

Figure 4 Additional emissions reduction needed

Source: Ministry for the Environment

# The transport sector is delivering on the first Emissions Reduction Plan (ERP1)

The Government's approach to emissions reduction in the first emissions budget period was set out in the Emissions Reduction Plan (ERP1) published in May 2022. ERP1 sets focus areas, targets and specific actions to be taken between 2022 and 2025 to reduce transport emissions in line with the transport sub-sector target.

Officials are working to implement the actions in the ERP1 by the end of 2025.

Current estimates suggest transport is likely to stay within its sub-sector target and meet its expected contribution to reducing emissions during the first emissions budget period. However, these estimates assume work underway to reduce transport emissions continues and incorporate data reflecting lower-than-expected rates of travel. This decline in travel is not fully understood and a range of factors are likely to have contributed, including migration, cost of living, and changing travel patterns post-COVID-19. Therefore, caution should be applied when assuming this trend will continue.

### Work is underway to develop the second Emissions Reduction Plan (ERP<sub>2</sub>)

As shown in Figure 4 above, a considerable jump is required in emissions reductions from transport from the first to second emissions budget period, and again from the second to the third.

Work is underway within the Ministry and across government to develop the second Emissions Reduction Plan (ERP2), which is due by the end of 2024. ERP2 will need to contain actions that meet the gazetted emissions budget for the second emissions budget period from 2026-2030.

In its draft advice to inform the strategic direction of ERP2, the Commission also advised ERP2 will need to include actions that set the transport sector up for the third emissions budget period.

In December 2023, you will receive initial cross-agency advice about key opportunities and challenges for ERP2 and some indicative content about what could be included. Cabinet is expected to make decisions about the draft and final content for ERP2in 2024.

## Meeting the third emissions budget and beyond require significant system changes

Current modelling suggests meeting the third budget for transport will require significant additional effort beyond currently committed policies as shown in Figure 5.



Figure 5 Transport emissions reductions by emissions budget period

Source: Ministry of Transport

ERP1 placed particular emphasis on rapidly transitioning the vehicle fleet to low- or zero-emissions vehicles because it is one the few ways to significantly reduce transport emissions that can be set in motion quickly. By the time we reach the third emissions budget, we will need to have made much more significant changes to the transport system including large scale public transport improvements, significant uptake of low emissions heavy vehicles and land use patterns that support low emissions transport options in urban areas.

#### A NET-ZERO TRANSPORT SYSTEM

With such systemic changes in place, transport emissions reductions could accelerate rapidly from around 2030 onwards (often referred to as 'bending the curve'). This can be observed in the Commission's demonstration path in Figure 6.

However, as Figure 6 also shows, these systemic changes are not factored into current investment plans for transport. Our latest baseline projection, shown in yellow, reflects expected transport emissions based on committed and funded actions, and suggests more investment and ambition will be required in ERP2 to successfully 'bend the curve' and meet our long-term targets.

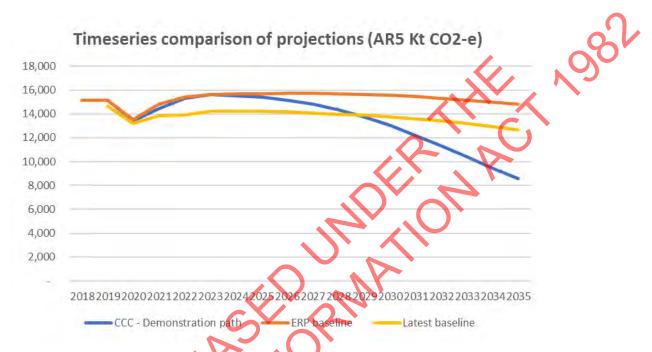


Figure 6 Timeseries comparison of (emissions reduction) projections

Source: Ministry of Transport

### The next steps for ERP1 and ERP2

#### Aligning ERP1 with your strategic objectives

We can provide you with more detail about the focus areas, targets, and actions for transport in ERP1 and advise you on the impact of any changes you may wish to make to the remaining actions to be delivered in the first budget period.

#### **Ensuring ERP2 meets your strategic objectives**

Setting strategic priorities for ERP2 with your Cabinet colleagues and deciding what actions will be included for transport to meet its expected contribution will be some of the biggest strategic decisions you will make as Minister of Transport in the next 12 months. The Ministry will support you with advice to inform these decisions.

In December 2023, along with your Ministerial colleagues in other climate portfolios, you will receive a package of preliminary advice about the long-term pathways to net zero by 2050 and indicative advice about what these mean for ERP2. This advice is likely to seek your direction on

some key strategic priorities, risks, benefits sought, and potential trade-offs, to inform the development of detailed options for inclusion in ERP2. The Ministry will provide you with additional transport-specific advice to supplement this interagency advice.

# Maintaining and growing New Zealand's international connectivity

# New Zealand's prosperity is heavily reliant on its connections to the world

International connectivity enables people and goods to move across our borders and is an important contributor to New Zealand's prosperity and well-being.

Most of our imports and exports move by sea - 99.7% of New Zealand's export goods by volume, and 80.9% of its exports by value. This makes the maritime sector vital to New Zealand's interests, including ports and the connections to them. The aviation system also delivers economic and social benefits of staying connected to each other and the global community. Air transport underpins key sectors in the New Zealand economy, including tourism, international education and high-value freight.

### New Zealand's international connections face a changing environment

The geo-political environment is becoming less rules based and more volatile, and there is growing risk around the international politics of climate change. This presents some risk to New Zealand as a distant trade reliant economy. The emissions from the aviation and maritime sectors are subject to increasingly tighter international standards and we need to be well engaged to ensure these support New Zealand's carbon emissions and connectivity objectives while not disadvantaging our connectivity to the world. The international security environment has also become more complex.

# Government can help promote efficient supply chains

After COVID-19 highlighted vulnerabilities in our supply chains, the Ministry conducted extensive engagement with supply chain stakeholders to develop a National Freight and Supply Chain Strategy, which was issued on 18 August 2023. Industry stakeholders especially called for:

- better signalling of government's long-term plans for supply chain infrastructure
- better consenting and planning that protects key logistic routes and nodes
- a review of the current port system
- improved data collection and availability
- improved ability to transfer across transport modes
- building the workforce for the supply chain of the future.

It is important the Strategy, which supports a stronger and more resilient supply chain, is translated into action. The next step proposed for the Strategy was the development of an action plan. Work priorities were identified around ports and their connections, road freight decarbonisation, freight data, and international connections.

# Proposed actions for progress on international connectivity and supply chain issues

Key actions we will look to progress are:

- Better collaboration with the private sector, so New Zealand has future supply chains that are
  low emission, resilient, productive, efficient, safe and sustainable. This is likely to involve
  work on ports and their connections to road and rail, the transition to low emission heavy
  vehicles and improving freight data collection.
- Working across government and the aviation sector to develop a national policy statement for aviation and provide a joined-up view on how best to embrace opportunities and address challenges in the sector. A private partnership initiative has already begun to accelerate decarbonisation of the aviation sector.
- A review of maritime legislation to ensure our regulatory f ameworks support an innovative, productive, safe and secure maritime sector.

We will discuss these potential actions further with you

# Developing thriving cities and regions

# Resilient, safe and well-connected transport networks are a basic requirement for cities and regions

Cities and regions depend on resilient, safe and well connected transport networks to have strong economic and social opportunities. These networks enable people to travel to and from work, access services and amenities, as well as allowing businesses to be productive and connect to a range of markets.

Regions need resilient and safe transport networks to enable communities to participate in society and connect our primary producers to their overseas markets. Well targeted road investment and effective maintenance is critical to sustain connectivity. Meanwhile, cities need well-connected transport networks to be able to move people while allowing goods and services, including freight, to move efficiently.

Well targeted transport investment, both capital and operational, is critical to sustain these networks. This investment can unlock better safety outcomes, grow the economy and increase productivity benefits for all New Zealanders.

# Alignment between transport planning and delivery, land use and infrastructure planning is essential

Delivering effective and efficient transport in cities and regions requires the alignment of transport planning, funding, and delivery with land use, regulation, urban development, housing and infrastructure provision. Transport solutions in cities require multiple interventions, including measures from outside the transport system itself. Given the shared regulatory responsibilities for delivery between central and local government, the tension between national and local priorities often need reconciliation to help meet statutory requirements, realise shared goals, and improve certainty.

Improving long-term, integrated planning across transport and other sectors will deliver better outcomes and greater planning certainty. However, there are challenges in achieving this integration due to several complication factors, such as the numbers of decision-makers involved, the planning horizons for delivering transport solutions, and the complexity of the projects.

To provide greater certainty and to better prepare for and manage growth, high-growth cities and regions have developed spatial plans under Urban Growth Partnerships These partnerships include local government alongside central government agencies and mana whenua. They are also a mechanism for long-term thinking and integration of transport and other infrastructure projects, as well as stakeholder engagement and involvement.

Spatial planning has been a critical tool for supporting integration of transport with the provision of other infrastructure. However, the challenge with spatial plans is that there is no guaranteed pathway between the major projects shown in spatial plans, nor do they guarantee funding. Once identified, transport and infrastructure projects often need to use existing statutory funding mechanisms and decision-making processes to make progress. This often requires decisionmakers to make trade-offs between competing investment priorities, and ensure benefits are equal to the level of required funding.

For example, all the Urban Growth Partnership spatial plans include rapid transit services and high-frequency public transport networks. These look to provide a backbone for future large-scale urban developments. However, there is currently no funding pathway, firm timeframes and clear prerequisites (such as the inclusion of intensification along the proposed rapid transit corridors) to deliver most of these projects. This uncertainty means there are risks around the ability of the these projects to deliver their projected public benefits.

## City and regional deals are a potential way to deliver integrated transport solutions

City and regional deals offer a potential way for central and local government, mana whenua and the private sector to provide greater certainty on transport and other priorities for a city or region, but this will likely be challenging given the constrained funding environment. Exploring innovative new funding and financing models to deliver major projects (including through transport pricing tools), using long-term planning instruments to provide certainty and improve integration between land-use and transport, and making better use of existing funding and financing tools and past

<sup>&</sup>lt;sup>5</sup> The Urban Growth Partnerships have developed spatial plans for Auckland, Wellington, Hamilton, Tauranga, Christchurch, and Queenstown

transport investments will be essential. Independent monitoring should ensure accountability, and clarity in governance structures enables shared understanding of roles and responsibilities. For example, this may require differentiating between operational and strategic arrangements. including the roles of investment and other initiatives that can get better use out of existing networks, such as congestion pricing.

City and regional deals can also serve to coordinate the multiple planning, funding, and regulatory approval streams necessary to advance the investment in urban development, transport and infrastructure often required to fund large investments in infrastructure our high-growth cities need. This includes considering ways to incentivise partners to invest in necessary transport networks and associated infrastructure and other developments, while also working together to address he risks the partners face from entering long-term funding commitments.

given constrained funding and the substantial costs of delivering large-scale transport projects, innovative funding and financing models can be explored to deliver major projects as the deals are being developed.

New Zealand has built up some experience with these types of multi- party funding arrangements as they relate to transport and associated urban development from which lessons can be learned., including the Auckland Transport Alignment Project (ATAP) and Let's Get Wellington Moving. Lessons can also be found internationally as these deals are used in other countries, including the United Kingdom, Canada, and Australia to support integrated programme delivery. They involve long-term partnerships between local and central government and private businesses based on a clear set of outcomes, with packages of funding and decision-making powers. Experience from other recent transport-based partnerships between central and local government has also underscored the importance of clarity on funding, roles and responsibilities, and governance arrangements.

# The Ministry can provide further advice on urban development and city and regional deals

The Ministry can provide you with further information and advice on opportunities for Ministerial collaboration, better planning, and city and regional deals. As these agreements require the input of different portfolios, substantial work would be needed with other Ministers to determine their viability and potential effectiveness in a New Zealand context. In the past, cross-portfolio Ministerial forums for urban development and infrastructure have encouraged government agencies to work together on policy development and delivery and ensure joint accountability.

# Strong Auckland, strong New Zealand

# Auckland is critical to achieving New Zealand's goals

Auckland is home to one third of New Zealand's population, contributes 38% of the nations GDP and is projected to account for around 60% of New Zealand's population growth between 2013 and 2043.

Over recent years, Auckland has accounted for 30% of the National Land Transport Fund spend and increasing Crown funding along with Auckland Council funding.

### Auckland continues to need a large investment in its transport networks

Auckland requires transport investment in roads, public transport and active transport. Along with investment, interventions such as congestion pricing and better integration of transport and landuse are required to achieve outcomes and manage affordability. Congestion pricing in Auckland will raise some revenue but its value is in improved productivity and potentially deferring some road costs and capital spending.

The strategic roading network in Auckland is almost complete. Penlink is underway and a preferred option for Mill Road as part of the package of investment in south Auckland needs to be determined.

# Rapid public transport is integral to improving Auckland's public transport network

Auckland's future public transport network will have to be much larger than it is today, and rapid transit will be needed to move people in a fast, frequent and reliable manner. While there have been some setbacks with the rail rebuild and bus driver shortages, public transport patronage has increased significantly in Auckland. Patronage increased from 84 million boardings in 2016 to 100 million boardings at the end of 2019. This can be further improved by increasing frequency and reliability on the current bus network and extending coverage, particularly to some of the lower income areas where access to public transport is poor. Successes to date have been the northern busway and passenger rail, post electrification. The City Rail Link and Eastern busway are well into construction and will support further growth in the short term. Work on a 30-year plan for rail investment in Auckland is also well advanced.

Business case work is underway on a range of major projects including on the northwest and city centre to Mangere corridors, as well an additional crossing over Waitemata harbour. There is a lack of consensus on the best way to proceed with these projects, and how work should be prioritised and sequenced. Our view is it is not feasible to progress with all of these projects as planned from both a funding and construction capacity perspective. Within the limited funding and delivery capacity available, you may want to consider the balance between high volume and highcost options, such as light or heavy rail, and lower volume but faster to deliver options such as busways. The Ministry's advice is these should be considered in the context of the type of overall network that should be available in future, and the nature and scale of development desired for Auckland.

Reaching agreement with Auckland Council on the sequencing of investments in Auckland over the longer-term is a priority. One way to achieve this is by continuing to work on the Auckland Transport Alignment Project (ATAP). Since 2017, ATAP has been New Zealand's most mature 'city deal'. The Minister of Transport and Mayor of Auckland are political sponsors of ATAP and a Governance Group of Chief Executives provides oversight and governance.

# The joint Government/Auckland Council Tāmaki Makaurau Transport Plan needs to be completed

The Tāmaki Makaurau Transport Plan, a long-term integrated plan has been the key piece of work progressed under the ATAP structure over recent months. It is paused and we will seek your guidance on the next steps for completing the Plan.



#### Auckland Commuter Rail

# Several major Auckland transport projects are underway

There are pressing choices to be made about investments in Auckland over the 10 and 30-year horizons. Affordability and delivery capacity need to be considered as an investment programme, which includes sustaining the current network, expanding public transport services and progressing major projects, is completed.

#### City Rail Link (CRL)

Most construction work is now complete, and the focus is on integrating CRL with the Auckland network and testing readiness for

operations. The Ministry monitors the work of the delivery company, City Rail Link Company (CRLL) and advises on broader investments needed to realise the benefits of the project. CRL is funded 50:50 by the Crown and Auckland Council. You are a joint sponsor of the work along with the Minister of Finance and Auckland Council, represented by Mayor Brown.

#### Auckland Light Rail (ALR)

ALR is an integrated urban and transport project along the city centre to Māngere corridor. Auckland Light Rail Limited (ALRL) is working on a detailed business case. The Ministry monitors the work of the company, provides policy advice on the project and supports the project's Sponsors You chair the Sponsors Group and it will be a priority to provide direction to the project.

#### Waitematā Harbour Connections

Waka Kotahi is developing an indicative business case on a recommended option including roading, rapid transit and cycling connections. This is scheduled to be considered by the Waka Kotahi Board in early 2024. The Ministry's feedback is significant work is required before moving to a decision-making process, including on lower-cost options. You have a role in setting direction for the work and ultimately deciding whether to take the project forward through Cabinet.

#### Northwest

The Northwest corridor has consistently been identified as a high-priority rapid transit corridor for Auckland. Interim improvements are underway including new bus stops, interchange enhancements, and extended bus lanes on SH16. Waka Kotahi is starting a detailed business case on a permanent rapid transit system. This corridor is a priority for the Mayor of Auckland and the Ministry expects it to be raised as part of your discussions on the Tāmaki Makaurau Transport Plan

## The Ministry will seek your direction on Auckland's transport priorities

The Ministry will seek your direction on completing work on the Tāmaki Makaurau Transport Plan and on the next steps for some of the planned projects in Auckland

# Building a resilient transport system

# The transport system connects New Zealanders but is vulnerable to shocks and disruptions

The transport system and our communities and businesses are vulnerable to shocks and disruptive events (either natural or human). New Zealand has transport corridors in steep valleys, alongside coastlines, and across rivers and floodplains. Many communities are in remote areas or have limited routes connecting them to the rest of New Zealand. In recent years, New Zealand has experienced climate change related severe weather events like Cyclone Gabrielle and natural disasters like the Christchurch and Kaikōura earthquakes in 2011 and 2016 respectively.

Transport operations can also be disrupted by other vulnerabilities. Parts of the transport system rely on highly trained workforces which are susceptible to staff shortages, for example, maritime pilots, air traffic controllers, ground handlers, airport rescue fire services, and bus and train drivers. The aviation system relies on imported jet fuel, which if it fails quality testing on arrival into the country results in disruptions to aviation operations. We also need to manage the transport system's susceptibility to security threats from malicious actors.

# A lack of resilience drives extra costs into the transport system

Being resilient is the ability to anticipate and manage disruptive events, minimise their impacts, and respond and recover effectively. A transport system that is not resilient increases the costs and time to reinstate critical transport connectivity to affected communities. Shocks from natural disasters such as the Christchurch and Kaikōura earthquakes, alongside the increasing frequency and severity of weather events caused by climate change, result in significant social and economic costs to restore transport networks.

# The Ministry is working to enhance the resilience of the transport system

The Ministry uses its leadership role across strategic policy and operational work to build transport system resilience into wider system reforms and work programmes. The Ministry works to ensure a broader 'New Zealand Inc' perspective is applied to managing transport system risks and in building better transport system resilience. This includes using an agreed national framework, together with the transport Crown entities, to manage risks.

#### Resilience work includes:

- Involvement in the National Security System reforms, and membership of the Counter-Terrorism Coordination Committee, Major Events Security Committee, and the National Security Board (as the Strategic Coordination Agency for maritime security).
- Involvement in the Emergency Management System reforms including emergency and catastrophic planning, and the current emergency management and the DPMC-led Critical National Infrastructure work programme.
- Involvement in climate change work programmes, including the Resource Management System Reforms, National Adaptation Plan, Emissions Reduction Plan, and membership of the Climate Change Interdepartmental Executive Board.
- Connecting the transport system into operational readiness, response, and recovery activity
  through its role as Chair of the interagency Transport Response Team, which is the Sector
  Coordinating Entity for the transport system in an emergency.

# As the Minister of Transport, you have an important role in enhancing transport system resilience

You can play a role in enhancing the resilience of the transport system by:

- Maintaining relationships across the sectors identified so the perspective of the transport sector is given due weight in government's wider resilience-related work.
- Engaging with your Ministerial colleagues on legislative programmes which cut across the transport system, such as the Emergency Management reforms, Climate Adaptation Bill, and Resource Management reforms.
- Engaging with other Ministers to address specific resilience issues (eg, the availability of RNZAF Base Ohakea and jet fuel supply chains).
- Making decisions on further investments via the National Resilience Plan.

# A productive, safe and secure transport system



# Travel needs to be safe and secure, and incorporate new technology

Travel needs to be as safe and secure as it can be, whether by road, rail, aviation or maritime. People should not be harmed when using transport and should be confident when using the system.

Our transport regulatory frameworks help deliver safety and other transport outcomes. Those frameworks depend on the work transport agencies do to enforce and implement them and are significantly shaped by international obligations, standards and recommended practices.

However, parts of these frameworks need to be updated or revisited. The safety issues and approaches to regulation in each sector vary and we need to make sure the regulation applied in each sector is doing its job.

A more challenging economic outlook and fiscal position means there is added emphasis on ensuring all aspects of our regulatory systems deliver value for money and support increased productivity. For example, out-of-date regulatory

requirements impose unnecessary costs on firms and individuals, which harms New Zealand's productivity.

The frameworks must also enable and adapt to novel technology, such as driverless vehicles/craft (eg, unmanned aircraft and autonomous vehicles), different fuel types (eg, sustainable aviation fuel, hydrogen) and different types of craft (eg, drones). Introducing still evolving technologies is a major challenge for policy makers and regulators. The beneficiaries of these technologies (the investors, manufacturers and consumers) often do not wear the full costs of their risks, which is borne by society at large. Appropriate regulatory approaches can help build the confidence of consumers to use new technology and encourage firms to invest in their development and deployment.

Therefore, it is crucial to have a regulatory system that provides the framework and permissible set of conditions under which decisions can be made on important features of transport markets such as entry, pricing, access obligations and quality or conditions of service.

### Improved road safety requires interventions across all parts of the system

Roads are used by just about everyone in New Zealand, and usually on a daily basis. Provisional figures show, 377 people died in road crashes in 2022, with 2,470 people suffering permanent lifechanging injuries<sup>6</sup>. Social cost of road trauma is estimated to be as much as \$8 billion a year. Our rate of road deaths is also significantly higher than many other jurisdictions New Zealand compares itself to, as indicated in Figure 7 below.



Figure 7 Road deaths per 100,000 inhabitants (2022)

Sustained effort is required to reduce the number of people being killed or seriously injured on our roads.

New Zealand has followed the safe system approach in recent years, which is the internationally accepted approach for road safety. A safe system means improving the safety of all parts of the system – roads and roadsides, speeds, vehicles and road user behaviour – so that if one part fails, other parts will work to protect people if they are involved in a crash. Progress in all areas is still needed to reduce deaths and serious injuries on our roads. However, you can choose to place more emphasis on interventions in some areas rather than others.

# New Zealand has made progress in some road safety areas, but there are significant opportunities for improvement

The current *Road to Zero* road safety strategy has targets for reductions in deaths and serious injuries. There has been progress in all areas. For example, Police have increased their enforcement activity in the last 12 months, with an additional one million alcohol breath tests conducted than in the previous year.

The interventions set out in the strategy that have been delivered have been proven to be highly effective in the New Zealand context. For example, changes to speed limits on State Highway 6 Blenheim to Nelson has seen the number of deaths and serious injuries reduce by approximately 80% in first two years while the average journey time has increased by approximately four minutes over the 110km road length. Installation of median barriers at SH2 Waipukurau in 2020 has seen a 100% reduction in deaths and serious injuries in the two years since.

COVID-19 slowed delivery of initiatives and there have been other challenges, which have impacted the scale and pace of implementation.

Public acceptance of some of the actions under the strategy has been limited, with concern expressed about:

• the public advertising and associated messaging, particularly how "zero" is unrealistic

Serious injuries are defined as fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.

some of the focus areas, such as the extent of speed management proposed.

Given these challenges, the Ministry has started reviewing the approach to road safety. We are preparing more in-depth advice on the impacts different initiatives will have on reducing deaths and serious injuries to assist you as you consider the strategic direction you wish to take for road safety. The Ministry would welcome the opportunity to discuss your expectations for road safety, including on the interventions you want to focus on.

#### Rail safety requires clear regulatory frameworks and investment

Rail safety needs clear regulatory frameworks, strong oversight and investment to provide the required level of safety assurance. After recent investment and growth, the risk profile of rail has increased. There have been several rail safety incidents involving fatal and serious injuries and recent reviews into the Auckland and Wellington metro systems have highlighted the need for system improvement and the need for the rail regulator to rigorously address risks

Waka Kotahi has primary regulatory responsibility for rail safety in New Zealand Waka Kotahi has a critical regulatory role in assuring stakeholders and the public that the country's rail networks are being managed safely. This is achieved through regulation of the rail industry in accordance with the Railways Act 2005. The Transport Accident Investigation Commission also plays an important role through independent investigation inquiries into rail accidents and incidents, and making recommendations that can identify opportunities to improve rail safety.

## Emerging transport technology requires regulation to be updated

The Ministry is responsible for providing advice on how existing regulatory frameworks can be adapted so emerging transport technology is safely integrated into the transport system. Increasingly, innovative uses of technology offer potential economic, environmental and social benefits. New Zealand should provide an enabling environment for innovators to support economic growth in areas like the aerospace industry, lift productivity through innovation, lower emissions and improve other environmental outcomes.

The Ministry has developed an Enabling Drone Integration (EDI) package to enhance the regulatory framework for drone operations, and as a building block for supporting autonomous aviation, which need to be able to operate safely in the same airspace as traditional manned aircraft. We will provide you with further advice on the proposed package of measures.

The land and maritime sector also face similar issues, including automation. In the land transport sector, for example, substantial modernisation of the vehicle standards framework is likely to be necessary to meet disruptive changes in the vehicle sector across environmental, safety and future transport domains.

Finally, the Ministry and transport agencies are alert to the real possibility that innovations, like artificial intelligence, may seriously disrupt the way transport operates or is regulated. Active monitoring of these developments is crucial.

# A review of maritime legislation is needed

Maritime transport is a critical part of our economy, with most of our imports and exports moving by sea. As an island nation, New Zealand relies on ferries to transport commuters, tourists, and

domestic travellers between islands. Boating is also an important part of our culture with over 1.9 million people taking part in recreational boating in 2020.

Maritime activity can be dangerous and risks are increasing of large scale maritime incidents. Vessel quality is declining and severe weather events are increasing at the same time. As well, the increased uptake of recreational boating and the numbers involved pose risks in that sector. Since 2015, an average of 16 recreational boating fatalities have occurred every year. Fatalities occur throughout the country, and most are associated with falls overboard, a vessel capsizing or flooding. Many Transport Accident Investigation Commission and coroner reports have found fatalities might have been prevented if users had demonstrated the requisite knowledge and skills or lifejackets had been worn.

Safe navigation is as critical in the maritime space as on land. Maritime incidents not only endanger human lives, but also the environment and the economy, as the Rena disaster demonstrated. The accessibility of the sea to recreational boating means recreational boating and commercial shipping operate in very close proximity to each other.

As discussed in the chapter on international connectivity, the Ministry and Maritime New Zealand have started scoping a possible review of primary maritime legislation, which is ageing and no longer works well. For example, the legislation does not accommodate new technologies, such as new fuels or autonomous vessels. This creates increasing costs and barriers for innovators. The legislation provides inadequate tools to effectively manage maritime incidents (including risks from poor quality vessels) or the increasing variety of threats to maritime security increasing the risks to safety, environment and supply chains.

The existing system also creates confusion around the differing roles of national and local regulation and suffers from complex and outdated requirements. Legislative reform could provide a range of practical benefits for New Zealand and has strong support from the maritime sector.

# Proposed actions to progress transport safety and other regulatory issues

The Ministry can provide you with any further information you require on these areas of transport system regulation and safety. In the shorter term, we would like to discuss with you:

- Our advice on reframing the approach to road safety.
- Taking a package of drone policy decisions to Cabinet
- The review of maritime legislation.
- Our regulatory activities and the Ministry's work to help position New Zealand for future technological developments like drones and automated vehicles.

# He pepa whakamōhiotanga mo te Minita Briefing to the Incoming Minister

Te Manatū Waka Ministry of Transport 

October 2023

# Briefing to the Incoming Minister 2023 - Strategic - Draft V1

# Contents

FOREWORD	0
Part One: He Wakamana i a Aotearoa Kia Momoho   Enabling New	
Zealanders to Flourish	7
Transport is critical for New Zealand's economic, social and environmental health	7
Growing demands on the transport system are creating new challenges	
New Zealand's international connections are increasingly vulnerable and uncertain	
Travels needs to move away from high emission vehicles	8
The transport system is more expensive to build and maintain	8
A new approach to paying for transport is needed	9
New technologies need to be integrated	9
Transport safety remains a priority	9
You can guide and shape the system to meet the challenges it faces	9
Investment is a powerful way for you to shape the system but there are limits	
Short-term policy priorities	11
Part Two: Strategic Opportunities and Challenges	19
Retter investment outcomes	10
Better investment outcomes	10
The Crown invests in land transport through the National Land Transport Fund and	12
	19
through direct funding	12
GPS 2024 sets the Government's transport policy	
GPS 2024 needs to be finalised	13
The draft GPS 2024 outlines six strategic priorities	
And a \$20.8 billion funding package	
The funding package is a short-term solution	
There are fiscal constraints in Budget 2024	
More broadly New Zealand's economic and fiscal position remains challenging	
A Not Zono Transport System	16
A Net-Zero Transport System Key points	10
	10
The Climate Change Response Act 2002 sets New Zealand's framework for reducing	16
emissions Emissions from the transport sector need to be reduced by 41 percent by 2035	
The three ways to reduce transport emissions are: Avoid, Shift, Improve	
ERP1 sets out focus areas and targets	
Planning is underway for ERP2	
We should move from a focus on VKT to increased travel choices and reduced growth	49
in congestion	19
ERP2 will need to focus on improving uptake of EVs	
Reducing emissions from freight and heavy transport is crucial	
Reducing aviation and maritime emissions is also important	
Aligning ERP1 with your strategic objectives	

Resilient, Sustainable and Collaborative Supply Chains	21
Key points	21
The freight and supply chain system underpins New Zealand's economy	21
Our supply chains face substantial changes	
Government and industry have distinct roles in the supply chain	22
Industry insights and collaboration underpins our work on supply chain issues	22
Immediate priorities for the next three years have been identified	
Road freight decarbonisation is critical if New Zealand is to meet its emissions to the development of the Freight and Supply Chain Action Plan 2024 is your opportunity to set priorities	
Developing thriving cities and regions	
Key points:	25
Transport needs to be well-integrated with other sectors	25
Spatial planning is an important tool to support better integration	25
City and regional deals provide a potential mechanism to support implementation	n 26
Strong Auckland, Strong New Zealand	97
Key points	2/
Tāmaki Makaurau is critical to achieving New Zealand's goals	
Rapid public transport is integral to improving Tamaki Makadrau's public transp	port
network	28
Investment choices will be constrained by funding availability and capacity	
availability	
The Tāmaki Makaurau Transport Plan needs to be completed	
Several major Auckland transport projects are underway	
City Rail Link (CRL)	29
Auckland Light Rail (ALR)	
Waitematā Harbour Connections	
Northwest	29
A resilient and future proofed transport system	30
The transport system connects New Zealanders but is vulnerable to shocks and	
disruptions	
A lack of resilience drives extra costs into the transport system	
The transport system needs to be future proofed to be resilient to all risks	
Work to enhance the resilience of the transport system is underway	
As the Minister for Transport, you can use your levers to enhance transport syste	
resilience	
Case Study: 2023 North Island Weather Events	32
A new way of paying for land transport	
Key points	
Ensuring a sustainable land transport revenue system	
You have a range of choices available	
There are options for the shorter-term	36

Value capture tools	36
Congestion charging framework	
Tolling	
The Government can also make greater use of private capital	37
Safer Transport	38
Key points	
You have opportunities to improve safety for people using the transport system	
[t.b.c]	38
Regulatory oversight must be risk-based and effective [t.b.c]	100
Road crashes killed 376 people last year and cause \$8 billion of harm each year	
International best practice indicates the need for action across all parts of the system to improve road safety	
New Zealand's road safety strategy continues to follow international best practice. New Zealand has made progress in some areas, but there are significant opportunities	40
Continue and the contract of t	41
There is an opportunity to review New Zealand's approach and confirm the actions	41
you want to prioritise	41
The air navigation system will need to change to meet future demands	
Drones and emerging aviation technologies require at for purpose regulations to	
improve safety	
The Civil Aviation Act 2023 will strengthen safety by the civil aviation system	
More cohesive and sustainable search and rescue and recreational safety sectors	
Maritime safety is important to people, the economy and the environment	
There is an opportunity to increase clarity around than time safety requirements	
Reducing duplication in recreational beating	
A lack of tools in some areas means some offenders are not held to account	44
Reforming navigation safety bylaw powers would increase certainty and reduce red	
tape	45
Modernising Transport Regulation	46
Key points	
Regulation is needed to realise the benefits of new technologies	
AI's impact is increasingly felt in the transport system	
Safety will need to be assured before automated vehicles are deployed on our roads	
Regulatory experimentation may be desirable to minimise safety risks while	-
encouraging intovation	47
The Ministry is prioritising implementing the Civil Aviation Act 2023 and a review of	
maritime legislation to address new opportunities and challenges	

Appendices No table of contents entries found.

# Schedules

No table of contents entries found.

Annexes No table of contents entries found.

# Tables

No table of figures entries found.

# Figures

No table of figures entries found.



# Foreword

[To come]



# Part One: He Wakamana i a Aotearoa Kia Momoho Enabling New Zealanders to Flourish

### Transport is critical for New Zealand's economic, social and environmental health

New Zealand's transport system connects us to work and school, to our whanau, to our communities and to the rest of the world. The smooth and sustainable movement of people and goods throughout the system is critical to our economic, social and environmental health. The transport system is an enabler, supporting and connecting to other sectors and society's wider goals, like better and affordable housing, healthier New Zealanders and desirable cities that attract the people necessary to drive economic growth. With all its good, though, the system also has negative impacts, including producing a significant proportion of New Zealand's greenhouse gas emissions, other air and noise pollution that affects the health of the general population and deaths and serious injuries for the people using the system.

The transport system involves millions of journeys every day on extensive networks of public and private infrastructure across New Zealand. These networks connect a population spread-out thinly across regions, but also concentrated in cities, who all need to be well served by the transport system to meet their social and economic needs.

These networks are used by a wide array of vehicles every day, many fossil-fuelled, and there are competing demands, including increasingly for use of street and city spaces. New Zealand's environment and geography also mean that our critical transport infrastructure is exposed to a broader and more consequential range of potential shocks than many other highly developed countries.

#### In New Zealand [t.b.c]:

- there are over 4.5 million registered motor vehicles in New Zealand, which is one of the highest rates of vehicle ownership in the world – around 64,000 of these are fully electric light vehicles
- transport produces 39 percent of our domestic carbon dioxide emissions and 17 percent of total greenhouse gas emissions
- around 200,000 New Zealanders (5 percent of the workforce) are employed in transportrelated industries.
- 20 million tonnes of freight are caried by rail annually
- around 34 percent of New Zealanders over 15 used public transport while 80 percent spent time travelling by private car
- 374 people died on our roads in 2022
- 46.3 billion vehicle kilometres were travelled in 2020

Based on Statistics NZ Business Demography Statistics, Snapshot at February 2022

 approximately 2 million adult New Zealanders participated in recreational boating activities in 2022.<sup>2</sup>

### Growing demands on the transport system are creating new challenges

As New Zealand has grown and matured, the demands on the transport system have grown significantly. In the past, the challenge revolved around efforts to grow capacity as activity increased and keeping the system maintained. However, new challenges, especially climate adaptation and mitigation, call for a fundamental shift in the way New Zealand's transport system operates. The long-lived networks that underpin the transport system need to be planned and funded over the long-term, managed and regulated effectively to support the shift needed.

# New Zealand's international connections are increasingly vulnerable and uncertain

Supply chain issues are increasingly influenced by geopolitics and the international politics of climate change, and New Zealand's position as the last stop on many international supply chains. Over the next decade, our distance from the rest of the world will be highlighted through the relatively high international aviation and maritime emissions that get our products to market. In aviation and maritime, and in the freight system more widely, the Government is much less often the funder or owner. But these sectors are increasingly seeking government leadership, involvement and support for measures to enable and support their transformation.

#### Travels needs to move away from high emission vehicles

To meet our 2050 net zero greenhouse emissions target, travel needs to move away from relying on high emission vehicles while making sure economic growth and social connection are maintained, and the burden of change does not fall too heavily on those who cannot afford it. New Zealand needs to reduce domestic transport emissions by 41 percent (from 2019 levels) by 2035. New Zealand is not on track for this, and the choices to achieve this change are becoming increasingly hard.

For more than fifty years, roads and fossil fuelled motor vehicles have been the dominant mode of transport. While private motor vehicles will always play an important role in our transport system, there is demand for these to be accompanied by access to a wider range of travel options. Increasing the range of choice involves large investments in expensive infrastructure, such as busways and mass transit options. These are expensive and difficult to implement, especially because they require infrastructure to be retrofitted into complex urban environments, and they create a need for ongoing operational funding too that does not have a ready revenue source.

#### The transport system is more expensive to build and maintain

Along with the need for more of this type of investment, as the system grows, it becomes more expensive to build, operate and maintain. Operating and maintenance costs are making up an increasing share of transport spending.

Part of the reason for the rise in costs is the impact of natural disasters, primarily earthquakes, and extreme weather events on our networks. There is an increasing realisation that our transport networks need to be more resilient and, as well, parts may need to be moved to cope with the

<sup>3</sup> Mantime NZ Survey

effects of climate change – much transport infrastructure is in vulnerable areas like coastlines and on, or near, hillsides. Keeping those networks secure is also critical.

Investment ambitions are running ahead of the capacity of the revenue system to meet them or the capacity of the construction sector to deliver new projects, especially alongside ambitious programmes in other sectors like water and housing. In the land transport system, our approach has historically been a "predict and provide" model where investment is made against forecast future demand, within a relatively stable revenue base. This approach is already unaffordable, with planned expenditure for the next 20 years nearly double the \$10 billion per annum of current investment, and more than four times the size of the National Land Transport Fund. Even if this full programme could be funded, it will not deliver the outcomes government and others are seeking from the system.

#### A new approach to paying for transport is needed

In the aviation and maritime sectors much of the network is provided and owned by private interests. In the land transport sector, central government has more of a role in how the system is planned and funded. However, New Zealand's land transport system has been reliant on a narrow range of user charges (mainly taxes on fuel and charges on diese and heavy vehicles) to pay for much of our land transport. Over the last two decades, Crown contributions and borrowing have increased as the level of funding from user charges has fallen behind investment ambitions. This, and other factors, have put the system under pressure, and our revenue system does not by its nature support large, long-term investments, which have a scale of cost that needs to be spread over several years.

#### New technologies need to be integrated

Transport will need to integrate considerable change to technology, including in energies and fuels. This brings considerable opportunity but also risk. Managing this quickly and safely will require change to the transport regulatory system. There are challenges on how to fund the regulation of new technologies as well as how to fund the intrastructure necessary for quick adoption of new technologies.

#### Transport safety remains a priority

Transport safety remains an issue, particularly with too many people still killed and hurt on our roads. Provisional figures for 2022 saw 377 people killed on the roads. The current target is to reduce deaths and serious injuries by 40 percent by 2030. Measures needed to achieve this target, such as speed management, can be controversial.

# You can guide and shape the system to meet the challenges it faces

The responses to the challenges New Zealand faces will involve difficult choices. Over the next decade, New Zealand's transport system will need to get on track to produce net zero emissions by 2050, halve road deaths and injuries by 2040, and address the significant disadvantages some groups and individuals face when accessing the transport system. The system will also need be ready to adapt to big challenges like severe weather, future possible pandemics, natural disaster, or economic shock.

This makes transport decision-making more complex than it has been in the past. To meet the challenges faced by New Zealand's transport system, there are opportunities for change. As Minister, you will apply policy interventions to shape the new system to make sure all New Zealanders can use the system safely and efficiently. Manatū Waka the Ministry of Transport's (the

Ministry's) role is to support you to implement your policies. As the Government's policy lead and system steward for transport, the Ministry will give you robust, evidence-based, future-oriented advice on the policy, investment, and regulatory settings that give the best chance of achieving your goals. The Ministry's System BIM gives further detail on the policy tools and levers available to you.

In its role as transport system steward, the Ministry believes that there are several key shifts the transport system needs to make over the next few years so that the future transport system continues to support New Zealand's economic and social health, while meeting our ambitious target of reducing transport emissions so New Zealand reaches its 2050 target of net zero. The necessary shifts in transport include:

- Planning transport with a long term focus and integrating transport planning with other sectors to reflect the long-lived nature of transport assets and the need for investments that will drive change in the transport system
- Supporting well working cities, towns and regions that improve the economic connections, support a high quality of living and encourage a lower emission way of life
- Bringing public transport, active mobility and freight more into the centre of system planning
- Changing the way New Zealand pays for land transport and its externalities so there is
  predictable revenue to invest in what is needed for change and encourage users to make
  good use of the system.

The Ministry has also developed the Transport Outcomes Framework to help you consider possible inventions in the context of achieving five outcomes; inclusive access, healthy and safe people, economic prosperity, environmental sustainability, and resilience and security.

# Investment is a powerful way for you to shape the system but there are limits

Investment is a powerful intervention available to you and your new government will need to consider how to shape its investment programme while, at the same time, making decisions about how any programme will be funded.

The current forward programme is unaffordable and there is not sufficient delivery capacity to build what is planned. Currently, Sx billion in investment is planned over the next x years, which is significantly more funding than is available to spend. Increasingly, we are having to look to other tools such as pricing and demand management (e.g. congestion charging), regulatory interventions, use of data, and the way transport and land use are considered together.

Further, what we "provide" drives and/or affects use. Providing more transport infrastructure induces demand for it. This forms part of travel demand management, where we influence demand by the type of infrastructure we provide. It is most obvious for encouraging cycling and public transport use, but equally applies for roads.

For example, there are a range of options available to address challenges such as urban congestion:

- building additional roading capacity
- providing additional public transport or walking and cycling options, to reduce demand for road space
- sending price signals.

The land transport system was not designed with the size of complexity of current and future investments in mind. Several aspects of this will need to be considered, but not all are about increasing levels of funding. There are options like congestion charging to manage demands, and officials can also advise you on opportunities for delivery and management of costs.

### Short-term policy priorities

The Ministry believes that there are several short-term priorities for you and your incoming government to consider. The Ministry would like to discuss these with you as soon as possible. These priorities include:

- Finalising and issuing the 2024 Government Policy Statement on Land Transport (GPS) –
  the GPS will give effect to your vision and priorities for investing the National Land Transport
  Fund into the land transport system.
- Enabling congestion pricing on our roads.
- Moving work forward on replacing the current land transport revenue system.
- Improving cost management in the land transport system.
- Setting priorities for the 2<sup>nd</sup> Emissions Reduction Plan (ERP2).
- Ensuring transport's regulatory systems are ready for a sustained period of new transport technologies and business models.

The Ministry looks forward to discussing your objectives and priorities further with you.

# Part Two: Strategic Opportunities and Challenges

## Better investment outcomes

#### Key points

- Investment in transport infrastructure and services can be influenced by the Government
  using the Government Policy Statement (GPS) or through direct Crown investment through
  the Budget process.
- The GPS is the key strategic document that outlines the Government's strategic proprities for land transport and allocates funding from the National Land Transport Fund over the next 10 years.
- The draft GPS has been out for public consultation and a final must be published by 1 July 2024
- The National Land Transport Fund is under significant pressure. Under current settings, the Ministry forecasts \$13.1 billion of National Land Transport Fund revenue over 2024-2027 this is \$5.3 billion below essential expenditure.
- The draft GPS 2024 provides the National Land Transport Fund with an additional \$7.7 billion (to fund essential expenditure and to allow for the first phase of the Strategic Investment Programme) funded through Crown grants, an increase in Fuel Excise Duty/ Road User Charges and new debt. This however only provides a short-term solution over the 2024-2027 period, the Future of the Revenue System work will identify options to efficiently and effectively raise revenues in an acceptable, financially sustainable, and equitable way.
- are also fiscal constraints in Budget 2024, with operating allowances showing very little
  ability to pick up additional transport expenditure. The Minister of Finance has requested that
  Vote Transport develop an annual 2 percent savings proposal across an annual \$761 million
  of eligible expenditure.
- The Ministry will seek to meet with you as soon as possible to discuss your priorities for transport investment as well as next steps for GPS 2024 and Budget 2024.

# The Crown invests in land transport through the National Land Transport Fund and through direct funding

GPS 202 outlines an expected expenditure of \$15.5 billion over 2021/22-2023/24, this money is provided through the National Land Transport Fund which is primarily comprised of hypothecated revenues from Fuel Excise Duties, Road User Charges and includes a \$2 billion Crown loan.

The National Land Transport Fund is managed by Waka Kotahi, and is used to give effect to the GPS through the development of a National Land Transport Programme. Waka Kotahi and its Board, as an independent Crown Entity, has statutory authority over what projects are approved for the National Land Transport Programme.

Separate to the GPS process, the Crown can fund additional transport projects through the annual Budget process. These tend to be larger projects, such as those under the New Zealand Upgrade Programme (e.g. Melling interchange, Ōtaki Bypass), or the City Rail Link. They may have bespoke delivery and governance arrangements depending on the preferences of the Government.

### New Zealand has been spending more on transport

New Zealand has been spending more on transport, both on new infrastructure and maintaining and operating existing networks. New Zealand has also changing what it invests in, with more investment going towards public transport and rail, in part to meet broader social objectives, such as improving access and reducing emissions.

The previous Government committed to an ambitious pipeline of projects, but the funding, scoping and phasing of these projects is still largely to be decided. These projects include Auckland Light Rail, the Strategic Investment Programme (outlined in the draft GPS2024), and the additional Waitematä Harbour Crossing.

The Ministry estimates that the total Investment in land transport over 2024 – 2034 will be \$180 billion.

# GPS 2024 sets the Government's transport policy

The GPS is the key strategic document that outlines the Government's strategic priorities for land transport and allocates funding over the next 10 years. The final GPS 2024 is required to be published by 1 July 2024.

The Ministry has already done a significant amount of work on the GPS, and a draft has been out for consultation.

## GPS 2024 needs to be finalised

### The draft GPS 2024 outlines six strategic priorities

The strategic priorities in the draft GPS reflect the results the Crown aims to achieve from the allocation of funding from the National Land Transport Fund. The six strategic priorities outlined in the draft GPS are:

- Maintaining and operating the system.
- Increasing resilience.
- Reducing emissions.
- Safety.
- Sustainable urban and regional development.
- Integrated freight system.

### And a \$20.8 billion funding package

The development of the draft GPS 2024 outlined a funding gap of \$5.3 billion, between revenue and essential expenditure<sup>3</sup> (once around \$300 million of efficiencies and forecasting adjustments are taken into account).

Essential expenditure includes, forecast expenditure on the ongoing operations and maintenance of the system, in-train capital projects, capital projects that are expected to be approved by 1 July 2024 and debt repayments.

Alongside the \$13.1 billion of National Land Transport Fund funding in 2024-27, the draft GPS 2024 proposes an additional \$7.7 billion funding package to fill the \$5.3 billion funding gap, with a further 2.4 billion of funding to allow for the first phase of the Strategic Investment Programme. The proposed funding package is:

- \$1.3 billion from the proposed Fuel Excise Duty/Road User Charges increases of 12 cents in GPS 2024
- \$2.4 billion from a Crown grant
- \$3.1 billion in Crown loans
- \$500 million from the Climate Emergency Response Fund
- \$300 million in traffic infringement hypothecation.

Without this proposed funding package, it is unlikely that Waka Kotahi would be able to fund the ongoing maintenance and operations of the system, and its existing commitments and debtorepayments. Without the proposed funding package, Waka Kotahi would need to start deferring new project approvals, to avoid incurring costs that fall within the GPS 2024 period and to preserve funds for maintenance and operations.

#### The funding package is a short-term solution

The National Land Transport Fund has been under significant pressure due to several factors including historic underinvestment in maintenance, the increasing frequency of extreme weather events, workforce pressures, inflation, and increased debt funding.

