

Lessons learned from one of New Zealand's most challenging civil engineering projects: rebuilding the earthquake damaged pipes, roads, bridges and retaining walls in the city of Christchurch 2011 - 2016.

Far-sighted and comprehensive - Alliance Objectives steer the SCIRT journey

Story: Alliance Objectives

Theme: The SCIRT Model

A document which discusses the importance of the Alliance Objectives to the operation of SCIRT.

This document has been provided as an example of a tool that might be useful for other organisations undertaking complex disaster recovery or infrastructure rebuild programmes.

For more information about this document, visit www.scirtlearninglegacy.org.nz



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Far-sighted and comprehensive – Alliance Objectives steer the SCIRT journey

At the core of the SCIRT Alliance, a powerful set of Objectives defined the direction for the unique organisation.

Within weeks of the destructive February 22, 2011 earthquake that shook and shocked Christchurch, the SCIRT Alliance was taking shape and a comprehensive set of Alliance Objectives was evolving.

Scope to expand

The Objectives fundamentally empowered SCIRT to deliver far more than just the physical repairs to Christchurch's horizontal infrastructure – a huge task in its own right.

They were wider-ranging than the usual cost, time, and quality objectives for a large infrastructure project.

SCIRT executive general manager Ian Campbell regarded the list of Objectives as a comprehensive road map, enabling the organisation to take a more holistic approach to the massive programme of works than would have been the case under a normal contractual agreement.

"If I had to put my finger on just a handful of things that ensured our success, that list of Objectives would be right up there," Campbell said.

"It was an explicit instruction to consider more than the purely commercial and engineering aspects of what we were doing. That was what enabled us to deliver an all-round performance."

Tailor-made for Christchurch

The Objectives were largely tailored to the Christchurch rebuild effort and required SCIRT to deliver an industry-leading performance in key areas: health and safety, environmental impact, community communications, and cost constraints and construction quality.

Among the more far-sighted and challenging requirements were directions to "do something

meaningful" to reduce unemployment in Christchurch, lift the capability of subcontractors and upskill the workforce, as well as show increasing productivity as the work progressed. Coupled with that, the Alliance had to establish the lowest cost structure in the rebuild effort and use local resources as much as possible with the proviso they were obtained on competitive terms.

The Objectives set out not just an expectation that the community would be informed about the infrastructure works, but an instruction to be proactive with communications, build rapport with affected residents, talk face to face where possible and go the extra mile when required to minimise disruption to their daily lives.

"The Objectives gave SCIRT a licence to develop training programmes, carry out widespread proactive communications and use new cost and time-saving technologies not well developed in New Zealand – all hallmarks of SCIRT's legacy," Campbell said.

"The fact that these objectives were written into the agreement meant we could budget to achieve them, removing the primary obstacle to people doing what they know is right," he said.



Good cause: SCIRT executive general manager Ian Campbell addresses the crowd at the reopening ceremony for the Ferrymead-Redcliffs causeway.

“The lesson learnt for me is if you are going to deliver all-round performance, provide value for money in every which way, you’ve really got to think upfront what that looks like, what you’re after and you’ve got to be prepared to be specific from the outset; and that’s what those Objectives do.”

Political Objectives

SCIRT’s first executive general manager, Duncan Gibb, said the government had clear goals, which were relayed through the Objectives – to boost employment in Christchurch and re-stimulate the economy after the displacement of hundreds of businesses – in order to send strong messages that the government was committed to the city’s recovery.

“The drive to reduce unemployment was an interesting one because it meant we intentionally employed unskilled people from outside the industry as a strong signal that steps were being taken to keep people employed,” Gibb said. “The Objectives were intentionally aspirational and challenging and a lot of them were very specific and not off the shelf.”

For Gibb, the Objectives were terms of reference to help develop and shape the organisation and drive the formation of strategies to achieve the results articulated in those Objectives.

“I think it was quite bold to take on some of those Objectives, which sound easy when written on a piece of paper, but to actually deliver them is really quite difficult,” he said.

Key movers

Two experienced government employees drove the formation of the Alliance and the Objectives: Colin Crampton, New Zealand Transport Agency (NZTA) general manager of highways and network operations at the time, and Kevin Locke, the Christchurch City Council’s then head of capital programme delivery.

NZTA provided advice and oversaw transport areas and the construction and maintenance of state highways. The Government sought NZTA advice after the February 22 earthquake because of the agency’s extensive experience with alliance contracts.

“If I had to put my finger on [what] ensured our success, that list of Objectives would be right up there”

– Ian Campbell, SCIRT executive general manager

Both men understood the private sector and the nature of alliancing and relationship contracts. They had worked in the consultancy sector and had later been NZTA colleagues when Crampton set up a procurement group in the late 1990s to develop models for alliancing, contracting and maintenance. As a result, they were familiar with the civil construction sector.

Their personal relationship was strong. After the earthquakes, Wellington-based Crampton had rung his friend in Christchurch to see how Locke and his family were faring, and that led to discussions about the huge repair facing the city. Their relationship was instrumental in opening a dialogue between the government, through NZTA, and the council, the owner of the badly damaged horizontal infrastructure.

