

CONSTRUCTION SECTOR ACCORD

July 2020

Rapid mobilisation models for the construction sector to support post COVID-19 recovery



Executive summary

A sub-group of the Accord Steering Group (ASG) was tasked with identifying possible rapid mobilisation models for the construction sector to support New Zealand's recovery from the Covid-19 pandemic, including enablers and barriers to their successful deployment. The sub-group consisted of representatives from the vertical and horizontal construction sectors, professional services and government. The views of the wider ASG membership were also sought and incorporated.

Members of the ASG have witnessed first-hand how rapid mobilisation models have already been successfully deployed in New Zealand. Attributes of these models are emphasised in this paper.

This paper presents the recommendations of the ASG sub-group on how an agreed pipeline of construction work can be rapidly mobilised while also achieving positive outcomes for New Zealand.

The following high-level conclusions and recommendations were formed:

Conclusion 1: Current Government Procurement Rules¹ and common forms of contract can support rapid mobilisation and enable positive project outcomes. Substantive changes to current rules (as distinct from procurement practice) are not required. Indeed, rules aimed at delivering broader outcomes (social, economic, environmental and cultural) should be embraced more fully and given added weight, including supporting New Zealand businesses and construction skills and training.

Conclusion 2: Success is more likely when project scale and complexity are matched with the right delivery model, an appropriate form of contract, funding for outcomes, and where well governed and managed, adopting the principles set out in the Construction Sector Accord.

Conclusion 3: The nuances of different parts of the construction sector, in terms of the nature of work and the contractor market, must be considered when selecting the most appropriate delivery model.

Conclusion 4: While some delivery phases can be fast-tracked by improving practice, such as with respect to procurement and funding approvals, other phases may be constrained, for example consenting. Options for rapid mobilisation include running some phases and activities in parallel.

¹ Government Procurement Rules, 4th Edition came into force 1 October 2019. Government agencies (including Crown Entities and District Health Boards) are mandated to comply with the rules. Crown Research Institutes must have regard to the rules, while Crown Entity subsidiaries, School Boards of Trustees and some other agencies are expected to apply the rules. Agencies that are encouraged to apply the rules include local authorities and universities. <https://www.procurement.govt.nz/about-us/mandate-and-eligibility/eligible-agencies-procurement/>

Recommendation 1: Where agencies and organisations have a proven track record in delivery, coupled with existing strong relationships with the contractor market and robust processes, they should be instructed to continue at pace. Where agencies have a limited track record and are likely to need assistance, they should be instructed to engage with MBIE and Infracom to work through the most appropriate rapid mobilisation model.

Recommendation 2: Where it makes sense, projects from the same sector and region should be aggregated into programmes with common objectives focused on regional economic, social and environmental outcomes, and with funding to achieve those outcomes. This is likely to require different agencies, including central and local government and the private sector, to rapidly come together under the umbrella of specific delivery vehicles.

Recommendation 3: Rapid mobilisation models require a collaborative mind-set amongst participants across the different delivery organisations, as well as increased tolerance for uncertainty and risk. This means that approvers and funders will have to make decisions equipped with less certainty in order to move more quickly. Fixed price contracts that seek to transfer significant risk in an effort to create certainty (for the procurer) are unlikely to deliver on rapid mobilisation goals.

Thanks to the organisations that contributed to the development of this paper:



Contents

Background	5
The Accord's role in leading the sector's recovery	5
A call to action	5
Sector risks.....	5
Suitability of existing procurement framework.....	6
Agencies already responding to the call to action.....	7
Waka Kotahi - New Zealand Transport Agency	7
Waikato Local Authority Shared Services (LASS)	8
Rapid mobilisation	9
A range of delivery models	9
Enablers for success.....	10
Selecting the right delivery model.....	11
Key success factors	14
Establish ownership and governance.....	14
Establish outcomes	14
Select delivery model and procurement strategy	15
Consenting.....	15
Funding and business case decision making.....	15
Tender (streamlined)	15
Risk and contracting.....	16
Appendix: Example delivery models	17
Christchurch rebuild.....	17
Hamilton City.....	18
America's Cup	19
Kaikōura	20
Education.....	22
Watercare	23
Piritahi Alliance.....	25

Background

The Accord's role in leading the sector's recovery

The Accord Steering Group (ASG), representing sector leaders from across industry and government, has been meeting to coordinate, plan and implement a sector-wide COVID-19 response. The ASG has been in direct contact with Ministers to support and assist the Government in its response. This includes the Government's request for Crown Infrastructure Partners (CIP) to compile a list of shovel ready projects that could be mobilised quickly to support the recovery. A key success factor in the recovery will be the ability to quickly and effectively mobilise a range of projects throughout New Zealand and across different sectors.

This paper has been compiled by a sub-group of the ASG, reviewed and endorsed by the ASG, with contributions and support from leaders across the sector.

A call to action

In much the same way that government and industry responded following the Christchurch and Kaikōura earthquakes, the post Covid-19 recovery requires the sector to respond to a 'call to action'.

A call to action should:

1. enable businesses throughout the construction sector supply chain to keep their workforce in employment and grow skills for improved sector resilience in the future
2. provide alternative employment for people from affected industries/sectors through re-training, including tangata whenua
3. ensure that work being undertaken is able to deliver relevant social, economic and environmental benefits in a coordinated way
4. adopt best practice and where necessary consider new models that cover all stages of the project lifecycle, from prioritisation, funding, planning and consenting, to procuring, designing and constructing, so that projects and programmes of work can be delivered **at pace** while also delivering great outcomes for New Zealand, and
5. ensure that all parts of the sector demonstrate the values and principles set out in the Construction Accord throughout the delivery.

A call to action will be most effective if supported nationally and executed locally. It requires full participation across client organisations, local and central government, communities and contractors, and should involve a spread of projects across the country.

Sector risks

Unlike the geographically focused Christchurch and Kaikōura responses, the Covid-19 recovery and call to action extends throughout the country where the sector ordinarily delivers projects distributed across multiple agencies and organisations from central to local government and in the private sector.

Not all agencies and organisations have the same level of requisite experience and expertise when it comes to supporting successful delivery. The Christchurch and Kaikōura responses were able to draw in and focus considerable experience and expertise. In the COVID-19 recovery period, it is not certain that there will be sufficient expertise available country-wide to

deploy rapid mobilisation models aimed at achieving call to action objectives. Centrally held expertise may be needed to test and validate different approaches, run procurements and establish rapid mobilisation models in a way that cuts through (as opposed to adding to) ‘red-tape’, as well as providing assurance to Government and other sponsors.

Greater connectivity and coordination are evident within the horizontal construction sector (eg road, rail, water) due to the smaller number of procuring agencies, contractors and professional services providers. This should mean that rapid mobilisation is more possible, including aggregating individual projects into programmes of work that give more certainty to the sector. Capability and experience already exist in agencies such as the New Zealand Transport Agency (NZTA) and via its contractor market. In a call to action this capability could be utilised more widely.

