

Ōtākaro Limited Submission to the Aotearoa New Zealand Infrastructure Strategy

Thank you for allowing Ōtākaro the opportunity to make a submission on the Aotearoa New Zealand Infrastructure Strategy.

Q3. Are there any other infrastructure issues, challenges or opportunities that we should consider?

Ōtākaro sees four key opportunities to improve the successful delivery of infrastructure projects for New Zealand, and thereby reduce the risk to the Crown in terms of cost overruns, timeliness and quality. These opportunities include:

- improving New Zealand’s limited end-to-end construction industry capability;
- improving the current form of industry contracts;
- developing more systematic and centralised oversight; and
- better utilising the capability and specialist knowledge we already have in some existing delivery-focused Crown agencies.

Industry capability – trades and project management

The current construction capability in New Zealand has limitations – from our trade skills shortage and material shortages, to the shortage of professional services supporting project development and delivery. It is well accepted that these limitations contribute to cost overruns, and timeliness and quality issues on major Crown projects.

Ōtākaro considers that much of the de-risking of Crown infrastructure projects depends on improving New Zealand’s end-to-end construction capability. For instance, increasing the pool of qualified tradespeople would reduce delays and cost overruns. Moreover, in Ōtākaro’s experience those projects that *are* successful are well-resourced in terms of quality professional services capability. Accordingly, we think that investment in increasing the professional services capability would result in a culture of robust and transparent decision-making and delivery, lift overall performance, and improve project outcomes for the Crown.

Industry capability – construction capacity

The construction industry is limited in terms of entities that have the capacity to complete large-scale projects. There is also a lack of experience within the industry to execute the various contracting models. These limitations are likely to hinder the speed and scale of the infrastructure projects that can be completed as part of any nationwide programme of infrastructure reform.

Much of the necessary expertise and capacity lies offshore, something borne out by the very limited pool of firms able to bid for New Zealand's larger infrastructure projects. This issue is likely to be exacerbated in the coming decades as countries roll out their own Covid-prompted infrastructure programmes, therefore tying up construction capability.

A decision should be made by the Crown about New Zealand's strategic approach to this limited construction capability issue. Do we continue to rely on offshore providers or do we explore what can be done about increasing local industry capability? Both have their advantages and disadvantages.

Relying on offshore entities may be expedient and easiest in the short term, but the limited supply of providers could hinder the pace of development we can achieve. Developing a plan for how to make the New Zealand market attractive to overseas participants and/or encourage them to establish a base here will help – work visas, contract types, and immigration incentives all have a part to play in this. Moreover, joint venture types of partnerships between local companies and international ones should be promoted.

On the other hand, investing in increasing local construction capability to help us be less reliant on offshore companies could be a more appropriate long-term solution. Encouraging more joint venture type of arrangements between local entities, and other market-led corporate arrangements would help to support the supply of the construction capacity we need. The scope, scale, and roll out of Crown led projects could be split to suit the local market capacity.

It is clear from the diminishing industry capacity over the past five years that pursuing a strategy to enhance both international participation and grow local capacity is unlikely to be mutually compatible.

Systematic and centralised oversight

Ōtākaro considers the issue of limited construction capability would be further compounded if the flow of projects is not time-managed appropriately – too many projects at once and only a small number of companies available to complete them would likely lead to time delays and cost overruns. The creation of a dedicated centralised agency (or agencies) would assist the Crown's ability to deliver capital works across agencies that are not commonly delivering larger projects. This would speed up the start-up phases of projects, and confidently and competently address procurement and contract management issues. A centralised office would also significantly enhance the Government's existing portfolio view, enable better prioritisation of projects, de-risk health and safety and commercial matters, enhance budgeting decisions and allow the optimisation of resources.

Industry contract

More flexibility is needed to the current form of industry contract. Presently, the risk share is not fully understood or accepted between parties and that is proving to be a challenge to the smooth delivery of projects.

We think there's an opportunity to improve the current situation by introducing more collaborative contract model types. It would be worthwhile consulting with industry participants to understand the common issues and then develop various contract models based on that feedback. Such a review could also examine better dispute resolution processes as these are often becoming protracted and hence expensive. Involvement of a centralised delivery agency (or agencies) in such negotiations would ensure the Crown is adequately represented by skilled practitioners.

Utilising existing procurement and project management expertise and capability

There are many Crown agencies requiring the completion of ad-hoc projects that do not possess the necessary in-house procurement and project delivery capability (unlike Waka Kotahi – NZTA, for instance).

