

OC240129

12 March 2024



I refer to your email dated 13 February 2024, requesting the following briefings under the Official Information Act 1982 (the Act):

- "Aide Memoire: Project IREX Potential Alternative Options
- Waitematā Harbour Connections
- Cancelling the Auckland Light Rail Project Implementing Cabinet's Decisions
- Meeting with Auckland Transport, 21 December 2023
- Accelerating the Transition to Road User Charges
- History of Auckland Light Rail Project
- Freight and Supply Chain Briefing
- The Climate Change Commission's Advice on the Policy Direction of the Second Emissions Reduction Plan
- Setting of Speed Limits Rule Review Terms of Reference
- Kiwirail and the National Rail System"

### Of the 10 briefings requested:

- six are released with some information withheld
- one is withheld in full
- three are refused.

Certain information is withheld under the following sections of the Act.

9(2)(a)	to protect the privacy of natural persons
9(2)(f)(iv)	to maintain the constitutional conventions for the time being which
	protect the confidentiality of advice tendered by Ministers of the Crown
	and officials
9(2)(g)(i)	to maintain the effective conduct of public affairs through the free and
( )(0)()	frank expression of opinions by or between or to Ministers of the Crown
	or members of an organisation or officers and employees of any public
	service agency or organisation in the course of their duty
9(2)(h)	to maintain legal professional privilege
18(d)	the information requested is or will soon be publicly available

The document schedule at Annex 1 summarises the above information.

With regard to the information that has been withheld under section 9 of the Act, I am satisfied that the reasons for withholding the information at this time are not outweighed by public interest considerations that would make it desirable to make the information available.

You have the right to seek an investigation and review of this response by the Ombudsman, in accordance with section 28(3) of the Act. The relevant details can be found on the Ombudsman's website www.ombudsman.parliament.nz

The Ministry publishes our Official Information Act responses and the information contained in our reply to you may be published on the Ministry website. Before publishing we will remove any personal or identifiable information.

Nāku noa, nā

Hilary Penman

HASE -

Manager, Accountability and Correspondence

# Annex 1 Document Schedule

Doc#	Reference	Document Title	Decision
1	OC231024	Aide Memoire: Project IREX Potential Alternative Options	Refused under Section 18(d).  This briefing is captured within a proactive release being prepared by the Treasury on all papers related to IREX. When published, it will be available on the Treasury's website: <a href="https://www.treasury.govt.nz/">https://www.treasury.govt.nz/</a>
2	OC230875	Waitematā Harbour Connections	Released with some information withheld under Sections 9(2)(a), 9(2)(f)(iv) and 9(2)(g)(i).
3	OC231014	Cancelling the Auckland Light Rail Project - Implementing Cabinet's Decisions	Refused under Section 18(d).  When published, it will be available here:  https://www.transport.govt.nz/about- us/what-we-do/proactive- releases/SearchForm
4	OC231027	Meeting with Auckland Transport, 21 December 2023	Released with some information withheld under Sections 9(2)(a), 9(2)(f)(iv) and 9(2)(g)(i).
5	OC230850	Accelerating the Transition to Road User Charges	Released with some information withheld under Sections 9(2)(a) and 9(2)(f)(iv).
6	OC231109	History of Auckland Light Rail Project	Released with some information withheld under Section 9(2)(a).
7	OC231041	Freight and Supply Chain Briefing	Released with some information withheld under Section 9(2)(a).
8	OC231045	The Climate Change Commission's Advice on the Policy Direction of the Second Emissions Reduction Plan	Released with some information withheld under Sections 9(2)(a), 9(2)(f)(iv) and 9(2)(h).
9	OC231067	Setting of Speed Limits Rule Review - Terms of Reference	Withheld in full under Section 9(2)(f)(iv).
10	OC230821	Kiwirail and the National Rail System	Refused under Section 18(d).  When published, it will be available here:  https://www.transport.govt.nz/about- us/what-we-do/proactive- releases/SearchForm



Document 2

6 December 2023 OC230875

Hon Simeon Brown

Action required by:

**Minister of Transport** 

Friday, 16 December 2022

# WAITEMATĀ HARBOUR CONNECTIONS

## **Purpose**

To outline key considerations on the Waitematā Harbour Connections (WHC) indicative business case to help inform your direction for this project. This briefing should be read in conjunction with the NZTA briefing (BRI-2897).

## **Key points**

NZ Transport Agency (NZTA) is moving at pace of the detailed planning stage of the Waitematā Harbour Connections project, with a recommended option that would take several decades to deliver. This option encompasses a first stage of road tunnels and repurposing the existing bridge, followed by a second stage involving a light rail tunnel and North Shore light rail line.



• The Government needs to be satisfied with all aspects of the work, as well as governance arrangements, before detailed planning starts.



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4 <b>discuss</b> the WHC project w	ith Mayor Wayne Br	own		Yes / No
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Page **2** of **8** 

#### Contacts

Name	Telephone	First contact
David Wood, Deputy Chief Executive Monitoring and Investment	s 9(2)(a)	
Karen Lyons, Director Auckland		1
Danny Pouwels, Senior Investment Advisor		

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## WAITEMATĀ HARBOUR CONNECTIONS

#### Introduction

- 1. You have received a briefing (BR-2897) from NZ Transport Agency (NZTA) about the Waitematā Harbour Connections (WHC) project.
- 2. This advice complements that briefing by providing the Ministry's views on the indicative business case and the key considerations that are relevant for you in the short-term.
- 3. The programme objectives, options considered and results of the business case investigation is set out in the NZTA briefing.
- 4. The project is expected to require significant Crown funding. Given this, decision-making sits with Ministers. The Government needs to be satisfied with the project's problem definition, objectives, option development and governance before detailed planning starts. Given the significant fiscal risk we recommend sharing this briefing with the Minister of Finance.
- 5. NZTA expects to move to detailed planning in early 2024 following Ministerial direction.
- 6. There have been numerous studies investigating options for a second crossing over the Waitematā Harbour. To build on the insights of the 2020 business cases, NZTA approved \$24 million for an Indicative Business Case (IBC) to be delivered in the National Land Transport Programme 2021–2024. NZTA was asked by the previous government to bring this work forward to integrate with planning for Auckland Light Rail (ALR), the City Centre to Mangere rapid transit corridor.
- 7. Ngā lwi Mana Whenua o Tāmaki Makaurau, Auckland Transport and Auckland Council, have been engaged as partners in the work. The status of iwi that have mana whenua and ahi kā (land rights) status over the Waitematā under the Marine and Coastal Area (Takutai Moana) Act 2011, has not been determined. This will be required for any proposal that impacts the Waitemata.
- 8. The IBC, developed by NZTA and an alliance of technical consultants, is almost complete. The recommended option consists of two stages: stage one involves road tunnels bypassing the city centre, improving the Northern Busway, raising a section of SH1 to protect against sea level rise, and establishing dedicated lanes for pedestrians and cyclists. Stage two involves a light rail tunnel and light rail line for the North Shore.
- 9. The NZTA Board is scheduled to consider the final business case in March 2024

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 NZTA has undertaken significant analysis and modelling and developed a comprehensive evidence base in a short time. There is now a substantive body of work to draw on.

NZTA and the Ministry are aligned on several areas including:

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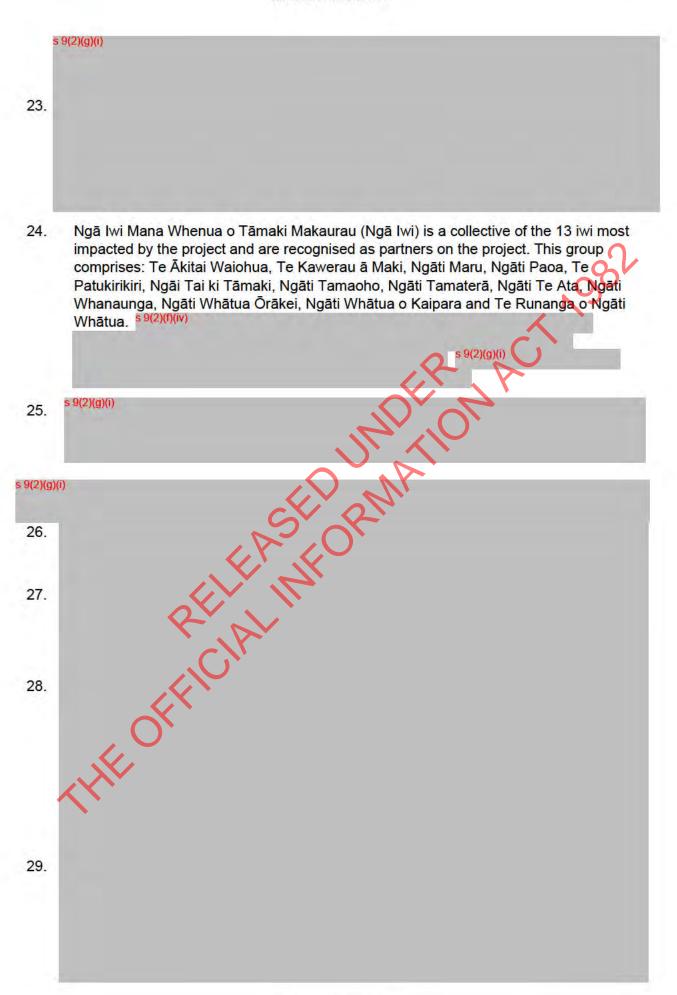
	•	addressing resilience is a priority;
	•	improving the Northern Busway is a no regrets investment; and
	•	s 9(2)(f)(iv)
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16. This feedback has been provided to NZTA.



20. The Ministry engaged TSA consultancy to provide an independent assessment on the emerging preferred option in June 2023 (before the previous Government announced the emerging preferred option) and then again on the draft business case. Our feedback to NZTA has been informed by this work.





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Document 4

19 December 2023 OC231027

Hon Simeon Brown Minister of Transport

## MEETING WITH AUCKLAND TRANSPORT, 21 DECEMBER 2023

## **Purpose**

This briefing provides background for an introductory meeting with the Chief Executive and Chair of the Board of Auckland Transport (AT).

