitious timeline

4.1 The draft plan simply looks to restore the freight rail network over the next decade, from a state of mismanagement and neglect. Substantive improvements to the network will only occur in the 2030s.

4.2 This completely ignores the need for Aotearoa New Zealand to half its emissions by 2030 set under the Zero Carbon Act. It also ignores the road safety crisis we currently find ourselves in, and our stagnant productivity due to our infrastructure deficit.

Proposed timeline changes

4.3 Undertake the “restoration” of the rail network in the next five years instead of the next decade. Undertake a more comprehensive growth and improvement of the network over the next 5 years and beyond. Rail needs to be a competitive and viable transport solution for the 21st century.

Go further with investment

- 4.4 We also want the future growth to go further over the next decade. This should include:
- a) Connecting all ports to rail, including NorthPort and Nelson
 - b) Connect all major inland primary sector regions with inland ports

- c) A comprehensive programme of works to smooth curves and increase speed limits, much like what happens on state highways
- d) Confirming the AKL-HAM double tracking
- e) Reopening mothballed lines
- f) Electrification of entire network with priorities for NIMT and ECMT electrification by 2030 at latest
- g) Double tracking Wellington to Palmerston North.

4.5 The plan should also consider smartly integrating infrastructure planning with coastal shipping alternatives.

5 Metro Rail



Inadequate and unambitious timeline

5.1 The draft plan simply looks to continue the business-as-usual approach to the metro rail network over the next decade, rescuing the network from a state of mismanagement and neglect. Why do further improvements to the network will only occur in the 2030s?

5.2 This completely ignores the need for Aotearoa New Zealand to half its emissions by 2030 set under the Zero Carbon Act. It also ignores the road safety crisis we currently find ourselves in, and our stagnant productivity due to our infrastructure deficit.

Proposed timeline changes

5.3 Undertake the “restoration” of the rail network in the next five years instead of the next decade. Undertake a more comprehensive growth and improvement of the network over the next 5 years and beyond. Rail needs to be a competitive and viable transport solution in our cities.

More investment in Auckland and Wellington needed

5.4 The metro rail systems in these two centres have been under-funded over many

years. The upcoming completion of the CRL is to be applauded. That project will lead to an explosion in patronage and requires massive enabling investment to reap the rewards:

- Longer platforms
- Major removal of level crossings
- Double tracked Onehunga line
- Third and Fourth main to Westfield with Third main continuing through to the city centre

5.5 Wellington also needs major improvements. Once the rail network is effectively extended through the city with mass transit, there will be a massive increase in patronage, placing further strain on an already packed system.

- Electrification and double tracking further north on the NIMT/Kapiti line.
- Major station improvements and electronic ticketing
- New alignments on the Kapiti line to improve speeds and distance travelled

Where is Christchurch?

5.6 This is a massive omission in the report. Mode shift, liveability, safety, affordability and emissions reductions are all identified as benefits of metro rail. But our most poorly served and car-dependent city, Christchurch, is not included.

5.7 Money should be presented to the Canterbury public as reserved for commuter rail and local decision makers can decide on its form.

5.8 It is crucial there are commuter services running in Christchurch within 5 years, with expansions to the network occurring from 2025-2030. Integration with Ministry of Housing and local councils can assist with zoning to allow transit-oriented development and targeted rates to more easily fund these projects.

Proper regional rail is missing

- 5.9 There is only the mention of the Auckland to Hamilton service. We urge the plan to:
- 1) include rapid regional rail services in the 'golden triangle' of Auckland, Hamilton and Tauranga. These can start as diesel hybrids, but eventually be 160km/h tilt trains that are electrified.
 - 2) Overnight services between Auckland and Wellington
 - 3) Rapid rail from Wellington to the Wairarapa and Palmerston North.
 - 4) Regional rail in the South island that has regular rapid services between Dunedin and Christchurch

Protect alignments for future expansion

- 5.10 The plan should be reserving designations now for new regional lines, stations and inland ports. For example:
- A second Kaimai tunnel
 - Bombay rail tunnel
 - Tauranga metro rail
 - Hamilton central station
 - Additional Christchurch metro rail

6 Approach to planning



- 6.1 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. There are two structural responses which should be undertaken to ensure the best

solutions from problems are sought:

- Put significant resources 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.

6.2 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. The investment decision-making framework review will also be hugely influential on the future of rail in New Zealand.