Ōtākaro thinks a Crown-led delivery agency (or agencies) should fill this gap. This agency could procure and project manage these ad-hoc projects for Crown agencies where infrastructure development is not core business or they do not have the 'business as usual' core skills to do it. Moreover, we think there's an opportunity to 'use what we already have' by harvesting the excellent procurement and project management expertise and capability that already exists within some particular delivery-focused Crown agencies. This would mean there was a consistent approach to procuring and delivering Crown infrastructure projects while not having to re-invent the wheel. It would result in significant cost savings and a range of other benefits to the Crown.

This type of agency should be responsible for interim asset management prior to divestment to the new asset owner. In Ōtākaro's experience, it can take some time for asset handover to be complete, which means areas such as maintenance of buildings and grounds, and general security require management.

Q12. How can we achieve greater adoption of building information modelling (BIM) by the building industry?

Ōtākaro agrees that BIM is key to achieving significant efficiencies if implemented correctly, and that accelerating the use of BIM in the construction process ought to be a priority. Better application by the New Zealand industry across the board would lead to better design coordination, resulting in more effective design and construction processes, and more useful data gathering, enabling better management of whole-of-life costs.

Ōtākaro sees two key ways to accelerate the use of BIM in a New Zealand context:

- clearer guidelines about the level of application required; and
- increased training on BIM.

Clearer guidelines about the level of application required

Currently, the application of BIM by industry participants is inconsistent. We think a large part of this lumpiness is due to the lack of understanding of the implementation and overall

benefits of good BIM application. For Crown projects this inconsistency could be addressed if the Crown developed and issued clear BIM guidelines to industry outlining the level of services required so project teams and end users knew the exact requirements for BIM for their particular project at the outset. The Crown would need to accept the significant upfront investment in doing this.

Further, we think that rather than requiring the same level of adherence across all projects, these guidelines should flex to encompass a variety of project types and sizes – i.e. different projects requiring different levels of adherence to BIM. This flexibility would help speed up completion of lower resource-intensive projects and keep a closer eye on the large-scale ones. For instance, requiring full adherence on minor construction projects could add significant cost with little benefit. Further to that, the requirement should be introduced incrementally to allow industry training to catch up.

Increase training in how to use BIM

It is clear that locally there is a current lack of capability in the use and application of BIM. It will take time to build up experience and capability to fully utilise it – the overseas experience indicates that it can take many years for industry to adopt management systems like BIM and utilise them to their full potential. Consequently, not only is a comprehensive training programme crucial, it should be implemented at the earliest opportunity. Overseas experience also indicates that significant uptake of such productivity enhancements only occurs when clients (particularly government clients) have provided a strong mandate for change through project procurement.

Q14. Does New Zealand need a Population Strategy that sets out a preferred population growth path, to reduce demand uncertainty and improve infrastructure planning?

Ōtākaro agrees that New Zealand needs a Population Strategy that sets out a preferred population growth path based on regional capacities to absorb population increases, to reduce demand uncertainty and improve infrastructure planning. Moreover, Ōtākaro thinks the development of a Population Strategy goes hand-in-hand with the development of the Infrastructure Strategy, and ought to include collaboration with local government and the private sector. The need is well illustrated by the demand for investment in water infrastructure. To that end, utilising models like the new urban growth partnership should be encouraged. These types of collaborative partnerships will likely improve the quality of long-term planning and outcomes for the regions and ensure that a diversity of interests is represented in decision-making.

Regeneration of the regions should be a core plank of this Population Strategy. New Zealand needs to get ready for the new economy, and revitalisation of the regions could be central to our success. Changing patterns of work, a large part of which is remote working and a likely significant increase of employment in the web-based economy, provides a golden opportunity for regeneration of the regions.

With good planning and some forward thinking, we could see regions currently in decline flourish. Prioritising spending in areas of new IT infrastructure and improved transportation between regions (to increase speed and reduce the cost it takes to get around the country) would encourage population shifts to the regions. This would not only revitalise the regions, it would help ease pressure on existing infrastructure in the larger cities and go some way to addressing the housing crisis.

Moreover, moving some core government agencies to the regions would not only be a boost to these regions, it also helps spread the risk of the Crown's business continuity. For instance, the disruption that various government entities experienced in the last Wellington earthquake highlighted the concentration (and over-reliance) of Crown infrastructure in Wellington. A more even spread across the country would mean government entities could pivot to these other regions, should one region experience a disruption or natural disaster.

