TE MANATŪ WAKA
MINISTRY OF TRANSPORT

Te rautaki ueā me te rautaki whakawhiwhinga o Aotearoa | New Zealand freight & supply chain issues paper

April 2022

> The supply chain is facing a range of challenges from climate change, to adopting technological advances, and shifting international geopolitics to name a few. The COVID-19 pandemic made vulnerabilities in the supply chain more visible and it is unlikely the system will revert to how it was before the current disruption.

Preparing our freight and supply chain system for the future

we will need to take a strategic approach to prepare our supply chain for the future. Te Manatū Waka has prepared an issues paper as preliminary work on the New Zealand freight and supply chain strategy. The issues paper presents a view of the big issues facing New Zealand's freight and supply chain system over the next 30 years.

We are seeking feedback on whether the issues and opportunities identified in the issues paper are the most important ones for the strategy to address.

Public consultation on the issues paper runs from 14 April – 3 June 2022 and we encourage you to make a submission.

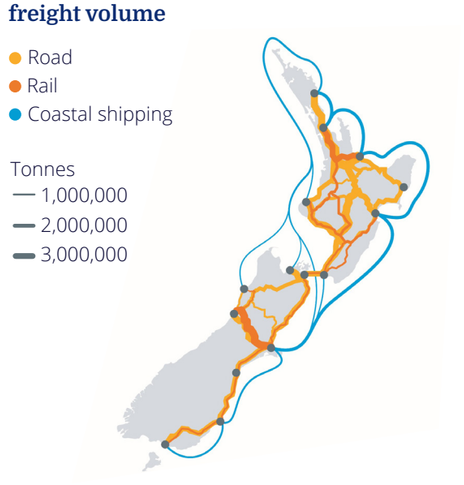
Part 1.

Understanding New Zealand's freight and supply chain system

Supply chains are the networks of individuals, companies, resources, infrastructure, activities, and technologies involved in supplying things from those who produce or manufacture them to those who use them. Our freight sector and its infrastructure underpin the operation of supply chains by enabling the physical movement of goods, within New Zealand and to and from overseas markets.

Within New Zealand, freight can travel by road, rail, coastal shipping, or air.

Road, rail and coastal shipping freight volume



National Freight Demand Study 2017/18

How goods are moved into, out of, and around New Zealand

Road freight
93.8% of freight in New Zealand is transported by trucks along our 94,000 km of roads.

Rail freight
5.6% of freight moves by rail along 3,700 km of railway.

Coastal shipping
1.6% of freight in New Zealand moves by coastal shipping. There are around 13 vessels in our coastal shipping fleet.

International shipping
99% of the country's trade by volume is moved by international shipping lines through our 15 ports.

Airfreight
Airlines carry 16% of our exports and 22% of our imports by value but only 1% by volume.

International connections

Internationally, 99% of New Zealand's imports and exports travel along global shipping routes to reach consumers. The remaining 1% travels via air, mostly in the belly hold of passenger airplanes. Australia/New Zealand and Oceania make up only about 4% of total global container shipping capacity. New Zealand is located far away from the main international shipping routes, and our small size and remote geographical location present a challenge in accessing reliable international transport services at competitive costs, especially when the international supply chain is experiencing disruption.

What is the role of government in the freight and supply chain system?

While the freight and supply chain system is largely operated by private entities and individuals, the government has a role to play in ensuring that the system functions well and serves the interests of New Zealand and its people. This includes:

Supporting what is needed for commercial activities to occur	The government sets the 'rules' of the market through regulation, to ensure the system works well and is competitive, and that businesses and consumers are able to participate in the market with the same understanding of how things work. The government also invests heavily in public infrastructure such as roads, bridges, tunnels, and railway tracks. The building, maintenance, and repair of these are fundamental to the movement of goods in freight and supply chains. The government provides services important to New Zealand which may otherwise struggle to be commercially viable, such as rail and postal services, through State-owned Enterprises.
Ensuring broader public good outcomes and national interests are achieved	The government works to ensure that broader public good outcomes are also achieved, which may not be prioritised by the commercial sector. These include outcomes such as environmental sustainability, health and safety of the workforce, fair and equitable distribution of economic growth and opportunities, etc.
Facilitating New Zealand's participation in global value chains	This provides our businesses with access to global networks, markets, capital, knowledge, and technology, which is valuable for a small country like New Zealand. The government supports this by building international relationships and agreements to ensure good connections, standards, trading conditions and opportunities, and effective management of trade routes.
Facilitating collaboration and coordination across the sector	There is a role for government to play in coordinating action across the sector, especially one as large and complex as the freight and supply chain system. This is also relevant in cases of emergency management and national resilience in response to major catastrophic events such as the COVID-19 pandemic, and natural disasters.
Providing a system-wide, longer-term view	Similarly, the government is in the position to take a system-wide view of the freight and supply chain system, to monitor performance across the freight sector, and provide longer-term planning and investment in the system.

