Title: **Testing our thinking - Developing an enduring National Infrastructure Plan**

Organisation: **NZ Airports Association Incorporated**

Reference: **NIPC24-0002995** | Submitted: **10/12/2024 04:06 pm** | Submitted by:

Summary of information submitted

Page 1 - Introduction

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We're seeking feedback

Our Discussion Document, Testing our thinking: Developing an enduring National Infrastructure Plan, sets out our thinking as we begin work to develop a National Infrastructure Plan. The Discussion Document sets out what we expect the Plan will cover and the problem it's trying to solve, as well as the approach we're proposing to take to develop it.

We're sharing this now to test our thinking and give you the chance to share your thoughts. Let us know if we've got it right or if there are issues you think we've missed.

We'll use your feedback as we develop the Plan. We'll be sharing our thinking by presenting at events around the country, hosting workshops and webinars, and sharing updates through our website, newsletter, and social media. We'll also seek feedback on a draft Plan before publishing the final Plan in December 2025.

Submission overview

You'll find 17 main questions that cover the topics found in the Discussion Document. You can answer as many questions as you like and can provide links to material within your responses. On the final page (6. Next steps) you can provide any other comments or suggestions that you would like us to consider as we develop the National Infrastructure Plan. Submissions are welcomed from both individuals and organisations.

A few things to note:

- You can save progress using the button at the top right of this form.
- A red asterisk (*) denotes a mandatory field that must be completed before the form can be submitted.
- We expect organisations to provide a single submission reflecting the views of their organisation. Collaboration within your organisation and internal review of your submission (before final submission), is supported through our Information Supply Platform. You'll need to be registered with an Infrastructure Hub account, and be affiliated with your organisation to utilise these advanced features. Many organisations will already have a '*Principal respondent*' who can manage submissions and assign users at your organisation with access to the draft responses.
- Submissions will be published on our website after the closing date. The names and details of organisations that submit will be published, but all personal and any commercial sensitive information will be removed.

Further assistance

Each submission that is started is provided a unique reference identifier. These identifiers are shown in the top right of each application page. Use this identifier when seeking further assistance or communicating with us about this submission by using one of the following methods.

- Use info@tewaihanga.govt.nz to contact us with any questions relating to our Discussion Document and consultation.
- Use inform@tewaihanga.govt.nz for help managing roles and permissions of user accounts affiliated with your organisation in the Information Supply Platform (ISP).

Submission method

Our preferred method is to receive responses through this form. However, we anticipate some submitters will wish to upload a pdf document, especially where their submission is complex or long. If this submission method is necessary, please use this word template and save as a pdf. We ask that you retain the structure and headings provided in the template as this will support our processing of responses.

Select a submission method

To continue, select the method you will be using.

Online form

Page 2 - Context for the Plan

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Testing our thinking

The Discussion Document includes five sections. Below we're seeking feedback on why we need a National Infrastructure Plan. We also want to test our thinking on our long-term needs and make sure we have a clear view of what investment is already planned.

Section one: Why we need a National Infrastructure Plan

A National Infrastructure Plan can provide information that can help improve certainty, while retaining enough flexibility to cancel or amend projects as circumstances or priorities change.

1. What are the most critical infrastructure challenges that the National Infrastructure Plan needs to address over the next 30 years?

The National Infrastructure Plan must address aviation infrastructure as a vital component of New Zealand's overall infrastructure planning. Aviation infrastructure operates on a user-pays model, largely excluded from government planning. This fails to account for the sector's role in enabling economic growth, connecting communities, and supporting essential services such as medical and emergency response.

Integrated transport planning across all modes is essential to improve connections between aviation and land transport networks, enabling higher-quality and more efficient investments.

Airport infrastructure serves as the foundation of aviation and our international and domestic connectivity. The safety and capacity of our airports influences the health of regional communities and the ability of regional economies to grow.

Airports should also be harnessed for their non-aeronautical infrastructure capacity. Airports provide natural hubs for industrial and commercial development, including the development of renewable energy hubs. Te Waihanga should harness a vision of how our airports can support regional development and the climate transition, as 30 year master planners integrated into transport supply chains and with effective land development powers.

Looking ahead, there are four key challenges for Te Waihanga to consider for airport infrastructure.