Time and date	8.30am, Thursday, 21 December 2023
Venue	Auckland Policy Office (Dean Kimpton) and Teams (Mark Darrow)
Attendees	Dean Kimpton, AT Chief Executive
	Mark Darrow, Acting Chair of the AT Board
Officials attending	Karen Lyons, Director Auckland
Agenda	20 OF
Talking points	Suggested talking points are attached as Annex 1

## Contacts

Name	Telephone	First contact
David Wood, Deputy Chief Executive, Investment and Monitoring	s 9(2)(a)	
Karen Lyons, Director Auckland		1

## MEETING WITH AUCKLAND TRANSPORT, 21 DECEMBER 2023

## **Key points**

- Key topics that Auckland Transport (AT) may want to discuss include funding, time of use road charging, governance of transport, speed management, parking fees and your overall priorities for Auckland.
- AT is currently developing their Regional Land Transport Plan (RLTP). Auckland
  Council's draft Long Term Plan (LTP) increases the Council's contribution to AT as
  compared to the previous RLTP. AT remain concerned about meeting public transport
  operating costs.
- The LTP budget includes assumptions of the continuation regional fuel tax revenue (or an alternative funding source) and that a 51% funding assistance rate from the New Zealand Transport Agency (NZTA) is achieved across the programme. Auckland Transport may raise with you that historically their renewals programme has not received the full funding assistance rate.
- AT are aware of pressures on the National Land Transport Fund (NLTF) and will be interested in the ability of the NLTF to match the Auckland Council contribution. s 9(2)(f)(iv)
- As well as being concerned about the loss of regional fuel tax, the chief executive has
  raised publicly that he sees the current funding model for transport as unsustainable.
  Your plan to use a range of funding sources as set out in Transport for the Future will
  be of interest.
- There is alignment between the new Government and Auckland Council on introducing congestion charging. It would be useful to understand AT's plans for developing an Auckland time of use scheme.
- AT have raised concerns about governance of transport in Auckland. You could note
  that you are planning on-going engagement with Mayor Brown around matters such as
  governance. And, in the meantime you see merit in utilising, and potentially
  strengthening, the current Auckland Transport Alignment Project (ATAP) political and
  programme governance structures.
- AT are key ATAP partners. In past planning cycles an ATAP indicative investment programme has informed the RLTP development. AT may be interested in your thinking on joint work between Government and Auckland Council on an ATAP investment programme/integrated transport plan.
- Reducing speed limits has been key part of AT's Vision Zero safety strategy. They will be considering the implications of the replacement of the 2022 speed limits rule.
- The Mayor and Auckland Transport would like to be empowered to set parking fines, that are currently set in national legislation and outdated.

#### Context

- Auckland Transport has faced a number of challenges over recent years including an inflationary environment, disruption to public transport with bus driver shortages and rail track closures, extreme weather events in early 2023, and post-Covid working patterns impacting on public transport patronage.
- Despite this there has continued to be good progress in the delivery of the investment programme. Also, public transport patronage is steadily increasing, reaching 75 million boardings in the year to September 2023, but still down on the annual 100 million at the end of 2019. This reflects an increase in bus patronage with the rail and ferry networks continuing to experience disruption.
- On his election, Mayor Brown set clear expectations for AT. He requested that they respond to what matters most to Aucklanders in transport. He also emphasised the need to get the most out the existing transport network, reduce AT's cost to Council and to take direction from Council.
- Dean Kimpton was appointed as interim chief executive in April 2023 for an 18-month period. There has not been a permanent Chair of the Auckland Transport Board since October 2022. Mark Darrow is the second acting Chair.

## **Background**

# Auckland Council have increased funding for AT in the draft Long-term Plan but AT remain concerned about funding public transport services

- Auckland Council are approving a draft Long-term Plan 2024-34 for consultation based on the mayor's proposal. This provides direction to the RLTP that AT are currently developing. For transport the mayor proposes:
  - Fully funding the Council's share of renewals but only if co-funding from the NLTF is made available.
  - Public transport improvements including a \$50 capped weekly transport pass for adults; progressing the removal of level crossings, network optimisation and dynamic lanes, completing the City Rail Link and Eastern busway; and looking at a trial of a low-cost bike ferry between Northcote and the city centre.
  - Completing the eastern busway, improvements to the northern busway, a
    permanent northwest busway and improvements to the Māngere to the Airport
    corridor.
  - Focusing on lower-cost cycleways that can be delivered with minimal disruption.
  - Progressing time of use (congestion) charging.
  - Reducing transport emissions in line with the target to reach net zero by 2050.
  - Progressing an integrated transport plan for Auckland, working with government.

- The proposed capital budget for AT over 2024-2034 is \$14 billon, this includes assumed funding from the NLTF of 51% and 49% from Auckland Council. This is a 19% increase on the \$11.7 billion budget in the 2021-31 RLTP. Auckland Council's share increases by \$1.6 billion over the 10 years.
- The operating budget, to be funded by Auckland Council and the NLTF, is \$11.2 billion, up from the 2021 RLTP figure of \$8.2 billion (these figures are net of operating income received by AT). Auckland Council's share increases by \$1.6 billion over the 10 years. This increase is required to cover increased public transport operating costs (existing services and new services), higher than forecast inflation and higher maintenance costs.
- Despite the increase, AT believe that they will be challenged to meet public transport operating costs and are investigating service reductions, higher fares and increased parking charges to be able to operate within budget.

# AT is well advanced with its speed management plan and will need to work through the change to the speed limits 2022 rule

- 9. Since June 2020, Auckland Transport (AT) has implemented speed changes on 3,000 roads covering 39% of their network. AT has reported that while deaths and serious injuries are rising on Auckland roads, they are falling on those roads with lower speed limits. Their draft speed management plan, if delivered in its entirely, will see 65% of the network set at safe speeds.
- Many city roads have transitioned from 50km/h to 30km/h, while a large number of 100km/h roads changed to 60km/h, 50km/h, or 40km/h speed limits.
- AT have received your letter regarding replacing the Land Transport Rule: Setting of Speed Limits 2022, as part of the Government's 100-day plan commitment to stop blanket speed limit reductions.
- 12. Public consultation on the draft version of AT's speed management plan closed in August 2023 and the plan is now nearing its final stages

#### The mayor's manifesto proposes that Auckland Council is enabled to set parking fines

- 13. Infringement fees for parking overstaying offences (a maximum level) are set out in the Land Transport (Offences and Penalties) Regulations 1999. Road Controlling Authorities, like AT, set their own infringement fee levels at or below the maximum through their parking bylaws.
- 14. The maximum penalty levels have not been updated since 1999, over which time inflation has eroded their value.
- 15. This has led to an artificial cap on the amount of money AT can charge for parking. If they charge more than, or even close, to the value of penalties, people will simply risk a ticket rather than paying for parking.
- AT has also highlighted the difficulty involved in recovering costs for towing and storing vehicles.

- 17. Residential parking permits are another concern for AT. While AT can set charges for these permits, legislation limits the amount they can charge to cost recovery only; that is, the costs of administering the parking permit.
- 18. The Ministry's regulatory team has been progressing work on the parking regulatory system and will be able to brief you on this as required. § 9(2)(f)(iv)

## **Biographies**



## Dean Kimpton, Acting Chief Executive Officer for AT

Dean Kimpton was appointed as the Interim CEO for AT on a fixed-term agreement for 18 months, starting in April 2023. He succeeds Mark Lambert, who had been in an interim role since July 2022 following the departure of former chief executive Shane Ellison.

Prior to this appointment, Dean served as the Chief Operating Officer at Auckland Council, held a Board position at Infrastructure New Zealand, and served as Managing Director of the civil engineering firm AECOM. He was also a member of the Randerson panel on Resource Management Act reform.



## Mark Darrow, Acting Chair of the AT Board

Mark Darrow assumed the role of Acting Chair of the AT board on 1 November 2023, succeeding Wayne Donnelly, who had been the Acting Chair since October 2022. Mark, who was initially appointed to the AT Board in 2021, previously supported Wayne Donnelly as Deputy Chair and chaired the AT Finance and Audit Committee.

Mark currently holds the position of Chair for TSB Bank, Armstrong's, Invivo & Co, MTF Finance, Riverton Dairies Farms, and the Inland Revenue's Risk and Assurance Committee.

## AT board members

The AT board members include Wayne Donnelly (Deputy Chair), Nicole Rosie, Raveen Jaduram, Henare Clarke, Councillor Andrew Baker, Councillor Chris Darby.

### **Annex 1: Talking Points**

## **MEETING WITH AUCKLAND TRANSPORT, 21 DECEMBER 2023**

#### Introduction

- Thank you for your time today. My portfolios of Transport, Auckland and Local Government made it a priority to meet with you early in the term.
- I appreciate the significant role that Auckland Transport plays in the Auckland transport system.
- This is an initial meeting, and I am happy for our discussion to focus on what is top of mind for you.
- As part of this it would be useful to hear:
  - how the RLTP is progressing; and
  - o if there are areas of transport that you think need particular attention from Government.

## **Funding**

• Our 100-day commitment is to introduce legislation to remove the Auckland RFT. That remains the government's intention.

s 9(2)(f)(iv)

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- The Government is committed to working with you and Auckland Council on the implications for the RFT-funded projects. There will be a need to work together on prioritisation.
- Moving forward, I am emphasising the need to use a range of funding sources, including additional government investment, value capture and cost recovery tools, toll roads where appropriate, and equity financing from private investors.
- We have committed to a new National Infrastructure Agency that will help with funding arrangements with the private sector.

## Time of use charging

- We have pledged to introduce congestion charging as a new tool to help reduce travel times.
- I welcome Auckland Council and Auckland Transport commencing work on time of use charges with the mayor's focus being on particular pinch points on the motorway network.

- I am also aware of the significant work in Auckland on this issue through the Congestion Question, a project that commenced under the previous National government.
- I will be considering the appropriate legislative framework that enables cities to design schemes that best suit their areas.

#### Governance

- I am familiar with the mayor's manifesto proposal to establish a joint statutory
  Government/Auckland Council committee for shared decision-making on transport. I'm
  also aware that the Council want to have a more direct role in developing and
  approving the RLTP.
- Joint decision-making by statute is a fundamental change to the land transport
  management system. This will require careful assessment including whether Auckland
  should be treated differently. I will engage with the mayor on these governance issues.
- Government has had a strong partnership with Auckland Council on transport since 2015 when the previous National government set up the Auckland Transport Alignment Project (ATAP).
- I support the ATAP arrangements and will be looking to continue the political sponsorship through the mayor and myself.

## Auckland Integrated Transport Plan/ATAP

- I am yet to engage with the mayor on this, but I am supportive of joint work through the ATAP process. Optimising our joint resources is critical to Auckland's and New Zealand's success.
- There is a need to establish what the focus should be of joint work and reset direction in light of our government's priorities.

