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New Zealand Infrastructure Commission Te Waihanga  
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Tēnā koe

## **Submission on the draft National Infrastructure Plan**

Thank you for the opportunity to provide feedback on the draft National Infrastructure Plan (the Plan). The recommendations outlined in this Plan, if implemented well, will play a significant role in helping to address New Zealand's infrastructure deficit and improve our infrastructure planning, delivery and maintenance.

This submission reflects the views of Engineering New Zealand. Engineering New Zealand is the largest professional body for engineers in New Zealand, with over 23,000 members. We have both regulatory and membership roles.

### **Overview**

Engineering New Zealand is committed to helping support a thriving infrastructure sector based on robust planning, strong relationships and ensuring the right development in the right places to help support our communities now and in the future.

We are thankful for the work Te Waihanga has undertaken in preparing this draft Plan. We are particularly appreciative of the enthusiasm and authenticity Te Waihanga has demonstrated towards engaging with us and the broader sector. It is an important step forward and clearly captures the challenges facing the infrastructure sector. We particularly support the emphasis on building consensus and reducing uncertainty in the pipeline of work.

This Plan can go a long way to helping achieve political consensus on infrastructure, on two fronts. By getting buy-in on the system enablers and the process for project selection. No plan is perfect – but the value of giving communities and the sectors certainty and stability has huge benefits for our growth and productivity. Ideally the Plan supports consensus being reached by having an agreed method for project selection for most of our infrastructure needs and then an agreed process for how differences on the margins are worked through. This gives current and future Governments' a robust and affordable 'train track' to follow with clear criteria to help assess ideas outside that.

We endorse the direction of the recommendations presented, supplemented by the following points:

- Implementation relies on an actionable plan.
- The Plan must coordinate and integrate government reform that relates to infrastructure.
- The focus on asset management and investment in maintenance and renewals is welcomed.
- Greater recognition and partnership with Māori will improve outcomes.
- Funding improvements should come early.

- An over-reliance on the user-pays model may impact affordability.
- Cultural and behavioural change is needed.
- More emphasis on project prioritisation would support change.
- Focus on enabling agencies to be sophisticated clients is critical.
- Principal Engineering Advisors help government be sophisticated clients.
- Workforce challenges require robust data and leadership to resolve.
- Spatial planning must be the central planning document for development.
- Need to monitor all parts of the pipeline, particularly when shovels hit the ground.
- The Plan should support work to address issues with the standards system.

Our previous [submission](#) from December 2024 also includes a range of ideas not covered in this submission but remain relevant and can help support the development of the final Plan.

### Implementation relies on an actionable plan

We are very keen to see the final National Infrastructure Plan include actionable steps, methods and a timeline. This draft Plan sets out the challenges well and identifies high level recommendations for some of the key challenges but lacks the detail necessary to show what decisions are needed, when and by whom. If it is to be a catalyst for the change that is needed now, it must provide a practical framework that can drive consistent action and decision-making. Engineering New Zealand supports a transparent phased approach that sequences change on the path to long term change.

The Plan needs to show what of the levers discussed in the Plan should be used, by who, when and how. The reforms suggested in the Plan look to slot into a stream of system enablers (regulatory change, asset registers and management, capability and capacity, funding changes etc) alongside the integration of existing and future projects into a consolidated prioritised version of the Infrastructure Priorities Programme (IPP).

### The plan must coordinate and integrate government reform that relates to infrastructure

We would like to see more detail on how delivery will be coordinated and integrated across central and local government. There is a risk that delivery decisions will default to officials operating in siloes, resulting in inconsistent or fragmented approaches that have occurred in the sector for many years.

This is particularly relevant considering the multiple reform processes underway (i.e. resource management reform, Local Water Done Well and the range of building system reforms that have been announced). If efforts are not aligned and coordinated centrally, it will significantly undermine the Plan and compound existing inefficiencies. We acknowledge that the Plan makes efforts to reference government reform programmes, but an effective and implementable plan will require detailed alignment that helps pull all of the relevant changes together.

