



Taituarā

Local Government Professionals Aotearoa

A New Future for Infrastructure?
Submission from Taituarā
in respect of
Rautaki Hanganga o Aotearoa
Draft New Zealand Infrastructure Strategy

Taituara
November 2021

Introductory Comments

What is Taituara?

Taituarā thanks Te Waihanga, the New Zealand Infrastructure Commission (the Commission) for the opportunity to submit in respect of *Rautaki Hanganga o Aotearoa: Draft New Zealand Infrastructure Strategy* (the draft).

Taituarā (formerly the NZ Society of Local Government Managers) is an incorporated society of approximately 930 members drawn from local government Chief Executives, senior managers, and council staff with significant policy or operational responsibilities.¹ We are an apolitical organisation. Our contribution lies in our wealth of knowledge of the local government sector and of the technical, practical, and managerial implications of legislation.

Our vision is:

Professional local government management, leading staff and enabling communities to shape their future.

Our primary role is to help local authorities perform their roles and responsibilities as effectively and efficiently as possible. We have an interest in all aspects of the management of local authorities from the provision of advice to elected members, to the planning and delivery of services, to the less glamorous but equally important supporting activities such as election management and the collection of rates.

Local government is a key provider of infrastructure. We are the owners of almost all the nation's three waters assets, some 90 percent (by length) of the road infrastructure, and community facilities such as parks, libraries, museums etc. According to the Department of Internal Affairs the sector owns about \$135 billion in fixed assets, most of which is either network infrastructure or community infrastructure.

Rautaki Hanganga o Aotearoa represents a step forward on the consultation document.

Taituara engaged with the consultation document *He Taupapa ki te Ora: Infrastructure for a Better Future* (the CD) in a constructive and substantive fashion. We made some 38 different recommendations for additions and amendments to the

¹ As at 31 October 2021.

strategy (there weren't any of the recommendations that we asked the Commission to remove).

While we would have preferred an opportunity to discuss our submission face to face, the Commission has obviously engaged with our submission – even quoting from it at one point. We see aspects of our recommendations around skills (especially) telecommunications, congestion pricing, targeted funding and investments in enhanced asset information in this draft strategy.

The draft gives us a much stronger indication of the contents of a strategy than was the case in the draft. In particular we see more evidence of a 30 year strategy. While there is still a significant element of frontloading in the timing of the recommendations, this is a common feature of many strategic documents.

We would generally concur with the objectives as they appear on page 12 of the strategy. We also concur with the overall commentary around better maintenance and use of existing infrastructure, and planning for the future.

And by no means least, we welcome a clearer sense of the areas that the Commission views as having the greatest impact. We note that the Commission's identification of the need for a skills strategy, better pricing, supporting the telecommunications network, spatial planning and business cases together cover seven of the 'top ten priorities' identified in our response to the CD.

This submission, of necessity, focuses on the issues where we recommend amendments or where we feel an issue or concern has not been addressed (the latter are generally first). We offer these in the spirit of enhancing the final strategy, we have no political or other agenda other than offering what works.

Transition needs more thought.

Our only criticism of the strategy is that it could have devoted more space to the transition towards some of the recommendations that are larger shifts (although the cumulative effect of the changes is in itself a transitional shift). Our response to the CD highlighted the scale of the change to 24/7 road pricing.

Another would be in the introduction of the Resource Management reforms, which we have identified of follows:

Stage 1

- implement the Strategic Planning Act - the lack of strategic spatial planning has been one of the major issues with the current system, both in terms of a lack of integrated planning and delivery on housing and environmental outcomes

- allow councils to continue to progress work on second generation plans and giving effect to the NPS-FM and NPS-UD. Although freshwater plans would not be as large as NBA plans, learnings from the new Freshwater Planning Process could helpfully inform new NBA processes.
- councils could also be encouraged to start thinking about how they work together in a regional way on certain, confined subject matters, to help test and iron out some of the issues associated with a regional way of working (prior to it being mandated). We note that the Government is currently involved in a number of regional planning exercises, including in Wellington/Horowhenua, Tauranga and Queenstown, that it could also draw learnings from to feed into the wider reform programme. integrate and upgrade national direction to provide a holistic framework to help direct activity under the RMA in the interim. This could include direction on environmental outcomes through an integrated framework of objectives and policies that are clearly drafted and could be adopted into plans and/or direct future plan changes, and environmental limits through appropriate national environmental strategies
- make interim changes to the RMA to start to embed some of the key focus and process change aspects that are proposed
- work could be undertaken to test the new, proposed NBA plan making system with a region that doesn't require considerable changes to governance or local authority roles (i.e. a unitary authority) through an area-specific piece of new legislation.

