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Earthquake Commission: Managing the Canterbury Home Repair Programme





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Cover photo: Repairs to earthquake floor damage.
Photo sourced from Fletcher Earthquake Recovery.

Earthquake Commission: Managing the Canterbury Home Repair Programme

This is an independent assurance report about a performance audit carried out under section 16 of the Public Audit Act 2001.

October 2013

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Auditor-General's overview

New Zealanders are fortunate in that the state provides some insurance cover to homeowners against natural disasters. A public entity, the Earthquake Commission (EQC), is responsible for paying the first \$100,000 of damage (all figures in this overview exclude GST) to insured homes after each damaging earthquake.

The 2010 and 2011 earthquakes in Canterbury damaged about 180,000 homes. For more than 20,000 homes, the damage will cost more than \$100,000 to repair, so it is the responsibility of private insurers. EQC contributes \$100,000 to the cost, but the private insurer manages the claim.

EQC is responsible for the remaining 160,000 or so damaged homes. It anticipates paying cash to settle about half of the claims and managing repairs to the rest.

This report is about how EQC has performed in managing the home-repair programme – a topic that has come under intense public scrutiny. I am aware that there are many stories highlighting examples of poor customer service by EQC. Unfortunately, I cannot provide a remedy for those individuals. My staff have not, and cannot, examine or attempt to resolve disputes about individual claims – that is the role of the Office of the Ombudsman and the courts (because EQC is not covered by the ombudsman scheme for private insurance companies).

What I can do is provide an independent and balanced assessment of EQC's performance in managing the home-repair programme, given the context and circumstances, and highlight where EQC can improve services for those still affected and in preparation for future events.

By June 2013, EQC had repaired more than 40,000 homes (just over half of the homes for which it is managing repairs) at a cost of about \$1.5 billion (including home-heating and emergency-repair initiatives, which have cost about \$154 million). The total also includes spending of \$180 million on project management. During our audit, EQC brought forward the completion date – when all repairs are expected to be finished – from the end of 2015 to the end of 2014.

In my view, EQC's performance to date has been mixed. It has performed well in managing repair costs and setting the home-repair programme up quickly, but has not performed as well in dealing with homeowners. Although efficiency is clearly important, this report is a timely reminder for EQC and others that being in the public service means serving the needs of people.

Positive aspects of EQC's management of the home-repair programme include:

- homeowners have not had to compete directly with each other for materials or tradespeople;

- some homeowners have been very satisfied with repairs (about 80% of homeowners with repairs just completed in 2013); and
- there has been a focus on safe work practices.

EQC has not performed as well with other aspects of the home-repair programme. For example:

- it was late in the programme before repair slots were actively allocated to the homes of vulnerable people;
- homeowners have experienced inconsistency in information and processes, and long periods without specific information from EQC about their claim, leading to a lack of certainty while waiting for repairs;
- some homeowners have been dissatisfied (about 20% of homeowners with repairs just completed in 2013), including dissatisfaction with the quality of repairs or the time taken to complete the repairs after work has started; and
- some important systems, controls, and support functions should have been in place and fully effective sooner, including controls to help manage risks to repair quality.

For homeowners, waiting to have a home repaired is trying and stressful. If the surveyed level of dissatisfaction with repairs in the programme in 2013 applied to the whole programme, then the owners of more than 14,000 repaired houses would be dissatisfied or very dissatisfied with the repairs. Some of this dissatisfaction would be likely to arise from a gap between the expectations of some homeowners and what EQC is able to do.

Repair costs have been reasonable to date, but there are risks to that continuing. Keeping repair costs at a reasonable level depends on EQC managing essential controls and systems, staying ahead of the private insurance and central city repair and rebuild work, and completing the home-repair programme by the December 2014 deadline set by EQC.

Project management costs (on average, about 12% of the cost of a repair to date) have been at the higher end of what we consider to be reasonable in the circumstances. Achieving reasonable project management costs at the end of the home-repair programme depends heavily on EQC:

- completing the home-repair programme by its December 2014 deadline;
- managing its hub reconfiguration project effectively to deliver the expected benefits; and
- continuing to control repair-cost inflation.

I have recommended that EQC prioritise actions that will give homeowners more certainty and improve the consistency of its practices. I have also recommended, among other matters, that EQC continue monitoring project management costs and quality assurance data to ensure that costs and quality are appropriate.

My office will carry out follow-up work to track the progress EQC has made with the recommendations in this report and to review the final total programme costs, following the expected completion of the home-repair programme by the end of 2014.

A complex situation

EQC has had no comparable situations to draw direct experience and lessons from given the scale and complexity of the repair activity is unprecedented in New Zealand. The affected population is a higher proportion of the country's total population, a much higher proportion of damage is covered by insurance, and the effect on the overall economy is proportionally bigger, especially when compared to the effects of large-scale natural disasters in other countries.