Whilst the \$7.7 billion reduces the pressure over 2024-27, it does not put transport funding onto a sustainable path. The draft GPS 2024 outlines a \$4.8 billion decrease in funding over 2027-30 compared to 2024-27, if no further debt and/or Crown grants were available.

Changes to the land transport system are required to support longer-term sustainability. The Ministry has started to address these needs through work on the Future of the Revenue System. You will receive separate advice about this project. However, any changes you may agree in that project will not be available in time to address the immediate funding challenge in GPS 2024.

The National Land Transport Fund is also used to fund other activities and the consideration process for these other activities is being revised

Under section 9 of the Land Transport Management Act 2003, the Ministers of Transport and Finance can approve the use of land transport revenue to fund certain activities. This includes search and rescue and recreational boating activities, the Waka Kotahi regulatory function, and activities to maintain the integrity of the land transport revenue system.

The Ministry is developing a set of principles to guide the consideration of section 9 funding requests going forward. The proposed principles will be provided to yourself and the Minister of Finance for consideration in the coming months.

### There are fiscal constraints in Budget 2024

Budget 2024 allowances are now constrained and substantially smaller than previous years. At Budget 2023, it was signalled that the operating allowance for Budget 2024 would be set at \$3.5 billion (which is \$1.3 billion less than the Budget 2023 operating allowance). However, several funding decisions have since been agreed by the Government as pre-commitments against Budget 2024 which have reduced the available operating allowance to \$1.3 billion.

It is likely available funding will be insufficient to meet cost pressures and fund new spending proposals. For this reason, the Ministry is investigating opportunities to reprioritise existing funding towards new, higher priority initiatives.

## More broadly New Zealand's economic and fiscal position remains challenging

In response to challenging fiscal circumstances, the previous Government adopted a Fiscal Sustainability and Effectiveness Programme (FSEP), which includes measures to strengthen fiscal discipline in the public service and return the Government accounts to a more sustainable position.

As part of the FSEP, the previous Minister of Finance announced that Vote Transport must develop a permanent 2 percent (\$15.23 million) savings proposal, based on an eligible baseline of \$761 million. The eligible baseline broadly excludes funding in Permanent Legislative Authorities (including the National Land Transport Fund) and regulatory fees and charges. Almost all other Vote Transport operating funding is in scope.

The Ministry will seek to meet with you at the earliest possible convenience to discuss your priorities for transport investment as well next steps for GPS 2024 and Budget 2024.



# A Net-Zero Transport System

#### Key points

- New Zealand has committed to reaching net zero Greenhouse Gas emissions by 2050 and transport is a key emitter. The path to net zero involves reducing transport emissions by 41 percent by 2035.
- The blueprint for achieving this is set out in the first Emissions Reduction Plan (ERP1) which sets out how transport intends to make is contribution to the first emissions budgets established by the Climate Change Commission.
- We are on track to deliver in the first budget period (2022-2025) but not the second (2026-2030) and third (2031-2035) budget periods.
- In the time available, the government will need to pull as hard as it can on all its transport levers, and support the businesses and industry to do the same, to meet the level of ambition it has set for transport.
- Achieving this change also relies heavily on other sectors, including energy where we need
  to accelerate the shift to less emissions intensive fuels, and urban development where we
  depend on changes in land use along transport conidors.
- Planning has started for the second Emissions Reduction Plan (ERP2) for the second emissions budget period 2026-30. ERP2 is due to be published by December 2024.
- In the meantime, if there are actions in ERP1 that do not align with your Government's strategic priorities, the Ministry is able to advise you on how to make changes and on the impacts of doing so.

# The Climate Change Response Act 2002 sets New Zealand's framework for reducing emissions

When New Zealand ratified the Paris Agreement in 2016, the country committed to playing our part in global efforts to limit temperature use to 1.5°C above pre-industrial levels. In 2019, Parliament amended the Climate Change Response Act 2002 (CCRA) setting the target of reaching net zero Greenhouse Gas (GhG) emissions by 2050.

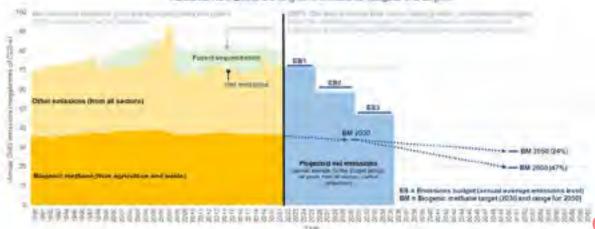
#### The CCRA requires:

- all GHGs, other than biogenic methane, to reach net zero by 2050
- a minimum 10 percent reduction in biogenic methane emissions by 2030 and a 24–47 percent reduction by 2050 compared to 2017 levels.

Th Climate Change Commission has issued its advice on the first three emissions budgets and these have been set and gazetted as follows:

- 2022-2025: 290 Megatons CO2e
- 2026-30: 305 Megatons CO2e
- 2031-2035: 240 Megatons CO2e.

Astearca New Zealand's long term emissions, facilgets, and target



The first Emissions Reduction Plan (ERP1) setting out actions to be taken between 2022 and 2025 to meet the first emissions budget was published in May 2022. According to current modelling, the first emissions budget is finely balanced, but is likely to be met. There is a considerable jump in expected emissions reductions from budget period 1 to 2, and again from budget period 2 to 3. The transport and energy sectors expected to contribute significantly to the next two emissions budgets.

The second emissions reduction plan (ERP2) will set out what actions the Government will take between 2026 and 2030 to meet the second emissions budget. ERP2 is due to be published by December 2024, and will come into effect on 1 January 2026, leaving a year for detailed implementation planning.

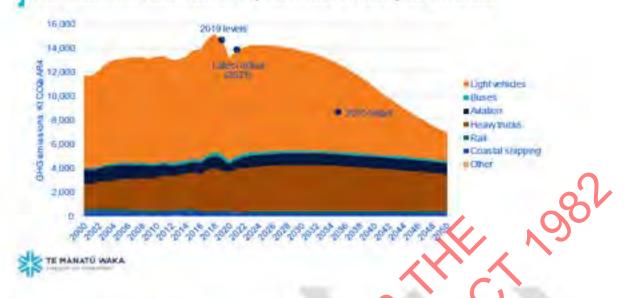
Setting strategic priorities for ERP2 with your Cabinet colleagues and deciding what actions will be included for transport to meet its expected contribution will be some of the biggest strategic decisions you will make as Minister of Transport in the next 12 months. The Ministry will support you with robust, evidence-based advice to inform these decisions.

[For more information about New Zealand's framework for reducing emissions and cross-agency climate response, please see the IEB Climate Change BIM].

# Emissions from the transport sector need to be reduced by 41 percent by 2035

Transport is one of Aotearoa New Zealand's largest sources of greenhouse gas emissions (GHG), producing 39 percent of our domestic CO2 emissions and 17 percent of total GHG emissions. Between 1990 and 2019, transport emissions rose approximately 80 percent, faster than any other sectoral source. The Climate Change Commission identifies transport as a sector with the potential to almost complétely decarbonise in time to reach net zero by 2050. New Zealand's overall emissions reduction success will rely heavily on transport realising this potential.

### The abatement task: current expectations for transport emissions



# The three ways to reduce transport emissions are: Avoid, Shift, Improve

The Climate Change Commission uses an approach known as the Avoid, Shift, Improve' (ASI) framework to identify opportunities to reduce transport emissions. This framework is used by the Intergovernmental Panel on Climate Change to frame its transport analysis. Te Manatū Waka Ministry of Transport and Waka Kotahi New Zealand Transport Agency have also adopted this framework.

Drawing on the ASI framework, the Climate Change Commission recommended three focus areas for reducing transport emissions in its first advice to Government in 2021:

- 1 Reducing the reliance on cars (or light vehicles) and supporting people to walk, cycle and use public transport
- 2 Rapidly adopting electric vehicles (EVs)
- 3 Beginning work now to decarbonise heavy transport and freight.

### ERP1 sets out focus areas and targets

ERP1 adopted the Climate Change Commission's focus areas and set four transport-specific targets. These targets need to be achieved by 2035 to meet the overall target of a 41 percent reduction in transport emissions.

Te Manato Waka are responsible for delivering the transport-specific initiatives, with:

- eighty three initiatives in total across the four targets:
  - Target 1: Reduce total Vehicle Kilometres Travelled (VKT) by the light vehicle fleet by 20 percent by 2035 through improved urban form and providing better travel options, particularly in our largest cities
  - Target 2: Increase zero-emissions vehicles to 30 percent of the light vehicle fleet by 2035

- Target 3: Reduce emissions from freight transport by 35 percent by 2035
- Target 4: Reduce the emissions intensity of transport fuel by 10% by 2035
- over 50 percent of the initiatives are focused on target 1 (reducing light vehicle travel by providing more travel options)
- one third of the initiatives will result in a review, assessment or investigation into transport emissions once complete – which will help us assess our progress and what is needed for further emissions work.

### Planning is underway for ERP2

You will receive package of preliminary advice about the long-term pathways to net zero by 2050 and indicative advice about what these mean for ERP2 in December, along with your Ministerial colleagues in other climate portfolios. This advice is likely to seek your direction on some key strategic priorities, risks, benefits sought, and potential trade-offs, to inform the development of detailed options for inclusion in ERP2. The Ministry will provide you with additional transport-specific advice to supplement this interagency advice.

# We should move from a focus on VKT to increased travel choices and reduced growth in congestion

Officials consider that there are opportunities to improve on the targets set in ERP 1. In particular, targeting a reduction in VKT reduction has drawn attention away from the benefits that can be achieved such as reducing congestion and giving people a wider range of travel choices. We are considering whether this target could be reframed to a goal direducing congestion growth in our biggest cities.

To achieve this, improving urban form, offering better transport options and using other regulatory levers all will play a part. Our larger cities are the most logical place to deliver these changes.

# ERP2 will need to focus on improving uptake of EVs

Overall, two-thirds of transport emissions come from the light vehicle fleet (cars, vans and utility vehicles that weigh up to 3.5 tonnes Policies such as the Clean Car Discount have resulted in a much higher uptake of EVs than modelled for ERP1. Even so, current EV uptake is not at the pace necessary to meet the 30 percent target by 2035.

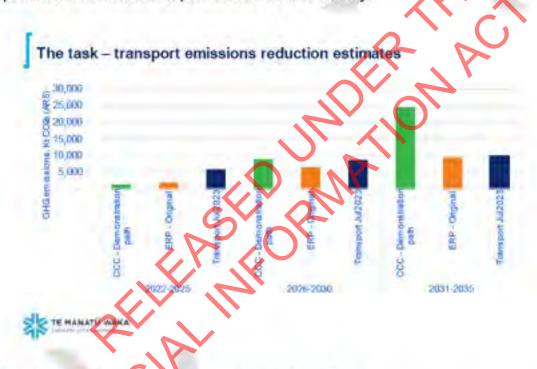
Rapidly accelerating the rollout of EV charging infrastructure will also be critical to ensure that lack of charging does not become a barrier to greater uptake. With New Zealand's light vehicle fleet numbering close 4 million vehicles, we would need to see around 1.5 million low or zero emissions vehicles on our roads by 2035. Currently, our zero emissions light vehicle fleet is at about 60,000 vehicles. To reach this goal it will be vital for ERP 2 to focus on the uptake of electric vehicles as a signature policy.

# Reducing emissions from freight and heavy transport is crucial

Heavy transport, mostly trucks used for freight, is responsible for almost a quarter of total transport emissions. In the short term, the freight sector will need to improve vehicle fuel efficiency and accelerate the uptake of low/zero-emissions trucks, while the wider transport sector will need to decarbonise other heavy vehicles such as buses. While making up only a small proportion of transport emissions, decarbonising the bus fleet will become increasingly important as more people are encouraged to travel by bus. In the longer term, reducing emissions from freight and heavy transport may also require significant modal shift from road to both rail and coastal. Decarbonisation of the freight and supply chain system is one of the objectives being advanced through the Aotearoa Freight and Supply Chain Strategy which has been developed in close consultation with the sector.

### Reducing aviation and maritime emissions is also important

Domestic aviation and maritime emissions only make up 9 percent of CO2 emissions. Nevertheless, our international obligations will drive domestic emissions reductions in these sectors as New Zealand joins in global efforts to reduce emissions from international aviation and shipping. For example, the International Maritime Organisation (IMO) recently adopted a strategy for the reduction of GhG emissions from shipping that sets targets, timeframes, and measures consistent with the 1.5 degree goal of the Paris Agreement. New Zealand is a member state and party to this agreement. Reducing our international aviation and maritime emissions will also be important for New Zealand's long-term economic viability given our geographical location and the importance of international export markets to our economy.



# Aligning ERP1 with your strategic objectives

There may be actions within ERP1 that do not align with your Government's strategic priorities, or there may be actions that have been discontinued that you wish to reinstate. The Ministry can advise you on opportunities to align the remaining delivery of ERP1 actions with your strategic priorities, which could include discontinuing, adjusting, or reinstating some actions.

The Ministry does not advise wholesale replacement for ERP1 for the remaining 18 months of its duration. The time frames to develop ERP2 are challenging, and developing a good second ERP is the best opportunity to ensure that the climate response in transport is delivers against your strategic priorities and keeps the transport sector on track to deliver its expected contribution.

# Resilient, Sustainable and Collaborative Supply Chains

#### Key points

- World events like the COVID-19 pandemic, increasing extreme weather events, and growing geostrategic friction in the Asia-Pacific, have emphasised the importance of supply chains to New Zealand's economy.
- The Ministry has worked with private sector stakeholders, local government, and iwi to identify vulnerabilities, and to develop solutions to build resilience and productivity in the system. This culminated in the launch of New Zealand's first Freight and Supply Chain Strategy.
- The Ministry expects our supply chains will face more frequent and severe disruptions in
  future. To meet these challenges, government and the supply chain sector will need to
  collaborate more closely than before, so decisions support future supply chains that are zero
  emission, resilient, productive, efficient, safe, and sustainable.
- The Ministry is now working on implementing the strategy and has identified actions under four priority areas for government to focus on over the next 12 months in collaboration with stakeholders. These focus areas are: ports and the connections to their communities, road freight decarbonisation, data sharing and interoperability, and international engagement.
- The strategy commits to the launch of a longer term action plan in 2024. This will be an
  opportunity for you to set your priorities for implementing the strategy.

# The freight and supply chain system underwins New Zealand's economy

The freight and supply chain system moves goods from producers to those who need them, at home and abroad. An efficient supply chain system is essential for our economy and is the bedrock for our export earnings. In 2017/2018, trucks, trains, ships, and airplanes moved about 280 million tonnes of freight around New Zealand

Our freight transport system is largely run and owned by the private sector. Freight operators, port companies, our exporters and importers, shipping lines, and many other kinds of freight businesses hold important levers in this system. The sector is dynamic and agile – as shown by its adaptability in response to COVID 19 and recent weather events.

A highly productive freight sector improves New Zealand's ability to get the goods New Zealand needs and deliver them to markets quickly and cost effectively. This helps New Zealand's businesses become more globally competitive by reducing the costs that come with being far away from the world's main markets and production centres.

# Our supply chains face substantial changes

Even before the COVID 19 pandemic, the supply chain system was facing substantial changes, including:

 Climate change is threatening our infrastructure and freight networks. Much of our transport infrastructure is on the coast and is at risk from sea level rise, coastal erosion, and increasing extreme weather events.

- The world's geopolitics are getting more complex. Competition for strategic influence in the Asia Pacific creates risk in our supply chains.
- New technologies are changing how freight moves in New Zealand. The country needs to position itself for new opportunities including the transition to zero emission trucks.
- Our population is growing and concentrating in our cities. Freight competes with other users for space and access.

### Government and industry have distinct roles in the supply chain

The supply chain system is complex and meaningful change requires coordination between many different groups.

The government's role is to make sure the whole freight system runs well and benefits New Zealand and its people. Specifically, this means that the Government:

- supports commerce by setting rules for the market, investing in public infrastructure, and providing essential services like rail and postal services, that may not otherwise be commercially viable
- regulates for things like protecting the environment and the health and safety of workers, vehicles and other transport users
- helps businesses connect with global markets and resources by building international relationships and agreements
- coordinates the different parts of the system, especially during large scale emergencies like the COVID-19 pandemic
- takes a system-wide view, monitoring how well the system is working, and planning and investing in the system's future

# Industry insights and collaboration underpins our work on supply chain issues

The Ministry carried out extensive engagement with supply chain stakeholders to inform the development of the Agreeroa New Zealand Freight and Supply Chain Strategy. Industry stakeholders especially called for:

- better signalling of government's long-term plans for supply chain infrastructure
- better consenting and spatial planning that protects key logistic routes and nodes
- a review of the current port system
- improved data collection and availability
- improved ability to transfer across transport modes
- building the workforce for the supply chain of the future

### Immediate priorities for the next three years have been identified

The Strategy offers a blueprint for the future supply chain, but it is crucial that this thinking is translated into action. Initial priorities for the next three years were chosen by applying a range of criteria, including the urgency or timeliness of the issue, estimated impact of action, availability of clear options and evidence, government and stakeholder interest in action, and whether the issue

would be best addressed through a cross-system approach. The initial actions will be delivered under four work programmes:

- Ports and the connections to their communities the strategy highlights the importance of ports as gateways for our economic connectivity to the world. To date government has not had a clear policy on the future of the port network and government's role in addressing the challenges outlined in the strategy. The strategy commits to further research and analysis on port issues.
  - There is strong interest from the freight sector to see coordinated action to improve the productivity and resilience of our port network and provide certainty on port expansion or relocation issues. There is an opportunity for government to clarify its position, including on the potential relocation of the Port of Auckland, how the capacity constraints on upper-North-Island port capacity will be addressed, and how freight access into ports might be improved.
- Road freight decarbonisation there is existing work to transition to zero emissions heavy vehicles (ZEHVs). However, it will take time to turn over the fleet, and the decision not to progress the Sustainable Biofuels Obligation has left a significant challenge for how the Government will meet its Emissions Budgets. Finding alternative options will be important in meeting the Government's target of reducing freight emissions by 35 percent by 2035. Actions are proposed to:
  - introduce a Clean Heavy Vehicle Grant scheme to support operators to purchase a zero emissions truck
  - extend the heavy electric vehicle road user charges exemption to 2030
  - undertake a review of the regulatory system to better enable zero emissions heavy vehicles to operate on our roads
- 3 Freight data this project will improve freight spatial data to help target investment, overcome disruptions through greater visibility and improve the day-to-day operations of freight companies, including during extreme weather events. This will involve identifying different stakeholders' data needs, investment in data analytics and mutual data sharing with the sector.
- 4 International connections this work will focus on how New Zealand can support green shipping corridors for zero emission shipping and work with our international partners to prepare for potential future disruption to freight networks. As the world becomes less predictable, the Government needs access to better information about our international freight connections to respond more effectively to disruptions.

### Road freight decarbonisation is critical if New Zealand is to meet its emissions targets

Decarbonising our road freight fleet presents the biggest opportunity for reducing emissions in the freight sector, as it delivers 93 percent of freight volumes and contributes around a quarter of total transport emissions. Some models of zero emissions trucks are already commercially available and operating in New Zealand but the transition will take time as existing diesel trucks will have a long lifetime in our fleet.

This transition to zero emission trucks will be driven by the market, but modelling indicates it will happen at a pace too slow to meet our emissions reduction targets. Government's objective is therefore to make this transition happen faster, and to ensure that barriers to uptake of zero emissions trucks are removed well ahead of demand to give certainty to the market. Government policies will need to give businesses the support, incentives, and long-term signals they need to invest in a zero-emissions and resilient future.

The strategy includes some initial actions to remove regulatory barriers to the use of zero emissions trucks and hasten the total cost of operating of these vehicles reaching parity with existing diesel heavy vehicles. If the freight sector is to achieve its target of reducing freight emissions by 35 percent by 2035, these will need to be supplemented by further actions during your term.

### The development of the Freight and Supply Chain Action Plan 2024 is your opportunity to set priorities

The strategy signalled that an Action Plan would be released in 2024. This plan provides you with an opportunity to set your priorities for the implementation of the strategy. This might include:

- further work on ports including enabling port growth and expansion (e.g. through improved consenting processes), and enabling port productivity through better utilisation of and investment in landside infrastructure.
- supporting maritime sector development including initiatives to build the capacity and capability of the coastal shipping workforce
- continuing work to remove regulatory barriers to ZEHVs and consider other approaches to reducing heavy vehicle emissions and bring forward total cost of operation parity with diesel heavy trucks.
- identifying and prioritising our critical national freight corndors and infrastructure, with a focus
  on informing long-term investment priorities enhancing freight access and productivity, and
  informing regional spatial strategies and implementation plans.
- establishing green shipping corridors with other countries and supporting the development of associated infrastructure.

## Developing thriving cities and regions

### Key points:

- Transport planning and funding needs to be closely integrated with housing, land use planning, and other infrastructure to create well-functioning cities and regions.
- You will need to collaborate with Ministers in other portfolios related to housing, urban development, and infrastructure to support joined-up approaches.
- Spatial planning is a tool that supports integration, by providing a long-term (30 years+), high-level, strategic direction for how cities and regions need to grow to achieve national and regional priorities. The Spatial Planning Act 2023 will require you to lead the development of a more strategic, long-term view of national priorities for transport.
- City and regional deals provide a potential mechanism for addressing funding issues. Further
  work would be needed with other Ministers to determine their viability and potential
  effectiveness in a New Zealand context.

### Transport needs to be well-integrated with other sectors

While you are responsible for the Transport portfolio, the transport sector needs to be joined-up with other sectors to create thriving cities and regions. Transport planning, funding, and delivery need to be aligned with land use planning, housing, other infrastructure, and broader funding and financing models.

This need for integration is clearest in our largest cities, which are facing major challenges. These include the need to build more housing, improve economic productivity, reduce greenhouse gas emissions, and to become more resilient to natural hazards.

One way to address these challenges is to deliver more medium and high-density, mixed-use developments in appropriate places where people have a good range of transport options. Making a wider range of travel options available will allow more people to live and work in our cities, and to choose from a greater range of housing and transport options, without increasing traffic, congestion, and emissions. New developments in greenfield locations also need to be well-designed and well-connected with multi-modal transport networks. The transport, housing, and planning systems need to be well-aligned to achieve these outcomes.

Previous governments established cross-portfolio Ministerial forums for urban development and infrastructure to support joined-up approaches to policy development and delivery. For example, increasing the supply of public transport is only effective if it is accompanied by high quality developments. Ongoing cross-portfolio collaboration is important to deliver positive social, economic and environmental benefits. The Ministry will brief you on opportunities to continue this collaborative approach with your colleagues.

## Spatial planning is an important tool to support better integration

Spatial planning provides long-term (30 years+), high-level, strategic direction for how cities and regions need to grow to achieve national and regional priorities.

There is currently an ad-hoc approach to spatial planning in New Zealand. Only Auckland is legally required to deliver a regional spatial plan (the Auckland Plan). Four other high-growth cities have

developed spatial plans, through Urban Growth Partnerships set up by previous Governments. These spatial plans are at sub-regional levels and focus on high-growth areas in their regions.

The recently completed resource management reforms have established the Spatial Planning Act 2023. This represents a step change in spatial planning. It requires all regions to develop a regional spatial plan, in partnership between councils, central government, and mana whenua.

If you wish to change the new framework, officials' advice is that the underlying objectives of them are important. Integrated planning with other sectors like housing and water is critical to delivering long-term plans that retain support and can serve as a foundation for communities to develop well.

Any new approach like this will enable the Government to play a more active and consistent role in how regions grow and change over the long-term. It will also require you to lead the development of a more strategic, long-term view of national priorities for transport. These national transport priorities will need to be integrated, alongside other priorities, with the regional spatial plans.

## City and regional deals provide a potential mechanism to support implementation

The shift to spatial planning raises questions about funding and financing major infrastructure projects that feature in these plans. For example, all the existing spatial plans developed through the Urban Growth Partnerships include rapid transit services and high-frequency public transport networks to provide the backbone for future large-scale urban developments. There is currently no funding pathway to deliver most of these projects.

Given the constrained funding environment, and the substantial costs of delivering large-scale transport projects, it is important to explore innovative new funding and financing models to deliver major projects. It is also important to make better use of existing transport networks (e.g. by using transport pricing tools, and by encouraging more efficient use of road space).

'City deals' and 'regional deals' provide a potential mechanism for addressing funding issues. These deals are an approach that has been used in other countries, including the United Kingdom, Canada, and Australia to support integrated programme delivery. They involve long-term partnerships between local and central government, with packages of funding and decision-making powers.

The Ministry can provide you with further information on city and regional deals if you request it. As these deals require the input of different portfolios, substantial work would be needed with other Ministers to determine their viability and potential effectiveness in a New Zealand context.

## Strong Auckland, Strong New Zealand

### Key points

- While there have been successes in both roading and public transport projects, Auckland's transport challenges remain large and complex.
- Sustained and integrated effort between Government and Auckland Council is required.
   Since 2016 the Auckland Transport Alignment Project has enabled joint work. Over the last year, an integrated long term transport plan (Tämaki Makaurau Transport Plan) has been progressed.
- Encouraging people onto public transport by providing fast, reliable and frequent services is a key focus for Auckland. Investment is only part of the story, demand-management measures such as congestion charging and integrated transport and land-use planning are also important.
- There are pressing choices to be made about investments in Auckland over the 10 and 30year horizons. Affordability and the ability to deliver need attention as a programme, encompassing investments to run and maintain the current network, expand public transport services and progress major projects, is completed.
- Your direction on completing work on the Tamaki Makaurau Transport Plan and on major projects will be priorities for the Auckland work.

### Tämaki Makaurau is critical to achieving New Zealand's goals

Tāmaki Makaurau is home to one third of New Zealand's population, contributes 38 percent of the nations GDP and is projected to account for around 60 percent of New Zealand's population growth between 2013 and 2043.

Over recent years Auckland has accounted for 30 percent of the National Land Transport Fund spend and increasingly Crown funding is required to complement the National Land Transport Fund and Auckland Council funding

An efficient and effective transport system in Auckland is essential to Government achieving national goals of increasing productivity and reducing emissions. Auckland is expected to deliver 48 percent of the national reduction in transport emissions.

## Auckland continues to need a large investment in its transport networks

Auckland requires transport investment in roads, public transport and active transport. Along with investment, interventions such as congestion pricing and better integration of transport and land-use are required to achieve outcomes and manage affordability. Congestion pricing in Auckland is unlikely to raise significant revenue but the value is in improved productivity and potential deferment of maintenance and capital spend on roading.

The strategic roading network in Auckland is almost complete. Penlink is underway and a preferred option for Mill Road as part of the package of investment in south Auckland needs to be determined. More roading capacity will mean that public transport in Auckland will need to contribute more to emissions reduction.

# Rapid public transport is integral to improving Tāmaki Makaurau's public transport network

While there have been some setbacks with the rail rebuild and bus driver shortages, public transport patronage has increased significantly in Auckland (was at 100 million boardings at the end of 2019, up from X in X). There are gains to be made with increasing frequency and reliability on the current bus network as well as by extending coverage, particularly to some of the lower income areas where access to public transport is poor.

Moving people in a fast, frequent and reliable manner by rapid transit is integral to Auckland's public transport network. Successes to date have been the northern busway and passenger rail, post electrification. The City Rail Link and Eastern busway are well into construction and business case work is underway for major projects including on the northwest and city centre to Mangere corridors as well as a 30-year plan for rail investment in Auckland. Planning for the Waitemata Harbour connections is also advancing.

Auckland's future public transport will have to be much larger than it is today. Within the limited funding and delivery capacity that is available, you will want to consider striking the right balance between high volume and high cost options such as rapid public transit solutions, and lower volume but faster to deliver options such as busways. Officials' advice is that these should be considered in the context of the type of overall network that should be available in future, and in turn the nature and scale of development that is desired for Auckland.

# Investment choices will be constrained by funding availability and capacity availability

There are key choices to be made on these major projects. When combined with what is needed to run and maintain the existing network and other investments, such as in public transport services, the ability to deliver from both a funding and a construction capacity perspective looks unfeasible. Work on staging and sequencing of investments over the longer-term is a priority.

This can be achieved by continuing to work through the Auckland Transport Alignment Project (ATAP). Since around 2017, ATAP has been New Zealand's most mature 'city deal'. The Minister of Transport and Mayor of Auckland are political sponsors of ATAP and a Governance Group of Chief Executives provides oversight and governance.

## The Tamaki Makauran Transport Plan needs to be completed

The Tamaki Makaurau Transport Plan, a long-term integrated plan has been the key piece of work progressed under the ATAP structure over recent months. It is currently paused and it will be important for you to meet with the Mayor of Auckland to commission the completion of the Plan. Your priorities will guide the next phase of work and the sequencing and phasing work noted above is key to the Plan's completion.

0(2)(0)(1)

## Several major Auckland transport projects are underway

### City Rail Link (CRL)

Most CRL construction work is now complete, and the focus is on integrating with the Auckland network and testing readiness for day one operations. The Ministry monitors the work of the delivery company, City Rail Link Company (CRLL) and advises on broader investments needed to bring the benefits of the project. CRL is funded 50:50 by the Crown and Auckland Council. You are a joint sponsor of the work along with the Minister of Finance and Mayor Brown.

#### Auckland Light Rail (ALR)

ALR is an integrated urban and transport project along the city centre to Mangere corridor.

Auckland Light Rail Limited (ALRL) is working on a detailed business case. The Ministry monitors the work of the company, provides policy advice on the project and supports Sponsors. You chair the Sponsors group and it will be a priority to provide direction on the on the project.

#### Waitematā Harbour Connections

Waka Kotahi is developing an indicative business case on a recommended option including roading, rapid transit and cycling connections. This is scheduled to be considered by the Waka Kotahi Board in early 2024. The Ministry's feedback to date has been that significant work is required before moving to a decision-making process, including on lower-cost options. You have a role in setting direction for the work and ultimately deciding whether to take the project forward through Cabinet.

#### Northwest

The Northwest corridor has consistently been identified as a high-priority rapid transit corridor for Auckland. Interim improvements are underway including new bus stops, interchange enhancements, and extended bus lanes on SH16. Waka Kotahi is commencing a detailed business case on a permanent rapid transit system. This corridor is a priority for the Mayor of Auckland and the Ministry expects it to be raised as part of your discussions on the Tāmaki Makaurau Transport Plan

The Ministry will provide you with more detailed advice on these important projects in the near future.

# A resilient and future-proofed transport system

## The transport system connects New Zealanders but is vulnerable to shocks and disruptions

New Zealand's transport system enables New Zealanders to get to their places of work and study, whanau and communities to connect, and businesses to move goods and services. Transport corridors often host other critical infrastructure such as telecommunications, power, fibreoptic, and water networks. This makes the transport system and transport networks a critical enabler of the socio-economic wellbeing and prosperity of New Zealand.

The transport system is vulnerable to shocks and disruptive events (either natural or human). New Zealand's 'tyranny of topography' has led to transport corridors being constructed in steep valleys, alongside coastlines, and across rivers and floodplains. Many communities are located in remote areas or have limited routes connecting them to the rest of New Zealand. As the transport system is a connector and facilitator for other networks, this creates increased vulnerabilities across multiple systems and for communities and business.

This increases the risk that transport networks and the communities they service face from natural hazards, such as severe weather events (causing slips, flooding, or storm surges), earthquakes, or tsunamis. These natural events can cause significant shocks to transport networks at the national, regional, or local levels. Even relatively minor shocks at the local level can have disproportionate impacts on the network and result in communities becoming isolated.

Transport operations can also be disrupted by other vulnerabilities both within and outside the transport system. Parts of the transport system rely on highly trained workforces which are susceptible to staff shortages, for example maritime plots, air traffic controllers, ground handlers, airport rescue fire services, and bus and train drivers. The aviation system relies on imported jet fuel, which if it fails quality testing on arrival into the country results in disruptions to aviation operations.

## A lack of resilience drives extra costs into the transport system

A transport system that is not resilient increases the costs and time to reinstate critical transport connectivity to affected communities. Shocks from natural disasters such as the Christchurch and Kaikoura earthquakes, alongside the increasing frequency and severity of weather events caused by climate change, result in significant social and economic costs to restore transport networks (refer to the case study on the 2023 North Island Weather Events).

Likewise, New Zealand's international aviation connectivity has been impacted by the unavailability of RNZAF Base Ohakea on a 24/7 basis as an alternate runway for international flights to New Zealand using wide-body aircraft. When Ohakea is unavailable airlines nominate Christchurch as the alternate airport, which requires aircraft to carry extra fuel. This has direct economic costs on airlines as they must carry fewer passengers or less cargo to compensate for the extra fuel load. As the total aircraft weight has been increased, there are extra environmental costs from the corresponding increase in carbon emissions from these flights.

# The transport system needs to be future proofed to be resilient to all risks

New Zealand's transport system needs to be resilient to withstand shocks and disruptive events. Being resilient is the ability to anticipate and manage disruptive events, minimise their impacts, and respond and recover effectively. In essence, resilience is about developing a wide zone of tolerance to external impacts and remain effective across a range of future conditions<sup>4</sup>. The methodology New Zealand has adopted to build resilience and manage risks is the 4R's Framework of Reduction, Readiness, Response, and Recovery. This framework is applied across the transport system.

The National Adaptation Plan is also applied to transport system resilience, by considering the full range of adaptation options for the transport network: avoiding risk; protecting assets from risk; accommodating risk; or retreating from risk.

Natural and environmental hazards are usually forefront when considering risk exposure and system resilience. While these present significant risks, they are not the only hazards to the transport system. The National Risk Register<sup>5</sup> identifies several categories of hazards that present nationally significant risks; natural and environmental hazards; biological and human health hazards; technological hazards; economic crises; and malicious threats.

Security against malicious threats and actions is often considered separately and as an isolated topic. However, security is an inherent and essential requirement of a resilient transport system.

It is more effective to build resilience against all these risks, than it is to recover from their adverse and far-reaching consequences

A stronger and more resilient transport system is essential to New Zealand's continued socioeconomic wellbeing and prosperity. The NIWE case study, rebuilds following recent earthquakes, and ongoing disruptions to aviation operations and state highway network all clearly highlight the need to build better resilience into the transport system. This provides a twofold benefit by enabling faster restoration of transport networks and operations, and with less cost to the Crown.

## Work to enhance the resilience of the transport system is underway

The Ministry uses its leadership and system stewardship role across strategic policy and operational work to build transport system resilience into wider system reforms and work programmes. The Ministry works to ensure a broader 'New Zealand Inc' perspective is applied to managing transport system risks and in building better transport system resilience. This is achieved by proactively engaging and ensuring the transport system is integrated in cross-government and cross-system activities.

#### This work includes:

- Involvement in climate change work programmes, including the Resource Management System Reforms, National Adaptation Plan, Emissions Reduction Plan, and membership of the Climate Change Interdepartmental Executive Board.
- Involvement in the Emergency Management System reforms, including emergency and catastrophic planning, and the current emergency management and the DPMC-led Critical National Infrastructure work programme.

NEMA (2019), National Disaster Resilience Strategy

DPMC (2022) New Zealand's Nationally Significant Risks

- Connecting the transport system into operational readiness, response, and recovery activity through its role as Chair of the interagency Transport Response Team, which is the Sector Coordinating Entity for the transport system in an emergency.
- Involvement in the National Security System reforms, and membership of the Counter-Terrorism Coordination Committee, Major Events Security Committee, and Maritime Security Oversight Committee.

## As the Minister for Transport, you can use your levers to enhance transport system resilience

You can use the levers available to you to promote and enhance resilience across the transport system. These levers include investment and revenue; economic and educational tools; regulation; influencing the international environment; and monitoring and oversight. You can also advocate for the interests of the transport system with your colleagues in instances where their work has the potential to impact the transport system.

There are several areas in which your imminent direction will be required including:

- Maintaining relationships across the sectors identified so the transport sector's involvement in this critical work continues and the Ministry can advocate for the transport sector's interests.
- Engaging with your Ministerial colleagues on Jegislative programmes which cut across the transport system, such as the Emergency Management reforms, Climate Adaptation Bill, and Resource Management reforms.
- Engaging with the Minister of Defence and Minister for Energy and Resources about the resilience of RNZAF Base Ohakea and the jet fuel supply chain respectively.
- Making decisions on further investments via the National Resilience Plan or legislation (Orders in Council) for the Cyclone recovery work programme.

#### Case Study: 2023 North Island Weather Events

During January and February 2023, New Zealand experienced several severe weather events - Cyclone Hale, heavy rainfall in the Northland, Auckland, Waikato, and Bay of Plenty Regions, and Cyclone Gabrielle (the North Island Weather Events (NIWE)).

Ongoing impacts to transport networks caused by the NIWE include:

- The closure of SH25A due to a significant under slip at Taparahi, which will be remediated by the construction of a bridge. This route is a key transport link in the Coromandel and is expected to remain closed until early 2024.
- Significant damage to the rail network. The North Auckland Line from Swanson to Whangarei
  is expected to remain closed until the end of the year; assessments are still underway to
  determine the timeframe, costs, and material requirements to reopen the rail line from Napier
  to Wairoa.

Following the NIWE, over \$1.6 billion has been allocated to support the initial response and recovery of transport networks. This is expected to result in all State Highways impacted by the NIWE to be reinstated to their previous levels of service. The funding does not cover all expected costs of reinstating local roads; work is underway with affected Councils to develop a clearer picture of the quantum of these costs.

## A new way of paying for land transport

### **Key points**

- The current land transport revenue system has served New Zealand well for the last twenty
  years. However, over the next decade, improvements in vehicle fuel efficiency and the shift
  to alterative fuels mean that Fuel Excise Duty will need to be replaced.
- In addition, the scope of the National Land Transport Fund has broadened to enable
  investment in providing a full range of modal choices, such as public transport and walking
  and cycling, which also reduce demand for driving. This is placing pressure on our narrow
  sources of revenue that is based on recovering revenue mostly from road users and from
  property owners and placing this revenue in the hypothecated National Land Transport Fund.
- Change is necessary. But you have choices around the design and implementation of these changes to support the delivery of your transport objectives.
- It is important that the long-term change is managed carefully, to ensure wide public support and buy-in. However, there are a range of options that can be used to relieve immediate pressures on the National Land Transport Fund, including congestion charging, valuecapture, tolling, and PPPs.
- The Ministry has been working on the Future of Revenue Project that is preparing options for a revised future land transport revenue system. The Ministry is well placed to support your immediate and long-term priorities for the revenue system.

### Ensuring a sustainable land transport revenue system

There are established tools for funding the land transport system. Some of those tools, like the distance and weight-based Road User Charges system for diesel and heavy vehicles, are still world leading (e.g. the Road User Charges system allows electric vehicles to be charged for road use as they come into the fleet once the current exemption expires early next year). Fuel Excise Duty is an extremely cost-effective and efficient method for collecting revenue from petrol vehicles.

However, there are developing issues around inequities and inconsistencies between road users, the charging of externalities and the long-term sustainability of Fuel Excise Duty (as vehicles become more efficient or there is widespread mode shift from private cars).

While overall revenue is not expected to decline until XX, the demands on the transport system and its management have grown significantly in recent years. This is constraining our ability to pay for the range of travel choices that modern transport systems increasingly provide, and to provide price signals that could influence demand.

The transport system includes investment that covers a wider range of infrastructure and services than it previously has. As investment priorities are subject to change, there are flow on revenue impacts. To meet emissions reductions goals, while ensuring economic growth and social connection are maintained, a significant lift of investment in areas like public transport (that tends to require subsidies rather than being a generator of revenue) and EV infrastructure, is needed, alongside continuing to invest in the roading network and keeping existing networks maintained and operating. Required investments include so-called "mega" or transformational projects that have wide benefits, and where the project cost needs to be spread out using debt.

Over the next ten years, there is an immediate revenue gap of over \$150 billion between available revenue and the investments currently being considered by the Government. One-off revenue and debt initiatives totalling \$6.3 billion have been developed to manage this issue for the next three years through the Government Policy Statement for Land Transport. However, debt repayments exacerbate the problem in the medium term and forecast revenue from 2027 will not be sufficient to meet even the essential expenditure requirements (maintenance, operations, and Public Transport subsidies), much less new investments.

### You have a range of choices available

Meeting the cost of providing, operating and maintaining the transport system that New Zealand aspires to affects every New Zealander and business, and it is important that the system is transparent and does not impose undue burdens on specific user groups.

As Minister, you have choices about the design of the future revenue system for land transport, both to ensure the sustainability of the system over the long term, while also addressing immediate revenue needs. These choices include, for example:

- setting the appropriate balance between revenue from road users, rate payers, tax payers and other beneficiaries
- shifting to distance-based charging for all vehicles
- the use of value-capture tools to recover the costs of transport improvements from those that benefit
- progressing congestion charging
- using debt financing arrangements, such as PPPs, to accelerate the delivery of infrastructure projects.

#### [Insert graphic we that illustrates the current shares of revenue]

The Ministry has already been working on creating a sustainable land transport revenue system that is durable for the next 20 to 30 years. The future land transport revenue system project (FoRS) is setting up a system with a reasonably predictable and stable architecture that supports adaptive implementation over the long-term. The revised system will need to be developed and implemented carefully. There is considerable inertia in the system given the large numbers of people and vehicles covered by it, and the challenges of gaining public acceptance for a new charging system. The consequences of choosing the wrong solution, or implementing a good solution poorly, would be significant.

The Ministry will provide a more detailed briefing on seeking your direction on the next steps for the Future of the Revenue System project.

Setting up the architecture and putting the tools in place then allows you, as Minister and the Government, to turn the dials on the land transport revenue tools up and down as needed so that sufficient revenue can be collected to meet reasonable investment needs.

### There are options for the shorter-term

#### Value capture tools

Value capture<sup>6</sup> can play an increasing role in the immediate future to increase transport revenue. There are a range of levy<sup>7</sup> and uplift-based<sup>8</sup> methods available to both central and local government. In general, these are under utilised in New Zealand compared to other countries.

Work undertaken in the Auckland Light Rail and Let's Get Wellington Moving programmes has highlighted the potential for value capture to fund infrastructure but also the operational complexities of implementing such a mechanism. A key choice for Ministers will be how and when to implement value capture, and if the current suite of tools give government the powers it needs.

Government has also been actively developing its road pricing and revenue tools that can be used to alleviate some of the revenue pressures on the National Land Transport Fund.

### Congestion charging framework

Road congestion is regularly cited as one of the key problems in our metropolitan transport systems and population growth will only make it worse. Arterial routes in the main centres can 'grind to a halt' by the volume of traffic at peak times and this comes at a significant economic and social cost.

A congestion charging scheme, which sets a higher cost for travelling at peak times, can encourage some users to change the time, route, or way that they travel. It has been successfully implemented to reduce congestion in cities around the world, for example London and Singapore. Key findings from an international scan show that congestion charging schemes failed in overseas jurisdictions when there were low levels of public acceptability. This is in part due to the public's concerns about equity and a perception that congestion charging is only in place to raise revenue.

Te Manatü Waka Ministry of Transport is aware there is interest from several of the large metro councils in congestion charging, both to reduce congestion by managing traffic and potentially raise revenue for transport projects, and the Ministry expects them to seek your support, as Minister, in introducing enabling legislation.

#### Tolling

As Minister, you are also responsible for the assessment and progression of tolling proposals under the current Land Transport Management Act framework.

The current tolling settings are relatively permissive but New Zealand's low population density, and the 'new road' criteria limits the extent to which the tolling of individual projects is viable, but tolling is being rolled out where a case can be made. However, you may wish to consider options for introducing new tolling approaches.

<sup>\*</sup> Here we are defining Value capture as the recovering or 'capturing' of an amount of the incremental benefit that landowners (either residential and or commercial) receive from investments in public infrastructure (and the resulting urban development and amenity), usually reflected in higher property (land and building) values.

i.e., a one-off charge based on property value increases due to the infrastructure:

i.e., a proportion of any capital value uplift is taxed

For example, Waka Kotahi has been working with Tauranga City and Eastern Bay of Plenty on a proof-of-concept study for variable road pricing. This involves placing a charge on people to drive on certain parts of the network, with expected outcomes including reduced congestion, reduced emissions and additional revenue to invest in the transport network. Next steps include communication with the public and more detailed investigations. Variable tolling is not permitted under current legislation.

It is important to consider tolling options alongside other arrangements, such as congestion charges at a network level. In the longer term, shifting to a distance-based system will provide greater scope to implement variable charging across the network that could be used to manage demand more effectively.

#### The Government can also make greater use of private capital

You have options available for involving private capital in the delivery of transport infrastructure and services.

In the past, Public Private Partnerships (PPPs) have been used with varying degree of success but have delivered some important lessons. There are two roads that have been delivered under the PPP model; Transmission Gully and Pühoi to Warkworth. <sup>10</sup> Compared to other types of PPPs, roading projects are riskier and more complex, largely due to ground and environmental factors, including weather and storm damage. Both Transmission Gully and Pühoi to Warkworth made significant insurance claims, including force majeure claims due to Covid-19.

The ability for PPP consortia to insure against risk is critical for the success of the model. How this is managed, when procurement processes are heavily weighted towards a low price, determines the degree to which PPPs are used for roading projects in the future.

If implemented well, there is potential for PRPs to improve services and close the infrastructure gap. Using private finance means that more projects can be built sooner than through the conventional "pay as you go" public sector procurement. However, the current model spreads out the costs of these projects over a longer period, which must be managed as a first call against the National Land Transport Fund. Alternatively, Government could consider changing the contracting model for roading PPPs to transfer more of the risk to the operator (e.g., through demand-based tolling arrangements).

You can also choose to involve private equity in the delivery of transport infrastructure. Under this arrangement, the investor will take an ownership stake in an asset and is likely to seek greater control over design, construction and operation. However, they may also be prepared to take on a wider range of risks. Investors such as ACC and the NZ Super Fund have shown an interest in these arrangements which may be a good way of approaching wider packages of development in cities. Equity-based arrangements would challenge the transport system's existing ways of operating, and will require a change in approach to planning, funding and earlier and more open engagement between Crown agencies and private sector investors.

## Safer Transport

### Key points

- Central government has a major role in making travel as safe as it can be. This involves
  regulation, investment and education. Improving the safety of the system prevents deaths
  and serious injuries, reduces broader social and economic costs connected to these deaths
  and injuries, and contributes to other outcomes. Leadership, a system-wide and co-ordinated
  approach, collaboration, and investment in safety infrastructure is needed. [t.b.c]
- On average more than one person was killed on our roads every day, and almost another seven were seriously injured, creating significant social costs in the order of \$8 billion a year.
   New Zealand's rate of road deaths is significantly higher than that of many other comparable jurisdictions.
- The Road to Zero road safety strategy targets a 40 percent reduction in deaths and serious injuries by 40 percent by 2030. There have been improvements, with delivery of highly effective, proven interventions. However, these interventions have not been able to be delivered at the scale and pace needed to make a meaningful difference.
- As Minister of Transport, you are responsible for setting the strategic direction for road safety. Officials have started reviewing our approach to road safety and are preparing more in-depth advice on the impacts that different initiatives will have on reducing deaths and serious injuries. The Ministry would welcome the opportunity to discuss where you want to see greater focus applied.
- Successful implementation of the recently enacted Civil Aviation Act 2023 will provide a good
  platform for improving the safety of civil aviation. There are future challenges including
  changing the air navigation system to meet future demands and putting in place regulations
  for drones and emerging aviation technologies.
- The maritime sector is critical to New Zealand's economy and for many New Zealanders recreational pursuits. There are opportunities to clarify the way the maritime sector is regulated to improve safety in the sector.

# You have opportunities to improve safety for people using the transport system [t.b.c]

Safety is a core part of the transport portfolio. Travel needs to be as safe as it can be, whether by road, rail, aviation and maritime, or new modes involving new technologies like e-scooters and drones.