Stage 2 would occur following, and be informed by, the completion of the Review into the Future for Local Government and be timed after most second generation plans are completed and bedded in. This would include transfer to the NBA and single regional plans, including any associated changes to governance or local authority roles.

Recommendation

- 1. That the Commission add an explicit discussion on transitional matters, especially those that are rated as a short-term priority.**

Community infrastructure is essential to economic growth and place-making.

Taituarā notes the draft is largely silent on community infrastructure, other than that provided by central government. Beyond one or two mentions of parks and libraries there's no real discussion on issues and challenges in these sectors and no recommendations on these at all.

Our response to the CD noted that the mobility of skilled labour and investment capital are generally lower than they were at any time in the last 500 years. With digitisation and global markets more jobs can be undertaken from literally anywhere, with the home nation increasingly becoming a concept for tax purposes only. New Zealand competes on its environment, on its lifestyle factors and on the business-friendly nature of its regulatory environment.

Communities need to be vibrant, attractive places to live to attract pools of skilled labour. In turn this means that a local authority cannot ignore its stock of community infrastructure (libraries, parks, recreational facilities, and the like) and what is sometimes referred to as the “look and feel” of the community.

The Commission should be taking steps to incorporate these assets into future editions of the strategy. In the current strategy that would require some scene-setting, and a statement of the intent to get these assets into future editions of the strategy. Taituarā has strongly recommended that local authorities upgrade their own data on these assets and suggests the Commission might do the same.

Recommendations

That the Commission amend the strategy by:

- 2. setting out a process for identifying community assets beyond those run by central government and bringing them into future editions of the strategy**
- 3. including a specific recommendation that owners/providers of community infrastructure upgrade their asset condition and performance information for these assets.**

Stormwater and flood control infrastructure remain significant omissions from the draft strategy.

In our response to the CD we noted that these two classes of assets are the two we know least about. Service failures here almost always result in an economic loss, be it an individual property or a whole central business district; or a public health issue (where for example, stormwater and wastewater co-mingle).

We noted few, if any recommendations directly addressed to the stormwater and flood protection sectors (these may be subsumed into recommendations around

climate change adaptation and potentially water reform). The draft strategy has not added to this in any significant way.

Given the time left between draft and final strategy, and the gaps in knowledge, the Commission would be able to not the importance of stormwater and flood control assets, and the gaps in the stock of information. The Commission could usefully signal its intent to bring these assets into the next iteration of the strategy and in the meantime emphasise the need to improve the state of the information.

Recommendations

That the Commission:

- 4. add a commentary to the final strategy signalling its intent to bring stormwater and flood protection**
- 5. recommend that local authorities prioritise improvements in asset condition and performance information for stormwater and flood protection assets.**

In future much economic activity need not happen in a central place.

One of the key underpinning planks is the strategy is the notion of urban intensification. We concur with this. Our own critical transitions work identified that densification of existing settlements is good for low emissions living, living in disrupted climate and interconnected communities.

The draft implicitly assumes that the model we've had until recently of people going *in* to work at a town or city centre will continue unchanged. Covid-19 has demonstrated that for many service, administrative, clerical and governance roles that isn't necessarily the case (subject to access to internet services with the appropriate speeds and capacity). In the CT report we have a future state assumption 'For the majority of the workforce, work can happen anywhere at anytime, with respect to the best balance between productivity and emissions'. That also means that locating in the Auckland-Tauranga-Taupo triangle isn't necessarily a given.