Progress has been complicated by more earthquakes and the need to apportion damage correctly to each earthquake, evolving repair techniques and guidance, and the effect of "zoning" land in Christchurch. Complications did not arise in a linear sequence but with many complexities coinciding (including land remediation and dwelling repairs).

In March 2011, EQC renewed reinsurance cover while large earthquakes were still occurring in Canterbury. EQC again renewed reinsurance cover in 2012 and in 2013. Securing reinsurance was important because, without it, the direct cost of the home-repair programme to the taxpayer would be significantly higher, and so too would the cost of another large-scale natural disaster during the period of cover. If EQC had failed to obtain reinsurance cover, the wider New Zealand insurance industry and potentially the wider economy could have been adversely affected.

Because of the high degree of Parliamentary and public interest in the subject of this report, we have deliberately included more descriptive material than usual. We hope this helps people to understand the complex and evolving circumstances experienced by everyone involved in the home-repair programme. Our approach has meant a lengthy report, so each Part begins with a summary of our findings.

Lessons for other public entities

Public entities naturally concentrate their planning around likely events. But the uncertainty and complexity of the contemporary world mean that this alone is not enough to serve the future needs of New Zealanders well.

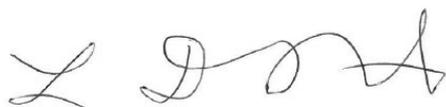
In my view, public entities need to sensibly prepare for potentially catastrophic but unlikely events. Those events can require public entities to administer large and complex initiatives that must be quickly set up. Examples of such events include the failure of significant financial institutions, a large mining disaster, a global pandemic, a shipping disaster, or a food contamination scare.

Being prepared for these types of situation is difficult but possible. Although detailed action planning cannot be done before an event, entities can prepare a coherent strategic approach, or framework, ahead of such events. A disciplined approach is required when responding to these events, particularly once the immediate emergency phase of the event has passed.

Acknowledgements

I thank the community organisations, EQC, Fletcher Construction, and the other people who have assisted my team during our audit.

In particular, I acknowledge and thank those members of the public who invited my audit team into their homes and shared their earthquake experiences.



Lyn Provost
Controller and Auditor-General

31 October 2013

Our recommendations

We recommend that the Earthquake Commission:

1. continue to improve its approach to auditing repairs in the home-repair programme so the Commission is well informed about the scale and type of repair quality risks, can mitigate those risks where possible, and can match the resourcing of its quality assurance processes to the significance of those risks;
2. continue to improve communication with individual homeowners about their claims, giving homeowners as much certainty as possible as early as possible;
3. continue to refine key performance indicators for the home-repair programme to consistently and meaningfully cover cost, time, quality, and safety, with targets where practicable;
4. continue to review and, if necessary, adjust the configuration of repair and project management services in the home-repair programme to deliver the best value and results in the circumstances and treat homeowners fairly and consistently; and
5. identify and record the lessons, tools, and information from the home-repair programme that could usefully support responses to future large-scale natural disasters.

The Earthquake Commission has work under way to address several of these matters. More detailed information is provided in the following Parts of this report.

Part 1

Introduction

- 1.1 In this Part, we describe:
- how the Earthquake Commission (EQC) used the reinstatement option in the Earthquake Commission Act 1993 (the Act) to put a home-repair programme in place in Canterbury;
 - our expectations of EQC’s management of the Canterbury Home Repair Programme (the home-repair programme);
 - how we carried out our audit; and
 - considerations of effectiveness and efficiency.

About the Earthquake Commission

- 1.2 EQC is one of many public entities responsible for supporting people after the Canterbury earthquakes. EQC is responsible for insuring residential buildings that have private insurance cover (for simplicity in this report, we use the terms houses or homes) against damage from a natural disaster.
- 1.3 EQC covers a capped amount – \$100,000¹ worth of damage for each natural disaster that is big enough to be classed as an “event” (see Appendix 1).² The amount of \$100,000 is set in the Act. If the cost of damage to an insured house exceeds this amount, EQC will pass the homeowner’s claim to the private insurance company and that private insurance company will handle the claim. Determining how much damage was caused by each earthquake is called “apportionment”.
- 1.4 EQC also provides cover for land and contents. These other responsibilities are outside the scope of this audit. More information about EQC’s roles and responsibilities and claimant obligations and entitlements can be found in the Act (available at www.legislation.govt.nz).
- 1.5 Under the Act, EQC can settle insurance claims for damage to houses in a number of ways:
- paying cash to the homeowner (cash settlement);
 - replacing the house;
 - reinstating the house – that is, restoring the house to the condition it was in before the natural disaster; and
 - relocating and then reinstating a house.

1 All figures exclude goods and services tax (GST).

2 In this report, we refer simply to “earthquakes” rather than “events” or “earthquakes large enough to be deemed an event”.