The vertical construction sector, especially the residential sector, is far more fragmented as there are fewer central coordinating or procuring agencies. Kāinga Ora and the Ministry of Education are the exceptions, but this makes up a much smaller proportion of the sector compared to, for example, NZTA’s role in the roading sector. The proportion of vertical construction projects led by private sector developers makes this sector more at risk of project suspensions or terminations. The lack of future pipeline certainty is likely to result in greater risk of significant unemployment.

There are also risks to the sector arising from local government led projects being suspended, terminated or not started, given the projected reduction in rates revenue. The same can be said for many other projects reliant on revenue from user-pays or other third-party sources of funding including in the tertiary education sector, airports, and other council-controlled organisations.

A further risk to the sector and rapid mobilisation is consenting, even where projects are agreed and funding sourced. Consenting represents a potential barrier to projects becoming ‘shovel ready’, and along with property acquisitions can take significant time for large horizontal projects. Vertical infrastructure projects can face similar barriers. To a certain extent, timeframes can be reduced through careful planning and sequencing, for example by carrying out certain activities concurrently. However, there are timeframes that cannot be reduced as a result of the legislative environment.

Suitability of existing procurement framework

The Government’s procurement policy framework consists of a combination of principles, rules and good practice guidance. The policy framework encourages procurement practice that delivers good outcomes, ensures accountability and transparency, and reflects commitments made in New Zealand’s free trade agreements. Government procurement in New Zealand is centre-led as opposed to centralised. Each agency is responsible for its decisions and practices relating to the purchase of goods and services.

The Government Procurement Rules (‘the Rules’) ensure that New Zealand businesses are able to bid for government contracts and can expect that the bid will be assessed on its merits. The Rules also include a number of “business-friendly” provisions, such as minimum times for responding, visibility of the procurement pipeline, and permitting joint bidding.

While the procurement policy framework sets the environment within which government agencies must conduct their procurement, the quality of government’s procurement activity will depend on the procurement capability of agencies and the staff that undertake procurement activities. In many agencies, it isn’t just the procurement function which

influences the success of the procurement, but the authorising environment set up around that function, such as senior leadership, finance functions and specialist sector knowledge.

The Rules are often cited as creating a barrier to rapid mobilisation. However, feedback (both domestically and internationally) is that New Zealand has an exemplary framework that already provides the flexibility required to act in a range of situations, be it during times of relative normality, an emergency, or recovery situation. When exploring the procurement challenges raised by buyers and suppliers, many of these appear to be behavioural choices that have been built into procurement processes or procedures. This poor practice can act as a barrier to successful outcomes being achieved.

Several systemic issues have been cited by ASG members in relation to construction procurement, such as the ineffective use of panels, unnecessarily long and burdensome primary and secondary procurement processes, a lack of consistency in forms of contract and a tendency to issue separate, piecemeal tenders as opposed to taking a programme approach. One significant criticism of procurement activity is a focus on selecting lowest price tenders, leading to unsustainable pricing and a short-term focus.

In trying to address some of these issues (namely the focus on lowest price), the revised Rules published in October 2019 incorporated the Broader Outcomes approach, which sought to enable agencies secure broader economic, social, cultural and environment outcomes through their contractual spending. Whilst it is taking time to embed this type of behaviour change in agency procurement, there is opportunity, in response to the call to action, to more fully embrace these provisions.

New Zealand Government Procurement and Property is working with Minister Twyford and agencies to explore ways to fast-track improvements in procurement practice, such as:

- Considering how changes to procurement policy can drive a focus on regional economic development, and sustainable jobs and businesses
- Developing a 'project acceleration policy', which could empower MBIE (as the procurement functional leader) with the authority to accelerate procurement and step-in to support agencies deliver key projects
- Developing sectoral specific procurement strategies, such as a government construction procurement strategy for example
- Accelerating the delivery of end-to-end procurement systems.

Given that best practice has been demonstrated in New Zealand Government projects in the past, with approaches taken that are consistent with the Rules, it is fair to conclude that the Rules are not an inhibitor to the effective and rapid delivery of projects. MBIE and Infracom will continue to consider how these initiatives and others can be tailored to meet the specific procurement challenges in the construction sector.

Agencies already responding to the call to action

A number of agencies are already preparing for accelerated procurement activity. Two examples (of the many forward-thinking agencies) are provided below:

Waka Kotahi - New Zealand Transport Agency

Waka Kotahi has identified procurement as a lever for acceleration it is intending to activate in order to drive economic stimulus post COVID-19. The sustainable procurement models that Waka Kotahi intends to deploy are aimed at accelerating the supplier selection process, while

also providing longer term industry certainty. With this in mind, Waka Kotahi will be leveraging its existing and historic innovative models and constructs to:

- accelerate the design and delivery of **a larger number of high value, complex projects**
- accelerate the design and delivery of **a larger number of small to medium sized projects.**

These two different approaches recognise the segmentation of Waka Kotahi's transport programme and the need for different methodologies to deliver accelerated outcomes. Waka Kotahi will be cognisant of local road projects currently designed and delivered by Approved Organisations and consider the ability to scale any models to accommodate these projects if or when there is appetite to do so.

Waikato Local Authority Shared Services (LASS)

The Waikato LASS is developing a programme view of forward procurement across both previously planned (ie long-term plan budgeted works from the 12 Waikato councils) and potential economic stimulus packages (ie Crown Infrastructure Partner submissions) to identify potential works programmes or packages, then looking at the most appropriate delivery mechanisms for those programmes.

Large, collaborative models (such as Alliance-type models) are being considered. However, to overcome perceptions that these models favour large 'Tier One' suppliers, representation of local small and medium-sized businesses can be increased by leveraging the 'Broader Outcomes' changes recently introduced into the Government Procurement Rules.

Rapid mobilisation

A range of delivery models

A range of potential delivery models are available to local and central government in both horizontal and vertical construction sectors. These models have been developed from experience in New Zealand and from other parts of the world. They are designed to deliver across a range of scale and complexity to support residential, commercial, industrial and government construction projects.

Many successful examples are building on good practice already exhibited in New Zealand, for example as part of the Christchurch rebuild activity, or in Waka Kotahi's processes for distributing work to contractors. More recently, the Ministry of Education has taken an approach to directly engage from their panel of designers and contractors, based on a high-level of knowledge of suppliers' cost and design performance, while maintaining a spread of work to help build market capacity.