Additionally distributed manufacturing through 3D printing and scanning technology is now in public use. In the long run there is a huge potential to change how and when we shop, and for what. In China, 3D printing of simple housing has been available for 5-6 years.

If people can self-manufacture at home that could reduce the need to purchase as many physical items. What then does that do to the retail sector? Distributed

manufacturing will also be disruptive for some parts of the manufacturing, transport and distribution sectors. What does this do to the notion of the large clustered industrial zones and urban form?

The future envisaged in this draft strategy requires investment in digital resilience, starting with a more explicit discussion in the strategy.

Taituarā endorses the three recommendations designed to support the greater uptake of technology by infrastructure providers (labelled as recommendations B4.1 to 4.3).

However, these three recommendations must be viewed with a risk and resilience lens. All three would be compromised by power or digital connectedness issues. Other recommendations such as road pricing, potentially some more efficient water pricing models and enhancements to condition and performance data would be greatly inhibited in their effectiveness if either scenario occurred.

Our response to the CD highlighted the successful cyberattack on the Waikato DHB as an example of how significant the consequences of single click on an infected attachment can be. As technology based applications expand the opportunities for attack expand with them. Lockdown and the greater prevalence of working from home have added further to the risk of cybersecurity breaches. It is estimated cybercrime in the United States alone has risen by 60 percent since the beginning of the Covid-19 pandemic.²

New Zealand is characterised by a number of relatively small (on a global scale) infrastructure providers and some diffusion of cybersecurity expertise in the public sector (mostly the security agencies and a few of the larger agencies). We submit that there needs to be a far greater of investment in developing our personnel capability in detecting, managing and responding to cybersecurity risks and threats. To us, these are skill sets that, in an infrastructure context, warrant inclusion in any infrastructure skills strategy.

We also renew our call for the final strategy to directly address the lack of investment in digital preservation infrastructure. The stock of human knowledge will soon be doubling every 12 hours. In our response to the CD we noted that *“All players, local and central govt, private enterprise and NGOs will be dealing with exponentially more digital material and the hardware and software in use will continue to evolve over time. Maintaining access to data over time will be a crucial input to well functioning operations at all levels. The expertise is rare, so the cost of in-house digital preservation is prohibitive. The lack of access to digital preservation services is a huge digital infrastructure risk.”*

² See <https://purplesec.us/cyber-security-trends-2021/>

Recommendations

- 6. That the Commission include a recommendation or recommendations around a greater investment in personnel and physical cybersecurity capability with some emphasis on digital preservation technology.**
- 7. That the Commission's supporting discussion around the infrastructure skills strategy incorporate discussion of personnel capability at detecting, managing and responding to cybersecurity risks.**

Local government could support the financially disadvantaged with the transition to energy efficiency, but legislation places practical barriers in the way.

Recommendation S1.4 calls for targeted financial support to those disproportionately affected by the transition to low emissions energy to assist with the upfront costs of investing in energy efficient technologies.

In fact, local authorities with assistance from Government agencies (particularly the Energy Efficiency and Conservation Authority) spent some time and energy developing a tool that has aided in the past.

The tool is known as a *voluntary targeted rate*, and essentially involves the local authority advancing the ratepayer a loan for a dedicated purpose and the ratepayer repays the principal and interest through the rating system. Variants of these schemes have been used by ratepayers wishing to install clean heating methods, energy efficient water heating, solar panels and the like. As an aside they also have potential applications as wide as supporting earthquake strengthening and providing incentives to detect and fix leaks.

However, there is a legislative barrier to local authorities providing or continuing to provide these schemes. A voluntary targeted rate is considered to be consumer credit for the purposes of the Consumer Credit and Customer Finance Act 2003 (CCCFA), placing local authorities under the same obligations as a financial institution, payday loan provider or pawnbroker.

Much of the Act is commonsense and not of concern e.g. requirements to disclose interest rates in advance etc. Some of the other requirements were obviously designed for models of corporate governance of a 'for profit' entity. For example,

from 1 October this year, any entity providing consumer credit must get all directors of the entity (i.e. Mayor and all councillors) and key management certified as a fit and proper person. Elected members are chosen by the community, and not necessarily for skills as a director. And where 5-7 might be a normal board size for a corporate local authorities might need to certify, at a minimum 12 people and up to 30.