#### **Speed Management**

- Our government wants to see a transport system that boosts productivity and economic growth and that will see New Zealanders get to where they want to go, safer and faster.
- As part of our 100-day commitment, I am replacing the Land Transport Rule: Setting of Speed Limits 2022.
- This week I announced an amendment to the Rule, which removed the requirement to develop speed management plans and revoked the date that speed management plans were due by.
- I have also instructed the Ministry of Transport to commence work on new rules for setting speed limits. My new rule will ensure that economic impacts, including travel times, and the views of the road user and community will be considered alongside safety. I expect them to keep you updated on progress.

- I encourage you to consider the new Rule, as well as community views and economic impacts before finalising AT's speed management plan, to avoid the need for revisions once the rule change is in place.
- Ahead of the new rule changes, I also encourage you to continue to work with officials at the New Zealand Transport Agency and Ministry of Transport throughout this process.

## **Parking fines**

- I understand that rules setting maximum parking fines have not been revised since 1999. I can see the challenge for you when setting parking fees, given the financial incentive for people to risk getting a ticket rather than complying with the fee.
- Any devolution of the authority to set parking fines will need careful consideration and the timing of any increase penalties needs care given the current pressures on households.

#### **Transport Priorities**

- Our government is committed to delivering infrastructure. Following on from our manifesto commitment the draft GPS provides me with the first opportunity to signal priorities to the transport sector.
- In Auckland there is strong alignment between the new Government and Auckland Council on projects such as completing the Eastern Busway, City Rail Link, rail electrification to Pukekohe, Airport to Botany and the northwestern corridor.
- I will be also bringing to the table:
  - a renewed focus on Mill Road with an emphasis on reducing congestion and travel times
  - o the East-West Link project to reduce travel times in this critical freight corridor
  - the Northwest Alternative Highway to support population growth, improve freight access and remove state highway traffic from the Kumeū-Huapai town centre.
- The Waitemata Harbour Crossing project requires our direction. I am aware of the concerns raised by Auckland Council and Auckland. 

  s 9(2)(f)(iv)
- The fiscal backdrop means that careful prioritisation and sequencing of investments is critical as well as looking at a broad range of funding tools. I also support the mayor's focus on making the most of existing assets.



Document 1

20 December 2023

OC230850

**Hon Simeon Brown** 

Action required by:

**Minister of Transport** 

Tuesday, 23 January 2024

## **ACCELERATING THE TRANSITION TO ROAD USER CHARGES**

## **Purpose**

This paper provides you with key considerations and phasing options to replace fuel excise duty (FED) with road user charges (RUC).

## **Key points**

- The RUC system is forecast to generate \$1,879 billion in 2023/24. This represents 47 percent of the total revenue collected for the National Land Transport Fund (NLTF).
- The Government has committed to work to move all vehicles, starting with electric vehicles, to electronic RUC (eRUC). Cabinet has agreed to let the RUC exemption for electric vehicles expire on 31 March 2024, so the future steps would require replacing FED (forecast to generate \$1,866 billion in 2023/24) with RUC, and eventually moving all vehicles on to eRUC.



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David Wood  Deputy Chief Executive, Investment and Monitoring	Hon Simeon Brown Minister of Transp	
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Minister's office to complete. "Approved	" Decline	d
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Comments		
Contacts		
Name	Telephone	First contact
David Wood, DCE Investment & Monitoring	s 9(2)(a)	
Matt Skinner, Manager Revenue		1
Carolina Durrant Principal Adviser Revenue		

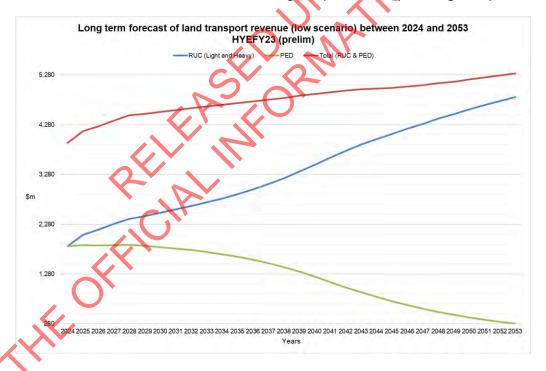
### **ACCELERATING THE TRANSITION TO ROAD USER CHARGES**

Fuel excise duty (FED) and road user charges (RUC) are the two main revenue sources of the National Land Transport Fund (NLTF)

- 1 The NLTF is made up of revenue from:
  - 1.1 fuel excise duty (FED) \$1,866 billion forecast for 2023/24
  - 1.2 road user charges (RUC) \$1,879 billion forecast for 2023/24 (around 60 percent collected from heavy vehicles, 40 percent from light vehicles)
  - 1.3 motor vehicle registration and licensing fees (MVR) \$232 million forecast for 2023/24

Changes in the vehicle fleet and improved fuel efficiency impacts FED but does not impact on RUC

The sustainability of our revenue system depends on the future make-up of our fleet, which is uncertain. The revenue forecast<sup>1</sup> indicates that without any rate increases, revenue from FED will start to decline by 2028 due to the increasing uptake of electric vehicles and fuel-efficient vehicles entering the petrol fleet (refer Figure 1).



- It is likely that the eroded revenue will be largely, but not fully offset by increased revenue from light vehicles subject to RUC.
  - 3.1 As our fleet shifts from petrol to electric, we will see a shift from FED to RUC. From 1 April 2024, owners of light electric vehicles (EVs) will pay RUC as Cabinet has agreed that the current exemption will expire.

<sup>&</sup>lt;sup>1</sup> This forecast includes assumptions about travel growth and population growth but does not include any tax increases.

3.2

s 9(2)(f)(iv)

We have been considering a wholesale shift to RUC



- 9 Background information on the RUC system is provided in Appendix 1.
- 10 A potential timeline showing high level dependencies is provided in **Appendix 3**.



FED and RUC are not comparable charging tools, leading to a lack of 'fairness' in the land transport revenue system

Transitioning to RUC reduces inequities in the land transport revenue system. Road users currently pay different amounts for travelling the same distance in the same car depending on whether they pay RUC or FED. **Appendix 2** provides you with examples of the difference in FED and RUC for some common petrol cars. Distance travelled (RUC) is a fairer way of charging than fuel consumption (FED) (e.g., due to differences in fuel efficiency, etc.).

# Appendix 1 - Overview of the RUC system

## FED and RUC account for most land transport revenue

- 1 The Government collects approximately \$4 billion a year from FED, RUC, and motor vehicle registration and licencing:
  - a. FED on petrol used by about 3.5 million vehicles (around 74 percent of the total fleet) accounts for \$1.9 billion of the total revenue from road users.
  - b. RUC on:
    - i. 230,000 heavy vehicles (less than 4 percent of all vehicles) accounts for \$1.1 billion of land transport revenue
    - ii. 950,000 light diesel vehicles (19 percent of all vehicles) accounts for \$700 million of land transport revenue.
  - c. Motor vehicle registration and licencing fees, an annual fee paid by all light vehicles, accounts for another \$230 million in land transport revenue.
- 2 RUC will also be paid by 105,000 electric vehicles (EVs) from 1 April 2024 (increasing the number of vehicles paying light RUC by almost 17 percent) accounting for an anticipated \$55–\$86 million per year in land transport revenue.
- Total revenue from road users for land transport between 2010/11 and 2020/21 has increased on average by about 4 percent annually. This has been largely due to adjustments in the rates of FED and RUC, along with some population growth, and people driving more.

# The RUC system's focus is cost recovery and was originally designed to account for heavy vehicles' disproportionate impact on the road pavement.

- 4 The RUC system recovers a range of financial (not economic) costs.
- As a cost recovery system, all expenses related to the improvement, upkeep, and operation of the national land transport system (excluding local authority cost and Crown contributions) are categorised and allocated among different vehicle types using a cost allocation model.
- The cost allocation model assigns weight-related road wear expenses primarily to heavy vehicles. Expenses related to "space" and "common costs" that encompass activities benefiting all road users, including public transport, are allocated equally to all vehicles. In short, the rates are designed to ensure that all vehicle types pay in proportion to use and impact on the land transport network.
- Despite differences in size and weight among light vehicles, their impact in terms of wear and tear on road pavement is minor, unlike the disparity seen between medium-sized and very large trucks. An SUV or a ute does very little damage to the road network compared to even a medium-sized truck, which is why all light vehicles under 3.5 tonnes are all subject to the same RUC rate. Furthermore, the majority of the

- financial costs that relate to road maintenance and damage resulting from vehicle weight are allocated to heavy vehicles, as they are the primary contributors to pavement wear and tear.
- In contrast to the one-rate of excise duty for petrol, the RUC system has a tiered rate structure of 81 vehicle types comprising close to 100 individual rates (excluding additional and specialist vehicles, and sometimes different weight bands).
- RUC plays a pivotal role in influencing vehicle purchasing and design decisions within the heavy vehicle fleet. Heavy vehicle operators often opt for configurations with multiple axles to qualify for a lower-cost RUC rate, reflecting the reduced impact of the vehicles on the road pavement. While there are opportunities to refine the RUC system and reduce averaging, this could introduce more complexity into the system.