1. ***Aviation must decarbonise, which will have impacts on airport infrastructure as well as the enabling alternative fuel infrastructure required for low and zero-emissions aircraft.*** *This will include a significant increase in renewable electricity requirements for electric, green hydrogen and eSAF production, far beyond current targets. It will also include access to Sustainable Aviation Fuel, either through import supply chains or through the development of domestic SAF plants.*

2. ***Advanced Air Mobility (AAM) will present significant opportunities for New Zealand both for urban mobility and regional connectivity, as a country with dispersed geographic centres.*** *There is a strong consensus among industry experts that as we enter the 2030s, New Zealand's unserved demand and geography makes us perfectly positioned to benefit from electric aircraft, including both eCTOLs (conventional take-off)*

and eVTOLs (vertical take-off), which, like EVs, will have far lower operating costs than conventional aircraft. Zero-emission short distance flight will transform the New Zealand economy and the movement of people and goods, enhancing the way our regions connect with main centres, as well as urban mobility. To harness this opportunity, vertiport infrastructure will be required as well as considerable investment into integrated airspace management.

3. ***A number of airports will require infrastructure upgrades to handle larger regional aircraft such as ATRs over the next 5-10 years, due to Air New Zealand's fleet changes.*** *Due to the domination of the national carrier in the domestic market, these airports are constrained in capacity investment. Lower frequency flights may affect airport landing charges and the economic sustainability of smaller airports.*

4. ***New Zealand has a chronic funding issue in relation to airports that have critical infrastructure requirements (for basic connectivity, medical services and emergency response) beyond their user base.*** *Currently these non-commercial airports run at a loss and from time to time can seek assistance for infrastructure upgrades from bespoke government funds. A sustainable solution should be found for this problem, which is illustrated in the NZ Airports report Linking the Long White Cloud.*

The Government's independent review into the Air Navigation System provides an excellent overview of infrastructure and system challenges in the aviation sector, which is broadly accepted by industry. We strongly recommend this is utilised by Te Waihanga in the development of the National Infrastructure Plan.

2. How can te ao Māori perspectives and principles be used to strengthen the National Infrastructure Plan's approach to long-term infrastructure planning?

We defer to feedback from Māori and Māori representative organisations and businesses. However one approach we can suggest for thinking about a te ao Māori view is to reflect on the role of manaakitanga and whanaungatanga among New Zealanders. These values underpin our desire as New Zealanders to connect with each other and with other countries.

Section two: Our long-term needs

The National Infrastructure Plan will reflect on what New Zealanders value and expect from infrastructure. To do this, the Plan needs to consider New Zealanders' long-term aspirations and how these could be impacted over the next 30 years.

3. What are the main sources of uncertainty in infrastructure planning, and how could they be addressed when considering new capital investments?

The aviation sector's user pays model supports well-performing airport infrastructure, with the exception of non-commercial airports where a funding gap exists between the user base and critical capex and opex requirements. Linking the Long White Cloud explains this

*situation. For these airports, including the five Joint Venture airports with 50% Crown ownership, there is **continual uncertainty about where they will find funding for essential capex upgrades**. Crown funding for the Joint Venture airports is far too low for their requirements and has not shifted for many years. Ad hoc funds, such as the Provincial Growth Fund, have addressed this gap from time to time, but this creates no long-term certainty for the sector.*

*For all airports, **stable and predictable economic regulation** is critical for infrastructure planning and investment. The information disclosure regime managed by the Commerce Commission for the three regulated airports sets an important precedent for the rest of the network, and has been well tested by regulatory reviews and in the courts.*

***New Zealand does not undertake integrated transport planning** across all transport modes. Aviation is often not considered in terms of land transport connections. Remedying this would support higher quality and more efficient transport investment overall.*

Section three: What investment is already planned

We already gather and share data on current or planned infrastructure projects through the National Infrastructure Pipeline. This data, alongside other information gathered by the Treasury or published by infrastructure providers, helps to paint a picture of investment intentions.

4. How can the National Infrastructure Pipeline be used to better support infrastructure planning and delivery across New Zealand?

