

MBIE feedback to the Testing Our Thinking document

MBIE didn't really have too many comments on the NIP. Other than we support the move towards **decarbonisation, greater transparency and management of our asset base** and **continued innovation in the options available for funding and financing infrastructure**.

From the normal angles of economic development/regional economic development we think the plan sets the context well.

On the funding angle

We think that the NIP could begin to answer the question about how other countries of similar economic size and scale balance private vs. public investment in their infrastructure assets and perhaps the benefits and failures of this.

Technology and Research, Science and Innovation angle

We also think that Te Waihanga could touch on **the role of technology in our future infrastructure delivery** strategy. I.e. Role of AI in engineering and architectural planning (standard design concepts, geotechnical engineering work and materials development etc), and include a section on necessary investments to digitise / invest in technology to lower the cost of infrastructure in the future.

Is New Zealand funding enough infrastructure engineering and science activity to support innovation in the sector?

Recommendations

We would be keen to see more of a recommendation from Te Waihanga in the final plan (not sure if this will come through more clearly in the needs analysis) about where the commission thinks we need to invest further in infrastructure, what regions and what type of infrastructure. Bringing specificity to Ministers about the 'balance' that is repeatedly mentioned in the document. I.e. Where are the no brainers – Auckland harbour bridge, Mt Vic Tunnel, Hospital upgrades, rapid transit rail in the golden triangle, airport rail connectivity. Through to the discretionary considerations.

Any such recommendation we would like to see a balance of benefits discussed that don't just focus on economic activity i.e. How stadiums support social cohesion as well as economic development through attracting major events.

MBIE thinks clear recommendations would support Ministers further to make decisions. (But assume this is the goal!)

From a tikanga and environmental perspective

Fit for purpose climate designed infrastructure, that adopts new technologies and cultural ways of doing could be emphasised further. We know that engineered solutions to a dynamic environment have consequences, we also know that the way we have built and designed infrastructure in the past will continue to change, and improve as we learn more about what works and what doesn't with nature – and in some instances – decolonise the system. The paper could bring attention to this more – I would even think identify that the way we build infrastructure is traditionally western. We should start to consider whether (in line with ao Māori) wastewater systems should exit into waterways for example (this is completely against indigenous beliefs as water is sacred). The paper could also identify nature based infrastructure vs. Hard infrastructure ie. The role of dunes and wetlands in buffer zones for inundation, coastal erosion and even pollution filtration vs. Hard engineered solutions. I don't think the plan discusses the different types and ways that we can define infrastructure and that not all infrastructure is concrete and steel.

Investment and planning for both kinds is key to a future New Zealand, and maybe in some cases a dynamic natural solution is more effective in the long term in certain locations.

Tourism

There isn't too much to say from an MBIE tourism perspective although we note that visitors (domestic and international) interact with most, if not all, of the infrastructure mentioned in the plan (waste, water, transport, health).

Our suggestions for the paper:

- As well as accounting for an increasing resident population, the commission could also account for increasing visitor numbers and the pressure this may put on infrastructure in certain areas (e.g. peak tourism destinations) and that infrastructure needs be designed to cope with higher usage at different times throughout the year (e.g. peak tourism summer season).
- When talking about housing infrastructure pressures te waihangā could also consider the pressures from short term rental accommodation and how this interacts with our housing market.