

Inter-Regional Passenger Rail Departmental Report

Final Report to the Transport and Infrastructure Committee
Inquiry

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Te Kāwanatanga o Aotearoa
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Executive Summary

Introduction

In August 2022, the Transport and Infrastructure Committee (the Committee) announced an inquiry into the future of inter-regional passenger rail in New Zealand. The Committee announced broad terms of reference that sought to gain insight into a range of economic, environmental, and social factors that could help determine the potential viability of new services.

This report provides the Committee with:

- a thematic summary of the submissions received as part of the inquiry, and
- comments by Te Manatū Waka Ministry of Transport (the Ministry) and Te Waihanga New Zealand Infrastructure Commission in response to these submissions.

In response to the inquiry announcement, there were 1752 submissions from members of the public, businesses, community organisations, and councils. Nearly all submitters (97%) supported the rollout of new inter-regional passenger rail services across New Zealand. Where submitters disagreed, their focus was on the cost of establishing and running new services, the risk of low patronage, and the role new and emerging technologies could have on the land transport system.

Key themes

We have grouped the analysis of the submissions into several themes, reflecting the economic, environmental, and social aspects of the terms of reference. These themes are:

- accessibility and equity
- agency roles and responsibilities for inter-regional passenger rail services in the land transport system
- inter--regional passenger rail within the existing strategic settings
- technical investment
- funding approaches
- evaluating existing inter-regional passenger rail services
- proposed inter-regional passenger rail services
- inter-regional passenger rail customer service expectations
- potential transport and regional development benefits, and
- climate change and wider environmental benefits.

Recommendations

Over the last few decades inter-regional passenger transport has been provided commercially via private and public sector entities. Submissions have put forward a range of public benefit outcomes that New Zealanders are seeking from inter-regional public transport. Further work is required to understand and determine what value and outcomes inter-regional passenger rail can provide and the costs of services to then determine the appropriate funding models.

We believe there is an opportunity to explore the following in more detail:

- economic, environmental, and social benefits that new inter-regional passenger rail services could deliver
- value proposition of new services
- level of investment needed to deliver new services (start-up costs, any associated network or infrastructure upgrade costs, and ongoing operational costs)
- trade-offs between investment into potential new services and their costs and other transport investment priorities and their outcomes.

The Ministry acknowledges there is an opportunity to now develop a framework that supports the planning for and provision of inter-regional passenger connections more broadly. We recognise there is the potential for inter-regional passenger rail to play a key role in this framework. The framework can also provide a platform for the Ministry and other transport agencies to work with and support regions more directly in the development of inter-regional passenger travel proposals or in a dedicated coordination function.

Through this framework, inter-regional passenger travel can input directly into the:

- review of the Rail Plan, which will commence in 2024
- development of the next Rail Network Investment Programme
- delivery of Emissions Reduction Plan key actions and targets
- development of future Government Policy Statements on land transport.

Introduction

The Transport and Infrastructure Committee opened an inquiry into the future of inter-regional passenger rail in New Zealand in August 2022. The Committee established terms of reference to help guide public submissions.

Terms of reference

The Committee included the following in the inquiry's terms of reference:

- Investigating possibilities and viability of passenger rail in underserved communities, those with prior rail links that have been disestablished, and those currently advocating for improved rail links
- Gaining insights into viability of passenger rail sitting alongside KiwiRail's freight network
- Evaluating existing inter-regional passenger rail, such as the Capital Connection, and how these services work between local and regional councils and central government
- Gaining insights into the integration of regional rail into existing local public transport networks
- Investigating the climate and emissions reductions possibilities of passenger rail, and how this links to VKT (vehicle kilometres travelled) reduction targets in the Emissions Reduction Plan, and including electrification between regions
- Investigating potential rail expansions and investments in specific areas, such as Tauranga and the lower North Island.

Consultation process

Public consultation began on 29 August 2022, with submissions open for six weeks. To promote public engagement and feedback, the Inquiry released a media statement.

Feedback was received from a range of stakeholders

A total of 1752 submissions were received from a range of stakeholders. Figure 1, below, summarises the total number of submissions received by stakeholder category.

Figure 1 Total Submissions by Stakeholder Categories



The 21 submitters from local government were a mixture of council-controlled organisations, regional and unitary councils, and territorial authorities. Some councils provided a joint submission. The 43 community groups that submitted represented a range of interests including transport, disability, education, health, climate, and sustainability, as well as rural and urban issues. A further 33 submissions were received from businesses and industry peak bodies. 95 per cent (1655) of submissions came from individuals. There were also 33 oral submissions made to the Committee in December 2022.

Te Waihanga New Zealand Infrastructure Commission comments

As part of the development of this report, Te Waihanga has provided its views on some aspects of the themes the report has identified. These views are identified in light grey boxes in each of the relevant sections.

Te Manatū Waka Ministry of Transport Ministry of Transport comments

Like the Te Waihanga comment boxes, the Ministry provides its own comments in response to the themes and other topics which submitters raised. These comment boxes are in each section, either at the end of a topic or at the end of it. They represent Ministry views and are not Government policy.

Section Themes

This section outlines the key themes raised in the submissions received. A more detailed analysis of the themes is provided in the following sections.

The table below outlines the number of comments in total submitters made for each of the section themes.

Table 1 Section themes

| Section Themes | Number of submitters |
|---|----------------------|
| Accessibility and equity | 620 |
| Agency roles and responsibilities for inter-regional passenger rail services in the land transport system | 435 |
| Inter-regional passenger rail within the existing strategic settings | 105 |
| Technical investments | 578 |
| Funding approaches | 502 |
| Evaluating existing inter-regional passenger rail services | 305 |
| Proposed inter-regional passenger rail services | 1280 |
| Inter-regional passenger rail customer service expectations | 821 |
| Potential transport and regional development benefits | 625 |
| Climate change and wider environmental benefits | 818 |

Section 1: Accessibility and equity

A significant number of submitters focus on accessibility and equity in their submissions. There was a broad consensus from submitters that there are barriers creating challenges for people to access private and public transport to travel between regions.

Section 2: Roles and responsibilities for inter-regional passenger rail services in the land transport system

Submitters raised, mainly within the context of inter-regional passenger rail, whether the current institutional arrangements and the organisations with responsibility for passenger and freight services, are organised appropriately to plan, fund and deliver inter-regional passenger rail services in New Zealand.

Section 3: Inter-regional passenger rail with the existing strategic settings

Submitters have diverse views about the level of ambition for inter-regional passenger rail services within existing strategic settings. Almost all submitters believe the current Rail Plan does not provide enough national direction for inter-regional passenger rail services. However, there are different

views from submitters as to how to give stronger strategic direction to inter-regional passenger rail services.

Section 4: Technical investment

Submitters identify a range of technical improvements and investment upgrades to improve service offerings, operational performance, and resilience of the rail network. For submitters, these upgrades would better enable inter-regional passenger rail services alongside freight services. Most of these submissions raise points relating to electrification of the rail network, investment into new rolling stock and network access and utilisation.

Section 5: Funding approaches

Submitters shared a range of views on who should pay for new inter-regional passenger rail services and corresponding rail network upgrades. They also suggest that different funding models should be utilised. Some submitters noted opportunities for partnership approaches between the Crown, councils, and the private sector. While other submitters commented that no funding should be made available to new inter-regional passenger rail services.

Section 6: Evaluating existing inter-regional passenger rail services

Both the Capital Connection and Te Huia received strong support from submitters. There was broad support from submitters for investment in service and network upgrades to improve certainty, regularity, and reliability of existing routes.

Section 7: Proposed new inter-regional passenger rail services

Submitters identified a range of different potential inter-regional passenger rail services across New Zealand. Underpinning these proposed routes were several different benefits that submitters considered including increasing regional economic development and tourism opportunities, reducing transport emissions, and improving access to essential services.

Section 8: Inter-regional passenger rail customer service expectations

A significant number of submitters identified a range of service expectations they would like to see considered in any new inter-regional passenger rail services. These included a range of on-board features and amenities and rail service integration with local transport networks.

Section 9: Potential transport and regional development benefits

Submitters thought that inter-regional passenger rail services offered several transport benefits including supporting road safety outcomes, reduced road network congestion and potential travel time savings (dependent on destination). Many submitters indicated that inter-regional rail services could support regional economic development, including greater opportunities for tourism and regional growth.

Section 10: Climate change and wider environmental opportunities

Just under half of all submitters referenced climate change adaptation and mitigation, highlighting the role passenger rail can play in reducing greenhouse gas emissions and adapting to climate change.

Glossary and Terminology

| Acronym | Definition |
|----------------|---|
| ATAP | Auckland Transport Alignment Project |
| CERF | Climate Emergency Relief Fund |
| ERP | Emissions Reduction Plan |
| GPS | Government Policy Statement on Land Transport |
| LGWM | Let's Get Wellington Moving |
| LTMA | Land Transport Management Act 2002 |
| NLTF | National Land Transport Fund |
| NLTP | National Land Transport Programme |
| PTOM | Public Transport Operating Model |
| Rail Plan | The New Zealand Rail Plan |
| RLTP | Regional Land Transport Plan |
| RPTP | Regional Public Transport Plan |
| RNIP | Rail Network Investment Programme |
| SAF | Sustainable Aviation Fuel |
| SOE Act | State Owned Enterprises Act 1986 |

Background: Investing in New Zealand's Rail System

Over the last five years there has been substantial changes in how rail is funded and planned for in New Zealand. During this time, the Government has committed significant investment into improving the resilience and reliability of the wider rail system. These investments have led to upgrading sections of the rail network and its supporting infrastructure, replacing locomotive and wagons, upgrading maintenance facilities, and investing into the Capital Connection and Te Huia services. Overall, this pipeline of investment has led to improvements for both freight and passenger (inter-regional passenger and metro) services.

Future of Rail Review

Historical revenue shortfall for KiwiRail from its freight and passenger operations and the short-term nature of the funding provided by successive previous governments and other entities has had negative long-term impacts on the rail system. This has proved challenging for the planning the maintenance and renewal of assets; especially assets that require investment decisions to be made on a long-term basis, and often years in advance.

In 2017, the Government initiated the Future of Rail review, which aimed to identify the future role rail could play in New Zealand's transport system. The key outcome of the Future of Rail review was the establishment of a programme of change to support the delivery of the Government's vision for rail as an enabler of economic, social, and environmental benefits for all New Zealanders.

The Future of Rail review identified:

- the current state of the rail network, owned and operated by KiwiRail, faced a state of managed decline due to long-term underinvestment
- short-term funding arrangements for the rail network through the annual Budget process, were inadequate for a long-term network asset
- historically, the outcomes the Crown has been seeking through its freight rail network investment have been unclear. In effect, Crown funding has been used to meet the shortfall between the minimum investment needed to support the rail network and the profits that KiwiRail can generate from its rail operations
- there is a lack of integration between road and rail network investments, which has been a long-standing concern in New Zealand. Rail and road investment utilise different decision-making frameworks making strategic alignment difficult.

The key recommendations from the Future of Rail review included:

- the development of a 10-year investment programme for rail to rehabilitate the rail network and KiwiRail's freight and ferry assets and ensure its is sufficiently resourced to deliver the transport and wider outcomes the Government seeks the establishment of a purpose statement for rail in the form of the New Zealand Rail Plan (the Rail Plan).
- The Rail Plan would set out the Government's 10-year strategic vision for rail, a 10-year programme of indicative investment and benefits, roles, and responsibilities of the

entities involved, funding sources and principles and monitor the performance of rail against the Government objectives.

The New Zealand Rail Plan

The first New Zealand Rail Plan (the Rail Plan) was published in April 2021. Alongside the amendments to the Land Transport Management Act 2002 (LTMA), the Rail Plan is part of the new planning and funding framework for rail investment in New Zealand.

The Rail Plan sets out the Government's 10-year strategic vision for rail, a 10-year programme of indicative investment and benefits, roles and responsibilities of the entities involved, funding sources and principles, and monitor the performance of rail against the Government objectives. Overall, the Rail Plan represents progress from largely ad-hoc annual funding to a more coherent and stable investment model.

The Rail Plan has two parts to its strategic priorities:

- establishing a new long-term planning and funding framework under the LTMA. This sees rail network investment decisions now taken under the LTMA. This will result in the national rail network being planned and funded on a sustainable long-term basis, alongside the rest of the land transport system, including the road and public transport networks. These amendments were passed in December 2020.
- strategic investment priorities for a resilient and reliable rail network: investing in the national rail network to restore rail freight and provide a platform for future investments for growth and investing in the metropolitan rail networks to support growth and productivity in our largest cities. Underpinning this is an emphasis on a pipeline of investment that provides a platform to investment in the critical renewals and asset replacements that is needed after long periods of underinvestment.

The Rail Plan outlines the investment into inter-regional passenger rail services the Government is making. Through the New Zealand Upgrade Programme, the Government is spending \$15 million to replace the existing Capital Connection carriages with refurbished ones. The Rail Plan also identifies the investment into the Te Huia service trial and its importance in connecting communities along the rail corridor between the Waikato and Auckland. Te Huia is the first new inter-regional passenger service for several decades. It also signals that further investment into inter-regional passenger rail is possible between other fast-growing cities.

Rail Network Investment Programme

KiwiRail released the first Rail Network Investment Programme (RNIP) in 2021. The RNIP sets out a three-year investment programme and a 10-year investment forecast for the national rail network. The programme is guided by the Rail Plan and the Government Policy Statement on Land Transport 2021. An updated version of the RNIP is proposed for release in mid 2024.