### The focus on asset management and investment in maintenance and renewals is welcomed

We support the emphasis on strong asset management processes and a prioritisation on maintenance and renewals to help reduce our infrastructure deficit. We agree that deferred maintenance should not be allowed to turn into future infrastructure deficits. The Plan's recommendations, backed by robust data and understanding of the infrastructure we have, will ensure that we make the most of existing infrastructure and that it operates more effectively for longer.

Stronger requirements for central government agencies to have asset management registers, investment plans and reporting requirements should help to create change. The independent review the Plan recommends is one way to ensure a consistent high-quality approach, but this would need to be supported with sufficient capability and capacity to develop and maintain the increased requirements. Underlying this needs to be a system which sufficiently prioritises funding towards maintenance and ensures there is a clear process to help determine cases where it might be uneconomic to maintain an asset and a new option should be considered.

We recommend a process where new infrastructure bids include funding for future maintenance that would remain ringfenced until required. This would reduce the need for government departments to have to seek new funding for maintenance (and therefore compete other capital investment bids) as part of budget processes.

## Greater recognition and partnership with Māori will improve outcomes

We note your commitment in the Plan to deepening relationships with Māori and iwi entities and better incorporating Te Ao Māori perspectives into the final Plan. We agree that there is a significant opportunity to partner with iwi, hapū and Māori businesses at a decision-making level to drive better outcomes for the sector. A Plan that better integrates matauranga Māori and reflects the value and opportunity that partnership with Māori provides would provide significant benefits to development outcomes and continue to build on New Zealand's international reputation of being a leader in indigenous partnerships with the Government. This has the potential to support our international standing and encourage further international investment.

The Māori economy contributed \$23 billion in 2023, and the Māori asset base increased to \$126 billion in the same period -making a meaningful contribution to the national economy.<sup>1</sup> While this contribution is significant, there are clear opportunities to grow the role of Māori within the development sector. As stated in a Te Waihangā report, *"Small to medium Māori businesses currently face barriers in obtaining contracts to work on infrastructure projects or programmes. Many of those barriers likely affect most small to medium New Zealand businesses. Therefore, appropriately designed interventions to address those barriers would be likely to benefit both Māori and non-Māori small to medium enterprises."*<sup>2</sup> We would like to see the Government play a strong role in supporting Māori businesses and work to quantify and measure the contribution of Māori to infrastructure.

Beyond economic benefits, Māori are the kaitiaki of many of New Zealand's greatest natural resources; traditional environmental management techniques have been developed and refined over hundreds of years. The role of Māori must be preserved throughout the resource management system and the broader development system. Projects developed in collaboration with iwi, using matauranga Māori concepts, can result in better outcomes not only for the environment but also for quality design that delivers for local communities (i.e. Te Pae convention centre in Christchurch or Te Ahu a Turanga Highway). As referenced by the *Built to Last* report, matauranga Māori supports long-term holistic asset stewardship by valuing interdependence between people, environment, and culture. A systems approach rooted in tikanga Māori helps asset managers understand long-term impacts and build sustainable and responsible infrastructure. A relationship-based approach strengthens trust and involves Māori communities in local asset stewardship.<sup>3</sup>

More can and should be done in the Plan to ensure better infrastructure outcomes that leverages the value that enhanced partnership can provide.

## Funding improvements should come early

Improvements to the infrastructure funding model would seem a beneficial early step in the reform. We support the Plan's discussion on the greater use of multiyear appropriations. If done well – as with the Inland Revenue Business Transformation – this can assist projects be delivered on time and budget. This programme showed that robust planning, monitoring and governance helps ensure success.

We note the reference to Government Investment Plans that far exceed forecast Budget funding. This approach does not give industry the forward certainty it needs, among other things. Government long term investment plans should be well integrated into the funding and prioritisation system.