Examples of different delivery models appended to this paper are:

- Stronger Christchurch Infrastructure Rebuild Team (SCIRT) – *Alliance*
- Hamilton City Council Infrastructure Alliance – *Collaborative Working Arrangement*
- AC36 Wynyard Edge Alliance – *Alliance*
- North Canterbury Transport Infrastructure Recovery (NCTIR) – *Alliance*
- Ministry of Education – *Panel*
- Watercare - *Enterprise model*
- Kāinga Ora Piritahi - *Alliance*

The delivery model deployed in response to a call to action tends to be an Alliance. The Alliance brings together individuals from public and private sector organisations into a collaborative delivery team. It may be considered as a suitable delivery method where the relevant project or programme has one or more of the following characteristics:

- risks that cannot be fully identified or quantified prior to tendering
- costs of transferring risks that are prohibitive in the prevailing market conditions
- an owner who is prepared to take the commercial risk of a suboptimal price outcome
- an owner who has superior knowledge, skills, preference and capacity to influence or participate in the development and delivery of the project (including for example, in the development of the design solution and construction method)
- a collective approach to assessing and managing risk will produce a better outcome.

While the examples used come primarily from the horizontal sector, the principles apply equally to the vertical sector.

Enablers for success

The successful delivery of a significant programme of national and regional projects across a multitude of agencies and organisations at pace will require a joined-up and coordinated set of **enablers**. Some of the most important system enablers are highlighted in the table below:

Enabler	Comment
Alignment on outcomes and strategy	Outcomes are more likely to be achieved if there is coordination at a national and regional level, for example targeting a small number of outcomes by region or sector.
A coordinated pipeline of work	Ministers, supported by Infracom and CIP, must get visibility of the full pipeline of work to enable funding and prioritisation decisions across portfolios and assess the market's capacity to deliver.
Establishing a collaborative mind-set	The Stronger Christchurch Infrastructure Rebuild Team's (SCIRT) 'better for rebuild' established a common purpose, which united the project team and encouraged a collaborative mind-set and behaviours. Progress was slowed whenever disunity over common purpose occurred.
Funding tied to wider outcomes	In order to avoid the lowest cost tender mind-set, funding needs to cover the wider outcomes sought in regard to the Governments Broader Outcomes rules, ie local sourcing, industry training and sustainable businesses.
Fair and equitable apportionment of risk	Project risk should be assigned to the party best placed to manage that risk. Further, if risk is to be transferred, it should be done so on an equitable basis.
Ownership, governance and leadership	Clear ownership of projects and programmes at a Ministerial and agency level, supported by fit-for-purpose governance structures and experienced industry leaders. Streamlined decisions and approval processes within Government and agencies will achieve faster delivery.
Monitoring and assurance	Oversight of decision making and agency capability at the right stages of the process will ensure that projects are well set-up from the outset. Equally, effective monitoring will ensure that agencies are well supported to deliver. This can be scaled depending on agency capability.
Capable agencies and project teams	Highly capable teams and individuals are required to deliver highly complex projects. Therefore, project complexity should be matched with agency and project team capability. This could be supported by having agency leaders in certain sub-sectors, for example, Waka Kotahi for civil and Watercare for water. Better outcomes can be achieved if delivery and setup are determined with inputs from contractors, designers and planners.
Fit-for-purpose procurement processes	The existing Rules framework is sufficiently flexible to enable the successful delivery of rapid mobilisation models; however there are challenges with practice and capability that need to be addressed. Existing procurement processes are often costly and time consuming, tying up key industry resources.
Streamlined business case and funding approvals processes	Existing business case processes can be cumbersome and impact project timeframes and priorities, particularly in smaller scale projects. Refined processes must carefully balance the need to safeguard quality investment decision making.
RMA process	The RMA and consenting process influences project timescales significantly. Careful selection of consenting pathways, better integration between relevant agencies or modification to RMA process (eg as occurred on the North

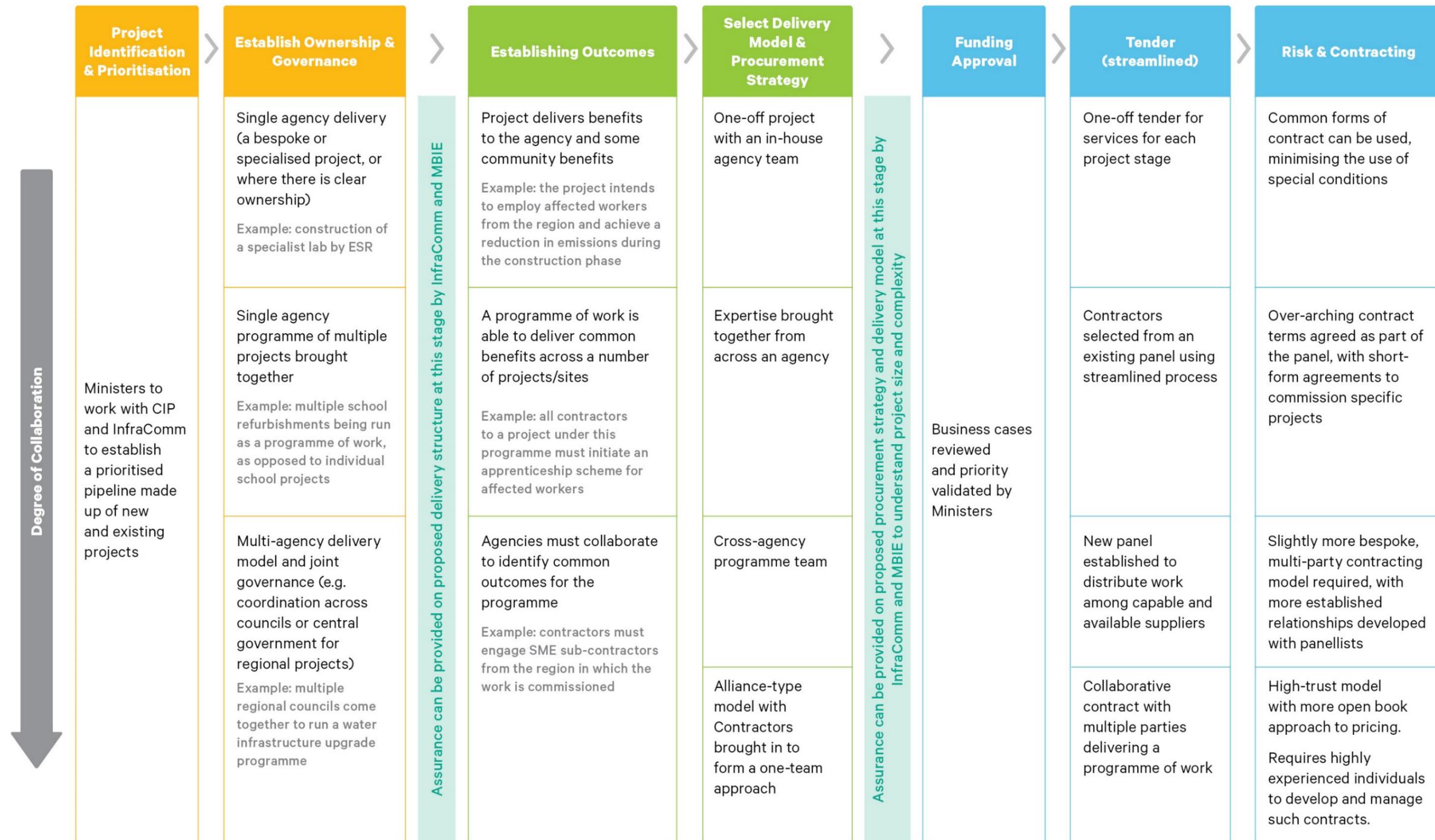
Enabler	Comment
	Canterbury Transport Infrastructure Recovery project) can aid faster delivery.