We understand this legislation exists to protect the public. But local government (and central government) are not for profit, which should reduce any concerns about unduly oppressive or usurious terms of credit. As a high profile public sector entity, a local authority's practices or financial management are open to a level of public scrutiny not afforded to other bodies corporate. And let's not forget that in many small-medium sized communities, local authority members and senior staff are resident, highly accessible and highly visible to the gene

We note many of the CCCFA provisions are sensible, and should apply to any credit provider. But the Commission's recommendations would be better supported by a regime that is fit for purpose for credit offered by central and local government providers. This could be as simple as exemptions from some requirements – indeed some already exist. We would be happy to elaborate on further requirements that make no sense in a public sector context.

Recommendation

- 8. That the Commission amend recommendation s1.4 by adding a fourth limb recommending that MBIE review the application of the Consumer Credit and Customer Finance Act 2003 to public sector entities.**

We support a national population plan as being of assistance to any mandatory regional spatial strategies.

The Commission is correct to say that New Zealand is expected to grow rapidly. It is equally correct to say that the overwhelming majority of the growth is expected to occur in the triangle bounded by Auckland, Tauranga and Taupō, the peri-urban fringes of Christchurch and a corridor between Dunedin and Queenstown.

This seems to be similar in intent to the Australian National Population and Planning Framework in that:

"The objectives of the National Population and Planning Framework are to improve Commonwealth, States and Territories and local governments' understanding of populations, population change and its implications, and set-out a plan for

government collaboration on the challenges and opportunities these changes present. The elements of the Framework have been developed for these objectives:

- *Element 1 Establishing a common understanding of populations and population change.*
- *Element 2 Ensuring greater collaboration across jurisdictions.*
- *Element 3 Increasing transparency.*
- *Element 4 Facilitating shared action.”³*

A national population plan would provide a lead to other plans such as the proposed regional spatial strategies, the New Zealand Transport Strategy, and other parts of the national planning framework. In effect it's a big step towards a national spatial strategy. The population plan might be used to inform immigration policy settings and so on.

A plan that meets these objectives would probably need authorisation in statute. One obvious opportunity to provide this would be in the Spatial Planning Act that is currently under development, especially if a strong link to regional spatial strategies is a desired outcome (as it should be). A linkage of this nature would also require some thought regarding the scope of regional spatial strategies (see the recommendations below), the membership of the governance structures, and (not least) implementation and funding.

Development of the Spatial Planning Act is well advanced. Legislation is expected in the first half of 2022. That being the case the Commission should make this one of the highest priority recommendations.

Alongside this, recommendation S2.3 also recommends that an unidentified party 'regularly review and publish best practice advice to improve population projection accuracy'. We concur with this, though we're not clear who this source of the advice would be. We would add to this by further recommending that the Government provide Statistics New Zealand with additional resource to undertake regular reviews of population projections, and improve the timeliness of the post-Census projections. These are critical for local authorities as either a base document for demand planning, or a device for assisting local authorities to check and calibrate their own growth models.

Recommendations

That the Commission

- 9. add a further limb to recommendation 2.3 that recommends that the population plan be established in statute**

³ See <https://population.gov.au/docs/framework.pdf>

10. **add to its discussion of the population plan by stating whether and how the plan links to other documents such as regional spatial strategies**
11. **add a further limb to recommendation s2.3 in support of additional resourcing for Statistics New Zealand to regularly review their projection models and improve the timeliness of the release of post census projections.**

We generally concur with the Commission's stance on the pricing and regulation of water services.

The seven parts to recommendation s3.1 cover the pricing and regulation of water services. In our response to the CD we discussed these matters at some length, but we have several refinements to the recommendations in the draft.