Given the high number of deaths and serious injuries, and adverse trends in these numbers over recent years, improving road safety remains important. There are opportunities to improve safety across all modes. There needs to be strong leadership, a system-wide approach, collaboration between road safety partners, and the co-ordinated use of public policy levers like regulation and education. In addition, an understanding of the role that emerging technologies can play in improving safety is necessary, including some of the problems that could result.

## Regulatory oversight must be risk-based and effective [t.b.c]

Transport regulation is managed as a single system across all the modes. However, there are separate Crown transport regulatory agencies and the regulatory approach is customised for specific modes. The Transport Accident Investigation Commission makes system-wide recommendations to improve safety across the aviation, rail and maritime modes.

Overall, the system needs to focus on the areas of greatest risk, and the regulators need the resources to carry out their role. There also needs to be good alignment with outside regulatory frameworks that overlap with the transport regulatory system like the health and safety at work system. Work is ongoing on how to ensure there is appropriate coordination across these systems and to avoid gaps.

# Road crashes killed 376 people last year and cause \$8 billion of harmeach year

As at 14 September 2023, 376 people died in road crashes in 2022, with many more suffering permanent life-changing injuries<sup>11</sup>. Social cost of road trauma is estimated to be as much as \$8 billion a year. Our rate of road deaths is also significantly higher than that of many other jurisdictions New Zealand compares itself to, as indicated in Figure 1 below.

Figure 1: Road deaths per 100,000 inhabitants (2022)



It is clear that more effort is needed to reduce the number of people dying or being seriously injured on our roads. Initiatives that improve road safety often provide co-benefits in other areas, such as environmental benefits, as well as liveability and amenity in the urban context.

# International best practice indicates the need for action across all parts of the system to improve road safety

The Safe System approach is the internationally accepted best practice for road safety. A Safe System means improving the safety of all parts of the system — roads and roadsides, speeds, vehicles and road user behaviour — so that if one part fails, other parts will still protect the people if they are involved in a crash.

Figure 2: Safe System approach [placeholder]

To come – data on the number of serious injuries (current figure is 2,470 but need to confirm). Serious injuries are defined as fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.



This approach is underpinned by the notion that humans are an imperfect part of the system and make mistakes. It also recognises that there is a limited amount of force that the human body can withstand in a crash before death and serious injury occurs.

As Minister, you can choose to put more effort in some areas, and less in others. However, action in all parts of the system ensures greater benefits for road safety – action in only some parts will not deliver the improvements needed.

# New Zealand's road safety strategy continues to follow international best practice

The Road to Zero 2020-2030 strategy is based on the Safe System approach. This is the same approach that has been taken under the previous road safety strategy, Safer Journeys.

Cross-government action is critical to the success of the strategy. Our partner agencies include Waka Kotahi, Police, WorkSafe, Justice, Health, ACC, and local government.

The strategy is underpinned by the ethical notion that it is unacceptable that people die on our roads.

It also sets a target for reducing deaths and serious injuries on our roads by 40 percent (from 2018 levels) by 2030. This is with a step towards the UN General Assembly's resolution to reduce deaths and serious injuries globally by 50 percent by 2030.

The 40 percent reduction target was derived from modelling a combination of evidence-based interventions. It is ambitious but achievable, requiring strong improvements across the safe system elements including around \$500 million per year investment in safety-specific infrastructure, speed management across the highest-risk 10 percent of the network, a suite of regulatory interventions and increased enforcement.

The table below shows the contribution from different initiatives when fully delivered in 2030 to achieve the target, based on our modelling:

Initiative	Percentage contribution to DSI reduction target	Deaths and serious injuries prevented annually from 2030
Infrastructure improvements (such as median barriers and intersection treatments) and targeted application of safe and appropriate speeds speed on the highest risk 10,000km of the network	46%	590
Increased levels of enforcement (both by safety cameras and Police officers), supported by updated levels of fines and penalties	28%	350
Lifting the safety performance of the vehicle fleet, and a combination of other improvements (for example, through increased use of court-imposed alcohol interlocks for impaired drivers)	26%	750

# New Zealand has made progress in some areas, but there are significant opportunities for improvement

Since the start of the strategy and the first action plan, there has been progress in some areas. For example, Police have increased their enforcement activity in the last 12 months, with an additional one million alcohol breath tests conducted than in the previous year.

The interventions promoted in the strategy have been found to be highly effective in the New Zealand context. For example, changes to speed limits on State Highway 6 Blenheim to Nelson has seen the number of deaths and serious injuries reduce by approximately 80 percent in first two years, while the average journey time has increased by approximately four minutes over the 110km road length. Installation of median barriers at SH2 Waipukurau in 2020 has seen a 100 percent reduction in deaths and serious injuries in the two years since.

However, it is evident from progress against the first action plan there are opportunities for improvement across the portfolio. Those improvements can ensure it is a practical and realistic programme that delivers more meaningful benefit for New Zealanders.

### There is an opportunity to review New Zealand's approach and confirm the actions you want to prioritise

Officials have started reviewing our approach to road safety, in light of challenges with the Road to Zero strategy While COVID-19 slowed delivery of initiatives, there have been other challenges for the portfolio, all of which have impacted the scale and pace of change.

Public buy-in for the strategy has been limited, with perception of wasteful spending and disagreement around:

- the messaging, particularly that "zero" is an unrealistic target
- some of the focus areas, such as speed reduction.

As Minister of Transport, you are responsible for setting the strategic direction for road safety. Officials are preparing more in-depth advice on the impacts that different initiatives will have on reducing deaths and serious injuries, including how these initiatives contribute to the 40 percent target. The Ministry would welcome the opportunity to discuss where you want to see greater focus applied.

### The air navigation system will need to change to meet future demands

The air navigation system is a critical part of New Zealand's core infrastructure, enabling the safe operation of aircraft through all phases of flight. Public trust and confidence in aviation largely rest on this system's performance

A government appointed independent panel looking into the air navigation system presented its final report to Ministers in May 2023.

The panel found that the system is currently safe. It is not in crisis, but change is needed to deal with emerging technologies and new threats, and to ensure the system is fit for the future.

The panel made nine recommendations covering system leadership, identifying critical system components, funding, understanding the value of the aviation sector, workforce (including regulator capability) issues, engagement with Māori and leveraging international relationships.

These recommendations all have wider sector, not just air navigation implications. The Ministry will work with other government agencies, and industry as we continue to develop a response.

# Drones and emerging aviation technologies require fit-for-purpose regulations to improve safety

The Ministry has a role in both the safe regulation of drone and enabling more innovative applications of drone. New Zealand's long-term objective is the safe integration of drone into the civil aviation system.

Increasingly innovative uses of drones offer potential economic, environmental and social benefits. This includes lifting productivity and wages through innovation, lowering emissions and improving other environmental outcomes. New Zealand needs to cater for growth of the drone sector and ensure that appropriate levels of aviation, safety and security in the aviation system are maintained.

New and fit-for-purpose regulatory tools are necessary to enable advanced operations of drones within airspace shared with conventional aircraft, while maintaining or improving safety standards, and addressing any problems caused by drone use, such as noise and privacy implications.

The rapidly growing drone sector has challenged aviation safety and security. Drone operators are finding more novel and complex ways to use technology. As a result, the challenges to safety and security are becoming increasingly difficult to manage.

The Ministry and other agencies have explored new policy initiatives and a developed a series of complementary regulatory measures called Enabling Drone Integration. Agreement of the package of measures is needed to enhance the regulator framework for drone operations.

# The Civil Aviation Act 2023 will strengthen safety in the civil aviation system

The Civil Aviation Act 2023 will come into force on 5 April 2023 unless brought in sooner by Order in council. The main purpose of the 2023 Act is a safe and secure civil aviation system.

Key safety policy implemented via the 2023 Act includes:

Drug and Alcohol Management Plans

- The 2023 Act strengthens the safety and security of New Zealand's aviation system by requiring operators in the commercial aviation sector to create and implement plans that provide for random testing of safety-sensitive workers.
- Provision for emerging technologies
- The 2023 Act provides for the CAA to support the safe integration of emerging technologies and provide a durable regulatory regime into the future. Key changes account for new and emerging technologies and the responsibilities a person has while operating these.
- "Just culture"
- The 2023 Act provides certain protections from enforcement action for people who self-report incidents to the safety regulator. This is intended to strengthen the incident reporting CAA receives and support a proactive regulatory approach.
- Clarifying investigation powers
- In the 2023 Act, the CAA's investigation powers are aligned with the Health and Safety at Work Act 2015. The changes ensure the CAA and other suitable persons (where applicable) have a flexible set of regulatory powers available to undertake their roles.

# More cohesive and sustainable search and rescue and recreational safety sectors

The New Zealand Search and Rescue (NZSAR) Council provides strategic coordination and leadership to New Zealand's search and rescue sector. The 11 000 strong sector, 90 percent of whom are volunteers, includes over 20 Government; non-government and commercial organisations. In the past year, the sector averted social costs of \$1.822 billion by saving 137 lives. This produced a 34:1 benefit to cost ratio on the Crown's investment of \$53.6million into the sector.

A review of the sector is complete, which makes a range of recommendations to place the both the search and rescue and recreational safety sectors onto a more effective and sustainable footing.

# Maritime safety is important to people, the economy and the environment

Maritime transport is a critical part of our economy, with the vast majority of our imports and exports moving by sea. As an island nation, New Zealand relies on ferries to transport commuters, tourists, and Kiwi travellers between islands. Boating is also an important part of Kiwi culture with over 1.9 million people taking part in recreational boating in 2020.

Maritime activity is inherently dangerous. Since 2015, an average of 16 recreational boating fatalities have occurred every year. Fatalities occur throughout the country, and most are associated with falls overboard, a vessel capsizing or flooding. Accidents are frequently sudden and unexpected. Many TAIC and coroner reports have found that fatalities might have been prevented if the persons concerned had been wearing a lifejacket.

Safe navigation is as critical in the maritime space as on land. Maritime incidents not only endanger human lives, but also the environment and the economy, as the Rena disaster demonstrated. The accessibility of the sea to recreational boating means recreational boating and commercial shipping operate in very close proximity to each other.

Maritime safety is regulated through a combination of maritime rules, regulations, safety codes and bylaws. The empowering Acts, the Maritime Transport Act 1994 and the Maritime Security Act 2004, govern navigation safety, including appointing of harbourmasters and the creation of navigation safety bylaws (MTA), and protection of ships and ports from international terrorism (MSA). Safety on board New Zealand ships is regulated under the HSWA by Maritime NZ. In July 2024 MNZ will also be the designated regulator of activity on ports.

### There is an opportunity to increase clarity around maritime safety requirements

The framework is holding up, but we see some areas where we could improve clarity, reduce duplication and strengthen the tools regulators (incl central and local government) have to make things safer.

#### These include:

- Reducing duplication in recreational boating (e.g. Part 91 review)
- Provide tools (Part 22 infringements)
- Reduce red tape through reviewing confusing and duplicative bylans
- Improve security by reviewing the MSA

### Reducing duplication in recreational boating

Maritime rules govern safety in many different areas, such as ship operations, ship design, crew safety, pilotage and navigation safety. These rules can take years to change, which has resulted in some councils filling perceived gaps in the navigation safety space. This in turn has resulted in different requirements across each of the 17 regional councils.

Over the past 80 years regulation of recreational coating safety has been split between local and central government, with local government as the default regulator. Currently, bylaws relating to recreational boating safety differ across each of the 17 regional council areas. Some councils require lifejackets to be worn at all times while others only require them to be carried on board. In other places, offences that may result in a \$100 fee could incur a significantly smaller or larger fee.

This has brought additional safety benefits in the regions with stricter regulations. However, the patchwork of requirements across the country make compliance for boat owners using their boats in different regions difficult. It also makes the development of national boating safety communications much more challenging.

# A lack of tools in some areas means some offenders are not held to

Other areas in which lack of clarity is creating regulatory complexity is in the area of collision prevention. There are currently no infringement offences for the collision prevention rule (maritime rule Part 22), leaving councils no tools to enforce the rules that exist. This has led to some councils writing bylaws to fill this enforcement gap, or people who do not obey the law escaping without consequences.

## Reforming navigation safety bylaw powers would increase certainty and reduce red tape

Having safety bylaws that are duplicative, in some cases in breach of the empowering Act, or filling gaps in rules has created complex layers of regulation that is difficult to disentangle. There is an opportunity, through a review of the MTA and other maritime Acts, to streamline safety rules so they are nationally consistent, ensure bylaw powers are clear, and close loopholes in security laws that prevent enforcement agencies from ensuring ship-based travel is safe.



## Modernising Transport Regulation

### Key points

- Regulation is needed to realise benefits of new technologies as quickly as possible, where they support improved transport outcomes and it is cost-effective to do so.
- All is increasingly affecting the transport system and could be a major disruptor its effects
  are still very uncertain.
- Automated vehicles continue to develop quickly although timing for their adoption at scale in New Zealand remains very uncertain. While automated vehicles hold much promise over the longer-term for improving safety outcomes on New Zealand's roads, the regulatory system will need to ensure that their introduction does not reduce safety in the interim.
- Innovation will be an important means of solving many of our transport challenges. Within
  bounds, some form of regulatory experimentation is likely to be desirable to encourage
  innovation. This may involve, for example, flexible regulatory regimes that allow for new
  technology to be trialled. This could help both the innovator refine and test their technology
  and the regulator to explore what a final regime would need to include.
- A new Civil Aviation Act was passed this year and the new Act is due to come into force in April 2025. The Ministry is prioritising implementing the Act and a review of maritime legislation to address new opportunities and challenges.

### Regulation is needed to realise the benefits of new technologies

Introducing new technologies that are often still evolving with unclear trajectories, while minimising harm, is a major challenge for policy makers and regulators. The beneficiaries of these technologies (the investors, manufacturers and consumers) often do not wear the full costs of their risks. Instead the burden is borne by society at large and their governments.

Therefore, it is crucial to have a regulatory system that appropriately balances safety outcomes with innovation, certainty and regulatory efficiency is in place before new transport technologies are rolled out at scale.

Regulation provides the framework and permissible set of conditions under which decisions can be made on important features of transport markets such as entry, pricing, access obligations and quality or conditions of service. To remain efficient over time, the regulatory framework needs to evolve as technological and society changes. Timely and proportionate regulation can support the exploitation of promising opportunities while also introduce new constraints to limit harmful trends.

### AI's impact is increasingly felt in the transport system

The transport system in Aotearoa evolves constantly in response to diverse influences, including the needs and wants of the changing population, and the transport outcomes it is seeking to achieve. Advancements in cleaner fuels and batteries can significantly reduce emissions. Escooters and e-bikes have increased mobility options for New Zealanders. Artificial intelligence (AI) is disrupting every industry and will change the way New Zealanders commute and the way they use transport infrastructure. Pilotless flying taxis have already been trialled in New Zealand. Autonomous ships with zero emission are on the horizon. All technology promises more driverassist functions and vehicle automation. All applications can easily gather traffic data for reducing congestion and detecting infringements.

### Safety will need to be assured before automated vehicles are deployed on our roads

Safety and security are at the heart of the transport regulatory system. New Zealand's transport system, particularly its land transport system, needs to be much safer in the future. Human error accounts for approximately 90 percent of all road deaths. Technological innovations, like driving automation technology in vehicles (such as Electronic Stability Control), already contribute to the decline in deaths and serious injuries on our roads.

Automated driving technology is evolving at a rapid pace. Internationally, there are emerging automated transport options that could arrive in New Zealand. Over the next 10 -20 years, automated vehicles (AV)<sup>12</sup>s could play a significant role in creating a transport system that positively contributes to the wellbeing of New Zealanders and improves the liveability of the spaces New Zealanders use.

Safety will, however, be the primary consideration before AVs will be allowed to operate or New Zealand roads. At a minimum, the regulatory system needs to be fit for purpose and hold the right parties to account for risks that are within their control. Regulations should ensure appropriate vehicle standards are in place for higher levels of automation, and that enforcement activities and the penalty regime is reflective of changing role of the driver. Businesses will require certainty about the regulatory pathway including any restrictions and requirements that may be placed on the operation of AVs as commercial ventures.

# Regulatory experimentation may be desirable to minimise safety risks while encouraging innovation

Innovation can be a challenging source of uncertainty for regulators. The safety performance of new technologies in real life situations is unknowable and unknown. The appropriate regulatory solution must carefully balance the associated risks, costs and benefits without vital real-life data. To encourage technological innovation (e.g. blockchain technology), some countries use regulatory safe spaces (regulatory sandbox approach) for experimentation to happen. Regulation is effectively "trialled" for a fixed period or within specified parameters under this flexible regulatory regime while the technology is allowed to operate in the real world. While New Zealand has not yet used a regulatory sandbox approach, the Ministry is open to adopting the approach for worthwhile new technology. New Zealand is then less likely to miss opportunities that only surface once such technology is given the chance to interact with its environment.

Legislative tools (laws, regulations, rules) have an important role in steering the application of technology away from negative outcomes and towards desirable ones. They provide a high level of certainty and confidence to regulators and regulated parties. They can, however, be cumbersome to change and become outdated quickly resulting in the inability of regulators to react quickly when needed. For example, the maritime regulatory regime includes hazardous substance pollution response. To date, the primary legislation equips regulators with powers to respond to oil spill pollution. The system is currently unable to account for different risks and capability needs of future fuels. Unless the legislative settings are updated, the maritime regulator cannot act in the event of an environmental disaster involving alternative energy.

These are vehicles that can take over the task of driving for all least a portion of the road. The current regulatory framework does not work for these vehicles.

Because technologies are continually scaled and improved through an iterative process, our regulatory framework must have scope to evolve to respond to changing circumstances or new information on the regulatory system's performance.

## The Ministry is prioritising implementing the Civil Aviation Act 2023 and a review of maritime legislation to address new opportunities and challenges

The recent Civil Aviation Act 2023 provides a single, modern statute that will create a platform for safety and security within the civil aviation system now and for the future. A key new provision sets out the responsibilities for the operation of new and emerging technologies and provide new intervention powers to respond to the serious misuse of remotely piloted aircraft. The Act is due to come into force in April 2025.

Maritime transport is critical to the resilience of New Zealand's international supply chains. The Ministry and Maritime New Zealand (MNZ) have begun a review of primary maritime legislation. The Maritime Transport Act 1994 (MTA) is the lynchpin of the maritime regulatory system. It governs navigation safety, establishes the power of the regulator, MNZ, and implements international maritime conventions that protect the marine environment. The Maritime Security Act 2004, established in the aftermath of the 9/11 attacks, protects ports and international shipping against acts of terrorism.

Together, these Acts and their associated rules and regulations do the heavy lifting in the enabling and protection of New Zealand's international seaborne trade. The review seeks to ensure the maritime regulatory system supports trade in the face of future emergencies, transnational crime, climate change, technological change and other challenges. It will do so by ensuring that:

- MNZ has adequate regulatory powers to manage risks
- Policy settings can address the challenges posed by technological innovations such as new low carbon fuels, autonomous vessels and sea gliders.
- Appropriate incentives are in place to encourage compliance including updating maritime financial penalties set nearly 30 years ago

# He pepa whakamōhiotanga mo te Minita | Briefing to the Incoming Minister

. ransport Te Manatū Waka Ministry of Transport

October 2023

## Briefing to the Incoming Minister 2023 – Master Version

# Contents

Foreword [to come - sample from earlier BIM provided]	5
Part One: He Wakamana i a Aotearoa Kia Momoho   Enabling New	
Zealanders to Flourish	6
Transport is critical for New Zealand's economic, social and environmental health	6
Growing demands on the transport system are creating new challenges	
The land transport system is more expensive to build and maintain	
Ambitions for new investment are growing beyond capacity	
A new approach to paying for land transport is needed	
Travel needs to move away from high emission vehicles	
New Zealand's international connections are increasingly vulnerable and uncertain	8
New technologies need to be integrated	8
Transport safety and security remains a priority	8
Transport, Te Ao Māori and Te Tiriti o Waitangi	9
You can guide and shape the system to meet the challenges it faces.	9
Short-term policy priorities	9
Part Two Stratogia Opportunities and Challenges	-1-1
Part Two: Strategic Opportunities and Challenges	11
Investing in a high quality transport system	
Challenging economic context	
New Zealand has been spending more on transport.	11
The Crown invests in land transport through the National Land Transport Fund and	
through direct funding.	
GPS 2024 will set the Government's land transport policy	
The Ministry has been working on the options for building a sustainable land	12
transport revenue system	19
This project is focusing on new revenue tools that could be implemented in the	10
shorter term	13
The Ministry will provide advice on the role of Crown funding and on a transition to	10
wider-spread use of RUC.	13
There are fiscal constraints in Budget 2024	
The Ministry will meet you soon to discuss your investment and revenue priorities	
More information on shorter term revenue tools	
Value capture tools	14
Congestion charging	
Tolling	
Making greater use of private capital	15
A Net-Zero Transport System	. 16
The Climate Change Response Act 2002 sets New Zealand's framework for reducing	
emissions	16
Transport emissions have the potential to almost fully decarbonise by 2050, and need	
to reduce by 41 percent by 2035 to remain on track	16

We are a year and a half into the first emissions budget period and officials at	
working to deliver on the first Emissions Reduction Plan	
Work is underway to develop the second Emissions Reduction Plan	
ERP2 will also need to factor in the third emissions budget	
The next steps for ERP1 and ERP2	
Aligning ERP1 with your strategic objectives	
Ensuring ERP2 meets your strategic objectives	18
Maintaining and growing New Zealand's international connectivit	v 18
	•
New Zealand's prosperity is heavily reliant on its connections to the world	
New Zealand's international connections face a changing environment	
The Government can help promote strong international connections and efficiency of the connections are strong international connections.	
supply chains	
Developing thriving cities and regions	10
Transport peods to be well integrated with other sectors	10
Spatial planning is an important tool to support better integration	19
City and regional deals provide a potential mechanism to support spatial plan	
The Ministry can provide further advice on spatial planning and city and regi	
deals	21
Strong Auckland, Strong New Zealand	21
Tāmaki Makaurau is critical to achieving New Zealand's goals	
Auckland continues to need a large investment in its transport networks	
Rapid public transport is integral to improving Tāmaki Makaurau's public tra	
network	_
Investment choices will be constrained by funding availability and capacity	
availability	22
The Tāmaki Makaurau Transport Plan needs to be completed	
Several major Auckland transport projects are underway	
City Rail Link (CRL)	
Auckland Light Rail (ALR)	20
Waitemata Harbour Connections	
Northwest	
The Ministry will seek your direction on Auckland's transport priorities	
The Willistry will seek your direction on Auckland's transport priorities	23
Building a resilient transport system	24
The transport system connects New Zealanders but is vulnerable to shocks a	
disruptions	
A lack of resilience drives extra costs into the transport system	24
Work to enhance the resilience of the transport system is underway	
As the Minister of Transport, you can play an important role to enhance trans	
system resilience	
System residence	20
Safer and more secure transport	25
	The state of the s
Travel throughout the transport system needs to be safe and secure	

Evidence suggests interventions are required across all parts of the system to improve road safety	26
New Zealand has made progress in some areas, but there are significant opportunities	20
for improvement	
Rail safety requires clear regulatory frameworks and investment	27
Drones and emerging aviation technologies require fit-for-purpose regulations to	-
improve safety	28
Maritime safety and security are important to people, the economy and the	00
environment	
As Minister of Transport, you can help to enhance transport safety	
Using regulation to support transport outcomes	.29
Regulatory frameworks are being challenged	29
Regulation is needed to realise the benefits of new technologies	29
Positioning New Zealand's regulatory frameworks for the future	30

## Foreword [to come - sample from earlier BIM provided]

Tēnā koe Minister, and congratulations on your appointment as Minister of Transport.

Transport plays a pivotal role in providing liveable cities and thriving regions. It underpins how New Zealanders get to their places of work and study, how whānau and communities connect, and how businesses move goods and services.

A well functioning transport system contributes to the economic prosperity of cities, towns, local neighbourhoods, and rural communities, and improves our wellbeing. It shapes land use, urban form, and street-level interactions. Transport connects New Zealand economically and culturally with the rest of the world.

New Zealand's transport system faces several major challenges over the medium to longer term. Several key reforms or new demands are being managed at the same time. Your approach to how you manage them will have a lasting impact.

Te Manatū Waka Ministry of Transport (the Ministry) plays a stewardship role in the sector and is here to provide you with advice and support.

The Ministry and the wider transport system are playing a key role as Aotearoa works to recover from the effects and devastation of extreme weather events, such Cyclone Gabrielle. A focus on rebuilding transport infrastructure in affected regions and ensuring that our system is resilient in the face of the impacts of climate change is a critical priority. Increasing climate resilience includes reducing transport emissions to support New Zealand reaching net zero carbon emissions by 2050. Interventions focus on improving active and public transport, providing alternatives to road freight, encouraging conversion to zero emissions vehicles, and providing low emission choices for people to travel.

Addressing these challenges places pressure on the funding system. New investments will need to be balanced against the costs of maintaining the existing transport system, the increasing need for repairs to the national roading and rail networks from extreme weather events and the rising costs of new and replacement infrastructure. The Ministry works collaboratively with agencies and stakeholders to advance a long-term, integrated approach to the transport system. An important part of this is maintaining our focus on the connections between wider economic, social and environmental outcomes and how different components of the transport system can be aligned to allow multiple objectives to be achieved over time. In our role as system lead, we look forward to giving you the advice, support and rigorous evidence needed to put your priorities in place.

Nāku noa, nā

Audrey Sonerson Secretary for Transport and Chief Executive

## Part One: He Wakamana i a Aotearoa Kia Momoho | Enabling New Zealanders to Flourish

### Transport is critical for New Zealand's economic, social and environmental health

New Zealand's transport system connects us to work and school, to our whānau, to our communities and to the rest of the world. The smooth and sustainable movement of people and goods throughout the system is critical to our economic, social and environmental health. The transport system is an important contributor to productivity and economic growth. The system supports other sectors and society's wider goals like better and affordable housing, desirable cities that attract skilled and talented people and healthier New Zealanders. The system also has negative impacts, including producing a significant proportion of New Zealand's greenhouse gas emissions, other air and noise pollution that affects the health of the general population and deaths and serious injuries for the people using the system.

The transport system involves millions of journeys every day on extensive networks of public and private infrastructure across New Zealand. These networks connect a population spread-out thinly across regions, but also concentrated in cities, who all need to be well served by the transport system to meet their social and economic needs.

These networks are used by a wide array of vehicles every day, and there are competing demands, including increasingly for use of street and city spaces. New Zealand's environment and geography also mean that our critical transport infrastructure is exposed to a broader and more consequential range of potential shocks than many other highly developed countries.

#### In New Zealand [sample data only - aviation, martime etc to be added]:

- there are over 4.5 million registered motor vehicles in New Zealand, which is one of the highest rates of vehicle ownership in the world – around 64,000 of these are fully electric light vehicles
- transport produces 39 percent of our domestic carbon dioxide emissions and 17 percent of total greenhouse gas emissions
- around 200,000 New Zealanders (5 percent of the workforce) are employed in transportrelated industries.<sup>1</sup>
- 20 million tonnes of freight are caried by rail annually
- around 34 percent of New Zealanders over 15 used public transport while 80 percent spent time travelling by private car
- 374 people died on our roads in 2022
- 46.3 billion vehicle kilometres were travelled in 2020
- approximately 2 million adult New Zealanders participated in recreational boating activities in 2022.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Based on Statistics NZ Business Demography Statistics, Snapshot at February 2022

<sup>&</sup>lt;sup>2</sup> Maritime NZ Survey

### Growing demands on the transport system are creating new challenges

As New Zealand has grown and matured, the demands on the transport system have grown significantly. In the past, the challenge revolved around efforts to grow capacity as activity increased and keeping the system maintained. However, new challenges, especially climate adaptation and mitigation, call for a fundamental shift in the way New Zealand's transport system operates. The long-lived networks that underpin the transport system need to be planned and funded over the long-term, managed and regulated effectively to support the shift needed.

#### The land transport system is more expensive to build and maintain

As the land transport system grows, it becomes more expensive to build, operate and maintain. Operating and maintenance costs are making up an increasing share of transport spending. This has taken place in the context of a planning and funding system, especially for land transport, that works well to signal investment priorities and ambitions but works less well to create incentives to spend money efficiently and effectively.

The increase in costs is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment, a need to consider resilience, and an expanded range of activities that are being funded. This is leading to an increased pressure on the available funding and has required a range of short-term solutions being put in place, including increased Crown funding and debt

### Ambitions for new investment are growing beyond capacity

Investment ambitions are running ahead of the capacity of the revenue system to meet them or the capacity of the construction sector to deliver new projects, especially alongside ambitious programmes in other sectors like water and housing. In the land transport system, our approach has historically been a "predict and provide" model where investment is made against forecast future demand, within a relatively stable revenue base. Increasingly many places are using a "decide and provide" approach, where the desired future is identified and agreed, and transport infrastructure is provided that will lead to this future.

New Zealand's current approach is already unaffordable, with planned expenditure for the next 20 years nearly double the \$10 billion per annum of current investment, and more than four times the size of the National Land Transport Fund. These commitments have not been made based on a system-wide investment plan and have likely driven inefficiencies in the system. Management oversight is also spread very thinly which exacerbates risk.

Even if this full programme could be funded, it will not deliver the outcomes government and others are seeking from the system and there is unlikely to be the construction capacity to deliver it. Increasingly, New Zealand is having to look to other tools, such as pricing and demand management (e.g. congestion charging), regulatory interventions, use of data, and the way transport and land use are considered together.

There is a growing urgency to consider the balance between new expenditure and maintaining the system and establish a more certain and sustainable model for funding their transport priorities – both to meet short term needs, but also to establish an enduring model for the next decade and beyond. This will involve considering the balance between new expenditure and expenditure to maintain the system and how to apply a sharper focus on value for money.

### A new approach to paying for land transport is needed

In the aviation and maritime sectors, much of the network is provided and owned by private interests, with some local government investment. In the land transport sector, central government

has more of a role in how the system is planned and funded. However, New Zealand's land transport system has been reliant on a narrow range of user charges (mainly taxes on fuel and charges on diesel and heavy vehicles) to pay for much of our land transport. Over the last two decades, Crown contributions and borrowing have increased as the level of funding from user charges has fallen behind investment ambitions. This, and other factors, have put the system under pressure and our revenue system does not by its nature support large, long-term investments. Many of these have a scale of cost that needs to be spread over many years.

#### Travel needs to move away from high emission vehicles

To meet our 2050 net zero greenhouse emissions target, travel needs to move away from relying on high emission vehicles while making sure economic growth and social connection are maintained, and the burden of change does not fall too heavily on those who cannot afford it. Under existing targets, New Zealand needs to reduce domestic transport emissions by 41 percent (from 2019 levels) by 2035. New Zealand is not on track for this, and the choices to achieve change are becoming increasingly hard.

For more than 100 years, roads and fossil-fuelled motor vehicles have been the dominant mode of transport. While private motor vehicles will always play an important role in New Zealand's transport system, there is demand for access to a wider range of travel options. Increasing the range of choice will include some large investments in infrastructure, such as busways and mass transit options. These are expensive and take effort to implement, especially because they require infrastructure to be retrofitted into urban environments. They also create a need for ongoing operational funding that does not have a ready revenue source.

# New Zealand's international connections are increasingly vulnerable and uncertain

New Zealand's ability to trade and connect with the world is increasingly influenced by geopolitics, the international politics of climate change and New Zealand's position as the last stop on many international supply chains. Over the next decade, New Zealand's distance from the rest of the world will be highlighted through the relatively high international aviation and maritime emissions that get our products to market and enable New Zealanders to connect globally. In aviation and maritime, and in the freight system more widely, government is much less often the funder or owner. But these sectors are increasingly seeking government leadership, involvement and support for measures to enable and support their transformation.

#### New technologies need to be integrated

Transport will need to integrate considerable change to technology, including in energies and fuels. This brings considerable opportunity but also risk. Managing this quickly and safely will require a fit-for-purpose transport regulatory system. There are some challenges and cost in adapting current frameworks to regulate new technologies as well as how to fund the infrastructure necessary for quick adoption of beneficial new technologies.

#### Transport safety and security remains a priority

Improving transport safety and enhancing security of the transport system remains an issue for New Zealand. For example, proportionally more people are killed and seriously injured on our roads than most other OECD countries, and x% more than in Australia [need to double check this is right]. Provisional figures for 2022 saw 377 people killed on the roads. Measures needed to improve safety require sustained effort and acceptance from those who may be affected by changes. Meanwhile, it is critical that New Zealand continues to effectively implement international

security obligations for aviation and maritime to ensure New Zealand remains a trusted destination for airlines and shipping operators.

#### Transport, Te Ao Māori and Te Tiriti o Waitangi

The Ministry acknowledges the historical sacrifice and service Māori have provided the nation to enable our transport privileges today. A key interaction between Māori and the transport sector was Māori land confiscation and then urbanisation of Māori communities. As the writers of policy and central providers of advice to the Crown, The Ministry has an obligation and responsibility to honour Te Tiriti o Waitangi through engaging with Iwi and applying a Te Ao Māori lens across our work. The transport system requires a holistic lens which should be viewed in a historical context identifying possibilities for connection between whānau, community and how we can focus on wellbeing and empowering better social, cultural and economic outcomes.

## You can guide and shape the system to meet the challenges it faces

The responses to the challenges and opportunities New Zealand's transport system faces will involve many choices. Over the next decade, New Zealand's transport system will need to be able to adapt to be able to produce net zero emissions by 2050, significantly reduce road deaths and serious injuries, and address the significant disadvantages some groups and individuals face when accessing the transport system. The system will also need be ready to adapt to shocks like severe weather, future possible pandemics, natural disaster, or economic downturns.

This makes transport decision-making more demanding than it has been in the past. To meet the challenges faced by New Zealand's transport system, there are opportunities for change. As Minister, you will apply policy interventions to shape the new system to make sure all New Zealanders can use the system safely and efficiently.

The Ministry's role is to support you to implement your policies. As the Government's policy lead and system steward for transport, the Ministry will give you robust, evidence-based, future-oriented advice on the policy, investment, and regulatory settings that give the best chance of achieving your goals. The Ministry's *System BIM* gives further detail on the policy tools and levers available to you, including the role of the Ministry's Transport Outcomes Framework.

# Short-term policy priorities

The Ministry believes that there are several short-term priorities for you and your incoming government to consider. The Ministry would like to discuss these with you as soon as possible. These priorities include:

- Finalising and issuing the 2024 Government Policy Statement on Land Transport (GPS). The
  GPS will give effect to your vision and priorities for investing the National Land Transport
  Fund into the land transport system. This will require you to consider how to fund the GPS,
  including progressing work on revenue options (e.g. congestion charging) that can be
  implemented at pace.
- Alongside the GPS, ensuring a strong focus on improving cost management in the land transport system.
- Confirming the Government's intended direction for a range of major planned infrastructure investments, including the rapid transit network in Auckland
- Confirming your approach to emissions reductions in the transport sector, including by setting priorities for the 2nd Emissions Reduction Plan (ERP2).

 Restoring the financial sustainability of our transport regulatory agencies, whose revenue streams were disrupted by the COVID-19 pandemic

The Ministry looks forward to discussing your objectives and these priorities further with you.



### Part Two: Strategic Opportunities and Challenges

## Investing in a high quality transport system

#### Challenging economic context

In the context of a challenging economic outlook, existing risks to long-run fiscal sustainability and cost pressures, New Zealand must make choices about how the transport system is developed and managed over the next decade and beyond. Maintaining a high quality transport system for all New Zealanders requires investing in the right things and at the right time, and maintaining a tight control on costs.

#### New Zealand has been spending more on transport

New Zealand has been spending more on transport, both on new infrastructure and maintaining and operating existing networks. This is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment and an expanded range of activities that are being funded. More investment has been going towards public transport and rail, in part to meet broader social objectives, such as improving access and reducing emissions. Around 70% of the funding available through the National Land Transport Fund is usually committed to maintenance and providing core services, such as road policing, and these activities are becoming increasingly costly

This situation is leading to an increased pressure on the available funding and has required a range of short-term solutions being put in place, including increased Crown funding and debt. In addition, existing revenue sources are unlikely to keep pace with these increasing demands, unless decisions are taken to significantly increase the amount collected from them. Fuel excise duty is a major source of revenue for the transport system, but this revenue source will become less certain and unstable over time as vehicles become more fuel efficient and people increasingly choose to travel by other modes.

The previous Government committed to, or was exploring, an ambitious pipeline of projects, but the funding, scoping and phasing of these projects is still largely to be decided. These projects include Auckland Light Rail, the Strategic Investment Programme (outlined in the draft GPS2024), and the additional Waitematā Harbour Crossing. If all of these projects proceed to construction, the Ministry estimates that the total Investment in land transport over 2024 – 2034 will be \$180 billion, compared to ...... x billion in the 10 years from 2013-2023. Analysis from the New Zealand Infrastructure Commission, Te Waihanga, suggests that this would materially exceed the capacity of the current labour market in Auckland, even under optimistic growth assumptions.

#### The Crown invests in land transport through the National Land Transport Fund and through direct funding

The Government sets the direction for investment in transport infrastructure and services using the Government Policy Statement (GPS), which sets priorities for the National Land Transport Fund over a 10-year period. A draft GPS has been out for public consultation and, as a statutory

document, must be published by 1 July 2024. Finalising the GPS is essential because it drives land transport planning and funding decisions make by both Waka Kotahi and local government.

Waka Kotahi gives effect to the GPS through the 3-yearly National Land Transport Programme, which sets out planned activities and projects. Waka Kotahi has statutory authority over what activities and projects are included in the National Land Transport Programme and approved for funding. Regional Land Transport Plans made by Regional Transport Committees, consisting of Waka Kotahi, local government and sometimes KiwiRail, feed into the National Land Transport Programme.

Separate to the GPS process, the Crown can fund additional transport projects through the annual Budget process. These tend to be larger projects, such as those under the New Zealand Upgrade Programme (e.g. Melling interchange, Ōtaki Bypass), or the Auckland City Rail Link. They may have bespoke delivery and governance arrangements depending on the preferences of the Government.

### GPS 2024 will set the Government's land transport policy

The draft GPS, which is out for consultation, established the outgoing government's strategic priorities and set out core investment needs for maintaining the system and the funding available from usual sources, and proposed a funding package to address the gap between them. That funding package emphasises the choices to be made in finalising GPS 2024 because it relies on raising FED and RUC, Crown grants, Crown loans and some non-traditional funding sources like the revenue from traffic infringements.

While the proposed funding package would reduce the pressure over 2024-27, the Ministry expects that there will continue to be a gap between expenditure and revenue. The draft GPS 2024 outlines a \$4.8 billion decrease in funding over 2027-30 compared to 2024-27.

In these circumstances, it will be vital to ensure that investment proposed in the final GPS is carefully prioritised, affordable, and meets your objectives. Further, there is a need to make sure that cost is better managed in the system through a sharp focus on value for money, strong business cases and ensuring there are a broad range of options considered, including options that do not involve investment, such as demand management. While there are also choices to generate additional revenue through existing tools, and maybe some newer ones, there will be constraints, especially in the face of upward pressure on the cost of living.

### Ensuring a sustainable land transport revenue system

The established tools for funding the land transport system, like the distance and weight-based Road User Charges system for diesel and heavy vehicles, are still world leading. Fuel Excise Duty is an extremely cost-effective and efficient method for collecting revenue from petrol vehicles.

These forms of funding are not well suited to very large, lumpy investments (eg mass rapid transit) that have wider benefits, such as supporting intensification. Further, there are developing issues around inequities and inconsistencies between road users, the charging of externalities and the long-term sustainability of Fuel Excise Duty.

[Insert graphic we that illustrates the current shares of revenue]

#### The Ministry has been working on the options for building a sustainable land transport revenue system

The Ministry has been investigating what is needed to enhance the transport revenue system, including the role for additional tools and providing more clarity on who should pay for what. There are longer-term and shorter-term elements to this, and in the long term, there are opportunities to look at the balance between who should bear the costs of the transport system amongst users, ratepayers, taxpayers and other beneficiaries. What ever approach is chosen, it will need to be predictable, stable and have good levels of public buy-in, reflecting that transport costs affect every New Zealander and every New Zealand business. The consequences of choosing the wrong solution, or implementing a good solution poorly, would be significant.

### This project is focusing on new revenue tools that could be implemented in the shorter term

While some changes would need to be implemented over the longer-term, there are revenue options that should be progressed in the shorter-term, including:

- value-capture
- congestion charging
- tolling (under current rules or new rules)
- greater use of private capital.

These tools will help provide additional revenue. However, they are unlikely to generate sufficient revenue to fill expected gaps over the next decade and each option comes with its own risks and challenges.

### The Ministry will provide advice on the role of Crown funding and on a transition to wider-spread use of RVC

Crown funding or debt can play a useful role in meeting transport funding needs. However, practices have varied and this can lead to a lack of clarity about when it should be used and for what. Taking a more principled and transparent approach here will help manage Crown cost and will provide more certainty and predictability for Waka Kotahi and cities and regions.

A transition towards RUC is already underway, with RUC generated revenue now almost equivalent to FED generated revenue [check], and with electric vehicles joining the RUC system from 1 April 2024. The RUC system overcomes the fuel efficiency issues with FED, and it may enable a more sustainable stream of funding over time. There are options for extending RUC, including to moving all vehicles on to the system through to more sophisticated charging approaches that would add time and location based charging.

### There are fiscal constraints in Budget 2024

s 9(2)(f)(iv)	s of things we need	runding forj	

As part of the Fiscal Sustainability and Effectiveness Programme (FSEP), the previous Minister of Finance announced that Vote Transport must develop a permanent two percent (\$15.23 million) savings proposal, based on an eligible baseline of \$761 million. The eligible baseline broadly excludes funding in Permanent Legislative Authorities (including the National Land Transport Fund) and regulatory fees and charges. Almost all other Vote Transport operating funding is in scope.

## The Ministry will meet you soon to discuss your investment and revenue priorities

The Ministry will seek to meet with you as soon as possible to discuss your priorities in these areas, including next steps for GPS 2024 and how it is funded and for Budget 2024.

#### More information on shorter term revenue tools

#### Value capture tools

Value capture<sup>3</sup> tools are under utilised in New Zealand compared to other countries. There are a range of levy<sup>4</sup> and uplift-based<sup>5</sup> methods available to both central and local government.

Work undertaken to date has highlighted the potential for value capture but also the operational complexities of implementing these mechanisms.

#### Congestion charging

Congestion charging, which sets a higher cost for travelling at peak times, can encourage some users to change the time, route, or way that they travel. This can make better use of existing capacity and defer the cost of new capacity. Congestion charging has been successfully implemented to reduce congestion in cities around the world, for example London and Singapore. However, schemes have also failed when there were low levels of public acceptability, in part due to concern about equity and a perception that congestion charging is only about raising revenue.

There is interest from several of the large metro councils in congestion charging, both to reduce congestion by managing traffic and potentially raise revenue for transport projects. The Ministry expects them to seek your support for legislation. Draft legislation was developed for the previous government so could be advanced quickly although the underlying policy would need to be changed or confirmed with you.

Here we are defining Value capture as the recovering or 'capturing' of an amount of the incremental benefit that landowners (either residential and or commercial) receive from investments in public infrastructure (and the resulting urban development and amenity), usually reflected in higher property (land and building) values

i.e., a one-off charge based on property value increases due to the infrastructure.

i.e., a proportion of any capital value uplift is taxed.

#### Tolling

As Minister of Transport, you are responsible for approving tolling schemes under the Land Transport Management Act. \$9(2)(f)(iv) \$9(2)(f)(iv)

The current tolling settings are relatively permissive but New Zealand's low population density, other charges, like Road User Charges and Fuel Excise, already on road users and the 'new road' criteria limits the extent to which the tolling of individual projects is viable. Within these constraints, tolling is being rolled out where a case can be made. However, there are options for new tolling approaches, including variable pricing or tolling existing roads, which would likely involve amending the Land Transport Management Act.

For example, Waka Kotahi has been working with Tauranga City and Eastern Bay of Plenty on a proof-of-concept study for variable road pricing.

It is important to consider tolling options alongside other arrangements, such as congestion charges at a network level. In the longer term, shifting to a distance-based system will provide greater scope to implement variable charging across the network that could be used to manage demand more effectively.

#### Making greater use of private capital

In the past, Public Private Partnerships (PPPs) have been used with varying degree of success but have delivered some important lessons. There are two roads that have been delivered under the PPP model: Transmission Gully and Pūhoi to Warkworth. Compared to other types of PPPs, roading projects are riskier and more complex, largely due to ground and environmental factors, including weather and storm damage.

The ability for PPP consortia to insure against risk is critical for the success of the model. How this is managed, when procurement processes are heavily weighted towards a low price, will affect the degree to which PPPs are used for roading projects in the future.

If implemented well, there is potential for PPPs to improve services and deliver new infrastructure. Using private finance means that more projects can be built sooner than through the conventional "pay as you go" public sector procurement. However, the current model spreads out the costs of these projects over a longer period, which must be managed as a first call against the National Land Transport Fund. Alternatively, Government could consider changing the contracting model for roading PPPs to transfer more of the risk to the operator (e.g., through demand-based tolling arrangements).

You can also choose to involve private equity in the delivery of transport infrastructure. Under this arrangement, the investor will take an ownership stake in an asset and is likely to seek greater control over design, construction and operation. However, they may also be prepared to take on a wider range of risks. Investors such as ACC and the NZ Super Fund have shown an interest in these arrangements which may be a good way of approaching wider packages of development in cities. Equity-based arrangements would challenge the transport system's existing ways of operating and may raise concerns with the public if there are perceptions of offshore ownership, and will require a change to an approach that provides longer term certainty around planning and

9(2)(g)(i)			

funding, and the ability for private sector investors to work with Crown agencies (among others) earlier and have real influence on design choices and delivery arrangements.

### A Net-Zero Transport System

## The Climate Change Response Act 2002 sets New Zealand's framework for reducing emissions

When New Zealand ratified the Paris Agreement in 2016, the country committed to playing our part in global efforts to limit temperature rise to 1.5°C above pre-industrial levels. In 2019, Parliament, amended the Climate Change Response Act 2002 (CCRA) setting the target of reaching net zero Greenhouse Gas (GhG) emissions by 2050.

The CCRA sets out the strategic framework for the government's approach to reducing emissions in line with our international commitments and requires:

- domestic GHG emissions reduction targets to reduce net emissions of all GHG (except biogenic methane) to zero by 2050
- a system of progressively reducing five-yearly emissions budgets to act as stepping stones towards the long-term target
- the Government to develop and implement policies to achieve the budgets
- establishment of an independent Climate Change Commission to provide expert advice and monitoring to help keep successive governments on track to meeting long-term goals.

The Climate Change Commission (CCC) issued its advice on the first three emissions budgets for New Zealand in 2021 and these have been set and gazetted as outlined in the following table. The Commission is due to advise the Government on the level of the fourth budget, covering the period 2036-2040. This advice is due to the Minister of Climate Change by 31 December 2024.

Time period	Level of permitted emissions (carbon dioxide equivalent, all sectors)
Emissions budget 1: 2022-2025	290 Megatons CO <sub>2</sub> -e
Emissions budget 2: 2026-2030	305 Megatons CO <sub>2</sub> -e
Emissions budget 3: 2031-2035	240 Megatons CO <sub>2</sub> -e

[Placeholder for a graph showing the scale of reductions in each budget period]

[For more information about New Zealand's framework for reducing emissions and cross-agency climate response, please see the IEB Climate Change BIM].