Selecting the right delivery model

The table and flowchart overleaf bring together the concept of enablers with a selection of fit-for-purpose delivery approaches, which demonstrate the spectrum of project delivery that can be deployed dependent on the scale and complexity of the work, and the importance of effective assurance and stewardship of decisions at key parts of the process. In selecting a delivery model, agencies must understand how each decision (for example, selecting a multi-agency delivery model) flows through to the next (such as developing collaborative outcomes).

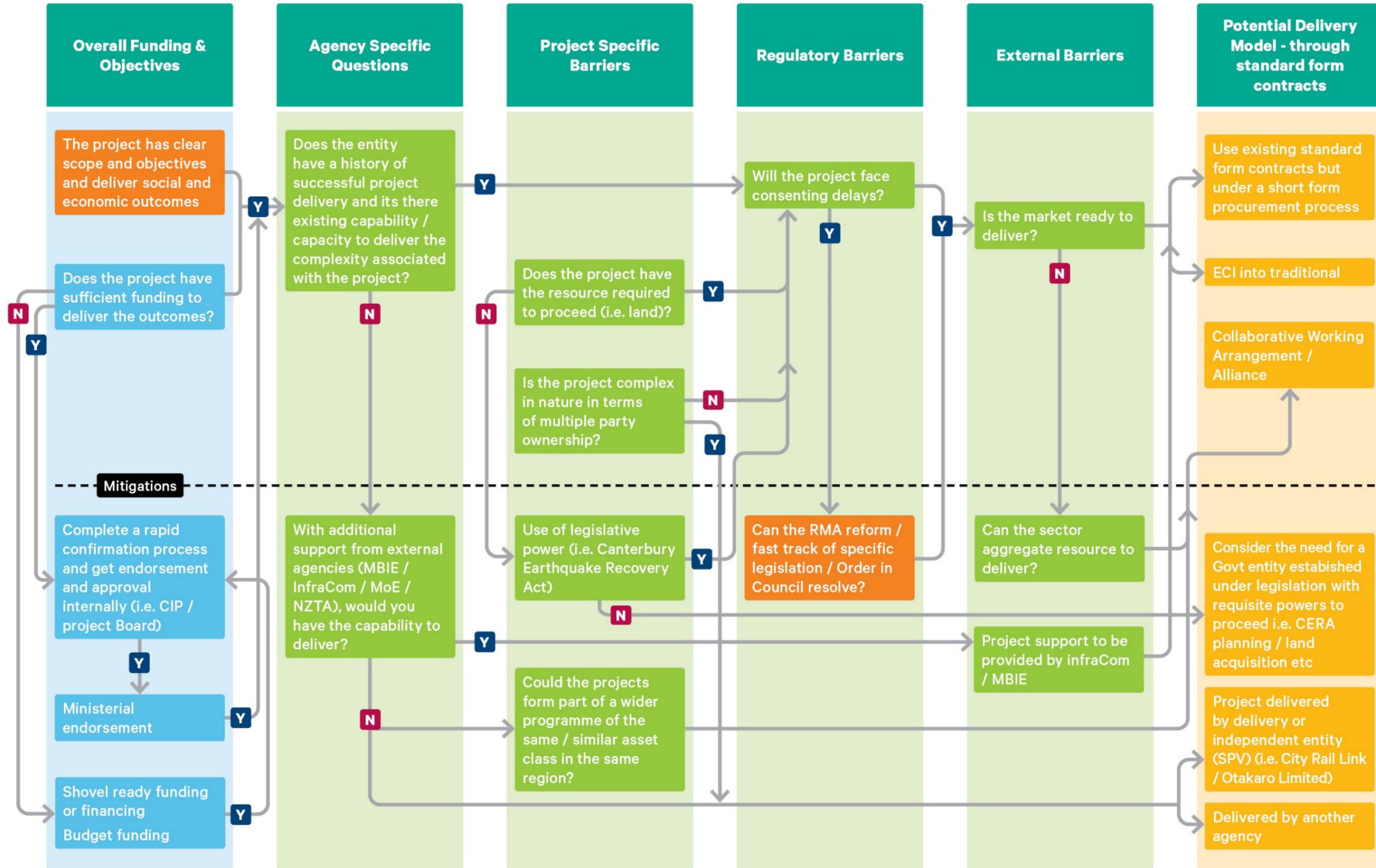
Overview of Delivery Models

A number of delivery models already exist that could be successfully deployed across the system if they are supported by enabling factors such as prioritisation, clear accountability, good governance and capable individuals. The right model should be chosen for the right project/programme.



The flow chart below provides a pathway for selection of the most appropriate delivery model, considering the complexities of individual projects or programmes and the maturity of the organisation to deliver them. Below the line, mitigations have been considered that can help to remove barriers to rapid mobilisation. The dark orange boxes represent prerequisites for a project being suitable or ready for rapid delivery.

For many projects where there is alignment on the scope and objectives, funding to deliver, and no major barriers then the fastest model is using an existing standard form contract via a short form procurement process.



Key success factors

The industry-wide experience and expertise that is available from within the Construction Sector Accord's membership has enabled us to identify a number of key success factors for ensuring projects are set up for success. These success factors are presented below, by each stage of the delivery process:

Project identification and prioritisation

Balancing the pipeline with market capacity

- Develop a view of projects on a regional and national basis, without focussing all projects on metro areas such as Auckland.
- Stagger projects to manage market capacity (smoothing), avoid regional or metro-based boom/bust activity.
- Deliver right sized stimulus packages to the problem that Government seeks to resolve. Select and scale project interventions to match the objectives and requirements in each region (eg the number of projects under the stimulus approach matched according to the labour requirements of the projects and employment requirement of the region).
- Consider delivering projects as part of a 'delivery programme' or corridor approach, not as a collection of individual projects.
- Do more deferred and brought forward maintenance activities, rather than large scale new and unique projects.

Establish ownership and governance

Aggregating where it makes sense

- Aggregate to enable programme management and manage costs on both sides, while also ensuring coordination across fragmented sub-sectors such as residential construction.
- Ensure agencies tasked with delivering large or complex programmes have the necessary capability and experience.
- Embed capable staff from owners and clients into project teams to speed up scope definition, decision making and approval processes (see NCTIR example described in more detail below).
- Ensure common agreement of objectives across client, Government and supplier organisations.