## Key trends impacting land transport revenue from FED and RUC

- The relative proportion of land transport revenue that is collected from RUC and FED depends on the type of light vehicle that is driven on the road. For example, because electric vehicles are projected to increase as a proportion of the total fleet, the proportion of land transport revenue raised from RUC is also projected to increase (although EVs are only just under 2 percent of the light vehicle fleet now, by 2037 there could be one million EVs on the road).
- 11 Other examples of key trends include:
  - a. an observed increase in the proportion of diesel vehicles in the light vehicle fleet (7% in 2000 to 19% in 2022) resulting in an increase in the number of vehicles that pay RUC.
  - b. rapid growth in the size of the light vehicle fleet over the last 20 years (from 0.65 vehicles capita in 2001 to 0.81 in 2021) and increased distance travelled by private vehicles (8,500 kilometres per person in 2001 to around 9,500 kilometres per person in 2018).
  - c. fuel efficiency improvements have been modest (around 0.5 percent per year) and the average age of a vehicle when it exits the New Zealand fleet is relatively old compared to internationally, between 16 to 20 years.

ece		

Vehicle	Current FED/RUC charges per year		Proposed FED/RUC charges per year	
type	(\$ inc	GST)		\$ inc GST)
Light petrol vehicles	Fuel excise duty* - Average vehicle (9L/100km) - 2015 Toyota Aqua (hybrid) (3.9L/100km) - 2023 Suzuki Swift (hybrid) (4.6L/100km) - 2022 Mitsubishi Outlander (8L/100km) - 2007 Toyota Rav4 (9.3L/100km) - 2006 Mazda 3 (9.4L/100km) - 2014 Kia Carnival people mover (12.9L/100km) - 2003 Holden Commodore V8 (16.4L/100km)	<b>797</b> 345 408 709 824 833 1,143 1,453	Fuel excise duty* - Average vehicle (9L/100km) - 2015 Toyota Aqua (hybrid) (3 9L/100km) - 2023 Suzuki Swift (hybrid) (4.6L/100km) - 2022 Mitsubishi Outlander (8L/100km) - 2007 Toyota Rav4 (9.3L/100km) - 2006 Mazda 3 (9.4L/100km) - 2014 Kia Carnival people mover (12.9L/100km) - 2003 Holden Commodore V8 (16.4L/100km)	<b>797</b> 345 408 709 824 833 1,143 1,453
Light diesel vehicles	All light diesel vehicles (including utes, vans etc) pay road user charges.	836	Al light diesel vehicles (including utes, vans etc) pay road user charges.	836
Electric vehicles	Not currently subject to any fuel excise duty or road user charges	0	Subject to the light RUC rate of \$76 per 1,000 kilometres	836
Plug-in hybrid vehicles (PHEVs)	Fuel excise duty on any petrol purchased  - Low petrol use** real-world estimate (2.86L/100km)  - Higher petrol use*** real-world estimate (4.5L/100km)  - Manufacturer estimates (1.5L/100km, unlikely to be realistic in the real world)	253 399 133	Subject to a partial road user charges rate of \$53 per 1,000 kilometres + fuel excise duty on any petrol purchased - partial road user charges + low petrol estimate (2.86L/100km - partial road user charges + high petrol estimate (4.5L/100km) - partial road user charges + manufacturer petrol estimate (1.5L/100km)	•

<sup>\*</sup> The L/100km estimates for petrol vehicles are based on factory-tested manufacturer claimed rates. Real world rates will almost always be higher, depending on use and the vehicle's age and condition.

#### **Notes to table:**

- There is also 10.4 cents per litre (GST exclusive) excise on CNG and LPG. Very few vehicles use these fuels, so they have not been included in the table.
- The numbers above assume average distance travelled of 11,000km per year for all vehicles.
- The road user charges exemption for light electric vehicles expires at the end of 31 March 2024. The exemption for heavy electric vehicles does not expire until the end of 31 December 2025.

<sup>\*\*</sup> The "low petrol use" real-world estimate for PHEVs is likely to be a city-commuter with limited longer trips. Basic testing by Consumer NZ in 5 PHEVs (driving from Lower Hutt to Wellington and back 5 days per week, a run to the supermarket, and one trip over the Remutaka hill), found petrol use was 1.5–3.5 L/100km.

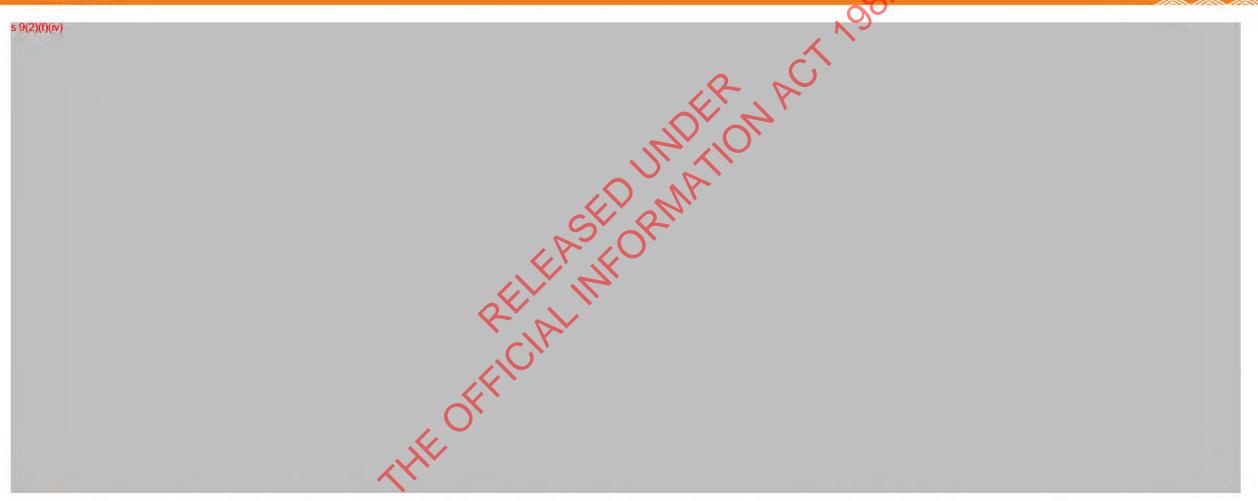
<sup>\*\*\*</sup> The "higher petrol use" real-world estimate for PHEVs is likely to be a user driving longer distances and charging less regularly.



Appendix 3: Work to replace fuel excise taxes with electronic road user charging for all vehicles, starting with electric vehicles.

Indicative Timeline

December 2023





Transitioning from FED to RUC at a faster pace than would occur 'naturally' improves fairness in the land transport revenue system, facilitates better land transport revenue sustainability, and enables a transition to advanced efficient variable road-based pricing systems.



There are options regarding a phased transition versus a wholesale transition that are not included in this high level A3.



Document 6

20 December 2023 OC231109

Hon Simeon Brown

**Minister of Transport** 

## HISTORY OF AUCKLAND LIGHT RAIL PROJECT

#### **Purpose**

In response to your request this briefing provides information on the history of the Auckland Light Rail (ALR) project, including prior decisions made by the Crown and costs incurred.

## 2012 analysis of public transport investment in the corridor

- In 2012, Auckland Transport commissioned Sinclair Knight Merz to assess future transport network deficiencies in Auckland. The resulting 2012 City Centre Future Access Study (CCFAS) highlighted city centre access issues from the central and southern isthmus not served by the heavy rail network.
- Analysis of forecast demand on the public transport network, compared to the expected capacity, showed many bus routes in the inner city and central isthmus would exceed capacity by 2041. The analysis indicated that forecast demand would require additional public transport intervention to increase capacity, including for the Dominion Road/ Mt Eden Road corridor

## 2015-2016: Auckland Transport

- In 2015, Auckland Transport released its Regional Land Transport Plan (RLTP) 2015-2025¹ which stated that, following an assessment of options, a light rail network that served the central isthmus had been identified as the best option to overcome capacity challenges. The RLTP noted the development of a light rail network also opened up the potential for the long-term travel solutions to the airport, the North Shore, and other possibilities.
- In October 2015, Auckland Transport, Auckland Council and the New Zealand Transport Agency (NZTA) jointly released the Auckland Central Access Plan (CAP) Strategic Case<sup>2</sup>. This was prepared in response to the CCFAS, as well as earlier studies, which showed that it would not be effective or efficient to increase accessibility to the city centre by private transport. Their strategic case focussed on public transport and active modes backed by stronger urban intensification.

IN CONFIDENCE

<sup>&</sup>lt;sup>1</sup> https://at.govt.nz/media/1191335/Regional-Land-Transport-Plan-Adopted-Version-July-2015.pdf

<sup>&</sup>lt;sup>2</sup> https://at.govt.nz/media/1913574/cas-strategic-case-report.pdf

- In March 2016, the Auckland Transport's supporting CAP Programme Business Case (PBC)<sup>3</sup> recommended a programme of work including:
  - assessing and as appropriate including a possible second high-capacity line on Sandringham Road and / or a metro rail spur from the Western Line to Mt Roskill; and
  - refining /developing higher capacity rapid transit programme that can use Queen Street and Dominion Road while enhancing the urban amenity – expected to be light rail
- In June 2016, Auckland Transport released a draft indicative business case into the South-Western Multi-modal Airport Rapid Transit<sup>4</sup>. This report's purpose was to address problems of constrained access to the Auckland Airport and surrounding districts, as well as accessibility and transport choices for the Mangere-Ōtāhuhu area. The report recommended that that two shortlisted options should be taken forward for further detailed investigation, including a light rail option that extended the alignment for Dominion Road along SH20 and SH20A to the Airport via an interchange at Onehunga.

## 2017-2019 - Central government commissions a light rail project

- In August 2017, then Labour leader, Jacinda Ardern, announced that, if elected, her government would build light rail from downtown Auckland to the airport within a decade.
- In May 2018, Cabinet commissioned NZTA to develop a single stage business case. Its design was based on the street-integrated light rail solution that had been earlier developed by Auckland Transport.

#### Parallel process

- In April 2018, NZ Infra (a joint venture between the New Zealand Superannuation Fund and Canadian institutional investors CDPQ Infra) approached the government with an unsolicited proposal for an alternative delivery and financing approach for light rail to the airport. Later n 2018, the Minister of Transport sought further advice on the NZ Infra approach.
- In June 2019, Cabinet directed the Ministry to run a parallel process with NZTA and NZ Infra developing their own proposals over four months. The two proposals were evaluated against a common set of criteria to enable central government to choose a preferred delivery partner or decide an alternative course of action. After the proposals were presented, the Ministry gave advice to the Minister of Transport and cross-party consultation took place during May 2020.
- However, the three government parties were unable to reach agreement on a preferred proposal. Cabinet also noted the current economic environment meant there were elements of both proposals fundamental to the commercial arrangements that were not acceptable to the Crown.

<sup>&</sup>lt;sup>3</sup> https://at.govt.nz/media/1913570/cap-programme-business-case.pdf

<sup>&</sup>lt;sup>4</sup> https://at.govt.nz/media/1927342/draft-smart-indicative-business-case.pdf

As a result, in June 2020, Cabinet formally terminated the proposal process and asked the Ministry and the Treasury to provide options for public service delivery to the new government following the 2020 general election. The intellectual property created by NZ Infra as part of the parallel process remains the commercial property of NZ Infra and is not available to government officials.

