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Te Waihanga | Infrastructure Commission
Wellington

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HE TŪĀPAPA KI TE ORA | INFRASTRUCTURE FOR A BETTER FUTURE

KiwiRail Holdings Limited (KiwiRail) welcomes the opportunity to submit feedback on the recent Infrastructure Commission Te Waihanga report titled *He Tūāpapa ki te Ora Infrastructure for a Better Future*.

We have prepared responses to most questions of relevance to the rail industry but have declined to respond where these matters fall outside of our industry expertise. KiwiRail has a range of direct engagements with Government where our feedback on matters raised will continue to be provided directly.

We would be happy to meet with you to discuss this submission further.

1. What are your views on the proposed 2050 infrastructure vision for New Zealand?

KiwiRail supports the proposed vision for 2050. We support the focus on people, places and businesses, and on future generations. As infrastructure assets are generally long-term investments, this multi-generational approach is important.

New Zealand's infrastructure should keep pace with population and economic growth and give New Zealanders the services they expect, both now and in the future. Rail is critical to achieving this, providing value to New Zealand of up to \$2.1 billion per year (EY: Value of Rail 2020) and is a key enabler for a sustainable and carbon neutral economy.

Recent rail reforms have supported a longer-term investment approach for rail infrastructure that is integrated into the land transport planning and funding system. This includes the provision of a new ten-year Rail Network Investment Programme (RNIP). This will support a sustainable funding profile for renewal and maintenance of the track network while KiwiRail operates self-sustaining commercial operations on this network.

Rail enables access and mobility, transporting people and goods to where they need to go, supporting productivity and business growth, reducing emissions, congestion, and road deaths, and strengthening social and cultural connections between communities. The New Zealand Rail Plan is an essential step in ensuring this component of New Zealand's infrastructure can deliver the value of rail New Zealanders expect.



2. What are your views on the decision-making outcomes and principles we've chosen? Are there others that should be included?

We consider the outcomes and decision-making values are appropriate to support wise investment in infrastructure. These are broadly consistent with key criteria engaged through Government Policy Statements on Land Transport that governs decision-making across our sector.

As specific points of feedback, we note:

- The term "value for money" could be lifted up as the overarching value. It has been used in reference to the "Efficient" outcome however value for money applies equally to Equitable and Affordable outcomes. For instance, an investment does not deliver value for money if it unfairly disadvantages the vulnerable and, likewise, an investment could not be considered affordable if its broad costs outweigh its benefits. To this end, it would be appropriate for "Efficient", "Equitable" and "Affordable" to be identified as dimensions of value for money. This would translate well to Treasury's Living Standards Framework.
- On the Affordability point, there is a concern that affordability can be determined by relatively short-term fiscal and economic conditions. This can lead to underinvestment in long-term infrastructure, compounding a negative economic condition through increased fiscal pressure to deliver on catch-up renewals. In addition, new investments can crowd out critical maintenance on existing infrastructure. To this end, the focus point should be on the level of investment available to deliver critical infrastructure. We are encouraged by the recent decision to shift to four-year capital allowances in the Budget cycle. It may be appropriate to consider the merits of longer capital allowance periods (e.g. ten years) to align funding decisions to long-term infrastructure investment. In the case of transport, this period would align well to the National Land Transport Programme and ten-year local government budgets. The definition could be extended and strengthened to more clearly articulate the need to maintain the infrastructure we already have.
- The principle of equity could be extended to include inter-generational equity.
- These outcomes should be heavily connected to the net-zero carbon objective to ensure our investments are sufficiently prepared for climate change. We also acknowledge the need for collaboration and integration across infrastructure planning, with organisations working closely together. We are pleased to see the Integrated decision-making value clearly identifies this as a priority.
- As the strategy is further developed, it would be helpful to consider whether the proposed outcomes and decision-making principles help to address the challenges outlined in the document. On this point we consider that the decision-making principles could have a stronger focus on the long-term context for infrastructure. For example, the principle of "future-focused" could be expanded to include the concept of extending our planning horizons for decision making – thinking longer term.
- The further developed documents could also strengthen the importance of decisions being timely – ahead of the curve, to address the issue where decisions are often delayed/deferred until there is no longer a choice. The cost of deferral or of doing nothing should be explicitly considered in infrastructure



decision making if we are to make informed choices. This highlights the importance of the infrastructure pipeline as a mechanism to identify and then address critical investment need.