Establish outcomes

Using project delivery to support business resilience and career-path outcomes

- Focus on maintaining labour force participation and retaining skills and capacity in the sector.
- Provide targeted opportunities for skills and career development across the sector, including by directly targeting current and potential workers from tangata whenua and Pasifika.
- Include social and regional outcomes as part of project objectives to ensure clarity and transparency of project success, particularly in collaborative delivery vehicles.

Select delivery model and procurement strategy

Matching delivery approaches with projects and owners and to complexity

- Carefully consider the project risk continuum and how it aligns to project delivery models.
- Set realistic cost and quality targets, and then incentivise beating them.
- Bring consenting, design, and construction teams together from the outset. ECI (early contractor involvement) projects are an example of this in vertical construction.
- Avoid bespoke designs where possible. Standardisation allows investment in supply chains for products in which there would be greater certainty and increased productivity (eg use of Cross Veneer Laminate in “standard” house or school design).
- Consider overlapping scoping, consenting, design, and construction processes as this can be critical in saving time.

Consenting

Develop a consenting strategy encompassing broad stakeholder engagement

- Cater for the fact while planning that consenting significantly influences project timeframes.
- Select appropriate consenting pathways and strategies (eg Board of Inquiry, traditional pathways, direct referral processes or mediated outcomes), while challenging project requirements against the intent of the Resource Management Act.
- Ensure alignment with iwi and other agencies at the earliest point of the project lifecycle as their involvement is critical. This requires maturity and the appropriate authorisation environment.
- Streamline property acquisition processes.
- Consider project-specific legislation where project timeframes are urgent and there is broad agreement on purpose and outcomes from the outset. Pukeahu: The National War Memorial Park delivered excellent outcomes using this approach.

Funding and business case decision making

Streamline to achieve pace while retaining checks and balances to protect taxpayer dollars

- Invest wisely, but acknowledge that there will be learning costs (we won't get it right every time).
- Focus business case processes on the critical decisions that are required; for example, where there is alignment on project or programme outcomes, reduce the requirements for individual projects to a minimum.

Tender (streamlined)

Building on what is already there

- Prioritise the use of existing supplier panels which allow a direct route for project delivery in design or construction. Review the functioning of panels where this is not the case.
- Find a balance between speed and protecting healthy markets, reflecting the need to ensure new entrants into panels over time, and the need to build sustainable markets that enable investment in businesses and skills.
- Standardise tender requirements (eg H&S, financial due diligence) or put in place centrally-led prequalification.
- Standardise secondary procurement processes to reduce the repetition of common quality attributes that clients typically seek.

Risk and contracting

Driving towards standardisation and fairness

- Identify standard forms of contract for project types and phases that understand the value of professional or design services, while ensuring constructability and urgency for the construction phase.
- Understand that at this time in the market specifically, unsustainable pricing will lead to numerous issues that will undermine the gains achieved by the Construction Sector Accord, in both professional services and construction companies.
- Develop a common risk allocation tool for government projects, which is also able to assess COVID-related risks such as reduced productivity and increased health and safety costs.
- Encourage a balanced approach to risk allocation and minimising special conditions.