## An over-reliance on the user-pays model may impact affordability

While we understand and support the principle of user-pays, we are concerned that the Government may have an over-reliance on it as a core funding tool. User-pays models that give people the ability to opt-in or use alternatives should be utilised wherever possible (i.e. road tolls and health insurance). However, user-pays models that require payment by households, particularly for essential services, can increase cost-of-living pressures and in turn, increase affordability concerns.

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<sup>1</sup> [Te Ōhanga Māori - The Māori Economy reports | Ministry of Business, Innovation & Employment](#)

<sup>2</sup> [Māori-engagement-in-infrastructure.pdf](#)

<sup>3</sup> <https://helencclark.foundation/publications-and-medias/built-to-last/>

We are concerned about the cumulative effect of the increased focus on user-pays models. As an example, households have already faced a 10.1% increase in their power bills.<sup>4</sup> Modelling shows that a large driver of increased costs is due to a 20% rise in lines and transmission charges alone.<sup>5</sup> This is concerning as many households across New Zealand are already struggling with the cost of essential services like power, water, and transport. Introducing or increasing the costs households face would increase the financial pressures they are already facing. We consider that pricing models must strike a careful balance; otherwise, we risk exacerbating inequities or pushing costs onto those who are least able to absorb them.

Further, we see that the Plan references cost-of-living pressures, but in our view, it is not well reflected. Affordability modelling must account for more than just income levels to accurately reflect household affordability.

We note the Plan says for land transport that “rising investment has also coincided with a declining influence of cost-benefit analysis on transport project selection.” This is concerning. We understand that alongside this the Government moved away from the transport dedicated fund concept where it had previously only invested within the level of the Fund based on a consensus approach to the cost benefit model. We therefore recommend that any moves towards the “transport system” recommendation on closing the funding gaps by user charges is supported by a bi partisan agreed project selection process to help keep a lid on charges.

### Cultural and behavioural change is needed

We would like to see some thought on how to bring the public along on the journey with this changing approach to infrastructure. Many of the changes signalled in the Plan look to require a shift of some mindsets and expectations of the public, politicians and Government. This particularly relates to what we as a nation can afford and what we need rather than want or see other countries have.

We note the emphasis in the Plan on guidelines and supporting government agencies through the change process. Good communication, education and training will also be needed. Other tools could be considered to help ensure the necessary leadership, and accountability- such as inclusion of some of the expectations in Letters of Expectations to Departments (including the new Infrastructure Agency), and Crown Entity Statement of Performance Expectations.

### More emphasis on project prioritisation would support change

We request more clarity in the Plan on how project priorities will be determined. We note the recommendation that all Crown-funded infrastructure proposals should pass through a transparent, independent readiness assessment before funding. We support this being expanded to bring all the infrastructure processes together - Gateway, Investment Plans, the Pipeline and IPP. This could then provide one assessment process against consistent principles to deliver the priority and sequence of projects against sector need and vision, becoming a prioritised National Plan.

We consider the project list needs to be within the bounds of what New Zealand can afford and is achievable. We need to stop planning infrastructure that cannot be funded. Developing business cases for options that cannot realistically be funded is not an effective use of resources. It would be good to see consideration of early use of demand management which could mean new infrastructure is not needed, or a different option might be more appropriate.

### Focus on enabling agencies to be sophisticated clients is critical

We recommend the Plan have a clear programme of work on capability uplift in Government procurement. We commend the endeavours so far to improve government procurement practices, with enhanced rules, guidance, training and reporting being introduced to support government agencies. While progress has been made, we still see some practices that generate poor outcomes. For instance, the focus across government on cost savings

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<sup>4</sup> [Consumers price index: June 2025 quarter | Stats NZ](#)

<sup>5</sup> [Quarterly Survey of Domestic Electricity Prices \(QSDEP\) to 15 February 2025](#)

and efficiencies has increased the occurrence of low-cost procurement that drives a 'race to the bottom'. These conversations have been going on for years, and New Zealand needs strong leadership to make the behavioural change that we need.