3. Are there any other infrastructure issues, challenges, or opportunities that we should consider?

The trends and issues on the horizon are appropriately identified and have been well described. The transport components of this section could be expanded further to include the flow of freight across New Zealand, the need to decarbonise our freight systems, and the optimal arrangements across New Zealand's ports. This is a critical demand component across our transport infrastructure.

Infrastructure planning and funding will continue to be a key enabler if New Zealand is to address the infrastructure deficit. There is a need for a long-term view for long-term assets with funding and planning mechanisms put in place to support this. Short term funding should not be used for long life critical infrastructure. We need to recognise the cost of doing nothing or deferring significant infrastructure decisions and ensure this is incorporated in decision making.

In addition, greater longer-term certainty of the infrastructure pipeline will enable more effective engagement with market participants and assist them to grow and retain capability. This is critical to ensure that we have a healthy and sustainable local contracting base to support infrastructure delivery.

Regarding transport, the strategy focusses on how people move around in and between our communities. This is appropriate given the need to reduce carbon emissions and respond to population pressures in our urban centres and changing populations across our rural communities.

4. For the 'Building a Better Future' Action Areas and the Needs, what do you agree with, what do you disagree with, are there any gaps?

KiwiRail supports the Action Areas and Needs identified through the Aotearoa 2050 survey.

We note KiwiRail's role as a key enabler for a sustainable and carbon neutral economy. We are currently exploring options for how to decarbonise the rail network to ensure we are net zero carbon by 2050 and strengthen the case for greater modal share from road to rail.

In addition, we are seeing increasing impacts of climate change on our rail infrastructure, for example, increased weather events, flooding, and slips. This is resulting in an increased need for investment to mitigate the impact of these events, such as improvements to sea walls, culverts and embankments.

5. How could we better encourage low-carbon transport journeys, such as public transport, walking, cycling, and the use of electric vehicles including electric bikes and micro-mobility devices?

KiwiRail is responsible for delivering reliable metro track networks to ensure services can meet the future demand for rail transport. In Auckland, commuter rail patronage grew 180% over the past decade, reaching nearly 22 million passengers by June 2019 (pre-COVID). Capacity increases (including the City Rail Link) that will enable continued growth are envisaged that will collectively and progressively provide increased capacity to a maximum of 54,000 passengers per hour at peak times. This



growth is being supported by long-term investments including Auckland's City Rail Link, Third Main Line, expanded services to new developments south of Auckland, and the Wellington Metro Upgrade Programme.

In our view, the provision of effective alternative transport options is a pre-requisite for encouraging and maintaining modal shift to low-carbon journeys such as rail. This requires that frequent, time-efficient, and reliable services are available that enable people to get where they need to go at the right times, and at reasonable cost – and that capacity improvements lead or at least keep pace with growth in demand. Rail services lend themselves well to forming a 'backbone' around which feeder services may be designed. Hence, current, planned and forecast investments in rail capacity, alongside appropriate planning and funding for renewal and maintenance will help to enable and support increased public transport patronage in our major centres. More work may be needed to ensure that our wider transport networks are designed to facilitate and encourage rail patronage (e.g. bus and cycling feeders to rail, park and ride facilities, etc), thereby reducing as far as possible any barriers that may exist to uptake which in turn would help to support the success of government policy initiatives aimed at encouraging low-carbon transport journeys.