Figure 2 The existing national rail network



Figure 3 Funding system for land transport

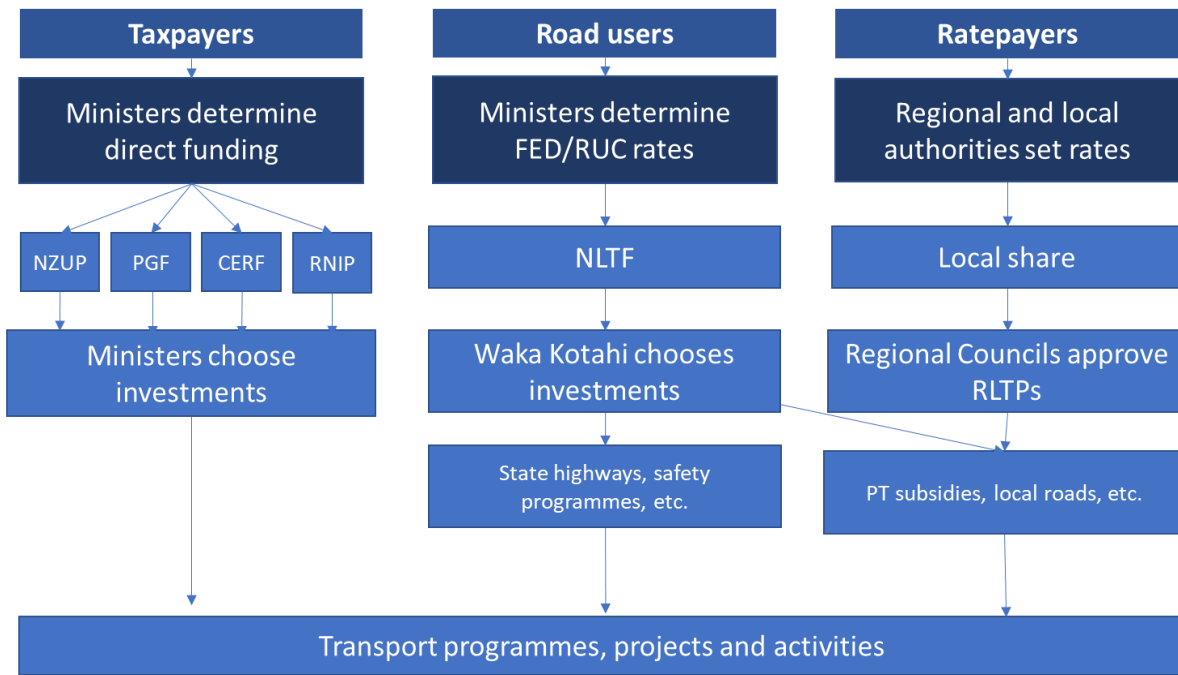
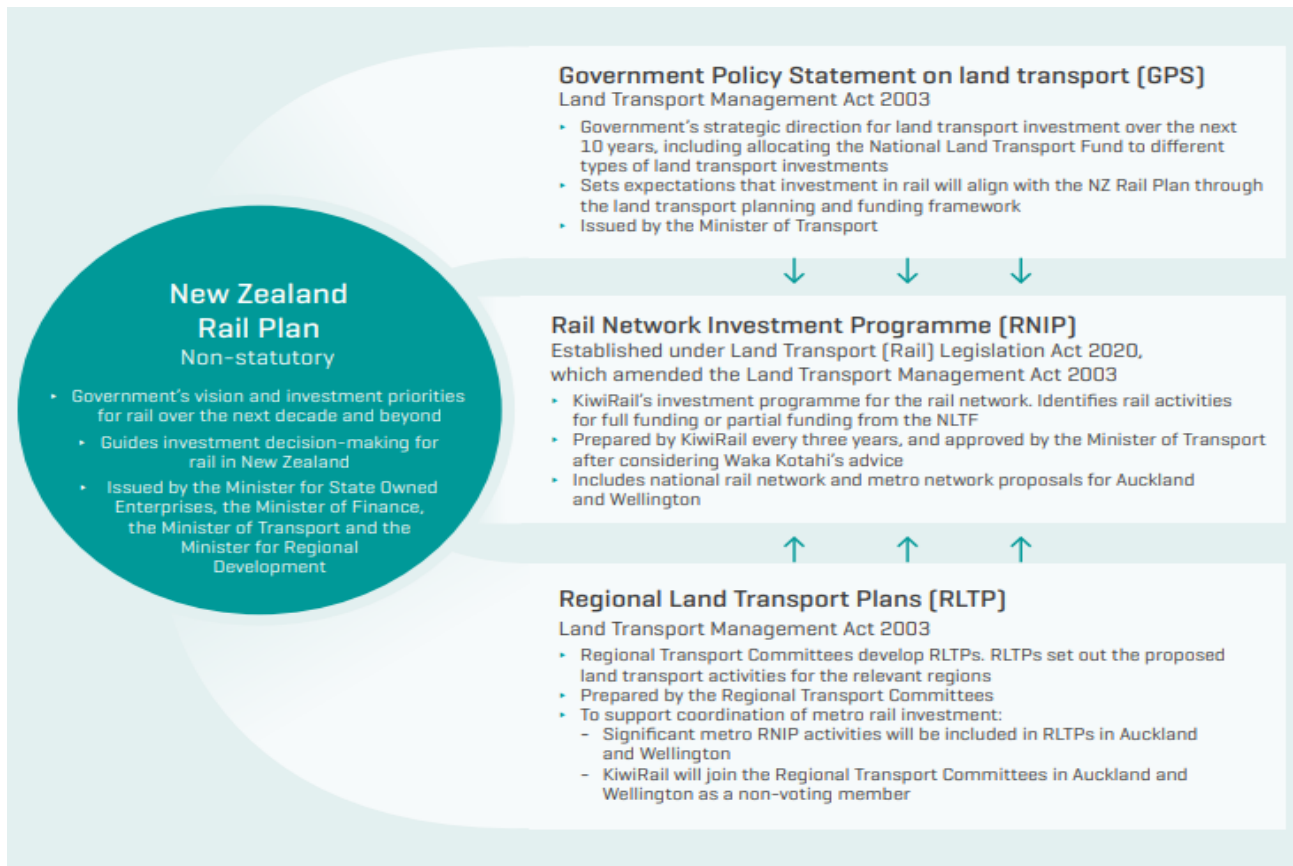


Figure 4 Planning and funding framework for rail



Section 1: Accessibility and equity

Adequate access to transport is a constraint faced by many individuals and under-served communities in New Zealand. Access issues hinder the ability of businesses, individuals, and communities to reach essential services, participate in economic and labour markets, and to connect with friends and whānau. Submitters were asked about the possibilities and viability of passenger rail in under-served communities, those with prior rail links that had been disestablished, and those currently advocating for improved rail links. 620 submitters responded, with many suggesting that inter-regional rail can play an important role in improving accessibility and bettering equity outcomes across the transport system.

Cost and Affordability

Many submitters emphasised that if inter-regional passenger rail services are to be a viable transport option for New Zealanders, they must have affordable fares. This is to ensure services are accessible and equitable to New Zealanders and high fares does not act as a barrier to uptake.

Submitters believe the current fare structure for existing inter-regional passenger rail services is too expensive for inter-regional rail to be a realistic mode of transport for many would-be users. Submitters acknowledged that while the KiwiRail Northern Explorer, Coastal Pacific and TranzAlpine are marketed for international tourists, they are set at a price point that is not affordable for many New Zealanders. For the Capital Connection, the cost of the fare (\$35 from Palmerston North to Wellington each way without the current 50% off public transport fare subsidy) is also seen as too expensive by submitters and therefore detracts from potential service users.

In addition, submitters identify the cost of other modes of transport can act as a barrier to many New Zealanders travelling inter-regionally. They note the upfront cost of private vehicle ownership, including fixed costs (such as a registration and warrant of fitness), and variable costs like repairs and parking. These comments were often discussed with reference to the lack of affordable and reliable inter-regional public transport in the regions. For many submitters, they acknowledge when trying to travel between regions (and in some cases, intra-regionally) there is little alternative to commercial coach services, flying, or using a private vehicle.

Submissions highlight that some groups were more likely to be impacted by high costs associated with car-ownership, particularly those with lower-incomes. Submissions emphasised can results in an exacerbation of wealth disparities, reduced access to opportunities for employment and education, and access to essential services and amenities. In her submission, Ingrid Mulder states:

“New Zealand’s reliance on private vehicle transport increases inequities in transport and health. Most people have no choice but to use cars even if they can ill afford to buy, fuel, and maintain a vehicle. Low-income households are more likely to face transport disadvantages than others in the population because they often live in car-reliant areas (e.g., on the fringes of cities and in rural areas) and have higher and longer daily travel costs, which perpetuates a cycle of inequity.”

Private sector bus or coach services were considered by submitters to be more affordable than driving or flying, depending on the length of a journey. However, many submitters highlighted that the drawbacks of inter-regional bus-services, such as infrequent services, long journey times, limited accessibility, and little space to store cargo or for passengers to move around with ease. Submitters also suggested that private coaches did not service all regions equally, meaning some missed out.

Airfares were highlighted as being expensive for individuals and families travelling domestically. Furthermore, while flights themselves were considered time efficient, for many regional passengers, there could be multiple flights with lengthy layovers, and an additional burden of navigating the cost of travelling to the airport, car parking, etc. Submitters find that while there were parts of New Zealand that they wished to travel to, the lack of affordable inter-regional transport options meant that travel was usually taken by private vehicle, and closer to home.

Submitters also view cost as a barrier to making their preferred transport choices. For example, submitters felt that they have little choice to travel for employment, education, health, and domestic tourism by any mode but private vehicles or flying, even though they would prefer rail. Simon Edmunds in his submission argued this point, saying:

“an efficient connected and affordable rail service would provide fairness to allow access to transport for all, re invigorating these smaller towns and, importantly, help make it possible to reach our goals of reducing carbon emissions by making it easier to travel without driving cars.”

Submitters recognise that a bike/scooter, private vehicle, shuttle, or bus trips may still be necessary to connect travellers to an inter-regional passenger rail service (e.g., a bus from a suburban street to a train station). Submitters recommend the cost of a journey from end-to-end should be as affordable as possible, so travellers are not faced with additional cost barriers when trying to access inter-regional passenger rail services.

Geographical Barriers

Submitters, particularly those who identified themselves as belonging to rural or regional communities, identify that social isolation is exacerbated by the lack of viable public transport options in and out of their region. These submitters suggest that the more remote their place of residence is, the harder it is to travel to another region using public transport and therefore they must rely on a private vehicle.

Regional and rural submitters were especially concerned about the impact that geographical isolation has on communities that are not well connected to others. This was considered in comparison to levels of rail coverage that had previously existed in a region, especially where tracks had been mothballed and are no longer in use. These submissions highlight that some rural and regional communities face access barriers to inter-regional travel, especially where road journeys are unappealing, commercial coach services do not operate and flights are unaffordable. Others commented on a need for regions to be better ‘joined-up’ and enable shared economic, cultural, and social opportunities. Southland Interagency Forum wrote in their submission:

“people living in small town Southland find it difficult to get to medical, financial, personal assistance/appointment/advice due to the ‘tyranny of distance’ and the lack of connectivity across the province. With the loss of the local train service, particularly when it is no longer replaced by a bus service, unless one has access to a car or even a driver’s licence, isolation becomes a very real factor in the lives of people in small communities.”

Many submitters see inter-regional passenger rail services as a means of reducing social isolation, particularly, as it can help rural communities by increasing opportunities to travel for a wide range of reasons, including for jobs, education, and health appointments. Other submitters emphasised the social benefits of being able to connect with friends and whanau and attend events more easily in nearby cities like Auckland, Dunedin, and Christchurch.

Disability, Mobility and Age Barriers

There is strong consensus from submitters that there is the potential for new inter-regional passenger rail services to improve accessibility for those who cannot drive due to age or disability. Many submitters spoke of their own experience of trying to navigate the public transport system as an older and/or disabled person, or on behalf of community members with a disability, age and/or mobility issues. These submitters highlighted the many challenges disabled, younger and older people experience when trying to use public transport, noting that these issues will likely be exacerbated as more tourists visit New Zealand and our population grows and ages (as currently projected).

Elyse Dawson noted the following in her submission: *“currently 1 in 4 New Zealanders have an impairment of some sort.”* Dawson used the findings of *Tourism for All NZ* from their 2015 research paper, *Stakeholder Perspectives of the Future of Accessible Tourism in New Zealand*, to argue that the percentage of individuals experiencing an impairment will increase as the population ages and therefore, more accessible transport is necessary to accommodate this growth, as well as enabling a more inclusive transport system for individuals visiting New Zealand.

Many submitters note potential new inter-regional passenger rail services could allow people, particularly older people, youths and individuals with a disability, greater independence, and more freedom of choice in how they travel. For example, Claire Thornton noted in her submission:

“it [rail] is a tool to minimise inequality. It allows efficient transport for those who cannot afford a car, or those who due to age or disability have no way of using a car such as myself. I have developed epilepsy and am no longer permitted to drive on the road.”

Of the submitters who spoke of accessibility barriers, several discussed the difficulties they encounter in trying to access buses and airports. Many noted that these services are not well set-up to cater to disabled or mobility impaired individuals, and that this can reduce the ability for these individuals to navigate these transport modes, independently.

The Disabled Persons Assembly wrote:

“re-establishing an accessible and affordable interregional passenger rail service would, for example, take pressure off disabled people whose impairments mean that they have limited energy levels. It would also mean (when compared with air travel) less risk that the essential mobility equipment of disabled people would be damaged while on route.”

There was strong feedback from submitters that there needs to be more focus on universal design choices to ensure existing train stations, nearby footpaths, drop off areas, and rolling stock are accessible to all. For a lot of submitters, who discuss accessibility, they acknowledge most existing public transport platforms are partially or largely inaccessible to mobility-impaired and disabled people, which is especially accentuated within the inter-regional travel context.

Furthermore, a few submitters highlighted the importance of disability or accessibility related services or equipment to enable more people to access public transport services. Submitters, like Gaylene Pepper, support a greater focus on ensuring any new services have station facilities that enable universal access to the train, including the appropriate equipment or support services. Submitters also suggested that many disabled people do not have access to private vehicles because they cannot drive for various reasons, i.e., cost or lack of access to vehicle modifications, or for impairment related reasons. For those disabled people who do own a vehicle (as well as their wider support network of friends and whānau who may be called upon to help) inter-regional travel can create further financial, time or psychological challenges on these individuals, or others around them.

Ministry Comment:

The Ministry is focussing on how to deliver better accessibility and equity outcomes for people using the land transport system. This work focuses on barriers for people accessing transport and how the transport system can ensure that transport modes help to deliver better accessibility, affordability, and inclusivity availability outcomes. These outcomes can help to improve the ability for people to fully engage in social and economic opportunities.

Inclusive access is one of five outcomes outlined in our Transport Outcome Framework. Inclusive access enables all people to participate in society through access to social and economic opportunities such as work, education, and healthcare. To be inclusive, the transport system must be accessible to all people in New Zealand including those with disabilities, low-income earners, and people of different ages, genders, and ethnicities.

This outcome is embedded into the GPS 2021, under the 'Better Travel Options' strategic priority. Delivering better transport options with inclusive access is highlighted as having co-benefits, such as increasing economic prosperity, resilience, and security, contributing to environmental sustainability, and healthy and safe people.

The current GPS includes a commitment to deliver improved access to social and economic opportunities, including public transport modes that are more accessible and increasing the share of travel made by public transport modes by 2031. Methods of delivering on these commitments includes implementing the priorities identified in the Rail Plan and providing a platform for future investment to enable the rail network to respond to growing patronage demands and supporting the Office for Disability Issues' Disability Action Plan's intentions to increase the accessibility of transport.

Furthermore, public transport services have been provided at half price for an extended period to directly help those struggling with cost-of-living pressures. This has included the permanent half price public transport fares to around one million Community Service Card holders from 1 July 2023. Half price fares for the Total Mobility Scheme are to be made permanent from April 1, 2023, and the Ministry has begun scoping a review of the Scheme.

The business case process that Waka Kotahi undertakes helps to ensure there is alignment between the outcomes sought in a business case the priorities set out in the GPS. Through this approach, the business cases should adequately consider accessibility and equity We also acknowledge there are opportunities to place greater emphasis on accessibility and equity outcomes during the business case process for a project.

The funding allocation process that Waka Kotahi undertakes reports on the distributions of benefits and costs, especially where they relate to the needs of the transport disadvantaged.

Further investigation into the viability of inter-regional passenger rail services could help to better measure and evaluate accessibility and equity alongside other benefits of potential services.

Te Waihanga Comment:



Access to transport is critical for equity and wellbeing

Safe and reliable access to infrastructure is fundamental to wellbeing. For people living away from main centres, it can be hard to access employment and specialist social infrastructure, like tertiary education and hospitals. Regional New Zealand will increasingly need rapid, low-cost connections between regions and cities.

Currently, air services to our regions are infrequent and expensive. While road connections do exist, they can be difficult to access for people with disabilities, for those who can't drive or who can't afford to drive.

When we look at the statistics, we see that:

- **Nearly 1 in 4 New Zealanders (23%) has a disability.** However, disability rates are significantly higher in parts of the North Island, namely Taranaki (30%), Northland (29%), Bay of Plenty and Manawatu-Wanganui (27%).
- **More deprived areas have less access to cars.** 22% of those in the most deprived areas have no licence, compared to 7% in the least deprived.
- **Some regions have lower access to cars than others.** Licensing rates are particularly low in in the far north and east coast of the North Island. Access to cars is lower in areas such as Gisborne, Manawatu-Wanganui, and the West Coast.

Better transport links to the regions would be particularly beneficial for people who are less able to use private cars. This reflects the fact that people in regional New Zealand typically have fewer transport options than those in urban areas.

But better links could also be helpful for those who do run private cars, especially those on lower incomes. Purchasing and maintaining a car can be expensive, putting pressure on those with limited budgets. Transport costs typically make up about 15% of household spending.

However, inter-regional rail is just one option for improving links across New Zealand. More work is needed to understand the range of options to improve connections between our regions. This should include lower cost and non-built solutions. For example, digital technology through online services can offer alternatives to hard infrastructure.

Section 2: Agency roles and responsibilities for inter-regional passenger rail services in the land transport system

Nearly 450 submitters, including industry representatives and local government, shared their diverse views on the existing roles and responsibilities in New Zealand's rail system. Their submissions focussed on whether the current institutional arrangements and the organisations with responsibility for passenger and freight services, were organised appropriately to plan, fund and deliver inter-regional passenger rail services in New Zealand.

Challenges in Understanding How Inter-Regional Passenger Rail Fits within the Land Transport System

Several submitters believe the institutional settings across the transport system are not well set up for planning, funding, and delivering inter-regional passenger rail services in New Zealand, and that agency roles and responsibilities were not always clearly defined.