First, water pricing encourages conservation and is beneficial for the environment and for the infrastructure itself. New Zealand experience shows a pretty consistent reduction in water demand of 20-30 percent. Alongside this however, access to clean water is regarded as a fundamental human right. While the overall level of water necessary for essential use is a fraction of total water use, some consideration of equity for the lower income would go some way to alleviating public concern. This can be done through the design of tariff systems for example making the first units of consumption free or at lower cost (known as an increasing block tariff).

Recommendation S2.1c calls for volumetric charges for large wastewater users. It was not clear to us that the Commission was intending to define what a large wastewater user was, or intended that providers define this. We'd also note that this power may already exist (though perhaps imperfectly) in the regime for trade waste charging.

Our response to the draft called for the enablement of volumetric charging for all providers of water services. It's generally well known that a large element of water consumption ultimately leaves the property through the wastewater system – which, by the way, includes sinks and showers, not just toilets. Technology to enable metering at source has been available for some time, but there are also reasonably well established proxies (80 percent of water use is common)

Recommendations

That the Commission:

12. **add consideration of equity issues in the design of charges to either recommendation S3.1 or recommendation s3.2**

- 13. extend recommendation s3.1c to enable (but not require) volumetric charging for wastewater for any user.**

Is there merit in nationally led consideration of the business cases for large scale take-up of alternative water technologies?

Recommendation S3.2 covers better water management and conservation, including a number of alternative technological solutions such as on-site stormwater management and rainwater harvesting.

We are aware of some countries where legislation has moved beyond empowering rainwater harvesting to actually mandated installation of means it for new construction (Thailand, Bermuda, and some states in the drier parts of India). It may also be candidate for central/local government assistance for retrofitting as with energy efficient technology (see recommendation 8 for example). New Zealand captures quite a low percentage of rainwater, historically rainfall has been generally deemed more than sufficient. Climate change has altered this perception somewhat.

The point being that our regulatory settings need regular review to ensure that they empower (or at least do not restrict) take-up of technology. This should form part of the standard regulatory stewardship roles of Crown agencies with infrastructure responsibilities.

There are other large scale alternatives in water management. For example the appropriate of greywater, desalination and the like. It seems to us that New Zealand has not undertaking any significant analysis of the circumstances in which investmnet in these technologies might be required and a viable proposition. This kind of 'what if' analysis of the impacts of current technology seems to us to sit squarely within the mandate of the Commission. A recent example from the transport sector might be the three volume analysis the Ministry has done of the impact of autonomous vehicles. For the sake of convenience we refer to this as developmental reseasch.

Recommendations

That the Commission

- 14. include a recommendation that Crown agencies with infrastructure responsibilities regularly assess their regulatory settings for compatibility with current and reasonably foreseeable technologies, and that agencies be resource for this as part of their regulatory stewardship functions**

15. add a recommendation for itself to develop a research strategy that assesses the potential for new technologies to enter New Zealand.

Spatial plans have significant transformative potential, if all partners are present through both development and implementation.

Recommendation S3.10 calls for spatial plan as a means of improving infrastructure outcomes. Similarly, recommendation S3.14 calls for enhancements to the information sets to support spatial planning.

We've been an active participant in the development of the proposals underpinning the Strategic Planning Act. The comments below reflect the key points we've made in those discussions, which the Commission's report serve only to underscore.

The first is that the scope of strategic plans should focus on building communities and therefore needs to bring in the widest range of providers. This includes utility providers, NGOs and, yes, central government. The Commissions' recommendations in support of a national population plan serve to emphasise the need to plan nationally and regionally for the impacts of population growth and change.

Central government needs to bring social infrastructure into the planning process. That is to say, for example, that spatial planning needs to bring in the planning and location of future state-funded educational institutions (particularly the school network) and healthcare (hospitals and other specialist care where applicable). This means communities can be designed with an eye on all of the needs that make for a successful community, and that investment can be rationalised.

That is, such a plan provides the vehicle for local and central government, the private sector, the voluntary sector, and the wider community to engage in real community planning. By which we mean determining an overall direction for the community and what each party can do to bring it about. This is an exciting opportunity to empower communities with a greater say in service design and delivery at local level that goes wider than merely the 'infrastructure providers' (as noted in recommendation S3.10b)

We have doubts that 13/14 strategies based on catchment boundaries is the best way to proceed. In our response to the CD we noted that interests of South Canterbury are distinct from those of the Greater Christchurch conurbation, just as the interests of the Taupo community do not sit in five different regions.