## Transport emissions have the potential to almost fully decarbonise by 2050, and need to reduce by 41 percent by 2035 to remain on track

As well as setting the national level emissions budgets, the Climate Change Commission's first advice to Government included a "demonstration pathway" that outlines how New Zealand can stay within the emissions budgets and successfully reach net zero by 2050. This demonstration

pathway informed the development expected contributions, or sub-sector targets, from different parts of the economy, which aportion levels of emissions reduction expected from each sector. These sub-sector targets are not legislated, but enable sectors to track progress and manage 'unders and overs' between sectors while staying on track to meet the overall target.

Transport is one of Aotearoa New Zealand's largest sources of GHG emissions, producing 39 percent of our domestic CO<sub>2</sub> emissions and 17 percent of total GHG emissions. Between 1990 and 2019, transport emissions rose approximately 80 percent, faster than any other sectoral source. The Commission identified transport as a sector with the potential to almost completely decarbonise in time to reach net zero by 2050 and estimated that transport emissions will need to fall by 41 percent by 2035 to remain on track. Because some other sectors are expected to be slower to decarbonise, New Zealand's overall emissions reduction success is likely to rely heavily on transport realising this potential.

## We are a year and a half into the first emissions budget period and officials are working to deliver on the first Emissions Reduction Plan

We have started the journey towards net zero transport emissions by 2050. The first Emissions Reduction Plan (ERP1) was published in May 2022 and set out the Government's approach to emissions reduction and the specific actions to be taken between 2022 and 2025 to meet the first emissions budget.

Based on committed policies, and assuming the work underway to reduce transport emissions continues, current estimates suggest transport is likely to stay within its sub-sector target and meet its expected contribution to reducing emissions during the second budget period. However the most recent estimates incorporate data that reflects a lower than expected level of travel. This decline is not fully understood and is likely to be contributed to by a range of factors including migration, cost of level, and changing patterns in a post-COVID-19 environment. Caution should be applied in assuming this trend will continue.

ERP1 sets focus areas, targets and specific actions to reduce transport emissions in line with the sub-sector target.

## Work is underway to develop the second Emissions Reduction Plan

The transport and energy sectors are expected to contribute significantly to the next emissions budget. A considerable jump is required in emissions reductions from transport from the first to second emissions budget period. Work is underway at both the cross-government and sector-specific level to develop content for the second Emissions Reduction Plan (ERP2), which is due to be published by the end of 2024. ERP2 must contain actions that can meet the gazetted emissions budget for the second period, from 2026-2030.

Based on committed policies, and assuming the work underway to reduce transport emissions continues, current estimates suggest transport is likely to stay within its sub-sector target and meet its expected contribution to reducing emissions during the second budget period. This will depend to a large extent on the actions that are included in ERP2, and is reliant on what is still an ambitious set of actions in ERP1, which rely in some cases on levers that are other Ministers to use, such as land use and development.

In December 2023 you will receive some initial cross-agency advice about key opportunities and challenges for ERP2 and some indicative content about what could be included. Cabinet will make decisions about the draft and final content for ERP2 in 2024.

#### ERP2 will also need to factor in the third emissions budget

There is an even more significant jump in required emissions reductions from transport from the second to the third emissions budgets. Our current modelling suggests that meeting the third budget for transport will require significant additional effort beyond currently committed policies. In its draft advice to inform the strategic direction of ERP2, the Climate Change Commission advised that ERP2 will need to include many actions that set the transport sector up for the third emissions budget period, as well as those that can help transport to meet the second emissions budget.

#### The next steps for ERP1 and ERP2

#### Aligning ERP1 with your strategic objectives

We can provide you with more detail about the focus areas, targets, and actions for transport in ERP1 and advise you on the impact of any changes you may wish to make to the remaining actions to be delivered in the first budget period.

#### Ensuring ERP2 meets your strategic objectives

Setting strategic priorities for ERP2 with your Cabinet colleagues and deciding what actions will be included for transport to meet its expected contribution will be some of the biggest strategic decisions you will make as Minister of Transport in the next 12 months. The Ministry will support you with advice to inform these decisions.

You will receive package of preliminary advice about the long-term pathways to net zero by 2050 and indicative advice about what these mean for ERP2 in December 2023, along with your Ministerial colleagues in other climate portfolios. This advice is likely to seek your direction on some key strategic priorities, risks, benefits sought, and potential trade-offs, to inform the development of detailed options for inclusion in ERP2. The Ministry will provide you with additional transport-specific advice to supplement this interagency advice.

# Maintaining and growing New Zealand's international connectivity

## New Zealand's prosperity is heavily reliant on its connections to the world

International connectivity enables people and goods to move across our borders and is an important contributor to New Zealand's prosperity and well-being.

The majority of our imports and exports move by sea - 99.7 percent of New Zealand's export goods by volume, and 80.9 percent of its exports by value. This makes the maritime sector vital to New Zealand's interests, including ports and the connections to them. The aviation system also delivers economic and social benefits of staying connected to each other and the global community. Air transport underpins key sectors in the New Zealand economy, including tourism, international education and high-value freight.

#### New Zealand's international connections face a changing environment

The geo-political environment is becoming less rules based and volatile, and there is growing risk around the international politics of climate change. This is presenting some risk to New Zealand as a distant trade reliant economy. The emissions from the aviation and maritime sectors are subject to increasingly tighter international standards and we need to be well engaged to ensure these support New Zealand's carbon emissions and connectivity objectives while not disadvantaging our connectivity to the world. The international security environment has also become more complex. COVID-19 underlined the vulnerabilities of our supply chains.

Against this backdrop, it is more important than ever that we can maintain and grow New Zealand's international connectivity and work to support an efficient supply chain system that delivers goods quickly and cost effectively.

## The Government can help promote strong international connections and efficient supply chains

The government can play a role in ensuring that New Zealand has a safe, secure, resilient, and thriving aviation and maritime sector that is fit for the future, and which support the supply chains that are so vital for the New Zealand economy.

The previous government issued a National Freight and Supply Chain Strategy on 18 August 2023, and the Ministry has started work on an action plan to implement it. This Strategy came from extensive engagement with supply chain stakeholders. The Strategy offers a blueprint for the future supply chain, but it is crucial that this thinking is translated into action. The next step for the Strategy was the development of an action plan.

Key actions that we will look to progress are:

- Taking forward actions to better collaborate with the private sector, so New Zealand has future supply chains that are zero emission resilient, productive, efficient, safe and sustainable. This is likely to involve work on ports and their connections to road and rail, the transition to low emission heavy vehicles and improving freight data collection. A private partnership has already begun to accelerate decarbonisation of the aviation sector.
- Working across government and the aviation sector to develop a national policy statement for aviation and provide a joined-up view on how best to embrace opportunities and address challenges in the sector.
- Initiating a review of maritime legislation to ensure that our regulatory frameworks support an
  innovative, productive, safe and secure maritime sector.

We will discuss these potential actions further with you.

## Developing thriving cities and regions

## Transport needs to be well-integrated with other sectors

To create cities and regions that have strong economies and good social connections, transport planning, funding, and delivery need to be aligned with land use planning, housing, other infrastructure, and broader funding and financing models.

This need for integration is clearest in our largest cities, where there is a need to build more housing, improve economic productivity, reduce greenhouse gas emissions and become more resilient to natural hazards.

One way to address these challenges is to deliver more medium and high-density, mixed-use developments in places where people have a good range of transport options. Making a wider range of travel options available will allow more people to live and work in our cities and to choose from a greater range of housing and transport options, without increasing traffic, congestion, and emissions. New developments in greenfield locations also need to be well-designed and well-connected with multi-modal transport networks. The transport, housing, and planning systems need to be well-aligned to achieve these outcomes.

Previous governments established cross-portfolio Ministerial forums for urban development and infrastructure to support joined-up approaches to policy development and delivery. For example, increasing the supply of public transport is only effective if it is accompanied by high quality developments.

#### Spatial planning is an important tool to support better integration

Spatial planning can provide long-term (30 years+), high-level, strategic direction for how cities and regions need to grow to achieve national and regional priorities. Integrated planning with other sectors like housing and water is critical to delivering long-term plans that retain support and can serve as a foundation for communities to develop well. Good Spatial planning can also allow national transport priorities to be integrated, alongside other national priorities, with regional priorities.

There is an ad-hoc approach to spatial planning in New Zealand. Only Auckland is legally required to deliver a regional spatial plan (the Auckland Plan). Four other high-growth cities have developed spatial plans, through Urban Growth Partnerships set up by previous Governments. These spatial plans are at sub-regional levels and focus on high-growth areas in their regions.

Integrated planning across transport and other sectors will deliver much better outcomes and greater planning certainty but this is hard to achieve due to the numbers of decision-makers involved and the depth of issues involved. A structured approach is needed to make it possible. The Spatial Planning Act 2023 enacted by the last Parliament was an effort to achieve this. This Act requires all regions to develop a regional spatial plan, in partnership between councils, central government, and mana whenua.

### City and regional deals provide a potential mechanism to support spatial planning

A shift to regional spatial planning raises questions about funding and financing major infrastructure projects that feature in these plans. For example, all the existing spatial plans developed through the Urban Growth Partnerships include rapid transit services and high-frequency public transport networks to provide the backbone for future large-scale urban developments. There is no funding pathway to deliver most of these projects.

Given the constrained funding environment, and the substantial costs of delivering large-scale transport projects, it is important to explore innovative new funding and financing models to deliver major projects. It is also important to make better use of existing transport networks (e.g. by using transport pricing tools, and by encouraging more efficient use of road space).

'City deals' and 'regional deals' provide a potential way for central and local government to coordinate the funding streams that would be required to fund the large investment in infrastructure

that many cities will require. These deals reflect approaches used in other countries, including the United Kingdom, Canada, and Australia to support integrated programme delivery. They involve long-term partnerships between local and central government, with packages of funding and decision-making powers.

### The Ministry can provide further advice on spatial planning and city and regional deals

The Ministry can provide you with further information and advice on opportunities for Ministerial collaboration, spatial planning and city and regional deals. As these deals require the input of different portfolios, substantial work would be needed with other Ministers to determine their viability and potential effectiveness in a New Zealand context.

## Strong Auckland, Strong New Zealand

### Tāmaki Makaurau is critical to achieving New Zealand's goals

Tāmaki Makaurau is home to one third of New Zealand's population, contributes 38 percent of the nations GDP and is projected to account for around 60 percent of New Zealand's population growth between 2013 and 2043.

Over recent years Auckland has accounted for 30 percent of the National Land Transport Fund spend and increasingly Crown funding is required to complement the National Land Transport Fund and Auckland Council funding.

While there have been successes in both roading and public transport projects, Auckland's transport challenges remain significant. An efficient and effective transport system in Auckland is essential to Government achieving national goals of increasing productivity and reducing emissions. Auckland is expected to deliver 48 percent of the national reduction in transport emissions.

## Auckland continues to need a large investment in its transport networks

Auckland requires transport investment in roads, public transport and active transport. Along with investment, interventions such as congestion pricing and better integration of transport and landuse are required to achieve outcomes and manage affordability. Congestion pricing in Auckland is unlikely to raise significant revenue but the value is in improved productivity and potential deferment of maintenance and capital spend on roading.

The strategic roading network in Auckland is almost complete. Penlink is underway and a preferred option for Mill Road as part of the package of investment in south Auckland needs to be determined. More roading capacity will mean that public transport in Auckland will need to contribute more to emissions reduction.

# Rapid public transport is integral to improving Tāmaki Makaurau's public transport network

While there have been some setbacks with the rail rebuild and bus driver shortages, public transport patronage has increased significantly in Auckland (was at 100 million boardings at the end of 2019, up from X in X). There are gains to be made with increasing frequency and reliability on the current bus network as well as by extending coverage, particularly to some of the lower income areas where access to public transport is poor.

Moving people in a fast, frequent and reliable manner by rapid transit is integral to Auckland's public transport network. Successes to date have been the northern busway and passenger rail, post electrification. The City Rail Link and Eastern busway are well into construction and business case work is underway for major projects including on the northwest and city centre to Mangere corridors as well as a 30-year plan for rail investment in Auckland. Planning for the Waitemata Harbour connections is also advancing.

Auckland's future public transport will have to be much larger than it is today. Within the limited funding and delivery capacity that is available, you will want to consider striking the right balance between high volume and high cost options such as rapid public transit solutions, and lower volume but faster to deliver options such as busways. The Ministry's advice is that these should be considered in the context of the type of overall network that should be available in future, and in turn the nature and scale of development that is desired for Auckland.

# Investment choices will be constrained by funding availability and capacity availability

There are key choices to be made on these major projects. When combined with what is needed to run and maintain the existing network and other investments, such as in public transport services, the ability to deliver from both a funding and a construction capacity perspective looks unfeasible. Work on staging and sequencing of investments over the longer-term is a priority.

This can be achieved by continuing to work through the Auckland Transport Alignment Project (ATAP). Since around 2017, ATAP has been New Zealand's most mature 'city deal'. The Minister of Transport and Mayor of Auckland are political sponsors of ATAP and a Governance Group of Chief Executives provides oversight and governance.

### The Tāmaki Makaurau Transport Plan needs to be completed

The Tāmaki Makaurau Transport Plan, a long-term integrated plan has been the key piece of work progressed under the ATAP structure over recent months. It is currently paused and it will be important for you to meet with the Mayor of Auckland to commission the completion of the Plan. Your priorities will guide the next phase of work and the sequencing and phasing work noted above is key to the Plan's completion.

s 9(2)(g)(i)

#### Several major Auckland transport projects are underway

There are pressing choices to be made about investments in Auckland over the 10 and 30-year horizons. Affordability and the ability to deliver need attention as a programme, encompassing investments to run and maintain the current network, expand public transport services and progress major projects, is completed.

#### City Rail Link (CRL)

Most CRL construction work is now complete, and the focus is on integrating with the Auckland network and testing readiness for day one operations. The Ministry monitors the work of the delivery company, City Rail Link Company (CRLL) and advises on broader investments needed to bring the benefits of the project. CRL is funded 50:50 by the Crown and Auckland Council. You are a joint sponsor of the work along with the Minister of Finance and Mayor Brown.

#### Auckland Light Rail (ALR)

ALR is an integrated urban and transport project along the city centre to Mangere corridor. Auckland Light Rail Limited (ALRL) is working on a detailed business case. The Ministry monitors the work of the company, provides policy advice on the project and supports the project's Sponsors. You chair the Sponsors Group and it will be a priority to provide direction to the project.

#### Waitematā Harbour Connections

Waka Kotahi is developing an indicative business case on a recommended option including roading, rapid transit and cycling connections. This is scheduled to be considered by the Waka Kotahi Board in early 2024. The Ministry's feedback to date has been that significant work is required before moving to a decision-making process, including on lower-cost options. You have a role in setting direction for the work and ultimately deciding whether to take the project forward through Cabinet.

#### Northwest

The Northwest corridor has consistently been identified as a high-priority rapid transit corridor for Auckland. Interim improvements are underway including new bus stops, interchange enhancements, and extended bus lanes on SH16. Waka Kotahi is commencing a detailed business case on a permanent rapid transit system. This corridor is a priority for the Mayor of Auckland and the Ministry expects it to be raised as part of your discussions on the Tāmaki Makaurau Transport Plan

# The Ministry will seek your direction on Auckland's transport priorities

The Ministry will seek your direction on completing work on the Tāmaki Makaurau Transport Plan and on major projects will be priorities for the Auckland work. The Ministry will provide you with more detailed advice on these important projects in the near future.

## Building a resilient transport system

#### The transport system connects New Zealanders but is vulnerable to shocks and disruptions

The transport system is vulnerable to shocks and disruptive events (either natural or human). New Zealand's 'tyranny of topography' has led to transport corridors being constructed in steep valleys, alongside coastlines, and across rivers and floodplains. Many communities are in remote areas or have limited routes connecting them to the rest of New Zealand. This creates increased vulnerabilities for communities and business. In recent years, New Zealand has started to experience the effects of climate change through severe weather events like Cyclone Gabrielle and natural disasters like the Christchurch and Kaikōura in 2011 and 2016 earthquakes respectively.

Transport operations can also be disrupted by other vulnerabilities. Parts of the transport system rely on highly trained workforces which are susceptible to staff shortages, for example maritime pilots, air traffic controllers, ground handlers, airport rescue fire services, and bus and train drivers. The aviation system relies on imported jet fuel, which if it fails quality testing on arrival into the country results in disruptions to aviation operations. We also need to manage the transport system's susceptibility to security threats from malicious actors.

### A lack of resilience drives extra costs into the transport system

Being resilient is the ability to anticipate and manage disruptive events, minimise their impacts, and respond and recover effectively. In essence, resilience is about developing a wide zone of tolerance to external impacts and remain effective across a range of future conditions<sup>8</sup>. The methodology New Zealand has adopted to build resilience and manage risks is the 4R's Framework of Reduction, Readiness, Response, and Recovery. This framework is applied across the transport system.

A transport system that is not resilient increases the costs and time to reinstate critical transport connectivity to affected communities. Shocks from natural disasters such as the Christchurch and Kaikōura earthquakes, alongside the increasing frequency and severity of weather events caused by climate change, result in significant social and economic costs to restore transport networks.

### Work to enhance the resilience of the transport system is underway

The Ministry uses its leadership and system stewardship role across strategic policy and operational work to build transport system resilience into wider system reforms and work programmes. The Ministry works to ensure a broader 'New Zealand Inc' perspective is applied to managing transport system risks and in building better transport system resilience.

#### Resilience work includes:

- Involvement in the National Security System reforms, and membership of the Counter-Terrorism Coordination Committee, Major Events Security Committee, and Maritime Security Oversight Committee.
- Involvement in the Emergency Management System reforms, including emergency and catastrophic planning, and the current emergency management and the DPMC-led Critical National Infrastructure work programme.

<sup>&</sup>lt;sup>8</sup>NEMA (2019), National Disaster Resilience Strategy

- Involvement in climate change work programmes, including the Resource Management System Reforms, National Adaptation Plan, Emissions Reduction Plan, and membership of the Climate Change Interdepartmental Executive Board.
- Connecting the transport system into operational readiness, response, and recovery activity through its role as Chair of the interagency Transport Response Team, which is the Sector Coordinating Entity for the transport system in an emergency.

### As the Minister of Transport, you can play an important role to enhance transport system resilience

You can play a role in enhancing the resilience of the transport system by:

- Maintaining relationships across the sectors identified so the perspective of the transport sector is given due weight in the Government's wider resilience-related work.
- Engaging with your Ministerial colleagues on legislative programmes which cut across the transport system, such as the Emergency Management reforms, Climate Adaptation Bill, and Resource Management reforms.
- Engaging with other Ministers to address specific resilience issues (for example, the availability of RNZAF Base Ohakea and jet fuel supply chains).
- Making decisions on further investments via the National Resilience Plan.

## Safer and more secure transport

### Travel throughout the transport system needs to be safe and secure

Travel needs to be as safe and secure as it can be, whether by road, rail, aviation or maritime. There is also new technology to consider, such as drones and e-scooters. People should not be harmed when using transport and should be confident when using the system. Confidence is important so New Zealand can unlock the benefits of new technology, such as drones.

Different modes have different attributes which mean that safety and security outcomes are achieved in different ways in each of those sectors.

For aircraft and ships that operate internationally safety and security settings are driven by international standards. Aviation and maritime also have greater inherent risk of catastrophic harm events. New Zealand needs to continue to engage internationally with the relevant bodies, in particular the International Civil Aviation Organisation (ICAO) and the International Maritime Organisation (IMO) and with other jurisdictions so New Zealand stays up to date with global developments and can influence international settings.

The maritime security environment has become increasingly complex. The effective delivery of the Maritime Security Strategy requires strong leadership and alignment across government. The Ministry has a key role to play as we chair the Maritime Security Officials Committee (MSOC).

## Road crashes killed 376 people last year and cause \$8 billion of harm each year

Roads are used by just about everyone in New Zealand, and usually on a daily basis. As at 14 September 2023, 376 people died in road crashes in 2022, with many more suffering permanent life-changing injuries<sup>9</sup>. Social cost of road trauma is estimated to be as much as \$8 billion a year. Our rate of road deaths is also significantly higher than that of many other jurisdictions New Zealand compares itself to, as indicated in Figure 1 below.

#### Road deaths per 100,000 inhabitants (2022)

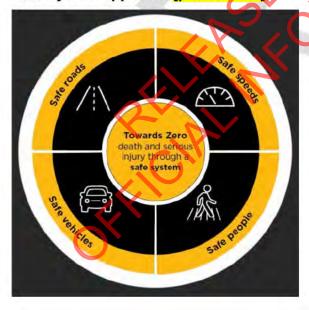


sustained effort is required to reduce the number of people dying or being seriously injured on our roads.

# Evidence suggests interventions are required across all parts of the system to improve road safety

New Zealand has followed the Safe System approach in recent years, which has become the internationally accepted best practice for road safety. A Safe System means improving the safety of all parts of the system – roads and roadsides, speeds, vehicles and road user behaviour – so that if one part fails, other parts will still protect the people if they are involved in a crash.

#### Safe System approach [placeholder]



To come – data on the number of serious injuries (current figure is 2,470 but need to confirm). Serious injuries are defined as fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.

Progress in all areas is still needed to reduce deaths and serious injuries on our roads. However, you can choose to place more emphasis on interventions in some areas than others.

#### New Zealand has made progress in some areas, but there are significant opportunities for improvement

The previous Government issued the *Road to Zero* road safety strategy that has targets for reductions in deaths and serious injuries. There has been progress in some areas. For example, Police have increased their enforcement activity in the last 12 months, with an additional one million alcohol breath tests conducted than in the previous year.

Some of the interventions set out in the strategy have been found to be highly effective. For example, changes to speed limits on State Highway 6 Blenheim to Nelson has seen the number of deaths and serious injuries reduce by approximately 80 percent in first two years, while the average journey time has increased by approximately four minutes over the 110km road length. Installation of median barriers at SH2 Waipukurau in 2020 has seen a 100 percent reduction in deaths and serious injuries in the two years since.

COVID-19 slowed delivery of initiatives and there have been other challenges, which have impacted the scale and pace of change.

Public acceptance of some of the actions under the strategy has been limited, in particular, concern has been expressed about:

- the public advertising and associated messaging, particularly that "zero" is an unrealistic target
- some of the focus areas, such as the level of speed reduction proposed.

Given these challenges, the Ministry has started reviewing the approach to road safety. We are preparing more in-depth advice on the impacts that different initiatives will have on reducing deaths and serious injuries to assist you as you consider the strategic direction you wish to take for road safety. The Ministry would welcome the opportunity to discuss your expectations for road safety, including on what interventions you want to see focus applied.

## Rail safety requires clear regulatory frameworks and investment

Rail safety needs clear regulatory frameworks, strong oversight and investment to provide the required level of safety assurance. After recent investment and growth, the risk profile of rail has increased. There have been several rail safety incidents involving fatal and serious injuries and recent reviews into the Auckland and Wellington metro systems have highlighted the need for system improvement and the need for the rail regulator to rigorously address risks.

Waka Kotahi NZ Transport Agency has primary regulatory responsibility for rail safety in New Zealand. Waka Kotahi has a critical regulatory role in assuring stakeholders and the public that the country's rail networks are being managed safely. This is achieved through regulation of the rail industry in accordance with the Railways Act 2005.

There will be opportunities over this term to consider how to continue to improve the legislation, regulation and oversight of rail safety, and to align New Zealand's rail safety approach with international best practice.

### Drones and emerging aviation technologies require fit-for-purpose regulations to improve safety

The Ministry has a role in both the safe regulation of emerging aviation technology and enabling more innovative applications of drone. New Zealand's long-term objective is the safe integration of drones and other emerging aviation technologies into the civil aviation system.

Increasingly innovative uses of these technologies offer potential economic, environmental and social benefits. This includes lifting productivity and wages through innovation, lowering emissions and improving other environmental outcomes. New Zealand needs to cater for growth of the drone sector and ensure that appropriate levels of aviation safety and security in the aviation system are maintained.

New and fit-for-purpose regulatory tools are necessary to enable advanced operations of drones within airspace shared with conventional aircraft, while maintaining or improving safety standards, and addressing any problems caused by drone use, such as noise and privacy implications.

The rapidly growing drone sector has challenged aviation safety and security. Drone operators are finding more novel and sophisticated ways to use technology. As a result, the challenges to safety and security are becoming increasingly difficult to manage.

The Ministry and other agencies have explored new policy initiatives and a developed a series of complementary regulatory measures to support drone integration and we will provide you with further advice on the proposed package of measures.

## Maritime safety and security are important to people, the economy and the environment

Maritime transport is a critical part of our economy, with most of our imports and exports moving by sea. As an island nation, New Zealand relies on ferries to transport commuters, tourists, and Kiwi travellers between islands. Boating is also an important part of Kiwi culture with over 1.9 million people taking part in recreational boating in 2020.

Maritime activity is inherently dangerous. Since 2015, an average of 16 recreational boating fatalities have occurred every year. Fatalities occur throughout the country, and most are associated with falls overboard, a vessel capsizing or flooding. Many Transport Accident Investigation Commission and coroner reports have found that fatalities might have been prevented if lifejackets had been worn.

Safe navigation is as critical in the maritime space as on land. Maritime incidents not only endanger human lives, but also the environment and the economy, as the Rena disaster demonstrated. The accessibility of the sea to recreational boating means recreational boating and commercial shipping operate in very close proximity to each other.

## Maritime legislation needs to be reviewed

The Ministry and Maritime New Zealand have started a review of primary maritime legislation. Changes could be made to make the system safer, while ensuring the maritime regulatory system supports trade in the face of future emergencies, transnational crime, climate change, technological change and other challenges.

#### As Minister of Transport, you can help to enhance transport safety

The Ministry can provide you with any further information that you require on these areas of transport system safety. You can help to enhance transport safety by:

- Considering advice on reframing of approaches for road safety
- Taking a package of drone policy decisions to Cabinet
- Considering advice on the review of maritime legislation review Maintaining relationships across the sectors identified so the perspective of the transport sector is given due weight in the Government's wider resilience-related work.

## Using regulation to support transport outcomes

## Regulatory frameworks are being challenged

Transport regulatory systems are made up of primary and secondary legislation, the Ministry, and transport Crown entities who carry out the role of regulators, deliver services, and educate and inform people on requirements set out in legislation.

New Zealand's transport regulatory systems are significantly shaped by international obligations, standards and recommended practices.

A more challenging economic outlook and fiscal position means that there is added emphasis on ensuring that all aspects of our regulatory systems deliver value for money and support increased productivity.

Our current regulatory frameworks are being challenged across all modes in areas such as driverless vehicles/craft (e.g. unmanned aircraft and autonomous vehicles), different fuel types (e.g. sustainable aviation fuel, hydrogen) and different types of craft (e.g. drones). Artificial intelligence (AI) is disrupting every industry and will change the way New Zealanders commute and the way they use transport infrastructure.

### Regulation is needed to realise the benefits of new technologies

Introducing new technologies that are often still evolving with unclear trajectories, while minimising harm, is a major challenge for policy makers and regulators. The beneficiaries of these technologies (the investors, manufacturers and consumers) often do not wear the full costs of their risks. Instead the burden is borne by society at large and their governments.

Therefore, it is crucial to have a regulatory system that appropriately balances safety outcomes with innovation, certainty and regulatory efficiency is in place before new transport technologies are rolled out at scale.

Regulation provides the framework and permissible set of conditions under which decisions can be made on important features of transport markets such as entry, pricing, access obligations and quality or conditions of service. To remain efficient over time, the regulatory framework needs to evolve as technological and society changes. Timely and proportionate regulation can support the exploitation of promising opportunities while also introduce new constraints to limit harmful trends.



PEICIA

For the government, new technologies raise issues about when to act. Drones are here and regulatory action is being taken. While technological innovations, such as driving automation technology in vehicles like Electronic Stability Control, already contribute to the decline in deaths and serious injuries on our roads, the deployment of fully automated vehicles at scale remains very uncertain. Potential safety benefits are high but so are the risks. Safety will be the primary consideration before fully automated vehicles will be allowed to operate on New Zealand roads. In this case, the Ministry has carried out preparatory work to identify the issues and the regulatory work that might be needed. including releasing a Long-Term Insights Briefing on the impact of these vehicles on New Zealand's roads in 2022. The Ministry will be well placed to advise you should the priority of this work need to be raised.

Positioning New Zealand's regulatory frameworks for the

#### future

Implementing the new Civil Aviation Act and the review of maritime legislation are all examples of work that will bring regulatory systems up to speed with new developments and help to future-proof them. The Ministry looks forward to providing you with more information on our regulatory stewardship role and the Ministry's work to help position New Zealand for future technological developments like drones and automated vehicles.



He pepa whakamōhiotanga mō te Minita | Briefing to the Incoming Minister | Briefing to the Incoming Minister

Te Manatū Waka Ministry of Transport

October 2023

## Contents

Part One: He Wakamana i a Aotearoa Kia Momoho   Enabling New Zealanders to Flourish
Part Two: Strategic Opportunities and Challenges1
Investing in a high quality transport system
A net-zero transport system
Maintaining and growing New Zealand's international connectivity11
Developing thriving cities and regions12
Strong Auckland, strong New Zealand
Building a resilient transport system
Safer and more secure transport18
Using regulation to support transport outcomes and improve productivity
Appendices No table of contents entries found.
Schedules No table of contents entries found.
Annexes No table of contents entries found.
Tables
No table of figures entries found.
Figures
Figure 1 Heavy civil engineering - construction9 Figure 2 Forecast expenditure and revenue3 Figure 3 Average annual revenue raised by New Zealand's current tools4
Figure 4 Additional emissions reduction needed

#### CONTENTS

Figure 5	Transport emissions reduction by emissions budget period	10
Figure 6	Road deaths per 1000,00 inhabitants (2022)	19
Figure 7	Safe System approach	20



#### Foreword

Tena koe Minister, and congratulations on your appointment as Minister of Transport.

The Ministry has a key role in providing advice to you on the decisions that sustain the transport system and to help achieve your transport priorities.

Transport is about people. We move to go to work or school, to connect with family, friends and communities, and to shift materials, goods and services. New Zealand's transport system enables the social and economic prosperity of our cities, towns and rural communities.

The transport system also has negative impacts, including road deaths and serious injuries air and noise pollution that affects the health of the general population, as well as producing a significant proportion of New Zealand's greenhouse gas emissions.

This year we have seen extreme weather events impacting communities and transport networks across the country. The Auckland Anniversary floods and Cyclone Gabrielle caused lasting damage to communities and vital infrastructure.

Increasingly, our cities and towns are facing funding pressures, driven by the demand for new or replacement infrastructure, of which transport is a major component. We must ensure the transport system is fit for future generations and able to withstand the impacts of extreme weather events.

Addressing these challenges places further pressure on existing funding models. The cost of maintaining the transport system, together with the need for repairs to roading and rail networks damaged by extreme weather events, will need to be balanced with new investment priorities.

The Ministry has been investigating the future of transport revenue system, including the role of additional funding tools, with the objective of providing more clarity on who should pay for what and how to apply a sharper focus on value for money.

The Ministry works collaboratively with agencies and stakeholders to advance a longterm, integrated approach to the transport system. To create thriving cities and regions the transport sector needs to be more closely joined-up with planning, housing, other infrastructure, and broader funding and financing models.

As a Crown agency, we have an important responsibility to actively improve outcomes for Māori to ensure a transport system serves all New Zealanders equitably. A key focus area for everyone at the Ministry is our Hel Arataki strategy which seeks to identify issues and opportunities for Māori in transport policy design and delivery.

As Minister of Transport, you can make real differences to the lives of all New Zealanders. In our role as system lead, we look forward to giving you the advice and support needed to put your priorities in place to help advance the nation's transport system.

Nāku noa, nā

THE STATE OF THE PROPERTY OF T	Glossary	of terms	and ab	breviations
--	----------	----------	--------	-------------

## Part One: He Wakamana i a Aotearoa Kia Momoho | **Enabling New Zealanders to Flourish**

#### Transport is critical for New Zealand's economic, social and environmental health

New Zealand's transport system connects us to work and school, to our whānau, to our communities and to the rest of the world. The smooth and sustainable movement of people and goods throughout the system is critical to our economic, social and environmental health. The transport system is an important contributor to productivity and economic growth. The system supports other sectors and society's wider goals like better and affordable housing, desirable cities that attract skilled and talented people and healthier New Zealanders. The system also has negative impacts, including producing a significant proportion of New Zealand's greenhouse gas emissions, other air and noise pollution that affects the health of the general population and deaths and serious injuries for the people using the system.

PART ONE: HE WAKAMANA I A AOTEAROA KIA MOMOHO | ENABLING NEW ZEALANDERS TO FLOURISH

The transport system involves millions of journeys every day on extensive networks of public and private infrastructure across New Zealand. These networks connect a population spread-out thinly across regions, but also concentrated in cities, who all need to be well served by the transport system to meet their social and economic needs.

These networks are used by a wide array of vehicles every day, and there are competing demands, including increasingly for use of street and city spaces. New Zealand's environment and geography also mean that our critical transport infrastructure is exposed to a broader and more consequential range of potential shocks than many other highly developed countries.

In New Zealand [sample data only - aviation, martime etc to be added]:

- there are over 4.5 million registered motor vehicles in New Zealand, which is one of the highest rates of vehicle ownership in the world – around 64,000 of these are fully electric light vehicles
- transport produces 39 percent of our domestic carbon dioxide emissions and 17 percent of total greenhouse gas emissions
- around 200,000 New Zealanders (5 percent of the workforce) are employed in transportrelated industries.
- 20 million tonnes of freight are caried by rail annually
- around 34 percent of New Zealanders over 15 used public transport while 80 percent spent time travelling by private car
- 377 people died on our roads in 2022
- 46.3 billion vehicle kilometres were travelled in 2020
- approximately 2 million adult New Zealanders participated in recreational boating activities in 2022.2

Based on Statistics NZ Business Demography Statistics, Snapshot at February 2022

Maritime NZ Survey

## PART ONE: HE WAKAMANA I A AOTEAROA KIA MOMOHO | ENABLING NEW ZEALANDERS TO FLOURISH Growing demands on the transport system are creating new challenges

As New Zealand has grown and matured, the demands on the transport system have grown significantly. In the past, the challenge revolved around efforts to grow capacity as activity increased and keeping the system maintained. However, new challenges, especially the need to adapt and mitigate the effects of climate change, call for a fundamental shift in the way New Zealand's transport system operates. The long-lived networks that underpin the transport system need to be planned and funded over the long-term, managed and regulated effectively to support the shift needed.

#### The land transport system is more expensive to build and maintain

As the land transport system grows, it becomes more expensive to build, operate and maintain. Operating and maintenance costs are making up an increasing share of transport spending. This has taken place in the context of a planning and funding system, especially for land transport, that works well to signal investment priorities and ambitions but works less well to create incentives to spend money efficiently and effectively.

The increase in costs is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment, a need to consider resilience, and an expanded range of activities that are being funded. This has led to increased pressure on the available funding and resulted in a range of short-term solutions being put in place, including increased Crown funding and debt.

#### Ambitions for new investment are growing beyond capacity

Investment in the transport system is an important way of increasing New Zealand's economic growth and meeting many of the social and educational ambitions of New Zealanders. Cities need to move people and freight efficiently while the regions need strong connections to well-run ports and airports to move their products to market. Still, investment ambitions are running ahead of the capacity of the revenue system to meet them or the capacity of the construction sector to deliver new projects, especially alongside ambitious programmes in other sectors like water and housing. In the land transport system, our approach has historically been a "predict and provide" model where investment is made against forecast future demand, within a relatively stable revenue base. Increasingly, many places are using a "decide and provide" approach, where the desired future is identified and agreed, and transport infrastructure is provided for this future.

New Zealand's current approach is already unaffordable, with planned expenditure for the next 20 years nearly double the \$10 billion per annum of current investment, and more than four times the size of the National Land Transport Fund. These commitments have not been made based on a system-wide investment plan and have likely driven inefficiencies in the system. Management oversight is also spread very thinly which exacerbates risk.

Even if this full programme could be funded, it will not deliver the outcomes government and others are seeking from the system and there is unlikely to be the construction capacity to deliver it. Increasingly, New Zealand is having to look to other tools, such as pricing and demand management (e.g. congestion charging), regulatory interventions, use of data, and the way transport and land use are considered together.

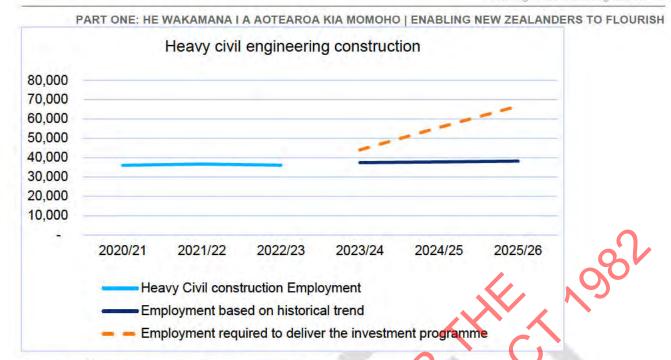


Figure 1 Heavy civil engineering - construction

Source: Ministry of Transport

There is a growing urgency to consider the balance between new expenditure and maintaining the system and establish a more certain and sustainable model for funding their transport priorities both to meet short term needs, but also to establish an enduring model for the next decade and beyond. This will involve considering the balance between new expenditure and expenditure to maintain the system and how to apply a sharper focus on value for money.

#### A new approach to paying for land transport is needed

In the aviation and maritime sectors, the networks are mostly owned and operated by private interests, with some local government investment. In the land transport sector, central government has more of a role in how the system is planned and funded. New Zealand's land transport system has been reliant on a parrow range of user charges (mainly taxes on fuel and charges on diesel and heavy vehicles) to pay for much of our land transport.

Over the last two decades, Crown contributions and borrowing have increased as the level of funding from user charges has fallen behind investment ambitions. This, and other factors, have put the system under pressure. Our revenue system does not easily support large, long-term investments. Many of these have a scale of cost that needs to be spread over many years.

#### We need to decarbonise the transport system

Transport is one of New Zealand's largest sources of greenhouse gas (GHG) emissions, producing 40 percent of our domestic CO₂ emissions and 17 percent of total GHG emissions. Most transport emissions (92%) come from land transport (primarily light vehicles such as cars, utes and vans at 64%).

The Climate Change Commission has identified transport as a sector with the potential to almost completely decarbonise by 2050 and make large reductions from the third emissions budget period (2031-2035) onwards. Because some other sectors are expected more challenging to decarbonise, New Zealand's overall emissions reduction success is likely to rely heavily on transport realising this potential.

PART ONE: HE WAKAMANA I A AOTEAROA KIA MOMOHO | ENABLING NEW ZEALANDERS TO FLOURISH

We have started the journey towards net zero transport emissions by 2050. The first Emissions Reduction Plan was published in May 2022. The transport chapter sets out the specific actions to be taken between 2022 and 2025 to reduce transport emissions in line with the emissions budget agreed for this period. The expected emissions reduction from transport will jump significantly in the next two emissions budget periods. Work is underway to develop the transport content for the second Emissions Reduction Plan, which must contain actions that can both meet transport's expected contribution to total emissions reductions between 2026-30, and also set the sector up to meet its even more ambitious expectations between 2031-2035.

## New Zealand's international connections are increasingly vulnerable and uncertain

New Zealand's ability to trade and connect with the world is increasingly influenced by geopolitics, the international politics of climate change and New Zealand's position as the last stop on many international supply chains. Aviation and maritime are emissions intensive industries and, in the coming decades, there will be growing global pressure on these sectors to decarbonise. Market based measures to reduce emissions in these sectors will be important, but they are likely to disproportionately impact New Zealand due to our distance from the rest of the world and a lack of viable alternatives. It is therefore important that we work collaboratively with these sectors and support them to decarbonise as quickly as possible. These sectors are increasingly seeking government leadership, involvement and support for measures to enable and support their efficiency and transformation.

#### New technologies need to be integrated

Transport will need to integrate considerable change to technology, including in energies and fuels. This brings considerable opportunity but also risk. Managing this quickly and safely will require a fit-for-purpose transport regulatory system. There are some challenges and cost in adapting current frameworks to regulate new technologies as well as how to fund the infrastructure necessary for quick adoption of beneficial new technologies.

#### Transport safety and security remains a priority

Improving transport safety and enhancing security of the transport system remains an issue for New Zealand. For example, proportionally more people per capital are killed and seriously injured on our roads than most other OECD countries, and approximately 58.7 percent more than in Australia. Provisional figures for 2022 saw 377 people killed on the roads. Measures needed to improve safety require sustained effort and acceptance from those who may be affected by changes. Meanwhile, it is critical that New Zealand continues to effectively implement international security obligations for aviation and maritime to ensure New Zealand remains a trusted destination for airlines and shipping operators.

### You can guide and shape the system to meet the challenges it faces

The responses to the challenges and opportunities New Zealand's transport system faces will involve many choices. Over the next decade, New Zealand's transport system will need to evolve to produce net zero emissions by 2050, significantly reduce road deaths and serious injuries, and address the significant disadvantages some groups and individuals face when accessing the transport system. The system will also need be ready to adapt to shocks like severe weather, future possible pandemics, natural disaster, or economic downturns.

PART ONE: HE WAKAMANA I A AOTEAROA KIA MOMOHO | ENABLING NEW ZEALANDERS TO FLOURISH

While transport decision-making is more demanding than it has been in the past, there are good opportunities to achieve change. As Minister, you can shape the system to make sure all New Zealanders can use it safely and efficiently, and the Ministry's role is to support you in your efforts.

As the Government's policy lead and system steward for transport, the Ministry will give you robust, evidence-based, future-oriented advice on the policy, investment, and regulatory settings that give the best chance of achieving your goals. The Ministry's System BIM gives further detail on the policy tools and levers available to you, including the role of the Ministry's Transport Outcomes Framework.

#### Short-term policy priorities

FFICIA

The Ministry believes that there are several short-term priorities for you and your incoming Government to consider. The Ministry would like to discuss these with you as soon as possible These priorities include:

- Finalising and issuing the 2024 Government Policy Statement on Land Transport (GPS). The GPS will give effect to your vision and priorities for investing the National Land Transport Fund into the land transport system. This will require you to consider how to fund the GPS, including progressing work on revenue options (e.g. congestion charging) that can be implemented at pace.
- Alongside the GPS, ensuring a strong focus on improving cost management in the land transport system.
- Confirming your intended direction for a range of major planned infrastructure investments, including the rapid transit network in Auckland.
- Confirming your approach to emissions reductions in the transport sector, including by setting priorities for the 2nd Emissions Reduction Plan (ERP2).
- Restoring the financial sustainability of our transport regulatory agencies, whose revenue streams were disrupted by the COVID-19 pandemic.

The Ministry looks forward to discussing your objectives and these priorities further with you.

### Part Two: Strategic Opportunities and Challenges

### Investing in a high quality transport system

#### Challenging economic context

With a challenging economic outlook, existing risks to long-run fiscal sustainability and cost pressures, New Zealand must make choices about how the transport system will be developed and managed over the next decade and beyond. Government investment, along with other interventions, is needed to create a high quality transport system for all New Zealanders. However, a good result requires investing in the right things and at the right time, with tight cost control.

#### New Zealand has been spending more on transport

New Zealand has been spending more on transport, both on new infrastructure and maintaining and operating existing networks. This is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment and an expanded range of activities that are being funded. More investment has been going towards public transport and rail, in part to meet broader social objectives, such as improving access and reducing emissions. Around 60 percent of the funding available through the National Land Transport Fund is usually committed to maintenance and providing core services, such as road policing, and these activities are becoming increasingly costly

This situation is leading to an increased pressure on the available funding and has required a range of short-term solutions being put in place, including increased Crown funding and debt. In addition, existing revenue sources are unlikely to keep pace with these increasing demands, unless decisions are taken to significantly increase the amount collected from them. Fuel excise duty is a major source of revenue for the transport system, but this revenue source will become less certain and unstable over time as vehicles become more fuel efficient and more people choose to travel by other modes.

An ambitious pipeline of projects has either been committed to, or explored, but the funding, scoping and phasing of these projects is still largely to be decided. These projects include Auckland Light Rail, the Strategic Investment Programme (outlined in the draft GPS 2024), and the additional Waitematā Harbour Crossing. If all these projects proceed to construction, the Ministry estimates that the total Investment in land transport over 2024 – 2034 will be \$125 billion, compared to \$61 billion in the 10 years from 2013-2023. Analysis from the New Zealand Infrastructure Commission, Te Waihanga, suggests that this would materially exceed the capacity of the labour market in Auckland, even under optimistic growth assumptions.

#### The Government invests in land transport through the National Land Transport Fund and through direct funding

Central government sets the direction for investment in transport infrastructure and services using the Government Policy Statement (GPS), which sets priorities for the National Land Transport Fund over a 10-year period. A draft GPS has been out for public consultation and, as a statutory document, must be published by 1 July 2024. Finalising the GPS is essential because it drives land transport planning and funding decisions made by both Waka Kotahi and local government.

Waka Kotahi gives effect to the GPS through the 3-yearly National Land Transport Programme, which sets out planned activities and projects. Waka Kotahi has statutory authority over what activities and projects are included in the National Land Transport Programme and approved for funding. Regional Land Transport Plans made by Regional Transport Committees, consisting of Waka Kotahi, local government and sometimes KiwiRail, feed into the National Land Transport Programme. This process helps reconcile the different priorities of central and local government.

Separate to the GPS process, the Crown has, at various times, funded additional transport projects through the annual Budget process. These have tended to be larger projects, such as those under the New Zealand Upgrade Programme (e.g. Melling interchange, Ōtaki to north of Levin), or the Auckland City Rail Link. They may have bespoke delivery and governance arrangements depending on the preferences of the Government. Sometimes, these projects have been committed to before there is agreement on the scope of the project or the full detail on cost is available, leading to a need for subsequent trade-offs in scope or unexpected cost increases.

### GPS 2024 will set the Government's land transport policy

The draft GPS, which has been consulted on, sets out proposed strategic priorities, the core investment required to maintain the system and the funding available from usual sources, as well as the suggested funding package to address the gap between them. That funding package emphasises the choices to be made in finalising GPS 2024 because it relies on raising FED and RUC (\$1.4 billion), Crown grants (\$2.7 billion), Crown loans (\$3.1 billion) and some non-traditional funding sources like the revenue from traffic infringements (\$300 million) and the Climate Emergency Response Fund (\$500 million).

While the proposed funding package would reduce the pressure over 2024-27, the Ministry expects that there will continue to be a gap between expenditure and revenue. The draft GPS 2024 outlines a \$4.4 billion decrease in funding over 2027-30 compared to 2024-27.

In these circumstances, it will be vital to ensure that investment proposed in the final GPS is carefully prioritised, affordable, and meets your objectives. Further, there is a need to make sure that cost is better managed in the system through a sharp focus on value for money, strong business cases and ensuring there are a broad range of options considered, including options that do not involve investment, such as demand management. While there are also choices to generate additional revenue through existing tools, and maybe some newer ones, there will be constraints, especially in the face of upward pressure on the cost of living.

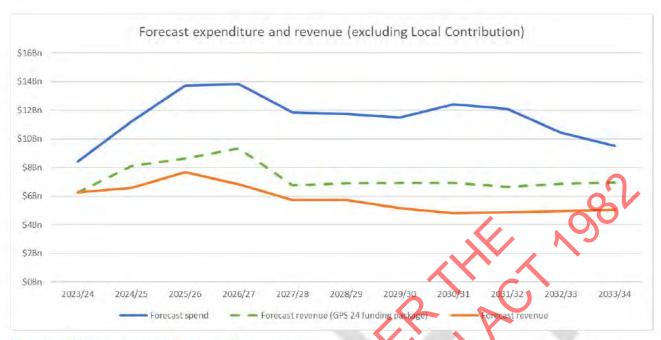


Figure 2 Forecast expenditure and revenue

Source: Ministry of Transport

#### Ensuring a sustainable land transport revenue system

The established tools for funding the land transport system, like the distance and weight-based Road User Charges system for diesel and heavy vehicles, are still world leading. Fuel Excise Duty is an extremely cost-effective and efficient method for collecting revenue from petrol vehicles.