Many submitters suggest the processes for planning and funding regional public transport are clear to understand. However, these submitters said that it was less clear who was responsible for delivering inter-regional public transport services, particularly inter-regional passenger rail services. These comments were often couched within the context of the existing Public Transport Operating Model (PTOM). How submitter's view PTOM typically influenced their views about who owns and operates inter-regional passenger rail.

Submitters believe a key reason for confusion regarding roles and responsibilities for inter-regional public transport is that inter-regional passenger rail services must connect two or more regions, as well as integrating with existing regional public transport services (and possibly alongside state highways). To reinforce this, submitters used the example of different ticketing models run by different agencies across the regions. They also note that there are several stakeholders involved with regional transport planning including local government, Waka Kotahi, and KiwiRail, and these typically differ from one region to the next. Therefore, some submitters are unsure as to who should be responsible for identifying and taking forward an inter-regional passenger rail proposal, and whether the strategic case for a service would be better made at the national level given the need to connect two or more regions.

Submitters note that this confusion is exacerbated by uncertainty about where funding for services should come from. Many submitters suggest that it is unclear whether inter-regional passenger rail would qualify for funding from the NLTF or other sources.

Submitters further question what the process is for councils to make the case for investment given the need to work with neighbouring regions, and query who is responsible for taking a national strategic and funding role for inter-regional passenger rail at a national level (Ministry of Transport, Waka Kotahi or KiwiRail.). Some submitters suggested that a new national entity should be established for inter-regional passenger rail (discussed below). Submitters suggested confusion about where funding for inter-regional rail proposals should come from was further compounded by limited data/evidence on the costs and benefits of inter-regional passenger rail at the local and national level, as well as uncertainties regarding patronage, commuting patterns, and tourism

numbers, noting the effect of COVID-19 on population growth provided greater ambiguity. Victoria University of Wellington Climate Clinic wrote in their submission:

“Rail in Aotearoa is now operated by KiwiRail, a State-Owned Enterprise (SOE), but also has local owners of train stations, train lines, and other associated rail infrastructure. This complicates the rail system at large and has limited the accessibility of rail in Aotearoa by requiring multiple local government, national government, and private organisations and companies to approve plans. Climate Clinic advocates for a nationalised rail system, with local governments remaining represented in an advisory and expertise capacity, rather than an operational one.”

Role of Kiwirail

Submitters also highlight that despite significant publicly owned rail infrastructure already existing between regions, it was unclear what KiwiRail’s role is when it comes to inter-regional passenger rail.

Several submitters focussed on how the principal objectives of the State-Owned Enterprises Act 1986 (SOE Act) underpins the business planning approach of KiwiRail, with a particular reference to being profitable. In practice, for these submitters, this means KiwiRail focuses on commercial outcomes, which submitters note as being primarily KiwiRail freight operations (including the Interislander). The Great Journeys New Zealand (Northern Explorer, Coastal Pacific, and TranzAlpine), which focus on the tourism market, were seen as secondary commercial venture.

This commercial focus gives some submitters a view that despite the environmental, economic, and social benefits inter-regional passenger rail can generate, KiwiRail has not provided enough system leadership to help councils and others to determine the viability of inter-regional passenger rail services. For McInnes Group International:

“Kiwirail is a freight-oriented service rather than a rail passenger service provider. Need to better utilise the rail network for more passenger rail services that target domestic travellers, instead of the focus of KiwiRail on overseas tourists. Within this highly confined and restricted rail passenger outlook, there is little room for the concept of genuine inter-regional rail passenger services outside the North Island commuting corridors.”

Some Submitters Proposed System Reform

On one hand, some submitters suggested that the existing regulatory regime enabled regions to work together to plan and deliver inter-regional passenger rail across New Zealand. Furthermore, the replacement of PTOM with the Sustainable Public Transport Framework could make roles and responsibilities for planning and funding inter-regional passenger rail system clearer. The relevant objectives of the new Framework are:

- for public transport services to support mode-shift from private vehicles, by being integrated, reliable, frequent, accessible, affordable, and safe
- well-used public transport services reduce the environmental and health impacts of land transport, including by reducing reliance on single-occupancy vehicles and by using zero-emissions technology.

In its submission, Infrastructure New Zealand said:

“At the local government level, metro and inter-regional passenger services are required to be included in all relevant Regional Public Transport Plans (RPTPs). Preparation of RPTPs also includes a public consultation phase. The RPTPs provide the public transport content for consideration in the Regional Land Transport Plans under the Land Transport Management Act.”

“This means that all rail infrastructure and service initiatives must have support of the organisations responsible for their planning and funding. It also ensures that services can be integrated and prioritised as part of the planning and funding of regions’ wider public transport services and land transport networks. The proposed Sustainable Public Transport Framework will make the provisions much clearer in relation to inter-regional rail and ensure this integrated approach.”

On the other hand, a significant number of submitters spoke of the need for greater leadership and clarity of roles and responsibilities in the rail system. There are diverse views from submitters, with some suggesting KiwiRail just needs to take a more proactive system leadership role with inter-regional passenger rail. However, some submitters argue for a complete overhaul of the entire land transport system to ensure the full integration of rail (freight and inter-regional and metro passenger services) into the planning, funding, and delivery of the transport network. Submitters believe this overhaul would better align the different transport modes into a one network approach and reduce the risk of competition between modes for funding.

The table below outlines the reforms that submitters proposed in their submissions to improve system leadership and clarity of roles and responsibilities.

Table 2 Proposed reforms by submitters

| Options | National network Provider (responsible for funding, maintaining, and operating the rail network assets, including land) | National provider for rail freight services | Provider for inter-regional passenger rail services (owning rolling stock assets and operating service) | Auckland and Wellington metro rail operator (owning rolling stock assets and operating metro services) |
|------------------------------|--|--|--|---|
| <i>Existing arrangements</i> | <i>KiwiRail</i> | <i>KiwiRail</i> | <i>Councils and KiwiRail in a funding and operating partnership for specific services</i> | <i>Auckland Transport and Metlink</i> |
| 1 | KiwiRail | KiwiRail | New inter-regional passenger rail agency | Auckland Transport and Metlink |
| 2 | KiwiRail | KiwiRail | KiwiRail | Auckland Transport and Metlink |
| 3 | New network provider | KiwiRail | KiwiRail | Auckland Transport and Metlink |
| 4 | New network provider | KiwiRail | New inter-regional passenger rail agency | Auckland Transport and Metlink |
| 5 | New national public transport agency | KiwiRail | New national public transport agency | New national public transport agency |

Ministry Comment:

The Ministry acknowledges that a range of options for leadership of the inter-regional rail system have been suggested by submitters. Regions play a key role in identifying their transport needs and priorities through the existing land transport system processes. However, we do acknowledge that it can be challenging under this system for inter-regional connections to be prioritised and progressed. Despite this, there are good examples of regions working together to advance inter-regional services, such as the Capital Connection and Te Huia. We also believe there is an opportunity for the Ministry and other transport agencies to work with regions on investigating the planning for and provision of inter-regional transport more broadly.

The development of an inter-regional passenger connections framework is one option in advancing this collaboration with regions. The framework could provide guidance to councils on what to consider when developing and progressing proposals, or a dedicated coordination function.

We believe the existing institutional arrangements are appropriate for the near future. The focus over the next few years should be on regions working with the Ministry and transport agencies to determine the viability of any new service. The current arrangements are flexible enough to allow for the development of business cases, and for an agreed service to go through the necessary funding and financing processes.

Te Waihangā Comment:

There is a knowledge gap on the potential for inter-regional passenger rail

Our national rail network has suffered from decades of underinvestment and significant parts of the network are in a state of managed decline. The New Zealand Rail Plan (2021) has two strategic investment priorities: restoring rail freight and metropolitan rail networks. However, it doesn't explain what role inter-regional passenger rail should play.

KiwiRail does currently provide some inter-regional passenger rail services. However, KiwiRail is set up to make investment decisions based on the economic viability of services, rather than whole-of-society costs and benefits. This means that even if a rail service was worth doing from a wider benefits perspective, it still might not happen under current investment criteria.

While Regional Land Transport Plans lay out investment priorities within regions, there isn't a clear process for councils to propose public transport projects that cross regional boundaries.

Because no one is tasked with planning and providing inter-regional rail, **there is a knowledge gap** on the potential for inter-regional passenger rail. It's a bit of a chicken and egg situation – because there is no clear system lead, it means no one has prioritised looking at the potential in this area.

Section 3: Inter-regional passenger rail within the existing strategic settings

Over 100 submitters provided diverse views about the level of ambition for inter-regional passenger rail services within existing strategic settings. Almost all submitters believe the current Rail Plan does not provide enough national direction for inter-regional passenger rail services. However, there are different views from submitters as to how to give stronger strategic direction to inter-regional passenger rail services.

Clearer Direction for Inter-Regional Passenger Rail is Needed in the Rail Plan

Several submitters told us that the New Zealand Rail Plan does not provide sufficient strategic national direction for inter-regional passenger rail services. While submitters support the need to move freight from road to rail, many suggested that the value of moving people out of their private vehicles and aeroplanes onto rail was not given the same weight in the Rail Plan as freight. Some suggested that this was because the strategic case for freight was better understood than the case for inter-regional passenger rail, and that more data and evidence was needed to ensure the Government could adequately evaluate the benefits and costs.

These submitters suggest that this lack of ambition is reflected in the Rail Network Investment Programme (RNIP) too, noting that most of the investment in rail is geared toward rebuilding the network for freight and metro passenger services rather than explicitly for inter-regional passenger services. However, submitters were pleased with the RNIP and its signalling of a pipeline of rail network infrastructure upgrades and noted that these improvements would be an important step to re-establishing the passenger rail network over time. Submitters often coupled their aspiration for greater ambition with the view that Government needs to take a more proactive role in supporting the rollout of inter-regional passenger rail services.

A National Strategy for Inter-Regional Passenger Rail

Some submitters, like Elizabeth Smith, support a national strategy that is solely focussed on inter-regional passenger rail services. For Smith, the strategy needs to be:

“built around concerns for climate action, accessibility, affordability, and economic development. The strategy should include: more routes, more stops, faster trains, affordable fares, integrated transport, electrification, and the necessary regulatory and legislative reform to encourage central and local government to work together to give our communities better, low-carbon public transport options.”

Other submitters saw a strategy as a means of articulating a national vision for all passenger rail and freight services. This approach could help to integrate inter-regional passenger rail into the existing metro rail and wider public transport networks better. It would also help provide direction for the long-term management of freight and passenger services on the rail network.

Reviewing Relevant National Transport Strategies

Submitters spoke of the role of inter-regional rail in the context of their aspirations for a multi-modal public and active transport network. For some submitters, a stronger national strategic approach is

needed for inter-regional public transport. For these submitters, this would mean an integrated mode neutral approach that ensures alignment for local, sub-regional, intra-regional and inter-regional public transport networks. Submitters also suggested this approach could be extended to walking, and cycling networks, to help ensure a one network approach for the wider transport network and its users. Underpinning this would be regional partnerships between regions and Central Government. Submitters saw this approach as ensuring a national lens and direction in delivering public transport across New Zealand.

Comments from a few submitters sought a greater role for inter-regional passenger rail within the LTMA, GPS, Emissions Reduction Plan (ERP), and the Rail Plan. Submitters sought legislative amendments to the LTMA to help ensure better consideration of inter-regional public transport in strategic outcomes and investment decisions. These comments were mostly focussed on needing to prioritise reducing the environmental impacts of using private vehicles.

There was broad strategic consensus from submitters that underpinning these approaches is the need for:

- a greater level of ambition for investment in the rail system, including in rail freight, increasing inter-regional connections and in existing and new metropolitan rail networks. This would be signposted through updated versions of the Rail Plan, ERP, and GPS.
- better utilisation of the rail network for both passenger rail (commuter, inter-regional, and intra-regional) and freight services
- moving away from the commerciality focus of rail and shifting to a more public value perspective
- ensuring the potential wider benefits of new inter-regional passenger rail services are identified and estimated properly.

Strategically Prioritising Metro Networks

Some submitters spoke of the need for planning certainty across the freight sector, and that rebuilding New Zealand's rail capacity would require investment in metropolitan areas as well as inter-regionally. For these submitters, metropolitan rail seemed to be a greater priority given the demand for fast, frequent, and reliable public transport to service large populations in cities such as Wellington and Auckland.

Infrastructure New Zealand, wrote in its submission:

“The New Zealand Rail Plan was released in May 2021 having gone through a public consultation process during its development. This Plan has provided a degree of priority and certainty for the work needed to upgrade the national rail infrastructure which services both freight and passenger services. The NZ Rail Plan, and the infrastructure projects identified within it, has been prioritised and planned on a national basis. It is critical that there is certainty around this pipeline.”

Infrastructure New Zealand adds that:

“Additional initiatives such as new rapid inter-regional passenger rail services need to be assessed in terms of how they compare to the other planned projects, many of which are focussed on the critical reinstatement and upgrade of track and signals across the network.”

Ministry Comment:

The Rail Plan acknowledges a level of ambition for inter-regional passenger rail, but within a narrative of the wider rail network and delivering resilience and reliability improvements. At the time of developing the Rail Plan there was a strong need to address the historical underinvestment in the network. In this respect, the current Rail Plan is a foundational document. There are opportunities for the next version of the Rail Plan to further consider the role of inter-regional passenger rail to determine its economic, environmental, and social value. The Ministry is looking at reviewing the Rail Plan in 2024/25.

While the Ministry recognises the comments made by submitters about a separate inter-regional passenger rail strategy, we believe the Rail Plan is a more suitable document to specify inter-regional passenger rail strategic priorities. This is because of the interconnected relationship that investment often brings for both freight and passenger rail services.

The Ministry acknowledges the comments from submitters about a holistic mode neutral strategy that captures all land transport modes of transport. The New Zealand Transport Strategy (NZTS) of the early 2000s took this approach. Since the last NZTS in 2008, there has been a growing sophistication of the strategic context and priorities of the land transport system. This means that we believe existing strategic frameworks can be better utilised for inter-regional passenger rail rather than creating an entire new strategy, which will have a significant impact on other relevant mode strategies at both Government and council levels.

From a funding perspective, the GPS 24 is currently being developed. Because of Cyclone Gabrielle the indicative priorities signed off by Cabinet last year and released publicly in February, will change. At this stage, we cannot comment on what these changes may look like.

The current land transport planning and investment system has a regional focus. However, it is flexible enough for different regions to choose to work together alongside Waka Kotahi to plan for and deliver projects or programmes through the Regional Land Transport Plan and NLTP processes. There may be opportunities to review how regions work together with Waka Kotahi and KiwiRail to deliver a more efficient approaches to planning and funding these business cases.

The ERP has an action requiring the Ministry of Transport to develop a national public transport strategy. The Ministry is currently progressing work on potential options of how to implement this action. There is an opportunity to ensure that mode neutral inter-regional public transport options are included in these options.

Section 4: Technical investment

Over the last 20 years investment into sections of the wider rail network has delivered tangible benefits with increased passenger rail use in Auckland and Wellington (prior to the COVID-19 pandemic) and growing freight business for KiwiRail. Despite this investment, there are still parts of the network that have had historical underinvestment and a focus on managed decline. 570 submitters identified a range of potential investment opportunities to upgrade the rail network to assist in improving the regularity and reliability of any new inter-regional passenger rail service. Submitters were also asked to provide their views on utilising the existing rail network for inter-regional passenger rail services.

Track Upgrades

Suggestions for potential upgrades to the track network improvements were made by several submitters. These improvements took either a whole of network approach or identified sections of the rail network for improvements.

Proposed track upgrades included:

- track realignments to ease curves, join destinations more directly and reduce the steepness of grades
- double-tracking and the development of passing loops
- extension of track to currently unserved areas and to ensure that interregional rail was integrated with local public transport networks.

Several submitters identify specific upgrades to the rail network. Many submitters suggest that these investments would release additional capacity for more freight and inter-regional passenger rail services along the network. Examples of specific investment to improve capacity include the double tracking of the Kaimai Tunnel and between Waikanae to Palmerston North as well as additional rail lines in Auckland.

Submitters chiefly see track upgrades as a means of:

- enhancing speed on the network
- improving service for passengers
- improving capacity on the network, and particularly ensuring that freight and passenger rail can coexist.