*All airports have a clear sense of the infrastructure upgrades they require over the short, medium and long term. The Pipeline should be able to map projected airport infrastructure upgrades and identify potential alignment opportunities across regional airports, for instance on runway resurfacing, where cost and timing efficiencies could be created through **joint procurement of services**.*

*The Plan and Pipeline should **map projected population growth and projected passenger transport and freight requirements over time**, providing a solid point of reference for the infrastructure and services needed by regions as they grow and change.*

Section four: Changing the approach

We have used our research and publicly available information on infrastructure investment challenges to identify key areas for change. The next question and the following three pages seek further detail on the three themes in section four of our paper. Within each of the three themes, we explore some topics in more detail, outlining the evidence, discussing the current 'state of play', and asking questions about where more work is needed.

5. Are we focusing on the right problems, and are there others we should consider?

Overall the themes are helpful but could risk being too general. Te Waihanga should be as specific as possible with any recommendations.

In the section 'Capability to plan and build' a case study is highlighted for land transport's funding sustainablity challenges. We recommend also including a case study for non-commercial airports.

In 'Getting the settings right' an airport case study could support Te Waihanga's thinking about user pays.

Page 3 - Capability to plan and build

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Changing the approach — Capability to plan and build

Section four looks at changes that we can make to our infrastructure system to get us better results. We've broken these changes down into three themes: capability to plan and build, taking care of what we have, and getting the settings right.

For the first theme, we look at three key areas:

- Investment management: Stability, consistency, and future focus
- Workforce and project leadership: Building capability is essential
- Project costs: Escalation means less infrastructure services.

Investment management: Stability, consistency, and future focus

We're interested in your views on how we can address the challenges with government infrastructure planning and decision-making.

6. What changes would enable better infrastructure investment decisions by central and local government?

Spatial planning *is an extremely useful tool to identify medium to long term infrastructure development requirements across regions, ensuring existing infrastructure is effectively utilised and avoiding duplication of effort or functions,*

Central government would benefit from ***stronger agency capability****. There is little understanding of aviation infrastructure in the Ministry of Transport, Infrastructure Commission or Treasury. The policy and strategy focus is dominated by land transport and other infrastructure that requires Crown funding, creating an unbalanced picture of critical infrastructure requirements and options for private investment.*

*Better investment decisions can be made when there are the **right incentives**. Gaps in infrastructure investment inevitably come from a disconnect on incentives. For example, regions experiencing higher tourism flows are required to develop infrastructure to meet that increased demand, however there is a disconnect between the entities required to invest (local authorities) and the entity that receives a direct return from visitors (the Crown, in the form of GST spend). If local authorities received some of this GST they would be naturally incentivised to improve and expand the infrastructure that grows the GST funding base.*

*Finally, there are a number of high quality airport projects, including non-aeronautical projects like business parks, that would be hugely beneficial to regions but are constrained by the **local government debt cap**. Addressing this could unlock useful infrastructure investment very quickly, with a measurable RoI.*

7. How should we think about balancing competing investment needs when there is not enough money to build everything?

*Firstly, **any investments which will produce a return should be prioritised**. For example, an investment to support an international air route into a regional airport may involve an upfront capex investment from the Crown of $1-2 million, but will return over $8m in GST spend per year back to the Crown, and $45m of visitor spend per year to the region. This is a natural area for prioritised investment which supports economic growth and a larger funding pot for other projects.*

*Improving the **utilisation of existing infrastructure** is a key priority, but this must not detract from the importance of infrastructure being developed to service a growing population. For airports, maximising existing infrastructure may require market intervention to support the initial start up phase of new air routes and increase connectivity between our regional airports, many of which are in very good shape in terms of capacity and service levels.*

*Entities like airports with a track record in high quality infrastructure development and funding processes should be **supported to expand and develop their interests in commercial and industrial precincts**. This can be done through favourable planning regulations, for example.*

Workforce and project leadership: Building capability is essential

We're interested in your views on how we can build capability in the infrastructure workforce.

8. How can we improve leadership in public infrastructure projects to make sure they're well planned and delivered? What's stopping us from doing this?