These forms of funding are not well suited to very large, lumpy investments (eg mass rapid transit) that have wider benefits, such as supporting intensification. Further, there are developing issues around inequities and inconsistencies between road users, the charging of externalities and the long-term sustainability of Fuel Excise Duty.

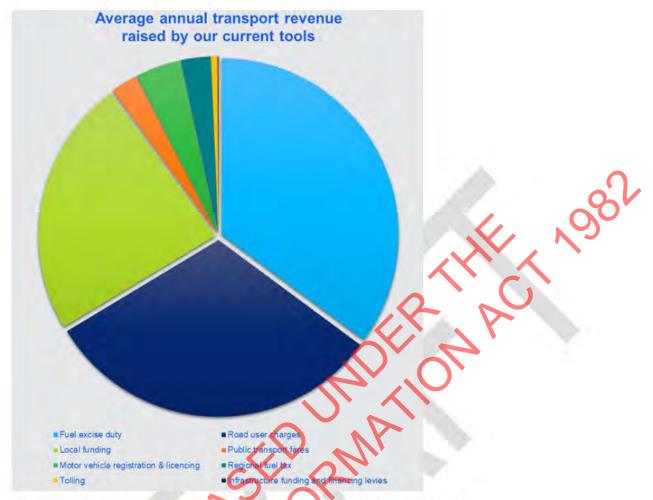


Figure 3 Average annual revenue raised by New Zealand's current tools

Source: Ministry of Transport

# The Ministry has been working on the options for building a sustainable land transport revenue system

The Ministry has been investigating what is needed to enhance the transport revenue system, including the role for additional tools and providing more clarity on who should pay for what. There are longer-term and shorter-term elements to this work. In the long term, there are opportunities to look at the balance between who should bear the costs of the transport system amongst users, ratepayers, taxpayers and other beneficiaries. What ever approach is chosen, it will need to be predictable, stable and have good levels of public buy-in, as transport costs affect every New Zealander and every New Zealand business. The consequences of choosing the wrong solution, or implementing a good solution poorly, are significant.

While some changes would need to be implemented over the longer-term, there are revenue options that should be progressed in the shorter-term, including:

- value-capture mechanisms
- congestion charging
- tolling (under current rules or new rules)

greater use of private capital.

These tools will help provide additional revenue. However, they are unlikely to generate enough revenue to fill expected gaps over the next decade and each option comes with its own risks and challenges.

#### The Ministry will provide advice on the role of Crown funding and on a transition to wider-spread use of RUC

Crown funding or debt can play a useful role in meeting transport funding needs. However, practices have varied and this can lead to a lack of clarity about when it should be used and for what. Taking a more principled and transparent approach will help manage Crown cost and will provide more certainty and predictability for Waka Kotahi and cities and regions.

A transition towards RUC is already underway, with RUC generated revenue now almost equivalent to FED generated revenue [check], and with electric vehicles joining the RUC system from 1 April 2024. The RUC system overcomes the fuel efficiency issues with FED, and it may enable a more sustainable stream of funding over time. There are options for extending RUC, including moving all vehicles on to the system or more sophisticated charging approaches that would add time and location based charging.

#### There are fiscal constraints in Budget 2024

The Budget process is your opportunity to seek new investment for the Transport sector, to progress your priorities and meet pressing cost pressures.



As part of the announced Fiscal Sustainability and Effectiveness Programme (FSEP), Vote Transport must develop a permanent two percent (\$15.23 million) savings proposal, based on an eligible baseline of \$761 million. The eligible baseline broadly excludes funding in Permanent Legislative Authorities (including the National Land Transport Fund) and regulatory fees and charges. Almost all other Vote Transport operating funding is in scope.

#### The Ministry will meet you soon to discuss your investment and revenue priorities

The Ministry will seek to meet with you as soon as possible to discuss your priorities in these areas, including next steps for GPS 2024 and how it is funded and for Budget 2024. Clarifying your expectations early will ensure that agencies do not commit resources to developing bids that are unlikely to be supported.

#### More information on shorter term revenue tools

#### Value capture mechanisms

Value capture<sup>3</sup> tools are under utilised in New Zealand compared to other countries. There are a range of levy<sup>4</sup> and uplift-based<sup>5</sup> methods available to both central and local government.

Work undertaken to date has highlighted the potential for value capture but also the operational complexities of implementing these mechanisms.

#### Congestion charging

Congestion charging is a method for managing demand, so revenue generation is not its primary aim. This type of charging sets a higher cost for travelling at peak times, and encourages some users to change the time, route, or way that they travel. This can reduce congestion by spreading out use over time and defer the cost of new capacity because better use is made of existing capacity. Congestion charging has been successfully implemented to reduce congestion in cities around the world, for example, London and Singapore. However, schemes have also failed when there were low levels of public acceptability, in part due to concern about equity and a perception that congestion charging is only about raising revenue.

There is interest from several of the large metro councils in congestion charging, both to reduce congestion by managing traffic and potentially raise revenue for transport projects. The Ministry expects them to seek your support for legislation. Draft legislation has been developed so could be advanced quickly although the underlying policy would need to be confirmed with you.

#### Tolling

As Minister of Transport, you are responsible for approving tolling schemes under the Land Transport Management Act. § 9(2)(f)(iv) § 9(2)(f)(iv)

Tolling settings are relatively permissive but tolls can only be applied to "new roads". As well, New Zealand's low traffic volumes, the high administrative costs of collecting tolls and a lack of public acceptance, may limit the widespread use of tolling.

Within these constraints, tolling is being rolled out where a case can be made. However, there are options for new tolling approaches, including variable pricing or tolling existing roads, but these would require amending the Land Transport Management Act. For example, Waka Kotahi has been working with Tauranga City and Eastern Bay of Plenty on a proof-of-concept study for variable road pricing.

Here we are defining Value capture as the recovering or 'capturing' of an amount of the incremental benefit that landowners (either residential and or commercial) receive from investments in public infrastructure (and the resulting urban development and amenity), usually reflected in higher property (land and building) values

<sup>4</sup> i.e., a one-off charge based on property value increases due to the infrastructure.

i.e., a proportion of any capital value uplift is taxed.

Tolling options also need to be considered alongside other arrangements, such as congestion charges at a network level. In the longer term, shifting to a distance-based system will provide greater scope to implement variable charging across the network that could be used to manage demand more effectively.

#### Making greater use of private capital

In the past, Public Private Partnerships (PPPs) have been used with varying degree of success but have delivered some important lessons. There are two roads that have been delivered under the PPP model: Transmission Gully and Pūhoi to Warkworth. Compared to other types of PPPs, roading projects are riskier and more complex, largely due to ground and environmental factors including weather and storm damage.

The ability for PPP consortia to manage risk is critical for the success of the model. How this is done, when procurement processes are heavily weighted towards a low price, will affect the degree to which PPPs are used for roading projects in the future.

If implemented well, there is potential for PPPs to improve services and deliver new infrastructure. Using private finance means that more projects can be built sooner than through the conventional "pay as you go" public sector procurement. However, the current model spreads out the costs of these projects over a longer period, which must be managed as a first call against the National Land Transport Fund. Alternatively, Government could consider whether there is benefit in changing the contracting model for roading PPPs to transfer more risk to the operator (e.g. through demand-based tolling arrangements).

You can also choose to involve private equity in the delivery of transport infrastructure. Under this arrangement, the investor will take an ownership stake in an asset and is likely to seek greater control over design, construction and operation. However, they may also be prepared to take on a wider range of risks. Investors such as ACC and the NZ Super Fund have shown an interest in these arrangements which may be a good way of approaching wider packages of development in cities. Equity-based arrangements would challenge the transport system's existing ways of operating and may raise concerns with the public if there are perceptions of offshore ownership, and will require a change to an approach that provides longer term certainty around planning and funding, and the ability for private sector investors to work with Crown agencies (among others) earlier and have real influence on design choices and delivery arrangements.

# A net-zero transport system

# The Climate Change Response Act 2002 sets New Zealand's framework for reducing emissions

When New Zealand ratified the Paris Agreement in 2016, we committed to playing our part in global efforts to limit temperature rise to 1.5°C above pre-industrial levels. In 2019, Parliament

#### A NET-ZERO TRANSPORT SYSTEM

amended the Climate Change Response Act 2002 (CCRA) setting the target of reaching net zero Greenhouse Gas (GhG) emissions by 2050.

The CCRA sets out the strategic framework for the Government's approach to reducing emissions in line with our international commitments. Key components of the framework include:

- domestic GHG emissions reduction targets to reduce net emissions of all GHG (except biogenic methane) to zero by 2050
- a system of progressively reducing five-yearly emissions budgets to act as stepping stones towards the long-term target
- a requirement for the Government to develop and implement policies to achieve the budgets
- establishment of an independent Climate Change Commission to provide expert advice and monitoring to help keep successive governments on track to meeting long-term goals.

In 2022, the Government set and gazetted the first three emissions budgets as outlined in the table below. These largely followed the emissions levels recommended by the Commission. The Commission is due to advise the Government on the level of the fourth budget, covering the period 2036-2040, by 31 December 2024.

Time period	Level of permitted emissions (carbon dioxide equivalent, all sectors)
Emissions budget 1: 2022-2025	290 Megatons CO <sub>2</sub> -e
Emissions budget 2: 2026-2030	305 Megatons CO <sub>2</sub> -e
Emissions budget 3: 2031-2035	240 Megatons CO <sub>2</sub> -e

# Transport has the potential to almost fully decarbonise by 2050, and significant reductions are required

As well as recommending the first three emissions budgets, the Commission's first advice to Government included a "demonstration pathway" that outlines how New Zealand could stay within the emissions budgets and successfully reach net zero by 2050. This demonstration pathway informed the development expected contributions, or sub-sector targets, from different parts of the economy. While not legislated, the Government adopted these as sub-sector targets to enable sectors to track progress and manage 'unders and overs' between sectors while staying on track to meet the overall target.

Transport is one of New Zealand's largest sources of GHG emissions, producing 40 percent of our domestic CO<sub>2</sub> emissions and 17 percent of total GHG emissions. Between 1990 and 2019, transport emissions rose approximately 80 percent, faster than any other sector. The Commission identified transport as a sector with the potential to almost completely decarbonise by 2050 and make large reductions from the third emissions budget period (2031-2035) onwards. New Zealand's overall emissions reduction success is likely to rely heavily on transport realising this potential.

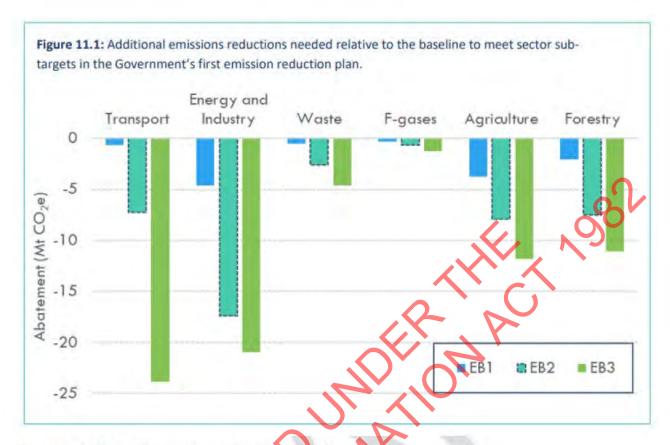


Figure 4 Additional emissions reduction needed

Source: Ministry of Transport

# We are a year and a half into the first emissions budget period and officials are working to deliver on the first Emissions Reduction Plan

We have started the journey towards net zero transport emissions by 2050. The first Emissions Reduction Plan (ERP1) was published in May 2022 and set out the Government's approach to emissions reduction and the specific actions to be taken between 2022 and 2025 to meet the first emissions budget. ERP1 sets focus areas, targets and specific actions to reduce transport emissions in line with the transport sub-sector target.

Officials are working to implement the actions in the ERP1 by the end of 2025.

Based on committed policies, and assuming the work underway to reduce transport emissions continues, current estimates suggest transport is likely to stay within its sub-sector target and meet its expected contribution to reducing emissions during the first emissions budget period. However, these estimates incorporate data that reflects a lower-than-expected level of travel. This decline is not fully understood and a range of factors are likely to have contributed, including migration, cost of living, and changing patterns in a post-COVID-19 environment. Caution should be applied when assuming this trend will continue. Changes to the actions in ERP1 may affect New Zealand's ability to meet the first three emissions budgets, and evidence from monitoring and reporting on ERP1 to date suggests achieving New Zealand's statutory climate change goals will require greater urgency.

## Work is underway to develop the second Emissions Reduction Plan

A considerable jump is required in emissions reductions from transport from the first to second emissions budget period. Work is underway at both the cross-government and sector-specific level to develop content for the second Emissions Reduction Plan (ERP2), which is due to be published by the end of 2024. ERP2 must contain actions that can meet the gazetted emissions budget for the second emissions budget period, from 2026-2030.

Based on committed policies, and assuming the work underway to reduce transport emissions continues, current estimates suggest transport is likely to stay within its sub-sector target and meet its expected contribution to reducing emissions during the second budget period. As stated above there is considerable uncertainty associated with the estimations and whether recently observed trends will continue. Meeting the second emissions budget is reliant on what is still an ambitious set of actions in ERP1 and will also depend to a large extent on what actions the Government decides to include in ERP2. Planning a buffer to achieve an emissions budget can help to account for some of the uncertainty.

In December 2023, you will receive initial cross-agency advice about key opportunities and challenges for ERP2 and some indicative content about what could be included. Cabinet will make decisions about the draft and final content for ERP2 in 2024.

## ERP2 will also need to factor in the third emissions budget

There is an even more significant jump in required emissions reductions from transport from the second to the third emissions budget (2031-2035). Our current modelling suggests that meeting the third budget for transport will require significant additional effort beyond currently committed policies. In its draft advice to inform the strategic direction of ERP2, the Commission advised that ERP2 will need to include many actions that set the transport sector up for the third emissions budget period, as well as those that can help transport meet the second emissions budget.

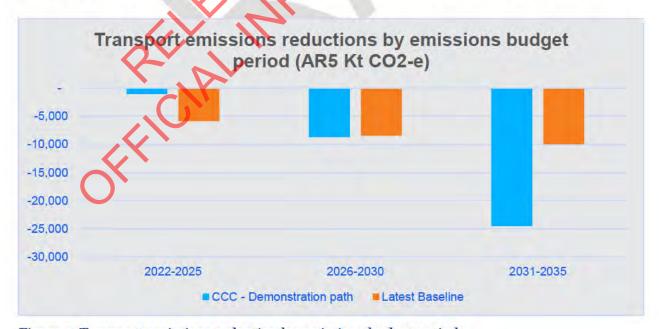


Figure 5 Transport emissions reduction by emissions budget period

Source: Ministry of Transport

## The next steps for ERP1 and ERP2

#### Aligning ERP1 with your strategic objectives

We can provide you with more detail about the focus areas, targets, and actions for transport in ERP1 and advise you on the impact of any changes you may wish to make to the remaining actions to be delivered in the first budget period.

#### Ensuring ERP2 meets your strategic objectives

Setting strategic priorities for ERP2 with your Cabinet colleagues and deciding what actions will be included for transport to meet its expected contribution will be some of the biggest strategic decisions you will make as Minister of Transport in the next 12 months. The Ministry will support you with advice to inform these decisions.

In December 2023, along with your Ministerial colleagues in other climate portfolios, you will receive a package of preliminary advice about the long-term pathways to net zero by 2050 and indicative advice about what these mean for ERP2. This advice is likely to seek your direction on some key strategic priorities, risks, benefits sought, and potential trade-offs, to inform the development of detailed options for inclusion in ERP2. The Ministry will provide you with additional transport-specific advice to supplement this interagency advice.

# Maintaining and growing New Zealand's international connectivity

## New Zealand's prosperity is heavily reliant on its connections to the world

International connectivity enables people and goods to move across our borders and is an important contributor to New Zealand's prosperity and well-being.

Most of our imports and exports move by sea - 99.7 percent of New Zealand's export goods by volume, and 80.9 percent of its exports by value. This makes the maritime sector vital to New Zealand's interests, including ports and the connections to them. The aviation system also delivers economic and social benefits of staying connected to each other and the global community. Air transport underpins key sectors in the New Zealand economy, including tourism, international education and high-value freight.

# New Zealand's international connections face a changing environment

The geo-political environment is becoming less rules based and more volatile, and there is growing risk around the international politics of climate change. This is presenting some risk to New Zealand as a distant trade reliant economy. The emissions from the aviation and maritime sectors are subject to increasingly tighter international standards and we need to be well engaged

to ensure these support New Zealand's carbon emissions and connectivity objectives while not disadvantaging our connectivity to the world. The international security environment has also become more complex.

### Government can help promote efficient supply chains

After COVID-19 demonstrated vulnerabilities in our supply chains, a role for government was identified. A National Freight and Supply Chain Strategy was issued on 18 August 2023 following extensive engagement with supply chain stakeholders. Industry stakeholders especially called for:

- better signalling of government's long-term plans for supply chain infrastructure
- better consenting and spatial planning that protects key logistic routes and nodes.
- a review of the current port system
- improved data collection and availability
- improved ability to transfer across transport modes
- building the workforce for the supply chain of the future

It is crucial that the thinking for the future supply chain that underpins the Strategy is translated into action. The next step proposed for the Strategy was the development of an action plan. Work priorities were identified around ports and their connections, road freight decarbonisation, freight data, and international connections.

# Proposed actions for progress on international connectivity and supply chain issues

Key actions that we will look to progress are:

- Taking forward actions to better collaborate with the private sector, so New Zealand has future supply chains that are zero emission, resilient, productive, efficient, safe and sustainable. This is likely to involve work on ports and their connections to road and rail, the transition to low emission heavy vehicles and improving freight data collection. A private partnership has already begun to accelerate decarbonisation of the aviation sector.
- Working across government and the aviation sector to develop a national policy statement for aviation and provide a joined-up view on how best to embrace opportunities and address challenges in the sector.
- Initiating a review of maritime legislation to ensure that our regulatory frameworks support an
  innovative productive, safe and secure maritime sector.

We will discuss these potential actions further with you.

# Developing thriving cities and regions

# High quality transport is a basic requirement for cities and regions

Cities and regions depend on high quality transport systems to have strong economies and good social connections. Regions require resilient and safe roading connections because they enable

their communities to participate in society and connect our primary producers to their overseas markets. Well targeted road investment and effective maintenance is critical. Traditional public transport services are often less useful in rural areas. Meanwhile cities need to be able to move many people around their networks on roads and public transport while allowing freight to move effciently.

### Transport should be well-integrated with other sectors

An important way to deliver good transport, either in cities or regions, is to make sure transport planning, funding, and delivery are aligned with land use planning, housing and utility provision and broader funding and financing approaches.

This need for integration is clearest in our largest cities, where there is a need to build more housing, improve economic productivity, reduce greenhouse gas emissions and become more resilient to natural hazards.

One way to address these challenges is to deliver more medium and high-density, mixed-use developments in places where people have a good range of transport options. Making a wider range of travel options available will allow more people to live and work in our cities and to choose from a greater range of housing and transport options, without increasing traffic, congestion, and emissions. New developments in greenfield locations also need to be well-designed and wellconnected with multi-modal transport networks. The transport, housing, and planning systems need to be well-aligned to achieve these outcomes.

In the past, cross-portfolio Ministerial forums have been used for urban development and infrastructure to encourage government agencies to work together on policy development and delivery. For example, increasing the supply of public transport is only effective if it is accompanied by high quality developments.

# Spatial planning is an important tool to support better integration

Spatial planning can provide long-term (30 years+), high-level, strategic direction for how cities and regions need to grow to achieve national and regional priorities. Integrated planning with other sectors like housing and water is critical to delivering long-term plans that retain support and can serve as a foundation for communities to develop well. Good Spatial planning can also allow national transport priorities to be integrated, alongside other national priorities, with regional priorities.

There is an ad-hoc approach to spatial planning in New Zealand. Only Auckland is legally required to deliver a regional spatial plan (the Auckland Plan). Four other high-growth cities have developed spatial plans under Urban Growth Partnerships between central government and local government. These spatial plans are at sub-regional levels and focus on high-growth areas in their regions.

Integrated planning across transport and other sectors will deliver much better outcomes and greater planning certainty but this is hard to achieve due to the numbers of decision-makers involved and the depth of issues involved. A structured approach is needed to make it possible. The Spatial Planning Act 2023 enacted by the last Parliament was an effort to achieve this. This Act requires all regions to develop a regional spatial plan, in partnership between councils, central government, and mana whenua.

# City and regional deals provide a potential mechanism to support spatial planning [t.b.c]

A shift to regional spatial planning raises questions about funding and financing major infrastructure projects that feature in these plans. For example, all the existing spatial plans developed through the Urban Growth Partnerships include rapid transit services and high-frequency public transport networks to provide the backbone for future large-scale urban developments. There is no funding pathway to deliver most of these projects.

Given the constrained funding environment, and the substantial costs of delivering large-scale transport projects, it is important to explore innovative new funding and financing models to deliver major projects. It is also important to make better use of existing transport networks (e.g. by using transport pricing tools, and by encouraging more efficient use of road space).

'City deals' and 'regional deals' provide a potential way for central and local government to coordinate the funding streams that would be required to fund the large investment in infrastructure that many cities will require. These deals reflect approaches used in other countries, including the United Kingdom, Canada, and Australia to support integrated programme delivery. They involve long-term partnerships between local and central government, with packages of funding and decision-making powers.

# The Ministry can provide further advice on spatial planning and city and regional deals

The Ministry can provide you with further information and advice on opportunities for Ministerial collaboration, spatial planning and city and regional deals. As these deals require the input of different portfolios, substantial work would be needed with other Ministers to determine their viability and potential effectiveness in a New Zealand context.

# Strong Auckland, strong New Zealand

## Tāmaki Makaurau is critical to achieving New Zealand's goals

Tāmaki Makaurau is home to one third of New Zealand's population, contributes 38 percent of the nations GDP and is projected to account for around 60 percent of New Zealand's population growth between 2013 and 2043.

Over recent years Auckland has accounted for 30 percent of the National Land Transport Fund spend and increasingly Crown funding is required to complement the National Land Transport Fund and Auckland Council funding.

While there have been successes in both roading and public transport projects, Auckland's transport challenges remain significant. An efficient and effective transport system in Auckland is essential to achieving national goals of increasing productivity and reducing emissions. Auckland is expected to deliver 48 percent of the national reduction in transport emissions.

## Auckland continues to need a large investment in its transport networks

Auckland requires transport investment in roads, public transport and active transport. Along with investment, interventions such as congestion pricing and better integration of transport and landuse are required to achieve outcomes and manage affordability. Congestion pricing in Auckland is unlikely to raise significant revenue but its value is improved productivity and potentially deferring some road maintenance and capital spend.

The strategic roading network in Auckland is almost complete. Penlink is underway and a preferred option for Mill Road as part of the package of investment in south Auckland needs to be determined. While there is scope to improve aspects of the roading network in Auckland, more roading capacity will mean that public transport in Auckland will need to contribute more to emissions reduction.

## Rapid public transport is integral to improving Tāmaki Makaurau's public transport network

Auckland's future public transport network will have to be much larger than it is today, and rapid transit will be needed to move people in a fast, frequent and reliable manner. While there have been some setbacks with the rail rebuild and bus driver shortages, public transport patronage has increased significantly in Auckland (was at 100 million boardings at the end of 2019, up from 84 million in 2016). There are gains to be made with increasing frequency and reliability on the current bus network as well as by extending coverage, particularly to some of the lower income areas where access to public transport is poor. Successes to date have been the northern busway and passenger rail, post electrification. The City Rail Link and Eastern busway are well into construction and will support further growth in the short term. Work on a 30-year plan for rail investment in Auckland is also well advanced.

Business case work is underway on a range of major projects including on the northwest and city centre to Mangere corridors, as well an additional crossing over Waitemata harbour. There is a lack of consensus on the best way to proceed with these projects, and how work should be prioritised and sequenced. Our view is that it is not feasible to progress with all of these projects as planned from both a funding and construction capacity perspective. Within the limited funding and delivery capacity that is available, you will want to consider striking the right balance between high volume and high-cost options, such as light or heavy rail, and lower volume but faster to deliver options such as busways. The Ministry's advice is that these should be considered in the context of the type of overall network that should be available in future, and in turn the nature and scale of development that is desired for Auckland.

Reaching agreement with Auckland Council on the sequencing of investments in Auckland over the longer-term is a priority. This can be achieved by continuing to work through the Auckland Transport Alignment Project (ATAP). Since around 2017, ATAP has been New Zealand's most mature 'city deal'. The Minister of Transport and Mayor of Auckland are political sponsors of ATAP and a Governance Group of Chief Executives provides oversight and governance.

## The Tāmaki Makaurau Transport Plan needs to be completed

The Tāmaki Makaurau Transport Plan, a long-term integrated plan has been the key piece of work progressed under the ATAP structure over recent months. It is currently paused and it will be important for you to meet with the Mayor of Auckland to agree on the next steps for completing the Plan. Your priorities will guide the next phase of work and the sequencing and phasing work noted above is key to the Plan's completion.



## Several major Auckland transport projects are underway

There are pressing choices to be made about investments in Auckland over the 10 and 30-year horizons. Affordability and the ability to deliver need attention as a programme, encompassing investments to run and maintain the current network, expand public transport services and progress major projects, is completed.

#### City Rail Link (CRL)

Most CRL construction work is now complete, and the focus is on integrating with the Auckland network and testing readiness for day one operations. The Ministry monitors the work of the delivery company, City Rail Link Company (CRLL) and advises on broader investments needed to bring the benefits of the project. CRL is funded 50:50 by the Crown and Auckland Council. You are a joint sponsor of the work along with the Minister of Finance and Auckland Council, represented by Mayor Brown.

#### Auckland Light Rail (ALR)

ALR is an integrated urban and transport project along the city centre to Mangere corridor. Auckland Light Rail Limited (ALRL) is working on a detailed business case. The Ministry monitors the work of the company, provides policy advice on the project and supports the project's Sponsors. You chair the Sponsors Group and it will be a priority to provide direction to the project.

#### Waitematā Harbour Connections

Waka Kotahi is developing an indicative business case on a recommended option including roading, rapid transit and cycling connections. This is scheduled to be considered by the Waka Kotahi Board in early 2024. The Ministry's feedback to date has been that significant work is required before moving to a decision-making process, including on lower-cost options. You have a role in setting direction for the work and ultimately deciding whether to take the project forward through Cabinet.

#### Northwest

The Northwest corridor has consistently been identified as a high-priority rapid transit corridor for Auckland. Interim improvements are underway including new bus stops, interchange enhancements, and extended bus lanes on SH16. Waka Kotahi is commencing a detailed

business case on a permanent rapid transit system. This corridor is a priority for the Mayor of Auckland and the Ministry expects it to be raised as part of your discussions on the Tāmaki Makaurau Transport Plan

# The Ministry will seek your direction on Auckland's transport priorities

The Ministry will seek your direction on completing work on the Tāmaki Makaurau Transport Plan and on the next steps for some of the planned projects in Auckland.

# Building a resilient transport system

# The transport system connects New Zealanders but is vulnerable to shocks and disruptions

The transport system is vulnerable to shocks and disruptive events (either natural or human). New Zealand's 'tyranny of topography' has led to transport corridors being constructed in steep valleys, alongside coastlines, and across rivers and floodplains. Many communities are in remote areas or have limited routes connecting them to the rest of New Zealand. This creates increased vulnerabilities for communities and business. In recent years, New Zealand has started to experience the effects of climate change through severe weather events like Cyclone Gabrielle and natural disasters like the Christchurch and Kaikōura in 2011 and 2016 earthquakes respectively.

Transport operations can also be disrupted by other vulnerabilities. Parts of the transport system rely on highly trained workforces which are susceptible to staff shortages, for example maritime pilots, air traffic controllers, ground handlers, airport rescue fire services, and bus and train drivers. The aviation system relies on imported let fuel, which if it fails quality testing on arrival into the country results in disruptions to aviation operations. We also need to manage the transport system's susceptibility to security threats from malicious actors.

# A lack of resilience drives extra costs into the transport system

Being resilient is the ability to anticipate and manage disruptive events, minimise their impacts, and respond and recover effectively. A transport system that is not resilient increases the costs and time to reinstate critical transport connectivity to affected communities. Shocks from natural disasters such as the Christchurch and Kaikōura earthquakes, alongside the increasing frequency and severity of weather events caused by climate change, result in significant social and economic costs to restore transport networks.

# The Ministry is working to enhance the resilience of the transport system

The Ministry uses its leadership and system stewardship role across strategic policy and operational work to build transport system resilience into wider system reforms and work programmes. The Ministry works to ensure a broader 'New Zealand Inc' perspective is applied to managing transport system risks and in building better transport system resilience. This includes using an agreed national framework, together with the transport Crown entities, to manage risks.

#### Resilience work includes:

- Involvement in the National Security System reforms, and membership of the Counter-Terrorism Coordination Committee, Major Events Security Committee, and the National Security Board (as the Strategic Coordination Agency for maritime security).
- Involvement in the Emergency Management System reforms, including emergency and catastrophic planning, and the current emergency management and the DPMC-led Critical National Infrastructure work programme.
- Involvement in climate change work programmes, including the Resource Management System Reforms, National Adaptation Plan, Emissions Reduction Plan, and membership of the Climate Change Interdepartmental Executive Board.
- Connecting the transport system into operational readiness, response, and recovery activity
  through its role as Chair of the interagency Transport Response Team, which is the Sector
  Coordinating Entity for the transport system in an emergency.

# As the Minister of Transport, you can play an important role to enhance transport system resilience

You can play a role in enhancing the resilience of the transport system by:

- Maintaining relationships across the sectors identified so the perspective of the transport sector is given due weight in government's wider resilience-related work.
- Engaging with your Ministerial colleagues on legislative programmes which cut across the transport system, such as the Emergency Management reforms, Climate Adaptation Bill, and Resource Management reforms.
- Engaging with other Ministers to address specific resilience issues (for example, the availability of RNZAF Base Ohakea and jet fuel supply chains).
- Making decisions on further investments via the National Resilience Plan.

# Safer and more secure transport

# Travel throughout the transport system needs to be safe and secure

Travel needs to be as safe and secure as it can be, whether by road, rail, aviation or maritime. People should not be harmed when using transport and should be confident when using the system. Confidence is important, so New Zealand can unlock the benefits of new technology, such as drones and e-scooters.

Different modes have different attributes which mean that safety and security outcomes are achieved in different ways in each of those sectors.

For aircraft and ships that operate internationally, safety and security settings are driven by international standards. Aviation and maritime also have greater inherent risk of catastrophic harm

events. New Zealand needs to continue to engage internationally with the relevant bodies, in particular, the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO) and with other jurisdictions so New Zealand stays up to date with global developments and can influence international settings.

The maritime security environment has become increasingly complex. The effective delivery of the Maritime Security Strategy requires strong leadership and alignment across government. The Ministry has a key role to play as we chair the Maritime Security Officials Committee (MSOC).

# Road crashes killed 376 people last year and cause \$8 billion of harm each year

Roads are used by just about everyone in New Zealand, and usually on a daily basis. As at 5 October 2023, 374 people died in road crashes in 2022, with 2,470 people suffering permanent life-changing injuries<sup>9</sup>. Social cost of road trauma is estimated to be as much as \$8 billion a year. Our rate of road deaths is also significantly higher than that of many other jurisdictions New Zealand compares itself to, as indicated in Figure 1 below.



Figure 6 Road deaths per 1000,00 inhabitants (2022)

Sustained effort is required to reduce the number of people dying or being seriously injured on our roads.

## Evidence suggests interventions are required across all parts of the system to improve road safety

New Zealand has followed the Safe System approach in recent years, which has become the internationally accepted best practice for road safety. A Safe System means improving the safety of all parts of the system - roads and roadsides, speeds, vehicles and road user behaviour - so that if one part fails, other parts will still protect the people if they are involved in a crash.

Safe System approach [placeholder]

Serious injuries are defined as fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.



Figure 7 Safe System approach

Progress in all areas is still needed to reduce deaths and serious injuries on our roads. However, you can choose to place more emphasis on interventions in some areas than others.

# New Zealand has made progress in some areas, but there are significant opportunities for improvement

The current *Road to Zero* road safety strategy has targets for reductions in deaths and serious injuries. There has been progress in some areas. For example, Police have increased their enforcement activity in the last 12 months, with an additional one million alcohol breath tests conducted than in the previous year.

Some of the interventions set out in the strategy have been found to be highly effective. For example, changes to speed limits on State Highway 6 Blenheim to Nelson has seen the number of deaths and serious injuries reduce by approximately 80 percent in first two years, while the average journey time has increased by approximately four minutes over the 110km road length. Installation of median partiers at SH2 Waipukurau in 2020 has seen a 100 percent reduction in deaths and serious injuries in the two years since.

COVID-19 slowed delivery of initiatives and there have been other challenges, which have impacted the scale and pace of change.

Public acceptance of some of the actions under the strategy has been limited, in particular, concern has been expressed about:

- the public advertising and associated messaging, particularly that "zero" is an unrealistic target
- some of the focus areas, such as the level of speed reduction proposed.

Given these challenges, the Ministry has started reviewing the approach to road safety. We are preparing more in-depth advice on the impacts that different initiatives will have on reducing deaths and serious injuries to assist you as you consider the strategic direction you wish to take for road

safety. The Ministry would welcome the opportunity to discuss your expectations for road safety, including on what interventions you want to see focus applied.

### Rail safety requires clear regulatory frameworks and investment

Rail safety needs clear regulatory frameworks, strong oversight and investment to provide the required level of safety assurance. After recent investment and growth, the risk profile of rail has increased. There have been several rail safety incidents involving fatal and serious injuries and recent reviews into the Auckland and Wellington metro systems have highlighted the need for system improvement and the need for the rail regulator to rigorously address risks.

Waka Kotahi NZ Transport Agency has primary regulatory responsibility for rail safety in New Zealand. Waka Kotahi has a critical regulatory role in assuring stakeholders and the public that the country's rail networks are being managed safely. This is achieved through regulation of the rail industry in accordance with the Railways Act 2005.

There will be opportunities over this term to consider how to continue to improve the legislation, regulation and oversight of rail safety, and to align New Zealand's rail safety approach with international best practice.

# Drones and emerging aviation technologies require fit-for-purpose regulations to improve safety

The Ministry has a role in both the safe regulation of emerging aviation technology and enabling more innovative applications of drone. New Zealand's long-term objective is the safe integration of drones and other emerging aviation technologies into the civil aviation system.

Increasingly innovative uses of these technologies offer potential economic, environmental and social benefits. This includes lifting productivity and wages through innovation, lowering emissions and improving other environmental outcomes. New Zealand needs to cater for growth of the drone sector and ensure that appropriate levels of aviation safety and security in the aviation system are maintained.

New and fit-for-purpose regulatory tools are necessary to enable advanced operations of drones within airspace shared with conventional aircraft, while maintaining or improving safety standards, and addressing any problems caused by drone use, such as noise and privacy implications.

The rapidly growing drone sector has challenged aviation safety and security. Drone operators are finding more pover and sophisticated ways to use technology. As a result, the challenges to safety and security are becoming increasingly difficult to manage.

The Ministry and other agencies have explored new policy initiatives and a developed a series of complementary regulatory measures to support drone integration. As well as improving safety, the package is intended to support the growth of the aerospace industry, by supporting an environment where aircraft without pilots on board can safely operate in the same airspace as traditional manned aircraft. We will provide you with further advice on the proposed package of measures.

# Maritime safety and security are important to people, the economy and the environment

Maritime transport is a critical part of our economy, with most of our imports and exports moving by sea. As an island nation, New Zealand relies on ferries to transport commuters, tourists, and Kiwi travellers between islands. Boating is also an important part of Kiwi culture with over 1.9 million people taking part in recreational boating in 2020.

Maritime activity is inherently dangerous. Since 2015, an average of 16 recreational boating fatalities have occurred every year. Fatalities occur throughout the country, and most are associated with falls overboard, a vessel capsizing or flooding. Many Transport Accident Investigation Commission and coroner reports have found that fatalities might have been prevented if lifejackets had been worn.

Safe navigation is as critical in the maritime space as on land. Maritime incidents not only endanger human lives, but also the environment and the economy, as the Rena disaster demonstrated. The accessibility of the sea to recreational boating means recreational boating and commercial shipping operate in very close proximity to each other.

## Maritime legislation needs to be reviewed

The Ministry and Maritime New Zealand have started a review of primary maritime legislation. Changes could be made to make the system safer, while ensuring the maritime regulatory system supports trade in the face of future emergencies, transnational crime, climate change, technological change and other challenges.

# As Minister of Transport, you can help to enhance transport safety

The Ministry can provide you with any further information that you require on these areas of transport system safety. You can help to enhance transport safety by:

- Considering advice on reframing the approach to road safety
- Taking a package of drone policy decisions to Cabinet
- Considering advice on the review of maritime legislation review.

# Using regulation to support transport outcomes and improve productivity

# Regulatory frameworks are being challenged

Transport regulatory systems are made up of primary and secondary legislation, the Ministry, and transport Crown entities who carry out the role of regulators, deliver services, and educate and inform people on requirements set out in legislation.

New Zealand's transport regulatory systems are significantly shaped by international obligations, standards and recommended practices.

A more challenging economic outlook and fiscal position means that there is added emphasis on ensuring that all aspects of our regulatory systems deliver value for money and support increased productivity. For example, out-of-date regulatory requirements impose unnecessary costs on firms and individuals, which harms New Zealand's productivity.

Our current regulatory frameworks are being challenged across all modes in areas, such as driverless vehicles/craft (e.g. unmanned aircraft and autonomous vehicles), different fuel types (e.g. sustainable aviation fuel, hydrogen) and different types of craft (e.g. drones). Artificial intelligence (AI) is disrupting every industry and will change the way New Zealanders commute and the way they use transport infrastructure.

# Regulation is needed to realise the benefits of new technologies

Introducing new technologies that are often still evolving with unclear trajectories, while minimising harm, is a major challenge for policy makers and regulators. The beneficiaries of these technologies (the investors, manufacturers and consumers) often do not wear the full costs of their risks. Instead, the burden is borne by society at large and their governments, which must take action to address the risks.

Therefore, it is crucial to have a regulatory system that appropriately balances safety outcomes with innovation, certainty and regulatory efficiency is in place before new transport technologies are rolled out at scale.

Regulation provides the framework and permissible set of conditions under which decisions can be made on important features of transport markets such as entry, pricing, access obligations and quality or conditions of service. To remain efficient over time, the regulatory framework needs to evolve as technological and society changes. Timely and proportionate regulation can support the exploitation of promising opportunities while also introduce new constraints to limit harmful trends.



#### USING REGULATION TO SUPPORT TRANSPORT OUTCOMES AND IMPROVE PRODUCTIVITY



For government, new technologies raise issues about when to act. Drones are here and regulatory action is being taken. While technological innovations, such as driving automation technology in vehicles like Electronic Stability Control, already contribute to the decline in deaths and serious injuries on our roads, the deployment of fully automated vehicles at scale remains very uncertain. Potential safety benefits are high but so are the risks. Safety will be the primary consideration before fully automated vehicles will be allowed to operate on New Zealand roads. In this case, the Ministry has carried out preparatory work to identify the issues and the regulatory work that might be needed, including releasing a Long-Term Insights Briefing on the impact of these vehicles on New Zealand's roads in 2022. The Ministry will be well placed to advise you should the priority of this work need to be raised

# Positioning New Zealand's regulatory frameworks for the future

Implementing the new Civil Aviation Act and the review of maritime legislation are all examples of work that will bring regulatory systems up to speed with new developments and help to future-proof them. The Ministry looks forward to providing you with more information on our regulatory stewardship role and the Ministry's work to help position New Zealand for future technological developments like drones and automated vehicles.

THE SEPONDER OF THE SEPONDER O

[heading – delete if empty]

[subheading – delete if empty]
[body text – delete if empty]
transport.govt.nz

ISSN [ISSN print – delete if empty]
ISSN [ISSN electronic – delete if empty]







Te Manatū Waka Ministry of Transport

# Contents

Part One: He Wakamana i a Aotearoa Kia Momoho   Enabling New	
Zealanders to Flourish	1
Transport is critical for New Zealand's economic, social and environmental health	1
Growing demands on the transport system are creating new challenges	2
The land transport system is more expensive to build and maintain	2
Ambitions for new investment are growing beyond capacity	3
A new approach to paying for land transport is needed	4
We need to decarbonise the transport system	4
New Zealand's international connections are increasingly vulnerable and uncertain	4
New technologies need to be integrated	4
Transport safety and security remains a priority	5
You can guide and shape the system to meet present and future challenges	5
Short-term policy priorities	5
Part Two: Strategic Opportunities and Challenges	7
rait Two. Strategic Opportunities and Chanenges	1
Investing in a high-quality transport system	7
Challenging economic context	7
New Zealand has been spending more on transport	
The Government invests in land transport through the National Land Transport Fund	
and through direct funding	7
GPS 2024 will set the Government's land transport policy	
There are fiscal constraints in Budget 2024	
Ensuring a sustainable land transport revenue system	
The Ministry has been working on a sustainable land transport revenue system	
Value capture mechanisms	
Congestion charging	
Tolling	
Making greater use of private capital	
The Ministry will meet you soon to discuss your investment and revenue priorities	
A net-zero transport system	. 13
The Climate Change Response Act 2002 sets New Zealand's framework for reducing	
emissions	13
New Zealand's overall emissions reduction success is likely to rely on transport	
meeting its potential to almost fully decarbonise by 2050	13
The transport sector is delivering on the first Emissions Reduction Plan (ERP1)	14
Work is underway to develop the second Emissions Reduction Plan (ERP2)	15

Road crashes killed 376 people last year and cause \$8 billion of harm each year25
Evidence suggests interventions are required across all parts of the system to improve
road safety
New Zealand has made progress in some areas, but there are significant opportunities
for improvement
Rail safety requires clear regulatory frameworks and investment
Emerging aviation technology require updated regulation
Maritime safety and security are important to people, the economy and the environment
Maritime legislation needs to be reviewed
As Minister of Transport, you can help to enhance transport safety
Using regulation to support transport outcomes and improve
productivity
Regulatory frameworks are generally fit-for-purpose but require some refinements 28
Regulation is needed to realise the benefits of new technologies
Positioning New Zealand's regulatory frameworks for the future
Appendices
No table of contents entries found.
Schedules
No table of contents entries found.
Annexes
No table of contents entries found.
Tvo tuble of contents entires found.
Tables
Table 1 Emissions budgets
Table 1 Emissions budgets
Figures
Figure 1 Heavy Civil construction employment3
Figure 2 Forecast expenditure and revenue (Crown and National Land Transport Fund)9
Figure 3 Average annual revenue raised by New Zealand's current tools10
Figure 4 Additional emissions reduction needed
Figure 5 Transport emissions reduction by emissions budget period
Figure 6 Timeseries comparison of (emissions reduction) projections
Figure 7 Auckland Commuter Rail22

Figure 8 Road deaths per 1000,00 inhabitants (2022)......25



### Foreword

Tenā koe Minister, and congratulations on your appointment as Minister of Transport.

The Ministry has a key role to provide you advice on the decisions to sustain the transport system and to help achieve your transport priorities.

Transport is about people. We move to go to work or school, to connect with family, friends and communities, and to shift materials, goods and services. New Zealand's transport system enables the social and economic prosperity of our cities, towns and rural communities.

The transport system also has negative impacts, including road deaths and serious injuries air and noise pollution that affects the health of the general population, as well as producing a significant proportion of New Zealand's greenhouse gas emissions.

This year, we have seen extreme weather events impacting communities and transport networks across the country. The Auckland Anniversary floods and Cyclone Gabrielle caused lasting damage to communities and vital infrastructure.

Increasingly, our cities and towns are facing funding pressures, driven by he demand for new or replacement infrastructure, of which transport is a major component. We must ensure the transport system is fit for future generations and able to withstand the impacts of extreme weather events.

Addressing these challenges places further pressure on existing funding models. The cost of maintaining the transport system, together with the need for repairs to roading and rail networks damaged by extreme weather events, will need to be balanced with new investment priorities.

The Ministry has been investigating the future of transport revenue system, including the role of additional funding tools, with the objective of providing more clarity on who should pay for what and how to apply a sharper focus on value for money

The Ministry works collaboratively with agencies and stakeholders to advance a longterm, integrated approach to the transport system. To create thriving cities and regions the transport sector needs to be more closely joined-up with planning, housing, other infrastructure, and broader funding and financing models.

As a Crown agency, we have an important responsibility to actively improve outcomes for Māori to ensure a transport system serves all New Zealanders equitably. A key focus area for everyone at the Ministry is our He Arataki strategy which seeks to identify issues and opportunities for Māori in transport policy design and delivery.

As Minister of Transport, you can make real differences to the lives of all New Zealanders. In our role as system lead, we look forward to giving you the advice and support needed to put your priorities in place to help advance the nation's transport system.

Nāku noa, nā

Glossary of terms and abbreviations		

OFFICIAL INFORMATION ACT A 982 OFFICIAL INFORMATION ACT A 982

# Part One: He Wakamana i a Aotearoa Kia Momoho **Enabling New Zealanders to Flourish**

## Transport is critical for New Zealand's economic, social and environmental health

New Zealand's transport system connects us to work and school, to our whānau, to our communities and to the rest of the world. The smooth and sustainable movement of people and goods throughout the system is critical to our economic, social and environmental health. The transport system is an important contributor to productivity and economic growth. The system supports other sectors and society's wider goals like better and affordable housing, desirable cities to attract skilled and talented people and healthier New Zealanders. The system also has negative impacts, including producing a significant proportion of New Zealand's greenhouse gas emissions, other air and noise pollution that affects the health of the general population and deaths and serious injuries for the people using the system.

The transport system involves millions of journeys every day on extensive networks of public and private infrastructure across New Zealand. These networks connect a population spread-out thinly across regions, but also concentrated in cities, who all need to be well served by the transport system to meet their social and economic needs.

These networks are used by a wide array of vehicles every day, and there are competing demands, including increasingly for use of street and city spaces. New Zealand's environment and geography also mean our critical transport infrastructure is exposed to a broader and more consequential range of potential shocks than many other highly developed countries.

## Some facts about New Zealand's transport system

- There are over 4.5 million registered motor vehicles, which is one of the highest rates of vehicle ownership in the world – around **64,000** are fully electric light vehicles
- Transport produces 39% of our domestic carbon dioxide emissions and 17% of total greenhouse gas emissions
- Around **200,000 New Zealanders** (5% of the workforce) are employed in transport-related industries.
- Around 34% New Zealanders aged 15 or more used public transport in the past year, while 36% aged 3 or more used a bike.