- 1.6 The Act also states that EQC “shall not be bound to replace or reinstate exactly or completely, but only as circumstances permit and in a reasonably sufficient manner.”³
- 1.7 This report is about our performance audit on EQC’s use of the reinstatement option to set up a home-repair programme.
- 1.8 After the 4 September 2010 Canterbury earthquake, EQC was asked to set up a home-repair programme for more than 50,000 damaged houses. The number of damaged houses increased to more than 80,000 after more earthquakes.
- 1.9 The objectives of the home-repair programme were to:
- manage inflation in the cost of repairs;
 - manage the quality of repairs;
 - avoid the loss of equity in Canterbury’s housing stock; and
 - avoid depopulation and social distress.
- 1.10 At the same time, the home-repair programme was expected to include emergency repairs to 47,391 homes (at a cost of about \$78 million) and install heating in 18,740 homes (at a cost of about \$76 million). These initiatives diverted attention and resources away from home repairs in the first year or so of the programme. The initiatives were intended to reduce the effects of cold and damp on occupants.
- 1.11 The scale and complexity of this activity was unprecedented in New Zealand. According to EQC, the home-repair programme was “built from scratch under great pressure” and no other country had attempted such a programme. EQC’s work has been further complicated by subsequent earthquakes, land “zoning” decisions, emerging guidance on repair techniques, and a High Court decision requiring EQC to reinstate its cover after each earthquake.
- 1.12 Appendix 2 sets out more information about the Government’s expectations of EQC and EQC’s preparedness, before the earthquake in Canterbury on 4 September 2010, for a large-scale natural disaster.
- 1.13 Appendix 3 sets out a timeline outlining the main milestones in the history of the home-repair programme.
- 1.14 The circumstances that EQC and homeowners were in, particularly in late 2010 and early 2011, were complex and chaotic. Complications did not arise in a linear sequence but with many complexities coinciding, including multiple types of land damage, land remediation, dwelling repairs, and multiple earthquake

3 There has been much public comment about what these requirements might mean in practice for discrepancies in floor levels, repairs to wiring in older homes, installing insulation, and removing asbestos.

events. According to EQC, the earthquakes posed unprecedented challenges to government policy and operations.

Our expectations of the Earthquake Commission

- 1.15 Overall, we expected all public entities involved in the Canterbury recovery and rebuild to be both effective and efficient in their procurement work.
- 1.16 We expected EQC to design and manage the home-repair programme effectively (repairing people's homes to the required quality within acceptable costs and time frames) and to carry out that programme efficiently.
- 1.17 We expected EQC to support the effective and efficient management of the home-repair programme by:
- clearly defining its contract and risk-management processes and procedures;
 - assessing and managing risks through its contract with Fletcher Construction Limited (Fletcher Construction is the private company that is providing project management services to the home-repair programme); and
 - effectively communicating with external and internal stakeholders, including homeowners.

How we carried out our audit

- 1.18 To carry out our audit, we:
- interviewed EQC staff located in Wellington and Christchurch and Fletcher Construction staff in Christchurch;
 - reviewed and analysed more than 300 documents, mostly EQC documents;
 - reviewed and used the findings of two EQC internal audits;
 - met with representatives of the Addington Action Group, Canterbury Communities Earthquake Recovery Network, TC3 (Technical Category 3) Residents Group, and Te Whare Roimata;
 - visited six "repair hubs" (temporary centres from which home repairs in a locality are managed) to meet with EQC and Fletcher Construction staff and review files for 30 homes, then met with the owners of four of those homes;
 - obtained information about project management costs in other building and construction projects; and
 - obtained relevant information from the Office of the Ombudsman, the Human Rights Commission, and the Ministry of Justice.
- 1.19 We carried out our audit in late 2012 and during 2013.

What our audit covered

- 1.20 EQC's main objectives are set out in section 5 of the Act. They are to:
- administer the insurance against natural disaster damage provided for under the Act (EQC handles residential claims, not commercial claims);
 - help research and educate about matters relevant to natural disaster damage; and
 - manage the Natural Disaster Fund, including arranging reinsurance.
- 1.21 Our audit covered EQC's responsibilities for the first objective, excluding land and contents claims.⁴ We included repairs that were within the home-repair programme, not the home-heating or emergency-repair initiatives⁵ that EQC was also asked to provide.

Considering effectiveness and efficiency

- 1.22 Determining whether EQC has effectively and efficiently managed and carried out the home-repair programme means considering what is appropriate in the circumstances. This means taking into account costs, practicalities, and competing and changing priorities. For example:
- What is a reasonable level of preparedness for a large-scale natural disaster?
 - How much scenario planning can be performed?
 - What are the implications of different response and recovery time frames on costs and achieving a programme's outcomes?
 - What priority should be given to:
 - repairs?
 - effective communication?
 - integrating important processes throughout and between organisations in a programme (such as risk management and complaint processes)?
 - setting up essential systems, controls, and support to manage risks of waste and inconsistency?
- 1.23 These are not easy questions to answer and they can be affected by policy decisions (which we do not comment on). The judgements about effectiveness and efficiency set out in this report are our own.

