

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

Ministry of Transport Te Manatū Waka

November 2023

Contents

Part One: Overview	1
Part Two: Strategic Opportunities and Challenges	5
Investing in a high-quality transport system	5
A net-zero transport system	11
Maintaining and growing New Zealand’s international connectivity	15
Developing thriving cities and regions.....	16
A strong Auckland transport system.....	18
Building a resilient transport system	21
A productive, safe and secure transport system.....	23
Glossary of terms and abbreviations.....	27

Foreword

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

The Ministry of Transport Te Manatū Waka (the Ministry) is your key adviser on the transport system and we are here to help you implement and deliver your transport priorities.

Transport connects people with family, friends, communities, schools and work, and shifts materials, goods and services around New Zealand and to and from the world. New Zealand's transport system enables the social and economic prosperity of our cities, towns and rural communities.

The transport system also has a range of impacts, including road deaths and serious injuries, air and noise pollution that affect 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, towns and regions 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 sector has faced significant cost inflation in recent years, which requires a strong focus on maximising the value we get from new investments.

The Ministry has been working on options for a sustainable 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 long-term, 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 public service department, 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 Hei Arataki strategy, which seeks to identify issues and opportunities for Māori in transport policy design and delivery.

FOREWORD

As the 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

A handwritten signature in black ink, appearing to read "Sonerson", followed by a horizontal line extending to the right.

Audrey Sonerson
Secretary for Transport and Chief Executive

Part One: Overview

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, to our customers and markets, 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, and enabler of, productivity and economic growth. The system supports other sectors and wider goals, such as better and affordable housing, desirable cities and healthier New Zealanders. The system also has wider impacts, including producing a significant proportion of New Zealand's greenhouse gas (GHG) emissions.

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 that is spread-out thinly across regions, but also concentrated in cities, which 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 for the 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 to keep the system maintained. However, new challenges, especially the need to adapt to, and mitigate the effects of, climate change, call for significant changes 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, and managed and regulated effectively to support current and future demands.

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 make 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 the financial burden is driven by a range of factors, including cost inflation across the economy, climate events and natural disasters, increased aspiration for investment, a need for 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.

PART ONE: OVERVIEW

Ambitions for new investment are growing beyond capacity

Investment in the right transport system at the right time and the right place is an important enabler of increasing New Zealand’s economic growth and meeting many of the ambitions of New Zealanders. Cities need to move large numbers of people and freight quickly and efficiently, while the regions need to connect spread-out communities and services and maintain strong links to well-run ports and airports to move their products to market. Still, investment ambitions are running well ahead of the capacity of the revenue system or the construction sector to deliver new projects, especially alongside ambitious programmes in other sectors like water and housing (see Figure 1). We need to make better use of what we have and grow the sector to be able to deliver increased activity and guard against inflation.

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 (NLTF). 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.

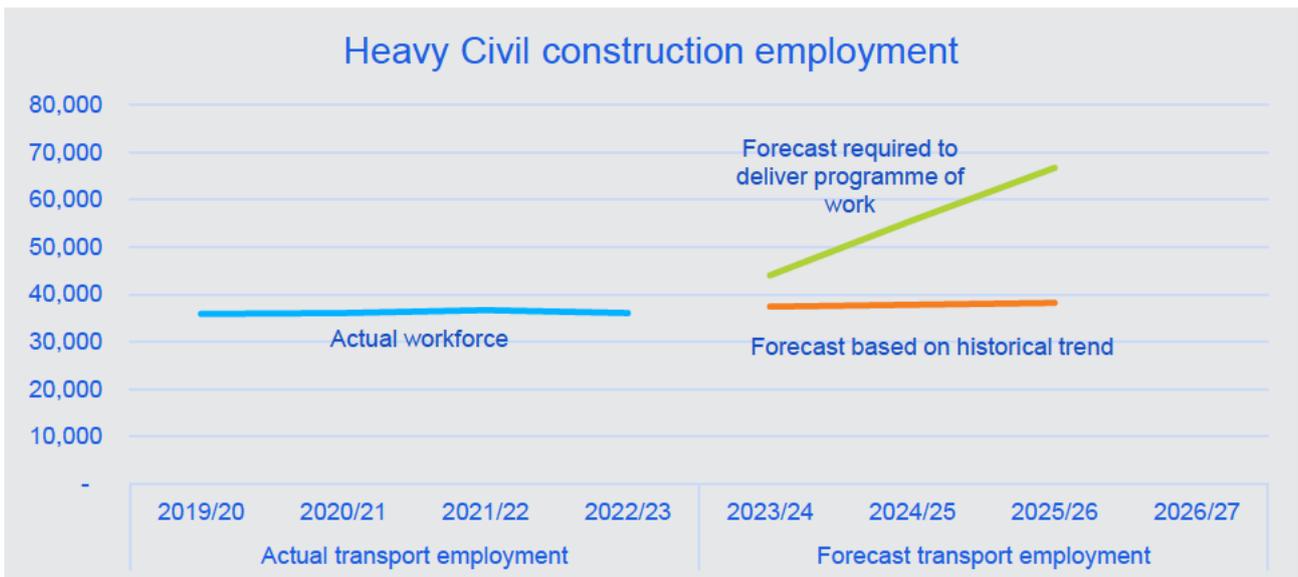


Figure 1 Heavy Civil construction employment

Source: Ministry of Transport

There is a growing urgency to consider the balance between new expenditure and maintaining the system and establishing a more certain and sustainable model for funding 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 revenue and expenditure, 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 for kilometres travelled) to pay for much of our land transport system, including infrastructure, maintenance, public transport operations, and other functions, such as search and rescue.