Many submitters comment specifically on the gauge of the tracks as part of their submissions. Some note that internationally trains travel faster on similar gauge. Queensland was specifically noted as having achieved speeds of up to 160 kph on tracks of the same gauge as New Zealand. In general, New Zealand's track gauge was not seen as a barrier to either network speed or investment by submitters.

Several submitters commented on a historical lack of investment into specific parts of the rail network. Submitters, like Dunedin City Council note that:

"There has been continuous under-investment in the Dunedin and greater Otago-Southland rail network, which has resulted in constraints leading to under-utilisation. The DCC submits that the New Zealand Rail

Plan and Rail Network Investment Programme has limited ambition to improve rail outside of the 'Golden Triangle' and lower North Island, with a focus in the Southland and Otago regions on maintaining the existing (low) level of service."

Further Investment into Electrification

Most of the submitters who included technical recommendations in their submissions are in favour of progressing and increasing the electrification of track and the upgrade of stock to take advantage of electrification.

Some submitters express preferences for which parts of the network to prioritise electrification for, while others advocate for full electrification as fast as possible. A few submitters specifically note the international standard of 25 kilovolts and suggested that New Zealand's tracks should be electrified to that standard.

In general, submitters see electrification to reduce New Zealand's carbon emissions, achieve international climate obligations and enhance the environmental benefits of a mode shift to passenger rail from road travel. Further analysis of the environmental benefits of electrification is in Section 10: Climate change and wider environmental benefits.

Some submitters felt that solar or battery-powered trains could be used while undertaking electrification or, in some cases, instead of electrification. While a few submitters recommended dual-voltage stock that could run on Auckland's AC network and Wellington's DC network. Some of these submitters suggested that tri-mode trains would still help rail to decarbonise without the need for costly electrification of the rail lines by using battery technology. WSP noted in its submission:

"Tri-mode trains for regional passenger rail services at a national scale would preclude the need for the long and costly line electrification work envisaged between Wellington and Palmerston North, between Auckland and Hamilton, and towards the Bay of Plenty. The pace of improvements in battery technology, and increased range without charging, could allow these Tri-mode trains to become Dual-mode overhead and battery electric trains by the time they are manufactured. This would mean that a fully electric passenger train service between Auckland and Wellington could be achieved without the high cost of completing electrification of the NIMT lines."

Utilising Existing Rolling Stock as an Interim Solution

Many submitters pointed out that while older rolling stock may not be suitable for passenger rail speed and comfort, it is suitable for re-establishing the service. Some submitters, like Benjamin Love, suggested a rolling stock replacement programme:

"What may need to take place is something like a rolling stock hand me down program. Initially services on main routes begin with existing and old rolling stock. Then new or potentially second-hand diesel or bi-mode (electric and diesel) units then replace the older rolling stock on those lines. The old units are then used to establish new services. Eventually the main routes should be fully electrified, and electric trains will replace the diesel/bi-mode units, which will get passed down."

Some submitters also noted that because most of the rail network already exists in New Zealand, the priority should be in developing an investment programme of upgrading rolling stock for new services. This would further help achieve New Zealand's emissions reduction targets.

Other submitters commented that New Zealand should adopt a national standard for rolling stock selection (e.g., diesel multiple units, bi-mode, or tri-mode units). This is because on a tri-mode unit (TMU), the engine has no mechanical drive and is connected to a generator to power the train; when in electric mode it can be powered from wires overhead directly or the battery which is charged either

from the engine or overhead. Thus, a TMU can run in three modes of power. National standards would allow for New Zealand to use common fleet for efficiency. Anthony Cross notes in his submission

“we can now take advantage of manufacturers from Europe which produce rolling stock for a variety of track gauges, loading gauges and electrification systems, including CAF, the suppliers of Auckland’s EMU trains, and Stadler, the Swiss suppliers of the FLIRT range including the Class 755 bi-mode trains recently introduced on the Anglia network in the East of England. Bi-mode and tri-mode trains which can use overhead line electrification (OLE) where it exists, and battery power or diesel power where it doesn’t, are now standard equipment in Europe.”

Investing in New Rolling Stock

In addition, other submitters recommend that rolling stock purchases need to be versatile enough to enable services to be considered and trialed, so more options are available into the future.

Many submitters noted that due to six-to-eight-year lead in time for rolling stock from order date to delivery, budgets need to be agreed with capital allocated so orders can be placed sooner. Engineering New Zealand further adds:

“A large amount of passenger rolling stock in the country, apart from the electric trains used in Auckland and Wellington, is based on rebuilt 1970s British Rail carriages which will reach end of life in the next 5 years or so. Services will require new rolling stock if investment is to be focused on the medium to long term. Replacement could provide an opportunity to reintroduce railcar-based services, which have more flexibility than locomotive-hauled trains and can be more environmentally friendly. Greater Wellington Regional Council and Horizons Regional Council’s multi-mode train concept for the Wairarapa and Capital Connection services could provide a suitable template for a national fleet of trains for interregional services across New Zealand. However new trains typically take around 5 years to procure and build, so early funding commitment will be required.”

A few submitters consider the development of new rolling stock needs to happen in New Zealand. For example, the Rail and Maritime Transport Union suggests:

“New trains can (and should) be assembled in New Zealand, with high local content for the manufacture of trains. This will flow onto economic and employment opportunities for local businesses.”

Investment into tilting trains were made by several submitters. These submitters suggest that new tilting trains would deliver time savings and provide comfort benefits for passengers when compared to existing rolling stock in use. Many submitters who suggested investigating the technology for tilt-trains argued that all level crossings need to be removed to prioritise safety by keeping reducing potential points where motor vehicles and trains could meet.

The Viability of the Rail Network for Inter-Regional Passenger Rail Services

Submitters provided a range of comments about the viability of the rail network for passenger services alongside the freight services run by KiwiRail. Overall, submitters thought that there were opportunities to maximise the optimisation of the existing rail network with new inter-regional passenger services. There was also an acknowledgment by submitters that there may be a range of infrastructure upgrades needed to ensure network optimisation.

Many submitters express a view the existing rail network has capacity for the introduction of inter-regional rail passenger services. Submitters suggest investment into rail infrastructure that seeks to:

- ensure the viability of any new rail passenger services over the long-term

- reduce the risk of competition with new and additional KiwiRail freight services
- futureproof the rail network for capacity and resilience reasons.

To ensure the maximisation of benefits from this investment, submitters like ARUP support the development of a cohesive freight and passenger rail strategy that seeks to address travel times, frequency, reliability of services, as well as the customer experience. They further emphasise that investment should not favour freight or passenger rail at the expense of the other.

Submitters identified potential investment examples such as double-tracking, electrification, and line upgrades. These submitters acknowledge the potential cost of these investments, but also note that investment into the rail network benefits not just inter-regional rail, but also can deliver additional benefits for freight services. For submitters like Nicola Vance:

“strongly in favour of expanding passenger rail services between centres, we should be encouraging inter-city/regional travel via the rail network. Invest in rail infrastructure that allows both freight and passenger rail, it shouldn't be a choice of one or the other - both freight and private vehicles co-exist on the road network, thus it should be possible for freight and scheduled services to do the same on the rail network.”

Regarding rail network investment to improve the viability of future inter-regional passenger services, WSP noted in its submission:

“freight movement and passenger travel can be accommodated with modest levels of investment – separation of services may only be desirable in a long-term future, for increased services or faster trains. Network constraints exist primarily towards urban centres (Auckland and Wellington) and will be released by initiatives being planned now. These rail network developments will increase the viability of regional rail to function alongside with freight services and will improve the accessibility of city centres to future regional rail services.”

Submitters further believe this investment will deliver the following benefits for inter-regional passenger and freight services:

- ensure a better management of competing demands between inter-regional passenger services and freight,
- provide service time savings
- increase network reliability and regularity of services.

Some submitters suggest that the cost of network upgrades may offset the benefits of investment. Tunnel widening to enable double tracking is seen as a challenge by some submitters, especially when they note that zero emissions planes may be a better alternative in the long-term.

Ministry Comment:

Outside the busy Auckland and Wellington metropolitan rail networks, there is significant capacity available across the national rail network to provide inter-regional passenger rail services.

However, starting up new services is still likely to require some of capital investment in the network to provide for passenger services, this might be in passing loops or in some instances double tracking to allow freight and passenger services to co-exist. There is also likely investment required in platforms and stations to enable passenger services.

The exact investment required depends on the route that is proposed and would need to be considered on a case-by-case basis. For example, this was demonstrated in the development of the Te Huia start-up service. Getting the service up and running required investment into refurbishing rolling stock and minor upgrades to Frankton Station

We note that the Emissions Reduction Plan has the targets to reduce emissions from freight transport by 35% by 2035 and to reduce the emissions intensity of transport fuel by 10% by 2035. For rail there are different ways of achieving these targets. The Ministry believes it would be beneficial to explore the costs versus benefits of electrification and other options, like tri-brid technologies that the publicly available Lower North Island Integrated Mobility business case is proposing and is seen in other international jurisdictions, to ascertain the best solutions for a New Zealand context.

Te Waihanga Comment:

Make best use of the existing system before building new infrastructure.

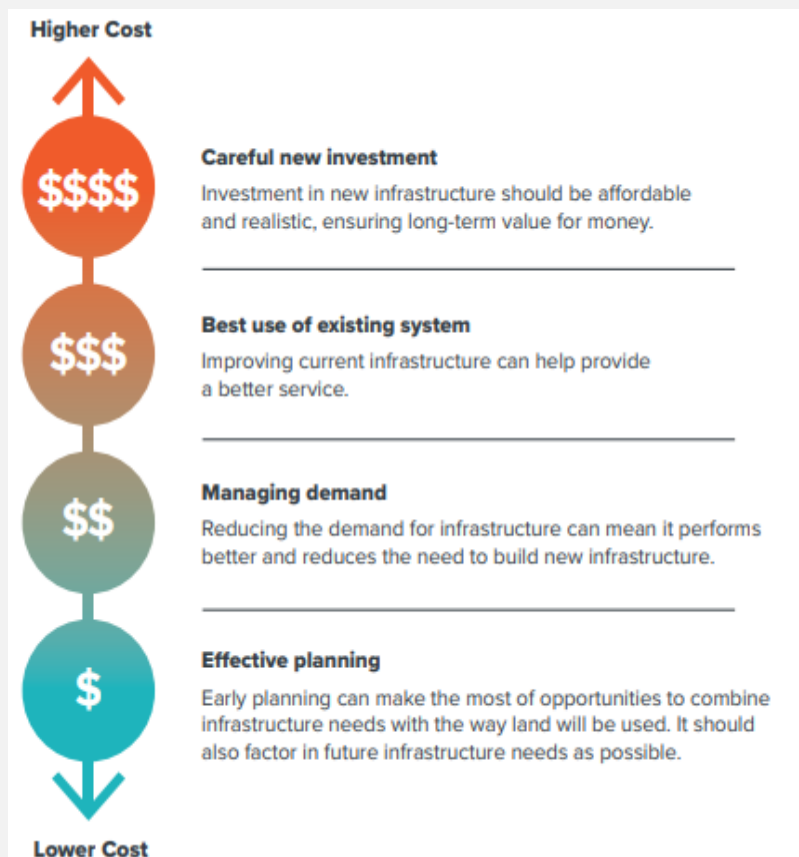
When choosing whether and how to invest, it's important to **consider the full range of alternatives rather than prematurely focusing on a single infrastructure-based solution**. Identifying and prioritising non-built solutions to infrastructure challenges will increase the value of infrastructure and improve outcomes for communities.

Infrastructure planning should consider options that don't involve building new infrastructure. Options to look at include effective planning, demand management, and improvements to existing infrastructure.

In the context of inter-regional passenger rail, which translates into making the **best use of the existing rail network where there are good opportunities to do so**, before looking at costly new investments. It also means we should look at the full range of options available to achieve our goals, before committing to a single option.

This doesn't mean we shouldn't build new rail infrastructure – it just means we should try to make the most of the infrastructure we already have before moving to new investment.

Decision-making hierarchy for investment



Section 5: Funding approaches

Just over 500 submitters provided views on who should pay for new inter-regional passenger rail services and associated rail network upgrades. Submitters noted opportunities for partnership approaches between the Crown, councils, and the private sector. They also provide examples of potential funding models that could be utilised.

Funding Partnership Agreements

Funding partnership agreements between councils and the Government were suggested by submitters. The partnerships would co-fund new trains and network upgrades. Some submitters emphasised that KiwiRail and Waka Kotahi need to be active and collaborative partners in these proposed partnerships. Several submitters also linked funding to governance and operating models.

These agreements would be a relatively new concept within an inter-regional passenger rail context. Where regional passenger rail services were not commercial, other relevant public bodies, such as councils have been encouraged to use their own funding for such services, partly on the basis that the services would benefit their communities. There are historical examples of the Government and councils working in partnership to fund metro rail and freight upgrades using an “above” and “below” track model, in effect co-funding specific parts of the upgrade.

Views of the role of the private sector in any new inter-regional passenger rail services were mixed. Some submitters saw opportunities of working with private sector entities. Their comments largely focussed on potential opportunities to utilise these entities for co-funding and operating services. However, many submitters were against private sector involvement, with some noting the issues associated with previous privatisation of rail in the 1990s as their rationale.

Funding Tools

Submitters identified several tools to assist in funding the start up and operation of new inter-regional passenger rail services. There was broad consensus from submitters these tools were needed to also fund investment into rail network upgrades to support new inter-regional passenger rail services.

Table 3 Proposed funding tool and their rationale, as suggested by submitters

| Proposed funding tools | Submitter rationale |
|------------------------|---|
| Farebox revenues | Several submitters identified there needs to be a balance between farebox revenue to offset operational costs and ticket affordability to attract people to use a service. Submitters commented that Waka Kotahi should reduce the focus on the fare-box recovery policy to attract patronage on a new service. |
| General taxation | There was strong support from submitters for the Government to significantly investment additional funding into rail. This investment was categorised into subsidising the cost of fares and more general investment into new rolling stock and network upgrades. Most of these submitters supported some type of Government subsidisation of passenger rail because they saw it as public good with the ability to deliver a wide range of environmental, economic, and social benefits. |

| | |
|------------------------------|---|
| Rates | There were suggestions from submitters that council rates should be used to help fund new inter-regional passenger rail services. Some of these submitters also identified the Government as needing to assist the councils in funding any new services. |
| Value uplift capture | Some submitters identified value uplift capture mechanisms to ensure those who benefit from being able to easily access any new services and upgraded train stations pay their fair share. |
| National Land Transport Fund | There was some support from submitters for increasing Fuel Excise Duty, Road User Charges, and Motor Vehicle Registration. Submitters saw this as a means for incentivising mode shift and reducing emissions. Other submitters supported moving funding from new roads to public transport, particularly to investment into inter-regional passenger rail. |
| Aviation fuel taxation | Submitters considered that the Government should explore the feasibility of a tax on all aviation fuel. Underpinning this was a strong sentiment from submitters that the aviation sector needs to pay more in offsetting the cost of carbon emissions. These submitters also saw an aviation tax to incentivise mode transfer to inter-regional passenger services and to help fund their operation. |

Other funding tools included targeted rates from Transit Oriented Development at key stations, utilising the Climate Emergency Response Fund, exploring the feasibility of community-based funding partnerships, and having inter-regional passenger rail as a product of development corporations. Instead of owning the trains, some submitters commented that the United Kingdom model of wet leasing ex rolling stock from manufacturers could be a cost-effective funding solution.

Alternative Projects/Programmes to Fund

Several submitters identified the cost of rail services as being expensive, both in terms of initial capital investment into trains and network upgrades, but also ongoing servicing and maintenance costs. Infrastructure New Zealand noted in its submission that:

“Cost effective alternatives to rail should be consider such as improved affordable inter-regional coach services. Electric and hydrogen for inter-city coach services would offer similar benefits but with less capital investment required.”

Infrastructure New Zealand also supports prioritising investing into the Auckland and Wellington metro rail networks and addressing deferred maintenance across the network. It suggests:

“Right now, INZ does not consider that New Zealand should divert its focus to developing further inter-regional passenger services trips while we have seriously substandard rail infrastructure in both our largest city and our capital city.”

Other submitters emphasised the benefits of investing in the wider rail network to increase the capacity of the network to manage freight services and to remove freight off the road. While submitters like the National Road Carriers Association and Tauranga Business Chamber emphasised the role of emerging zero emissions aviation technology for domestic flights instead of inter-regional passenger rail.