4 By 30 April 2013, EQC had received 120,337 land claims and 185,518 contents claims arising from the earthquakes in Canterbury.

5 See www.eqc.govt.nz/news/eqconnects-21-april-2011.

Part 2

Implementing the home-repair programme

- 2.1 In this Part, we describe:
- why the home-repair programme was set up;
 - the process for procuring a provider of project management services for the home-repair programme; and
 - how the home-repair programme operates.

Summary of our findings

- 2.2 EQC's Board and Ministers decided on a home-repair programme because of its potential to contain inflation in the cost of repairs, ensure that funds were used for repairs, and maintain the quality of housing stock in Canterbury. Maintaining the quality of housing stock was considered important in encouraging people to stay in the region.
- 2.3 EQC's procurement of a project management provider to run the home-repair programme, Fletcher Construction, was done under the Government's emergency procurement guidelines. It was planned and carried out well.

Deciding to have a home-repair programme

The decision was made to set up a home-repair programme to reduce the risks of inflation in the cost of repairs and shortages of building materials.

- 2.4 After the 4 September 2010 earthquake, EQC's Board and Ministers agreed that, because of the scale of the earthquake, settling most claims in cash would not be appropriate. Instead, EQC would set up a home-repair programme to settle claims for damage that would cost between \$10,000 and \$100,000 to repair.
- 2.5 The decision to set up a home-repair programme enabled repairs to start as soon as possible and reduced risks. The identified risks were:
- the availability of building materials;
 - cost inflation;
 - the availability of skilled labour; and
 - competition between organisations for labour and materials in Canterbury.
- 2.6 The home-repair procurement strategy identified that consistent repair standards would be an advantage of a home-repair programme. In turn, this would help reduce the risk of people leaving Canterbury.
- 2.7 The home-repair procurement strategy also identified that a managed home-repair programme could prioritise repairs based on need, ensure equitable access to repairs, and reduce the stress for homeowners of not being able to live or feel safe in their own home.

Procuring a provider of project management services

The home-repair programme was set up quickly and procured appropriately. Although EQC appropriately obtained independent and professional advice on the project management costs of shortlisted providers, doing so showed that determining what might be considered “reasonable” was challenging. In our view, this should have signalled for EQC the importance of ongoing scrutiny of project management costs.

- 2.8 To carry out a managed home-repair programme, EQC decided to set up a project management office (PMO) to co-ordinate and manage the large number of contractors that would repair thousands of homes. EQC knew that it did not have the resources or skills to do the project management work.
- 2.9 To procure those resources, EQC put together an evaluation panel of people who knew the market, including a senior procurement adviser seconded from the Ministry of Economic Development (now the Ministry of Business, Innovation and Employment, MBIE).
- 2.10 In our view, and based on our analysis of the contract for the home-repair programme and how it was procured, EQC planned and operated the procurement well.

An emergency procurement process

- 2.11 The procurement process was done under emergency procurement guidelines, based on advice from the former Ministry of Economic Development. This advice allowed direct sourcing of goods and services if open tendering resulted in unacceptable risks to people, property, or equipment, or unacceptable delays in re-establishing services.
- 2.12 The selected PMO needed to have the capacity to cope with the scale of repairs, the ability to expand operations to meet demand, and access to specialist advice.
- 2.13 EQC identified 14 organisations that could meet the requirements, after input from New Zealand Trade and Enterprise and the former Ministry of Economic Development. EQC issued the Request for Proposal (RFP) to the 14 organisations on 27 September 2010. After EQC advertised the RFP, one further organisation received a copy of the RFP document on 28 September 2010.
- 2.14 The RFP stated that the PMO was expected to provide several services, including:
- acting as a prime contractor (being a “one-stop shop for the management and delivery of reinstatement of properties”);
 - sourcing, subcontracting, and managing a number and range of skilled contractors;

- ensuring a single point of contact for stakeholders (including homeowners);
- developing an approved pricing mechanism;
- providing adequate reporting to EQC; and
- managing the programme of repairs for all accepted EQC residential claims.

2.15 Respondents to the RFP had to address several risks, including repair priorities based on need, effective management of the cost of repairs, ensuring that the quality of repairs met the required standards, and the effective management of conflicts of interests.

Evaluating the tenders

- 2.16 The evaluation panel selected a shortlist of two, using criteria and weightings of:
- capacity to deliver (35%);
 - capability and experience (25%);
 - method (25%); and
 - cost and approach (15%).
- 2.17 The weightings reflected the overall priority of getting the repairs done. Capacity and capability were given greater weight than cost and approach.
- 2.18 To gain assurance on the procurement process followed in shortlisting two companies, the Chairperson and Deputy Chairperson of EQC's Board interviewed the evaluation panel before reporting to EQC's Board. EQC's Board approved the shortlist.