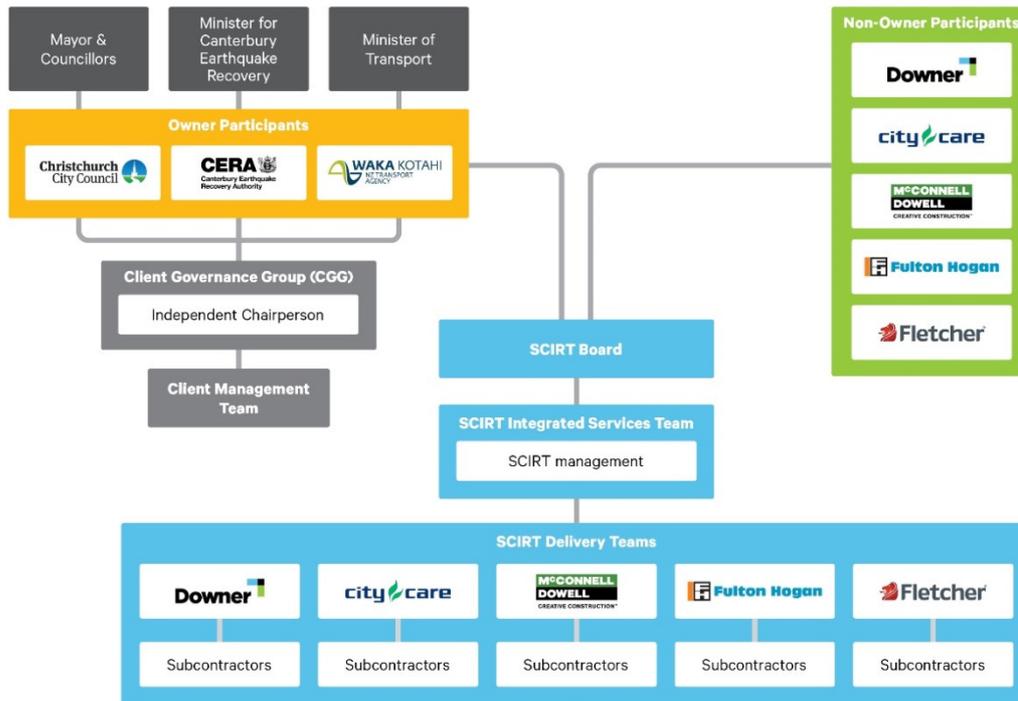
Appendix: Example delivery models

Christchurch rebuild

SCIRT Alliance – Canterbury Earthquake Response and Recovery

SCIRT

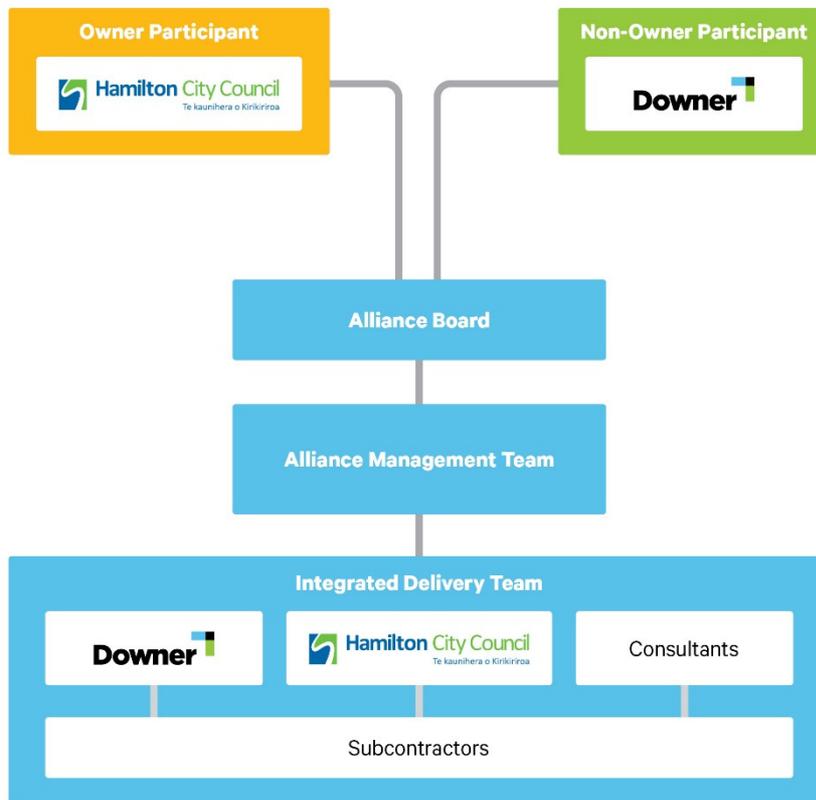
Organisation Structure



- The Stronger Christchurch Infrastructure Rebuild Team (SCIRT) Alliance was established to manage the huge scale and complexity of the horizontal infrastructure rebuild following the Christchurch earthquakes.
- Approximately 900 km of water infrastructure and 1.7 million square metres of roading was repaired or replaced.
- The SCIRT Alliance brought together five of New Zealand’s largest contractors (as non-owner participants) with the Christchurch City Council, Christchurch Earthquake Recovery Agency and Waka Kotahi (as the owner participants). An Integrated Services Team was the centre point of the SCIRT Alliance, the primary function of which was to plan, design, execute and manage the rebuild programme.
- The SCIRT Alliance built on existing relationships between the non-owner participants and the Christchurch City Council.
- Throughout the SCIRT programme, challenges were faced as a result of a lack of aligned objectives between the Crown and Council, which led to additional cost and delays. In addition, client representatives on the SCIRT Board did not have the requisite level of delegation to make key decisions to enable the programme to be delivered efficiently.
- Clear and agreed objectives, alongside appropriately delegated client representatives in governance positions, are critical aspects in a successful Alliance.

Hamilton City Council Infrastructure Alliance

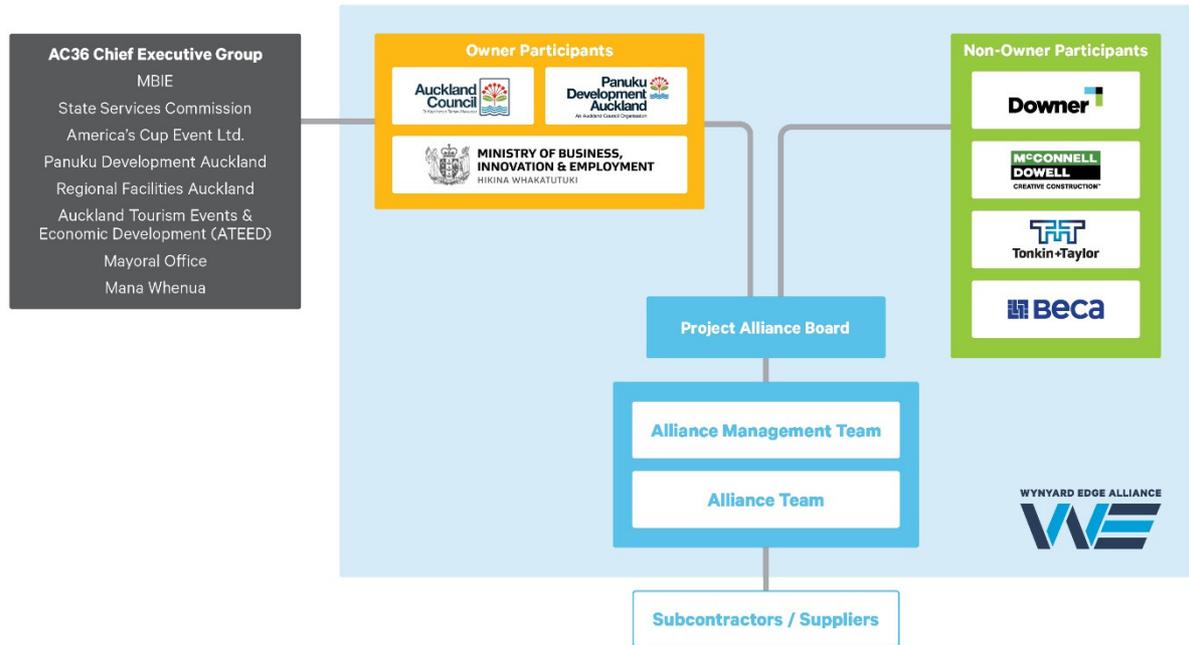
Organisation Structure



- Hamilton City Transportation Unit has adopted a **Collaborative Working Agreement (CWA)** with a major contractor, to maintain their roads. The scope includes all activities within the road corridor from property boundary to property boundary. This is a 10-year contract and involves staff from the City Transportation Unit working closely with, and from the same office as, the contractor. The reason for this new way of working is to provide a more efficient and effective service to customers.
- The CWA is an alliance type contract and this type of contract is becoming more widely used. The selected contractor, Downer NZ, was awarded the project in October 2013 after a competitive tender process.

AC36 (The Wynyard Edge Alliance)