We are also continuing to seek opportunities to increase volumes of freight on rail, as this provides a significant opportunity to reduce carbon emissions (as well as road maintenance and renewal costs) compared to heavy trucks. As this would take place alongside increasing passenger demand and need for frequent reliable services, investment in new infrastructure (e.g. third and fourth main lines) will be an important component of the necessary rail capacity.

6. How else can we use infrastructure to reduce waste to landfill?

No response

7. What infrastructure issues could be included in the scope of a national energy strategy?

The 100% renewable energy target by 2030 is aspirational and necessary to signal the level of investment required in order to transition. The proposed national energy strategy is a sensible next step. KiwiRail does not have a view about when this target can be reached. We note the Infrastructure Commission's comment that electrification of the transport sector would require more transmission capacity to cater for larger power flows over the national grid. We agree with this assessment.

Due to the significant cost of electrification, it is most appropriate for high volume routes. KiwiRail is also currently exploring alternative options for how to decarbonise our operation. There is a growing range of energy sources that may provide greater value for money whilst still delivering lower emissions.

To this end, we are continuing to investigate further electrification for certain routes, but also recommend taking a medium-term view on further investments in line with the development of alternative fuels and locomotive technology. This could complement electrification and result in a better overall economic investment.



8. Is there a role for renewable energy zones in achieving New Zealand's 2050 net-zero carbon emissions target?

KiwiRail does not have a view on this proposal but is interested in exploring it further. As a national operator with property holdings across New Zealand, this investment approach would impact us directly and indirectly (e.g. additional station requirements around housing developments). It is unclear what level of incentive would be required to sufficiently disincentivise investment from other regions where the cost of energy is higher but other reasons to invest, develop, and maintain kāinga continue.

9. Of the recommendations and suggestions identified in the Ministry of Business, Innovation and Employment "accelerating electrification document, which do you favour for inclusion in the Infrastructure Strategy and why?

This is not an area that KiwiRail holds industry expertise. We have previously noted that further electrification of the rail network would add significant power draw on the national grid, so we are considering how low-energy locomotives could attain similar carbon reduction outcomes without significant additional draw on the network.

10. What steps could be taken to improve the collection and availability of data on existing infrastructure assets and improve data transparency in the infrastructure sector?

We agree that data integrity is essential to support wise investment decisions for long-term infrastructure and we are focused on continuous improvement in this area.

For example, KiwiRail instituted a new capacity management system in May 2021 which represents a significant step forward for our operations and for rail customers. The new system better identifies capacity on the freight network and makes this information available to the market on a weekly basis. This ensures existing customer freight needs are met and enables KiwiRail to increase the use of rail freight to a new customer base by better understanding and then using rail freight capacity. This approach is similar to passenger airline bookings, carrying fees for cancellations, charges for no-shows and adjusting closer to the service running.

These systems provide real information about the demand for and use of rail infrastructure. In turn, this is supplemented by robust asset management information. The Rail Network Investment Programme (RNIP) is a critical enabler to ensure investments are underpinned by asset management planning processes. KiwiRail determines rail infrastructure investment needs by identifying freight and metro customers' current and future needs, the required level of service to meet those needs, and the capacity of the network and assets needed to meet the identified level of service. As part of this, we take into account safety and other regulations that must be complied with, condition and capacity of assets, any identified performance issues, current and future obsolescence issues, imminent renewals (to smooth the curve when many assets are at end of life at a similar time).



11. What are the most important regulatory barriers to technology adoption for infrastructure providers that need to be addressed?

KiwiRail has not identified obvious regulatory barriers to technology adoption in its operations. Certain technologies will require approval from a safety perspective, but this should be viewed as prudent management and not a barrier.

12. How can we achieve greater adoption of building information modelling (BIM) by the building industry?

KiwiRail has used BIM and last night won an award for recent double-tracking work between Trentham and Upper Hutt. We consider that digital engineering, of which BIM is part, to be integral to our future. The best way for the horizontal infrastructure providers to influence greater adoption is to share experience and require the capability from contractors in tenders for major works. In time, this will become the industry standard. We consider that the industry is incentivised to invest to make this happen.