Based on Statistics NZ Business Demography Statistics, Snapshot at February 2022

- Each year, more than half of New Zealander's total travel time (58%) is spent driving, and a further quarter is spent as passengers in private vehicles. Vehicles travelled a total of 48.8 billion kilometres on New Zealand roads in 2022/23<sup>2</sup>
- 377 people died on our roads in 2022
- Trucks, trains, ships and airplanes carried about **280 million tonnes** of freight around New Zealand in 2017/18 **90%** was carried by road.<sup>3</sup>
- KiwiRail operates around 40,400 mainline freight departures each year replacing around 1 million truck trips.<sup>4</sup>
- 9.7 million passengers arrived or departed from New Zealand in 2022/23 70% of pre-COVID levels in 2018/19<sup>5</sup>.
- There were 2208 overseas ship voyages to New Zealand in 2022 an 18% reduction from the peak in 2017.
- **1.6 million full containers (TEU)** were imported or exported from New Zealand **46%** entered through Ports of Auckland and 52% left through the Port of Tauranga.<sup>7</sup>
- Approximately 2 million adult New Zealanders participated in recreational boating activities in 2022.8

# Growing demands on the transport system are creating new challenges

As New Zealand has matured, the demands on the transport system have grown significantly. In the past, the challenge revolved around efforts to grow capacity as activity increased and keeping the system maintained. However, new challenges, especially the need to adapt and mitigate the effects of climate change, call for a fundamental shift in the way New Zealand's transport system operates. The long-lived networks underpinning the transport system need to be planned and funded over the long-term, managed and regulated effectively to support the shift needed.

### The land transport system is more expensive to build and maintain

As the land transport system grows, it becomes more expensive to build, operate and maintain. Operating and maintenance costs are making up an increasing share of transport spending. This has taken place in the context of a planning and funding system, especially for land transport, that works well to signal investment priorities and ambitions but works less well to create incentives to spend money efficiently and effectively.

Waka Kotahi, data published September 2023

National Freight Demand Study, 2017/18

<sup>&</sup>lt;sup>4</sup> KiwiRail Integrated Report 2023, p 10 and

<sup>&</sup>lt;sup>5</sup> Statistics NZ, International Travel and Migration – total passenger movements by travel mode

<sup>&</sup>lt;sup>6</sup> Freight Information Gathering System Data – Overseas ship visits

Freight Information Gathering System Data - Containers

<sup>8</sup> Maritime NZ Survey

The increase in costs is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment, a need to consider resilience, and an expanded range of activities being funded. This has led to increased pressure on the available funding and resulted in a range of short-term solutions being put in place, including increased Crown funding and debt.

#### Ambitions for new investment are growing beyond capacity

Investment in the transport system is an important way of increasing New Zealand's economic growth and meeting many of the social and educational ambitions of New Zealanders. Cities need to move people and freight efficiently while the regions need strong connections to well-run ports and airports to move their products to market. Still, investment ambitions are running ahead of the capacity of the revenue system to meet them or the capacity of the construction sector to deliver new projects, especially alongside ambitious programmes in other sectors like water and housing.

Planned expenditure for the next 20 years is nearly double the \$10 billion per annum of current investment, and more than four times the size of the National Land Transport Fund. These commitments have not been made based on a system-wide investment plan and have likely driven inefficiencies in the system. Management oversight is also spread very thinly which exacerbates risk.



Figure 1 Heavy Civil construction employment

Source: Ministry of Transport

There is a growing urgency to consider the balance between new expenditure and maintaining the system and establish a more certain and sustainable model for funding their transport priorities to meet short term needs and to establish an enduring model for the next decade and beyond. This will involve considering the balance between new expenditure and expenditure to maintain the system and how to apply a sharper focus on value for money. New Zealand must also look to other tools, such as pricing and demand management (eg, congestion charging), regulatory interventions, use of data, and the way transport and land use are considered together.

#### A new approach to paying for land transport is needed

In the aviation and maritime sectors, the networks are mostly owned and operated by private interests, with some local government investment. However, in the land transport sector, central government plays a lead role in how the system is planned and funded. New Zealand's land transport system has been reliant on a narrow range of user charges (mainly taxes on fuel and charges on diesel and heavy vehicles) to pay for much of our land transport.

Over the last two decades, Crown contributions and borrowing have increased as the level of funding from user charges has fallen behind investment ambitions. This and other factors, have put the system under pressure. Our revenue system does not easily support large, long-term investments. Many of these have a scale of cost that needs to be spread over many years.

### We need to decarbonise the transport system

Transport is one of New Zealand's largest sources of greenhouse gas (GHG) emissions, producing 40% of our domestic CO<sub>2</sub> emissions and 17% of total GHG emissions Most transport emissions (92%) come from land transport (primarily light vehicles such as cars, utes and vans at 64%).

The Climate Change Commission has identified transport as a sector with the potential to almost completely decarbonise by 2050 and make large reductions from the third emissions budget period (2031-2035) onwards. Because some other sectors are expected to be more challenging to decarbonise, New Zealand's overall emissions reduction success is likely to rely heavily on transport realising this potential.

# New Zealand's international connections are increasingly vulnerable and uncertain

New Zealand's ability to trade and connect with the world is increasingly influenced by geopolitics, the international politics of climate change and New Zealand's position as the last stop on many international supply chains. Aviation and maritime are emissions intensive industries and, in the coming decades, there will be growing global pressure on these sectors to decarbonise. Market based measures to reduce emissions in these sectors will be important, but they are likely to disproportionately impact New Zealand due to our distance from the rest of the world and a lack of viable alternatives. It is therefore important we work collaboratively with these sectors and support them to decarbonise as quickly as possible. These sectors are increasingly seeking government leadership, involvement and support for measures to enable and support their efficiency and transformation.

#### New technologies need to be integrated

Transport will need to integrate new advances in technology, including novel craft and new types of fuel. This brings considerable opportunity but also risk. Managing this quickly and safely will require some changes to the transport regulatory system. These changes will help ensure that regulation enables the use of this new technology in a way that does not impose unnecessary costs. Government will also need to continue to work closely with the private sector on how to fund the infrastructure necessary to adopt new technologies. For example, airports need to consider the

infrastructure investment required for aircraft which might be electrified or use hydrogen as a fuel source. Electrification of aircraft at scale will also have significant implications for the supply of electricity needed from the grid.

#### Transport safety and security remains a priority

Improving transport safety and enhancing security of the transport system remains an issue for New Zealand. For example, proportionally more people per capita are killed on our roads than most other OECD countries. The death rate in Australia per 100,000 people was 4.6 while, for New Zealand, it was 7.3 or approximately 58.7% more. Provisional figures for 2022 saw 377 people killed on the roads. Measures needed to improve road safety require sustained effort from government agencies and social acceptance from those who may be affected by changes Meanwhile, it is critical New Zealand continues to effectively implement international security obligations for aviation and maritime to ensure New Zealand remains a trusted destination for airlines and shipping operators.

## You can guide and shape the system to meet present and future challenges

The responses to the challenges and opportunities New Zealand's transport system faces will involve many choices. Over the next decade, New Zealand's transport system will need to evolve to produce net zero emissions by 2050, significantly reduce road deaths and serious injuries, and address identified challenges some groups and individuals face when accessing the transport system. The system will also need to further adapt to shocks like severe weather, future possible pandemics, natural disaster, or economic downturns

While transport decision-making is more demanding than it has been in the past, there are good opportunities to achieve change As Minister, you can shape the system to make sure all New Zealanders can access safe and efficient transport options, and the Ministry's role is to support you in your efforts.

As the Government's policy lead for transport, the Ministry commits to giving you robust, evidencebased, future-focused advice on the policy, investment, and regulatory settings that provide the best opportunity to achieve your goals. The Ministry's System BIM gives further detail on the policy tools and levers available to you, including the role of the Ministry's Transport Outcomes Framework.

# Short-term policy priorities

There are several short-term priorities for you and your incoming Government to consider. The Ministry would like to discuss these with you as soon as possible. These priorities include:

- Finalising and issuing the 2024 Government Policy Statement on Land Transport (GPS). The GPS will give effect to your vision and priorities for investing the National Land Transport Fund into the land transport system. This will require you to consider how to fund the GPS, including progressing work on revenue options (eg, congestion charging) that can be implemented at pace.
- Alongside the GPS, ensuring a stronger focus on cost management in the land transport system given cost pressures.

- Confirming your intended direction for a range of major planned infrastructure investments, including the rapid transit network in Auckland.
- Confirming your approach to emissions reductions in the transport sector, including by setting priorities for the 2<sup>nd</sup> Emissions Reduction Plan (ERP2).
- Restoring the financial sustainability of our transport regulatory agencies, whose revenue streams were disrupted by the COVID-19 pandemic.

The Ministry looks forward to discussing your objectives and these priorities further with you.



# Part Two: Strategic Opportunities and Challenges

# Investing in a high-quality transport system

## Challenging economic context

With a challenging economic outlook, increasing risks to long-run fiscal sustainability and cost pressures, New Zealand must make choices about how the transport system will be developed and managed over the next decade and beyond. Government investment, along with other interventions, is needed to create a high-quality transport system for all New Zealanders. However, a good result requires investing in the right things and at the right time, with tight cost control.

# New Zealand has been spending more on transport

New Zealand has been spending more on transport, both on new infrastructure and to sustain existing networks. This is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment and an expanded range of activities being funded. More investment has been going towards public transport and rail, in part to meet broader objectives, such as improving access and reducing emissions. Around 60% of the funding available through the National Land Transport Fund is usually committed to maintenance and providing core services, such as road policing, and these activities are becoming increasingly costly.

With increased pressure on existing funding models, a range of short-term solutions are being put in place, including increased Crown funding and debt. Existing revenue sources are unlikely to keep pace with demands, unless decisions are taken to increase the amount collected. Fuel excise duty is a major source of revenue for the transport system, but will become less certain over time as vehicles become more fuel efficient and more people choose to travel by other modes.

An ambitious pipeline of projects has either been committed to, or explored, but the funding, scoping and phasing of these projects is still largely to be decided. These projects include Auckland Light Rail, the Strategic Investment Programme (outlined in the draft GPS 2024), and the additional Waitematā Harbour Crossing. If all these projects proceed to construction, the Ministry estimates the total Investment in land transport from 2024 to 2034 will be \$125 billion, compared to \$61 billion in the 10 years from 2013-2023. Analysis from the New Zealand Infrastructure Commission, Te Waihanga, suggests this would materially exceed the capacity of the labour market in Auckland, even under optimistic growth assumptions.

## The Government invests in land transport through the National Land Transport Fund and through direct funding

The Government Policy Statement (GPS) sets the Government's priorities for the National Land Transport Fund over a 10-year period. A draft GPS has been out for public consultation and, as a

statutory document, must be published by 1 July 2024. Finalising the GPS is essential to drive land transport planning and funding decisions made by both Waka Kotahi and local government.

Waka Kotahi gives effect to the GPS through the 3-yearly National Land Transport Programme, which sets out planned activities and projects. Waka Kotahi has statutory authority over what activities and projects are included in the National Land Transport Programme and approved for funding. Regional Land Transport Plans made by Regional Transport Committees, consisting of Waka Kotahi, local government and sometimes KiwiRail, feed into the National Land Transport Programme. This process helps reconcile the different priorities of central and local government.

Separate to the GPS process, the Crown has, at various times, funded additional transport projects through the annual Budget process. These have tended to be larger projects, such as those under the New Zealand Upgrade Programme (eg, Melling interchange, Ōtaki to north of Levin), or the Auckland City Rail Link. These projects may have bespoke delivery and governance arrangements depending on the preferences of the Government. Sometimes, these projects are committed before the final scope of the project or the full costs are fixed, leading to subsequent trade-offs in scope or unexpected cost increases.

## GPS 2024 will set the Government's land transport policy

As well as setting out proposed strategic priorities, the draft GPS outlines the core investment required to maintain the system, the funding available from usual sources, as well as the suggested funding package to address the gap between them. That funding package emphasises the choices to be made in finalising GPS 2024 because it relies on raising FED and RUC (\$1.4 billion), Crown grants (\$2.7 billion), Crown loans (\$3.1 billion) and some non-traditional funding sources like the revenue from traffic infringements (\$300 million) and the Climate Emergency Response Fund (\$500 million).

While the proposed funding package would reduce the pressure over 2024-27, the Ministry expects there will continue to be a gap between expenditure and revenue. The draft GPS 2024 outlines a \$4.4 billion decrease in funding over 2027-30 compared to 2024-27.

In these circumstances, the investment proposed in the final GPS must be carefully prioritised, be affordable, and meet your objectives. Cost must also be better managed and demonstrate value for money. This includes strong business cases and ensuring there are a broad range of options considered, including options that do not involve investment, such as demand management. While there are also choices to generate additional revenue through existing tools, and maybe some newer ones, there will be constraints, especially in the face of upward pressure on the cost of living.

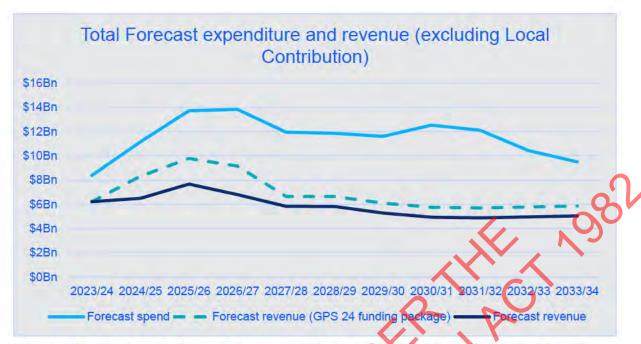


Figure 2 Forecast expenditure and revenue (Crown and National Land Transport Fund)

Source: Ministry of Transport

# There are fiscal constraints in Budget 2024

The Budget process is your opportunity to seek new investment for the Transport sector to progress your priorities and meet pressing cost pressures.

With Budget 2024 allowances likely to be constrained, funding is likely be insufficient to meet cost pressures and fund new spending proposals. While the position might differ under a new government, the Ministry is investigating opportunities to reprioritise existing funding towards new, higher priority initiatives and find savings.

# Ensuring a sustainable land transport revenue system

The existing tools for funding the land transport system, like the distance and weight-based Road User Charges system for diesel and heavy vehicles, are still world leading. Fuel Excise Duty is also an extremely cost-effective and efficient method for collecting revenue from petrol vehicles.

However, these forms of funding are not well suited to very large, lumpy infrastructure investments (eg, mass rapid transit) that have social wider benefits, such as supporting intensification. Further, there are developing issues around inequities and inconsistencies between road users, the charging of externalities and the long-term sustainability of Fuel Excise Duty.

Crown funding or debt can play a useful role in meeting transport funding needs. However, practices have varied and this can lead to a lack of clarity about when Crown funding should be used and for what. A more principled and transparent approach would help manage Crown cost and will provide more certainty and predictability for Waka Kotahi and cities and regions.

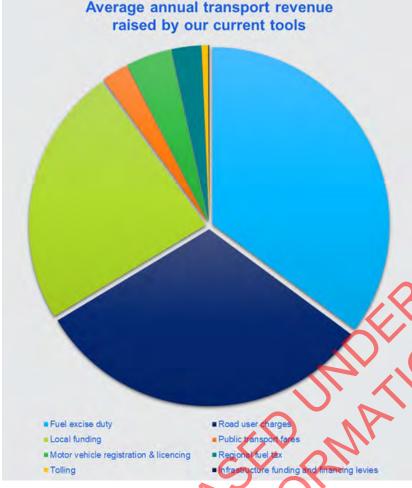


Figure 3 Average annual revenue raised by New Zealand's current tools

Source: Ministry of Transport

The Ministry has been working on a sustainable land transport revenue system

The Ministry has been working on what is needed to enhance the transport revenue system, including the potential role of additional tools and providing more clarity on who should pay for what. There are longer-term and shorter-term elements to this work. In the long term, there are opportunities to look at the balance between who should bear the costs of the transport

system amongst users, ratepayers, taxpayers and other beneficiaries. What ever approach is chosen, it will need to be predictable, stable and have good levels of public buy-in, as transport costs affect every New Zealander and every New Zealand business. The consequences of choosing the wrong solution, or implementing a good solution poorly, are significant.

A transition towards RUC uptake is already underway. The RUC system overcomes the fuel efficiency issues with FED, and it may enable a more sustainable stream of funding over time. There are options for extending RUC, including moving all vehicles on to the system or more sophisticated charging approaches that would add time and location based charging.

While some changes would need to be implemented over the longer-term, there are revenue options that can be progressed in the shorter-term. While such tools would help provide additional revenue, they are unlikely to generate enough revenue to fill expected gaps over the next decade and each option comes with its own risks and challenges. These revenue options include:

### Value capture mechanisms

Value capture is under utilised in New Zealand compared to other countries. Value capture involves recovering or 'capturing' the incremental benefit residential or commercial landowners receive from investments in public infrastructure and the resulting urban development and amenity.

This benefit is usually reflected in higher property (land and building) values. There are a range of levy<sup>9</sup> and uplift-based<sup>10</sup> methods available to both central and local government.

Work to date has highlighted the potential for value capture but also the operational complexities of implementing these mechanisms.

#### Congestion charging

Congestion charging is a method for managing demand, so revenue is not its primary aim. This type of charging sets a higher cost for travelling at peak times, and encourages some users to change the time, route, or way they travel. This can reduce congestion by spreading out use over time and defer the cost of new capacity because better use is made of existing capacity. Congestion charging has been successfully implemented to reduce congestion in cities around the world, for example, London and Singapore. However, schemes have also failed when there were low levels of public acceptability, in part due to concern about equity and a perception congestion charging is only about raising revenue.

There is interest from several of the large metro councils in congestion charging, both to reduce congestion by managing traffic and potentially raise revenue for transport projects. The Ministry expects them to seek your support for legislation. Draft legislation has been developed so could be advanced quickly although the underlying policy would need to be confirmed with you.

#### Tolling

As Minister of Transport, you are responsible for approving tolling schemes under the Land Transport Management Act 2003. s 9(2)(f)(iv)

Tolling settings are relatively permissive but tolls can only be applied to "new roads". As well, New Zealand's low traffic volumes, the high administrative costs of collecting tolls and a lack of public acceptance, may limit the widespread use of tolling.

Within these constraints, tolling is being rolled out where a case can be made. However, there are options for new tolling approaches, including variable pricing or tolling existing roads, but these would require amending the Land Transport Management Act. For example, Waka Kotahi has been working with Tauranga City and Eastern Bay of Plenty on a proof-of-concept study for variable road pricing.

Tolling options also need to be considered alongside other arrangements, such as congestion charges at a network level. In the longer term, shifting to a distance-based RUC system could provide greater scope to implement variable charging across the network to manage demand more effectively.

s 9(2)(f)(iv

i.e., a one-off charge based on property value increases due to the infrastructure.

i.e., a proportion of any capital value uplift is taxed.

#### Making greater use of private capital

In the past, Public Private Partnerships (PPPs) have been used with varying degree of success but have delivered some important lessons. Two roads have been delivered under the PPP model: Transmission Gully and Pūhoi to Warkworth. <sup>12</sup> Compared to other types of PPPs, roading projects are riskier and more complex, largely due to ground and environmental factors, including weather and storm damage.

The ability for PPP consortia to manage risk is critical for the success of the model. How this is done, when procurement processes are heavily weighted towards a low price, will affect the degree to which PPPs are used for roading projects in the future.

If implemented well, there is potential for PPPs to improve services and deliver new infrastructure. Using private finance means more projects can be built sooner than through the conventional "pay as you go" public sector procurement. However, the current PPP model spreads out the costs of these projects over a longer period, which must be managed as a first call against the National Land Transport Fund. Alternatively, Government could consider whether there is benefit in changing the contracting model for roading PPPs to transfer more risk to the operator (eg, through demand-based tolling arrangements).

You can also choose to involve private equity in the delivery of transport infrastructure. Under this arrangement, the investor would take an ownership stake in an asset and would seek greater control over design, construction and operation. However, they may also be prepared to take on a wider range of risks. Investors such as ACC and the NZ Super Fund have shown an interest in these arrangements which may be a good way of approaching wider packages of development in cities. Equity-based arrangements would challenge the transport system's existing ways of operating and may raise concerns with the public if there are perceptions of offshore ownership. This approach requires longer-term planning and funding certainty, with private sector investors able to work with Crown agencies (among others) earlier so they can influence design choices and delivery arrangements.

# The Ministry will meet you soon to discuss your investment and revenue priorities

The Ministry will seek to meet with you as soon as possible to discuss your priorities and the next steps for GPS 2024, Budget 2024, and the Ministry's revenue work. Clarifying your expectations early will ensure agencies do not commit resources to developing bids unlikely to be supported.



## A net-zero transport system

## The Climate Change Response Act 2002 sets New Zealand's framework for reducing emissions

When New Zealand ratified the Paris Agreement in 2016, it committed to joining a global effort to limit temperature rise to 1.5°C above pre-industrial levels. In 2019, Parliament amended the Climate Change Response Act 2002 (CCRA) setting the target of reaching net zero GHG emissions by 2050.

In 2022, the first three emissions budgets were gazetted as outlined in Table 1 below. The Climate Change Commission is due to advise the Government on the level of the fourth budget, covering the period 2036-2040, by 31 December 2024.

Table 1 Emissions budgets

Time period	Level of permitted emissions (carbon dioxide equivalent, all sectors)
Emissions budget 1: 2022-2025	290 Megatons CO <sub>2</sub> -e
Emissions budget 2: 2026-2030	305 Megatons CO <sub>2</sub> -e
Emissions budget 3: 2031-2035	240 Megatons CO <sub>2</sub> -e

## New Zealand's overall emissions reduction success is likely to rely on transport meeting its potential to almost fully decarbonise by 2050

As well as recommending the first three emissions budgets, the Commission's analysis included a "demonstration pathway" outlining how New Zealand could stay within the emissions budgets and successfully reach net zero by 2050. This pathway informed the development of expected contributions from different parts of the economy. While not legislated, the Government adopted these as sub-sector targets to enable sectors to track progress and manage 'unders and overs' between sectors while staying on track to meet the overall target.

Transport is one of New Zealand's largest sources of GHG emissions, producing 40% of our domestic CO<sub>2</sub> emissions and 17% of total GHG emissions. Between 1990 and 2019, transport emissions rose approximately 80% faster than any other sector. The Commission identified transport as a sector with the potential to almost completely decarbonise by 2050 and make large reductions, especially from the third emissions budget period (2031-2035) onwards. New Zealand's overall emissions reduction success is likely to rely heavily on transport realising this potential.

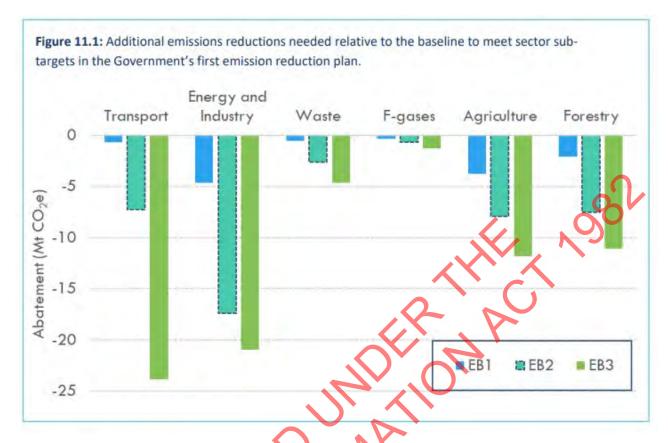


Figure 4 Additional emissions reduction needed

Source: Ministry of Transport

# The transport sector is delivering on the first Emissions Reduction Plan (ERP1)

The Government's approach to emissions reduction in the first emissions budget period was set out in the Emissions Reduction Plan (ERP1) published in May 2022. ERP1 sets focus areas, targets and specific actions to be taken between 2022 and 2025 to reduce transport emissions in line with the transport sub-sector target.

Officials are working to implement the actions in the ERP1 by the end of 2025.

Current estimates suggest transport is likely to stay within its sub-sector target and meet its expected contribution to reducing emissions during the first emissions budget period. However, these estimates assume work underway to reduce transport emissions continues and incorporate data reflecting lower-than-expected rates of travel. This decline in travel is not fully understood and a range of factors are likely to have contributed, including migration, cost of living, and changing travel patterns in a post-COVID-19 environment. Therefore, caution should be applied when assuming this trend will continue.

Changes to the actions in ERP1 may affect New Zealand's ability to meet the first three emissions budgets.

## Work is underway to develop the second Emissions Reduction Plan (ERP<sub>2</sub>)

As shown in Figure 4 above, a considerable jump is required in emissions reductions from transport from the first to second emissions budget period, and again from the second to the third.

Work is underway at the cross-government and sector-specific levels to develop the second Emissions Reduction Plan (ERP2), which is due by the end of 2024. ERP2 will need to contain actions that can meet the gazetted emissions budget for the second emissions budget period, from 2026-2030.

Meeting the second emissions budget is reliant on what is still an ambitious set of actions in ERP1 and will also depend on what actions the Government decides to include in ERP2. A buffer can help to account for some of the uncertainty.

In its draft advice to inform the strategic direction of ERP2, the Commission has also advised ERP2 will need to include actions that set the transport sector up for the third emissions budget period.

In December 2023, you will receive initial cross-agency advice about key opportunities and challenges for ERP2 and some indicative content about what could be included. Cabinet will make decisions about the draft and final content for ERP2 in 2024.

## Meeting the third emissions budget and beyond require significant system changes

Current modelling suggests meeting the third budget for transport will require significant additional effort beyond currently committed policies as shown in Figure 5.

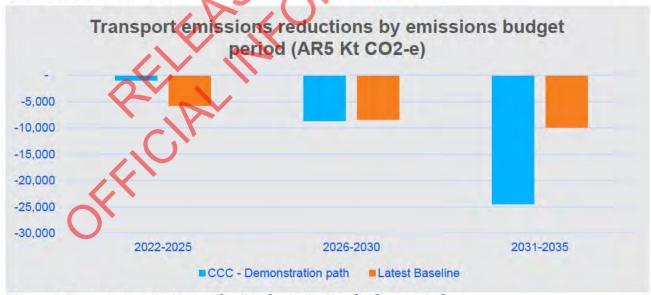


Figure 5 Transport emissions reduction by emissions budget period

Source: Ministry of Transport

ERP1 placed particular emphasis on rapidly transitioning the vehicle fleet to low- or zero-emissions vehicles because it is one the few ways to significantly reduce transport emissions that can be set in motion quickly. By the time we progress to the third emissions budget, we will need to have

made much more significant changes to the transport system including large scale public transport improvements, significant uptake of low emissions heavy vehicles and land use patterns that support low emissions transport options in urban areas.

These changes are challenging to deliver in the time available and, once implemented, it can be years before they begin to deliver significant emissions reductions. It will be necessary to prepare for, invest in, and implement sufficient actions now to ensure transport emissions continue to trend down during all three gazetted budget periods to 2035 and beyond.

With such systemic changes in place, transport emissions reductions could accelerate rapidly from around 2030 onwards (often referred to as 'bending the curve'). This can be observed in the Commission's demonstration path in Figure 6.

However, as Figure 6 also shows, these systemic changes are not factored into current investment plans for transport. Our latest baseline projection, shown in yellow, reflects expected transport emissions based on committed and funded actions, and suggests more investment and ambition will be required in ERP2 to successfully 'bend the curve' and meet our long-term targets.

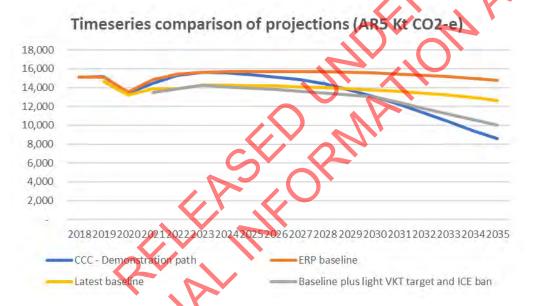


Figure 6 Timeseries comparison of (emissions reduction) projections

Source: Ministry of Transport

## The next steps for ERP1 and ERP2

#### Aligning ERP1 with your strategic objectives

We can provide you with more detail about the focus areas, targets, and actions for transport in ERP1 and advise you on the impact of any changes you may wish to make to the remaining actions to be delivered in the first budget period.

#### **Ensuring ERP2 meets your strategic objectives**

Setting strategic priorities for ERP2 with your Cabinet colleagues and deciding what actions will be included for transport to meet its expected contribution will be some of the biggest strategic decisions you will make as Minister of Transport in the next 12 months. The Ministry will support you with advice to inform these decisions.

In December 2023, along with your Ministerial colleagues in other climate portfolios, you will receive a package of preliminary advice about the long-term pathways to net zero by 2050 and indicative advice about what these mean for ERP2. This advice is likely to seek your direction on some key strategic priorities, risks, benefits sought, and potential trade-offs, to inform the development of detailed options for inclusion in ERP2. The Ministry will provide you with additional transport-specific advice to supplement this interagency advice.

## Maintaining and growing New Zealand's international connectivity

## New Zealand's prosperity is heavily reliant on its connections to the world

International connectivity enables people and goods to move across our borders and is an important contributor to New Zealand's prosperity and well-being.

Most of our imports and exports move by sea - 99.7% of New Zealand's export goods by volume, and 80.9% of its exports by value. This makes the maritime sector vital to New Zealand's interests, including ports and the connections to them. The aviation system also delivers economic and social benefits of staying connected to each other and the global community. Air transport underpins key sectors in the New Zealand economy, including tourism, international education and high-value freight

## New Zealand's international connections face a changing environment

The geo-political environment is becoming less rules based and more volatile, and there is growing risk around the international politics of climate change. This presents some risk to New Zealand as a distant trade reliant economy. The emissions from the aviation and maritime sectors are subject to increasingly tighter international standards and we need to be well engaged to ensure these support New Zealand's carbon emissions and connectivity objectives while not disadvantaging our connectivity to the world. The international security environment has also become more complex.

## Government can help promote efficient supply chains

After COVID-19 highlighted vulnerabilities in our supply chains, the Ministry conducted extensive engagement with supply chain stakeholders to develop a National Freight and Supply Chain Strategy, which was issued on 18 August 2023. Industry stakeholders especially called for:

better signalling of government's long-term plans for supply chain infrastructure

#### **DEVELOPING THRIVING CITIES AND REGIONS**

- better consenting and spatial planning that protects key logistic routes and nodes
- a review of the current port system
- improved data collection and availability
- improved ability to transfer across transport modes
- building the workforce for the supply chain of the future.

It is important the Strategy, which supports a stronger and more resilient supply chain, is translated into action. The next step proposed for the Strategy was the development of an action plan. Work priorities were identified around ports and their connections, road freight decarbonisation, freight data, and international connections.

# Proposed actions for progress on international connectivity and supply chain issues

Key actions we will look to progress are:

- Taking forward actions to better collaborate with the private sector, so New Zealand has future supply chains that are zero emission, resilient, productive, efficient, safe and sustainable. This is likely to involve work on ports and their connections to road and rail, the transition to low emission heavy vehicles and improving freight data collection.
- Working across government and the aviation sector to develop a national policy statement for aviation and provide a joined-up view on how best to embrace opportunities and address challenges in the sector. A private partnership has already begun to accelerate decarbonisation of the aviation sector.
- Initiating a review of maritime legislat on to ensure our regulatory frameworks support an innovative, productive, safe and secure maritime sector.

We will discuss these potential actions further with you.

## Developing thriving cities and regions

## High quality transport is a basic requirement for cities and regions

Cities and regions depend on high quality transport systems to have strong economies and good social connections. Regions need resilient and safe roading connections to enable communities to participate in society and connect our primary producers to their overseas markets. Well targeted road investment and effective maintenance is critical to sustain connectivity. Traditional public transport services are often less useful in rural areas. Meanwhile cities need to be able to move many people around their networks on roads and public transport while allowing freight to move efficiently.

## Transport should be well-integrated with other sectors

An important way to deliver good transport, either in cities or regions, is to make sure transport planning, funding, and delivery are aligned with land use planning, housing and utility provision, and broader funding and financing approaches.

This need for integration is clearest in our largest cities, where there is a need to build more housing, improve economic productivity, reduce greenhouse gas emissions and become more resilient to natural hazards.

One way to address these challenges is to deliver more medium and high-density, mixed-use developments in areas where people have a good range of transport options. Making a wder range of travel options available will allow more people to live and work in our cities and to choose from a greater range of housing and transport options, without increasing traffic, congestion, and emissions. New developments in greenfield locations also need to be well-designed and wellconnected with multi-modal transport networks. The transport, housing, and planning systems need to be well-aligned to achieve these outcomes.

In the past, cross-portfolio Ministerial forums have been used for urban development and infrastructure to encourage government agencies to work together on policy development and delivery. For example, increasing the supply of public transport is only effective if it is accompanied by high quality developments.

## Spatial planning is an important tool to support better integration

Spatial planning can provide long-term (30 years+), high-level, strategic direction for how cities and regions need to grow to achieve national and regional priorities. Integrated planning with other sectors like housing and water is critical to delivering long-term plans that retain support and can serve as a foundation for communities to develop well. Good spatial planning can also allow national transport priorities to be integrated, alongside other national priorities, with regional priorities.

There is an ad-hoc approach to spatial planning in New Zealand. Only Auckland is legally required to deliver a regional spatial plan (the Auckland Plan). Four other high-growth cities have developed spatial plans under Urban Growth Partnerships between central government and local government. These spatial plans are at sub-regional levels, focusing on high-growth areas.

Integrated planning across transport and other sectors will deliver much better outcomes and greater planning certainty but this is hard to achieve due to the numbers of decision-makers involved and the depth of issues involved. A structured approach is needed to make it possible. The Spatial Planning Act 2023 enacted by the last Parliament was an effort to achieve this. This Act requires all regions to develop a regional spatial plan, in partnership between councils, central government, and mana whenua.

## City and regional deals provide a potential mechanism to support spatial planning

A shift to regional spatial planning raises questions about funding and financing the major infrastructure projects that feature in these plans. For example, all the existing spatial plans developed through the Urban Growth Partnerships include rapid transit services and highfrequency public transport networks to provide the backbone for future large-scale urban developments. There is no funding pathway to deliver most of these projects.

Given the constrained funding environment, and the substantial costs of delivering large-scale transport projects, it is important to explore innovative new funding and financing models to deliver major projects. It is also important to make better use of existing transport networks (eg, by using transport pricing tools, and by encouraging more efficient use of road space).

'City deals' and 'regional deals' provide a potential way for central and local government to coordinate the funding streams required to fund the large investment in infrastructure that many cities need. These deals reflect approaches used in other countries, including the United Kingdom, Canada, and Australia to support integrated programme delivery. They involve long-term partnerships between local and central government, with packages of funding and decision-making powers.

# The Ministry can provide further advice on spatial planning and city and regional deals

The Ministry can provide you with further information and advice on opportunities for Ministerial collaboration, spatial planning and city and regional deals. As these deals require the input of different portfolios, substantial work would be needed with other Ministers to determine their viability and potential effectiveness in a New Zealand context.

## Strong Auckland, strong New Zealand

## Auckland is critical to achieving New Zealand's goals

Auckland is home to one third of New Zealand's population, contributes 38% of the nations GDP and is projected to account for around 60% of New Zealand's population growth between 2013 and 2043.

Over recent years Auckland has accounted for 30% of the National Land Transport Fund spend and increasingly Crown funding is required to complement the National Land Transport Fund and Auckland Council funding

While there have been successes in both roading and public transport projects, Auckland's transport challenges remain significant. An efficient and effective transport system in Auckland is essential to achieving national goals of increasing productivity and reducing emissions. The city is also expected to deliver 48% of the national reduction in transport emissions.

## Auckland continues to need a large investment in its transport networks

Auckland requires transport investment in roads, public transport and active transport. Along with investment, interventions such as congestion pricing and better integration of transport and landuse are required to achieve outcomes and manage affordability. Congestion pricing in Auckland is

unlikely to raise significant revenue but its value is improved productivity and potentially deferring some road maintenance and capital spend.

The strategic roading network in Auckland is almost complete. Penlink is underway and a preferred option for Mill Road as part of the package of investment in south Auckland needs to be determined. While there is scope to improve aspects of the roading network in Auckland, more roading capacity will mean public transport in Auckland will need to contribute more to emissions reduction.

## Rapid public transport is integral to improving Auckland's public transport network

Auckland's future public transport network will have to be much larger than it is today, and rapid transit will be needed to move people in a fast, frequent and reliable manner. While there have been some setbacks with the rail rebuild and bus driver shortages, public transport patronage has increased significantly in Auckland. Patronage increased from 84 million boardings in 2016 to 100 million boardings at the end of 2019. This can be further improved by increasing frequency and reliability on the current bus network and extending coverage, particularly to some of the lower income areas where access to public transport is poor. Successes to date have been the northern busway and passenger rail, post electrification. The City Rail Link and Eastern busway are well into construction and will support further growth in the short term. Work on a 30-year plan for rail investment in Auckland is also well advanced.

Business case work is underway on a range of major projects including on the northwest and city centre to Mangere corridors, as well an additional crossing over Waitemata harbour. There is a lack of consensus on the best way to proceed with these projects, and how work should be prioritised and sequenced. Our view is it is not feasible to progress with all of these projects as planned from both a funding and construction capacity perspective. Within the limited funding and delivery capacity available, you will want to consider striking the right balance between high volume and high-cost options, such as light or heavy rail, and lower volume but faster to deliver options such as busways. The Ministry's advice is these should be considered in the context of the type of overall network that should be available in future, and the nature and scale of development desired for Auckland.

Reaching agreement with Auckland Council on the sequencing of investments in Auckland over the longer-term is a priority. This can be achieved by continuing to work through the Auckland Transport Alignment Project (ATAP). Since around 2017, ATAP has been New Zealand's most mature 'city deal'. The Minister of Transport and Mayor of Auckland are political sponsors of ATAP and a Governance Group of Chief Executives provides oversight and governance.



Figure 7 Auckland Commuter Rail

Source: Ministry of Transport

The joint
Government/Auckland
Council Tāmaki
Makaurau Transport
Plan needs to be
completed

The Tāmaki Makaurau Transport Plan, a long-term integrated plan has

been the key piece of work progressed under the ATAP structure over recent months. It is paused and it will be important for you to meet with the Mayor of Auckland to agree on the next steps for completing the Plan. Your priorities will guide the next phase of work and the sequencing and phasing work noted above is key to the Plan's completion



## Several major Auckland transport projects are underway

There are pressing choices to be made about investments in Auckland over the 10 and 30-year horizons. Affordability and delivery capacity need to be considered as an investment programme, which includes sustaining the current network, expanding public transport services and progressing major projects, is completed.

## City Rail Link (CRL)

Most construction work is now complete, and the focus is on integrating CRL with the Auckland network and testing readiness for operations. The Ministry monitors the work of the delivery company, City Rail Link Company (CRLL) and advises on broader investments needed to realise the benefits of the project. CRL is funded 50:50 by the Crown and Auckland Council. You are a joint sponsor of the work along with the Minister of Finance and Auckland Council, represented by Mayor Brown.

#### **Auckland Light Rail (ALR)**

ALR is an integrated urban and transport project along the city centre to Māngere corridor. Auckland Light Rail Limited (ALRL) is working on a detailed business case. The Ministry monitors

the work of the company, provides policy advice on the project and supports the project's Sponsors. You chair the Sponsors Group and it will be a priority to provide direction to the project.

#### Waitematā Harbour Connections

Waka Kotahi is developing an indicative business case on a recommended option including roading, rapid transit and cycling connections. This is scheduled to be considered by the Waka Kotahi Board in early 2024. The Ministry's feedback is significant work is required before moving to a decision-making process, including on lower-cost options. You have a role in setting direction for the work and ultimately deciding whether to take the project forward through Cabinet.

#### Northwest

The Northwest corridor has consistently been identified as a high-priority rapid transit corridor for Auckland. Interim improvements are underway including new bus stops, interchange enhancements, and extended bus lanes on SH16. Waka Kotahi is starting a detailed business case on a permanent rapid transit system. This corridor is a priority for the Mayor of Auckland and the Ministry expects it to be raised as part of your discussions on the Tāmaki Makaurau Transport Plan

## The Ministry will seek your direction on Auckland's transport priorities

The Ministry will seek your direction on completing work on the Tāmaki Makaurau Transport Plan and on the next steps for some of the planned projects in Auckland.

## Building a resilient transport system

## The transport system connects New Zealanders but is vulnerable to shocks and disruptions

The transport system and our communities and businesses are vulnerable to shocks and disruptive events (either natural or human). New Zealand has transport corridors in steep valleys, alongside coastlines, and across rivers and floodplains. Many communities are in remote areas or have limited routes connecting them to the rest of New Zealand. In recent years, New Zealand has experienced climate change related severe weather events like Cyclone Gabrielle and natural disasters like the Christchurch and Kaikōura earthquakes in 2011 and 2016 respectively.

Transport operations can also be disrupted by other vulnerabilities. Parts of the transport system rely on highly trained workforces which are susceptible to staff shortages, for example, maritime pilots, air traffic controllers, ground handlers, airport rescue fire services, and bus and train drivers. The aviation system relies on imported jet fuel, which if it fails quality testing on arrival into the country results in disruptions to aviation operations. We also need to manage the transport system's susceptibility to security threats from malicious actors.

## A lack of resilience drives extra costs into the transport system

Being resilient is the ability to anticipate and manage disruptive events, minimise their impacts, and respond and recover effectively. A transport system that is not resilient increases the costs and time to reinstate critical transport connectivity to affected communities. Shocks from natural disasters such as the Christchurch and Kaikōura earthquakes, alongside the increasing frequency and severity of weather events caused by climate change, result in significant social and economic costs to restore transport networks.

# The Ministry is working to enhance the resilience of the transport system

The Ministry uses its leadership role across strategic policy and operational work to build transport system resilience into wider system reforms and work programmes. The Ministry works to ensure a broader 'New Zealand Inc' perspective is applied to managing transport system risks and in building better transport system resilience. This includes using an agreed national framework, together with the transport Crown entities, to manage risks.

#### Resilience work includes:

- Involvement in the National Security System reforms, and membership of the Counter-Terrorism Coordination Committee, Major Events Security Committee, and the National Security Board (as the Strategic Coordination Agency for maritime security).
- Involvement in the Emergency Management System reforms, including emergency and catastrophic planning, and the current emergency management and the DPMC-led Critical National Infrastructure work programme.
- Involvement in climate change work programmes, including the Resource Management System Reforms, National Adaptation Plan, Emissions Reduction Plan, and membership of the Climate Change Interdepartmental Executive Board.
- Connecting the transport system into operational readiness, response, and recovery activity
  through its role as Chair of the interagency Transport Response Team, which is the Sector
  Coordinating Entity for the transport system in an emergency.

## As the Minister of Transport, you can play an important role to enhance transport system resilience

You can play a role in enhancing the resilience of the transport system by:

- Maintaining relationships across the sectors identified so the perspective of the transport sector is given due weight in government's wider resilience-related work.
- Engaging with your Ministerial colleagues on legislative programmes which cut across the transport system, such as the Emergency Management reforms, Climate Adaptation Bill, and Resource Management reforms.
- Engaging with other Ministers to address specific resilience issues (eg, the availability of RNZAF Base Ohakea and jet fuel supply chains).
- Making decisions on further investments via the National Resilience Plan.

## Safer and more secure transport

#### Travel throughout the transport system needs to be safe and secure

Travel needs to be as safe and secure as it can be, whether by road, rail, aviation or maritime. People should not be harmed when using transport and should be confident when using the system. Confidence is important, so New Zealand can unlock the benefits of new technology, such as drones and e-scooters.

Different transport modes have different attributes which mean that safety and security outcomes. are achieved in different ways in each of those sectors.

For aircraft and ships that operate internationally, safety and security settings are driven by international standards. Aviation and maritime also have greater inherent risk of catastrophic harm events. New Zealand engages internationally with the relevant bodies, in particular, the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO) and with other jurisdictions so we stay up to date with global developments and can influence international settings.

The maritime security environment has become increasingly complex. The effective delivery of the Maritime Security Strategy requires strong leadership and alignment across government. The Ministry has a key role to play as we chair the Maritime Security Officials Committee (MSOC).

## Road crashes killed 376 people last year and cause \$8 billion of harm each year

Roads are used by just about everyone in New Zealand, and usually on a daily basis. Provisional figures show, 377 people died in oad crashes in 2022, with 2,470 people suffering permanent lifechanging injuries<sup>13</sup>. Social cost of road rauma is estimated to be as much as \$8 billion a year. Our rate of road deaths is also significantly higher than many other jurisdictions New Zealand compares itself to, as indicated in Figure 1 below.



Figure 8 Road deaths per 1000,00 inhabitants (2022)

Sustained effort is required to reduce the number of people being killed or seriously injured on our roads.

Serious injuries are defined as fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.

## Evidence suggests interventions are required across all parts of the system to improve road safety

New Zealand has followed the safe system approach in recent years, which is the internationally accepted best practice for road safety. A safe system means improving the safety of all parts of the system – roads and roadsides, speeds, vehicles and road user behaviour – so that if one part fails, other parts will work to protect people if they are involved in a crash.

Progress in all areas is still needed to reduce deaths and serious injuries on our roads. However, you can choose to place more emphasis on interventions in some areas rather than others.

# New Zealand has made progress in some areas, but there are significant opportunities for improvement

The current *Road to Zero* road safety strategy has targets for reductions in deaths and serious injuries. There has been progress in all areas. For example, Police have increased their enforcement activity in the last 12 months, with an additional one million a cohol breath tests conducted than in the previous year.

The interventions set out in the strategy that have been delivered have been proven to be highly effective in the New Zealand context. For example, changes to speed limits on State Highway 6 Blenheim to Nelson has seen the number of deaths and serious injuries reduce by approximately 80% in first two years, while the average journey time has increased by approximately four minutes over the 110km road length. Installation of median barriers at SH2 Waipukurau in 2020 has seen a 100% reduction in deaths and serious injuries in the two years since.

COVID-19 slowed delivery of initiatives and there have been other challenges, which have impacted the scale and pace of implementation.

Public acceptance of some of the actions under the strategy has been limited, in particular, concern has been expressed about:

- the public advertising and associated messaging, particularly how "zero" is unrealistic
- some of the focus areas, such as the extent of speed management proposed.

Given these challenges, the Ministry has started reviewing the approach to road safety. We are preparing more in depth advice on the impacts different initiatives will have on reducing deaths and serious injuries to assist you as you consider the strategic direction you wish to take for road safety. The Ministry would welcome the opportunity to discuss your expectations for road safety, including on the interventions you want to focus on.

## Rail safety requires clear regulatory frameworks and investment

Rail safety needs clear regulatory frameworks, strong oversight and investment to provide the required level of safety assurance. After recent investment and growth, the risk profile of rail has increased. There have been several rail safety incidents involving fatal and serious injuries and recent reviews into the Auckland and Wellington metro systems have highlighted the need for system improvement and the need for the rail regulator to rigorously address risks.

Waka Kotahi has primary regulatory responsibility for rail safety in New Zealand. Waka Kotahi has a critical regulatory role in assuring stakeholders and the public that the country's rail networks are being managed safely. This is achieved through regulation of the rail industry in accordance with the Railways Act 2005.

There will be opportunities over this term to consider how to continue to improve the legislation, regulation and oversight of rail safety, and to align New Zealand's rail safety approach with international best practice.

## Emerging aviation technology require updated regulation

The Ministry is responsible for providing advice on how existing regulatory frameworks can be adapted to enable the safe use of emerging aviation technology so that they can be safely integrated into the aviation system. Examples of this emerging technology are drones and other uncrewed aircraft, which need to be able to operate safely in the same airspace as traditional manned aircraft.

Increasingly innovative uses of these technologies offer potential economic, environmental and social benefits. This includes ensuring that New Zealand provides an enabling environment for innovators, supporting the growth of the aerospace industry, lifting productivity through innovation, lowering emissions and improving other environmental outcomes.

The Ministry has developed an Enabling Drone Integration (EDI) package to enhance the regulatory framework for drone operations, and as a building block for supporting autonomous operations. We will provide you with further advice on the proposed package of measures.