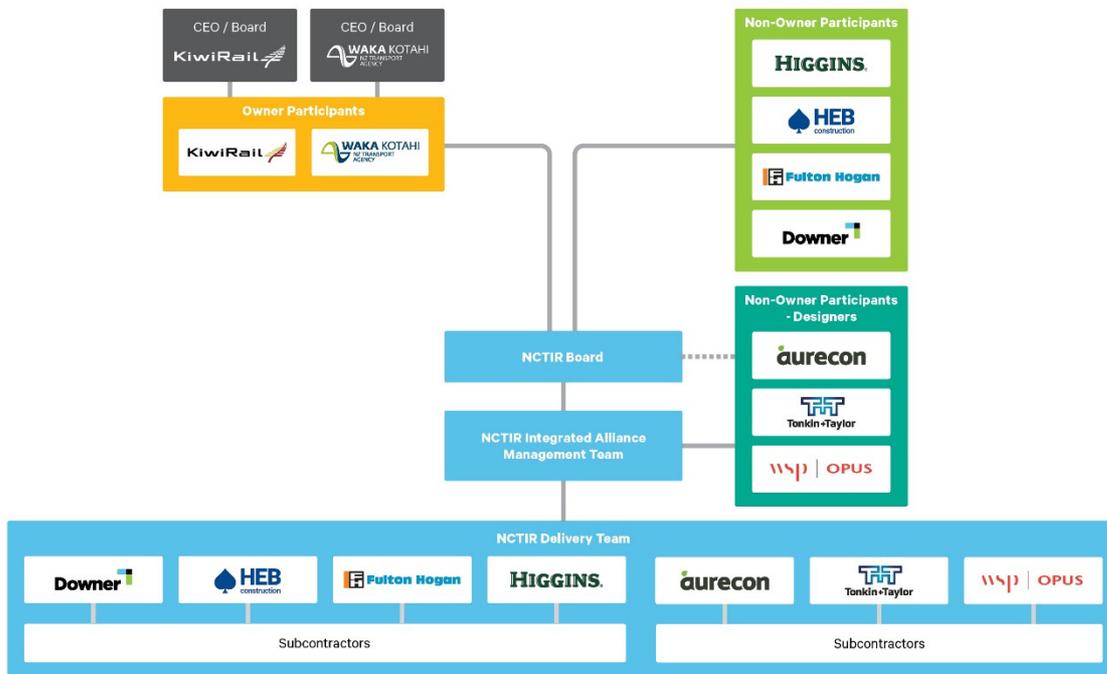
Organisation Structure



- Driven by a short period between securing funding, the final venue selection, and the fixed start date, the **Wynyard Edge Alliance** was formed to consent, design and construct the infrastructure required to support the 36th America's Cup event in Auckland in 2020/21 and other associated works in the Auckland downtown area.
- This work is funded by Auckland Council and Central Government who are also the Alliance Owner Participants and represented in the governance of the alliance by Auckland Council, Panuku Development and the Ministry of Business, Innovation and Employment (MBIE).
- The Non-Owner Participants in the Wynyard Edge Alliance are constructors Downer and McConnell Dowell and designers Beca and Tonkin & Taylor.