Review of shortlisted proposals

- 2.19 EQC commissioned two independent quantity surveying firms to assess the costs of the two shortlisted proposals.
- 2.20 The independent quantity surveying firms commented on the reasonableness of the proposed costs of providing PMO services. They both concluded that the cost of the two proposals was reasonable and in line with industry standards.
- 2.21 The firms reached different conclusions about the costs of each proposal, and different conclusions about which proposal would be more expensive. The differences in assessed costs were tens of millions of dollars.
- 2.22 This shows that assessing the reasonableness of the costs was challenging and that the professional judgement of what was reasonable and in line with industry standards varied widely.

- 2.23 A firm of Chartered Accountants reviewed the financial status of the shortlisted companies and supplied a report to EQC on 14 October 2010. The report did not indicate any financial capability or solvency matters with either of the shortlisted companies.

Decision

- 2.24 Fletcher Construction was identified as the preferred supplier of PMO services. A recommendation to award Fletcher Construction the contract for PMO services was submitted to EQC's Board on 14 October 2010 and approved.
- 2.25 EQC entered a Memorandum of Understanding (MoU) with Fletcher Construction on 22 October 2010. A PMO Services Agreement between the parties replaced the MoU on 6 July 2011. The decision to have an MoU first was deliberate. It enabled repairs to start quickly while the contract was negotiated. It also gave both parties the opportunity to learn more about the challenges of managing home repairs.
- 2.26 EQC commissioned an external report on the probity of the procurement process. The report, completed in December 2010, concluded that the RFP process was consistent with good practice, based on probity principles. The report also said that EQC identified and mitigated potential probity risks.

Respective responsibilities of EQC and Fletcher Construction

- 2.27 A Project Control Group (PCG) governs the PMO contract. The PCG consists of senior representatives from both parties, with an EQC representative as chairperson. It oversees all aspects of the home-repair programme, to ensure that the project goal is achieved and potential issues within the home-repair programme are identified and resolved. The project goal is that:
- ... [all repairs] *are completed properly, safely, as quickly as practicable and in a manner that provides value for money in the circumstances.*
- 2.28 The contract requires Fletcher Construction to act as EQC's agent in settling claims through repairing earthquake-damaged houses. However, EQC is under no obligation to pass any claim for repair to Fletcher Construction.
- 2.29 Under the contract, Fletcher Construction is required to prepare and manage an accreditation process for contractors and consultants appointed to carry out repairs. EQC needs to approve the accreditation process and any changes to the process. This process has been prepared. Fletcher Construction is also responsible for contracting with contractors and consultants on EQC's behalf (on terms approved by EQC) and for monitoring contractors and consultants.

- 2.30 A similar process for merchants was anticipated in the contract. Accredited merchants were to supply all materials used in the home-repair programme. The standard building contract used in the home-repair programme requires tradespeople to use accredited merchants. Six building material supply chains and three paint supply chains have been accredited to the home-repair programme.
- 2.31 Fletcher Construction is required to prepare and maintain a contractor-pricing schedule (known as a rates ceiling schedule). The rates ceiling schedule, which has been prepared, includes the cost of materials, installation, labour, and management. In preparing the rates ceiling schedule, Fletcher Construction is required to liaise with EQC and set the maximum price that EQC is willing to pay for repairs. Fletcher Construction needs EQC's approval for the rates ceiling schedule and any changes to it.
- 2.32 The total cost to EQC for the PMO services from Fletcher Construction is a margin on the direct repair cost plus the salaries and wages of Fletcher Construction staff who work on the project, with a multiplier on these salaries and wages. The multiplier covers the additional costs of employing staff, including leave and Accident Compensation Corporation levies. It is a cost-recovery mechanism. EQC also reimburses the direct project management costs such as rent, computers, and other equipment used by Fletcher Construction.