Crampton understood the government’s thinking on an alliance as the best means to tackle the rebuild. Both men wrote papers for their respective organisations to help gain support for the alliance journey.

Five leading New Zealand construction companies had been engaged to repair Christchurch roads and underground infrastructure after the September 4, 2010 earthquake, under the Christchurch City Council Infrastructure Rebuild Management Office (IRMO) programme. Crampton and Locke steered those companies into an untried alliance structure, where the companies kept their own brands but had to work both collaboratively and competitively within an alliance framework.

The fact both men were familiar with the construction players helped break down barriers that might have



Sign of success: The signing of the Alliance Agreement, with Earthquake Recovery Minister Gerry Brownlee (seated left) and then Christchurch mayor Bob Parker.

slowed the creation of an alliance. Close and familiar relationships in a small country could prove beneficial when a speedy response was required.

A framework to go forward

Locke explained that they both sketched out the high-level Objectives, which Crampton fleshed out before taking to the new SCIRT Board for further crafting.

While the SCIRT Board was established, it was not formally in place until the signing of the Initial Alliance Agreement on May 4, 2011. The board included representatives from the government and local government and the five construction companies.

At the time, the formation of the Alliance, the setting of the Objectives, and the determining of the commercial model were happening simultaneously, which was far from typical, because all the parties wanted the rebuild to get under way as soon as possible.

“The objectives were to guide the early work and the Alliance,” Crampton said.

“They helped ensure all parties understood what we were trying to do before the Alliance began and also to help Alliance participants understand the scope.

“To me they were very important because they articulated what was required of the rebuild for all the people who were at the beginning. They were designed to create an incentive for the Alliance to incorporate their intent into further SCIRT documentation,” he said.

Fresh challenges

The Alliance Objectives were first included in the Christchurch Infrastructure Alliance Request for Proposal (RFP), which was released on April 15, 2011, stating the intention of the government and the council to enter into an alliance with a consortium of five construction companies for the Christchurch rebuild.

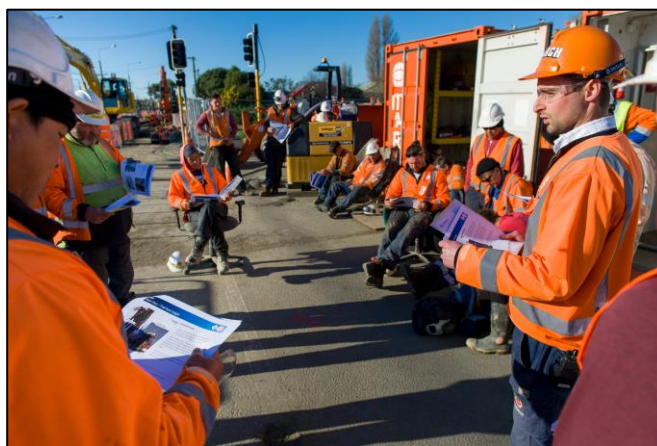
From that time until the signing of the final SCIRT Alliance Agreement in September 2011, the Alliance Objectives changed very little.

“Nobody really knew what the impact was going to be on employment in Christchurch, with the facilities that had been destroyed,” Locke said.

“I think everybody was thinking there would be an emerging picture of high unemployment, so we wanted to make sure that, as much as possible, we used local labour and redeployed labour from other sectors.”

The Objective of lifting health and safety performance to a total recordable injury frequency rate (TRIFR) of 10 per 1 million man hours was a challenge for the construction sector at that time.

Those Objectives regarding value and establishing the lowest cost structures were designed to show alliance critics that it was a value for money commercial structure for projects of great complexity and uncertainty of scale.



Safety first: An on-site safety “toolbox talk” for SCIRT workers.

In practice, some objectives were difficult to achieve, Locke said, such as improving productivity and documenting that because the hundreds of construction projects were quite different and difficult to compare.

What drove SCIRT’s performance day-to-day, Locke said, was the five key result areas (KRAs), which were set down in a separate KRA Management Plan designed to monitor and report on the achievement of the Alliance Objectives.

One of the lessons for other organisations in putting the Objectives together, he said, was the value of an independent and outside voice. That voice was provided by Crampton, who travelled regularly to Christchurch but was not in the thick of an emergency response, unlike Locke and other players.

“My reflection looking back on these objectives now, I think ‘wow, we did a really good job’, but at the time I didn’t necessarily think it was an extraordinary effort because it was just one of a thousand things we were trying to achieve at the time, but, obviously, really important to get right,” Locke said.

Lessons learnt:

Look forward: From the outset, craft objectives for what the organisation wants to achieve and where it wants to be in the future.

Be specific: Be clear and specific with objectives for a post-disaster organisation.

Assess the particular challenges: Tailor the objectives for the particular challenges presented by the post-disaster environment.

Objectives as a touchstone: Be aware when forming objectives that the organisation’s performance will be monitored and measured against them at a future date.

Find agreement: Consult with participants in an alliance to ensure alignment on the objectives.

Incorporate in a legal document: Include the objectives in a legal document to give them authority and legitimacy.



Cleared for take-off: SCIRT’s opening event at the Airforce Museum of New Zealand.