NCTIR

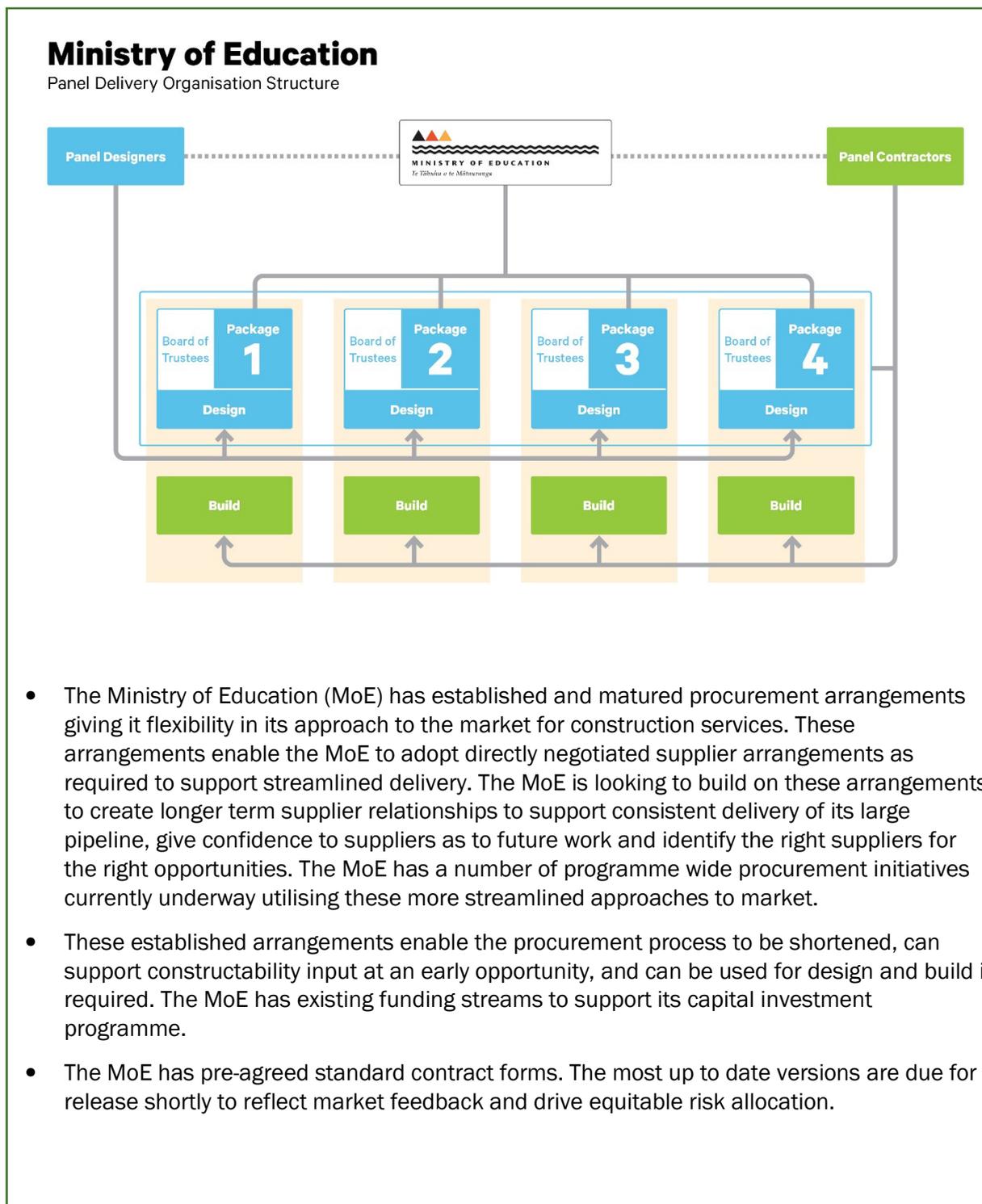
Organisation Structure



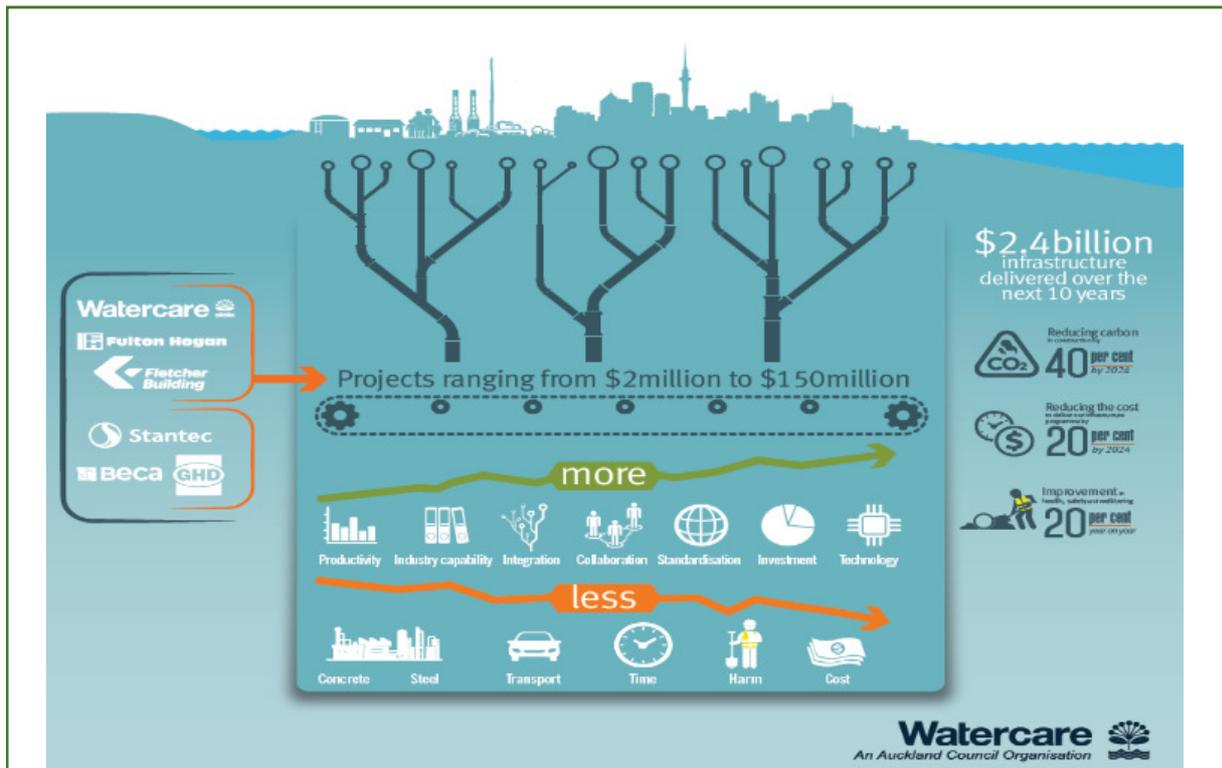
- The damage caused by the 7.8-magnitude November 2016 Kaikōura earthquake to the Main North Line railway and SH1 along the east coast of the South Island was unprecedented in New Zealand. **The North Canterbury Transport Infrastructure Recovery (NCTIR) alliance** was set-up to restore the road and rail networks.
- An alliance model was selected as the most appropriate delivery model due to the scale, complexity of design and build, and multidisciplinary nature of the response and repair programme.
- The NCTIR alliance brought together those contractors already shortlisted for the North Canterbury Network Outcomes Contract, who also had recognised experience in rail, road and bridge construction.
- Professional services (such as design work) were provided by a sub-alliance of three leading consulting firms. The sub-alliance includes Aurecon, Tonkin & Taylor, and WSP, and has a representative on the NCTIR Alliance Management Team.
- The sub-alliance set-up included a ‘healthy markets’ component, under which a portion of the works were sub-contracted to the broader market. This is important in helping to share the work around.
- Key features of NCTIR that aided fast delivery included:
 - fast-tracked consenting processes giving NCTIR the ability to consent works (related to emergency works only)
 - a governance framework and owners that fully bought into the overall process
 - a collaborative alliance model which focussed on big picture outcomes

- consenting, investigations, scoping, design, and construction processes overlapped to aid quick delivery
- tailored and streamlined documentation and processes suited to fast delivery
- embedded personnel from owners Waka Kotahi and KiwiRail, which aided quicker scope decisions and technical sign-offs
- IT and Digital tools to aid collaboration and quick delivery
- unified industry wide response with very clear goals for the programme
- strong relationships with iwi and stakeholders
- large numbers of local people within the NCTIR workforce which helped garner support and economic stimulus
- health and wellbeing programmes targeted to manage staff working under extremely tight timeframes
- key leaders with an outstanding delivery track record, who were 100% committed to the project
- an initial project setup which included owners, contractors, designers and planners
- a professional services sub-alliance incentivised to meet programme and avoid scope-creep
- no-sue provisions in the Alliance agreement which gave participants confidence to move fast. This is important when working to a 'go fast' objective under emergency conditions.

Education



Watercare



- The Enterprise Model was established in 2019 to transform Watercare’s infrastructure delivery through enhanced engagement with the construction supply chain.
- This innovative delivery model fosters collaboration among participants as does an open book allocation of risk that is agreed between all partners. This increases involvement for partners at all project development and delivery stages and is designed to extract value by considering a long-term programme approach to infrastructure delivery. This allows partners to invest with confidence creating a stronger national infrastructure delivery capability.
- Watercare has partnered with two Tier 1 contractors (Fletcher Construction and Fulton Hogan) and three designers (Beca, GHD and Stantec) to support the delivery of \$2.4 billion of investment in assets for Auckland over 10 years.
- Projects ranging from \$2 million to \$150 million are aggregated into a series of programmes to increase productivity, raise capability and enhance resilience of our people, communities and businesses. Many of the Enterprise Model values and principles mirror those of the Construction Sector Accord.
- The enterprise model and its partnership allows:
 - a pipeline of work for 10 years
 - a trusting and collaborative mind-set
 - partners aligned on outcomes and strategy
 - early contractor involvement starting at business case development
 - a strong cultural and commercial model
 - outcomes that are tied to a shared incentive
 - balanced risk management (between asset owner and construction and design partners)
 - capable partners and project teams that are committed to lift industry capability and capacity
 - streamlined procurement

- enhanced delivery via one collaborative team incentivised to resolve challenges and issues
- enhanced cost, carbon and wellbeing, health and safety outcomes due to a sustained programme of work
- transparent performance monitoring and assurance.
- All of these features expedite infrastructure delivery and surety of outcomes and aim to create industry leading outcomes.

Piritahi Alliance



- Piritahi was established in 2018 to deliver the Auckland Civics Alliance Programme (ACAP). It consists of the civil engineering and infrastructure works within the Auckland Housing Programme’s large-scale developments, led by Kāinga Ora.
- Piritahi brought together five of Auckland’s industry experts as its non-owner participants, chosen for their proven track record of civil infrastructure planning, design, consenting and construction.
- It is estimated that Piritahi will complete well over \$1B worth of civil infrastructure and land development work over its lifetime, spread across hundreds of individual land development and infrastructure projects worth between approximately \$2M and \$40M each.
- Unlike many other alliances that deliver one specific project, at any given time Piritahi handles multiple projects across several geographic locations, within different communities, each with their own Target Outturn Cost (TOC). Piritahi operates a robust, agile and flexible project delivery team designed to deal with these complexities and with the ability to scale up and pivot quickly.
- In addition, the Alliance members have an existing pool of pre-qualified and supplier-panel qualified sub-contractors supported to grow steadily as Piritahi realises cost-efficiencies through the value of the programme of work.
- Piritahi’s robust, independently verified commercial model along with embedded systems and in-house training capability provides a rapid mobilisation ready platform to expand with industry demands.
- Piritahi works collaboratively with Council and Council Controlled Organisations (CCOs) to help deliver their broader infrastructure commitments to the Auckland Housing Programme. This collaboration has already involved Piritahi being formally engaged by Council (via Kāinga Ora) to complete other design and construction outside of their core scope. This other work would normally be carried out directly by Council and their own consultants and contractors.