Ministry Comment:

Over the last few decades inter-regional passenger transport has been provided commercially via private and public sector entities. Submissions have put forward a range of public benefit outcomes that New Zealanders are seeking from inter-regional public transport. Further work is required to understand and determine what value and outcomes inter-regional passenger rail can provide and the costs of services to help determine the appropriate funding models.

The transport system is funded from a range of sources. Often the funding source for projects or systems is driven from the outcomes being sought:

- the National Land Transport Fund – contributes to the purpose of the LTMA
- ticket fare revenue – which often represents what is a private benefit to an individual
- council rates – to support regional benefits and outcomes
- development and financial contributions – to recover the costs of planned development from private developers and individuals, or to address the direct impacts of a particular development
- CERF – to enable outcomes that result in reduced emissions
- Crown funding – defined by and allocated by the Government of the day.

There are several factors the Ministry considers when developing advice on funding models for a particular project or system. We note one source that can be drawn from is the Financing and Funding of Infrastructure guidance from Te Waihangā, which has six principles:

- Those who benefit pay – infrastructure services should be paid for by those benefiting from the services (the benefit principle) or creating a need for the service (the causer principle).
- Intergenerational equity – funding and financing arrangements should reflect the period over which infrastructure assets deliver services and be affordable for current and future generations.
- Transparency – there should be a clear link between the cost to provide infrastructure services and how services are funded. Wherever possible, prices should be service-based and cost-reflective.
- Whole-of-life costing – funding requirements should include the ongoing costs to maintain and operate an infrastructure asset and the cost to renew or dispose of it at the end of its life as well as the up-front cost to construct or purchase it.
- Administratively simple and standardised – administrative costs for both providers and users should be minimised unless there are clear benefits from more complex funding and financing arrangements.
- Policies for majority of cases – funding and financing policies should be written to work for most cases. If needed, alternative or supplementary mechanisms should be added to provide flexibility and ensure fairness.

Amendments to the LTMA now enables the establishment of a new long-term planning and funding framework. This sees rail network investment decisions taken under the LTMA. This is designed to allow the national rail network being planned and funded on a sustainable long-term basis, alongside the rest of the land transport system, including the road and public transport networks.

The Ministry is currently undertaking a substantial work programme on the Future of the Revenue System, which is reviewing the existing funding arrangements for land transport. The review is taking a first principles approach and reviewing the purpose and principles of the revenue system, who should pay, and why, co-funding arrangements with local government, the role of

This is a long-term piece of work that seeks to ensure we have a revenue system that is fit for purpose for the next 30 plus years. Current Crown funding to rail, occurs via the NLTF for the rail network, and directly to KiwiRail for its commercial assets. Track user charges also ensure rail users contribute to the NLTF.

As part of the Auckland Light Rail project, the Government signalled an interest in using value capture as part of the funding package. The Ministry is currently exploring different approaches to value capture to further advise the Government of their appropriateness. Further work would be needed to determine the feasibility of value capture to help fund new inter-regional passenger rail services.

The Ministry notes that domestic aviation is subject to the Emissions Trading Scheme and in international aviation, there is the Carbon Offsetting and Reduction Scheme for International Aviation. Both these mechanisms can capture the full cost of carbon emissions.

Overall, these Ministry led changes to the funding of rail are designed to provide greater certainty for KiwiRail, local government and other rail participants to better enable long-term planning and investment in rail.

We also recognise the work currently undertaken through the Future for Local Government review, which is investigating the roles and functions of local government across New Zealand as well as ensuring that local government has sustainable and equitable funding models over the long-term.

Te Waihanganga Comment:

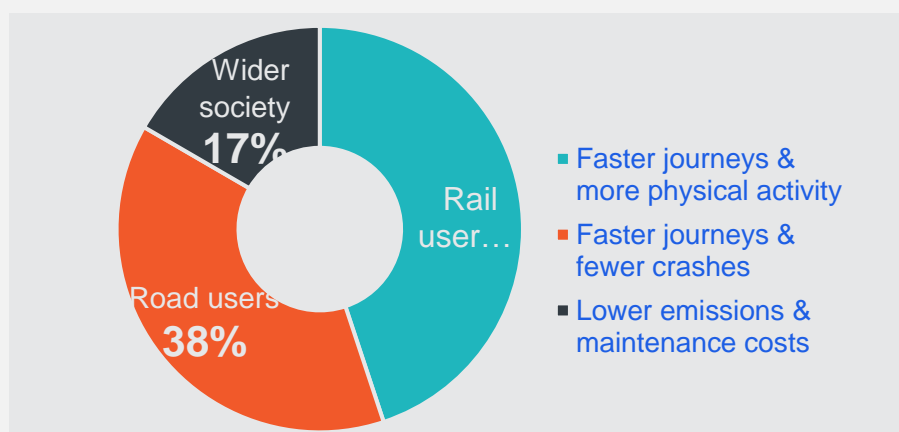


Those who benefit from investments should pay for them

A core principle of best practice infrastructure funding and financing is **those who benefit pay** – those who benefit from a service should be the ones that pay for it.

In the case of inter-regional rail, benefits are usually split across three groups of people: rail passengers, road users, and wider society. Rail passengers benefit from faster journeys, road users benefit from less congestion and crashes on the roads, and wider society benefits from reduced emissions and less road noise.

The chart shows the distribution of benefits in a recent business case for inter-regional passenger rail. As inter-regional rail provides substantial benefits to each of these groups, it would be reasonable to expect that each of these groups should pay for the investment to some extent. Benefits are spread across a wide range of people



Section 6: Evaluating existing inter-regional passenger rail services

Submitters were asked to evaluate the existing inter-regional services (Capital Connection, between Palmerston North and Wellington, and Te Huia, between Hamilton and Auckland). There was broad consensus from submitters on proposed service and technical upgrades to improve the passenger experience. These are outlined below in more detail. Submitters shared with us their views on how councils and central government work together to deliver these services.

Capital Connection

Overall, the Capital Connection has strong support from submitters, with 132 submissions supporting continued investment into the operation of the service. Submitters expressed support for service and network upgrades, which seek to increase confidence in the service by improving its certainty, regularity, and reliability.

Submitters in favour of service upgrades recommended:

- increasing the frequency of services during weekdays and establishing new weekend services
- extending the service to Feilding
- improving the affordability of fares
- investing in rolling stock and upgrading infrastructure.

Many submitters believe the commuter focus of the Capital Connection is too narrow and needs to be broadened to include non-commuter travel on weekdays and weekends. For example, Martin Burr said:

“the Capital Connection and Wairarapa Connection continue to have high patronage despite running on older equipment. The current timetables for these services are aimed at commuters travelling to the larger cities and don’t offer as many options for those travelling the other way or for other travel during the day and at weekends.”

Manawatū District Council commented that there were accessibility and emissions benefits from extending the Capital Connection to start at Feilding instead of Palmerston North:

“while there is an appetite for low carbon emissions transport options, members of the community use their cars or air transport for interregional travel due to the lack of an alternative cost effective and convenient means of transportation. MDC firmly suggests that Feilding station is a stop for passenger rail services commuting to and from the region, for example, the Capital Connection rail service could begin its route from the Feilding station.”

Several other submitters agreed with Manawatū District Council and supported the inclusion of Feilding into the Capital Connection service.

Many submitters noted the cost of Capital Connection fares and the lack of fare subsidisation from Waka Kotahi when compared to local bus services. They emphasised that fare cost is a deterrent to travelling on the Capital Connection and that fare subsidisation could incentivise future patronage growth.

Submitters identified three key necessary technical investments: electrification of the rail network to Levin and potentially beyond, replacing the existing rolling stock with either new hybrid diesel-electric trains or battery electric multiple units (EMUs) and integration of the service into a national ticketing system. For submitters, these improvements would provide more certainty for the public, help deliver more services, and enhance the quality of the journey.

Te Huia

Like the Capital Connection, submitters express strong support for Te Huia. Over 170 submitters outline that they see Te Huia as being more comfortable, convenient, and affordable than other passenger transport options available. Submitters called for the continuation of Te Huia beyond its trial period, due to end in early-2024.

Submitters proposed improvements designed to increase Te Huia's service certainty, regularity, and reliability. These included:

- service extensions to Tauranga and Cambridge
- increasing the number of services each day and implementing new services on Sundays
- better marketing aimed to increase service patronage.

Michal Chudzinski-Pawlowski submitted that there needs to be a greater focus on Te Huia services from Auckland and for non-commuters:

“contrary to the current Te Huia timetable that primarily suits Hamiltonians; there should be a number of services in both directions every day, including weekends and public holidays to accommodate different types of passengers.”

Greater Auckland supported the opinion of Chudzinski-Pawlowski with Te Huia patronage data. They noted that there is a higher use for Te Huia on weekends and during public holidays than during weekdays:

“while the service is focused on commuters, this suggests there is stronger demand for a wider variety of trips and that more services throughout the day and across the week could help in generating more demand.”

Future Opportunities

Submitters, including Greater Wellington Regional Council, Horizons Regional Council and Waikato Regional Council, note the role that Capital Connection and Te Huia services could play in the future urban growth and development of towns and cities along their routes. Their submissions focussed on the ability of these services to reduce emissions and help to enable affordable housing, and wider regional outcomes (e.g., regional economic development, improved transport choices, and social outcomes).

How Councils and Central Government Work Together to Deliver These Services

Most submitters who commented on this suggested that the existing bespoke arrangements for governance and operation of these services have unintended effects.

Some submitters suggested that these bespoke arrangements may be reducing patronage growth and impacting the customer experience of these services. In his submission, Michael Clemens noted that:

“the current model where public transport is planned and contracted by each regional council leads to perverse outcomes for inter-regional public transport. Examples of this are the historically non-subsidised nature of the Capital Connection and the fact that Te Huia doesn’t stop at Pukekohe.”

Submitters also commented that rail services between regions give rise to a range of operational and funding allocation challenges, and regions can have different strategic priorities for the service. Dr André Brett used the Capital Connection and Te Huia as examples of services that have experienced challenges and delays, which have stifled innovation and implementation:

“the Wairarapa Connection is within the boundaries of the Greater Wellington Regional Council and operates five times every weekday despite serving a population much smaller than that served by the Capital Connection, which crosses into Horizons Regional Council and has an inadequate timetable. Te Huia has had to overcome similar difficulties related to co-operation between authorities and provides some valuable lessons for other authorities keen to improve or revive rail.”

Some submitters suggested that the governance and operational structures of these services have historically led decision-makers to focus on short-term funding. This has meant that decisions to fund improved service levels and infrastructure (e.g., new rolling stock) have been delayed or foregone. Submitters also suggested that these arrangements have led to reduced public confidence in the services, especially the reliability of Capital Connection.



TE MANATŪ WAKA
MINISTRY OF TRANSPORT

Ministry Comment:

Both the Capital Connection and Te Huia services are contributing to the strategic priorities for rail set out in the New Zealand Rail Plan. These services are also delivering wider environmental sustainability, healthy and safe people, economic prosperity, inclusive access, and resilience and security benefits.

The Ministry acknowledges that decisions on any service changes to the Capital Connection need to be made by KiwiRail and service co-funders Greater Wellington Regional Council, Horizons Regional Council and Waka Kotahi.

The trial of the Te Huia service is set to end in early-2024. The Ministry will review Te Huia’s future viability following that.

We also note that in 2020 \$211 million was allocated to improve Capital Connection, including track upgrades, safety improvements, and refurbishment of carriages. The first set of refurbished carriages are on track to be completed and come into service in March 2023. The second set of refurbished carriages are expected to come into service in August 2023.

Section 7: Proposed inter-regional passenger rail services

Submitters propose several new inter-regional passenger rail services across New Zealand. Submitters also advocate for intra-rail services either as service extensions or more as new services. Based on the terms of reference, further analysis of submitter feedback on services to and from Tauranga is provided. Submitters also provided their views on the investment appraisal approach for understanding the benefits and costs of new services.

The table below lists the most submitted on services by submitters.

Table 4 Proposed new inter-regional passenger rail services

| Proposed Service | Other locations submitters suggested could be included in the proposed service route | Number of Submitters |
|---|--|--|
| Auckland-Whangārei | Helensville and Wellsford | 37 |
| Auckland-Tauranga | Hamilton, Katikati, Ōmokoroa, Mount Maunganui, Papamoa, and Te Puke | 155 |
| Auckland-Hamilton | Pōkeno, Huntly and Ngāruawāhia | 101 |
| Auckland-Wellington (including overnight service) | Hamilton, Pōkeno, Te Kuiti, Taumarunui, Ōhakune, Marton, Feilding and Levin | 170 (included are the 21 submissions for an overnight service) |
| Auckland- Rotorua | Hamilton | 47 |
| Hamilton-Tauranga | Katikati and Ōmokoroa | 50 |
| Gisborne-Napier | Wairoa | 22 |
| Gisborne-Wellington | Wairoa, Napier, and Hastings | 17 |
| Napier-Wellington | Hastings, Waipukurau, and Masterton | 62 |
| New Plymouth-Wellington | Stratford, Hāwera and Whanganui | 38 |
| Whanganui-Wellington | Palmerston North | 24 |
| Picton-Invercargill | Blenheim, Picton, Christchurch, Dunedin | 21 |
| Picton-Christchurch | Kaikōura | 54 |
| Christchurch-Dunedin | Ashburton, Tīmaru, and Ōamaru | 97 |
| Christchurch-Invercargill | Ashburton, Tīmaru, and Ōamaru | 60 |
| Dunedin-Invercargill | Balclutha | 25 |

There were 40 submitters who recommended a complete national rail network. Most submitters did not identify specific routes for this network, instead recommending:

- the creation of a national network with reliable and regular services running between cities and towns
- the development of a national strategy for all forms of passenger rail to help inform inter-regional passenger rail service delivery and provision
- a high-quality service for users.

Several submitters specified locations to be serviced, rather than identifying routes. Examples of these locations include Nelson, Rotorua, Hawke's Bay and Ōhakune.

Most submitters supported new services within the “Golden Triangle” of Whangārei, Auckland, Hamilton, and Tauranga. Many based their support for this on economic and population growth trends for these cities. Submitters raised the potential benefits that these services could have on accessibility, equity, regional economic development, road safety, and tourism. Some noted that despite significant historical investment in the state highway network, travel time remains unreliable due to Auckland motorway congestion.

Some submitters, for example Greater Auckland, acknowledged that new services require time to grow patronage and must target the right markets to be successful. They suggested that new services need time to attract patronage and change behaviours that underpin transport mode choices.



TE MANATŪ WAKA
MINISTRY OF TRANSPORT

Ministry Comment:

We support regions working collaboratively with each other and with partners to investigate the potential benefits and costs of new inter-regional passenger rail services.

Te Waihanga Comment:



When journey times are long, night trains can be a popular option

Night trains are having a comeback in Europe: over a dozen new night services are planned to open between 2021 and 2025.

While speed is critical for daytime train services to be competitive with flying, it's a different story for overnight train services. Studies show that overnight services can allow trains to compete when travel times are longer, because time spent sleeping isn't viewed as wasted time.

A recent European study looked at preferences for night trains vs flying for trips about as long as the length of the North Island. The study found that several factors were important:

- **Lie flat beds:** sleeper beds are the most important factor for customers.
- **Privacy:** Smaller, more private compartments are preferred over other amenities like food and showers.
- **Uninterrupted sleep:** no train stops between midnight and 6am.

When these conditions were met, the study found that between **41-71% of people would take a night train instead of flying**. These results help explain why European countries see night trains as a good way to reduce emissions and connect communities.

Potential Tauranga Inter-Regional Passenger Rail Services

The inquiry terms of reference identify Tauranga as a location for potential passenger rail investment. There was strong support for this, with nearly 200 submissions in favour of services to and from Tauranga. Several submitters noted that Tauranga used to have inter-regional rail until 2001 and,

with a population that has grown significantly over the last 20 years, there is potentially more demand now than previously for this service.

Submitters identified the following as potential benefits of a Tauranga service:

- reduction in congestion and improving road safety outcomes along State Highway 2 to Auckland and State Highway 29 to Hamilton
- the opportunity to maximise the benefits of Te Huia with a service extension to Tauranga
- more transport options to improve access from surrounding towns like Te Puke, Ōmokoroa and Katikati to Tauranga and to Auckland and Hamilton
- reduction in emissions from private vehicles and improved air quality.