Over the last two decades, Crown contributions and borrowing have increased as the level of funding from user charges has fallen behind investment ambitions. Without these contributions, charges on users would need to increase significantly. 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 need 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 CO₂ emissions and over 17% of total domestic GHG emissions. Most transport emissions (92%) come from land transport, with 69% of the land transport emissions from light vehicles (cars, utes and vans).

The Climate Change Commission has identified transport as a sector with the potential to be almost completely decarbonised by 2050 and make large reductions from the third emissions budget period (2031-2035) onwards. New Zealand's overall success in reducing emissions 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 sectors 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. It is 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. Changes will help ensure that regulation enables the use of 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 and seaports need to consider the infrastructure investment required to support alternative fuels for their users or to power their own operations, such as electrification and hydrogen facilities.

PART ONE: OVERVIEW

Transport safety and security remains a priority

Improving transport safety and enhancing the security of the transport system remains an issue for New Zealand. While most users can have confidence in the safety and security of the transport services and the infrastructure they use, improvements can and should be made and new risks and changing technology addressed. For example, proportionally more people per capita are killed on our roads than in most other OECD countries. In 2022, the death rate in Australia per 100,000 people was 4.6 while, for New Zealand, it was 7.3 or approximately 60% more. Provisional figures for 2022 indicate 374 people were killed on the roads.¹ Measures needed to improve road safety require sustained effort from government agencies and social acceptance for the changes.

Safety in the aviation, maritime and rail sectors must also be maintained, especially as new technologies are introduced. New Zealand must also continue 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

Responding 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 increase its own economic efficiency and support improvement in New Zealand's productivity. The system also needs to significantly reduce emissions, materially 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.

There are good opportunities to achieve change. As the Minister, you can shape the system to help New Zealanders 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 Briefing to the Incoming Minister* gives further detail on the policy tools and levers available to you, including the role of the Ministry's Transport Outcomes Framework.

¹ Provisional figure at 5 October 2023.

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 maintain 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 congestion and emissions. Around 60% of the funding available through the NLTF is usually committed to maintenance and providing core services, such as public transport and road policing, and these activities are becoming increasingly costly.

With increased pressure on existing funding models, a range of short-term, ad hoc solutions are being put in place, including increased Crown funding and debt. Existing revenue sources cannot keep pace with increasing demand, unless decisions are taken to significantly increase the amount collected. Fuel Excise Duty (FED) is a major source of revenue for the land transport system but could become less certain over time as the average fuel efficiency of the vehicle fleet improves and 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 Government Policy Statement on land transport (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 an investment programme of this scale would materially exceed the capacity of New Zealand's heavy and civil construction labour force, even under optimistic growth assumptions.

INVESTING IN A HIGH-QUALITY TRANSPORT SYSTEM

The Government invests in land transport through the NLTF and through direct funding

The Land Transport Management Act 2003 (LTMA) requires a GPS to set the Government's priorities for the NLTF over a 10-year period. A draft GPS 2024 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 NZ Transport Agency (Waka Kotahi) and local government.

Waka Kotahi gives effect to the GPS through the three-yearly National Land Transport Programme (NLTP), which sets out planned activities and projects. Waka Kotahi has statutory authority over what activities and projects are included in the NLTP and approved for funding. Regional Land Transport Plans made by Regional Transport Committees, consisting of local government, sometimes KiwiRail, and Waka Kotahi, feed into the NLTP. 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 included in 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 to before the final scope of the project or the full costs are known, leading to subsequent trade-offs in scope or the need for significant additional funding.

GPS 2024 will set the Government's land transport policy

As well as setting out proposed strategic priorities, the draft GPS outlines the investment required for the system, the funding available from usual sources, as well as a proposed funding package to address the gap between them.

The funding package proposed by the previous Government emphasises the choices to be made in finalising GPS 2024. The package relies on raising FED for petrol powered vehicles and Road User Charges (RUC) for diesel and heavy vehicles (\$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). Further, while the proposed funding package would have reduced pressure over 2024-27, the Ministry expects there would have continued 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 will need to be carefully prioritised, be affordable, and meet your objectives. Expenditure 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 capital investment, such as demand management. While there are also choices to generate additional revenue through existing tools, and maybe some new tools, there will be constraints, especially in the face of upward pressure on the cost of living.

Figure 2 shows the forecast expenditure for projects previously signalled compared with the available revenue, including Crown funding committed to delivering these projects.