Regional boundaries may work in some areas, some of the smaller regions for example. Legislation is likely to set a rebuttable presumption that plans will be prepared on regional basis, and criteria for departing from a regional basis. More

than one distinct community of interest should exist with significant or compelling differences in local economies or infrastructural needs.

We renew our call for the Department of Prime Minister and Cabinet to take the role as the central government owner of the legislation and the implementation of the plans. Signals matter, assigning the lead to one of the wellbeing departments will prima facie, be seen publicly as communicating that the plan focusses on that wellbeing. DPMC is likely to have more 'cut through' in resolving issues and ensuring cross central government alignment.

At this point its also unclear what degree of follow through into implementation and (especially) funding is likely. For example, we're not aware just what the Government intends be the degree of 'bind' on other plans and strategies (as called for by recommendation 3.10a), only that its not likely to be much stronger than 'have regard ro'.

There is a degree of sector expectation that funding should follow strategies. That is to say that the partners involved in identifying the objectives and designing the strategic plans should be prepared to support the achievement of the plans beyond their adoption.

The governance and funding of plans are absolutely fundamental to the sector's overall support for the Resource Management reforms (including spatial planning).

Recommendations

That the Commission:

- 16. delete the words 'infrastructure suppliers' from recommendation S3.10b**
- 17. refine recommendation S3.10 to create a rebuttable presumption that spatial plans be prepared on a regional basis and set of criteria for assessing whether the presumption is met**
- 18. amend recommendation S3.10 to include endorsement of the Department of Prime Minister and Cabinet as the lead government agency for spatial planning**
- 19. amend recommendation S3.10 to require parties to agree a binding funding and implementation plan.**

We repeat our earlier submission that a climate change adaptation fund is a vital step to supporting a 'future-proof' local government funding and financing system.

Recommendation 4.3 prepares infrastructure for the impact of climate change. While we support completing the actions in the National Adaptation Plan and improving the stock of climate change information, there is a key aspect missing.

Funding is a significant and necessary precondition for successful climate change adaptation, be it defending assets, building assets to a higher standard or managed retreat, it all costs.

Our previous submission echoed those of commentators such as the Climate Change Commission and the Productivity Commission in calling for a central government administered adaptation fund to support adaptation. This would include a prefunded element to reflect notions of exacerbator pays and used to send at least some signal about the cost of activities that gave rise to climate change or avoid locating in areas at risk etc. Further tax on automotive energy and/or other fossil fuel use would be one example. "Pricing" in this way should avoid sending disincentives for actions that support adaptation or internalise some cost.

Funding should be consistent with "*widely accepted principles of social equity (or distributive justice)*".⁴ This includes the so-called fair opportunity requirement – that people should not be unduly disadvantaged for those things that they have little control over. In addition, like should be treated alike, that includes consideration of need, ability to pay, and responsibility.

Individual local authorities might build up their own funds, but this ignores that many, but not all, of the areas that will be at the forefront of adaptation issues are in areas that have particularly limited capacity to raise revenue. South Dunedin is one of New Zealand's poorest metropolitan communities, and many parts of the Eastern Bay of Plenty, Northland and the West Coast of the South Island fall into this category.

This and other policy tools for supporting adaptation (for example, the extinguishing of land title) are to be dealt with as part of the upcoming Climate Change Adaptation Act. This appears to be very much the 'little sibling' of the three strands to RMA

⁴ Boston and Lawrence (2018), *Funding Climate Change Adaptation – The Case for a New Policy Framework*, Policy Quarterly, May 2018, page 44.

reform, and does not appear due for at least another 15 months. Given we see merit in deferring the Spatial Planning Act pending completion of the population plan, we see no reason this could not be further advanced on a faster timetable.