#### 2021-2023: Public service delivery model advanced

- In March 2021, the Minister of Transport announced the formation of a temporary Establishment Unit to progress an indicative business case to enable decisions to be made on mode and route, and to provide cost estimates as well as funding and financing options. The Establishment Unit was overseen by a board with representation from the Ministry, NZTA, Auckland Transport, Auckland Council and Kāinga Ora. Auckland Council and Crown representatives were joint Sponsors of the project.
- In December 2021, Cabinet agreed a preferred option of Tunnelled Light Rail a segregated option in the denser areas of the route and surface running along Bader Drive (in Māngere). Cabinet also agreed to progress the project to the detailed planning phase.

Detailed planning phase and the establishment of Auckland Light Rail Limited

- The detailed planning phase was set up with a governance arrangement that had representatives from the Crown, Auckland Council and mana whenua as Sponsors, making decisions together to progress the project.
- In May 2022, the former government announced the Honourable Dame Fran Wilde would lead a board overseeing the design and construction of the project taking effect from 1 June 2022 following the conclusion of Establishment Unit Board on 31 May 2022. The latter's work included releasing a tender for detailed design out to market as well as work on funding and urban design components.
- In October 2022, Auckland Light Rail Limited (ALRL) was established as a Crown Entity Company to deliver the final business case and undertake preparatory work to deliver the project. Dame Fran Wilde was appointed Chair of ALRL's Board.
- To provide clear lines of accountability during the detailed planning phase, a Project Planning and Funding Agreement (PPFA) was agreed between ALRL, the Crown, and Auckland Council. Given the complexity of the project and the number of outcomes intended to be achieved by it, certain decisions that shaped the business case were reserved for Sponsors. This included decisions on the route and station locations and growth assumptions used. The Crown reserved decision making for the final investment decision and policy matters required to deliver the project
- In addition to decision-making to establish ALRL, ALR Ministers (Ministers of Finance, Housing and Transport) made other decisions in the detailed planning phase to progress the project. These included:
  - supporting ALRL in seeking requiring authority status so the company could have responsibility for protecting the corridor;
  - the approval of the acquisition of land following Cabinet's approval to release tagged contingency for land acquisition; and

- approving ALRL's entry into a material contract with the alliance of Aurecon and Arup, to undertake work to develop the business case.
- Over the course of detailed business planning, ALRL formed a view that a Tunnelled Metro option, fully segregated from road traffic, was the preferred option over Tunnelled Light Rail which travels on the surface from the airport to Mt Roskill, then goes underground for the section from Mt Roskill to the Wynyard Quarter.
- On 31 May 2023, ALR Sponsors agreed the station locations, indicative station location zones, and route alignment for Tunnelled Metro to allow ALRL to proceed to further detailed assessment to inform applications for statutory approvals, specifically, notices of requirement to designate land for the project. These statutory approvals were to be considered by Sponsors at a subsequent meeting in August 2023. Sponsors also agreed that further work will be undertaken prior to the final investment decision to update work on Surface Light Rail (the lowest cost comparator and a different option to Tunnelled Light Rail) so that Tunnelled Metro can be adequately compared against it.
- The August 2023 Sponsors' meeting was postponed as ALRL decided that it was the wrong time to lodge a notice of requirement citing 'significant contextual shifts in recent months including a change in our authorising environment, with a number of new sponsors."

### **Summary of Costs**

- For the period October 2017 to April 2021, when NZTA undertook the 2018 Business Case and 2019 Parallel Process, the Agency incurred \$34.857 million of costs for business case development.
- 25 For period March 2021 to 30 October 2023, central government expenditure on ALR was \$193.807 million comprising
  - \$116.778 million for the operation of Auckland Light Rail Limited since its establishment in October 2022;
  - \$25.630 million for operations during the Establishment Unit phase (March 2021 to October 2022);
  - \$18.576 million for other Ministry of Transport costs
  - \$32.823 million to purchase 317 New North Road, Kingsland.
- We do not have to hand the costs incurred by Auckland Transport for the period 2012 to 2016.

#### Contacts

Name	Telephone	First contact
David Wood, Deputy Chief Executive	s 9(2)(a)	
Isaac Trienen, Senior Adviser, Auckland Light Rail		1



Document 7

20 December 2023

OC231041

**Hon Simeon Brown** 

Action required by:

**Minister of Transport** 

Monday, 29 January 2024

## FREIGHT AND SUPPLY CHAIN BRIEFING

### **Purpose**

Following your recent meeting with the New Zealand Council of Cargo Owners (NZCCO), you requested advice on the freight and supply chain sector, and in particular the Port of Tauranga Ltd's consent application to extend its terminal, green shipping corridors, and the extent of engagement between the Ministry and the sector

## **Key points**

- Since you met with NZCCO, the Environment Court has provisionally granted
  resource consent to the Port of Tauranga Ltd for part of its planned container wharf
  extension, subject to further matters being addressed to the satisfaction of the Court.
  The additional capacity that will be enabled by the wharf extension is vital for
  increasing productivity at the port and managing increased freight volumes.
- The Ministry and Maritime New Zealand (MNZ) are supporting early work on enabling alternative fuels for specific international shipping routes to or from New Zealand, known as "green shipping corridors". This work will support our economic connectivity as New Zealand exporters face increasing expectations from customers to address supply-chain emissions. A pre-feasibility study by an independent international research centre on an Australia-New Zealand corridor will be completed in early 2024. The Ministry will engage with the sector on progressing this work.
- This briefing also covers some other Ministry work that may be of interest, including refreshing the National Freight Demand Study to get better data on our freight and supply chain system, a technical feasibility study into the Manukau Harbour's suitability as a future location for a large-scale port, and a commissioned business case into establishing a large dry dock and marine maintenance facility at Northport.
- Officials would like to discuss your priorities for the freight and supply chain sector next year to make sure we understand your policy preferences. The Ministry's previous work in developing a national freight and supply chain strategy, including industry's key priorities, will provide a good basis for this conversation. This will also enable the Ministry to resume industry engagement on a freight and supply chain work programme.

#### Recommendations

We recommend you:

1 indicate if there are any freight and supply chain matters where you would like further advice.

Yes / No

olgi
1/
X

Siobhan Routledge
Acting Deputy Chief Executive

Minister's office to complete:

..20/12/2023...

Hon Simeon Brown Minister of Transport

.....1 ......1 ......

☐ Approved

☐ Seen by Minister

□ Not seen by Minister

☐ Declined

☐ Overtaken by events

#### Comments

#### Contacts

Contacts		
Name	Telephone	First contact
Marian Willberg, Manager Freight and Supply Chain	s 9(2)(a)	
Siobhan Routledge, Acting Deputy Chief Executive		1
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#### FREIGHT AND SUPPLY CHAIN BRIEFING

- Following your meeting with the New Zealand Council of Cargo Owners (NZCCO) on Thursday 7 December, you asked for advice on the freight and supply chain sector, and in particular the Port of Tauranga's consent application to extend its terminal; green shipping corridors; and the extent of engagement with the sector.
- This briefing also provides you with an overview of key priorities identified through discussion with industry as part of the developing the New Zealand Freight and Supply Chain Strategy. We are keen to engage with you in the New Year on your priorities for this sector. This briefing serves as a scene setter for future discussions.

# New Zealand's freight and supply chain system is critical to the country's economic potential

International trade is predominantly shipped, with air freight moving higher value goods.

- New Zealand's international trade relies on ports, which move 99 percent of the country's trade by volume and around 80 percent by value, as well as playing an important role in moving freight between regions. Container trade is concentrated in Tauranga (39 percent of container volumes), Auckland (22 percent) and Lyttleton (14 percent). Tauranga is also the largest bulk export port. Annex 1 maps New Zealand's supply chain system and illustrates the import and export value of each port.
- Air freight moves 1 percent of the country's trade by volume, but this is 20 percent of the country's trade by value. Auckland handles 85 percent of air freight, Christchurch 14 percent and Wellington 1 percent.

Domestic freight is multi-modal with road, rail and coastal shipping each playing a role.

- When it comes to New Zealand's domestic freight, road freight delivered 75 percent of freight by tonne-km and 93 percent by volume in 2017/18. Coastal shipping accounted for around 13 percent of the national freight task by tonne-kilometres and 1.6 percent by volume. Rail carried around 12 percent by tonne-kilometres and around 6 percent by volume. Domestic air freight carried less than a percent.
- These proportions reflect the relative strengths of each mode. Rail and shipping typically carry freight very long distances, with rail well suited for moving goods between major centres. Coastal shipping tends to support the movement of bulk commodities such as cement, as well as containerised goods. These modes are constrained to routes served by existing port and rail infrastructure.
- Road freight can serve almost any location in the country and is more responsive to shifting needs as its scheduling is more flexible. Road freight tends to be localised with around 77 percent moved within the region from which it was sourced.

While the freight and supply chain system is industry-led, government can support the sector to become more competitive and productive.

While New Zealand's freight sector is market-led and highly competitive, government plays multiple roles in the supply chain. It is an operator (through interests in KiwiRail, and to an extent New Zealand Post and Air New Zealand), builds and maintains

- crucial arterial infrastructure, provides regulatory settings for the market and sets the parameters within which it operates (e.g., setting rules on heavy vehicle weights limits).
- Industry, through its input to the Freight and Supply Chain Strategy developed in 2023, have identified areas where government action could support the sector with a view to maintaining New Zealand's economic productivity and connectivity. This particularly reflects some medium-term challenges industry has identified, including a more complex geopolitical environment and the possible challenges this results in for trade; population growth and increasing densification and how this affects freight routes through our cities; climate change; and new technologies. We attach summaries of the Freight and Supply Chain Strategy and public submissions as Annex 2 and Annex 3, respectively. This input from industry will serve as a good starting point for discussions with you in the New Year on your policy preferences for our work programme in this area.

## The Port of Tauranga has received interim consent to expand its capacity

- Since your request for this briefing, the Environment Court has provisionally granted resource consent to the Port of Tauranga Ltd (POTL) for part of its planned container wharf extension, subject to further matters being addressed to the satisfaction of the Court. The Court has requested some further information before reaching a decision on two further parts of the consent application.
- As New Zealand's largest export port, POTL plays a critical role in New Zealand's freight and supply chain system. However, Infrastructure New Zealand has predicted that, without expansion, the port will reach the limits of its capacity by 2025. The Court has provisionally approved consent for a 285-metre wharf extension and associated dredging. POTL is currently handling around 1.2 million twenty-foot equivalent unit (TEU) containers per year, out of a total capacity of 1.5 million TEUs. The wharf extension is intended to provide capacity for up to an additional 1 million TEU. The Court is still considering consent for a 1.8-hectare reclamation at Sulphur Point; and a 2.9 hectare reclamation on its Mt. Maunganui wharves.
- More generally, the sector sees the ongoing uncertainty on the future of major ports (e.g., whether POTL would be able to expand, and whether the Port of Auckland will move) as creating delays in necessary investment and reducing productivity. Stakeholders have argued for different roles for government to address this uncertainty. The Ministry has begun to consider what changes, if any, are appropriate in this highly commercial environment, with both national and regional interests at play and many regulatory frameworks involved.