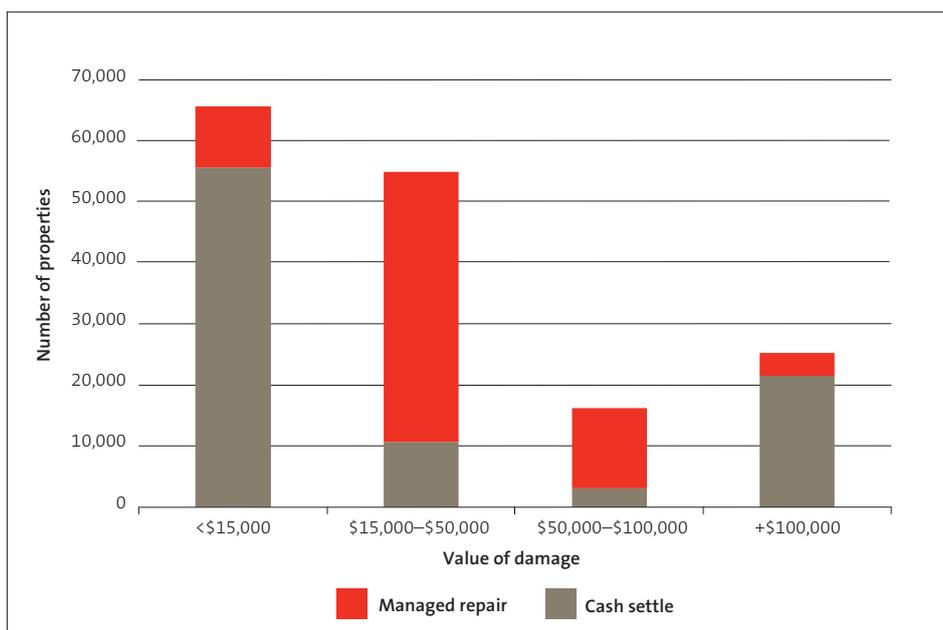
How the home-repair programme works in practice

Repairs have been managed through repair hubs located throughout earthquake-damaged suburbs. Although there was a clear rationale for widely located repair hubs, this approach can be expensive and needs to be carefully managed. Bringing the completion date forward by a year could remove considerable fixed costs from the home-repair programme.

Damage covered by the home-repair programme

- 2.33 Originally, the scope of the home-repair programme was for repairs to houses that had between \$10,000 and \$100,000 worth of non-structural earthquake damage, and all houses with structural damage of less than \$100,000.
- 2.34 Figure 1 shows the number of insured properties that were damaged in the Canterbury earthquakes by the value of the damage and whether they will be part of the home-repair programme or settled in cash. Usually, houses with less than \$15,000 in damage are settled in cash.

Figure 1
Number of repairs, by value of damage, at 22 July 2013



Note: The cost categories were provided by EQC. Normally, the home-repair programme covers houses with between \$15,000 and \$100,000 in damage. Some homes were repaired before the threshold for cash-settling increased to \$15,000, and some homeowners asked EQC to manage their repairs instead of receiving a cash settlement. Some houses in the home-repair programme have suffered smaller amounts of damage attributed to separate earthquakes which, in total, amount to more than \$100,000.

- 2.35 The threshold changed in July 2012 from cash-settling claims below \$10,000 to cash-settling claims below \$15,000. This decreased the number of repairs in the programme by about 8500 houses.
- 2.36 After scoping work, the cost to repair some houses is found to exceed \$100,000 so the claim passes to the homeowners' insurance company. Some homeowners decide to opt out of the home-repair programme part-way through. In these instances, the houses are not counted as completed repairs even though they have used programme resources. To July 2013, about 14,000 houses were in these two categories.

Repair hub structure

- 2.37 During our audit, the home-repair programme was delivered through 20 offices (known as hubs, see Figure 2) with their own defined areas. There were also two specialist hubs; one for engineering and technical expertise, and another for urgent response work. A central office, known as “EQR (Earthquake Recovery) Command Central”, manages the hubs.
- 2.38 To manage repairs within its area, each of the 20 hubs has a mixture of Fletcher Construction and EQC staff. There can be between eight and 35 Fletcher Construction staff, and up to four EQC staff, in each hub. Fletcher Construction told us that there has never been a construction project in New Zealand with such a concentrated “branch office” structure employing so many people.
- 2.39 The reasons for a widely dispersed hub structure were the need to have a “community footprint”, be seen to be taking action, accommodate up to 700 staff (commercial premises were scarce after the earthquakes), and enable liaison with local communities.