We recommend drawing from infrastructure sectors that are successful in planning for the future and executing major, complex projects without government funding. The Ipsos

*Global Infrastructure Index in October 2024 ranked New Zealand last in delivering infrastructure – but **New Zealanders rated our airports as our highest performing infrastructure sector**. We should take lessons from this. The airports sector uses master planning processes to ensure that its infrastructure serves the needs of growing and changing communities and regional aspirations. Airports should be elevated in regional planning processes and their practices mirrored elsewhere when appropriate.*

9. How can we build a more capable and diverse infrastructure workforce that draws on all of New Zealand's talent?

No response provided

Project costs: Escalation means less infrastructure services

We're interested in your views on further opportunities to improve our ability to deliver good infrastructure at an affordable cost.

10. What approaches could be used to get better value from our infrastructure dollar? What's stopping us from doing this?

The user pays model for airport infrastructure ensures our investments are right sized according to stakeholder demand and passenger projections over time, avoiding both under-building and over-building. There could be elements of airport processes that could be analysed for broader application.

Page 4 - Taking care of what we've got

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Changing the approach — Taking care of what we've got

The second theme in section four looks at how we can get better at taking care of what we have. It looks at three areas:

- Asset management: Managing what we already have is the biggest task
- Resilience: Preparing for greater disruption
- Decarbonisation: A different kind of challenge.

Asset management: Managing what we already have is the biggest task

Asset management means looking after our infrastructure. We are interested in your views on how we can improve planning for this.

11. What strategies would encourage a better long-term view of asset management and how could asset management planning be improved? What's stopping us from doing this?

Airport master plans support a long-term view of infrastructure development and asset management with an outlook of 30 years. This type of planning could be better supported by protections in the Resource Management Act on reverse sensitivity.

Resilience: Preparing for greater disruption

We are interested in your views on how we can better understand the risks that natural hazards pose for our infrastructure.

12. How can we improve the way we understand and manage risks to infrastructure? What's stopping us from doing this?

Spatial planning is a key tool for both understanding risks and planning for necessary infrastructure changes. Stronger local and central government engagement is essential.

Decarbonisation: A different kind of challenge

We're interested in your views on how we can improve understanding of the decarbonisation challenge facing infrastructure.

13. How can we lower carbon emissions from providing and using infrastructure? What's stopping us from doing this?

The top priority for infrastructure and lowering carbon emissions must be a plan to produce not just sufficient, but abundant renewable energy; other initiatives on emissions reduction will only have minor impact when compared to the importance of this task. Currently, New Zealand's electricity generation projections do not take into account massive energy requirements in the form of decarbonised aviation (electric, green hydrogen and e-SAF generation); carbon capture and storage; and data centres. To be credible, the Plan should embrace this challenge and ensure it is front of mind for all government and industry participants.

There are airports around the country developing their own renewable energy capacity, and this could be better leveraged to support the climate transition at the regional level. In addition to this, there are airports wishing to contribute renewable energy at significant scale, including Christchurch Airport with the Kowhai Park solar farm. These larger projects must be incentivised and their development made smoother in order to work at the pace

required to meet our net zero targets. At this point, the infrastructure required for this task should be able to be mapped out, with target delivery through to 2050.

Page 5 - Getting the settings right

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Changing the approach — Getting the settings right

The third theme in section four looks at how we can get our settings right to get better results from our infrastructure system. It looks at three areas:

- Institutions: Setting the rules of the game
- Network pricing: How we price infrastructure services impacts what we think we need
- Regulation: Charting a more enabling path.

Institutions: Setting the rules of the game

We're interested in your views on what changes to our infrastructure institutions would make the biggest difference in giving us the infrastructure we need at an affordable cost.

14. Are any changes needed to our infrastructure institutions and systems and if so, what would make the biggest difference?

The critical change from an aviation perspective is agency integration and the removal of agency blind spots.

Aviation remains a blind spot for government agencies due to the limited Crown involvement, which leads to an incomplete picture of infrastructure requirements, challenges and opportunities.

On top of that, considerable work is needed to achieve a genuinely connected and integrated process across Te Waihanga, the Ministry of Transport, MBIE and Treasury, as well as other agencies. Without this integration we cannot see how agencies will plan for the level of nation-building infrastructure required for decarbonisation.

Critically, when plans and strategies are developed, they must be used. This is the most common problem we see from central government agencies, where work is often repeated and recast over time.