## The Ministry is supporting early work on green shipping corridors

The Ministry and MNZ are supporting early work to support use of alternative fuels for specific international shipping routes to or from New Zealand, known as "green shipping corridors". New Zealand's economic potential depends on the long-term reliability of the supply of high-quality shipping services. Our distance from most of our key export markets, and the fact that we are at the tail end of global shipping routes, means we need to work hard to be an attractive destination for shipping

- services. Enabling use of alternative fuels in New Zealand in the future will help to ensure we remain an attractive shipping destination into the future.
- Our work in this area sits under the Clydebank Declaration, which New Zealand signed at the 2021 UN Framework Convention on Climate Change Conference of the Parties. Signees collectively seek to establish zero-emissions shipping on six key trade routes by 2025, with more by 2030.
- During 2023, we contributed to a pre-feasibility study for an Australia-New Zealand green shipping corridor by the independent Maersk McKinney Moller Centre for Zero Carbon Shipping. This included a November 2023 workshop with ports, exporter and shipping company representatives, including NZCCO. Discussions covered the potential alternative fuels (including likely production, volumes, transportation and storage) and possible shipping routes.
- The pre-feasibility study will be completed during the first quarter of 2024. The Ministry plans to engage with the sector next year to determine whether and how this work can be progressed. While this should be led by industry, the Ministry is likely to play a convening role to help coordinate this work. We are hearing from stakeholders that they would value some sort of "pathway" to help industry make decisions and manage risks. We will need to link more closely with the Ministry of Business, Innovation and Employment around alternative fuels and the Ministry of Foreign Affairs and Trade.
- The Ministry has also commissioned research from Concept Consulting into domestic regulatory barriers to low emissions shipping. This research is due in April 2024, and, depending on its findings, could highlight regulatory barriers to address.

# The Ministry engages regularly with the freight and supply chain sector, but could always do more

- The Ministry places a high priority on engaging with stakeholders working in different parts of the supply chain. The supply chain is complex and interconnected, so it is valuable to hear from a range of perspectives.
- 19 Sector engagement has fluctuated at times. There was very intense engagement during COVID-19 through regular online meetings to keep industry updated on regulation changes and addressing significant disruptions. There was also frequent engagement with industry during the development of the New Zealand Freight and Supply Chain Strategy, and its preceding issues paper, under the previous Government. Engagement has been quieter following the launch of the strategy in August 2023 and in the lead up to the general election.
- Similarly, MNZ engages regularly with the sector, including NZCCO. During the height of the COVID-19 pandemic, MNZ (and the Ministry) engaged directly with NZCCO through regular meetings. This has now returned to a more issues-based engagement, with NZCCO's interests covered by port representatives at MNZ's monthly Maritime Industry Forum. The New Zealand Transport Agency (NZTA) also engages regularly with the sector through several freight forums. These forums operate at national, regional, and local levels and cover strategic, tactical and operational issues.

As noted above, we are keen to discuss your priorities in the area of freight and supply chain and see an agreed work programme as a good platform to strengthen our engagement with the sector.

#### The Ministry is working on a number of other freight and supply chain matters

Some other areas we wanted to highlight for you at this time are our work on data, the Manukau feasibility study, the Northport dry dock, and regulatory barriers to highly productive heavy vehicles. We can provide further information on these areas, or other matters of interest, as required.

We are exploring the need for improved freight and supply chain system data.

- The Ministry is exploring how better data on the New Zealand freight and supply chain system could support ports and all other modes of freight road, rail, shipping, and air freight to improve productivity and efficiency. There are gaps in the data available to government, local government and the sector on how freight moves, which corridors deliver the greatest value, where our vulnerabilities are, and how all of this might change over time.
- The Ministry has begun refreshing the National Freight Demand Study (NFDS) an analysis of current and future freight movements as one way to address these gaps. The NFDS was last updated in 2017/18. Stakeholder engagement has identified that the NFDS is used and valued by NZTA, KiwiRail, local government and the private sector. The wide use of the NFDS has also exposed areas for improvement and information gaps that exist within the study.
- Stage 1 of the refreshed NFDS is identifying and evaluating options to expand the scope of the study (for example to analyse the value of freight flows as well as freight tonnage; to include intra-regional and urban freight, which were not part of the earlier studies; take advantage of data sources such as telemetry and GPS, which have been less well used in the earlier studies; and consider whether we can move to live updates rather than static snapshots). This is progressing with NZTA input and engagement with other government agencies and the sector as both potential data providers and users of the NFDS. Stage 1 will end in April 2024.
- Stage 2 will be a full update of the NFDS, if required. This will form part of the evidence base for future work on the freight and supply chain. This will be critical evidence to support more productive use of existing infrastructure and prioritising investment in critical corridors.

Work is underway on the technical feasibility of Manukau Harbour as a future port location.

- The Ministry has not taken a position on whether the Port of Auckland Limited should remain in its current location on the Waitematā Harbour. The previous government did note in 2019 that the Port of Auckland was not viable as the Upper North Island's key import port over the long term.
- The Ministry has commissioned a technical feasibility study into whether the Manukau Harbour would be suitable as a future location for a large-scale port. The study will not address commercial feasibility, environmental and cultural assessments or

#### UNCLASSIFIED

consenting. We expect to receive the completed study in the first half of 2024 and will subsequently provide you advice on proposed next steps, if any.

The Ministry initiated a business case exploring a dry dock at Northport in 2023.

- In relation to Northport in Whangārei, the Ministry commissioned a business case into establishing a large dry dock and marine maintenance facility capable of taking vessels up to 250 metres. Currently New Zealand's larger vessels (e.g., Cook Strait ferries; two Navy vessels) must cross to Australia or Singapore to access dry dock facilities. This has wide ranging consequences: reduced service frequency, security implications, foregone revenue due to time away (the trip to Singapore takes 28 days) and increased fuel costs (a return sailing to Singapore costs around \$1.4 million).
- The sector has advocated for a larger dry dock for many years and considers it a critical piece of infrastructure. Northport included the proposal in its port expansion strategy *Vision for Growth* in 2015 on the basis of acting as a landlord. We understand Northport has paused progressing the project due to complexities with consenting and it is actively seeking support from Government to overcome these.
- We note that the coalition agreement with New Zealand First agreed to progress this matter further through a detailed business case. The Ministry is ready to provide advice to you on next steps, as appropriate.

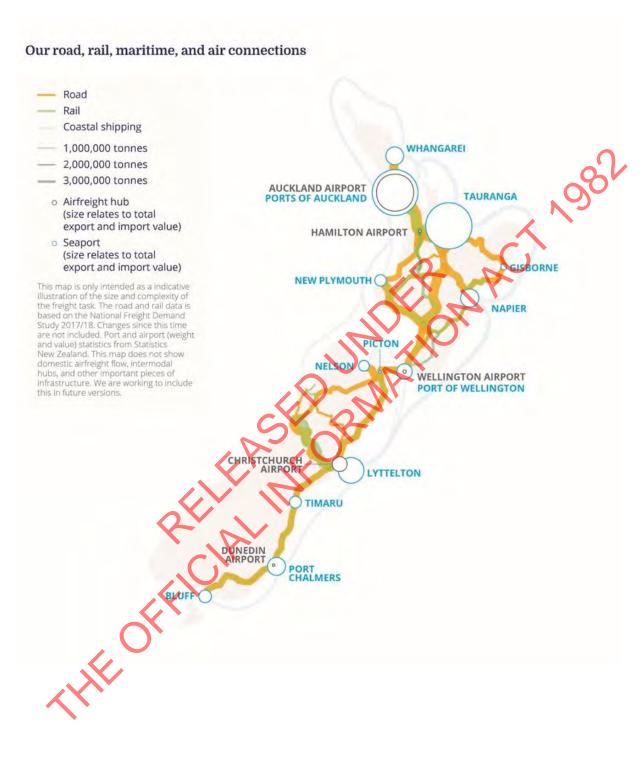
The trucking industry is seeking a review of regulatory barriers to highly productive heavy vehicles, including low emissions trucks

- New Zealand's trucking industry, including both National Road Carriers and Ia Ara Aotearoa Transporting New Zealand, have asked the Ministry and NZTA to prioritise reviewing existing heavy vehicle regulations. Heavier vehicles can generally carry more freight, increasing productivity.
- New Zealand's regulatory environment incentivises trucks that are relatively heavy (for greater efficiency) but with relatively lower axle weights (to reduce damage to roads and highways) compared to other markets. This divergence from international standards can mean that New Zealand industry faces higher costs purchasing heavy vehicles that meet our specific vehicle regulations. This is particularly so for low and zero emissions trucks that tend to be heavier than their diesel counterparts.
- Any regulatory changes in this area would need to be balanced against the increased wear and tear on roads and bridges from heavier vehicles and associated higher maintenance costs. In the New Year, we would like to discuss your views on progressing a review in this area.

**UNCLASSIFIED** 

For example, New Zealand's maximum single axle weight is 7.2 tonnes, although trucks can weigh over 50 tonnes. In Europe, the maximum single axle weight is typically 10 tonnes, with maximum truck weight of 40-44 tonnes.

### Annex 1: New Zealand freight and supply chain network





# Aotearoa New Zealand Freight and Supply Chain Strategy - Overview

June 2023



## 30-year horizon



Aotearoa is facing strategic challenges to our supply chains

#### System outcomes: what should our supply chain system look like?



#### **ZERO EMISSIONS**

New Zealand's supply chains are underpinned by zero emissions freight transport.



#### RESILIENCE

We are resilient, reliable, and prepared for potential disruption.



## PRODUCTIVITY & EFFICIENCY

Our freight sector is highly productive and efficient.



## SAFETY AND SUSTAINABILITY

Our freight transport system upholds safety and environmental sustainability.

# To position New Zealand for the future and achieve our outcomes these principles need to underpin our actions



#### NATIONAL INTEREST

We will identify, protect, and strengthen the parts of the freight and supply chain system that are critical to New Zealand's national interest.



#### SYSTEM STEWARDSHIP

The Ministry of Transport will be a steward of the freight and supply chain system.