Part 2.

The strategic context for change

There are major changes affecting the freight and supply chain system now and in the future.

Climate change will impact all aspects of our supply chain and will require significant changes to how freight is moved

It will affect what we produce and where, increase the risk of damage to infrastructure and supply chain disruption and increase the likelihood of global supply chain disruptions.

We have committed to ambitious goals to decarbonise our economy – this requires changing how we move goods. We also need to decarbonise how we move goods to and from overseas markets.

We must adapt to New Zealand's growing population and increasing densification

Our population is expected to grow, especially in urban areas. Housing shortages and efforts to respond to climate change are increasing urban densification. The corresponding increase and concentration of freight volumes will put pressure on our freight and supply chain system

Technology and digitalisation may change how we move goods

Advancing technology may change how freight is moved. Increased digitalisation of trade could significantly facilitate global supply chains

International developments will increase uncertainties faced

International trading is likely to become more uncertain as global geopolitics in the shifts and trading patterns change

Consolidation in the international shipping sector and the rise of megaships will impact our ports

Part 3.

Current vulnerabilities of the freight and supply chain system

We need to address the vulnerabilities and barriers the system faces including:

- just-in-time efficiency prioritised over spare capacity
- it can be hard to shift between freight options
- international shipping lines may not always prioritise NZ's freight needs
- the competition settings of New Zealand ports may not be optimal
- limited data on the freight sector is available
- accessing labour can be challenging
- long-term planning needs to be clearer

Other factors which make the system vulnerable may include:

- Some evidence shows that our freight and supply chain system could be performing better
- The pre-COVID-19 operating environment is unlikely to return, so we need to position the system for the future
- We need to ensure a sustainable labour force
- Limited access to data to understand and evaluate the system

New Zealand export flow to the next international port

New Zealand import flow from the last international port

Part 4.

Our proposal for developing a freight and supply chain strategy

Based on our conversations with stakeholders, we propose that the strategy focuses on four outcomes: Low Emissions, Resilience, Productivity and Innovation, and Equity and Safety. Below are some potential areas of focus. These are not exhaustive and only indicative at this stage. We will be engaging with iwi and stakeholders to identify priorities and options are part of the strategy development process this year.

Now	Areas of focus	30 years
1. Low emissions	**New Zealand's freight and supply chain system is underpinned by a low emissions freight transport system** • Set the pace of intermediate steps between now (current emissions) and 2050 (net zero emissions) • Provide a road map for infrastructure requirements to enable the shift to zero and low emissions heavy vehicles – this could include biofuels, hydrogen and electric charging stations • Signal government support, incentives and regulation to enable long-term business planning	
2. Resilience	**New Zealand's freight and supply chain system is resilient, reliable, and prepared for potential disruptions** • Assess parts of the freight and supply system that are most critical and their level of resilience, and develop plans to improve resilience • Improve modal options including rail and coastal shipping to support decarbonisation and enhance resilience and safety	
3. Productivity & innovation	**New Zealand's freight and supply chain system is highly productive and innovative, and performs well when measured against global standards** • Assess port settings to improve national and regional outcomes • Address barriers to innovation and uptake of productive technologies • Support collaboration among government, industry, and unions to improve access to labour and job quality • Develop a systemic approach to improve freight data access and collection, and performance evaluation	
4. Equity & safety	**We transition to a low emissions, resilient, productive and innovative freight and supply chain system in a way that is equitable and safe for all** • Ensure Māori interests are at the forefront and articulate Māori aspirations in relation to supply chains • Ensure our long-term plans maintain or increase connectivity with regional communities and support regional economic development • Support SMEs in transition • Support efforts to enhance safety on roads and in workplaces	
Across all outcomes	**Enhance collaboration between stakeholders and government on freight and supply chain issues**	

Our approach to progressing from issues paper to strategy

We will be taking a collaborative approach and drawing on the expertise and experience of stakeholders across the system to inform the process. We would also like to work with our Treaty partners to articulate Māori aspirations relating to the freight and supply chain system and explore how to achieve them.

Issues paper public consultation at a glance

- **Consultation ends:** 3 June 2022
- Issues paper full copy: go to www.transport.govt.nz/supplychain.
- **Online submissions:** go to www.transport.govt.nz/supplychainconsultation
- **For other ways to make a submission:** go to www.transport.govt.nz/supplychain
- **Contact the supply chain team:** supply.chain@transport.govt.nz

Te Kāwanatanga o Aotearoa
New Zealand Government