Figure 2
Picture of a typical repair hub



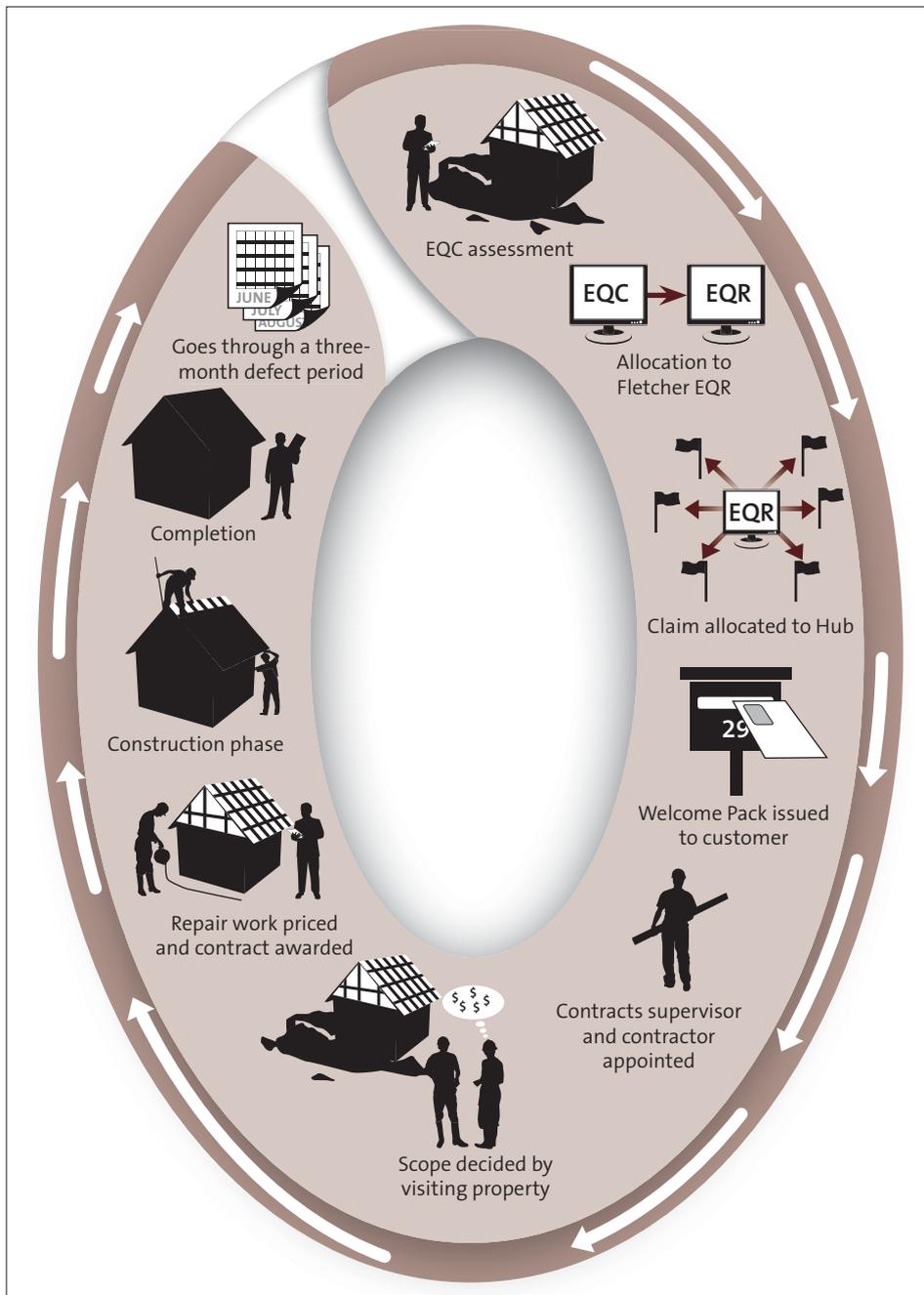
- 2.40 At the beginning of 2013, the home-repair programme was expected to involve:
- up to about 700 staff working for Fletcher Construction;
 - about 70 staff from EQC working in the hubs; and
 - more than 1000 contractors accredited to the programme.

- 2.41 During our audit, EQC brought forward the completion date for the programme from the end of 2015 to the end of 2014. The revised targets for the home-repair programme were to finish repairs of homes with structural earthquake damage worth more than \$50,000 by the end of 2013 and all other repairs by the end of 2014.

The home-repair programme process

- 2.42 Figure 3 sets out a high-level overview of the home-repair process. Appendix 1 explains each of the steps in the home-repair process further.

Figure 3
How the home-repair programme operates



Source: Based on EQC's depiction in *Your guide to the Canterbury Home Repair Programme* (August 2012). "Fletcher EQR" refers to the business unit of Fletcher Construction Limited that was set up to provide PMO services to EQC. We use the term "Fletcher Construction" to refer to that business unit.

Part 3

Effectiveness of the home-repair programme

3.1 In this Part, we assess whether the home-repair programme is achieving the intended results. We have looked at:

- what the home-repair programme has delivered to date;
- how EQC has carried out damage assessments;
- the scoping of works;
- how EQC has managed the quality, safety, and timeliness of repairs; and
- the prioritisation of repairs.

Summary of our findings

3.2 EQC's management of the home-repair programme has been effective in:

- reducing the need for large numbers of homeowners to individually co-ordinate and manage the repairs to their homes and compete with each other for tradespeople and building materials;
- completing a large number of repairs and starting quickly – by the end of June 2013, more than 40,000 homes had been repaired, just over half of the total repairs to be completed; and
- promoting safe work practices, with the focus becoming more formal as the home-repair programme has progressed.

3.3 In our view, there are risks with the way in which EQC has managed repair quality in the programme to date, due in a large part to the late implementation of some important controls and the need for some of these controls to be fully embedded and functional. However, there is now regular auditing of the quality of a sample of completed repairs against repair standards prepared by EQC for the home-repair programme.

3.4 We have not formed a view on the appropriateness of the repair standards because we do not have specialist trade qualifications. However, we are concerned about the way in which compliance with the standards is scored to produce a composite measure.