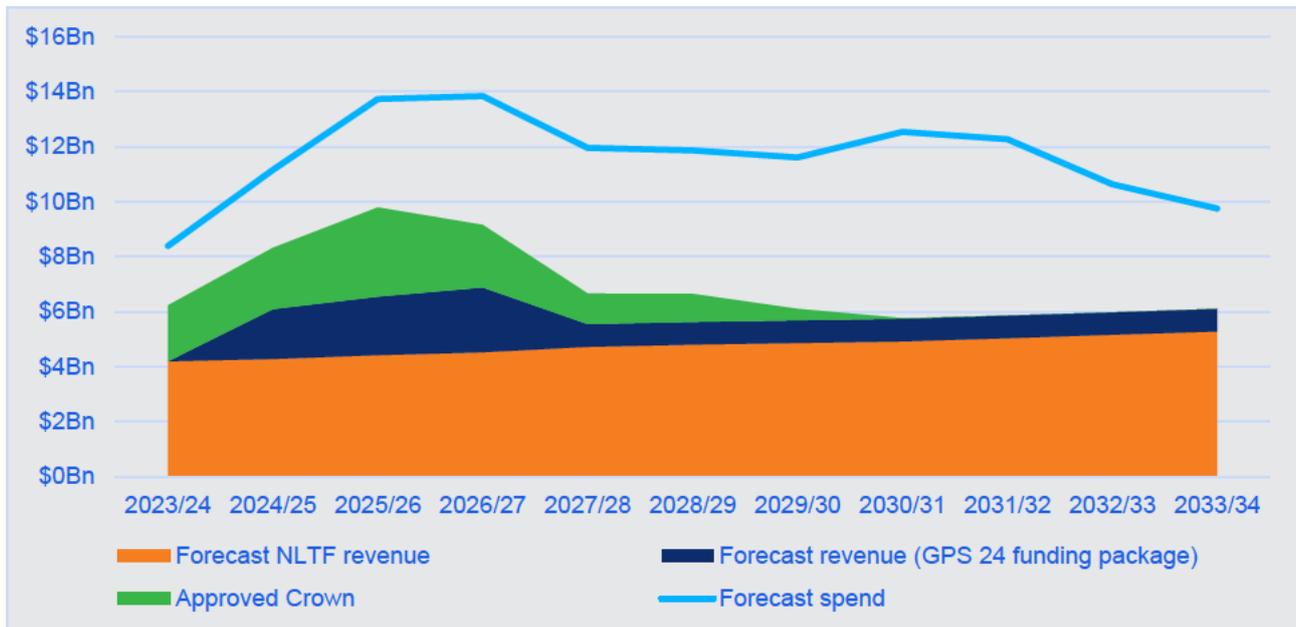


Figure 2 Forecast total expenditure and revenue for land transport (Crown and NLTF)

Source: Ministry of Transport

Opportunities to reprioritise funding and find savings

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

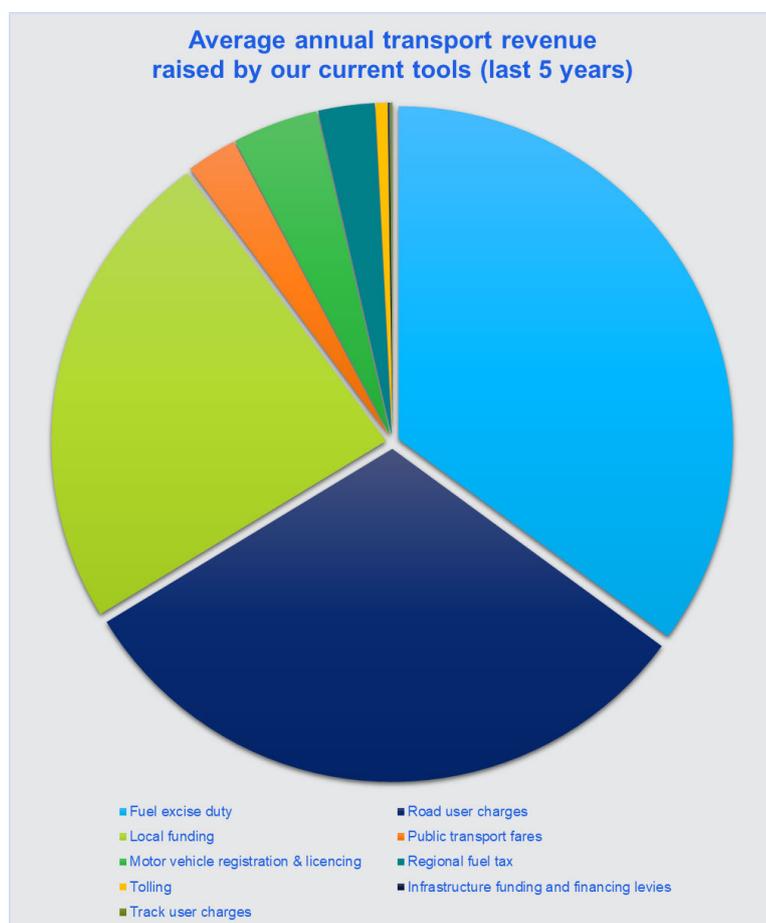
The existing tools for funding the land transport system, like the distance and weight-based RUC system for diesel and heavy vehicles, are still world leading. FED is also an extremely cost-effective and efficient method for collecting revenue from petrol vehicles. Figure 3 breaks down the current revenue between the existing tools.

However, these forms of funding are not well suited to very large, lumpy infrastructure investments (eg, mass rapid transit) that have 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 costs and provide more certainty and predictability for Waka Kotahi and cities and regions.

INVESTING IN A HIGH-QUALITY TRANSPORT SYSTEM

Figure 3 Average annual revenue raised by New Zealand's current tools (last 5 years)



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 longer 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. Whatever 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 reducing fuel use issues with FED, and it may enable a more equitable and 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 are described in the following paragraphs.