13. How should communities facing population decline change the way they provide and manage infrastructure services?

No response.

14. Does New Zealand need a Population Strategy that sets out a preferred population growth plan, to reduce demand uncertainty and improve infrastructure planning?

No response.

15. What steps can be taken to improve collaboration with Māori through the process of planning, designing, and delivering infrastructure?

No response.

16. What steps could be taken to unlock greater infrastructure investment by Māori?

No response.

17. What actions should be taken to increase the participation and leadership of Māori across the infrastructure system?

No response.

18. For the 'Enabling Competitive Cities and Regions' Action Area and the Needs, what do you agree with, what do you disagree with, are there any gaps?

We are generally supportive of the action area and needs. However, cities and regions are already "competitive" in the sense that there is a demand for finite resources and real challenges in meeting their infrastructure needs to adapt to changing population demand (both up and down). KiwiRail previously questioned whether this is the right value to drive our long-term investment approach, or if collaborative decision-making based on coherent national strategies is a better approach. The objective should not be attracting people into an area in and of itself, it should be understanding population pressures and having the right systems to meet projected demand.



The investment priorities underpinning the Rail Network Investment Programme include investment in metropolitan rail to support productivity and growth. This corresponds to the Government's Rail Plan released in May 2021. We expect this will continue to focus on completing the programmes which align with the Auckland Transport Alignment Programme (ATAP) and investments identified through the Regional Land Transport Programmes (RLTPs) along with enhanced regional services (i.e. embedding the Te Huia service between Hamilton and Auckland and the Capital Connection between Wellington and Palmerston North).

KiwiRail has proposed participating in a coordinated cross-agency forum alongside Waka Kotahi and the Ministry of Transport to develop a framework and plan to support further consideration of regional passenger rail investment. We would also support multi-agency initiatives aimed at ensuring that wider metro Public Transport networks (including around new developments) are optimised to promote fast and efficient connections via rail services.

In addition, we acknowledge the importance of Freight and Tourism connections and KiwiRail's role in supporting regional economies.

19. What cities other areas might be appropriate for some form of congestion pricing and/or road tolling?

No response.

20. What is the best way to address potential equity impacts arising from congestion pricing?

No response.

21. Is a 10-year lapse period for infrastructure corridor designations long enough? Is there a case for extending it to 40 years consistent with spatial planning?

With a 10-year lapse period (or sometimes even longer) as occurs now, designations are regularly rolled over as the enabling funding is often delayed by the business case and procurement processes. The progression of transport projects is also subject to changing investment priorities, but it is important to retain the investment in the designation to preserve the project's future potential. With the uncertainty that often surrounds the delivery of projects and associated procurement, the only means to preserve the existing investment in obtaining a designation in the first place (i.e. time and resources) is to hold designations. Obtaining new ones is a time consuming and costly process and creates uncertainty for both requiring authorities and impacted communities.

Given the timeframes associated with spatial planning and the long term thinking that is being asked of transport infrastructure providers there is a definite case for the lapse period for transport designations being 30 years (or even longer). This will provide certainty to developers and Local Authorities as to what the high-level arterial network will look like and it can be planned around accordingly. It is also easier to develop housing and other activities around proposed (and future planned) transport networks than it is to develop it in reverse.



22. Should a multi-modal corridor protection fund be established? If so, what should the fund cover?

A multimodal corridor protection fund would enable establishment and protection of corridors to a higher extent than currently occurs. This would align with the Spatial Planning framework duration without imposing costs immediately on infrastructure providers to fund what can be significant costs with future corridor identification and protection. The fund could cover the costs of design and designating the land, any consents that are required and the acquisition of land. KiwiRail would support the establishment of such a fund.

23. What infrastructure actions are required to achieve universal access to digital services?

No response.

