

5 Horizontal Infrastructure ('HI')

Summary

- The TYP contained \$3.178 billion for HI, to be undertaken by SCIRT (70%) and CCC (30%).
 - \$1.8 billion (60%) to be paid by the Crown, per the Cost Sharing Agreement signed in June 2013. We understand this is the maximum the Crown would agree to pay when the Cost Sharing Agreement was signed.
 - \$1.378 billion (40%) to be paid by CCC.
- When the TYP was issued, CCC thought the total cost would be \$3.576 billion. CCC's view is that HI work was underfunded from the beginning because the Crown would only pay \$1.8 billion and CCC would only pay 40% of the total budget.
- The current cost estimate is \$3.591 billion. In so far as CCC was concerned, there always was a funding shortfall and that is now estimated at \$413 million. Based on the most recent priority assigned to projects, this would result in 83 projects not being undertaken and Christchurch's HI not being restored to its pre-earthquake standard.
- The Cost Sharing Agreement states that the cost of fixing Christchurch's HI will be assessed by someone independent by 1 December 2014, and that the Crown and CCC will then again discuss funding. If the 60/40 funding split between the Crown and CCC remains and the current cost estimate is correct, CCC will have to pay another \$159 million. CCC has not budgeted for this additional expense.
- If the Crown does not agree to pay more than \$1.8 billion, CCC's options will be to:
 - Pay the full amount itself, which it would have to find.
 - Not complete some of the work. The Horizontal Infrastructure Governance Group ('HIGG') is running a process to prioritise all the projects and identify what should and should not be done. CCC staff recommend against cancelling any projects.
 - Secure cost savings. We are advised that the HIGG is focused on reducing cost, where possible.
 - Complete the work to a lower standard so the cost fits within the budget. This would mean Christchurch's HI will not be restored to the same standard as before the earthquake.

5.1 Background

HI covers roads, fresh and waste water, and sewerage. Repairing HI is the single largest cost of the rebuild. In the TYP the total cost was estimated at \$3.178 billion (or just over 70% of the total estimated Rebuild Costs).

The HI programme is separated into two work programmes:

- Most of the HI repair programme is being managed by SCIRT. SCIRT is responsible for approx. 70% of the budget.⁵
- CCC projects, which account for the remaining budget.³

In June 2013, just before the TYP was issued, CCC and the Crown signed a Cost Sharing Agreement. Amongst other things, the Cost Sharing Agreement sets out how much of the HI Rebuild Costs the Crown and CCC will each pay. The Crown does not contribute to everything. There are some projects CCC has to pay the full cost of and the Crown pays different amounts for different things. For example, the Crown pays 83% of the cost of fixing roads and 60% of the cost of fixing the city's stormwater system, but none of the cost of fixing pump stations and reservoirs.

⁵ These figures include emergency repair works that were undertaken in the immediate aftermath of the earthquakes, which have been paid partly by SCIRT and by CCC. This accounts for approx. 20% of the total budget and has mostly been spent already. The only ongoing cost is to maintain services to the few properties in the Residential Red Zone ('RRZ') that are still occupied. The cost is a lot compared to the small number of people who remain.

On average, CCC expected it would ultimately have paid around 40% of the total cost and the Crown would have paid the rest.

The Cost Sharing Agreement caps the amount the Crown will pay at \$1.8 billion. We understand that CCC's former CEO, Tony Maryatt, represented CCC in the negotiations of the Cost Sharing Agreement. Mr Maryatt advised us that, at the time the Cost Sharing Agreement was being negotiated, the Crown was not willing to pay more than \$1.8 billion of the cost of repairing Christchurch's horizontal infrastructure.⁶ We have not spoken with the Crown so we do not know whether \$1.8 billion was the maximum it would pay, or, if it was, why it would only pay \$1.8 billion.

5.2 TYP estimate

When the Cost Sharing Agreement was signed CCC expected the Crown to pay 60% of the total cost to fix Christchurch's HI. CCC expected to pay the remaining 40% of the total cost. CCC therefore estimated that it would have to pay \$1.378 billion if the Crown paid \$1.8 billion. This is how the cost estimate in the TYP was set; by taking the amount the Crown would pay (\$1.8 billion) and adding to it the amount CCC would then have to pay to ensure CCC paid 40% of the total budget:

	TYP \$ million
Government subsidy	1,800
Council (gross cost prior to insurance recoveries)	1,378
Total horizontal infrastructure	3,178

The \$3.178 billion estimate included everything SCIRT and CCC were responsible for, and all the work required whether or not it was covered by the Cost Sharing Agreement.⁷

	TYP \$ million
SCIRT	2,200
CCC	978
Total horizontal infrastructure	3,178

When the TYP was issued CCC actually thought the total cost of repairing Christchurch's HI would be \$3.576 billion. CCC believed therefore that the budget was short by \$398 million.

CCC's position is that the \$398 million funding shortfall arose because the Crown would only pay a maximum of \$1.8 billion, and CCC would only pay 40% of the total HI cost.

CCC believed that the Crown should actually pay \$2.039 billion, in which case CCC would pay \$1.537 billion (an additional \$159 million). CCC did not budget in the TYP to raise this additional \$159 million, which it logically should have if it thought it was going to have to be paid.

For the purposes of the TYP, the \$398 million difference was shown as 'Savings to be agreed with the Crown'. From CCC's perspective, a more accurate description would probably have been something like 'Budget shortfall'.

The Cost Sharing Agreement also says that the total cost of the HI programme will be reassessed by an independent assessor by 1 December 2014, and that this reassessment will 'provide a basis for any final discussions on horizontal infrastructure cost sharing'.⁸ When the TYP was being prepared only about half the infrastructure had been properly assessed for damage. CCC expected all the infrastructure to be thoroughly assessed for damage by December 2014 so the cost to fix it could then be accurately estimated.