Value capture mechanisms

Value capture is under-utilised in New Zealand compared to other countries. Value capture involves recovering or 'capturing' the incremental benefit that residential or commercial landowners receive from investments in public infrastructure. This benefit is usually reflected in higher property (land and building) values. There are a range of levy² and uplift-based³ 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.

² i.e., a one-off charge based on property value increases due to the infrastructure.

³ i.e., a proportion of any capital value uplift is taxed.

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 mode of travel. This can reduce congestion by spreading out use over time and defer the cost of installing 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 larger 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 the legislation. Draft legislation has been developed, so it could be advanced quickly, although the underlying policy would need to be confirmed in consultation with you.

Tolling

As the Minister of Transport, you are responsible for approving tolling schemes under the LTMA.

s 9(2)(f)(iv)

Tolling settings are relatively permissive, but tolls can only be applied to new roads. New Zealand's low traffic volumes, the high administrative costs of collecting tolls and a lack of public acceptance, have limited the widespread use of tolling and the amount of revenue able to be generated.

Within these constraints, tolling is rolled out where a case can be made. However, there are options for new tolling approaches, including variable pricing or tolling existing roads. These would require amending the LTMA. 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 charging. 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 than tolling.

Making greater use of private capital

In the past, Public Private Partnerships (PPPs) have been used with varying degrees of success but have delivered some important lessons. Two roads have been delivered under the PPP model: Transmission Gully and Pūhoi to Warkworth.⁵ 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.

s 9(2)(f)(iv)

s 9(2)(g)(i)

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 approach. 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 NLTF if not funded by the Crown. Alternatively, the Government could consider whether there is a benefit to exploring new arrangements for major projects, including new delivery models that transfer more risk to the operator or include value capture.

You can also choose to involve private equity in the delivery of transport infrastructure. Under this arrangement, the investor would seek long-term control of the 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 such arrangements, which may be a good way of approaching wider packages of development in cities.

The Ministry will meet with 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 (except for biogenic methane).

In 2022, the first three emissions budgets were gazetted as outlined in Table 1 below. The Climate Change Commission (the 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 ₂ -e
Emissions budget 2: 2026-2030	305 Megatons CO ₂ -e
Emissions budget 3: 2031-2035	240 Megatons CO ₂ -e

New Zealand’s overall emissions reduction success is likely to rely on transport meeting its potential to decarbonise

As well as recommending the first three emissions budgets, the Commission’s analysis included a “demonstration pathway”, which outlined 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 CO₂ emissions and 17% of total domestic GHG emissions in 2021. Between 1990 and 2021, transport emissions rose approximately 69%, faster than any other sector. The Commission identified transport as a sector with the potential to be almost fully decarbonised by 2050 and make large reductions, especially from the third emissions budget period (2031-2035) onwards (see Figure 4 below). New Zealand’s overall emissions reduction success is likely to rely heavily on transport realising this potential.

A NET-ZERO TRANSPORT SYSTEM

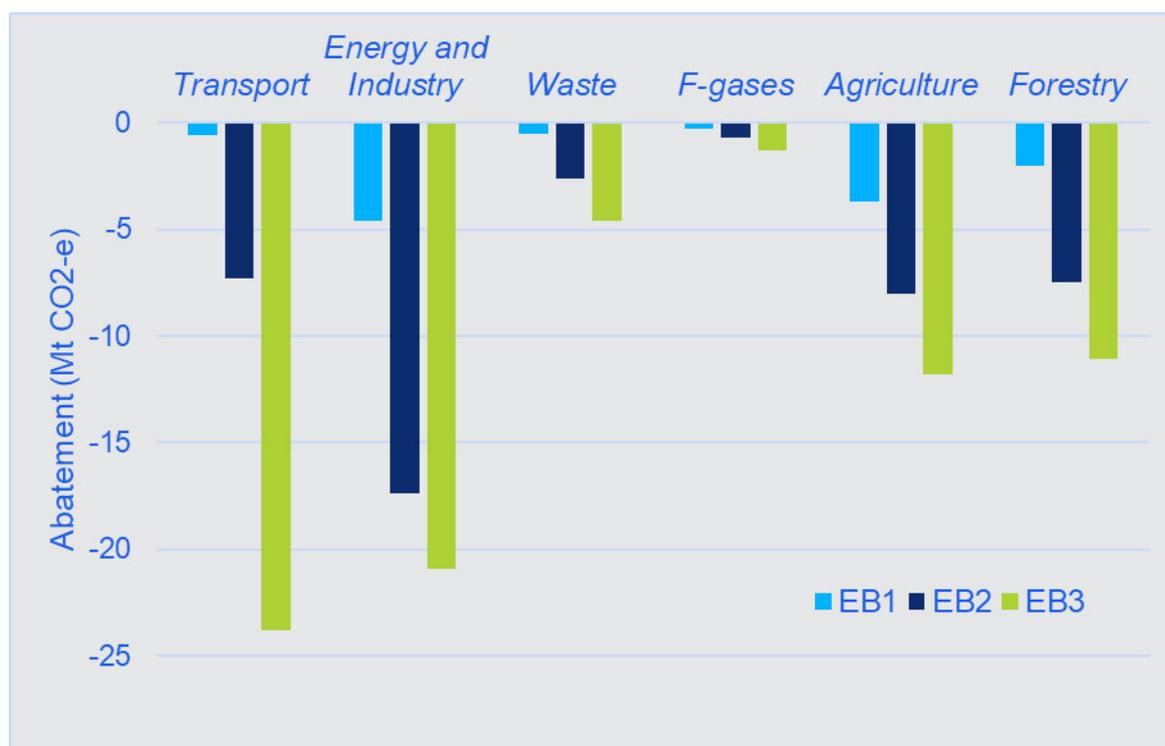


Figure 4 Additional emissions reduction needed relative to the baseline to meet subsector targets in ERP1

Source: Climate Change Commission 2023 draft advice to inform the strategic direction of the Government's second emissions reduction plan

The transport sector is delivering on the first Emissions Reduction Plan

The Government's approach to emissions reduction in the first emissions budget period was set out in the first 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 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 certain policies underway to reduce transport emissions continue and incorporate recent 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

As shown in Figure 4, 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 to stay within current sub-sector targets.