Q21. Is a 10-year lapse period for infrastructure corridor designations long enough? Is there a case for extending it to 30 years consistent with spatial planning?

Ōtākaro agrees that infrastructure corridor designations should be increased from 10 years to 30. While we recognise that reform of the RMA will improve things, the 10-year lapse period is not long enough. Population growth is likely to accelerate in the next 30 years at a faster rate than previously, so the need to expand existing infrastructure will become an issue and should not be restricted by a lack of land.

In Ōtākaro's experience, interdependencies, changes in priorities and delays in delivery of other key elements in a project can impact on the timing of execution of infrastructure projects. For example, critical decisions about whether an infrastructure project will be a lead or a lag project, as well as funding/cashflow, can affect designations.

Furthermore, the ten-year infrastructure corridor designation is unlikely to be long enough for major projects – for example, new rail projects and motorway extensions – given those project types happen in phases over a long period of time.

To that end, the situation could be improved greatly with more robust, long-term planning of infrastructure projects. Taking a 50-80 year view and accounting for projected population growth would allow for a more holistic approach and facilitate better prioritisation of spending.

Q22. Should a multi-modal corridor protection fund be established? If so, what should the fund cover?

Ōtākaro considers that if infrastructure corridor designations are increased from 10 years to 30, it will be necessary for the Crown to hold and purchase some land, and therefore agrees with the establishment of a multi-modal corridor protection fund.

Q25. Does New Zealand have the right institutional settings for the provision of infrastructure?

Ōtākaro views the Infrastructure Commission as the most appropriate vehicle to manage the nation's infrastructure priorities. The Infrastructure Commission's mandate and powers should also include developing policy to increase and facilitate coordination between central and regional agencies.

While much of Government is practiced at infrastructure delivery and has the experience and capability needed to overcome the infrastructure deficit in its relevant sector, many agencies do not and when faced with the need to deliver, look to establish the required capability within their organisation. There are many examples where this approach has resulted in poor project outcomes due to inadequate resourcing and governance. Ōtākaro supports the idea of a central agency or agencies to support less experienced Crown agencies with their project delivery needs.

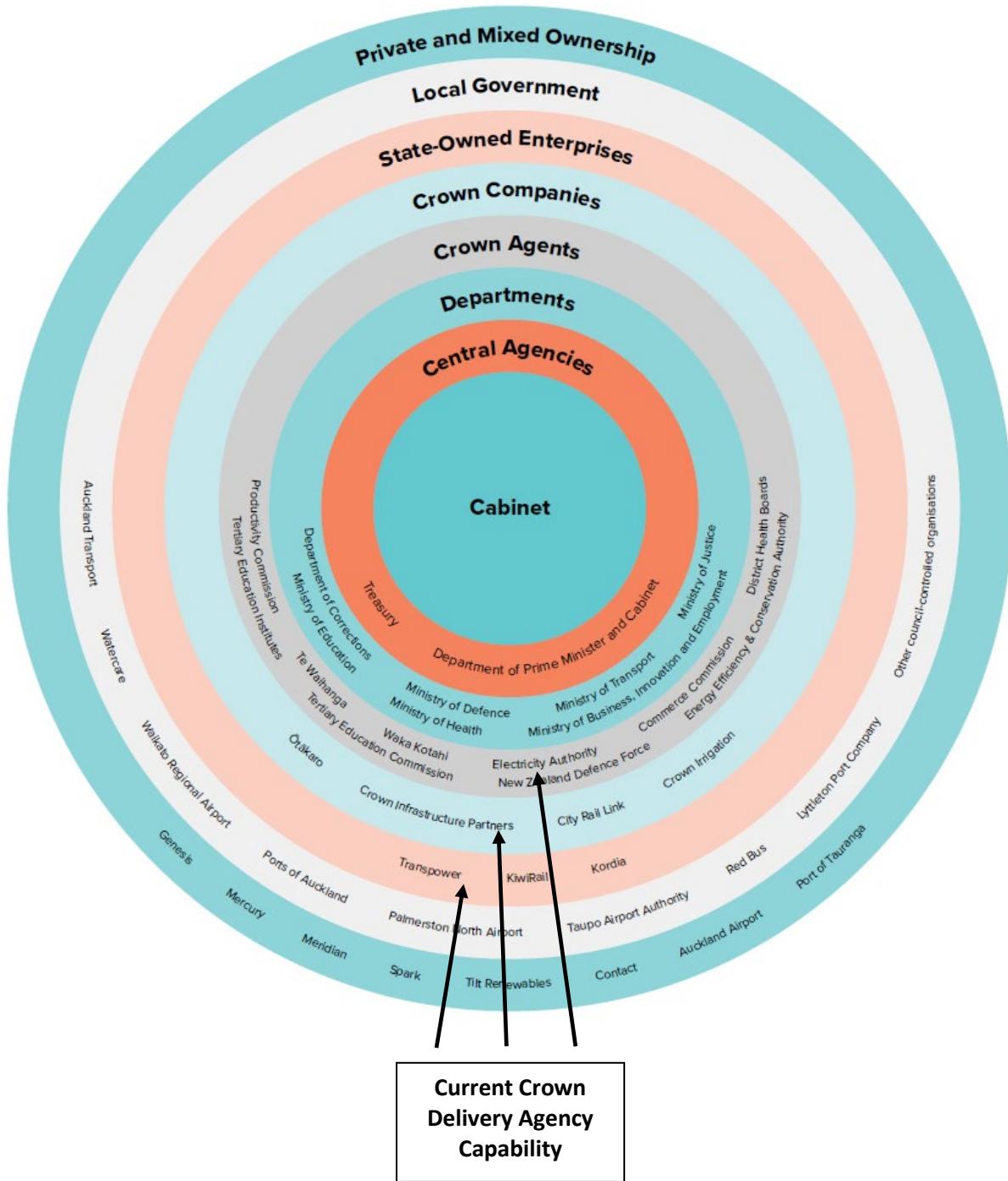
Q29. Are existing infrastructure funding and financing arrangements suitable for responding to infrastructure provision challenges? If not, what options could be considered?