Tauranga City Council noted in its submission the significant upgrade needed on the existing rail network. The Council focused on removing existing network constraints by investing in track separation and remodelling the Kaimai Tunnel. These investments would help to improve the capacity of the network to handle both freight and passenger rail.

In its submission, KiwiRail also identified the Kaimai Tunnel as being a key constraint to reinstating an inter-regional passenger rail service:

“while locomotive engineers may pass through the tunnel inside locomotives, the Tunnel is not currently rated for passenger services and may require upgrades to ventilation and fire safety systems. These matters would need to be thoroughly considered through any business case to ensure any resultant service meets rail safety regulation standards.”

Some submitters, for example the Tauranga Business Chamber, did not support inter-regional passenger rail to Tauranga. It noted that commuters have complex travel journeys with different origins and destinations, which would potentially disincentivise people from taking a rail service. The Chamber also noted the lack of a national integrated ticketing system, and the differences between city public transport systems that complicate passenger rail journeys. It suggested that any future benefits of passenger rail would be offset by the cost of upgrades to the rail network and the Government subsidies needed to make a service viable.



Ministry Comment:

The Ministry acknowledges further investigation is needed determine the feasibility of a rail service to Tauranga. This should explore the costs of upgrading the network and service costs and the potential environmental, economic, and social benefits of the service.

Intra-Regional Passenger Rail Services

While outside the inquiry’s terms of reference, some submitters outlined specific intra-regional services that they would like prioritised for investment. All the services identified have previously run. The table below outlines services recommended by multiple submitters:

Table 5 Proposed intra-regional services

| Proposed Service | Number of Submitters in Support |
|---|---------------------------------|
| Extending the Auckland metro rail service to Huapai/Kumeū | 11 |
| Hawke's Bay (Napier, Hastings, Wairoa, Waipukurau) | 9 |
| Whanganui-Palmerston North | 7 |
| Christchurch (including Rolleston, Rangiora, West Melton, Lyttleton, Rakaia, Darfield and Prebbleton) | 21 |
| Dunedin-Mosgiel | 6 |



TE MANATŪ WAKA
MINISTRY OF TRANSPORT

Ministry Comment:

The Ministry acknowledges that each of these proposed intra-regional passenger rail services are unique and are at different stages in ascertaining their viability. We also appreciate that some potential services rely on other investment to the wider rail network to potentially occur first to improve reliability and resilience. Existing business case processes provide a means to understand and determine the benefits and costs of these potential investments.

Investment Appraisal

Submitters also raised a desire to review investment criteria and prioritisation, noting that traditional cost benefit analysis may not fully account for the wider costs and benefits of inter-regional passenger rail.

Several submitters suggest that KiwiRail needs to pivot away from offering tourism-centric inter-regional passenger rail towards the domestic market. These submitters believe that the investment into these services should be spent on making inter-regional passenger services faster, more regular and with more stops to cater to more people. Submitters also believe that this pivot would not stop tourists from using the Great Journey services.

Many submitters consider that inter-regional passenger rail in New Zealand has been disadvantaged by a series of historical government decisions. Submitters raise concerns as to why rail decisions must be revenue positive, noting the effect of this has been, in their view, a prioritising of investment on roads over rail, which many suggest are not met with the same stringency as rail given roads also require public subsidies for maintenance and upgrades. They consider this prioritisation of roads over other transport modes has led to a decline in the number of passenger services available and has meant New Zealand has failed to meaningfully invest in the wider rail network to keep the infrastructure, including freight infrastructure, to a high standard. Some submitters consider that these decisions have created legacy issues that have led to path dependencies towards roads and private vehicles. Rail Historian, André Brett noted in his submission:

“From the 1950s, central and local governments alike turned away from investing in rail and prioritised motorways and other road infrastructure. The railway network and rollingstock (trains) became aged, worn, and rundown. NZR reduced track capacity from the 1980s to save costs. The railway network is now more limited—in scope or capacity—than it was a century ago.

The failure to invest in many meaningful upgrades since the 1950s means that New Zealand trains travel very slowly. Speed restrictions and the need to catch up on decades of deferred maintenance—a legacy of “managed decline” policies—further delay trains. New Zealand trains run slower than they did decades ago; while networks in comparable countries have improved, ours has gone backwards.”

While some submitters suggested that assessing route proposals through a business case process would help to inform decision-makers of the costs and benefits of a proposal. Other submitters discussed their view that decision-makers do not adequately understand the costs and benefits of inter-regional passenger rail, and that more data, evidence and analysis was needed to show the public benefits inter-regional passenger rail can deliver. They suggest investment decision-making processes can do more to consider the wider benefits of inter-regional passenger rail (discussed in sections 9 and 10 below), as well as energy efficiency, changes in technology and whole-of-life costs.

As part of this, some submitters want to see a single multi-modal network approach taken to funding transport more broadly, rather than investing in certain modes more heavily than others. They argue that this integrated approach reflects how different modes intersect with each other to support the movement of people, goods, and services. Furthermore, for some submitters, trade-offs should be adequately understood and worked through, with an eye to the long-term. WSP stated in their submission:

“Investment in passenger rail services does not necessarily divert money away from roading projects. Instead, improved regional rail services complement roading corridors between towns and cities, as they remove traffic from the roads connecting them. Expensive road upgrades and renewals are therefore delayed by investment in regional rail. Services must be seen as regional projects that fulfil several roles – for example, fostering investment and economic growth, reducing congestion, mitigating climate change, and supporting housing growth outside Auckland.”



Ministry Comment:

The Ministry supports the use of cost benefit analysis in determining the potential benefits of a new inter-regional passenger rail service. We take on board the comments made by submitters that further data and evidence is needed to ascertain the anticipated benefits that may accrue from a project against the anticipated costs of it. A cost benefit analysis is just one of many different tools that can be used in making rail investment decisions.

From a strategic context, it is important to note the roles that both the Rail Plan and the GPS plays at a national level in directing the overall outcomes from potential rail investment. More locally, there is the opportunity for regions to use their RPTPs and RLTPs to reflect the local needs and aspirations of their communities when it comes to rail investment.

Te Waihanga Comment:



Project selection should be guided by cost-benefit analysis.

For most problems we face, there are potential solutions that vary in both cost and outcomes. The key is to identify options that deliver the best ‘bang for buck.’

To do this, public infrastructure providers should commit to preparing and publishing a cost-benefit analysis (CBA) for all major investments. A good CBA comprehensively considers all relevant costs and benefits, including non-financial economic, social, cultural, and environmental impacts – in both the short and the long term.

For inter-regional rail investments, we can expect proposals to have a range of benefits. Benefits from rail are likely to include travel time savings, emissions reductions, reduced congestion for drivers, and reduced crashes on our roads.

For inter-regional rail proposals to be worthwhile, they need to have more than just benefits. Proposals will also need to show that they are a cost-effective way of solving the problems at hand. To do this, CBA should guide project selection.

Using CBA as a guide means two things. First, it means comparing inter-regional rail against

Section 8: Inter-regional passenger rail services customer expectations

Just over 850 submitters highlighted areas where service quality influences their transport choice. Submitters discussed several areas where they would expect inter-regional passenger rail to offer a high quality of service. These are: speed and time savings, reliability, and frequency of services, on-board amenities, integration with the existing public transport network, and improved walking and cycling connections.

Speed and Time Savings

While some submitters believe rail speeds are not a priority for certain routes, other submitters argue that inter-regional passenger rail needs to be fast enough to compete with private vehicles and for shorter distances (such as, Rotorua to Auckland), air travel. Many submitters commented that New Zealand could explore ultra-high speed rail options for certain routes where speed and time savings are a key determinant in travel choice. Submitters argued that ensuring that services are at a comparative speed as private vehicles, and in some cases, air travel, will help to incentivise mode shift and maximise patronage uptake.

Submitters suggested that if new services were to be established, the following inter-regional passenger rail routes would benefit from a focus on fast services: Auckland to Hamilton, Auckland to Rotorua, Wellington to Napier, and Christchurch to Dunedin as examples. To achieve this, submitters note that there may need to be safety improvements to the existing network as well as investment into new rolling stock, which can deliver higher speeds.

Reliability and Frequency of Services

Submitters told us that ensuring the regular frequency of services will mean more train services at times that suit more people. Ensuring regular frequency could incentivise people to utilise the service more, especially if there are amenities onboard that allow people to work or do activities they can't do while driving. Cogo acknowledges, in its submission, the current frequency shortcomings in the services, which make it difficult to incentivise non-tourists to use it:

“The current rail service is impractical and expensive, making it unworkable for the broader public and business community to shift transport modes. At present, the only ‘regular’ service between centres is Auckland to Wellington via the ‘Northern Explorer,’ which restarted in October and runs once per day, every second day. The ‘Coastal Explorer’ service between Christchurch and Picton, which helps link Wellington with Christchurch, currently only runs on weekends.”

Most submitters believe that frequent inter-regional passenger services that are affordable could ease the need to fly between large centres like Auckland and Tauranga, Wellington and Napier, or Christchurch to Dunedin.

On-Board Amenities and Comfort

Submitters shared a diverse range of modern amenities they would like to see on an inter-regional passenger rail service. Examples of amenities include free wi-fi, reclining seats, tables to be able to work from, a range of healthy food and beverages and modern accessible bathrooms. Many submitters outlined that one of the biggest advantages of inter-regional passenger rail was the relative comfort trains offer passengers compared to buses and private vehicles. While other

submitters suggested that one of the biggest attractions of trains is the ability for passengers to use their time on board for work, leisure or sleeping, and unlike buses or cars, passengers would not need to stop for meal, bathroom, or rest breaks.

Submitters also noted that storage facilities were an important factor in deciding whether to use inter-regional passenger rail. For these submitters, the ability to easily carry items such as luggage, bikes, and outdoor equipment in a secure storage facility on the train would enable them to participate in range of activities once they reached their destination. For many submitters this would open new opportunities for New Zealanders, and visitors alike. One submitter, Adam Cheney, noted:

“trains should have sufficient provision to carry bikes, and plenty of them. This opens mixed cycle and train commuting and opens cycle-based tourism.”

Many of these submitters used the existing services available on aeroplanes in New Zealand as a point of comparison. While other submitters used European and Japanese rail services as models for any new inter-regional passenger rail service to aspire to. Other submitters suggested that to attract patronage, new services need to directly compete with what people can and cannot do when travelling by car or private coach.

Integration with the Existing Public Transport Network

There was strong support from submitters for better integration of inter-regional passenger rail services with existing local public transport networks; particularly, bus services. Many submitters noted that for inter-regional passenger rail services to be successful it requires stations that are well located, and local public transport networks that enable passengers to easily transfer to. In her submission, Sophie Fern proposes:

“we need to integrate inter-city rail with local services. Passenger-rail needs to be integrated with local public transport services allowing entire door-to-door journeys to be undertaken on public transport.”

Several submitters suggested that improved integration would help to incentivise inter-regional passenger rail patronage because potential users would have more confidence in accessing transport before and after a trip.

Physical safety was also identified by some submitters a rationale for ensuring better integration. Submitters used examples of misalignment of timetabling between rail services and the connecting bus services in Auckland and Wellington. In these cases, submitters would often drive or not take the train out of safety concerns while waiting for up to 15 minutes for the connecting bus, particularly at night.

Some submitters used the Capital Connection and Te Huia as examples where this lack of integration can be a challenge for the next stage in their journey. Submitters identified having luggage to carry in Auckland as a particular challenge, as the Te Huia service ends at the Strand in Parnell, about a kilometre away from the central city and Britomart Train Station.

Other submitters acknowledged that to achieve integration between services would require greater co-ordination between the agency/council response for public transport and the provider of the inter-regional passenger rail service.

Improved Walking and Cycling Connections

Many submitters commented that there needs to be significant investment into a dedicated footpath and cycleway network around train stations to make it easier to access a station using active transport. For a lot of submitters these improvements would also help to incentivise choosing to

travel by rail rather than by other modes because it would improve safety, reduce costs, increase modal choice, and would allow for better journey planning. These submitters also highlighted their desire for train stations and rail carriages to have bike/scooter parking and storage facilities. Simon Telfer, in his submission, recommends:

“that people on bikes are specifically provided for in terms of protected cycleways to access train stations, safe and easy bike storage at train stations and the ability to easily travel with bikes on trains.”

Several other submitters noted that investing into improved cycleways and other appropriate cycling infrastructure could act as an incentive for cyclists to travel to these locations. Some submitters compared this potential to the existing popular cycle trails in the South Island.

Other submitters emphasised the need for investment into footpaths to help enable more walking and other active modes of transport to access the train station and to incentive



Ministry Comment:

Research shows that customer satisfaction is key. There is an interplay between the traveller persona and their required deliverables. The table below shows the sensitivity to travel deliverables that customers have:

| Deliverables | Leisure/Tourism | Functional | Commuter |
|---------------------|-----------------|------------|-----------|
| Frequency | Low | Medium | High |
| On-time performance | Medium | High | High |
| Amenity | Very High | Medium | Low |
| Cost | Low | High | Very High |
| Speed | Very Low | Medium | High |

Te Huia was initiated as a trial to better understand the traveller personas and their specific needs in New Zealand, and what customers value when standing up a new inter-regional rail service.

During May 2022, a customer satisfaction survey was undertaken on board Te Huia with satisfaction rate being at 94%. This survey asked passengers to rank the following elements of their experience: frequency, trip duration, service reliability, station quality, station facilities, train/carriage quality, value for money, onboard facilities, helpfulness of onboard crew/staff, and work-friendly environment. Value for money came in as the most important for passengers, with 61% choosing this as either number 1 or 2. Service reliability also an important aspect of the train service, with 42% choosing this as being important. Station facilities and station quality were not relevant for a lot of passengers.

We envisage any future business cases for a potential service to look a customer satisfaction in more detail.

Te Waihanga Comment:



Travel times matter for uptake of passenger rail

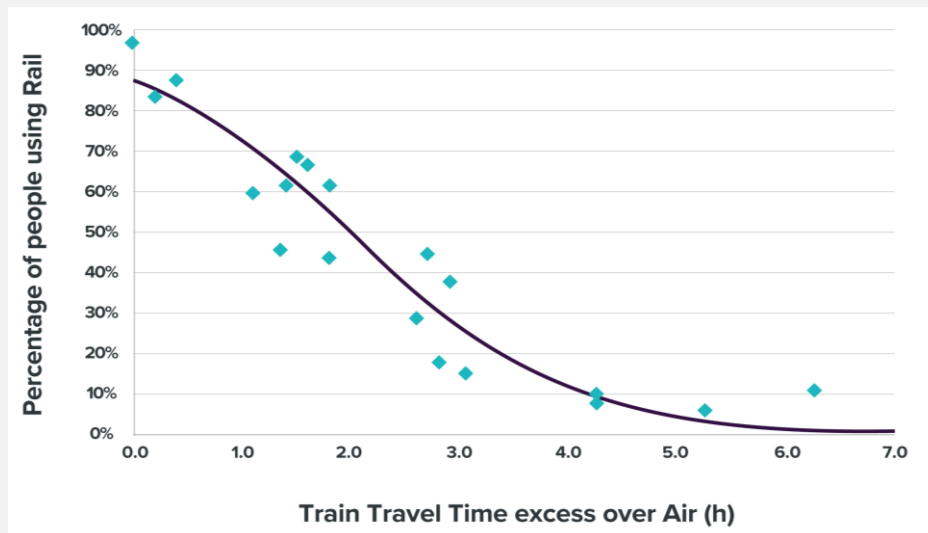
For urban rail services, urban density and city size are predictors of success. However, for inter-regional rail it's a different story. Inter-regional rail does not necessarily require large populations, rather, the **success of inter-regional rail services is primarily down to its attractiveness relative to air and road travel** between the same points.

Studies from overseas have shown that the uptake of rail is largely dependent on the relative journey time compared to flying, as shown in the chart below. When looking at journey times, it's important to look at the total door-to-door time for a journey, including time to get to the station and security/check in time. In many cases, trains can be competitive because of centrally located stations and less time required to check in.

The chart below shows the percent of people using rail vs flying between different pairs of cities. When we look at overseas experience, most people choose to take the train rather than fly when journey times are the same. However, once rail journey times become a couple of hours longer than flying, average market share drops to about 50% and decreases rapidly as rail travel times get longer.