#### PARTNERSHIP

Those involved in the freight an supply chain system will work together for the benefit of New Zealand.

# 10-year horizon



#### Strategic goals

Over the next ten years our priority will be achieving these goals in line with our outcomes and principles.

# INFRASTRUCTURE AND GOVERNMENT SYSTEMS

- We are protecting, decarbonising, & optimising nationally significant freight routes & infrastructure.
- There is a sophisticated, robust, & transparent base of evidence to support decision making in the freight system.
- 3. We have reliable & adaptive long-term plans for key parts of our freight system.

#### **ENABLING THE SECTOR**

- Government policy enables the sector to accelerate emissions reduction and build long-term resilience.
- The sector leads change in areas of common interest independently or with government support.
- The value & function of the freight system is understood across the government and by the public.

#### INTERNATIONAL CONNECTIONS

- We have reliable, resilient, competitive, & efficient international shipping & airfreight services.
- Government & the sector are aware of global supply chain threats & opportunities & are ready to respond & adapt.
- New Zealand reduces its international freight emissions in line with its international commitments.

## 3-year horizon



#### Focus areas

Our three year horizon will focus on four high priority areas. We are making a limited set of initial commitments in each of these areas and intend to expand on these commitments as resources allow.

# PORTS AND THE CONNECTIONS TO THEIR COMMUNITIES

- About 99% of traded goods by weight flow through our ports. We need to ensure they are resilient to longterm threats and highly productive to support our economic prosperity.
- We will analyse the spatial connections of our ports to help us strengthen our critical freight corridors. We will also undertake analysis of alternative port models.

#### ROAD FREIGHT DECARBONISATION

- Road freight is responsible for almost a quarter of transport emissions, while rail and coastal shipping are much lower emissions modes of transport. This makes road freight a priority to decarbonise first.
- Initial work will focus on progressing priorities to accelerate the transition to zero emissions heavy vehicles. We will also continue to work on the implementation of the rail plan, and policies to support coastal shipping.

# DATA SHARING AND INTEROPERABILITY

- A more sophisticated evidence base will support a better understanding of the freight and supply chain system and improved investment decision making.
- We will identify and invest in freight data needs based on priorities of different public and private sector stakeholders. This could be supported by a partnership with the sector to support mutual data sharing.

#### INTERNATIONAL ENGAGEMENT

- The COVID-19 supply chain disruptions have demonstrated vulnerabilities in our international freight connections. We need to be better prepared for future disruption and play our part in decarbonising international freight.
- We will maintain collaboration with international partners to prepare for disruption to freight networks and support the establishment of green shipping corridors.



# Collaborative implementation approach

Across all these areas we will work with the sector to find the most impactful ways we can collaborate and partner on both strategic direction and progressing specific initiatives. This could include establishing ongoing working groups, partnering on shared projects or supporting industry to progress sector led initiatives.







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

Summary of submissions made through the public consultation process (April - June 2022)



Te Manatū Waka Ministry of Transport is leading the development of the New Zealand freight and supply chain strategy which seeks to identify what is needed to optimise the system in the coming decades.

As preliminary work we developed an issues paper after extensive engagement with a broad range of stakeholders. The purpose of the issues paper was to set out the strategic context for changing the way we do things and to hone in on the most important areas of focus as we develop the long-term strategy.

The Ministry ran a public consultation process to gain feedback on the issues paper from April to June 2022. This is a summary of the feedback we received. We would like to thank all the individuals and organisations who took the time to send us their views.

### Key themes in the feedback

# Government has a role as we prepare the supply chain for the future.

Submitters agreed there is a role for government in the supply chain system – although views differed as to whether direct intervention or industry enablement was the correct approach to different issues. Government was seen as having one or all of the following roles: investor, regulator, overall system steward. Many felt that government was the only entity that could take a whole-of-system view. Government also has a role as the sole entity able to influence international relations, negotiate better market access, and meaningfully effect change in international bodies such as the International Maritime Organisation (MO) and the United Nations.

#### Government needs to signal its long-term plans for investment in supply chain infrastructure.

Many submitters said that a long-term infrastructure investment plan with broad, high level political support, was needed to give the industry certainty for their own plans. This would include planning private infrastructure around future government investment in utilities and transport nodes, providing certainty of future capability needs for construction companies, and allow local

government to make more informed and joined up investments through their own regional transport and unitary plans. Co-investment was also identified as an area where government could make a difference including as a way to meet its Tiriti o Waitangi commitments to Māori while accelerating economic development, with positive sentiment from across the industry towards the Ruakura freight hub development.

### Strong interest in port reform.

Many submitters desired some sort of review or reform of the current port system. Ideas included: reviewing the ownership model, competition settings, and moving towards a hub and spoke model for our ports. Some submitters felt that the shift towards the optimal port model would happen naturally through the market over time, others felt that a national port plan and regulatory reform was needed to achieve change.

#### Improved ability to transfer between modes.

There was support for an intermodal freight system, enabled by hubs that would allow cost effective, quick and flexible transfers between modes and drive mode shift. Rall especially was identified as benefiting from intermodal hubs that reduce the number of times cargo has to be handled, with a number of stakeholders advocating for rail connections to ports, as these greatly enable freight hubs and inland ports due to rail's ability to move agglomerated volumes of cargo efficiently. Others suggested barriers included the low rate of containerisation of domestic cargo, which makes intermodal transfers a labour and time consuming process, and lack of data sharing between different modes and operators to enable seamless transfers.

#### Consenting and land-use issues are a constraint.

Consenting and spatial planning issues were a common concern, with the RMA reform regarded as crucial for the efficient operation of the supply chain. Constraints on port operations and congestion in freight corridors were common examples. Stakeholders want to see protection of key logistics routes and nodes, especially in urban areas that are expected to densify.



# Build the workforce for the supply chain of the future.

There are labour concerns across the industry, with submitters in agreement that current conditions do not create enough workers across all skill levels, but there was a split between those who believe we should build our domestic capability and those who believe immigration should fill skills gaps. Some submitters believed that automation would replace workers in repetitive and unattractive tasks, and would allow greater utilisation of infrastructure, and safety improvements. However, there were concerns about equity and feasibility across the supply chain.

## Improved data collection and availability.

There was support for more data collection, collation and sharing across the industry, to improve cooperation and collaboration without reducing competition.

#### There were different views on the role of government in the decarbonisation of the system.

There is a strong desire for government funding or co-funding to ensure the transition to a decarbonised freight sector happens equitably, and efficiently, without reducing the competitive nature of the freight sector. Many submitters said government should allow some flexibility to ensure New Zealand is not locked into a particular technology pathway in case it is superseded. They advised that if we want to lead in the decarbonisation of our transport system we will likely need to commit to a small number of alternate fuels and fund the provision of their supporting infrastructure. Cargo owners were also advocating for low emissions freight options to meet consumer expectations.

#### There is ambition for mode shift to rail, but not for all freight.

A number of submitters supported mode shift to rail, in line with the desire for greater intermodality. Others said that rail is unlikely to be competitive with road transport for certain commodities (small dimension, high value, and/or urgent), as well as for short distances and were concerned about double handling costs associated with using rail. There was also a view that rail is simply not resilient enough, being more vulnerable to seismic events. Other submitters felt that the structure of KiwiRail disincentivises greater mode shift to rail. [Note: some of these issues are currently being reviewed by the Ministry, Treasury and Waka Kotahi through the KiwiRail entity form review.]

#### International and coastal shipping face many changes.

International shipping to New Zealand is expected to develop into more of a hub and spoke model, although perspectives on the degree to which ports and volumes would consolidate, and the speed with which it would occur differed dramatically. There were some concerns about New Zealand's coastal shipping sector only recently having begun to grow again after decades of decline meaning that there may not be the domestic capacity to meet the required or desired mode shift.

#### Airfreight has an important role in moving high value cargo.

The perceived focus on volume instead of value in the issues paper was questioned by the airfreight sector, who felt that their role in the supply chain was understated as a result.



Feedback v policy - this document summarises the views of submitters and does not represent government policy.



**Document 8** 

20 December 2023

OC231045

Hon Simeon Brown Minister of Transport

Action required by: Monday, 22 January 2024

# THE CLIMATE CHANGE COMMISSION'S ADVICE ON THE POLICY DIRECTION OF THE SECOND EMISSIONS REDUCTION PLAN

#### **Purpose**

Respond to your request for an overview on the Climate Change Commission's (the Commission's) advice on the policy direction of the second emissions reduction plan (ERP 2) relevant to the transport sector and indicate how we will support you to consider the advice as ERP 2 is developed.

#### **Key points**

- On 12 December 2023 the Commission's final advice for ERP2 was publicly released.
   The Government is required to consider the Commission's advice when preparing and publishing ERP 2 which is required by legislation to be published by 31 December 2024.
- The Commission's final advice for ERP 2 builds on its 2021 advice and provides
  recommendations on the policy direction for transport and other sectors. It includes key
  recommendations (six of which are relevant for transport) which, in the Commission's
  view, identify critical gaps in action, as well as existing actions that urgently need to be
  strengthened and accelerated.
- In February 2024 we will provide you with advice to support you to make initial decisions on the transport content for the ERP 2 consultation draft, taking into consideration the Commission's advice.

•	s 9(2)(f)(iv)		

#### Recommendations

We recommend you:

Scatholas

advise whether you would like to meet with officials in early 2024 to provide initial direction on the transport content for ERP 2, prior to receiving more formal advice in February 2024.