⁶ The Crown is contributing more than \$1.8 billion to the Christchurch rebuild but its contribution to HI is capped at \$1.8 billion.

⁷ As noted in section 5.1 above, the Crown does not contribute to everything.

⁸ Clause 4.4 of the Cost Sharing Agreement.

We understand from Tony Maryatt that this process was agreed to ensure there was a mechanism for the budget shortfall to be met.

5.3 Current estimate

A final cost estimate is not yet available. Almost 60% of the Horizontal Infrastructure projects have already been completed or are underway, costing just under \$2 billion (note this includes \$679 million of emergency response costs). An estimate is therefore only needed for the remaining 328 projects.

The latest estimate is for a total cost of \$3.591 billion across all 848 individual projects (including the \$2 billion already spent or committed), \$413 million higher than the estimate in the TYP:

	Latest estimate \$ million	Number of projects
Total programme	3,591	848
Outside CSA	(177)	(134)
Balance	3,414	714
Committed	1,981	386
Uncommitted	1,433	328
Budget	3,000	631
Unaffordable	413	83

As is noted above, CCC always thought the HI infrastructure programme was underfunded by \$398 million so the current estimate of \$413 million is not significantly higher (although CCC never budgeted to fund the shortfall).

83 projects costing \$413 million cannot be completed under the current funding arrangement based on the current order of work.

The total cost estimate covers the SCIRT projects and those CCC is completing. Increases are forecast on both:

	TYP estimate	Latest estimate \$ million
SCIRT	2,200	2,338
CCC	978	1,253
Total horizontal infrastructure	3,178	3,591

CCC believes the SCIRT cost estimate is reasonably certain. The cost estimate is based on returning the entire HI network to the same average level of service as existed before the earthquakes (put simply). This does not mean everything will be exactly the same as it was before the earthquakes but SCIRT expects that the entire network will function to the same standard as it did before the earthquakes. Council staff assign a 90% confidence ratio to the SCIRT estimate.

CCC's estimate remains less certain because there is not yet a final decision on what work will actually be undertaken. The CCC budget mainly covers:

	Committed \$ million	Uncommitted \$ million	Total \$ million
Emergency works	679	-	679
Waterways	41	160	201
Assessed damage rectification	3	171	174
Wastewater Treatment Plant	46	28	74
Parks	8	40	48
Reticulation	16	2	18
Wells	14	13	27
Compost facility	12	-	12
River banks and stop banks	11	-	11
Other	9	1	10
Total CCC horizontal infrastructure	840	413	1,253

This includes some very large projects such as the Port Hills road and a citywide land drainage scheme.

CCC will not have a final cost estimate for some time. Council staff believe however that the confidence ratio on the estimate has improved from 50% to 75%. We believe there remains a risk the cost estimates will increase as final decisions are made about what can be done, or that CCC will have to limit what it does to stay within budget.

5.4 Options available

The current estimate is that another \$413 million will have to be spent if Christchurch's HI is to be returned to the same standard as it was before the earthquakes.

As is noted above, the Cost Sharing Agreement provides that the cost of repairing the HI will be reassessed by 1 December 2014, and contemplates that the Crown and CCC will then rediscuss the funding arrangements.⁹ This is the primary way in which the funding shortfall could be addressed. If the Crown paid another \$248 million, CCC would have to pay another \$165 million.¹⁰

If the \$413 million shortfall cannot be funded, other options would be to:

- Cancel projects. Council staff have recommended against this. This option might reduce the immediate cost but it would probably result in higher ongoing costs to maintain the damaged infrastructure. Section 5.5 below discusses work currently being done on this option.
- Undertake the work to a lower standard, resulting in Christchurch's HI not being repaired to the same standard as existed before the earthquakes. We understand this would be possible.
- Save money on the existing programme. SCIRT and CCC could try to negotiate savings. We understand the HIGG is focused on achieving savings, where possible.

5.5 Prioritisation process

A process is underway to prioritise projects. This will result in an assessment of what projects can be paid for and what will not be done if the budget is not increased.

This process is being run by the HIGG. In the Cost Sharing Agreement, CCC and the Crown agreed to establish the HIGG. The HIGG is made up of:

- One representative from NZTA.
- One representative from CERA.
- One representative from CCC.
- An independent chairperson, Mark Ford. We understand Mr Ford was recommended by the Crown.

⁹ Refer "First Joint Clarification, under clause 6.5.1 of the Cost Sharing Agreement dated 26 June 2013.

¹⁰ This split assumes the funding shortfall relates to things to which the Crown contributes.

The HIGG is responsible for determining how the HI budget is spent.

All the HI projects in Christchurch have been assigned a number to reflect their importance. The number is calculated according to a prioritisation framework. The HIGG set the prioritisation framework. SCIRT has been using its system to rank projects for some time. The system to rank CCC's projects was devised in November 2013 and is still being developed.

Once a number has been assigned to each project, all the projects controlled by SCIRT and CCC are then ranked according to their priority number. The project with the highest number is ranked at the top and the project with the lowest number is ranked at the bottom.

There is a cost estimate for every project. As we noted above, the cost of SCIRT's projects is more certain than CCC's.

After all the projects have been ranked, the HIGG works out what projects can be paid for within the current budget. When the budget is all used, the lowest ranking projects cannot be completed.

The current estimate is that the lowest ranking 83 projects will not be completed. This is not the final position, as projects are included or excluded depending on the number they are assigned. We understand the HIGG is still considering how to deal with the estimated budget shortfall and the final ranking of projects.

As it currently stands, if enough money is made available, all the projects can be completed so the prioritisation system will then only determine the order in which projects are done. If the budget remains too low, the prioritisation system will determine what is not done.