Network pricing: How we price infrastructure services impacts what we think we need

We're interested in your views on further opportunities to improve network infrastructure pricing.

15. How can best practice network pricing be used to provide better infrastructure outcomes?

We have already mentioned the benefits of a user pays system that ensures infrastructure is appropriately priced and shaped to the needs of the customer. This will not always be appropriate where there is a public good element to infrastructure with costs that should be more broadly socialised, but there is definitely room to explore further use cases for this model.

It is important to note that airports have additional key qualities that ensure a user pays model works for stakeholders and communities. Airport company boards and management must engage with stakeholders and communities on a daily basis, and they have a sense of accountability for what is built and for its regional impact.

Regulation: Charting a more enabling path

We're interested in your views on further opportunities to improve regulation affecting infrastructure delivery.

16. What regulatory settings need to change to enable better infrastructure outcomes?

For airports there are a number of regulatory changes that would have an immediate effect.

Protecting and enhancing airport operations and infrastructure development in the government's RMA reforms (such as the NPS Infrastructure), including through stronger ***reverse sensitivity protections****, would support all airports and airlines in the New Zealand system. This is particularly important as airspace becomes busier, and where flightpaths may need to be shifted.*

Reforming the Civil Aviation Authority's approach to ***Runway End Safety Areas (RESA)****. New Zealand's RESA rules are out of alignment with the International Civil Aviation Organisation (ICAO), and CAA's ability to remedy this is constrained by a High Court ruling in relation to Wellington Airport. Resolving this problem would immediately support much more efficient and cost-effective airport infrastructure in Gisborne, Hokitika, Kerikeri, Masterton, New Plymouth, Kapiti Coast, Whangarei and Westport.*

Additional information to support our development of the Plan

Section five in the Discussion Document is on the next steps. In this section, we're asking you for any additional comments, suggestions, or supporting documentation that we should consider in our development of the National Infrastructure Plan.

17. Do you have any additional comments or suggestions that you would like us to consider as we develop the National Infrastructure Plan?

Click 'Add another' to add multiple suggestions or comments.

Item 1

NZ Airports is partnering with NZTE and WSP on the development of a report on the future of airports and air connectivity. The initial outcomes of this process should be available early in the new year. This project will explore a number of future scenarios for aviation in New Zealand to support strategic decisions around infrastructure investment to grow connectivity, leverage new technology, and harness the industrial and commercial opportunities offered by airport precincts.

It would be ideal to connect this work with Te Waihanga's process on the National Infrastructure Plan.

Item 2

With reference to the Air Navigation Systems review, we recommend considering infrastructure in a broad sense. This review discusses the need to understand the Minimum Operating Network required for aviation in New Zealand, which includes airport infrastructure as well as the systems and processes that support aviation - from air traffic control through to ground based navigation aids. This type of approach would be beneficial for the plan across all sectors.

18. Attach any documents that support your submission

Click 'Add another' to add multiple attachments in PDF format.

Document 1

Linking-the-Long-White-Cloud-NZ-Airports-Position-paper-July-2017-FINAL-small-file.1.1 (1).pdf

Last modified 2023-9-6 15:51:54 pm, file size 1.99 MB

Document 2

Position paper: https://nzairports.co.nz/resources/linking-the-long-white-cloud/

Air-Navigation-System-Review-phase-two-report-May-2023.pdf

Last modified 2024-12-10 15:49:26 pm, file size 2.57 MB

Air Navigation System Review paper: https://www.transport.govt.nz/assets/Uploads/Air-Navigation-System-Review-phase-two-report-May-2023.pdf

Thank you for your response

Thank you for providing feedback on our Discussion Document. We'll use your comments as we continue to develop the Plan. This will not be the only opportunity for

you to provide feedback, but it is an important way to test our emerging thinking on the development of an enduring National Infrastructure Plan.

If you have prepared a submission on behalf of an organisation, you'll need to be an authorised *respondent* to make the final submission. If you entered a new organisation during sign-up, or your organisation does not already have a *Principal respondent* assigned, you will have been asked to nominate yourself or someone else for this role as you started this submission. Our team will have worked to verify these accounts allowing *Principal respondents* to manage access and assignment of requests for information to people within your organisation.

If you require any assistance please reach out to our team at inform@tewaihanga.govt.nz.