Other factors, like frequency, reliability, and price, also play a role. For instance, rail market share can vary by plus or minus 15% for city pairs with similar travel times. However, the data suggests that the potential usage of inter-regional rail is mostly down to a combination of two factors – the number of people travelling between points on the route and journey time.

Rail vs Air Market Share in Global Cities



Quality of the experience matters

To get large numbers of people using trains, it not just the journey time that counts – the quality of the experience also matters.

A 2018 study reviewed the evidence from several countries, including New Zealand, on the importance of customer amenities for passengers on both local and inter-regional services. When the authors looked across 57 studies, they found that customers placed the most value on five types of amenities on trains. These, in order of importance, were:

1. **Access to options** (for example, access between carriages, multi-purpose areas within vehicle, storage areas)
2. **Information availability** (for example, timetables, PA system, maps)
3. **Security** (for example, surveillance cameras, staff)
4. **Quality** (for example, heating/cooling, ride quality)
5. **Overall condition** (for example, vehicle newness, décor of interior, cleanliness of exterior).

The study showed that for a trip over the same distance, people would often prefer a longer travel time on a better train service, compared to a shorter time on a basic train service. For example, people might choose a 2-hour journey on a service with access between carriages, a café car and storage, as compared to a 1.5-hour journey on a service without these amenities.



Section 9: Potential wider transport and regional development benefits

Over 630 submitters commented on the potential for any new inter-regional passenger rail services to help reduce congestion and deliver resilience and road safety benefits for the transport system. Wider public value benefits, and the realisation of economic, cultural, environmental, and social benefits were highlighted by submitters.

Delivering Congestion Benefits

Many submitters suggest that inter-regional passenger rail would help to reduce traffic congestion. Submitters noted that congestion was a cause for time inefficiency related to driving, and that rail was preferable as it takes cars off the road, transports more people, and allows roads to be used for other purposes, like freight. A few submitters reference the Road to Zero strategy as a further reason for the inefficiency of cars and the need to address congestion.

Submitters express views that many of New Zealand's inter-regional roads are not adequately servicing demand, particularly as New Zealand's population grows, and domestic tourism returns. Submitters suggest that instead of spending money on costly road upgrades that could increase emissions intensity, and disrupt road users, it may be easier to manage congestion by moving vehicles off the road and into passenger rail services.

Submitters highlight a correlation between road congestion and journey times, suggesting that inter-regional passenger rail would be one solution to help to free up the roads and reduce time stuck in traffic. Submitters also noted that with less cars on the road, bus and coach services would spend less time stuck in traffic, meaning these services could be faster, more frequent, and reliable for users.

Increased fuel and maintenance costs are incurred, as well as the opportunity cost time spent driving. A significant number of submitters consider switching from road to rail would reduce the overall private and public cost of using, maintaining, and upgrading roads. For submitters, this is because travelling on a congested road increases the overall cost that drivers face. Increased fuel and maintenance costs are incurred, as well as the opportunity cost time spent driving. For example, submitters note less vehicles on the road would likely reduce the amount of fuel used, and the level of wear and tear, potentially delaying the need for maintenance and extending the lifespan of the road asset. Many submitters suggest this reduction in expenditure on asset maintenance, renewals/upgrades could save money for all road users in New Zealand, as well as Government and councils. Several submitters cited the work undertaken by EY for the Ministry of Transport in 2021, which found that the annual value of moving passengers and freight by rail is between \$1.7B - \$2.14B, with \$997m coming from reduced congestion alone. The other monetary benefits identified in the report were derived from: reduced air pollution, reduced fuel use, reduced emissions, reduced road maintenance, and improved safety outcomes.

Submitters also argue that reduced journey times for road users will result in a range of social, environmental, and economic benefits, such as: increased productivity, improved air quality, better access for people, goods and services to new markets, reduced expenditure on personal transport, and more leisure time for commuters (including more time to spend with family and friends).

Supporting Road Safety Outcomes

In their submissions, several submitters expressed a view that passenger rail services are relatively safer than travelling by private motor vehicle. As part of this, they support further investment into transport modes that prioritised safety.

Passenger rail services were frequently referred to as way to reduce serious injuries and road fatalities by several submitters. Submitters also link this view to the current Road to Zero campaign, and its aim to significantly reduce road deaths and serious injuries in New Zealand.

Submitters also suggest safety benefits would arise from a reduction in the volume of road users on the road network. These submitters believe travelling independently from freight as a safer method of transport. This view included both increased safety for those travelling on roads where freight is transported by rail, and for those travelling by rail where freight is transported by roads. These submitters also expressed discomfort at sharing roads with trucks. In his submission, Callum Worsley notes that:

“its important that we avoid displacing freight onto trucks, which would have a negative impact on the climate and more wear and tear on the roads (taking up more of the funding allocation to transport) and higher risk for road users including cyclists.”

Cameron Carter in his submission further emphasises this point:

“getting freight off trucks and on to trains helps improve road safety, reduce emissions, and reduce traffic on our roads.”

A lot of submitters view rail as a viable alternative to driving long-distances for inter-regional travel. This was associated with safety improvements from a reduction in fatigued driving. Submitters also highlight that many may believe that they have no choice but to drive while fatigued with the lack of affordable flights as the only other inter-regional transport alternative.

Submitters also believe new inter-regional passenger rail services could increase the safety of overseas visitors. These services offer an alternative option to driving on roads with rules which tourists might not be accustomed to. This was often mentioned in conjunction with comments about the added public value that rail could provide for New Zealand’s tourism market.

Contributing to Regional Development

Many submitters consider that inter-regional passenger rail could provide value to regional development and connectivity. These benefits are largely associated with economic benefits from increased accessibility between regional communities and cities, which submitters believe can promote sustainable economic growth for New Zealand’s regions.

The most common economic benefit submitters mentioned is the role inter-regional passenger rail can play in increasing access to employment opportunities for regional and rural communities. Submitters consider this would allow for higher participation in labour markets outside of a regional or rural areas immediate catchment, especially for members of regional communities who are unable to travel by car, or who cannot find suitable employment opportunities in their own community. Submitters also highlighted that with increased economic activity into a region, new jobs may be created.

Submitters from urban areas view increased regional accessibility as an opportunity to have access to housing markets where prices may be more affordable than those in cities, or the typology of housing is better suited to household need. Furthermore, these submitters told us about the added value of being able to live outside of an urban centre, but not being subjected to a long drive, coupled

with commuter traffic and road hazards to access economic, social, and cultural opportunities in another region.

Many submitters also note the changing landscape of the labour market as being more amenable to remote/flexible working arrangements for some employees, reducing the need to travel between regions as often (or at all). The benefits from employees shifting from a daily inter-regional car commute to inter-changing between working from home and travelling via passenger rail would result in less time commuting, and more time for work or leisure. This may have flow on impacts on productivity and wellbeing, as well as regional development.

A few submitters highlight that some regions could benefit more from inter-regional rail links than others. For example, rail connections between smaller towns and cities would have an asymmetrical impact, where smaller towns are disproportionately benefited by increased access compared to cities who may lose assumed levels of population growth and the corresponding economic, social and agglomeration benefits. Some submitters suggested this could lead to greater competition between regions for growth, while others argued that it could impact on the ability for regions to make informed planning and investment decisions, as population growth may move down a rail corridor or into a connecting region.

Of the submitters who cite regional development as a reason for their support of the inquiry, many indicate that rail was a more suitable transport option for removing barriers of access compared to air or road travel. Engineering New Zealand note in its submission that:

“unlike the point-to-point access provided by flying, inter-regional rail can serve intermediate destinations, providing spill-over benefits to those areas.”

Some of these submitters highlight that commuter services alone would be insufficient for providing adequate service frequency, as it would limit access to only before and after work times, instead of encouraging weekend/public holiday trips, domestic tourism, and ready access of regional and rural communities to goods and services that they need.

Potential Tourism Opportunities

Many submitters propose inter-regional passenger rail services can play a key role in improving domestic tourism, by making it easier, and more appealing to visit regional towns. These submitters suggest this opportunity could lead to increased economic activity occurring in regional destinations. Cycling trails, vineyards, cultural events, beaches, and national parks as examples of attractions potential inter-regional rail-users might travel for.

Several submitters identify specific opportunities, like weekend tourism packages, which include inter-regional passenger rail services with access to tourist destinations and events. Examples of regional destinations that submitters wish to access via inter-regional passenger rail include: the Bay of Islands, Rotorua, and the Central Plateau (including Taumarunui, National Park, and Ohakune to access Mount Ruapehu and Lake Taupō).

For submitter Stephanie Cairns:

“the combination of rail journeys and cycling, or adventure tourism more generally and the regional development that this brings, is a colossal, missed opportunity for New Zealand (Taumarunui, Whanganui, Wairarapa in particular). A well-connected long-distance train network with affordable fares and plenty of carrying space for bikes will enable more New Zealanders and international tourists to access the excellent cycle trails throughout the country, and other adventure tourism activities.”

These types of packages, alongside regular inter-regional passenger rail services, would help to bring a range of economic and social benefits to regional towns. Submitters note these benefits

would be captured by local businesses like hotels, cafes, restaurants, tourism operators and guides, retail shops, bike and car hire companies and tourism operators. Furthermore, submitters suggest these services would provide more transport options for people wanting to access regional destinations. Some submitters propose these services would incentivise behaviour to visit regional destinations that people could be reluctant to drive or fly to due to time to or the cost of car ownership/petrol or flights. Michelle Smith, emphasised this point in her submission, saying:

“connecting regions by rail will enhance tourism as it is often a cheaper and more effective way for many people to travel.”

There were several submitters who support inter-regional passenger rail as a potential means to get vehicles off the roading network where there is heavy use by both domestic and international tourists. Submitters offer diverse views, from road safety, reduced congestion, helping to reinforce New Zealand’s clean green tourism image, and helping with cycle tourism as its services could make it easier to move bikes around the country.

Supporting Land Use Change

There was strong support from a range of submitters (councils, community groups and industry representatives) that inter-regional passenger rail services could play a role in shaping urban development and land use.

These submissions emphasised that inter-regional passenger rail could influence urban development patterns and spatial plans, allowing population growth to move out of large urban centres and down the rail line towards or within another region, enabling regions to share labour and housing markets. Submitters suggested that for development to be transit oriented and emissions to be reduced, urban development should occur near existing urban centres, and preferably within proximity to railway stations. Alternatively, regional towns and small urban centres should have integrated active and public transport networks connecting inter-regional passenger rail stations to urban development

In its submission, Engineers for Social Responsibility, noted the land use opportunity for new stations:

“urban station locations should ideally be centrally located and/or designed to permit good access and integration with local services and intensified land use activity. Park and ride opportunities should be investigated for appropriate outer urban and rural areas.”

Submitters suggested in regions where growth in cities is growing exponentially, there may be a need to identify and protect land which would be suitable for a future rail corridor and/or stations (and related uses). This would help to ensure that future growth, and the expansion of housing and labour markets into neighbouring regions would not substantially increase VKT and demand for new urban development, but instead demand for new development could be accounted for in existing local and regional plan making documents and be orientated around existing towns along the rail corridor. It would also assist developers and infrastructure providers in considering proximity to train stations and rail lines when making investment decisions. Engineering New Zealand stress this point in their submission:

“creating an attractive and efficient interregional passenger transport system, interconnected with other forms of regional and urban public transport, would increase the attractiveness of living and working near those stations and public transport – both in urban areas and regional New Zealand. With substantial population growth anticipated over the next century, actions that increase the efficiency of locational choices and infrastructure usage will be necessary.”

Submissions from councils considered spatial planning to be of particular importance in areas with growing populations. Submitters viewed that the extension of public transport infrastructure and provisions are required to service an increase in transport needs, and that inter-regional passenger rail is an opportunity to optimise land use in areas which would be suitable for intensification. This was often mentioned in relation to climate change resilience, particularly in areas where managed retreat will have to occur. These submissions highlighted the need for certainty about rail provisions to allow for strategic planning for future economic, environmental sustainability and resiliency in their regions. For Kāpiti District Council, inter-regional passenger rail services offer an opportunity to meet future emission reduction targets:

“Improved road options encourage people to use private vehicles for their travel across and between regions. Rail services can transport large numbers of people, and every passenger rail service could remove dozens of cars from the road and reduce the associated emissions.”

Kāpiti District Council further adds that:

“...future development in our district and across the country needs to encourage low-carbon living including the use of public transport. We need long-term greenfield development in the north of our district to be matched with increased rail services to support people living in accessible neighbourhoods, with less reliance on private vehicle use.”

Submitters said that different land use and transport strategies will be necessary for different regions. While submitters referred to rail as an opportunity to support urban intensification, the introduction of park and ride facilities were considered a good option to encourage rail uptake in outer urban and rural areas and to remove cars off the state highway network. In some cases, submitters suggested repurposing and/or acquiring land or reallocating road space for the provision of rail.



TE MANATŪ WAKA
MINISTRY OF TRANSPORT

Ministry Comment:

The Ministry acknowledges road congestion not only causes delays in journey times for road users, but it is also associated with higher fuel and car maintenance and environmental costs. To address the issue of road congestion, the Ministry, in collaboration with other land transport agencies (such as Waka Kotahi and KiwiRail), has introduced a range of strategies, infrastructure upgrades, and education/behaviour programmes, including the Government Policy Statement on land transport, the National Land Transport Programme and the Road to Zero strategy. These focus on creating a safer, more accessible, better connected and more resilient land transport system to keep New Zealand moving.

The ERP also has a range of key actions and targets that seek to relate to congestion. The aim of these is to provide people with different choices about how they travel and in doing so can reduce congestion and emissions.

Road safety is paramount. Together with Waka Kotahi, the Ministry has developed a range of strategies and plans that aim to improve road safety. For example, one of the purposes of Road to Zero is to eliminate road-related death and serious injuries by 2050. To achieve such results, Waka Kotahi is improving road infrastructure and vehicle safety standards. The strategy also provides education programmes to reduce the high-risk driving instances (e.g., drink driving).

The Speed Management Guide: Road to Zero edition aims to empower regional transport committees and road controlling authorities to develop high-quality speed management plans that will help make informed, accurate and consistent speed management decisions in their communities. This Guide contributes to the development of safe and appropriate speed limits aligned with Road to Zero.

An opportunity exists for new inter-regional passenger services to support these outcomes by enabling people to move from private vehicles to trains. The extent of this benefit would depend on the service and the demand for it. Undertaking a cost benefit analysis would help to determine the scale of these benefits.

The Ministry also acknowledges passenger rail can have a significant impact on the flow of people within and between urban areas, changing travel choices and making cities and towns more accessible and help deliver road safety outcomes. It can also support and stimulate regional and national economic growth. These benefits can include:

- the potential for greater density along the corridor and at each end of the corridor
- improved transport system capacity, by providing a transport alternative that reduces vehicle numbers, congestion, and emissions
- better transport system resilience, by providing a separate route from the road system
- expanding public transport so it supports new housing and inter-regional commuting
- better productivity by supporting commuting and providing a work-in-travel option
- tourism generating regional economic benefits.

Stations and passenger service infrastructure can be an important element in urban development. They provide an opportunity for creating compact, walkable, liveable communities centred around high quality rail services. This includes providing a transport hub with a mix of office, residential, retail, and civic uses in close proximity. Benefits of this kind of development include greater mobility and ease of moving around, increased rail use, and reduced sprawl.

Spatial planning will be a key mechanism for making this choice. This is because spatial planning provides a way for central government, local government, iwi, and other key stakeholders to identify where long-term growth should happen and how best to support it.

A key trade-off that regions will need to consider is whether they want to focus on greater intensification and population growth in key urban centres or spread growth throughout a region. Both approaches could have merit in different circumstances, but each have different costs and benefits associated with them. For example:

- Inter-regional passenger rail will be a significant enabler if a region wants to grow its smaller towns. While growing smaller towns can improve regional economic development, it can also put strain on housing and other infrastructure if not planned well.
- On the other hand, increased availability of inter-regional passenger rail could shift demand for housing and infrastructure away from where it has been planned. This could impact the ability to achieve a range of benefits such as improved urban form, and reduced congestion and emissions.