Our previous submission also noted that little has been done to source overseas examples of private finance of climate change adaptation. We renew our call for the Commission might add a recommendation along these lines in either the climate change or equitable funding sections

Recommendations

That the Commission amend the strategy by:

- 20. adding a recommendation that supports the expedited enactment of the proposed Climate Change Adaptation Act**
- 21. adding a recommendation supporting a Climate Change Adaptation Fund**
- 22. adding a recommendation or recommendations calling for the gathering and release of examples of private sector financing of climate change related investments.**

Central government has a role in assessing the supply and demand of resources that support infrastructure, including skilled labour.

We concur with the Commission's comments about the security of supply of critical materials. This is one of the drivers of contract prices. We therefore support much of recommendation 4.4, with some modifications.

It seems to us that central government is better placed to assess the national levels of supply and demand for the listed resources. It certainly has greater access to the powers necessary to, for example, get producers or importers of these resources to furnish returns of how much 'supply' there is. Central government also has some knowledge of the level of demand its agencies have (NZTA for example). This might be a role for the Commission as chief advisor on infrastructure

A second aspect of this is, of course, the availability of skilled labour to do the work. This is, short-medium term, a more significant driver of tender prices and has been a limiting factor on the 'do-ability' of the 2021-31 LTPs.⁵ The demand and supply of

⁵ The 2021-31 LTPs represented the seventh round of LTPs, and this year for the first time there were xx local authorities where the plan received a modified audit opinion based on an assessment of the deliverability of the capital plan.

civil contracting resource needs to be monitored too, although the Commission has implicitly suggested this in its recommendation around the infrastructure skills strategy.

One of the areas where technology is advancing is in the building and construction sector. For example, the technology to 3D print a house has existed for some seven years (though we understand those with Better Homes and Gardens aspirations should look elsewhere).

So while, having better stocks of building materials like steel rebar and cement is a sensible response for managing short-medium supply constraints, it is very much a short-term solution. There is rapid change in construction methods and construction materials. Over the next 30 years New Zealand should look to building in ways that use materials that i) can be sourced or generated here and ii) have lower embedded carbon than current building materials and iii) create less or no construction waste and iv) can be disassembled and re-used/recycled at the end of the building's life. Recommendation S4.4 needs an additional recommendation in support of the transition.

Recommendations

That the Commission:

- 23. amend recommendation S4.4 to add civil contracting resource to the list of key resources for monitoring**
- 24. add a further recommendation to S4.4 that New Zealand plan a transition to construction methods and construction materials that are low carbon, low waste, recyclable and do not rely on international supply chains.**
- 25. amend recommendation S4.4 to place itself under a duty to monitor the supply and demand of these resources**
- 26. amend recommendation S4.4 to explicitly require all infrastructure providers to consider and document the resource requirements of their infrastructure plans.**

Taituarā welcomes greater long-term certainty of funding.

Recommendation B1.2 calls for central government to provide more certainty of long-term funding to public infrastructure agencies, by providing ten year funding allocations as a guide to capital plans.

We would welcome such a change. This would tie funding allocations more closely to life of other statutory plans (the LTP and land transport planning in particular). It also provides a greater (though not absolute) level of funding certainty beyond the Parliamentary electoral cycle.

The one proviso that we have with this, and it is implicitly mentioned in recommendation B1.2, is that this recommendation must align with the local government planning cycle. In that fashion it can be implemented in a consideration fashion in the early stages of long-term plans. The next long term plans are due in 2024, we'd suggest the optimum time to have the funding plan available would be the end of 2022. The practical example we cited in our earlier submission shows the effects the misalignment of planning and funding cycles can have.

Recommendations

- 26. That the Commission recommend that central government and local government jointly work to better align planning and funding cycle.**

We welcome the recommendation to broaden the focus of project evaluation

There are several recommendations that broaden the focus of project evaluation methodologies to incorporate the wider social and environmental costs and benefits. We support these recommendations in principle.

It needs to be fit for purpose ... \$150 million probably weights it more towards the bigger transport, water, community centre type projects or possibly some of the larger economic development projects. The Better Business Case methodology widely used in central government has a so-called BBC-light process for assessing smaller projects. This leads us to ask whether there is room for scaleable processes for moderate and smaller scale projects i.e. a toolkit rather than a single methodology.