## Maritime safety and security are important to people, the economy and the environment.

Maritime transport is a critical part of our economy, with most of our imports and exports moving by sea. As an island nation, New Zealand relies on ferries to transport commuters, tourists, and domestic travellers between islands. Boating is also an important part of our culture with over 1.9 million people taking part in recreational boating in 2020.

Maritime activity can be dangerous. Since 2015, an average of 16 recreational boating fatalities have occurred every year. Fatalities occur throughout the country, and most are associated with falls overboard, a vessel capsizing or flooding. Many Transport Accident Investigation Commission and coroner reports have found fatalities might have been prevented if lifejackets had been worn.

Safe navigation is as critical in the maritime space as on land. Maritime incidents not only endanger human lives, but also the environment and the economy, as the Rena disaster demonstrated. The accessibility of the sea to recreational boating means recreational boating and commercial shipping operate in very close proximity to each other.

## Maritime legislation needs to be reviewed

The Ministry and Maritime New Zealand have started a review of primary maritime legislation. Changes could be made to make the system safer, while ensuring the maritime regulatory system supports trade in the face of future emergencies, transnational crime, climate change, technological change and other challenges.

### As Minister of Transport, you can help to enhance transport safety

The Ministry can provide you with any further information you require on these areas of transport system safety. You can help to enhance transport safety by:

- Considering advice on reframing the approach to road safety
- Taking a package of drone policy decisions to Cabinet
- Considering advice on the review of maritime legislation.

# Using regulation to support transport outcomes and improve productivity

# Regulatory frameworks are generally fit-for-purpose but require some refinements

Transport regulatory systems are made up of primary and secondary legislation, the Ministry, and transport Crown entities who carry out the role of regulators, deliver services, and educate and inform people on requirements set out in legislation.

New Zealand's transport regulatory systems are significantly shaped by international obligations, standards and recommended practices.

A more challenging economic outlook and fiscal position means there is added emphasis on ensuring all aspects of our regulatory systems deliver value for money and support increased productivity. For example, out-of-date regulatory requirements impose unnecessary costs on firms and individuals, which harms New Zealand's productivity.

Our current regulatory frameworks are generally fit-for-purpose and contribute well to our transport outcomes. However, some parts of these frameworks need to be updated if we want to ensure that regulation does not impose unnecessary costs and enables novel technology, such as driverless vehicles/craft (eg, unmanned aircraft and autonomous vehicles), different fuel types (eg, sustainable aviation fuel, hydrogen) and different types of craft (eg, drones). In addition, artificial intelligence (AI) is disrupting every industry and will change the way New Zealanders commute and the way they use transport infrastructure.

## Regulation is needed to realise the benefits of new technologies

Introducing still evolving technologies, while minimising harm, is a major challenge for policy makers and regulators. The beneficiaries of these technologies (the investors, manufacturers and consumers) often do not wear the full costs of their risks. Instead, the burden is borne by society at large and their governments, which must take action to address the risks.

Therefore, it is crucial to have a regulatory system that balances safety with innovation, certainty and efficiency before new transport technologies are rolled out at scale.

Regulation provides the framework and permissible set of conditions under which decisions can be made on important features of transport markets such as entry, pricing, access obligations and quality or conditions of service. The regulatory framework needs to evolve as technological and

society changes. Timely and proportionate regulation can support the exploitation of promising opportunities while also limit harmful trends.



For government, new technologies raise issues about when to act. Drones are here and regulatory action is being taken. While technological innovations, such as driving automation technology in vehicles like Electronic Stability Control, already contribute to the decline in deaths and serious injuries on our roads, the deployment of fully automated vehicles at scale remains very uncertain. Potential safety benefits are high but so are the risks. Safety will be the primary consideration before fully automated vehicles will be allowed to operate on New Zealand roads. In this case, the Ministry has carried out preparatory work to identify the issues and the regulatory work needed, including releasing a Long-Term Insights Briefing on the impact of these vehicles on New Zealand's roads in 2022. The Ministry will be well placed to advise you should the priority of this work need to be raised

## Positioning New Zealand's regulatory frameworks for the future

Implementing the new Civil Aviation Act and the proposed review of maritime legislation are all examples of work to bring regulatory systems up to speed with new developments and help to future-proof them. The Ministry looks forward to providing you with more information on our regulatory activities and the Ministry's work to help position New Zealand for future technological developments like drones and automated vehicles.

THE SEPONDER OF THE SEPONDER O

[heading – delete if empty]

[subheading – delete if empty]
[body text – delete if empty]
transport.govt.nz

ISSN [ISSN print – delete if empty]
ISSN [ISSN electronic – delete if empty]





He pepa whakamōhiotanga mō te Minita | Briefing to the Incoming Minister

Te Manatū Waka Ministry of Transport

## Contents

Part One: He Wakamana i a Aotearoa Kia Momoho   Enabling New Zealanders to Flourish	1
Part Two: Strategic Opportunities and Challenges	5
Investing in a high-quality transport system	55
A net-zero transport system	10
Maintaining and growing New Zealand's international connectivity	15
Developing thriving cities and regions	16
Strong Auckland, strong New Zealand	18
Building a resilient transport system	21
A productive, safe and secure transport system	23
Tables	
Table 1 Emissions budgetsFigures	11
Figure 1 Heavy Civil construction employment	2
Figure 2 Forecast expenditure and revenue (Crown and National Land Transport Fund)	7
Figure 3 Average annual revenue raised by New Zealand's current tools	8
Figure 4 Additional emissions reduction needed	
Figure 5 Transport emissions reductions by emissions budget period	
Figure 6 Timeseries comparison of (emissions reduction) projections	14
Figure 7 Road deaths per 100,000 inhabitants (2022)	24

#### Foreword

Tenā koe Minister, and congratulations on your appointment as Minister of Transport.

The Ministry has a key role to provide you advice on the decisions to sustain the transport system and to help achieve your transport priorities.

Transport moves people to work or school to connect them with family, friends and communities, and shifts materials, goods and services. New Zealand's transport system enables the social and economic prosperity of our cities, towns and rural communities.

The transport system also has negative impacts, including road deaths and serious injuries air and noise pollution that affects the health of the general population, as well as producing a significant proportion of New Zealand's greenhouse gas emissions.

This year, we have seen extreme weather events impacting communities and transport networks across the country. The Auckland Anniversary floods and Cyclone Gabrielle caused lasting damage to communities and vital infrastructure.

Increasingly, our cities and towns are facing funding pressures, driven by he demand for new or replacement infrastructure, of which transport is a major component. We must ensure the transport system is fit for future generations and able to withstand the impacts of extreme weather events.

Addressing these challenges places further pressure on existing funding models. The cost of maintaining the transport system, together with the need for repairs to roading and rail networks damaged by extreme weather events, will need to be balanced with new investment priorities.

The Ministry has been working on the future of transport revenue system, including the role of additional funding tools, with the objective of providing advice on who should pay for what and how to apply a sharper focus on value for money.

The Ministry works collaboratively with agencies and stakeholders to advance a longterm, integrated approach to the transport system. To create thriving cities and regions the transport sector needs to be more closely joined-up with planning, housing, other infrastructure, and broader funding and financing models.

As a Crown agency, we have an important responsibility to actively improve outcomes for Māori to ensure a transport system serves all New Zealanders equitably. A key focus area for everyone at the Ministry is our He Arataki strategy which seeks to identify issues and opportunities for Māori in transport policy design and delivery.

As Minister of Transport, you can make real differences to the lives of all New Zealanders. We look forward to giving you the advice and support needed to put your priorities in place to help advance the nation's transport system.

Nāku noa, nā

Glossary of terms and abbreviations			

OFFICIAL INFORMATION ACT 1982

OFFICIAL INFORMATION ACT 1982

OFFICIAL INFORMATION ACT 1982

## Part One: He Wakamana i a Aotearoa Kia Momoho **Enabling New Zealanders to Flourish**

## Transport is critical for New Zealand's economic, social and environmental health

New Zealand's transport system connects us to work and school, to our whānau, to our communities and to the rest of the world. The smooth and sustainable movement of people and goods throughout the system is critical to our economic, social and environmental health. The transport system is an important contributor to productivity and economic growth. The system supports other sectors and society's wider goals like better and affordable housing, desirable cities to attract skilled and talented people and healthier New Zealanders. The system also has negative impacts, including producing a significant proportion of New Zealand's greenhouse (GHG) gas emissions, other air and noise pollution that affects the health of the general population and deaths and serious injuries for the people using the system.

The transport system involves millions of journeys every day on extensive networks of public and private infrastructure across New Zealand. These networks connect a population spread-out thinly across regions, but also concentrated in cities, who all need to be well served by the transport system to meet their social and economic needs.

These networks are used by a wide array of vehicles every day, and there are competing demands, including increasingly for use of street and city spaces. New Zealand's environment and geography also mean our critical transport infrastructure is exposed to a broader and more consequential range of potential shocks than many other highly developed countries.

## Growing demands on the transport system are creating new challenges

As New Zealand has matured, the demands on the transport system have grown significantly. In the past, the challenge revolved around efforts to grow capacity as activity increased and keeping the system maintained. However new challenges, especially the need to adapt and mitigate the effects of climate change, call for a fundamental shift in the way New Zealand's transport system operates. The long-lived networks underpinning the transport system need to be planned and funded over the long-term, managed and regulated effectively to support the shift needed.

#### The land transport system is more expensive to build and maintain

As the land transport system grows, it becomes more expensive to build, operate and maintain. Operating and maintenance costs are making up an increasing share of transport spending. This has taken place in the context of a planning and funding system, especially for land transport, that works well to signal investment priorities and ambitions but works less well to create incentives to spend money efficiently and effectively.

The increase in costs is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment, a need to consider resilience, and an expanded range of activities being funded. This has led to increased pressure

on the available funding and resulted in a range of short-term solutions being put in place, including increased Crown funding and debt.

#### Ambitions for new investment are growing beyond capacity

Investment in the transport system is an important way of increasing New Zealand's economic growth and meeting many of the social and educational ambitions of New Zealanders. Cities need to move people and freight efficiently while the regions need strong connections to well-run ports and airports to move their products to market. Still, investment ambitions are running ahead of the capacity of the revenue system to meet them or the capacity of the construction sector to deliver new projects, especially alongside ambitious programmes in other sectors like water and housing.

Planned expenditure for the next 20 years is nearly double the \$10 billion per annum of current investment, and more than four times the size of the National Land Transport Fund. These commitments have not been made based on a system-wide investment plan and have likely driven inefficiencies in the system. The scale of the investment also stretches management capacity. Reduced oversight can exacerbate the risk of cost overruns or delivery failures.



Figure 1 Heavy Civil construction employment

Source: Ministry of Transport

There is a growing urgency to consider the balance between new expenditure and maintaining the system and establish a more certain and sustainable model for funding their transport priorities to meet short term needs and to establish an enduring model for the next decade and beyond. This will involve considering the balance between new expenditure and expenditure to maintain the system and how to apply a sharper focus on value for money. New Zealand must also look to other tools, such as pricing and demand management (eg, congestion charging), regulatory interventions, use of data, and the way transport and land use are considered together.

#### A new approach to paying for land transport is needed

In the aviation and maritime sectors, the networks are mostly owned and operated by private interests, with some local government investment. However, in the land transport sector, central government plays a lead role in how the system is planned and funded. New Zealand's land transport system has been reliant on a narrow range of user charges (mainly taxes on fuel and charges on diesel and heavy vehicles) to pay for much of our land transport.

Over the last two decades, Crown contributions and borrowing have increased as the level of funding from user charges has fallen behind investment ambitions. This, and other factors, have put the system under pressure. Our revenue system does not easily support large, long-term investments. Many of these have a scale of cost that needs to be spread over many years.

#### We need to decarbonise the transport system

Transport is one of New Zealand's largest sources of GHG emissions, producing 40% of domestic CO<sub>2</sub> emissions and 17% of total GHG emissions. Most transport emissions (92%) come from land transport, with 64% from light vehicles (cars, utes and vans)

The Climate Change Commission has identified transport as a sector with the potential to almost completely decarbonise by 2050 and make large reductions from the third emissions budget period (2031-2035) onwards. Because some other sectors are expected to be more challenging to decarbonise, New Zealand's overall emissions reduction success is likely to rely heavily on transport realising this potential.

#### New Zealand's international connections are increasingly vulnerable and uncertain

New Zealand's ability to trade and connect with the world is increasingly influenced by geopolitics, the international politics of climate change and New Zealand's position as the last stop on many international supply chains. Aviation and maritime are emissions intensive industries and, in the coming decades, there will be growing global pressure on these sectors to decarbonise. Market based measures to reduce emissions in these sectors will be important, but they are likely to disproportionately impact New Zealand due to our distance from the rest of the world and a lack of viable alternatives. It is therefore important we work collaboratively with these sectors and support them to decarbonise as quickly as possible. These sectors are increasingly seeking government leadership, involvement and support for measures to enable and support their efficiency and transformation.

#### New technologies need to be integrated

Transport will need to integrate new advances in technology, including novel craft and new types of fuel. This brings considerable opportunity but also risk. Managing this quickly and safely will require some changes to the transport regulatory system. These changes will help ensure that regulation enables the use of this new technology in a way that does not impose unnecessary costs. Government will also need to continue to work closely with the private sector on how to fund the infrastructure necessary to adopt new technologies. For example, airports need to consider the infrastructure investment required for aircraft which might be electrified or use hydrogen as a fuel source. Electrification of aircraft at scale will also have significant implications for the supply of electricity needed from the grid.

#### Transport safety and security remains a priority

Improving transport safety and enhancing security of the transport system remains an issue for New Zealand. For example, proportionally more people per capita are killed on our roads than most other OECD countries. The death rate in Australia per 100,000 people was 4.6 while, for New Zealand, it was 7.3 or approximately 58.7% more. Provisional figures for 2022 saw 377 people killed on the roads. Measures needed to improve road safety require sustained effort from government agencies and social acceptance from those who may be affected by changes. Meanwhile, it is critical New Zealand continues to effectively implement international security obligations for aviation and maritime to ensure New Zealand remains a trusted destination for airlines and shipping operators.

# You can guide and shape the system to meet present and future challenges

The responses to the challenges and opportunities New Zealand's transport system faces will involve many choices. Over the next decade, New Zealand's transport system will need to evolve to produce net zero emissions by 2050, significantly reduce road deaths and serious injuries, and address identified challenges some groups and individuals face when accessing the transport system. The system will also need to further adapt to shocks like severe weather, future possible pandemics, natural disaster, or economic downtums.

While transport decision-making is more demanding than it has been in the past, there are good opportunities to achieve change. As Minister you can shape the system to make sure all New Zealanders can access safe and efficient transport options, and the Ministry's role is to support you in your efforts.

As the Government's policy lead for transport, the Ministry commits to giving you robust, evidence-based, future-focused advice on the policy, investment, and regulatory settings that provide the best opportunity to achieve your goals. The Ministry's *System BIM* gives further detail on the policy tools and levers available to you, including the role of the Ministry's Transport Outcomes Framework.

## Getting your policy priorities in place

The Ministry looks forward to working with you to get your priorities in place. We would like to meet with you as soon as possible to discuss a range of key decisions and critical issues. These include your manifesto priorities especially for the first 100 days of your administration, legislative requirements, and other priority issues. We will provide you with a list of these issues before our first meeting.

## Part Two: Strategic Opportunities and Challenges

## Investing in a high-quality transport system

## Challenging economic context

With a challenging economic outlook, increasing risks to long-run fiscal sustainability and cos pressures, New Zealand must make choices about how the transport system will be developed and managed over the next decade and beyond. Government investment, along with other interventions, is needed to create a high-quality transport system for all New Zealanders. However, a good result requires investing in the right things and at the right time, with tight cost control.

## New Zealand has been spending more on transport

New Zealand has been spending more on transport, both on new infrastructure and to sustain existing networks. This is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment and an expanded range of activities being funded. More investment has been going towards public transport and rail, in part to meet broader objectives, such as improving access and reducing emissions. Around 60% of the funding available through the National Land Transport Fund is usually committed to maintenance and providing core services, such as road policing, and these activities are becoming increasingly costly.

With increased pressure on existing funding models, a range of short-term solutions are being put in place, including increased Crown funding and debt. Existing revenue sources are unlikely to keep pace with demands, unless decisions are taken to increase the amount collected. Fuel excise duty is a major source of revenue for the transport system, but will become less certain over time as vehicles become more fuel efficient and more people choose to travel by other modes.

An ambitious pipeline of projects has either been committed to, or explored, but the funding, scoping and phasing of these projects is still largely to be decided. These projects include Auckland Light Rail, the Strategic Investment Programme (outlined in the draft GPS 2024), and the additional Waitematā Harbour Crossing. If all these projects proceed to construction, the Ministry estimates the total Investment in land transport from 2024 to 2034 will be \$125 billion, compared to \$61 billion in the 10 years from 2013-2023. Analysis from the New Zealand Infrastructure Commission, Te Waihanga, suggests this would materially exceed the capacity of the labour market in Auckland, even under optimistic growth assumptions.

## The Government invests in land transport through the National Land Transport Fund and through direct funding

The Government Policy Statement (GPS) sets the Government's priorities for the National Land Transport Fund over a 10-year period. A draft GPS has been out for public consultation and, as a statutory document, must be published by 1 July 2024. Finalising the GPS is essential to drive land transport planning and funding decisions made by both Waka Kotahi and local government.

Waka Kotahi gives effect to the GPS through the 3-yearly National Land Transport Programme, which sets out planned activities and projects. Waka Kotahi has statutory authority over what activities and projects are included in the National Land Transport Programme and approved for funding. Regional Land Transport Plans made by Regional Transport Committees, consisting of Waka Kotahi, local government and sometimes KiwiRail, feed into the National Land Transport Programme. This process helps reconcile the different priorities of central and local government.

Separate to the GPS process, the Crown has, at various times, funded additional transport projects through the annual Budget process. These have tended to be larger projects, such as those under the New Zealand Upgrade Programme (eg, Melling interchange, Ōtaki to north of Levin), or the Auckland City Rail Link. These projects may have bespoke delivery and governance arrangements depending on the preferences of the Government. Sometimes, these projects are committed before the final scope of the project or the full costs are fixed, leading to subsequent trade-offs in scope or unexpected cost increases.

## GPS 2024 will set the Government's land transport policy

As well as setting out proposed strategic priorities, the draft GPS outlines the core investment required to maintain the system, the funding available from usual sources, as well as the suggested funding package to address the gap between them. That funding package emphasises the choices to be made in finalising GPS 2024 because it relies on raising FED and RUC (\$1.4 billion), Crown grants (\$2.7 billion), Crown loans (\$3.1 billion) and some non-traditional funding sources like the revenue from traffic infringements (\$300 million) and the Climate Emergency Response Fund (\$500 million).

While the proposed funding package would reduce the pressure over 2024-27, the Ministry expects there will continue to be a gap between expenditure and revenue. The draft GPS 2024 outlines a \$4.4 billion decrease in funding over 2027-30 compared to 2024-27.

In these circumstances, the investment proposed in the final GPS must be carefully prioritised, be affordable, and meet your objectives. Cost must also be better managed and demonstrate value for money. This includes strong business cases and ensuring there are a broad range of options considered, including options that do not involve investment, such as demand management. While there are also choices to generate additional revenue through existing tools, and maybe some newer ones, there will be constraints, especially in the face of upward pressure on the cost of living.

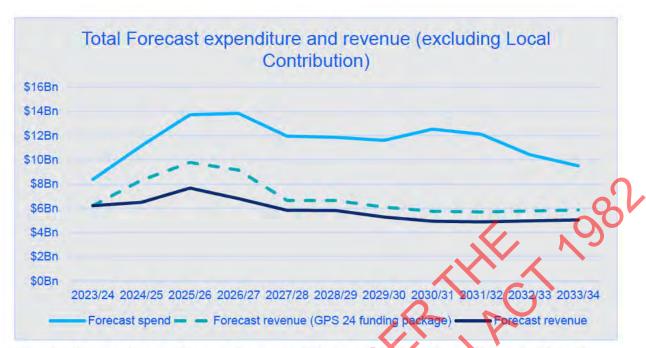


Figure 2 Forecast expenditure and revenue (Crown and National Land Transport Fund)

Source: Ministry of Transport

## There are fiscal constraints in Budget 2024

With Budget 2024 allowances likely to be constrained, the Ministry is investigating opportunities to reprioritise existing funding towards higher priority initiatives and to find savings.

## Ensuring a sustainable land transport revenue system

The existing tools for funding the land transport system, like the distance and weight-based Road User Charges system for diesel and heavy vehicles, are still world leading. Fuel Excise Duty is also an extremely cost-effective and efficient method for collecting revenue from petrol vehicles.

However, these forms of funding are not well suited to very large, lumpy infrastructure investments (eg, mass rapid transit) that have social wider benefits, such as supporting intensification.

Crown funding or debt can play a useful role in meeting transport funding needs. However, practices have varied and this can lead to a lack of clarity about when Crown funding should be used and for what. A more principled and transparent approach would help manage Crown cost and will provide more certainty and predictability for Waka Kotahi and cities and regions.

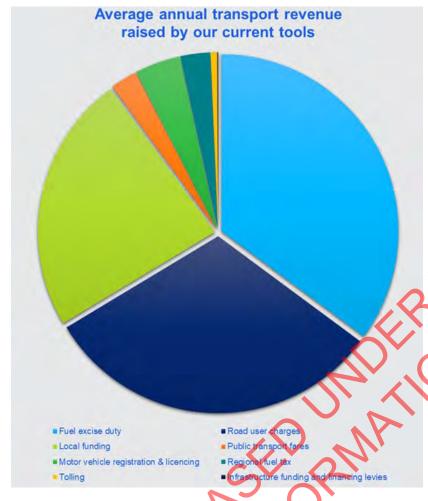


Figure 3 Average annual revenue raised by New Zealand's current tools

Source: Ministry of Transport

The Ministry has been working on what is needed to enhance the transport revenue system, including the potential role of additional tools and providing more clarity on who should pay for what There are longer-term and shorter-term elements to this work. In the long term, there are opportunities to look at the balance between who should bear the costs of the transport system amongst users, ratepayers, taxpayers and other beneficiaries. What ever approach is chosen, it will need to be predictable, stable and have good levels of public buy-in, as transport costs affect every New Zealander and every New

#### Zealand business.

A transition towards RUC uptake is already underway. The RUC system overcomes the fuel efficiency issues with FED and it may enable a more sustainable stream of funding over time. There are options for extending RUC, including moving all vehicles on to the system or more sophisticated charging approaches that would add time and location based charging.

While some changes would need to be implemented over the longer-term, there are revenue options that can be progressed in the shorter-term. While such tools would help provide additional revenue, they are unlikely to generate enough revenue to fill expected gaps over the next decade and each option comes with its own risks and challenges. These revenue options include:

#### Value capture mechanisms

Value capture is under utilised in New Zealand compared to other countries. Value capture involves recovering or 'capturing' the incremental benefit residential or commercial landowners receive from investments in public infrastructure and the resulting urban development and amenity.

This benefit is usually reflected in higher property (land and building) values. There are a range of levy<sup>1</sup> and uplift-based<sup>2</sup> methods available to both central and local government.

Work to date has highlighted the potential for value capture but also the operational complexities of implementing these mechanisms.

#### Congestion charging

Congestion charging is mainly used for managing demand, so revenue is not its primary aim. This type of charging sets a higher cost for travelling at peak times, and encourages some users to change the time, route, or way they travel. This can reduce congestion by spreading out use over time and defer the cost of new capacity because better use is made of existing capacity. Congestion charging has been successfully implemented to reduce congestion in cities around the world, for example, London and Singapore. However, schemes have also failed when there were low levels of public acceptability, in part due to concern about equity and a perception congestion charging is only about raising revenue.

There is interest from several of the large metro councils in congestion charging, both to reduce congestion by managing traffic and potentially raise revenue for transport projects. The Ministry expects them to seek your support for legislation. Draft legislation has been developed so could be advanced quickly although the underlying policy would need to be confirmed with you.

#### Tolling

As Minister of Transport, you are responsible for approving tolling schemes under the Land Transport Management Act 2003. 5 9(2)(f)(iv)

Tolling settings are relatively permissive but tolls can only be applied to "new roads". As well, New Zealand's low traffic volumes, the high administrative costs of collecting tolls and a lack of public acceptance, has limited the widespread use of tolling.

Within these constraints, tolling is being rolled out where a case can be made. However, there are options for new tolling approaches, including variable pricing or tolling existing roads, but these would require amending the Land Transport Management Act. For example, Waka Kotahi has been working with Tauranga City and Eastern Bay of Plenty on a proof-of-concept study for variable road pricing.

Tolling options also need to be considered alongside other arrangements, such as congestion charges. In the longer term, shifting to a distance-based RUC system could provide scope to implement variable charging across the network to manage demand more effectively.

#### Making greater use of private capital

In the past, Public Private Partnerships (PPPs) have been used with varying degree of success but have delivered some important lessons. Two roads have been delivered under the PPP model:

i.e., a one-off charge based on property value increases due to the infrastructure.

i.e., a proportion of any capital value uplift is taxed.

#### A NET-ZERO TRANSPORT SYSTEM

Transmission Gully and Pūhoi to Warkworth.<sup>4</sup> Compared to other types of PPPs, roading projects are riskier and more complex, largely due to ground and environmental factors, including weather and storm damage.

The ability for PPP consortia to manage risk is critical for the success of the model. How this is done, when procurement processes are heavily weighted towards a low price, will affect the degree to which PPPs are used for roading projects in the future.

If implemented well, there is potential for PPPs to improve services and deliver new infrastructure. Using private finance means more projects can be built sooner than through the conventional "pay as you go" public sector procurement. However, the current PPP model spreads out the costs of these projects over a longer period, which must be managed as a first call against the National Land Transport Fund. Alternatively, Government could consider whether there is benefit in changing the contracting model for roading PPPs to transfer more risk to the operator (eg, through demand-based tolling arrangements).

You can also choose to involve private equity in the delivery of transport infrastructure. Under this arrangement, the investor would take an ownership stake in an asset and would seek greater control over design, construction and operation. However, they may also be prepared to take on a wider range of risks. Investors such as ACC and the NZ Super Fund have shown an interest in these arrangements which may be a good way of approaching wider packages of development in cities. Equity-based arrangements would challenge the transport system's existing ways of operating. This approach requires longer-term planning and funding certainty, with private sector investors able to work with Crown agencies (among others) earlier so they can influence design choices and delivery arrangements.

# The Ministry will meet you soon to discuss your investment and revenue priorities

The Ministry will seek to meet with you as soon as possible to discuss your priorities and the next steps for GPS 2024, Budget 2024, and the Ministry's revenue work. Clarifying your expectations early will ensure agencies do not commit resources to developing bids unlikely to be supported.

## A net-zero transport system

# The Climate Change Response Act 2002 sets New Zealand's framework for reducing emissions

When New Zealand ratified the Paris Agreement in 2016, it committed to joining a global effort to limit temperature rise to 1.5°C above pre-industrial levels. In 2019, Parliament amended the

s 9(2)(g)(i)

Climate Change Response Act 2002 (CCRA) setting the target of reaching net zero GHG emissions by 2050.

In 2022, the first three emissions budgets were gazetted as outlined in Table 1 below. The Climate Change Commission is due to advise the Government on the fourth budget by 31 December 2024. This budget will cover 2036 to 2040.

Table 1 Emissions budgets

Time period	Level of permitted emissions (carbon dioxide equivalent, all sectors)
Emissions budget 1: 2022-2025	290 Megatons CO <sub>2</sub> -e
Emissions budget 2: 2026-2030	305 Megatons CO <sub>2</sub> -e
Emissions budget 3: 2031-2035	240 Megatons CO <sub>2</sub> -e

## New Zealand's overall emissions reduction success is likely to rely on transport meeting its potential to almost fully decarbonise by 2050

As well as recommending the first three emissions budgets, the Commission's analysis included a "demonstration pathway". This outlinines how New Zealand could stay within the emissions budgets and successfully reach net zero by 2050. This pathway informed the development of expected contributions from different parts of the economy. While not legislated, the Government adopted these as sub-sector targets to enable sectors to track progress and manage 'unders and overs' between sectors while staying on track to meet the overall target.

Transport is one of New Zealand's largest sources of GHG emissions, producing 40% of domestic CO<sub>2</sub> emissions and 17% of total GHG emissions. Between 1990 and 2019, transport emissions rose approximately 80% faster than any other sector. The Commission identified transport as a sector with the potential to almost fully decarbonise by 2050 and make large reductions, especially from the third emissions budget period (2031-2035) onwards. New Zealand's overall emissions reduction success is likely to rely heavily on transport realising this potential.

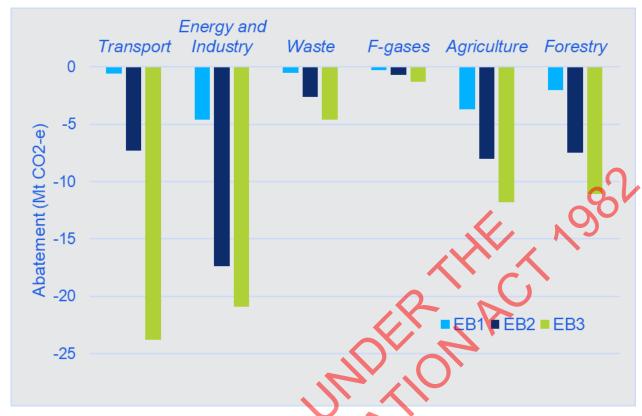


Figure 4 Additional emissions reduction needed

Source: Ministry for the Environment

# The transport sector is delivering on the first Emissions Reduction Plan (ERP1)

The Government's approach to emissions reduction in the first emissions budget period was set out in the Emissions Reduction Plan (ERP1) published in May 2022. ERP1 sets focus areas, targets and specific actions to be taken between 2022 and 2025 to reduce transport emissions in line with the transport sub-sector target.

Officials are working to implement the actions in the ERP1 by the end of 2025.

Current estimates suggest transport is likely to stay within its sub-sector target and meet its expected contribution to reducing emissions during the first emissions budget period. However, these estimates assume work underway to reduce transport emissions continues and incorporate data reflecting lower-than-expected rates of travel. This decline in travel is not fully understood and a range of factors are likely to have contributed, including migration, cost of living, and changing travel patterns post-COVID-19. Therefore, caution should be applied when assuming this trend will continue.

## Work is underway to develop the second Emissions Reduction Plan (ERP<sub>2</sub>)

As shown in Figure 4 above, a considerable jump is required in emissions reductions from transport from the first to second emissions budget period, and again from the second to the third.

Work is underway within the Ministry and across government to develop the second Emissions Reduction Plan (ERP2), which is due by the end of 2024. ERP2 will need to contain actions that meet the gazetted emissions budget for the second emissions budget period from 2026-2030.

In its draft advice to inform the strategic direction of ERP2, the Commission also advised ERP2 will need to include actions that set the transport sector up for the third emissions budget period.

In December 2023, you will receive initial cross-agency advice about key opportunities and challenges for ERP2 and some indicative content about what could be included. Cabinet is expected to make decisions about the draft and final content for ERP2in 2024.

## Meeting the third emissions budget and beyond require significant system changes

Current modelling suggests meeting the third budget for transport will require significant additional effort beyond currently committed policies as shown in Figure 5.



Figure 5 Transport emissions reductions by emissions budget period

Source: Ministry of Transport

ERP1 placed particular emphasis on rapidly transitioning the vehicle fleet to low- or zero-emissions vehicles because it is one the few ways to significantly reduce transport emissions that can be set in motion quickly. By the time we reach the third emissions budget, we will need to have made much more significant changes to the transport system including large scale public transport improvements, significant uptake of low emissions heavy vehicles and land use patterns that support low emissions transport options in urban areas.

#### A NET-ZERO TRANSPORT SYSTEM

With such systemic changes in place, transport emissions reductions could accelerate rapidly from around 2030 onwards (often referred to as 'bending the curve'). This can be observed in the Commission's demonstration path in Figure 6.

However, as Figure 6 also shows, these systemic changes are not factored into current investment plans for transport. Our latest baseline projection, shown in yellow, reflects expected transport emissions based on committed and funded actions, and suggests more investment and ambition will be required in ERP2 to successfully 'bend the curve' and meet our long-term targets.

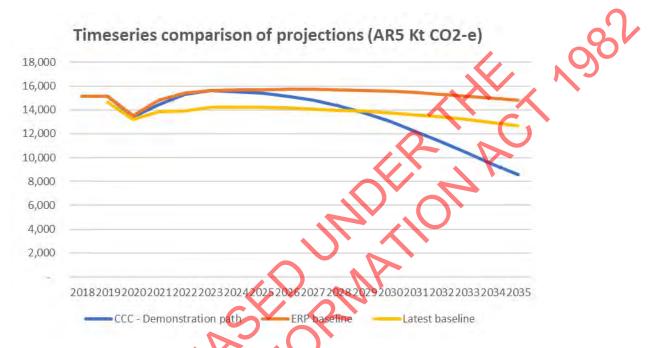


Figure 6 Timeseries comparison of (emissions reduction) projections

Source: Ministry of Transport

#### The next steps for ERP1 and ERP2

#### Aligning ERP1 with your strategic objectives

We can provide you with more detail about the focus areas, targets, and actions for transport in ERP1 and advise you on the impact of any changes you may wish to make to the remaining actions to be delivered in the first budget period.

#### **Ensuring ERP2 meets your strategic objectives**

Setting strategic priorities for ERP2 with your Cabinet colleagues and deciding what actions will be included for transport to meet its expected contribution will be some of the biggest strategic decisions you will make as Minister of Transport in the next 12 months. The Ministry will support you with advice to inform these decisions.

In December 2023, along with your Ministerial colleagues in other climate portfolios, you will receive a package of preliminary advice about the long-term pathways to net zero by 2050 and indicative advice about what these mean for ERP2. This advice is likely to seek your direction on

some key strategic priorities, risks, benefits sought, and potential trade-offs, to inform the development of detailed options for inclusion in ERP2. The Ministry will provide you with additional transport-specific advice to supplement this interagency advice.

#### Maintaining and growing New Zealand's international connectivity

#### New Zealand's prosperity is heavily reliant on its connections to the world

International connectivity enables people and goods to move across our borders and is an important contributor to New Zealand's prosperity and well-being.

Most of our imports and exports move by sea - 99.7% of New Zealand's export goods by volume, and 80.9% of its exports by value. This makes the maritime sector vital to New Zealand's interests, including ports and the connections to them. The aviation system also delivers economic and social benefits of staying connected to each other and the global community. Air transport underpins key sectors in the New Zealand economy, including tourism, international education and high-value freight.

#### New Zealand's international connections face a changing environment

The geo-political environment is becoming less rules based and more volatile, and there is growing risk around the international politics of climate change. This presents some risk to New Zealand as a distant trade reliant economy. The emissions from the aviation and maritime sectors are subject to increasingly tighter international standards and we need to be well engaged to ensure these support New Zealand's carbon emissions and connectivity objectives while not disadvantaging our connectivity to the world. The international security environment has also become more complex.

#### Government can help promote efficient supply chains

After COVID-19 highlighted vulnerabilities in our supply chains, the Ministry conducted extensive engagement with supply chain stakeholders to develop a National Freight and Supply Chain Strategy, which was issued on 18 August 2023. Industry stakeholders especially called for:

- better signalling of government's long-term plans for supply chain infrastructure
- better consenting and planning that protects key logistic routes and nodes
- a review of the current port system
- improved data collection and availability
- improved ability to transfer across transport modes
- building the workforce for the supply chain of the future.

It is important the Strategy, which supports a stronger and more resilient supply chain, is translated into action. The next step proposed for the Strategy was the development of an action plan. Work priorities were identified around ports and their connections, road freight decarbonisation, freight data, and international connections.

## Proposed actions for progress on international connectivity and supply chain issues

Key actions we will look to progress are:

- Better collaboration with the private sector, so New Zealand has future supply chains that are
  low emission, resilient, productive, efficient, safe and sustainable. This is likely to involve
  work on ports and their connections to road and rail, the transition to low emission heavy
  vehicles and improving freight data collection.
- Working across government and the aviation sector to develop a national policy statement for aviation and provide a joined-up view on how best to embrace opportunities and address challenges in the sector. A private partnership initiative has already begun to accelerate decarbonisation of the aviation sector.
- Initiating a review of maritime legislation to ensure our regulatory frameworks support an innovative, productive, safe and secure maritime sector.

We will discuss these potential actions further with you

#### Developing thriving cities and regions

## Resilient, safe and well-connected transport networks are a basic requirement for cities and regions

Cities and regions depend on resilient, safe and well connected transport networks to have strong economic and social opportunities. These networks enable people to travel to and from work, access services and amenities, as well as allowing businesses to be productive and connect to a range of markets.

Regions need resilient and safe transport networks to enable communities to participate in society and connect our primary producers to their overseas markets. Well targeted road investment and effective maintenance is critical to sustain connectivity. Meanwhile, cities need well-connected transport networks to be able to move people while allowing goods and services, including freight, to move efficiently.

Well targeted transport investment, both capital and operational, is critical to sustain these networks. This investment can unlock better safety outcomes, grow the economy and increase productivity benefits for all New Zealanders.

#### Alignment between transport planning and delivery, land use and infrastructure planning is essential

Delivering effective and efficient transport in cities and regions requires the alignment of transport planning, funding, and delivery with land use, regulation, urban development, housing and infrastructure provision. Transport solutions in cities require multiple interventions, including measures from outside the transport system itself. Given the shared regulatory responsibilities for delivery between central and local government, the tension between national and local priorities often need reconciliation to help meet statutory requirements, realise shared goals, and improve certainty.

Improving long-term, integrated planning across transport and other sectors will deliver better outcomes and greater planning certainty. However, there are challenges in achieving this integration due to several complication factors, such as the numbers of decision-makers involved, the planning horizons for delivering transport solutions, and the complexity of the projects.

To provide greater certainty and to better prepare for and manage growth, high-growth cities and regions have developed spatial plans under Urban Growth Partnerships These partnerships include local government alongside central government agencies and mana whenua. They are also a mechanism for long-term thinking and integration of transport and other infrastructure projects, as well as stakeholder engagement and involvement.

Spatial planning has been a critical tool for supporting integration of transport with the provision of other infrastructure. However, the challenge with spatial plans is that there is no guaranteed pathway between the major projects shown in spatial plans, nor do they guarantee funding. Once identified, transport and infrastructure projects often need to use existing statutory funding mechanisms and decision-making processes to make progress. This often requires decisionmakers to make trade-offs between competing investment priorities, and ensure benefits are equal to the level of required funding.

For example, all the Urban Growth Partnership spatial plans include rapid transit services and high-frequency public transport networks. These look to provide a backbone for future large-scale urban developments. However, there is currently no funding pathway, firm timeframes and clear prerequisites (such as the inclusion of intensification along the proposed rapid transit corridors) to deliver most of these projects. This uncertainty means there are risks around the ability of the these projects to deliver their projected public benefits.

#### City and regional deals are a potential way to deliver integrated transport solutions

City and regional deals offer a potential way for central and local government, mana whenua and the private sector to provide greater certainty on transport and other priorities for a city or region, but this will likely be challenging given the constrained funding environment. Exploring innovative new funding and financing models to deliver major projects (including through transport pricing tools), using long-term planning instruments to provide certainty and improve integration between land-use and transport, and making better use of existing funding and financing tools and past

<sup>&</sup>lt;sup>5</sup> The Urban Growth Partnerships have developed spatial plans for Auckland, Wellington, Hamilton, Tauranga, Christchurch, and Queenstown

transport investments will be essential. Independent monitoring should ensure accountability, and clarity in governance structures enables shared understanding of roles and responsibilities. For example, this may require differentiating between operational and strategic arrangements. including the roles of investment and other initiatives that can get better use out of existing networks, such as congestion pricing.

City and regional deals can also serve to coordinate the multiple planning, funding, and regulatory approval streams necessary to advance the investment in urban development, transport and infrastructure often required to fund large investments in infrastructure our high-growth cities need. This includes considering ways to incentivise partners to invest in necessary transport networks and associated infrastructure and other developments, while also working together to address he risks the partners face from entering long-term funding commitments.

given constrained funding and the substantial costs of delivering large-scale transport projects, innovative funding and financing models can be explored to deliver major projects as the deals are being developed.

New Zealand has built up some experience with these types of multi- party funding arrangements as they relate to transport and associated urban development from which lessons can be learned., including the Auckland Transport Alignment Project (ATAP) and Let's Get Wellington Moving. Lessons can also be found internationally as these deals are used in other countries, including the United Kingdom, Canada, and Australia to support integrated programme delivery. They involve long-term partnerships between local and central government and private businesses based on a clear set of outcomes, with packages of funding and decision-making powers. Experience from other recent transport-based partnerships between central and local government has also underscored the importance of clarity on funding, roles and responsibilities, and governance arrangements.

## The Ministry can provide further advice on urban development and city and regional deals

The Ministry can provide you with further information and advice on opportunities for Ministerial collaboration, better planning, and city and regional deals. As these agreements require the input of different portfolios, substantial work would be needed with other Ministers to determine their viability and potential effectiveness in a New Zealand context. In the past, cross-portfolio Ministerial forums for urban development and infrastructure have encouraged government agencies to work together on policy development and delivery and ensure joint accountability.

### Strong Auckland, strong New Zealand

#### Auckland is critical to achieving New Zealand's goals

Auckland is home to one third of New Zealand's population, contributes 38% of the nations GDP and is projected to account for around 60% of New Zealand's population growth between 2013 and 2043.

Over recent years, Auckland has accounted for 30% of the National Land Transport Fund spend and increasing Crown funding along with Auckland Council funding.

#### Auckland continues to need a large investment in its transport networks

Auckland requires transport investment in roads, public transport and active transport. Along with investment, interventions such as congestion pricing and better integration of transport and landuse are required to achieve outcomes and manage affordability. Congestion pricing in Auckland will raise some revenue but its value is in improved productivity and potentially deferring some road costs and capital spending.

The strategic roading network in Auckland is almost complete. Penlink is underway and a preferred option for Mill Road as part of the package of investment in south Auckland needs to be determined.

#### Rapid public transport is integral to improving Auckland's public transport network

Auckland's future public transport network will have to be much larger than it is today, and rapid transit will be needed to move people in a fast, frequent and reliable manner. While there have been some setbacks with the rail rebuild and bus driver shortages, public transport patronage has increased significantly in Auckland. Patronage increased from 84 million boardings in 2016 to 100 million boardings at the end of 2019. This can be further improved by increasing frequency and reliability on the current bus network and extending coverage, particularly to some of the lower income areas where access to public transport is poor. Successes to date have been the northern busway and passenger rail, post electrification. The City Rail Link and Eastern busway are well into construction and will support further growth in the short term. Work on a 30-year plan for rail investment in Auckland is also well advanced.

Business case work is underway on a range of major projects including on the northwest and city centre to Mangere corridors, as well an additional crossing over Waitemata harbour. There is a lack of consensus on the best way to proceed with these projects, and how work should be prioritised and sequenced. Our view is it is not feasible to progress with all of these projects as planned from both a funding and construction capacity perspective. Within the limited funding and delivery capacity available, you may want to consider the balance between high volume and highcost options, such as light or heavy rail, and lower volume but faster to deliver options such as busways. The Ministry's advice is these should be considered in the context of the type of overall network that should be available in future, and the nature and scale of development desired for Auckland.

Reaching agreement with Auckland Council on the sequencing of investments in Auckland over the longer-term is a priority. One way to achieve this is by continuing to work on the Auckland Transport Alignment Project (ATAP). Since 2017, ATAP has been New Zealand's most mature 'city deal'. The Minister of Transport and Mayor of Auckland are political sponsors of ATAP and a Governance Group of Chief Executives provides oversight and governance.

#### The joint Government/Auckland Council Tāmaki Makaurau Transport Plan needs to be completed

The Tāmaki Makaurau Transport Plan, a long-term integrated plan has been the key piece of work progressed under the ATAP structure over recent months. It is paused and we will seek your guidance on the next steps for completing the Plan.



#### Auckland Commuter Rail

# Several major Auckland transport projects are underway

There are pressing choices to be made about investments in Auckland over the 10 and 30-year horizons. Affordability and delivery capacity need to be considered as an investment programme, which includes sustaining the current network, expanding public transport services and progressing major projects, is completed.

#### City Rail Link (CRL)

Most construction work is now complete, and the focus is on integrating CRL with the Auckland network and testing readiness for

operations. The Ministry monitors the work of the delivery company, City Rail Link Company (CRLL) and advises on broader investments needed to realise the benefits of the project. CRL is funded 50:50 by the Crown and Auckland Council. You are a joint sponsor of the work along with the Minister of Finance and Auckland Council, represented by Mayor Brown.

#### Auckland Light Rail (ALR)

ALR is an integrated urban and transport project along the city centre to Māngere corridor. Auckland Light Rail Limited (ALRL) is working on a detailed business case. The Ministry monitors the work of the company, provides policy advice on the project and supports the project's Sponsors You chair the Sponsors Group and it will be a priority to provide direction to the project.

#### Waitematā Harbour Connections

Waka Kotahi is developing an indicative business case on a recommended option including roading, rapid transit and cycling connections. This is scheduled to be considered by the Waka Kotahi Board in early 2024. The Ministry's feedback is significant work is required before moving to a decision-making process, including on lower-cost options. You have a role in setting direction for the work and ultimately deciding whether to take the project forward through Cabinet.

#### Northwest

The Northwest corridor has consistently been identified as a high-priority rapid transit corridor for Auckland. Interim improvements are underway including new bus stops, interchange enhancements, and extended bus lanes on SH16. Waka Kotahi is starting a detailed business case on a permanent rapid transit system. This corridor is a priority for the Mayor of Auckland and the Ministry expects it to be raised as part of your discussions on the Tāmaki Makaurau Transport Plan

#### The Ministry will seek your direction on Auckland's transport priorities

The Ministry will seek your direction on completing work on the Tāmaki Makaurau Transport Plan and on the next steps for some of the planned projects in Auckland

#### Building a resilient transport system

#### The transport system connects New Zealanders but is vulnerable to shocks and disruptions

The transport system and our communities and businesses are vulnerable to shocks and disruptive events (either natural or human). New Zealand has transport corridors in steep valleys, alongside coastlines, and across rivers and floodplains. Many communities are in remote areas or have limited routes connecting them to the rest of New Zealand. In recent years, New Zealand has experienced climate change related severe weather events like Cyclone Gabrielle and natural disasters like the Christchurch and Kaikōura earthquakes in 2011 and 2016 respectively.

Transport operations can also be disrupted by other vulnerabilities. Parts of the transport system rely on highly trained workforces which are susceptible to staff shortages, for example, maritime pilots, air traffic controllers, ground handlers, airport rescue fire services, and bus and train drivers. The aviation system relies on imported jet fuel, which if it fails quality testing on arrival into the country results in disruptions to aviation operations. We also need to manage the transport system's susceptibility to security threats from malicious actors.

#### A lack of resilience drives extra costs into the transport system

Being resilient is the ability to anticipate and manage disruptive events, minimise their impacts, and respond and recover effectively. A transport system that is not resilient increases the costs and time to reinstate critical transport connectivity to affected communities. Shocks from natural disasters such as the Christchurch and Kaikōura earthquakes, alongside the increasing frequency and severity of weather events caused by climate change, result in significant social and economic costs to restore transport networks.

## The Ministry is working to enhance the resilience of the transport system

The Ministry uses its leadership role across strategic policy and operational work to build transport system resilience into wider system reforms and work programmes. The Ministry works to ensure a broader 'New Zealand Inc' perspective is applied to managing transport system risks and in building better transport system resilience. This includes using an agreed national framework, together with the transport Crown entities, to manage risks.