Engineering New Zealand would like to see government agencies work together (supported by Te Waihangā and Crown Infrastructure Delivery) to improve procurement practices and be a smarter more informed client. We continue to advocate for transparent procurement processes that have built-in review processes aimed at continuous improvement. These processes should include the following:

- Better project scoping and development of business cases that involve the right technical experts early to help inform prioritisation and ensure feasibility. Scope creep and scope variations can have significant impacts on project costs and delivery timeframes. More realistic upfront project estimates and assumptions are needed.
- Improved leadership within government to ensure prioritisation on what is important, enhance the ability to make tough decisions and ensure correct processes are followed such as cost-benefit methodologies.
- Consistent use of standard contract terms and conditions (i.e. CCCS and NZS3910:2023), without special conditions to avoid wasteful contract negotiations, project-specific terms and inappropriate risk transfer.
- Streamlined procurement processes that prioritise technical excellence and build robust relationships.
- A clear (weighted) focus on longer-term value and quality outcomes rather than short-term project costs, including more appropriate risk sharing.
- Requirement for evaluation and lessons learnt practices. Agencies should have a focus on continuous improvement that fosters a culture of no blame. This would help ensure both agencies and industry learn from each project and work together to improve.
- More training and capability uplift – helping bring a disciplined approach in project planning and execution, business case development, and reliable and knowledgeable procurement and project teams, which undertake due diligence.

### Principal Engineering Advisors help government be sophisticated clients

Further to the points above, Engineering New Zealand believes the use of Principal Engineering Advisors would greatly support agencies that have medium- large infrastructure portfolios. We therefore encourage government agencies to hire this type of technical expertise at senior levels. Several government agencies with property portfolios who have brought leading engineers into these roles are seeing direct results in terms of reductions in unnecessary expenditure. Employing engineers in senior positions will help agencies with informed decision-making and support institutional knowledge within government.

### Workforce challenges require robust data and leadership to resolve

Te Waihangā has done an excellent job of outlining the capacity problem facing the workforce and reflects the challenges we have been raising for a long time. We agree with your suggested recommendation on workforce development and that more work in this area is needed to develop more specific steps. It is our view that central government needs a more active role in supporting the growth and sustainability of the infrastructure workforce, particularly for engineering and technical professions. A bipartisan approach to infrastructure planning and development and some national workforce planning are two key steps that could help.

Before the current downturn, we needed an estimated 1,500 and 2,300 additional engineers each year to meet industry demands and support ongoing economic growth.<sup>6</sup> We are concerned that there simply won't be the skilled workforce required to build the infrastructure pipeline in the future. Only 1.8% of children aged 7 to 13 in New Zealand aspire to pursue engineering careers, ranking the profession 15 out of 50 career options.<sup>7</sup> Statistics

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<sup>6</sup> [Long-term skills shortage – Action Plan 2025 | Engineering NZ](#)

<sup>7</sup> [Engineering workforce Skills shortage Action plan 1.pdf](#)

New Zealand data also showed construction sector jobs were down 5.0% or 10,360 jobs in 2024 from the year before.

As you have noted in your Plan, the political volatility of the infrastructure pipeline is compounding this. The sector is currently struggling with this instability, with over 1900 people within engineering and consulting having left the industry over the past 18 months -around 1200 through redundancies, 400 to overseas jobs and 300 to other roles or unknown destinations.<sup>8</sup>

Integrated, cross-government workforce planning for key skills shortage areas is needed. Currently there are pockets of great work occurring but this needs to be brought together. While the industry has a strong role to play in addressing these challenges, the Government must partner with us to help provide support using the levers it has available such as encouraging the future workforce through high-quality education and study opportunities.

Workforce planning should include consideration of how-to bring people back to the industry from overseas and those who have been lost to the profession within New Zealand through lack of work. We are even hearing that some students cannot graduate after they have completed their engineering degree and be an engineer because they cannot get the required practical job work element.