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.

Agencies are preparing advice about key opportunities and challenges for ERP2 and some indicative content about what could be included. Initial direction will be sought from Ministers with climate responsibilities by the end of 2023.

Meeting the third emissions budget and beyond require significant system changes

Current modelling suggests meeting the third budget for transport (ie, staying within our sub-sector target) will require significant additional effort beyond currently committed policies, as shown in Figure 5. Figure 5 also shows that the transport sector is expected to stay within its sub-sector target for the second emissions budget. However, given the small margin, caution should be applied in interpreting this figure. In particular, the modelling assumes rising prices from the Emissions Trading Scheme, which may vary significantly depending on policy settings.

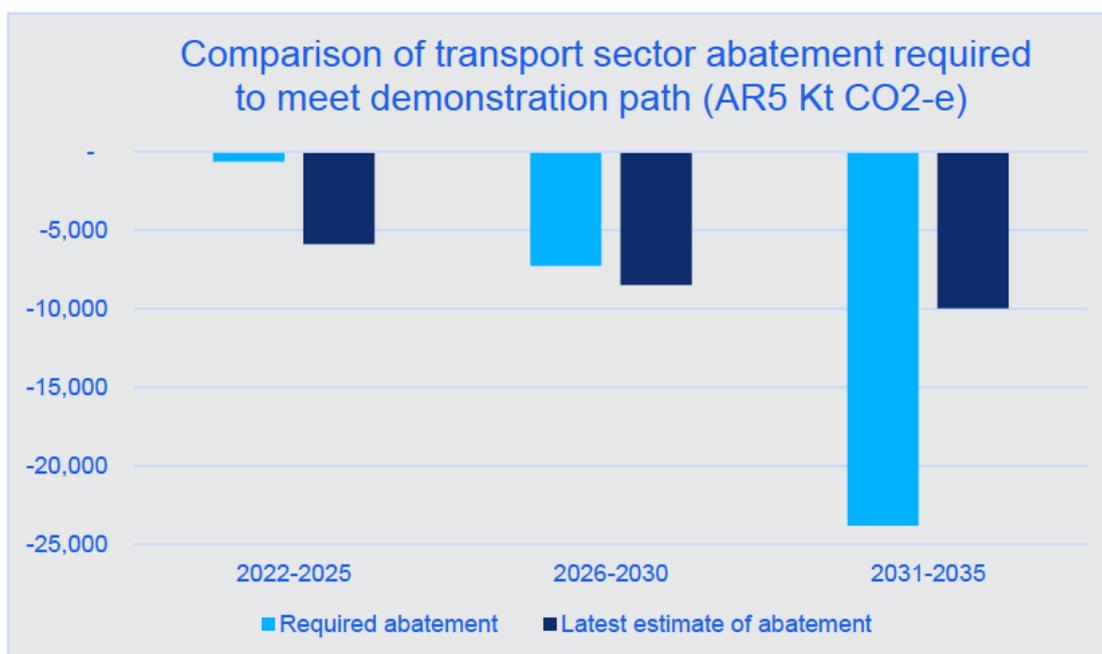


Figure 5 Transport emissions reductions by emissions budget period

Note: Kt CO₂-e is kilotonnes of carbon dioxide equivalent. AR5 is the Fifth Assessment Report of the United Nations Intergovernmental Panel

Source: Ministry of Transport

ERP1 placed emphasis on rapidly transitioning the vehicle fleet to low- or zero-emissions vehicles because it is one of the few ways to significantly reduce transport emissions that can be set in motion quickly. As well as making progress on fleet electrification, the first two emissions budget periods are a critical opportunity to lay the foundations for more significant changes to the transport system, including large scale public transport improvements, significant uptake of low emissions heavy vehicles and altered land use patterns that support low emissions transport options in urban areas. Transport emissions reductions could accelerate rapidly from around 2030 onwards if there are the right systemic changes in place and if ETS prices remain high. This is expressed in the Commission’s demonstration path in Figure 6.

