

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

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Summary of information submitted

Page 1 - Introduction

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We're seeking feedback

Our Discussion Document, <u>Testing our thinking: Developing an enduring National Infrastructure Plan</u>, 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 <u>info@tewaihanga.govt.nz</u> to contact us with any questions relating to our Discussion Document and consultation.
- Use <u>inform@tewaihanga.govt.nz</u> 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?

Base load electricty from renewable energy resources. To achieve this two elements in addition to what you have outlined are needed:

- 1. A 50 70 year horizon NOT 30. If Huntley, which presently is the key base load supplier, is be be replaced by 2050 under the Paris agreement its replacement will have a 50 -70 year life. So if Huntley was to be replaced in say 2040 you are talking 2090 2110.
- 2. A long term holistic view is required. The Onslow project was based in the SI. but the major demand growth is in the "golden Triangle". It makes economic sense that this demand be produced in the NI. Huntley etc. Savings in expensive transmission lines and ongoing savings possibly at Haywards Heath.
- 3. The viable alternatives need to be on the table. No where is there any mention of nuclear energy. The greater the quantum of electricity produced from wind and solar the greater the need for economic base load electricity. It maybe that geothermal can supply this but that is uncertain so to minimise risk and to gain time nuclear energy needs to be on the table!
- 2. How can te ao Māori perspectives and principles be used to strengthen the National Infrastructure Plan's approach to long-term infrastructure planning?

Get Maori to understand that advanced technology is in absolute accordance with their principles.

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?

see one above. Changing technology, especially in the electricity sector, is a major source of uncertainty and that is why getting all the options on the table is vital. Presently battery technology is not economic in terms of the base load problem.

Politics is the other big uncertainty so bi partisan buy in necessary. I have argued that a similar mandate to that the RBNZ has over interest rates be given to Infrastructure NZ but in respect of its long term plans.

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?

Thinking about synergies between pipeline projects and the effect of those on growth of GDP.

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?

In terms of electricity generation and distribution I think you are way wide of the mark. See my comments in one above.

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?

Clearer demarcation of responsibities between Government and local bodies and sources of finance. It may be that Regional bodies add complexity - certainly adds to lower productivty! We are a nation of 5.0 + million people!

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

Cost benefit analysis and thinking about synergies over time - see above. Staging - it may be more economical to complete a project completely well rather than short term make do. The highway north comes to mind, we are spending a fortune on maintaining the Brinderwin road when by passing it would save dollars.

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? Spending far more time analysing needs and objects as well as financial outcomes so that potential problems are identified early.
- 9. How can we build a more capable and diverse infrastructure workforce that draws on all of New Zealand's talent?

By having a pipeline of projects that require a given set of skills as well as the appropriate

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?

See comments above

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?

Simplify: Attempt to find long term solutions that do away with old /present infrastructure. Imagine if we could dispense with the Cook straight cables and the transmission lines from SI to NI. Or at least reduce them but in longer term (see my one above) why couldn't the NI be independent of the SI for electricty. Be bold with your thinking.

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?

Better analysis - see comments above.

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?

See my comments in one above.

Use biotechnology to fargreater extent.

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?

Bi partisan buy in. See my comments above re RBNZ etc. Fewer Government departments to prevent silo mentality and save 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?

User pays is not a bad place to start. No better example than when people pay for water!

Charges should be based on what individuals can control.

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?

See my comments above.

Page 6 - What happens next?

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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

Have regard to international outcomes and experience: The book" How big things get done" is not a bad place to start.

Bring the public along with you and for that you need to be transparent, justifying your decisions and using laymans language.

I wish the new Commision well - you have a very IMPORTANT role to play in advancing the socio - economic well being of ALL New Zealanders.

Item 2

Section 1.1.2

Apart from savings the present infrastructure could be de- risked: e.g. less reliance on Cook Strait cables which sit on a tectonic plate. South – North transmission lines, especially across the central NI with its possible lahars, earthquakes and more frequent serious episodic weather related incidents due to climate change. See comments in section 4.11.

Item 3

Section 1.1.3

The NZ Infrastructure Commission (NZIC) should remain politically neutral but where Politian's are nervous of public opinion the NZIC should not hold back recommending potential solutions such as nuclear power. The NZIC needs to make the case. In this example there are good precedents: the 4 x 250 MW nuclear reactors that were seriously considered for Oyster Point on the Kaipara Harbour in 1968 and the eminent recommendations of the 1978 Royal Commission report on "Nuclear Power Generation in New Zealand". Why have a Royal Commission report if no notice is taken of it? You can see my article in the Listener Magazine of 2nd October 2021. NB. Dutton has set up the debate in Australia which is very necessary as will take time to win the public over and to build the necessary national capabilities if the technology is proven to be economically viable. At least the subject is on the table!

Item 4

Section 4.5

Apart from not generating sufficient base load electricity the other major economic infrastructure risk is the Auckland Harbour bridge constraints. In that regard a new bridge/tunnel should have regard for the possible future expansion of hard rail. Stage one in effect has already been completed with the sensible provision of a branch line at the new CRL Aotea station that could be extended at some future date to the North Shore. Thinking in terms of 100 years — will housing extend between say Albany/ Coatesville and Kumeu — would another loop line on the North Shore make long term economic sense and reduce risk to the whole hard rail system? Synergies with other pipeline projects? Stage two

could mean the setting aside of a land corridor now to facilitate such a plan. It would involve little capital investment now but should be incorporated into future town plans just as ex Auckland Mayor Dove - Myer Robinson did during his term of office.

18. Attach any documents that support your submission

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

Document 1

No attachment

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.