All agencies can benefit from the application of some greater standardised methodologies. Consistent application of these methodologies requires a training and development programme, consideration of incorporation into civil engineering

curriculums and the like. The professional development aspects should be considered as part of the infrastructure skills strategy

Recommendation

27. That the Commission broaden recommendation x.x to call for development of a toolkit of scalable assessment methodologies.

A national process for determining development contributions removes any rationale for the Crown not paying them

We thank the Commission for its recommendation that the Crown pay rates. There is no real rationale for this shifting of cost from one level of government to another (as non-rateability of Crown land is).

The Commission also recommended that there be a standardized national process for determining development contributions. In fact, there's a nationally developed good practice guide to development contributions – jointly developed by the Department of Internal Affairs, Taituara and the Development Contributions Working Group (in consultation with the development community).⁶

We observe that this recommendation for a nationally determined process – not nationally set levels of charge. This is sensible as the cost of infrastructure provision varies markedly.

Crown developments such as new schools, tertiary education, prisons, social housing developments and the like require council provided infrastructure to function. In some cases this requires the provision of a peak capacity – for example school sewage disposal needs to be built for a thrice daily peak demand.

Some developments, such as tertiary establishments, high schools and some of the planned housing developments are the size of small communities.

Development contributions are not a tax – they are more of a targeted charge for a service. The (specious) rationale that the Crown does not pay tax is not available in this case. With guidance, an appeal process (to an independent Commissioner) and/or a nationally determined process for setting development contributions, the (equally specious) argument that councils might treat Crown developments as 'cash cows' is completely removed.

⁶ This can be viewed at [https://www.dia.govt.nz/diawebsite.nsf/Files/Development-contributions-policies-guide/\\$file/Development-contributions-policies-guide-v2.pdf](https://www.dia.govt.nz/diawebsite.nsf/Files/Development-contributions-policies-guide/$file/Development-contributions-policies-guide-v2.pdf)

We add that the Crown facing the true costs of providing for its development projects provides a string incentive to use land efficiently, and still further to work with local authorities to determine present and future community needs and the optimum placement of facilities. That is to say, having to pay a development contribution will encourage the Crown to take an active part in strategic planning.

We renew our call for the Commission to recommend that the Crown also pay development contributions.

Recommendation

28. That the strategy include a recommendation supporting the removal of the Crown exemption from paying development contributions.

Local government wishes to be involved in the development of the infrastructure skills strategy and the implementation of the strategy

We congratulate the Commission for the suite of recommendations around the so-called Infrastructure Skills strategy. We have previously submitted on the need for the strategy to better address the capacity and capability needs. In the period since the CD, the three waters reform work has reported that the estimated number of full-time employees in three waters professions is expected to increase from approximately 5000 FTE to around 9000 FTE.

The draft lists wide range of partners with responsibilities for this actions including Government Procurement, the Public Service Commission, the Commission, MBIE, the Tertiary Education Commission, Treasury and the Construction Sector Accord agencies. These all seem appropriate to various extents.

We suspect that the lead responsibilities for a strategy framed in the way the Commission has would be better placed with the Commission itself, and with the Tertiary Education Commission. The Commission itself provides an expert overview of the totality of the infrastructure needs nationwide. The Tertiary Education Commission as the agency with the best overall knowledge of their sector where many of the levers that exist. (Having said that the Ministry of Education and the New Zealand Qualifications Authority would also have some interest and one or more levers).

We add that local government should be a partner in the development of the strategy. There is a reform process underway that may change some service delivery options, that doesn't mean that local government is no longer a partner in the delivery of infrastructure. Local government retains substantial involvement in roads , flood protection and control, and (of course) community infrastructure. Local government needs to retain some knowledge to better identify, understand and advocate for community needs. We also have some experience in running a recruitment and retention strategy for the sector.⁷

Recommendation

- 29. That the Commission add the local government sector to the list of agencies responsible for delivering the infrastructure skills strategy.**

⁷ For example, see <https://taituara.org.nz/working-in-local-government>