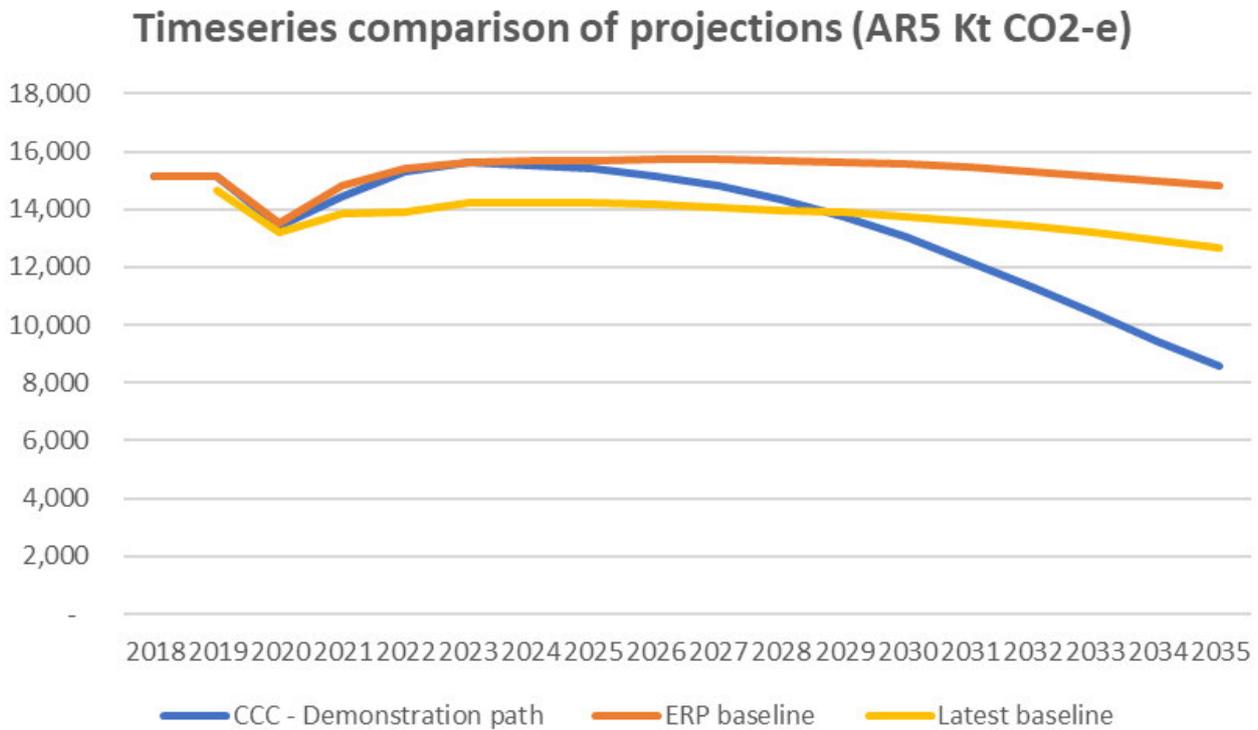


Figure 6 Timeseries comparison of (emissions reduction) projections

Source: Ministry of Transport

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 wellbeing.

Most of our imports and exports move by sea - 99.7% of New Zealand's export goods by volume, and 83.7% by value (based on 2019 figures). This makes the maritime sector vital to New Zealand's interests, including ports and the connections to them. Air transport also 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

In its 2023 Strategic Assessment, the Ministry of Foreign Affairs and Trade identified three "Big Shifts" that will shape New Zealand's global strategic context for the next decade — a shift from rules to power, economics to security, and efficiency to resilience.⁶ The geo-political environment is becoming less rules based and more volatile, and there is growing risk around the international politics of climate change. These shifts present 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 competitiveness with 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 released on 18 August 2023. We will discuss potential actions with you. Industry stakeholders especially called for:

- better signalling of the 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.

⁶ Ministry of Foreign Affairs (2023). *Strategic Foreign Policy Assessment – Navigating a shifting world*. Wellington.

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, and allow businesses to be productive and connect to markets.

Regions need resilient and safe transport networks to enable communities to participate in society and to connect our primary producers to their overseas markets. Well targeted road investment and effective maintenance is critical. Meanwhile, cities need well connected transport networks that allow people to move frequently and reliably 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 services, particularly in cities and towns, requires the alignment of transport planning, funding, and delivery with land use, regulation, urban development, and infrastructure provision. Given the shared responsibilities between central and local government, national and local priorities often need to be reconciled to help meet statutory and regulatory requirements, realise shared goals, and improve certainty.

Improving long-term, integrated planning across transport and other sectors will deliver better outcomes and provide greater certainty for government, the private sector and the community. However, there are challenges in achieving this integration, such as the number of decision-makers involved, the planning horizons for delivering transport solutions, and the complexity of the projects.

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

To provide greater certainty and to better prepare for and manage growth, high-growth cities and regions have developed spatial plans under Urban Growth Partnerships⁷. These partnerships include local government alongside central government agencies and mana whenua. However, the challenge with spatial plans is that there is no guaranteed funding pathway for the major transport and infrastructure projects identified. Once identified, these projects often need to use existing funding mechanisms and decision-making processes to make progress. Combined with the need to fund maintenance and renewal of existing assets, these projects often require decision-makers to make difficult investment trade-offs.

⁷ The Urban Growth Partnerships have developed spatial plans for Auckland, Wellington, Hamilton, Tauranga, Christchurch, and Queenstown

City and regional deals are another way to coordinate the multiple planning, funding, and regulatory approvals necessary to progress agreed upon transport, infrastructure, and urban development projects. This could include considering ways to incentivise partners to take a more co-ordinated approach to project delivery, develop innovative funding models, leverage local government land use and funding tools, while also working together to address the risks the partners face from entering long-term funding commitments. Achieving success from these deals will likely be challenging given the constrained funding environment and the range of existing funding tools currently available.