Yes / No

Siobhan Routledge Acting Deputy Chief Executive	, Policy	Simeon Brown Minister of Transport	
Group .20 / .12 . / .23 .		11	
Minister's office to complete:	☐ Approved	□ Declined	
	☐ Seen by Min	ister ☐ Not seen by Minister	
	☐ Overtaken by	y events	
Comments			

#### Contacts

,	s 9(2)(a)	Siobhan Routledge, Acting Deputy Chief Executive, Policy Group	
		Genevieve Woodall, Manager, Emissions Reduction Plan Project Team	
		Michelle Palmer, Senior Adviser, Emissions Reduction Plan Project Team	

# THE CLIMATE CHANGE COMMISSION'S ADVICE ON THE POLICY DIRECTION OF THE SECOND EMISSIONS REDUCTION PLAN

## **Background**

- The Climate Change Response Act 2002 (CCRA) sets out the strategic framework for New Zealand's approach to reducing emissions in line with our international commitments. Key components of this framework include:
  - 1.1 targets to reduce all domestic greenhouse gas emissions (except biogenic methane) to net zero by 2050;
  - 1.2 a series of progressively reducing emissions budgets to act as stepping stones towards the 2050 target, which the Minister for Climate Change has a duty to ensure are met;
  - 1.3 a requirement for the Government to develop and implement policies to achieve these emissions budgets via a series of emissions reduction plans (ERPs);
  - 1.4 an independent Climate Change Commission (the Commission) to provide expert advice on the policy direction of ERPs and monitoring to help successive Governments remain on track to meet the 2050 target; and
  - 1.5 a requirement for the Government to consider the Commission's advice when preparing and publishing ERPs and supporting policies.
- In 2024, the Government will develop ERP 2, covering the years 2026-2030, which is required by legislation to be published by 31 December 2024.
- While the Government does not need to adopt the Commission's recommendations, it will be important for you to receive advice that clearly demonstrates your consideration of the Commission's advice and recommendations as you make decisions on the transport content of the ERP 2.
- As noted above, the Minister for Climate Change has a duty to ensure that emissions budgets are met. Therefore, it is important for Ministers to demonstrate consideration of the impact of decision-making on emissions budgets and a proportionate response, both in relation to ERP 2 and other relevant matters. Officials will provide you with advice to support you to meet these requirements.
- Note in 2024 the Commission will also provide advice to set the fourth emissions budget (2036-2040), including any recommendations to revise existing notified emissions budgets and review the inclusion of international aviation and shipping emissions in the legislated 2050 target.

# The Commission's final advice for ERP 2 provides recommendations on the policy direction for transport, building on its 2021 advice

- The Commission's final advice for the ERP 2 builds on its 2021 report titled *Ināia tonu nei: a low emissions future for Aotearoa* which recommended the levels of the first three emissions budgets and the direction on the polices and strategies needed for key sectors, including transport, to meet the first emissions budget.
- The 2021 advice outlined opportunities to decarbonise transport by 2050 by investing in infrastructure and systems, encouraging people to choose different ways of travelling, and adopting available technologies. It also recommended three focus areas for transport: reducing reliance on cars; rapidly adopting electric vehicles; and beginning work to decarbonise heavy transport and freight.
- The Commission published its draft advice on the policy direction for ERP 2 on 26 April 2023 and undertook consultation until 20 June 2023. The final advice was publicly released on 12 December 2023, and highlights where and why the advice was amended to respond to consultation feedback.
- 9 The 2023 advice includes key recommendations which, in the Commission's view, identify critical gaps in action, as well as existing actions that urgently need to be strengthened and accelerated.
- Within the transport chapter of the advice, the Commission has outlined barriers and opportunities for reducing emissions across four areas:
  - 10.1 increasing walking, cycling, and public transport;
  - 10.2 decarbonising the light vehicle fleet;
  - 10.3 decarbonising freight, commercial, and offroad vehicles; and
  - 10.4 preparing now to enable future decarbonisation of aviation.
- 11 Their recommendations for the policy direction for transport in the ERP 2 are as follows.
  - 11.1 **Recommendation 22:** Simplify planning and increase investment in integrated transport infrastructure and services that optimise public and active transport.
  - 11.2 **Recommendation 23:** Provide dedicated long-term funding for the construction of integrated cycle and rapid transport networks in major population centres.
  - 14.3 **Recommendation 24:** Rapidly upscale vehicle charging infrastructure, including removing existing barriers.
  - 11.4 **Recommendation 25:** Accelerate the uptake of zero emissions commercial vehicles, including vans, utes, trucks and offroad vehicles.
- The Commission's advice on the built environment, and energy and industry are also relevant for transport. Relevant recommendations include the following.

- 12.1 **Recommendation 13:** Ensure planning systems are integrated and support building urban areas upward and mixing uses in order to reduce emissions, while decreasing susceptibility to climate-related risks.
- 12.2 **Recommendation 19:** Prioritise and accelerate renewable electricity generation build and ensure electricity networks can support growth and variability of demand and supply.
- 13 **Annex 1** sets out the key recommendations for transport in full and our initial response.
- 14 Beyond these recommendations, the report also outlines other areas of policy direction relevant for transport to consider. These are summarised in Annex 2.

## We will support you to consider the Commission's advice as you make decisions on the transport content for ERP 2

- As ERP 2 is developed, Ministers will need to consider the Commission's advice. 15 Work on ERP 2 is being led by the Ministry for the Environment (MfE) and has already begun. We are working closely with MfE, as well as officials working in the energy and built environment sectors, to develop the transport content for ERP 2.
- In February 2024 we will provide you with advice to support you to make initial 16 decisions on the transport content for ERP 2 consultation draft, which take into consideration the Commission's advice.



You will also need to make decisions, in consultation with colleagues, about the relative contribution transport is expected to make to emissions reduction targets

- Sub-sector targets, unlike the emissions budgets, are not legislated and are at the discretion of the Government. Ministers will need to ensure that the overall package of Government policies is sufficient to meet emissions budgets. Through the ERP 2 process Ministers will determine how much each sector will contribute to this goal.
- The Commission has identified transport as a sector with the potential to make large reductions relative to other sectors, whilst delivering other benefits.
- The Commission's 2021 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. The previous Government adopted these as the subsector targets to enable sectors to track progress and manage 'unders and overs' between sectors while staying on track to meet the overall target.
- As shown in the diagram below there is a considerable jump 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.



Source: 2023 Advice on the direction of policy for the Government's second emissions reduction plan

# Decisions that you make on other matters in your transport portfolio will be relevant for ERP 2

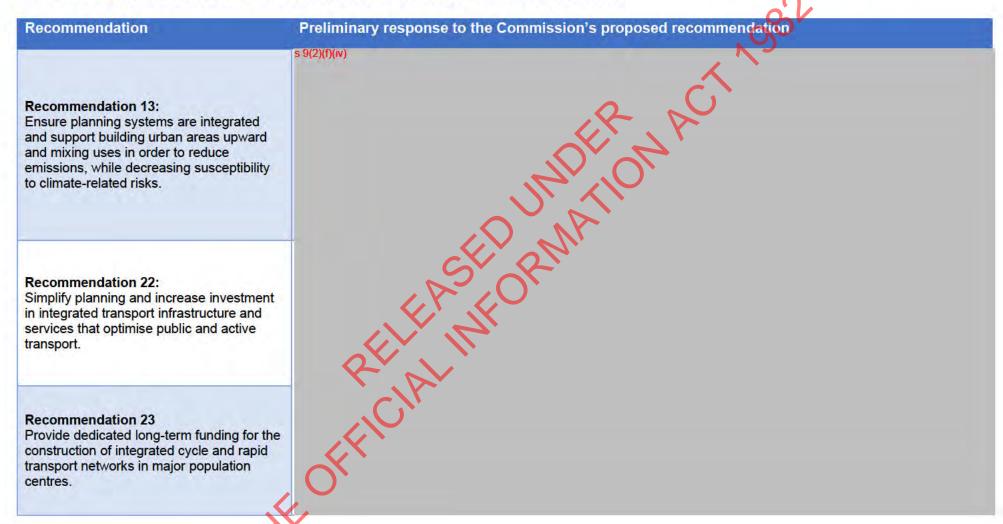
- In addition to advice focussed specifically on the development of ERP 2, many other areas of your portfolio are relevant to ERP 2 and the Commission's advice. For example, the Government Policy Statement on land transport and the decisions you take on existing programmes in the Climate Emergency Response Fund.
- We will provide you with information on the emissions implications of these decisions to support your decision making.



#### **Next steps**

We intend to brief you on the possible direction of the transport content for ERP 2 in February 2024, prior to cross Ministerial discussions leading up to public consultation in mid-2024. We welcome any direction you would like us to take for this initial advice.

# ANNEX 1 – CLIMATE CHANGE COMMISSION'S FINAL ADVICE ON THE DIRECTION OF THE SECOND EMISSIONS REDUCTION PLAN: TRANSPORT RECOMMENDATIONS



#### Recommendation 24:

Rapidly upscale vehicle charging infrastructure, including removing existing barriers.

#### Recommendation 25:

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RELEASED INDERNACT 1982
RELEASED INDERNACT 1982 Accelerate the uptake of zero emissions commercial vehicles, including vans, utes, trucks and offroad vehicles.

## IN CONFIDENCE

## ANNEX 2 - SUMMARISED POLICY DIRECTION FOR TRANSPORT

The following is a summary of the key messages for transport to consider which are contained within the '2023 Advice on the direction of policy for the Government's second emissions reduction plan'.

Chapter Section	Key messages
Chapter 5: Emissions pricing	<ul> <li>Transport is impacted by emissions pricing from the New Zealand Emissions Trading Scheme, but this is seen as insufficient on its own to substantially grow rates of walking, cycling and public transport.</li> </ul>
Chapter 11: Built Environment	<ul> <li>The way cities and town are shaped impacts emissions across transport and other sectors. To improve emissions reduction potential, transport and development projects for an urban area should be implemented in an integrated way.</li> <li>While infrastructure is part of the solution when reducing emissions, it also produces and enables emissions.</li> </ul>
Chapter 13: Energy and Industry	<ul> <li>Electrifying transport (and heat) are some of the greatest opportunities to reduce emissions and will contribute substantially to growth in demand. Electricity generation, transmission, and distribution infrastructure will likely need to be improved to manage this increased demand.</li> </ul>
Chapter 15: Transport	<ul> <li>International research has shown that highway spend is associated with induced demand for private vehicle use and creates higher emissions.</li> <li>Public investment in transport infrastructure can be supplemented by leveraging private funding.</li> <li>Pressure is building on the consenting system, which could impact the realisation of emissions reductions.</li> <li>Inter-regional passenger rail can create low emissions choices to connect major urban centres.</li> <li>Walking, cycling, and public transport can be supported by greater use of shared transport, such as car share services, and enhanced modes such as e-bikes and, to a lesser extent, e-scooters.</li> <li>Targeted support for low income and disadvantaged groups can ensure an equitable transition to a zero-emissions vehicle fleet particularly because supply of second-hand EVs may be constrained in the second emissions budget period.</li> <li>Government support for rail and coastal shipping can support a more resilient freight network and lower emissions.</li> <li>Sustainable decarbonisation for aviation will be achieved through new aircraft types and low emissions fuels. Sustainably sourced biofuels can provide the most benefit when prioritised for aviation, shipping, and other applications that cannot be easily electrified. Regulations will also be required to enable this.</li> </ul>