The *Built to Last* report also highlights the importance of a consistent infrastructure pipeline to retain skilled workers, as without this, we risk professionals leaving for jobs overseas when work eventually dries up.<sup>9</sup> We need a sustained and well-supported workforce strategy or else we risk falling short of the capability needed to deliver on the ambitions that are set out in the Plan.

Engineering New Zealand believes that Te Waihangā workforce projections should include data and modelling on the workforce capacity. Better monitoring and modelling would help industry and Government work together to ensure we have the capacity to deliver the infrastructure New Zealand needs most. Modelling workforce capacity would give early indications of areas of the workforce that may require the Government to partner with industry to upskill, recruit and train workers to meet the estimated workforce demand. We are also unclear how the workforce projections in the Plan are calculated.

### Spatial planning must be the central planning document for development

Engineering New Zealand is supportive of strong, integrated spatial planning that enables the right things to be built in the right places at the right time. Robust spatial planning would also ensure that infrastructure is resilient and delivers for communities now and into the future. Without strong planning the likelihood that infrastructure will not be fit-for-purpose in the future increases significantly. Once infrastructure has been constructed it is difficult and expensive to change it in the future.

We welcome the efforts the Plan makes to highlight the importance of spatial planning. Spatial planning must be the central planning document that guides the development of infrastructure. Occasions where development occur outside of spatial plans should be minimised wherever possible- ensuring development is well planned and infrastructure connections have the capacity to manage any increased demand.

We would like to see the Plan include stronger emphasis on the role that central government needs to play in ensuring local government has access to high-quality and consistent data to inform their spatial planning processes. This is important because it would ensure nationally consistent approaches across the country based on the best data available. Otherwise, communities with councils that have less capability, or capacity may be disadvantaged or poorly managed risk because they cannot access the best available information.

Related to this, Engineering New Zealand is concerned that there is an increasing focus on enabling greenfield development. As a principle, Engineering New Zealand supports intensification where possible, as greenfield developments generally have worse environmental outcomes and high infrastructure costs. We would like to

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<sup>8</sup> [Infrastructure future depends on reversing the engineering exodus | The Post](#)

<sup>9</sup> <https://helenclark.foundation/publications-and-medias/built-to-last/>

see Te Waihangā play a stronger role in ensuring the government understands the increased costs of greenfield development and the importance of sensible, well-planned intensification for thriving communities.

### Need to monitor all parts of the pipeline, particularly when shovels hit the ground

One action that the Plan does not include but we have been advocating for some time is to monitor all parts of the pipeline - in particular, better monitoring of when funding for projects gets to market and when projects start construction. This is an important data point that would provide an early indicator of the health of the industry and information that can help identify and assess problem areas. Allowing government and industry to make interventions early.

### The Plan should support work to address issues with the NZ Standards System

The standards system is an example of an underlying challenge that requires change to support and enable the Plan. The current approach for developing and maintaining infrastructure standards is outdated and no longer fit for purpose. This contributes to inefficiencies and change is needed to enhance productivity.

A key first step is to address the standards funding model that Standards New Zealand is required to operate within. MBIE's work programme includes consideration of the funding and development model but there is no timeframe for this. We recommend some urgency is given to this work to support and enable many of the key government reforms underway, particularly infrastructure.

We support the Government's commitment to increasing standardisation, but have concerns that this will not work without a functioning standards system. We think it is unlikely that central government agencies (i.e. MBIE and MFE) will have the capacity and capability to develop, maintain and update the increase of national standards arising from many government reform programmes (particularly in the resource management) and will need a better national standards system.

For more information on the challenges and potential solutions for the New Zealand standards system, please see our [position statement](#).

### Conclusion

Thank you again for the opportunity to provide comment on the draft National Infrastructure Plan. While we support the Plan's overarching direction, there are clear areas that require further development to ensure that the Plan can provide the stable and effective infrastructure strategy that New Zealand critically needs.

We look forward to continuing to engage and support the work of Te Waihangā. If we can be of any assistance or provide further information, please do not hesitate to contact us.

Nāku iti nei, nā



**Dr Richard Templer**  
Chief Executive