New Zealand has built up experience with these types of arrangements. This experience has underscored the importance of clarity on funding, roles and responsibilities and governance arrangements. 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.

A strong Auckland transport system

Auckland is critical to achieving New Zealand's goals

Auckland is home to one third of New Zealand's population, contributes 38% of the nation's GDP, and according to Statistics NZ, is projected to account for around 39% of New Zealand's population growth between 2018 and 2048.

Investment needs to be prioritised and sequenced

Auckland requires transport investment in roads, public transport and active transport to help lift productivity, which is not at the levels that might be expected of our largest city. 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 will raise some revenue but its value is in improved productivity and potentially deferring some capital spending.

Investment has to be prioritised across maintaining and renewing the transport system, public transport services, and completing roading projects, including Penlink and Mill Road. Business case work is also underway on a range of major projects, including the northwest and city centre to Māngere corridors, as well an additional crossing over Waitematā harbour.

There is a lack of consensus on the best way to proceed with these projects, and how work should be prioritised and sequenced. We believe it is not feasible to progress these projects concurrently, and choices need to be made over the 10 and 30 year horizons. Within the limited funding and delivery capacity available, you may want to consider the 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.

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 2016, 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 long-term Auckland Integrated Transport Plan has been the key piece of work progressed under the ATAP structure over 2023. We will seek your guidance on how you would like to progress this work.

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 to support reduced congestion and emission reduction goals. Rapid transit will be needed to move people in a fast, frequent and reliable manner.

While there have been some recent setbacks with the rail rebuild and bus driver shortages, Figure 7 shows public transport patronage was increasing before COVID-19, from 84 million boardings in 2016 to a peak of just over 100 million boardings at the end of 2019. Patronage then declined significantly with COVID-19 and has recovered to around 75 million boardings in September 2023. Patronage can be further improved by reinstating services, including rail, 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.

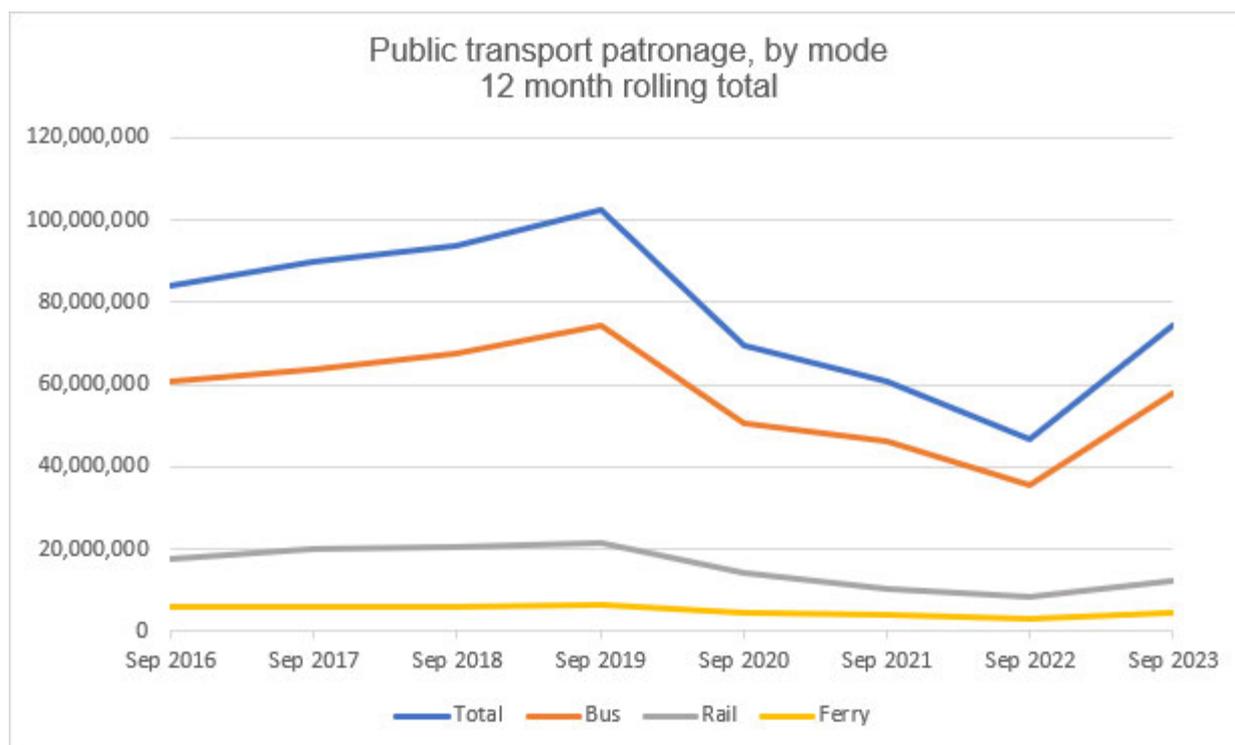


Figure 7 Auckland Public Transport Patronage

Source: Auckland Transport

Rapid transit successes 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 patronage growth in the short term. Work on a 30-year plan for rail investment in Auckland is also well advanced, and it will be important to prioritise initiatives that get the most out of the investment in the City Rail Link (CRL).

A STRONG AUCKLAND TRANSPORT SYSTEM

Rapid transit projects being delivered or planned

The following projects are all major rapid transit projects being delivered or planned in Auckland.