24. For the 'Creating a Better System' Action Area and the Needs, what do you agree with, what do you disagree with, are there any gaps?

We are generally supportive of the action area and needs.

Ensuring equitable funding and financing has been a key focus in rail in recent years through the Future of Rail Review. As a result, a new planning and funding model is in place from 1 July with funding coming through the NLTF. Longer term funding is critical to support efficient and effective planning and investment in long term infrastructure assets such as the rail network.

With respect to the point about integration of infrastructure institutions:

- We support coordination, integration, and collaboration between agencies around infrastructure
- This may be better expressed than "Integrate infrastructure institutions" to "Support integrated infrastructure planning and investment"
- The changes arising from the Future of Rail Review are a good example of putting in place appropriate funding and planning mechanisms and supporting effective coordination and collaboration between responsible entities
- We note the comments on the funding of land transport infrastructure on page 96 – this should be updated to reflect the new planning and funding model for the rail network which is applicable from 1 July (through the NLTF)

We support the idea of regional spatial plans to guide investment.

With respect to the point on "reviewing roles and functions of local government and other related infrastructure providers", the wording is a bit ambiguous, but we believe that the suggested actions are all intended to be in relation to the role and functions of local government. Given rail's connection to local communities, we will maintain an interest in this area.

It is important that system interventions support the principle of timely investment.

25. Does New Zealand have the right institutional settings for the provision of infrastructure?

Covered through other responses.



26. How can local and central government better coordinate themselves to manage, plan and implement infrastructure?

KiwiRail's Rail Network Investment Programme has had strategic input from (a) the Government through the Rail Plan and Government Policies on Land Transport (and Future of Rail forum), (b) local authorities through Regional Land Transport Plans led by Regional Transport Committees for which KiwiRail can be a member, and (c) by KiwiRail in response to our market information to ensure infrastructure investment is responsible to and enabling of demand. This reflects the relatively mature system underpinning transport planning and funding. We note that different institutional arrangements are in effect across other large infrastructure sectors.

27. What principles could be used to guide how infrastructure providers are structured, governed and regulated?

This is a complex area where one size does not fit all, and careful consideration is required.

Given that structural reforms can be costly and time consuming, it is important that any proposed reform should be very clear around the problem definition and the linkage to the outcomes being sought. Options analysis should consider alternative ways to achieve the outcomes sought. Legislative/structural reform should be used wisely and not be the panacea for issues which could be solved through greater collaboration between entities or to address issues which are primarily about affordability/funding.

Many principles will be important, including clarity and alignment with the outcomes being sought, ensuring benefits demonstrably exceed cost, being cognisant of (and responsive to) stakeholders (e.g. customers, communities etc), avoiding unnecessary cost/duplication/administrative burden, and being fit for purpose (future proofed).

28. What steps could local and central government take to make better use of existing funding and financing tools to enable the delivery of infrastructure?

No response.

29. Are existing infrastructure funding and financing arrangements suitable for responding to infrastructure provision challenges? If not, what options could be considered?

No response.

30. Should local authorities be required to fund depreciation as part of maintaining balanced budgets on a forecast basis?

No response.

31. What options are there to better manage and utilise existing infrastructure assets?

We support the point on better managing and utilising existing assets. In line with the NZ Rail Plan and RNIP we will be investing in resilience and reliability of the rail network to support greater utilisation of capacity (and increased volumes on rail).

We support the points made around the need to adequately invest in existing assets. It is also important to ensure we invest at the right time, commit to long term



renewal and maintenance plans and make efficient funding decisions around long term infrastructure assets.

For investment in new assets, the flow on impacts for renewal and maintenance (and the funding thereof) should be made transparent.

32. Are there benefits in centralising central government asset management functions? If so, which areas and organisations should this apply to?

We note that this point relates to central government only.