#### Resilience work includes:

- Involvement in the National Security System reforms, and membership of the Counter-Terrorism Coordination Committee, Major Events Security Committee, and the National Security Board (as the Strategic Coordination Agency for maritime security).
- Involvement in the Emergency Management System reforms including emergency and catastrophic planning, and the current emergency management and the DPMC-led Critical National Infrastructure work programme.
- Involvement in climate change work programmes, including the Resource Management System Reforms, National Adaptation Plan, Emissions Reduction Plan, and membership of the Climate Change Interdepartmental Executive Board.
- Connecting the transport system into operational readiness, response, and recovery activity
  through its role as Chair of the interagency Transport Response Team, which is the Sector
  Coordinating Entity for the transport system in an emergency.

## As the Minister of Transport, you have an important role in enhancing transport system resilience

You can play a role in enhancing the resilience of the transport system by:

- Maintaining relationships across the sectors identified so the perspective of the transport sector is given due weight in government's wider resilience-related work.
- Engaging with your Ministerial colleagues on legislative programmes which cut across the transport system, such as the Emergency Management reforms, Climate Adaptation Bill, and Resource Management reforms.
- Engaging with other Ministers to address specific resilience issues (eg, the availability of RNZAF Base Ohakea and jet fuel supply chains).
- Making decisions on further investments via the National Resilience Plan.

#### A productive, safe and secure transport system



#### Travel needs to be safe and secure, and incorporate new technology

Travel needs to be as safe and secure as it can be, whether by road, rail, aviation or maritime. People should not be harmed when using transport and should be confident when using the system.

Our regulatory frameworks are generally fit-for-purpose and contribute well to our transport outcomes like safety. Those frameworks and systems are significantly shaped by international obligations, standards and recommended practices. However, some parts of these frameworks need to be updated if we want to ensure that regulation continues to deliver the desired outcomes and does not impose unnecessary costs

A more challenging economic outlook and fiscal position means there is added emphasis on ensuring all aspects of our regulatory systems deliver value for money and support increased productivity. For example, out-of-date regulatory requirements impose unnecessary costs on firms and individuals, which harms New Zealand's productivity.

The frameworks must also enable novel technology, such as driverless vehicles/craft (eg, unmanned aircraft and autonomous vehicles), different fuel types (eg. sustainable aviation fuel, hydrogen) and different types of craft (eg. drones). Introducing still evolving technologies is a major challenge for policy makers and regulators. The beneficiaries of these technologies (the investors, manufacturers and consumers) often do not wear the full costs of their risks, which is borne by society at large. Appropriate regulatory approaches can help build the confidence of consumers to use new technology and encourage firms to invest in their development and deployment.

Therefore, it is crucial to have a regulatory system that provides the framework and permissible set of conditions under which decisions can be made on important features of transport markets such as entry, pricing, access obligations and quality or conditions of service.

#### Improved road safety requires interventions across all parts of the system

Roads are used by just about everyone in New Zealand, and usually on a daily basis. Provisional figures show, 377 people died in road crashes in 2022, with 2,470 people suffering permanent lifechanging injuries<sup>6</sup>. Social cost of road trauma is estimated to be as much as \$8 billion a year. Our

Serious injuries are defined as fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.

rate of road deaths is also significantly higher than many other jurisdictions New Zealand compares itself to, as indicated in Figure 7 below.



Figure 7 Road deaths per 100,000 inhabitants (2022)

Sustained effort is required to reduce the number of people being killed or seriously injured on our roads.

New Zealand has followed the safe system approach in recent years, which is the internationally accepted best practice for road safety. A safe system means improving the safety of all parts of the system – roads and roadsides, speeds, vehicles and road user behaviour – so that if one part fails, other parts will work to protect people if they are involved in a crash. Progress in all areas is still needed to reduce deaths and serious injuries on our roads. However, you can choose to place more emphasis on interventions in some areas rather than others.

## New Zealand has made progress in some road safety areas, but there are significant opportunities for improvement

The current *Road to Zero* road safety strategy has targets for reductions in deaths and serious injuries. There has been progress in all areas. For example, Police have increased their enforcement activity in the last 12 months, with an additional one million alcohol breath tests conducted than in the previous year.

The interventions set out in the strategy that have been delivered have been proven to be highly effective in the New Zealand context. For example, changes to speed limits on State Highway 6 Blenheim to Nelson has seen the number of deaths and serious injuries reduce by approximately 80% in first two years while the average journey time has increased by approximately four minutes over the 110km road length. Installation of median barriers at SH2 Waipukurau in 2020 has seen a 100% reduction in deaths and serious injuries in the two years since.

COVID-19 slowed delivery of initiatives and there have been other challenges, which have impacted the scale and pace of implementation.

Public acceptance of some of the actions under the strategy has been limited, in particular, concern has been expressed about:

- the public advertising and associated messaging, particularly how "zero" is unrealistic
- some of the focus areas, such as the extent of speed management proposed.

Given these challenges, the Ministry has started reviewing the approach to road safety. We are preparing more in-depth advice on the impacts different initiatives will have on reducing deaths and serious injuries to assist you as you consider the strategic direction you wish to take for road

safety. The Ministry would welcome the opportunity to discuss your expectations for road safety, including on the interventions you want to focus on.

#### Rail safety requires clear regulatory frameworks and investment

Rail safety needs clear regulatory frameworks, strong oversight and investment to provide the required level of safety assurance. After recent investment and growth, the risk profile of rail has increased. There have been several rail safety incidents involving fatal and serious injuries and recent reviews into the Auckland and Wellington metro systems have highlighted the need for system improvement and the need for the rail regulator to rigorously address risks.

Waka Kotahi has primary regulatory responsibility for rail safety in New Zealand. Waka Kotahi has a critical regulatory role in assuring stakeholders and the public that the country's rai networks are being managed safely. This is achieved through regulation of the rail industry in accordance with the Railways Act 2005.

#### Emerging aviation technology require updated regulation

The Ministry is responsible for providing advice on how existing regulatory frameworks can be adapted to enable the safe use of emerging aviation technology so that they can be safely integrated into the aviation system. Examples of this emerging technology are drones and other uncrewed aircraft, which need to be able to operate safely in the same airspace as traditional manned aircraft.

Increasingly innovative uses of these technologies offer potential economic, environmental and social benefits. This includes ensuring that New Zealand provides an enabling environment for innovators, supporting the growth of the aerospace industry, lifting productivity through innovation, lowering emissions and improving other environmental outcomes.

The Ministry has developed an Enabling Drone Integration (EDI) package to enhance the regulatory framework for drone operations, and as a building block for supporting autonomous operations. We will provide you with further advice on the proposed package of measures.

#### Maritime safety and security are important for people, the economy and the environment

Maritime transport is a critical part of our economy, with most of our imports and exports moving by sea. As an island nation, New Zealand relies on ferries to transport commuters, tourists, and domestic travellers between islands. Boating is also an important part of our culture with over 1.9 million people taking part in recreational boating in 2020.

Maritime activity can be dangerous. Since 2015, an average of 16 recreational boating fatalities have occurred every year. Fatalities occur throughout the country, and most are associated with falls overboard, a vessel capsizing or flooding. Many Transport Accident Investigation Commission and coroner reports have found fatalities might have been prevented if lifejackets had been worn.

Safe navigation is as critical in the maritime space as on land. Maritime incidents not only endanger human lives, but also the environment and the economy, as the Rena disaster demonstrated. The accessibility of the sea to recreational boating means recreational boating and commercial shipping operate in very close proximity to each other.

#### Maritime legislation could be reviewed

The Ministry and Maritime New Zealand have started a review of primary maritime legislation. Changes could be made to make the system safer, while ensuring the maritime regulatory system supports trade in the face of future emergencies, transnational crime, climate change, technological change and other challenges.

#### Proposed actions to progress transport safety and other regulatory issues

The Ministry can provide you with any further information you require on these areas of transport system regulation and safety. In the shorter term, we would like to discuss with you:

- Our advice on reframing the approach to road safety.
- Taking a package of drone policy decisions to Cabine.t
- Advice on a proposed review of maritime legislation
- rk to hu. id automate Our regulatory activities and the Ministry's work to help position New Zealand for future technological developments like drones and automated vehicles.

From: <u>Jane Turner</u>
To: <u>Alec Morrison</u>

Cc: Lorenz Wright; Ella Sparrow; John Edwards

Subject: RE: Draft System BIM

Date: Wednesday, 18 October 2023 5:10:32 pm

Attachments: <u>image002.png</u>

Draft System BIM - 13.10.23 CAA comments.docx

Kia ora anō Alec,

Many thanks for the visibility and opportunity to review the draft Transport System BIM. It certainly acts as a useful briefing to tell the high-level story.

Attached is a marked-up version with a few in-line changes and suggestions, including:

- Adding sector funding as one of the funding sources in the Investment and Revenue' section
- Adding a reference to the Crown's role in funding for CAA and Maritime, both of whom are largely sector-funded, in the 'Crown funds can supplement revenue' section
- Adding a reference to the critical infrastructure protection needs of the wider system in the 'Emergency Management' section.
- Amending the outline of the Authority to align with the current approach for describing the organisation

Lorenz will shortly send through an updated version of the aviation "facts & figures" for the portfolio snapshot. We noted that the "time in airport queues" box was omitted in the full System BIM draft, but we've kept it in, as it's something the new government has already shown interest in addressing at an early stage.

Ngā mihi,

Jane

From: Alec Morrison <a.morrison@transport.govt.nz>

**Sent:** Friday, October 13, 2023 9:08 AM

**To:** kirstie.hewlett@maritimenz.govt.nz; Keith Manch < Keith.Manch@caa.govt.nz>; stephen.hunt@meiservice.com; James Young < james.young@airways.co.nz>; martin.sawyers@taic.org.nz; tommy.parker@aucklandlightrail.govt.nz; Helen Rogers < helen.rogers@kiwirail.co.nz>; David Wood < D.Wood@transport.govt.nz>; Tommy Parker < tommy.parker@lightrail.co.nz>; Nicole.rosie@nzta.govt.nz; Karen < Karen.Jones@nzta.govt.nz>; Peter Brunt < Peter.Brunt@maritimenz.govt.nz>

**Cc:** John Edwards < <u>j.edwards@transport.govt.nz</u>>; Ella Sparrow < <u>E.Sparrow@transport.govt.nz</u>>; Sarah Carson < <u>S.Carson@transport.govt.nz</u>>; Carmen Mak < <u>C.Mak@transport.govt.nz</u>>; Richard Cross < <u>r.cross@transport.govt.nz</u>>; Siobhan Routledge < <u>S.Routledge@transport.govt.nz</u>>; Jeff Trevella < <u>Jeff.Trevella@nzta.govt.nz</u>>; Vanessa Bates < <u>Vanessa.Bates@nzta.govt.nz</u>>; Jane Turner < <u>Jane.Turner@caa.govt.nz</u>>; Sean Cooper < <u>Sean.Cooper@maritimenz.govt.nz</u>>; Audrey Sonerson < <u>A.Sonerson@transport.govt.nz</u>>; Brent Johnston < <u>B.Johnston@transport.govt.nz</u>>

Subject: Draft System BIM

#### Good morning all

As discussed at TSL this week, please find a draft of the System BIM for your consideration. As a reminder the System BIM aims to describe how the transport system works rather than be a decision-making document. The aim is to be as informative while keeping descriptions relatively high-level in acknowledgement more detail will follow in subsequent briefings and in your respective BIMs.

The Strategic BIM, which is still in development, aims to provide an overview of the opportunities and challenges facing the transport system.

Please let us know if you have any show stopper feedback by **COP 18 October 2023**. Feel free to pass the draft onto those looking after your respective BIMs - I have copied in those I have already been in contact with. In particular, please provide track changes to any descriptions we have made of your organisation within the document, especially where we have them listed towards the end

If you have any questions please feel free to get in touch. We appreciate any thoughts you might have.

Kind regards

Alec Morrison (he / his)

Policy Delivery Lead - Kalarataki Uruhi Kaupapahere Rautaki | Strategy

Te Manatū Waka Ministry of Transport

9(2)(a)		E:	a.morri	son@tra	nsport.go	vt.nz	trans	<u>port.go</u>	vt.nz
	Y								

#### MINISTRY OF TRANSPORT

**Wellington (Head Office)** | Ground Floor, 3 Queens Wharf | PO Box 3175 | Wellington 6011 | NEW ZEALAND | Tel: +64 4 439 9000 |

**Auckland** | NZ Government Auckland Policy Office | 45 Queen Street | PO Box 106238 | Auckland City | Auckland 1143 | NEW ZEALAND | Tel: +64 4 439 9000 |

**Disclaimer:** This email is only intended to be read by the named recipient. It may contain information which is confidential, proprietary or the subject of legal privilege. If you are not the intended recipient you must delete this email and may not use any information contained in it. Legal privilege is not waived because you have read this email.

Please consider the environment before printing this email.

This e-mail (and its accompanying attachments) is intended for the named recipient only and may contain information that is provided in confidence and may be subject to legal privilege. Any classification marking must be adhered to. If you are not the intended recipient please inform the sender and destroy the message. If you have received this message in error you must not distribute or copy this e-mail or its attachments. The Civil Aviation Authority accepts no responsibility for any changes made to this message after the transmission from the Civil Aviation Authority. Before opening or using attachments, check them for viruses and other effects. This communication may be accessed or retained for information assurance and cyber security purposes.





# He pepa whakamōhiotanga mō te Minita | Briefing to the T Minister (System)

ary of the late of Te Manatū Waka Ministry of Transport

October 2023

#### Contents

A snapshot of your portfolio	1
Shaping our transport system	2
Introduction	
The Transport Portfolio	2
Your role in the system	2
The different parts of the transport system	3
Measuring progress and using evidence.	4
	6
Key transport responsibilities	6
Economic and educational tools	8
Regulation	8
Crown monitoring, assurance, and oversight	9
Influencing the international environment.	
Delivering your priorities	12
Transport's role within the wider system	13
Appendices	
Appendix 1 Emergency Management and search and rescue functions	15
Appendix 2 Cross system collaboration	16
Appendix 3 Summary of agencies, state owned enterprises, and their functions	17

Glossary o	of terms a	nd abbre	viations	
	1			

Editing Note – being generated when document is finalised

#### A snapshot of your portfolio – MOCK UP

Trucks, trains, ships and airplanes carried about 280 million tonnes of freight around New Zealand (2017/18)

Around 200,000 New Zealanders (5 % of the workforce) are employed in transportrelated industries

Transport produces 39 percent of our domestic carbon dioxide emissions and 17 percent of total greenhouse gas emissions

11,201km state highways

86.152km local roads

There are over 4.5 million vehicles in the fleet, 64,000 of these are fully electric light vehicles

25.8% of people in Auckland, 15.8% of people in Wellington and 23.6% of people in Christchurch have access to frequent public transport services. (2021/22)

377 road fatalities in 2022 (as at August 2023) 16% of jobs are accessible by public transport compared to 43% of jobs accessible by car within 45 minutes during weekday morning peak (2022/23)

Transport CO2 emissions are from:

- 45% Light passenger vehicles
- •27% Heavy vehicles
- 17% light commercial vehicles

4,563km track in rail network

10 rail fatalities in 2022 (as at August 2023)

74.9% of all journeys made on strategic freight and tourist routes achieved the predictability travel time target (2022/23)

27% of domestic freight was moved by road and 13% by rail (2022/23) NZ marine economy contributed \$6.5 billion to New Zealand's economy (2022/23).

\$65.8 billion of NZ's exports and \$70.7 billion in imports is carried by maritime (2022/23).

37 maritime fatalities in 2022 (as at August 2023) New Zealand's search an rescue region is one of the largest in the world, spanning over 30 million km2

#### Aircraft

- 2,082 aeroplanes
- 895 helicopters
- 323 amateur-built aeroplanes

4.98 million international passengers were screened at aviation security (2022/23). 6.89 million domestic passengers were screened through aviation security (2022/23)

26.48 million bags screened at aviation security

3 aviation fatalities in 2022 (as at August 2023)

#### Shaping our transport system

#### Introduction

This briefing describes your role and responsibilities as Minister of Transport, along with those of Te Manatū Waka Ministry of Transport (the Ministry), government transport agencies, State-Owned Enterprises, and key stakeholders you will work with. It also outlines the tools available to you for influencing the transport system and enabling better outcomes for everyone in New Zealand.

This briefing should be read in conjunction with the Strategic BIM.

#### The Transport Portfolio

The transport system is a significant part of our social and economic infrastructure, providing the links that help establish and sustain our economy and society.

The transport system includes:

- vehicles that move people and products
- physical infrastructure (e.g., airports, seaports, the rail network, roads, busways, and cycleways)
- transport services (e.g., public transport, bike- sharing, ride-sharing)
- digital infrastructure (e.g., satellite-based navigation infrastructure and aids, travel apps, communications technologies)
- institutions and regulatory systems that influence how the transport system functions and develops (e.g., through their management practices, rules, policies, and investment tools).

Transport is a delivery arm of many broader government strategies, and many key government priorities will not be achieved unless transport plays its part: reaching New Zealand's emissions targets, growing the economy and connecting to markets, and enabling economic and social mobility in our towns and cities. Transport cannot achieve these priorities by itself, but its absence can slow or prevent their delivery.

#### Your role in the system

As Transport Minister you have a range of responsibilities, some of which you must do by law. These provide you with opportunities to influence the system. Your role as Minister is to set the overall direction for the transport system, including through:

- setting the overall direction for investment in the transport system through the Government Policy Statement on land transport (GPS).
- setting the regulatory framework by developing legislation and regulation to influence individual and business behaviour
- appointing board members to the transport Crown entities, setting their expectations and overseeing their delivery and performance.

seeking Cabinet's agreement to the rates at which fees, charges, and levies are set. These are critical decisions because they determine the resourcing available to the transport agencies to deliver their regulatory responsibilities.

#### The different parts of the transport system

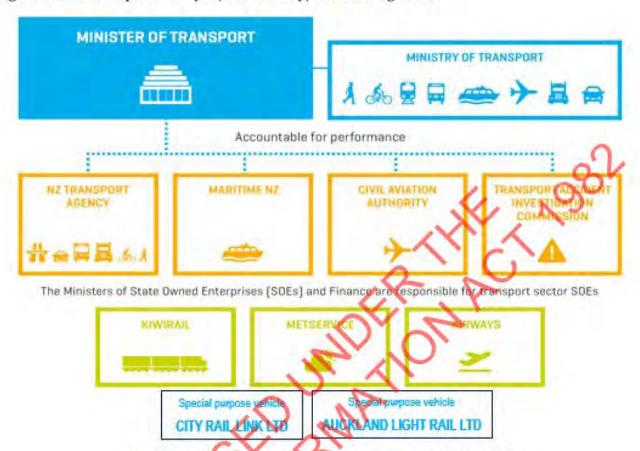
Central government is heavily involved in the transport system as a planner, funder, partner, enforcer, and regulator. A major part of your role will be working with transport sector agencies that help deliver the Government's objectives, these include:

- Te Manatū Waka Ministry of Transport (the Ministry) is a government department.
- Waka Kotahi NZ Transport Agency (Waka Kotahi), the Civil Aviation Authority (CAA) Maritime New Zealand (MNZ) and the Transport Accident Investigation Commission (TAIC) are transport agencies, with TAIC as an independent Crown entity.
- There are three state-owned enterprises (SOEs): KiwiRail, Airways Corporation of New Zealand Ltd (Airways), and Meteorological Services of New Zealand Ltd (MetService).
- Auckland Light Rail Limited (ALRL) was established in late 2022 under Schedule 2 of the Crown Entities Act 2004. Additionally, City Rail Link Limited is the sole company under Schedule 4A of the Public Finance Act, jointly established by the Crown and Auckland Council to deliver Auckland's City Rail Link (CRL).

You have different roles and responsibilities in relation to each of these agencies.



Figure 1 Relationship between you, the Ministry, SOEs and agencies



\*The Ministers of Transport and Finance are jointly responsible for CRLL and ALRL

#### Measuring progress and using evidence

#### The Transport Outcomes Framework

The Transport Outcomes Framework (the Framework) (Figure 2) sets out a way of assessing the sector's performance and measuring progress against a range of outcomes. There are five interrelated outcomes, and the Framework is closely aligned with the Treasury's Living Standards Framework. The Ministry developed the Framework with input from sector stakeholders.

The Framework provides a consistent approach to assessing the effectiveness of policy proposals and delivery. The Framework helps us understand transport's many areas of influence across society and the economy and be more explicit about the trade-offs between the outcomes that are sometimes required. Because the outcomes are inter-related, they need to be met through a range of interventions. Different Governments can place their own emphasis across the outcomes and there is no single 'right' approach.

To support the Framework, there is a set of quantitative indicators to track transport's contribution against the five outcomes over time.

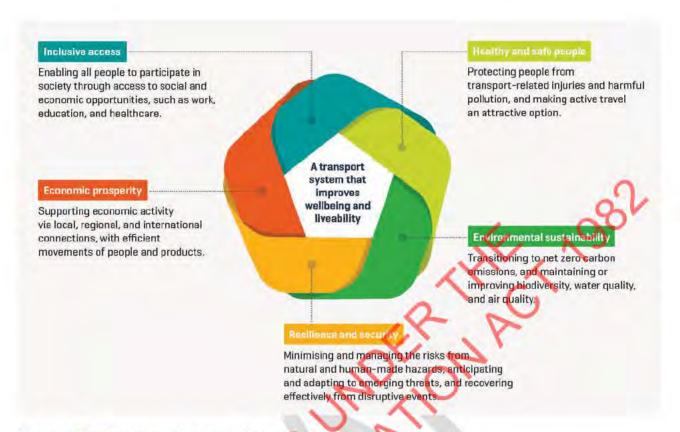


Figure 2 The Transport Outcomes Framework

#### Supporting policy development with data and modelling

The Ministry, transport agencies and SOEs have access to data and analysis from numerous datasets, including vehicle fleet statistics, freight movement, and emissions data. This means we can offer evidence-based insight into trends, future projections, and possible impacts of policy decisions.

We can help you understand the implications of your decisions on the transport system, from modelling the impacts, to monitoring and evaluating the effectiveness of policies and investment in infrastructure. For example, the Ministry has developed a National Transport Model (Monty) to understand how people interact with the transport system.

The Ministry's Transport Sector Monitoring Framework provides a consistent approach to monitoring how well services or interventions are being delivered, whether they have been delivered in a timely and fiscally responsible way and if outcomes have been achieved..

The Transport Evidence Base Strategy (TEBS) and the Decarbonising Transport Research Strategy (DTRS) set out the paths to ensure the transport sector has the right data, information, research and evaluation to support policy decisions. Implementing the TEBS and the DTRS is the responsibility of transport agencies (e.g., through the Land Transport Sector Research Programme managed by Waka Kotahi) and SOEs, working alongside local government and other stakeholders.

#### Key transport responsibilities

As Minister, you have a range of levers to influence the transport system. There are differences in the way the various levers are exercised for each mode, and each mode has its own regulatory model. Our advice to you will always focus on how you can make use of these levers to achieve your objectives.

You are responsible for 20 transport Acts which set out:

- the roles and functions of the Ministry, transport agencies, and SOEs
- the planning and funding arrangements for land transport
- the roles and powers of local authorities for transport activities and road controlling authorities
- licensing and certification arrangements for transport system users, vehicles and technology
- the requirements for making transport regulations and rules
- compliance tools to promote adherence to safety, security and environmental requirements across transport modes.

#### Investment and revenue

Investing in transport infrastructure is a priority for any Government. Investment comes from range of funding sources, including the National Land Transport Fund (NLTF) revenue, local authority funds, Crown funds, sector funding, and loans. This investment is used to build, operate and maintain the network and services and influence how people decide to travel through funding alternative travel options.

## The Government Policy Statement on land transport allows you to guide investment from the NLTF

The GPS outlines what the Government wants to achieve in land transport, and how it expects to see funding allocated between types of activities (for example, roading, public transport and road safety) across the land transport system. Each GPS sets out the priorities for the following 10-year period and is reviewed and updated every three years

While you can use the GPS to indicate what types of transport activities you want delivered, you cannot specify what individual projects are funded using hypothecated NLTF revenue.

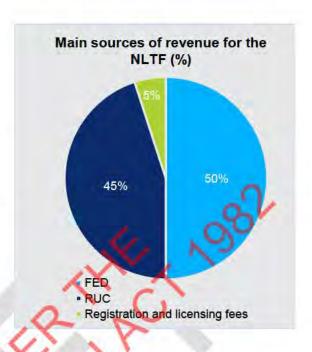
The Land Transport Management Act 2003 (LTMA) requires you to issue a GPS. This statutory document allows you to guide investment from the NLTF and can be used both to maintain a level of service and drive change on the land transport network, while delivering value for money. This is done through applying the Ministry's value for money assessment model in the appraisal and evaluation process and establishing funding ranges for activity classes. Each GPS sets out the priorities for the following 10-year period and is reviewed and updated every three years.

The LTMA gives Waka Kotahi statutory independence to select projects for the National Land Transport Programme (NLTP). However, the GPS can set an expectation for Waka Kotahi to consider government programmes and priorities when allocating funding through the NLTP.

## The NLTF is mainly funded by motor vehicle users

The NLTF is administered by Waka Kotahi and collects about \$4.2 billion per annum. The main sources of revenue for the NLTF are:

- Fuel Excise Duty (FED) which is tax applied at a rate of 70c/l to petrol and 10.4c/l to liquid petroleum gas.
- Road User Charges (RUC) which is a distancebased charge applied to diesel vehicles and heavy vehicles over 3.5 tonnes. Different RUC rates are applied to vehicle classes depending on weight and axle configuration and range from \$76 to over \$1,000 per 1,000 km travelled.
- Motor vehicle registration and annual licensing fees



Revenue from the fund is invested in state highways, coastal shipping, local roads, road policing, walking and cycling, and public transport. Local government matches the \$1 billion contribution from the NLTF with another \$1 billion per year of its own funding.

National rail network maintenance and renewals investment is also funded through the NLTF as part of the Rail Network activity class. KiwiRail is required to prepare a Rail Network Investment Programme (RNIP) every three years and you are responsible, as Minister for Transport, for approving KiwiRail's RNIP

## You can adjust the rate of charges and duties for the NLTF to meet your priorities

RUC rates are set through the RUC Rates Regulations 2015 and changes must be confirmed by Parliament. FED is generally set through amendments to the Customs and Excise Act 2018 and sometimes by an Order in Council.

## Crown funds can supplement transport revenue and be used to purchase specific projects or programmes

Not all investment in the land transport sector has been able to be met from the NLTF. Increasingly, the Crown has made direct investments in specific transport activities through the annual budget process led by the Minister of Finance.

Unlike investment from the NLTF where the Waka Kotahi Board has an independent role in overseeing and monitoring expenditure, ministers are accountable for Crown-funded activities. Ministers have decision making rights when changes are needed to the budget, scope or timeframes for these projects. While bodies like Waka Kotahi or KiwiRail may deliver Crownfunded activities and investment programmes, the Crown usually establishes additional oversight arrangements for any projects or programmes with Crown funding, such as the NZ Upgrade

#### KEY TRANSPORT RESPONSIBILITIES

programme. These arrangements give Ministers assurance the intended investment outcomes are being achieved.

#### Economic and educational tools

## You can use travel demand management tools to drive behaviour change within the transport system

Pricing and other economic tools can be used to encourage more efficient use of the network and can be used by local government to influence travel choices and decisions. Such tools include differential charging of public transport (e.g., reduced off-peak fares), subsidised public transport fares, tolling, congestion charging, and parking fees.

Tolling, for examples, can contribute to the cost of building and maintaining new roads. You are the key decision maker and responsible for recommending to the Governor General that a road is tolled under the LTMA. The Ministry will provide advice on tolling proposals, liaise with the Road Controlling Authorities, and advise on the legislative process to establish a tolling order.

Information and education are used in road safety and can nudge people to make more informed travel decisions by communicating information about their travel choices. Examples of ways we can influence travel choices and decisions include travel planning apps, social media marketing, information provision, and mass media campaigns.

The greatest benefits come from combining economic and educational instruments with complementary measures, such as infrastructure provision and legislative changes. In doing so, these measures help to achieve the outcomes you want to see in the transport system.

#### Regulation

## You have a range of tools in the transport regulatory system to deliver durable transport outcomes

Regulation is indispensable to the proper functioning of economies and societies. Regulation underpins markets, creates an enabling environment for firms and individuals, protects the rights and safety of citizens, and ensures the delivery of public goods and services.

The system is comprised of primary and secondary legislation (which includes regulations, rules, and other instruments) and local government by-laws<sup>1</sup>. You are responsible for the passage of primary transport legislation through Parliament. The Ministry supports you to do this.

Some transpot regulation involves the direct prohibition or authorisation of some commercial activity. For example, foreign ships are prohibited from carrying coastal cargo, except in specific circumstances and with approval. Airlines operating scheduled international services require an international air services licence, issued within parameters set out in Air Services Agreements. Some parts of the transport sector are subject to regulation by other agencies, e.g., the Commerce Commission regulates the disclosure of pricing by airports given their monopolistic nature.

As Transport Minister you have powers to amend, replace or disallow some local government bylaws.

#### Regulations set out associated offences and penalties, fees, and charges

Transport regulations mainly set out the associated rule-related offences and penalties, and fees and charges that fund the work of the transport agencies. The Ministry leads the development of these with involvement from transport agencies and SOEs, and the NZ Police depending on the subject. Regulations must be approved by Cabinet.

#### Transport rules contain detailed standards, requirements and procedures that govern transport activities

Transport rules are the most common form of delegated legislation for transport. Rules contain detailed technical standards, requirements, and procedures governing transport activities within modes. You are empowered under primary legislation to make these rules through delegated responsibilities. You are expected to advise Cabinet you intend to make a rule if there would be wide-ranging impacts. There is an expedited rule making process where urgent changes can be made by Order in Council.

The transport Crown entities develop most transport rules with the Ministry's involvement, but the Ministry leads policy development on significant rules.

#### Transport instruments support a more flexible regulatory system

Transport instruments improve the flexibility of the rule-making process by having more customised consultation requirements, meaning changes that only affect a small number of transport users can be progressed quickly. Transport instruments are more easily amended in response to technological innovation.

Transport instruments are outlined in a rule made by you as Minister of Transport, with the design and management delegated to a specified official (such as the Director of the relevant transport agency). Several transport instruments exist in Maritime legislation, with more planned in other modes as part of work on secondary legislation. The Civil Aviation Act 2023 (which comes into force in 2025) also empowers the Minister to create transport instruments.

#### Crown monitoring, assurance, and oversight

You have a role in appointing board members to the transport agencies, setting their expectations and monitoring their performance.

#### Crown entity monitoring and oversight is a key mechanism to deliver your priorities

The Ministry and the transport Crown entities work collaboratively to progress your priorities and the delivery of transport outcomes, and other priority actions to maintain and renew the system.

#### KEY TRANSPORT RESPONSIBILITIES

Your role as responsible Minister of these entities is to oversee and manage the Crown's interests in, and relationship with, a statutory entity. While you are ultimately accountable for their performance, the boards you appoint to these are primarily responsible.

The Crown carries out service delivery and regulation activities in the transport system through Crown transport entities and Crown companies: Waka Kotahi, MNZ, CAA, ALRL and CRL.

The Ministry is your monitoring agent for the transport Crown entities. The roles and responsibilities of the Minister, Crown entity and monitoring department are outlined in the *It Takes Three Framework*<sup>3</sup>.

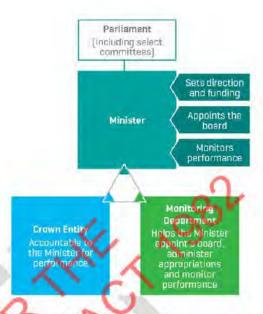


Figure 3 Roles and responsibilities of the Minister, Crown entity and monitoring department

## You have a vital role in overseeing the delivery and performance of key transport agencies

Your oversight role, supported by the Ministry, is vital to ensure the transport Crown entities are effectively performing their functions, many of which deliver critical services to New Zealanders. Below are a range of accountability mechanisms that the Ministry will advise you on to assist you in overseeing the transport Crown entities and meeting your statutory responsibilities.

## The capability and performance of the transport entity boards is critical in delivering your priorities and expectations

Each Crown entity and company is governed by a board. There are a maximum of 69 ministerial appointed positions across the transport sector. This is comprised of up to 23 positions on Crown entities, including positions on the ALRL Board, TAIC Commissioners, CRLL Board, Aviation Medical Conveners, and advisory committee positions.

Crown entity boards have the primary responsibility for their entity's performance. They exercise the power, perform the functions of each entity and hold responsibility for the operational decisions of their entities. You appoint and oversee those boards as responsible Minister and are assisted by the Ministry as your monitoring agent, assisting you in discharging your statutory functions.

Before appointments fall due, we will provide you with advice to support the appointment and reappointment of board members. As part of this process, we will provide you with an overall assessment of board capability and recommendations on the skills and capabilities needed to ensure your boards are well governed, effective, and high performing.

As defined under section 27 of the Crown Entities Act

https://www.publicservice.govt.nz/quidance/it-takes-three-operating-expectations-framework-for-statutory-crown-entities/

Table 1 Accountability mechanisms

Accountability Mechanism	Description		
Letter of Expectations	Primary mechanism used to set the priorities and performance expectations on an annual basis. You can expect to receive draft letters from the Ministry around October/November. These letters are sent out well in advance of the financial year, so Crown entities can respond effectively.		
Statement of Intent	Sets out the entity's strategic intentions against the Government's priorities and direction. The Statement of Intent is developed by an entity for at least a four-year period.		
Statement of Performance Expectations	Sets out the entity's annual delivery and performance expectations against your Letter of Expectations and the Statement of Intent. Entities are required to provide their final drafts of their Statements of Performance Expectations for your comment before 1 May each year.		
Annual Report	Sets out entities' annual non-financial and financial performance against the expectations set out in the Statement of Performance Expectations. You can expect to receive annual reports from each entity around October.		
Quarterly reporting	Performance reporting provided by the entity against the priorities and expectations set out in the Statement of Performance Expectations.		

You will have regular meetings with Crown entity chairs to discuss entity governance, performance and key risks. The Ministry will provide you with advice to assist in your engagement.

#### The Ministry also conducts other assurance, funding, contracting and reviewing activities

In addition to overseeing and monitoring the Crown entities and companies on your behalf, the Ministry also conducts other activities for government transport initiatives and programmes, Crown entities and Crown companies. For example, providing advice on and monitoring programmes such as the NZ Upgrade Programme, the Climate Emergency Response Fund (CERF), and managing the MetService contract to ensure New Zealand has a service that fulfils the World Meteorological Organisation Technical Regulations.

The Ministry uses the Transport Sector Monitoring Framework which provides a structured approach to monitor interventions. This assesses entity governance, capability and performance, how entities communicate information to the board, their assurance mechanisms for key projects and programmes, and whether the board is receiving the necessary information from an entity. The approach is informed by your priorities and our assessment of key risks for each entity.

#### Influencing the international environment

New Zealand's transport regulatory systems are significantly shaped by international obligations, standards and recommended practices. New Zealand benefits strongly from international transport regulatory frameworks, which underpin our international connections and facilitate our trade in goods and services.

The Ministry and the Crown Entities work together to:

#### **DELIVERING YOUR PRIORITIES**

- monitor and understand what is happening internationally, and how it affects, or may affect,
   New Zealand's transport system
- · influence relevant international standards to protect and promote New Zealand's interests
- ensure New Zealand meets its international transport commitments.

A wide range of international organisations influence New Zealand's transport settings. Some of the key organisations the Ministry and transport agencies work with, and their role, are:

- The International Civil Aviation Organisation: sets standards and regulations for the aviation sector (international safety, security, and environmental protections).
- International Maritime Organisation: sets standards and regulations for the maritime sector (international safety, security, and environmental protections)
- International Labour Organisation: sets conditions of work and employment on ships (under the Maritime Labour Convention).
- United Nations working parties: New Zealand has obligations as a party to two United Nations Agreements relating to road vehicle and road vehicle standards. Under these agreements, regulations and standards are set to improve road safety and facilitate international trade.
- World Meteorological Organisation: Fulfils New Zealand's obligations under the World Meteorological Organisation, the United Nations specialised agency for weather, climate, and water, by way of the Ministry's contract with MetService.

#### Your engagement at the international level is important

The Ministry will provide advice on where we consider there will be good value in your engagement in Ministerial-level forums.

Key opportunities over the next year may include:

- The Transport and Infrastructure Council.
- Pacific Transport Ministerial-level meetings.
- International Transport Forum (ITF) Annual Ministerial Summit.
- Asia-Pacific Economic Cooperation (APEC) Ministerial meeting.

#### Delivering your priorities

As your Ministry, we can help to embed your priorities and connect them with whole of government priorities and advise you on how to use the available levers to achieve your short-, medium-, and longer-term goals. This includes working with the transport agencies to develop a coherent strategic view of the longer-term needs for the transport system.

Medium term-strategies that use a package of interventions to address specific issues may be developed or amended. For example, the **Road to Zero** strategy was developed to respond to a sustained high level of deaths and serious injuries on New Zealand roads. The strategy supports a range of actions to reduce road trauma which can be monitored and adjusted over time.

Transport sector agencies also support a range of cross-government strategies. For example, the Ministry and the CAA also have important roles in supporting the implementation of the Aotearoa New Zealand Aerospace Strategy, led by the Ministry of Business, Innovation and Employment.

Additionally, there are short-term transport sector delivery plans, many of which are governed by Acts of Parliament and are key components of the transport planning and funding system. For example, the Decarbonising Transport Action Plan (2022-25) sets out what the Government will do to implement the transport actions in the first Emissions Reduction Plan, and what we need to reduce our transport emissions by 41 percent by 2035 and reach net zero by 2050.

#### Transport's role within the wider system

Outside of existing collaboration between government agencies and SOEs, collaboration with other stakeholders in the transport system is critical to realising positive transport outcomes.

Effective and meaningful engagement with stakeholders from local government, the private sector, researchers and iwi will be critical to achieving government priorities and shaping the transport system. We can provide you with further advice on engagement that you should prioritise, and when.

There are other important levers that transport does not 'own', but there are actions that can be taken to influence these. For example, land use is an important lever that requires cross-system collaboration and agreement.

Given its role as a key enabler of social and economic connections, the transport system intersects with a wide range of other systems at the local national and global levels. This underlines the need to coordinate and recognise the impacts decisions in transport may have on other sectors.

Figure 4 below illustrates some of the key relationships with the transport system, and Appendix 2 includes further detail on some key areas where a coordinated response and decisions are required, including maritime security, border security and climate response.

#### TRANSPORT'S ROLE WITHIN THE WIDER SYSTEM



Figure 4 Transport's role within the wider system

#### Notes

- 1 Key groupings
- 2 \* Secretary for Transport attends ODESC as required

#### Appendix 1 Emergency Management and search and rescue functions

#### Emergency Management and search and rescue functions

#### **Emergency Management**

The transport system is vulnerable to major natural events and shocks that disrupt services. The Ministry exercises its system stewardship role by being the transport sector lead on resilience and security policy matters with other government agencies such as the Department of Prime Minister and Cabinet (DPMC), the National Emergency Management Agency (NEMA), and the National Security System. The Ministry works closely with the other transport Crown entities to plan for future needs and emergencies so the transport sector can respond efficiently and effectively to system disruptions or damaged infrastructure.

System planning and preparedness is reviewed during DPMC-led Officials Committee for Domestic and External Security Coordination (ODESC) forums and exercised as part of the NEMA-led all-of-government National Exercise Programme. During significant responses the Ministry will activate and lead the Transport Response Team (TRT), which acts as the sector coordinating entity for transport under the Civil Defence and Emergency Management Act. As a non-operational agency, the Ministry's role is to coordinate the transport sector and ensure a single transport voice is provided to the lead agency for the response and to Ministers.

#### New Zealand Search and Rescue Council

New Zealand's 30 million km2 Search and Rescue (SAR) region (the world's third largest) extends from the South Pole to the southern border of the Honolulu region, halfway to Australia and Chile, and includes American Samoa, Cook Islands, Niue, Norfolk Island, Samoa, Tokelau, and Tonga. Collectively, the SAR sector comprises approximately 11,095 people from a wide variety of public, non-government and commercial organisations of whom around 89 percent are volunteers. During the 2022/23 year, the sector saved 137 lives, rescued 744 people, and assisted a further 1130 people. These actions averted \$1.639 billion in social costs to New Zealand.

The New Zealand Search and Rescue (NZSAR) Council, established by Cabinet in 2003 provides strategic governance, leadership to the SAR sector, man ges the governments investment into the sector and provides SAR advice to Ministers. The Council consists of the chief executives of departments with SAR responsibilities and includes the Ministry (chair) Maritime NZ (MNZ), the Civil Aviation Authority, the Department of Conservation, the NZ Police, the New Zealand Defence Force, Fire and Emergency NZ, and a non-government independent member.

The Ministry receives funding for and hosts the NZSAR Secretariat. Either the NZ Police or the Rescue Coordination Centre NZ (which is an operating group within MNZ) coordinates SAR operations. The responsible coordinating authority will request the use of SAR assets depending on the requirements of the operation. A wide variety of organisations may participate in SAR operations, including the Department of Conservation, NZ Land Search and Rescue, Coastquard NZ, Surf Life Saving NZ, rescue helicopters, the NZ Police, commercial vessels, Defence and a variety of smaller organisations or assets including members of the public.

The SAR sector's revenue comes from a variety of sources, including Crown funding through Vote Transport, Vote Police, Vote Conservation, and Vote Defence, and hypothecated funding collected under the LMTA (which recognises FED paid by recreational boat users). Commercial sponsorship, local fundraising, community grants, class 4 gaming (including gaming machines from pubs and clubs) and the Lotteries Grants Board also provide funding to the wider search and rescue and recreational safety sectors.

Ministers of Transport and Finance are empowered under the LTMA to allocate FED funding for SAR purposes. The NZSAR Council (on behalf of the Ministry) administers approximately \$21.8 million per annum of FED investment into SAR sector agencies. The NZSAR Council (on behalf of the Ministry) also administers the government's investment of \$15.1 million per annum into frontline water safety rescue and prevention services (Coastquard NZ and Surf Life Saving NZ).

#### Appendix 2 Cross system collaboration

#### Maritime Security

You are the lead minister for Maritime Security and the Ministry is the lead agency for maritime security policy. The Ministry chairs the Maritime Security Oversight Committee (MSOC) which is responsible for oversight of New Zealand's maritime security and comprises the lead 11 maritime security agencies. MSOC developed a Maritime Security Strategy (endorsed by Cabinet in 2019) in response to multiple, increasing security pressures.

There are 12 core national security issues within the National Security Strategy with each issue assigned a Strategic Coordination Agency. The Ministry performs that role for maritime security so sits on the National Security Board where is it also able to represent other national security issues such as transport security and the supply chain.

#### Border Executive Board

The Border Executive Board (BEB) is an interdepartmental executive board with six member agencies – New Zealand Customs Service (chair), Ministry for Primary Industries, Ministry of Business, Innovation and Employment, Ministry of Foreign Affairs and Trade, Manatū Hauora Ministry of Health, and Te Manatū Waka Ministry of Transport. The BEB provides joint accountability for New Zealand's border system and acts as a single point of contact for issues and opportunities that can only be progressed by working across more than one agency.

Cabinet has set five accountabilities for the BEB and approved the first BEB Border Sector Strategy in May 2023. The BEB has four priorities for 2023/24: implement the digital arrival card; progress trans-Tasman seamless travel; respond to the resumption of demand for air travel; and coordinate maritime activity. The work programme is reviewed on a six-monthly basis and includes a mix of stewardship, coordination, and improvement activity.

#### Climate Change Chief Executives Board

New Zealand has international commitments under the Paris Agreement, and a domestic legislative framework (under the Climate Change Response Act 2002) that commits the government to ambitious emissions reduction targets and to improving our resilience and ability to adapt to the effects of climate change. The Climate Change Chief Executives Board (the Board) was established in July 2022 as an Interdepartmental Executive Board (IEB) under the Public Service Act 2020 to align and co-ordinate cross-department climate change action.

The Board comprises of eight chief executives, is chaired by the Secretary for the Environment, and is responsible to the Prime Minister for its operations. The Ministry of Transport's Chief Executive serves on the Board to drive collaboration with other key departments alongside delivering on your transport portfolio commitments.

While the Board is responsible for overseeing the delivery of the first emissions reduction plan and national adaptation plan as a whole, Te Manatū Waka remains accountable for the delivery of actions within your portfolio.

For more information on the Board and its work, please refer to the Climate Change Chief Executives Board BIM.

## Appendix 3 Summary of agencies, state owned enterprises, and their functions

Agency/SOE	Key Functions			
Te Manatū Waka Ministry of Transport	The Ministry advises you, and government more widely, on all policy and regulatory matters within the transport system, and also on funding and governance of the transport Crown entities. The Ministry has key functions under five key levers (previously detailed).			
Waka Kotahi	Waka Kotahi is a Crown entity primarily governed by the Land Transport Management Act 2003 (LTMA) and Crown Entities Act 2004. Waka Kotahi's functions include investing in, and managing most aspects of the land transport network, including rail.  Waka Kotahi has a set of statutorily independent functions, including determining which activities should be included in the NLTP. Waka Kotahi also approves activities as qualifying for payment from the NLTF, approving procurement procedures for land transport activities, issuing or suspending any land transport document or authorisation, and exercises enforcement powers.  Waka Kotahi has regulatory compliance and enforcement responsibilities relating to aspects of rail safety, driver licensing, vehicle testing, and certification and revenue collection.			
Civil Aviation Authority (CAA)	CAA is a Crown entity primarily governed under the Civil Aviation Act 1990 and Crown Entities Act 2004. The Authority has seven business groups performing safety and security regulatory and service delivery functions across the breadth of the aviation system, so that people feel safe and are safe when they fly.			
Maritime New Zealand (MNZ)	MNZ is a Crown entity established under the Maritime Transport Act 1994. It is responsible for promoting a safe, secure, clean and sustainable maritime environment for all commercial and recreational activities on the water and minimising the impact of maritime incidents and accidents on New Zealand and its people. MNZ has both a domestic and international focus			
Transport Accident Investigation Commission (TAIC)	TAIC is an independent Crown entity, and acts as a standing commission of inquiry. The Commission's core purpose is to determine the circumstances and causes of certain aviation, rail and maritime occurrences with a view to avoiding similar occurrences in the future rather than to ascribe blame.  TAIC was established to assist New Zealand to comply with its international aviation obligations of ensuring independently conducted, safety-focused accident and incident investigations, a role that has since expanded to include investigations of maritime and rail occurrences. The Commission has a range of investigative (not enforcement) powers.			
City Rail Link Limited	City Rail Link Limited is listed as a company under Schedule 4A of the Public Finance Act. It was established in 2017 by the Crown and Auckland Council to deliver Auckland's City Rail Link (CRL) project.  The Crown and Auckland Council jointly own City Rail Link Limited (with a 51/49 percent shareholding respectively). You are jointly responsible, with the Minister of Finance, for the Crown's interest in City Rail Link Limited (as shareholding Ministers). Board appointments require joint agreement from the Crown and Auckland Council.  The Board operates independently to shareholding Ministers and Auckland Council, in accordance with the Project Delivery Agreement. The Project Delivery Agreement is a contractual agreement between the Crown, Council and City Rail Link Limited that sets out the terms for City Rail Link Limited to manage the delivery of the CRL project on behalf of the Crown and Council, as joint sponsors of the project.			