City Rail Link

Most construction work is now complete, and the focus is on integrating CRL with the Auckland network and testing readiness for operations. CRL is expected to be open to passengers in 2026.



The Ministry monitors the work of the delivery company, City Rail Link Company (known as CRL) 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

Auckland Light Rail (ALR) is the proposed solution for an integrated urban and transport project along the city centre to Māngere corridor. A Crown entity company, Auckland Light Rail Limited (known as ALRL), was established in October 2022. The Ministry monitors the work of the company and supports the Sponsors Group, which you chair.

With the incoming Government's commitment to cancel the project, it will be a priority for the Ministry to seek your direction on the future of the project.

Waitematā Harbour Connections

Waka Kotahi has developed an indicative business case on a recommended option including roading, rapid transit and cycling connections. You have a role in setting direction for the work and ultimately deciding whether to take the project forward through Cabinet. There is a lack of consensus on the priority for this project, and the Ministry believes the work would benefit from a confirmation of investment objectives, reflecting the Government's priorities for the project, and clearer identification of the key problems and interventions required to address these. This includes considering lower cost options as an alternative to expensive asset-based solutions.

North West Rapid Transit

The North West corridor has 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 Auckland Integrated Transport Plan.

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 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 services can also be disrupted by other vulnerabilities. Parts of the transport system rely on highly trained workforces that 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. Failing to invest in a resilient transport system creates the risk of unnecessary social disruption and economic costs. Failure to prepare also 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 financial, 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 Critical National Infrastructure work programme led by the Department of Prime Minister and Cabinet

BUILDING A RESILIENT TRANSPORT SYSTEM

- 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 that 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 chain issues)
- 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 and should feel 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 bear the full costs of their risks, which are 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. New Zealand has an opportunity to be internationally competitive in this area.

Improved road safety requires sustained, long-term effort to deliver 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 that 374 people were killed in road crashes in 2022, with 2,470 people suffering serious injuries.⁸ The social cost of road trauma is estimated to be almost \$10 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 8 below.



Figure 8 Road deaths per 100,000 inhabitants (2022)

Source: Ministry of Transport

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 for the past 15 years, which is recognised by institutions, such as the OECD and the World Bank, as the most effective approach for road safety. A safe system approach 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 initial progress in road safety, but there are significant opportunities for improvement in delivery

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 over the previous year.

Where safe system interventions have been implemented in New Zealand as part of the current strategy, there is evidence of a reduction in deaths and serious injuries. Statistically robust, full evaluations of these interventions have not been possible, as many of them have only been in place for two to three years. However, initial evidence indicates, at least, the planned reduction in deaths and serious injuries will be achieved.

⁸ 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.

For example, in the first two years following changes to speed limits on SH6 Blenheim to Nelson, and other infrastructure improvements, deaths and serious injuries have reduced by approximately 80%, while the average journey time has increased by approximately four minutes over the 110km length of road. Installing median barriers on SH2 Waipukurau in 2020 has seen a 100% reduction in deaths and serious injuries.

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 in the strategy has been limited, with concern expressed about:

- the public advertising and associated messaging, particularly with the ethical underpinning of “vision zero” in the strategy, getting confused with the actual target for reducing deaths and serious injuries by 40% by 2030
- some focus areas, such as the extent of speed reductions 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, including the interventions you want to focus on.

Rail safety requires clear regulatory frameworks and investment

Rail safety needs clear regulatory frameworks and strong oversight 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.

The rail industry is regulated under the Railways Act 2005 that is administered by the Ministry. Waka Kotahi is the rail safety regulator and has primary regulatory responsibility for rail safety in New Zealand, with a critical role in assuring stakeholders and the public that the country’s rail networks are being managed safely. 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.

A PRODUCTIVE, SAFE AND SECURE TRANSPORT SYSTEM

The Ministry has developed an Enabling Drone Integration 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 sectors 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 across environmental, safety and future transport domains.

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 and adapting our regulatory approach is crucial.

A review of maritime legislation is needed

The Ministry and Maritime New Zealand have started scoping a possible review of primary maritime legislation. Risks in the commercial maritime and recreational boating sectors are increasing. Maritime legislation is ageing and no longer works well. The legislation does not easily accommodate new technologies, such as new fuels or autonomous vessels. This creates 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 posing risks to safety, the 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.

Glossary of terms and abbreviations

ACC	Accident Compensation Corporation
ALR	Auckland Light Rail
ALRL	Auckland Light Rail Ltd
ATAP	Auckland Transport Alignment Project
BIM	Briefing to the Incoming Minister
CCRA	Climate Change Response Act 2002
CO ₂	carbon dioxide
CO ₂ -e	carbon dioxide equivalent
CRL	City Rail Link
CRLI	City Rail Link Limited
ERP1	First Emissions Reduction Plan
ERP2	Second Emissions Reduction Plan
FED	Fuel Excise Duty
GHG	greenhouse gas
GPS	Government Policy Statement on land transport
LTMA	Land Transport Management Act 2003
NLTF	National Land Transport Fund
NLTP	National Land Transport Programme
PPPs	Public Private Partnerships
RUC	Road User Charges
the Commission	Climate Change Commission
the Minister	Minister of Transport
the Ministry	Ministry of Transport Te Manatū Waka
Waka Kotahi	Waka Kotahi NZ Transport Agency

Briefing to the Incoming Minister (Strategic)

Your guide to the strategic
opportunities and challenges in
the transport system

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