However, for the absence of doubt, KiwiRail does not consider that centralisation of government asset management functions would work well for rail infrastructure. KiwiRail is a vertically integrated company that is led by commercial incentives to operate rail freight, ferry and other services and is also the steward for the national rail network. There are significant benefits to an agency of government, in this instance a State Owned Enterprise, holding responsibility for planning, designing, costing, and delivering rail infrastructure investment with strong engagement with the transport planning and funding process. It is important that as the agency responsible for the network, that we are also responsible for the associated asset management functions.

33. What could be done to improve the procurement and delivery of infrastructure projects?

We have outlined our general view in response to Question 34.

34. Do you see merit in having a central government agency procure and deliver infrastructure projects? If so, which types of projects should it cover?

KiwiRail does not consider that procurement of its assets would be better served by another agency.

Entities, such as Crown Infrastructure Partners, have demonstrated the efficiencies of national infrastructure delivery through capital recycling programmes. This includes the ultra-fast fibre rollout and supporting housing development. This model is appropriate where the infrastructure programme is capable of being delivered by a broad and competitive market. The entity, which could be co-owned by central and local government, is ultimately a financing tool to extend the value of an initial investment through capital recycling.

KiwiRail is a vertically integrated company that is led by commercial incentives to operate rail freight, ferry and other services and is also the steward for the national rail network. There are significant benefits to an agency of government, in this instance a State Owned Enterprise, holding responsibility for planning, designing, costing, and delivering rail infrastructure investment with strong engagement with the transport planning and funding process. KiwiRail is a centre of excellence for rail infrastructure expertise and continues to demonstrate its ability to deliver large-scale and complex capital programmes on budget and on time (for example, the Main North Line reinstatement following the 2016 earthquake).

35. What could be done to improve the productivity of the construction sector and reduce the cost of delivering infrastructure?

No response.



36. What components of the infrastructure system could have been improved to deliver effective stimulus spending during the Covid-19 pandemic?

KiwiRail supports longer-term planning and an infrastructure pipeline as mechanisms for supporting future investment decisions. We also note that acceleration of renewals and maintenance is an often overlooked, but sensible way to deliver economic stimulus quickly.

The COVID-19 Response and Recovery Fund and other Government funds enabled a range of infrastructure initiatives across New Zealand to support employment and maintain economic confidence. For example, KiwiRail received \$26 million to support a nationwide drainage programme. This enabled additional employment opportunities to be delivered through KiwiRail that supported improved weather resilience and reduced environmental damage across the track network. This has also supported the recruitment of a future workforce to deliver long-term rail network infrastructure maintenance and upgrades. This programme required additional funding in order to be delivered at pace and has supported broader economic outcomes.

The pandemic also presented an opportunity to increase construction activity on the metro network while passenger numbers were low during lockdown. This enabled KiwiRail's track maintenance teams to speed up the Auckland Metro Remediation programme. The accelerated programme of work across seven months involved the installation and distress of 134 kilometres of rail, more than 20,000 sleepers and 23,000 cubic metres of ballast. This highlights the ability of a vertically integrated national rail company to respond quickly and flexibly as opportunities arise.

The pandemic also highlighted the need for resilient supply chain arrangements across the public and private sector. KiwiRail was impacted through the sudden and significant decline in demand during the Alert Level 4 lockdown period and subsequently. This involved aligning operations to Ministry of Health guidance, engaging our workforce including through High-Performance High-Engagement, critically reviewing cost structures, and focussing on delivering services through the severe impact. Like other companies across the supply chain, we have embedded these changes into our operations.

The pandemic has continued to impact international supply chains. In New Zealand, this is demonstrated by international shipping freight consolidating to a few key ports. KiwiRail was able to meet the uplift in domestic freight demand as a consequence. This highlights the benefits of considering transport as an integrated system. When the dynamic shifts in one element, the balance of the system must be in a position to respond. KiwiRail continues to demonstrate the economic benefits of rail as the supply chain continues to be affected.