Ōtākaro believes there is an opportunity to improve existing infrastructure funding and financing arrangements to better respond to New Zealand's infrastructure provision challenges. More specifically, there is a dearth of entities with the capability to deliver Crown infrastructure projects which leaves the Crown open to risk. Most of this capability resides with Crown agents, Crown companies and state-owned enterprises, and so what *is* there is highly fragmented. This fragmentation raises issues of lack of consistency of process and quality of outcomes. Although the Investor Confidence rating system that is central to Treasury's risk and assurance programme does provide a level of industry-wide consistency, we do not believe it goes far enough, and some key developments in this space would lead to vast improvements for the Crown.

Figure 12 shows the various entities involved in the infrastructure space.

This notable limited capacity in delivery agencies is likely to hinder the speed with which the implementation of any future infrastructure developments can be rolled out.

Figure 12: Just some of the players in our infrastructure system



Furthermore, the narrowly focused mandate of the current Crown delivery agency capability is only likely to compound matters. Current mandates of these entities should be revisited with a view to expand the scope of what projects they can deliver. Consolidation of some/all of the entities is also another option. Either option is in keeping with 'using what we already have' and capitalises on the specialist knowledge and experience that already exists within these agencies.

Q32. Are there benefits in centralising central government asset management functions? If so, which areas and organisations should this apply to?

If the Crown wants to maximise the efficiency of New Zealand’s infrastructure, it needs to have a view on how it manages the assets the Government already holds. The current Treasury view is that the Crown will never be the long-term owner of assets, whereas the Crown does in reality hold assets such as roads, schools, hospital buildings and social housing.

Given the reality of asset ownership, the Crown needs to adequately address the long-term implications of maintenance, including providing suitable funding for the costs likely to arise over the lifetime of the asset. Any asset management plan will also need to address investment in upskilling and increasing capability.

Q33. What could be done to improve the procurement and delivery of infrastructure projects?

There are a variety of things that could be done to reduce the risk to the Crown and improve the procurement and delivery of infrastructure projects.

These key things are:

- investing in better resourcing for government agencies;
- adoption of a ‘capable client’ model;
- creation of a new Crown specialist delivery agency; and
- re-establishing MBIE as a centre of excellence.

The Crown needs to better resource Government agencies to enable them to increase their in-house procurement and project delivery capability so they are better equipped to deal with capital development and ongoing maintenance. Even the larger Crown agencies responsible for delivering large scale infrastructure projects are quite often thin on the ground in terms of capability. This issue undoubtedly has flow-on impacts in terms of the consistency of approach to the market, project costs, delays and the cost of tendering.