Section 10: Climate change and wider environmental opportunities

Nearly half of submitters reference climate change adaptation and mitigation, highlighting the role passenger rail can play in reducing greenhouse gas emissions, and enabling greater resilience to the effects of climate change.

New Zealand has Committed to Decarbonising the Transport System

Submitters highlighted New Zealand's commitment to reduce emissions at scale and at pace, including:

- ratifying the Paris Agreement in 2016
- implementing the Climate Change Response (Zero Carbon) Amendment Act in 2019 (CCRA), including setting a national emissions target of net zero carbon emissions by 2050
- implementing emissions budgets and the inaugural Emissions Reduction Plan (ERP) to reduce VKT from cars and light vehicles by 20 percent by 2035.
- The ERP also included an action to decarbonise aviation, including developing and setting specific targets for decarbonising domestic aviation in line with the CCRA's 2050 target.

Reducing Vehicle Kilometres Travelled

Many submitters spoke of the need for low-emissions, inter-regional public transport choices that support efforts to reduce greenhouse gas emissions from vehicle kilometres travelled. Submitters support investment into zero emissions or low emissions inter-regional passenger rail services. They also highlighted that to be fully decarbonised, any future services should be integrated with existing regional active and public transport networks to align with regional VKT reduction plans and offer multi-modal end-to-end services. This would help to reduce the 'last mile problem' and allow users to arrive at their destination as safely and seamlessly as possible. Submitters suggest that this would make it easier for inter-regional passenger rail corridors or infrastructure provision to be built into district plans, as well as RPTPs.

Submitters also question whether meeting the emissions budgets set out in the ERP, and the 2035 VKT reduction target will be viable if alternatives to internal combustion engine (ICE) vehicles are not readily made available. Many submitters raise their concern that while switching from ICE vehicles to EVs for the light vehicle fleet will go some way to reducing transport emissions, it is a reduction in VKT itself that is needed to help New Zealand meet its emissions goals. Submitters point to supply constraints in the global commodities markets for rare earth and other minerals (such as, lithium) needed for EV batteries, and the increased pressure EVs will put on New Zealand's supply of renewable electricity in New Zealand, as compounding factors.

Some submitters propose inter-regional passenger rail services could enable households and businesses to reduce their car dependency and may even help some to become car free. These submitters highlight that to reduce reliance on cars, network integration with regional public transport services, car-share services, park 'n ride and/or the ability to transport (e)bikes and (e)scooters

aboard trains would be needed to ensure travellers can reach their destination as efficiently as possible.

Further Electrification of the Rail Network

Submitters emphasise the need to electrify further parts of the rail network to realise not only the emission reduction benefits, but also energy savings. Submitters suggest that while diesel engines may be considered an attractive interim solution to electrification, there are substantial benefits to investing in an electrified network despite the potential costs. These submitters note that to realise the emission reduction benefits of electrification across the rail network, electricity would need to be renewably sourced, and therefore, efforts to increase the supply of renewable energy generation would be critical to the success of an electrified rail network. Auckland Climate Action stated in its written submission:

“... electric trains are generally estimated to be three times more costly to purchase than diesel-engine trains. However, they have roughly double the life span of a diesel-engine train, which, over the life of the train, neutralises the higher starting cost. Alpharail also says that the cost per km for electric trains is over 50% cheaper than diesel trains when measured according to fuel intake and maintenance costs. Based on the above, it is clear that steps need to be taken to ensure that electrically powered trains are used in areas where electricity is available.

Currently our electricity is around 80% generated from renewable resources, but there is potential to strongly increase this renewable percentage. It would make sense for the rail authorities to push for the availability of more cleanly generated electricity so that the rail system can effectively reduce its emissions further.”

Other submitters suggested that there are options to decarbonise the rail network outside of electrifying the network itself. For example, in its written submission, WSP said:

“Beyond VKT reductions, there is an opportunity to reduce greenhouse gas emissions with decarbonised propulsion outside of electrified networks. As demonstrated by Greater Wellington Regional Council’s Lower North Island Rail Integrated Mobility Detailed Business Case, tri-mode trains currently used in other countries can emit eight times less carbon than current diesel locomotives hauled trains. Beyond emissions reduction, there is an opportunity to further improve the environmental impact of New Zealand’s transport system by reducing built carbon.”

Reducing Whole-Of-Life Transport Costs and Improving Efficiency

Many submitters outline the role inter-regional passenger rail can play in reducing the whole-of-life emissions costs of vehicles and transport infrastructure by reducing wear and tear, decreasing the volume of carbon-intensive resources needed to build new transport infrastructure (such as, roads and bridges) and enabling a more efficient use of existing infrastructure (both road and rail). In his written submission, André Brett said:

“A report for KiwiRail on North Island electrification prepared by Beca / Systra and dated 31May 2021 estimates that the cost would come to approximately NZ\$1.5 billion. This encompasses the whole North Island Main Trunk, East Coast Main Trunk to Tauranga, and Wairarapa Line to Masterton, and includes new rollingstock. By comparison, recent motorway projects have costed more while increasing emissions and doing less to enhance mobility.”

Some submitters believe that inter-regional passenger rail can help New Zealand to reduce our energy dependence on other nations, and better utilise the existing energy we generate. Many submitters also highlight the efficiency gains of inter-regional passenger rail compared to other modes, such as driving or flying. These submitters spoke of resource, space, and energy efficiency

as well as the ability to utilise or retrofit existing rail infrastructure. Submitters suggest that this would result in a range of benefits, including: a reduction in emissions, cost, and energy savings, as well as greater levels of productivity. The Victoria University Climate Clinic noted in their submission:

“The energy costs of mobility per person per kilometre in New Zealand on average is much higher than other jurisdictions, as travel is forced into private cars or air transport for interregional distances. More passenger rail services would allow these costs to be reduced. It means as a country, we can move more people further using the same amount of energy. In the case of oil, this means importing less costly foreign oil and reduces our reliance on having an ever-increasing supply of oil. Supported by gradual electrification of the network, passenger rail presents an opportunity to deliver more climate friendly and efficient passenger transport to New Zealand.”

The Need to Decarbonise Aviation in New Zealand

Submitters argue the potential for passenger rail to be a viable alternative to emissions intensive domestic air travel. This would give New Zealanders greater choices about how they travel and enable access to locations not currently serviced well by the domestic aviation market. Many submitters believe there is an important role that inter-regional rail could play in helping to decarbonise domestic tourism and business travel.

Some submitters highlighted that while travel speed would be an important consideration for those looking to switch from a domestic flight to an inter-regional rail service, patronage for some services, such as tourist services or overnight sleeper services, would be less likely to be affected by fast travel times as passengers would be able to use their time for leisure or sleeping.

Many submitters spoke of the challenges associated with decarbonising aviation, including the need for New Zealand to have access to sustainable aviation fuel, electric batteries and hydrogen powered aircraft. Submitters raised concerns that policy settings that depend on technology that is yet not readily available in the New Zealand market and is highly dependent on an ample supply of renewable energy, is ignoring the decarbonisation opportunity that inter-regional passenger rail represents today. Given the long lead times for planning and delivering rail infrastructure, many submitters would like to see local and central government get on with the job ahead.

The Need for a ‘Just Transition’

Several submitters argue the need for Government to enable a ‘just transition’ that is equitable to all. This means providing affordable and inclusive alternatives to emissions intensive transport, to give communities and businesses more choices about how they travel. Submitters emphasise the increasing cost of responding to climate change, and the steep challenge ahead for New Zealand to meet its emission targets and the Nationally Determined Contribution at least cost. Many submitters think this is especially important for Pasifika, and iwi and Māori groups, who are more likely to be disproportionately affected by the effects of climate change, and related policies (such as: the effect of the emissions trading scheme on commodity prices). In its written submissions, Our Climate Declaration stated:

“The \$1.2 billion this government has allocated to upgrade Kiwi Rail, with its focus on moving freight from trucks to trains, will reduce emissions minimally but it makes no start towards securing our future transport needs. \$1.2 billion sounds a generous amount but consider it in relation to the \$30 billion the Climate Change Commission estimates our govt will spend over the next eight years to buy overseas credits. This is how govt plans to achieve the target they’ve agreed to of a 50% reduction in emissions by 2030. We’ll make minimal reductions ourselves - by upgrading the car fleet to EVs (those who can afford a new car) - and we’ll continue to fly around the country.”

Improving National Resilience

Many submitters discussed the role passenger rail can play in improving New Zealand's resilience to the effects of climate change, natural hazards, economic and supply chain shocks. Noting that inter-regional passenger rail could allow New Zealand to reduce energy dependence by using less imported fuel and rare earth/minerals, and instead using energy stocks more efficiently than private vehicles and aeroplanes do. Inter-regional rail would provide alternatives to roads following a severe weather event or natural hazard. In the event of planes being grounded, rail could also provide an alternative to moving large numbers of people (as well as goods/services) between regions.

Submitters suggested that in circumstances where a road may wash out or become stranded due to a natural hazard or extreme weather event, inter-regional passenger rail could provide an alternative transportation choice. As discussed in Section 9, some submitters highlighted that inter-regional passenger rail, or protecting an inter-regional rail corridor in advance, could also help planners and engineers to prepare managed retreat.

Given its space efficiency, inter-regional passenger rail could help to reduce the need to pave over natural areas and wetlands, enabling more permeable surfaces which will further improve the adaptive capacity of rail infrastructure to severe weather events and extreme heat.

Environmental Benefits Beyond Emission Reductions

A significant number of submitters note potential environmental benefits inter-regional passenger rail offers, such as improved air quality, reduced tyre pollution, reduced demand for renewable electricity, raw materials and rare earth minerals needed for roading infrastructure and electric vehicles, reduced waste, and reduced impact on the natural environment (e.g., paving of wetlands and contamination of soil and water). Many of these submitters highlighted the relationship between environmental benefits and the creation of public value.



TE MANATŪ WAKA
MINISTRY OF TRANSPORT

Ministry Comment:

The ERP has three key areas for reducing transport emissions, these are:

- reduce reliance on cars and support people to walk, cycle and use public transport
- rapidly adopt low-emissions vehicles
- begin work now to decarbonise heavy transport and freight.

The Government has set four transport targets that will support these focus areas and align with achieving the sector sub-targets for transport. This is approximately equivalent to a 41 per cent reduction in transport emissions by 2035 from 2019 levels.

- Target 1 – Reduce total kilometres*** travelled by the light fleet by 20 per cent by 2035 through improved urban form and providing better travel options, particularly in our largest cities.
- Target 2 – Increase zero-emissions vehicles to 30 per cent of the light fleet by 2035.
- Target 3 – Reduce emissions from freight transport**** by 35 per cent by 2035.
- Target 4 – Reduce the emissions intensity of transport fuel by 10 per cent by 2035.

The targets provide guidance on how much effort is required to reduce transport emissions across the system and will shape our policy and investment decisions to support the scale and pace of change required

To achieve these targets, the Government must work with key partners to take the initial actions outlined in this chapter over the first emissions budget period (2022–25). This includes partnering with Māori to incorporate Māori-led solutions and supporting communities and businesses for an equitable transition.

Further action and refinement will be needed in the second (2026–30) and third (2031–35) emissions budgets depending on how we are tracking.

and set specific targets for decarbonising domestic aviation in line with our 2050 targets.

Te Waihanga Comment:



Rail is a low carbon way to travel, especially compared to flying

A substantial portion (17%) of New Zealand's carbon emissions come from the transport sector. If we look at transport emissions, the large majority (92%) is from driving, while domestic aviation is responsible for 5% of transport emissions, and 4% is from other sources.

Only a portion of New Zealand's rail network is electrified, so most long-distance passenger rail services are currently diesel powered. You might think that diesel power would mean rail wouldn't reduce emissions much compared to other options, but it does. For example:

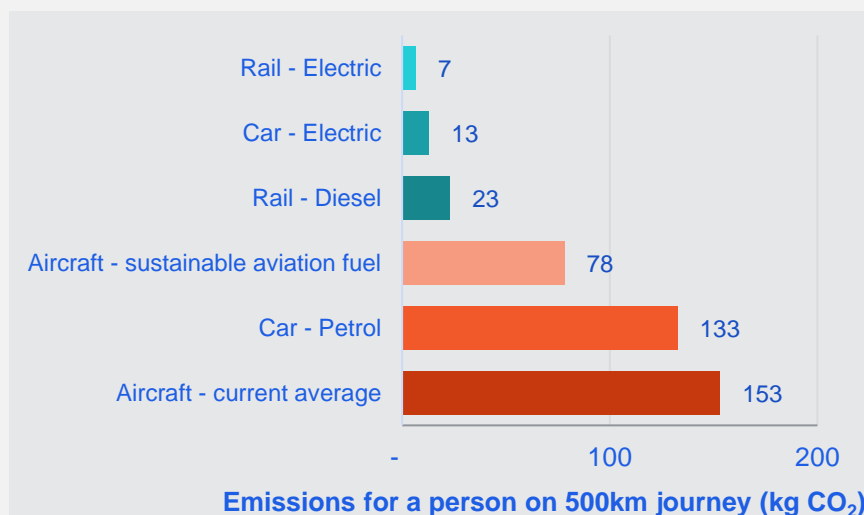
- driving a petrol car has **6.7 times more emissions** than travelling by diesel train
- flying has **5.8 times more emissions** than travelling by diesel train.

Based on current data, switching from either driving or flying to current rail services could reduce carbon emissions substantially. The carbon reduction benefits from new rail services would depend on many factors, including:

- The type of train technology, such as hybrid options
- How many people would take the train if services improved
- Carbon emissions from construction (if required)
- The speed of uptake of electric vehicles.

Unfortunately, we don't currently have a good understanding of all these factors. This makes it hard to know the potential role rail might play in emissions reductions.

Rail is a low emissions way to travel between cities



Conclusion

The submissions have put forward a range of range of views and have highlighted several issues and opportunities that they would like to see inter-regional public transport, specifically rail, help to realise. We believe that further work is required to understand and determine what value and outcomes, as well as the costs, inter-regional passenger rail presents., This information can then be used to determine whether the current regulatory and funding models are still fit for purpose. If not, further work will be needed to understand how the transport system can be planned and funded to better serve the interests of all New Zealanders.

Our recommendation to the Committee is to consider undertaking further work to better understand the potential costs and benefits of potential inter-regional passenger rail services through investigating the:

- economic, environmental, and social benefits that new inter-regional passenger rail services could deliver
- value proposition of new services
- level of investment needed to deliver new services (start-up costs, any associated network or infrastructure upgrade costs, and ongoing operational costs)
- trade-offs between investment into potential new services and their costs and other transport investment priorities and their outcomes.

The Ministry acknowledges there is an opportunity to now develop a framework that supports the planning for and provision of inter-regional passenger connections more broadly. We recognise there is the potential for inter-regional passenger rail to play a key role in this framework. The framework can also provide a platform for the Ministry and other transport agencies to work with and support regions more directly in the development of inter-regional passenger travel proposals or in a dedicated coordination function.

Through this framework, inter-regional passenger travel can input directly into the:

- review of the Rail Plan, which will commence in 2024
- development of the next Rail Network Investment Programme
- delivery of Emissions Reduction Plan key actions and targets
- development of future Government Policy Statements on land transport.

Te Waihanga Comment:



The logical next step is to scope the potential costs and benefits.

If we look at the potential future of inter-regional passenger rail in New Zealand, it is hard to know what the path forward should be because of our gaps in knowledge. We cannot be sure how many people might use it, what the emissions reductions might be, or whether proposals would stack up from a cost-benefit perspective.

Despite these knowledge gaps, the scale of the problems – the need to reduce emissions and connect regional communities – are substantial. Because of the scale of the challenge, it's worth taking a deeper look at the potential case for inter-regional passenger rail, alongside other options to improve low-carbon connections between regions.

To move forward, **the logical next step is a scoping study to get a handle on the potential costs and benefits** of different options. This study should look at lower cost, non-built or low build options first, before looking at higher cost options.

A scoping study would need to look at:

- how much investment would be required on potential routes
- the current volume of inter-regional travel on potential routes
- what share of current travellers might switch to rail in future
- the potential emissions reductions from investment, taking a whole of life approach to emissions.

By starting with strategic planning and guiding project selection by cost-benefit analysis, a scoping study could be well-aligned with the *New Zealand Infrastructure Strategy, Rautaki Hanganga o Aotearoa*.