Increasing capability would lead to ‘capable clients’, ultimately resulting in downstream efficiencies like:

- fewer change requests;
- faster delivery times;
- less cost overruns;
- better management of contingency funds;
- a levelling of power between the Crown client and construction company (particularly offshore construction companies);
- the reduction of the cost of procurement;
- freeing up key people for project delivery as opposed to having them focused on acquiring new business; and

- less disruption to the local community and business.

Further to this, there would be huge benefit in the creation of a dedicated agency to assist the large number of Crown agencies requiring the completion of ad-hoc projects but that do not possess the necessary in-house procurement and project delivery capability. We have discussed this more fully in Question 34.

Q34. Do you see merit in having a central government agency procure and deliver infrastructure projects? If so, which types of projects should it cover?

The creation of one or a small number of dedicated specialist Crown agencies would be enormously beneficial to the Crown. This dedicated agency would assist the large number of Crown agencies requiring the completion of ad-hoc projects but that do not possess the necessary in-house procurement and project delivery capability.

Dedicated specialist delivery agency

This dedicated specialist delivery agency could provide a full range of procurement and project support management services, or only partial help if the particular agency does possess some capability. For example, the delivery agency could provide the project and risk management capability, while the agency could provide the technical capability.

Having a shared tool such as a dedicated delivery agency (or agencies) would provide consistency across a disparate group of Crown agencies, lift the standards of reporting, reduce risk, save costs, enhance safety, and speed up project delivery. Many Crown agencies do not possess the know-how or experience in construction contract management to deliver and deliver well, whereas a dedicated team would have the ability to reduce the Crown risk and drive the projects to completion. Similarly, through proficiency in the health and safety issues associated with infrastructure project delivery, dedicated delivery agencies could reduce the risk the Crown faces as a PCBU under the Health and Safety at Work Act. A dedicated delivery agency would also provide other efficiencies through consistency in addressing climate adaptation and change, and leaving core Crown agencies to otherwise get on with their core business.

This dedicated delivery agency should be created by harvesting the procurement, safety, risk and project management expertise and capability that already exists within some of the delivery-type Crown agencies such as Ōtākaro. Not re-inventing the wheel in this way would be in keeping with 'using what we already have' and would be an efficient use of resources the Crown has already invested in developing.

This type of agency should be responsible for interim asset management prior to divestment to the new asset owner. In Ōtākaro's experience, it can take some time for asset handover to be complete which means areas such as maintenance of buildings and grounds, and general security require management.

National accreditation system

Building on the dedicated specialist delivery agency idea is the creation and implementation of a national accreditation system requiring Crown agencies looking to deliver capital projects to be accredited by Treasury based on their capability and experience. This could be an extension of the existing ICR system or modelled on the IANZ accreditation system. The likes of Waka Kotahi – NZTA, Corrections, Kainga Ora, Ōtākaro, City Rail Link Ltd, and Education would likely meet the accreditation standard. An unaccredited agency would be required to work with an accredited partner as a condition of its funding. That may involve collaboration, joint venturing or complete delivery.

Q35. What could be done to improve the productivity of the construction sector and reduce the cost of delivering infrastructure?

The key opportunities Ōtākaro sees for improving productivity of the construction sector are:

1. The creation of a clear plan and adequate funding to address the skills and material shortages;
2. Improving the year-on-year variability of Crown funding. Providing more consistent funding gives the market the ability to plan and respond better, improving the timely and economic delivery of Crown projects;
3. Improving procurement to address cost escalation and issues of slow decision-making;
4. Creating better incentives to prevent the risk of drain of our resources to Australia and/or encourage the flow of new talent in;
5. Better adoption and understanding of systems like BIM;
6. Exploring different funding models for Crown infrastructure developments (such as using pension funds); and
7. Consistent approach to contract management and commercial negotiations, and better understanding and acceptance of risk allocation.

About Us – Ōtākaro Limited is a specialist project delivery agency for the Crown. To date, we have been at the forefront of the Christchurch rebuild, leading the procurement and project management of the construction of central city Anchor Projects. Notable projects include: Te Pae Christchurch Convention Centre, Parakiore Recreation and Sport Centre (the largest aquatic and indoor recreation and leisure venue in New Zealand), the East Frame housing development (a partnership with Fletchers delivering 900+ inner city dwellings), the Christchurch Bus Interchange; the development of the Avon River Precinct, the Canterbury Earthquake National Memorial, the South and East Frame Public Realms, and the Accessible City Project (the implementation of a localised eco-friendly and future-proofed transportation system). Ōtākaro also has financial oversight of Canterbury Shovel Ready Projects.