3.5 In November 2012, EQC began actively allocating “repair slots” for repairs to vulnerable people's homes. In our view, this was too late – it was about two years after the home-repair programme started. This allocation happens only after the work has been scoped. Our analysis of claims management found no end-to-end prioritisation of repairs in the home-repair programme.

3.6 EQC expects to complete the most difficult repairs and the remaining repairs to vulnerable people's homes by the end of 2013. In our view, increasing the use

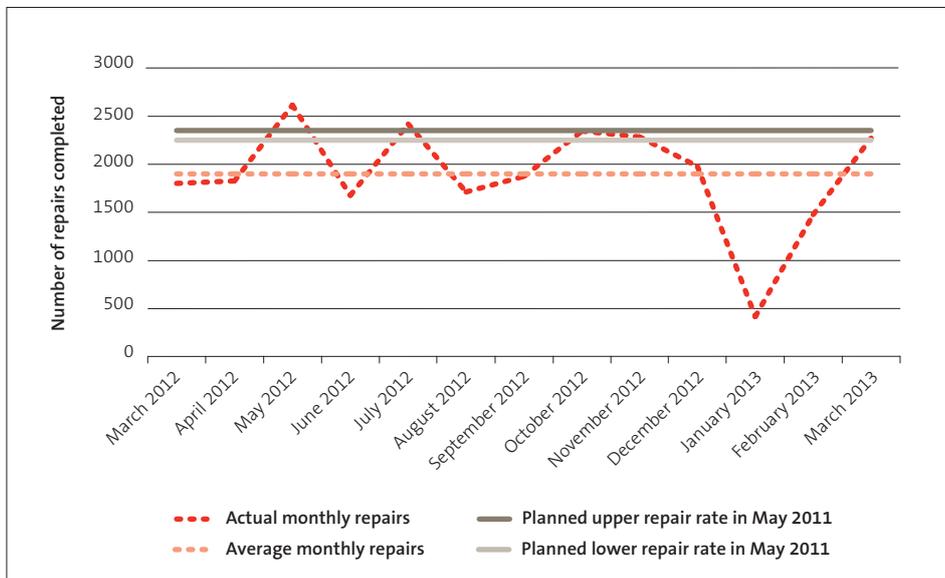
of cash-settling to meet this deadline could be counter to the objectives of the home-repair programme if it contributes to cost inflation or the offer to cash-settle is made to a homeowner who does not have the capacity to manage repairs on their own.

Programme delivery to date

More than 40,000 home repairs have been completed, and homeowners have not had to directly compete with each other for tradespeople or building materials.

- 3.7 By the end of June 2013, more than 40,000 homes had been repaired as part of the home-repair programme.
- 3.8 On average, 1200 repairs have been completed each month from the start of the programme to the end of March 2013. The monthly average increased during this period. Between March 2012 and March 2013, an average of about 1900 repairs were completed each month (see Figure 4).
- 3.9 As at August 2013, the home-repair programme would need to average about 2250 repairs each month to be completed by the end of 2014. This calculation assumes that EQC will not cash-settle large numbers of remaining claims.

Figure 4
Actual and anticipated number of completed home repairs, March 2012 to March 2013



Source: Our analysis, based on information provided by EQC.

Notes: There were fewer repairs in January 2013 because it is the summer holiday period. In May 2011, EQC planned an upper repair rate of 2350 repairs each month and a planned lower repair rate of 2250 each month. These repair rates assumed available trades resource and no further significant earthquakes.

Carrying out damage assessments

About 430,000 damage assessments have been completed. The training for assessment teams has increased during the programme. For some assessments, the assessed cost of damage is less than the scoped cost of work. Although the main reason for this difference is multiple earthquakes between assessment and scoping, the accuracy of some assessments has also contributed to the difference.

- 3.10 Damage assessments are critical to the operation and management of the home-repair programme. This is because damage assessments:
- set up homeowner expectations about what will be repaired;
 - indicate whether the cost of repairing the damage puts the house in the home-repair programme;
 - indicate the range and quantity of different types of repairs required; and
 - in aggregate, indicate the overall cost of the home-repair programme.
- 3.11 By April 2013, EQC had completed about 430,000 damage assessments. Assessments have not involved invasive practices such as lifting floor boards or removing floor or wall coverings. Many homes have been assessed more than once because subsequent earthquakes have caused more damage. EQC assessment teams comprise two people: an assessor (to verify the claim and manage the homeowner's expectations) and an estimator (a licensed building practitioner). As well as having a well-developed understanding of the Act, assessors are expected to have strong communication and listening skills and the ability to remain calm.⁶
- 3.12 Full damage assessments were carried out after the 4 September 2010 earthquake and before the 22 February 2011 earthquake (about 20% of all assessments). The assessors and estimators received two days' training informed by EQC's practice and experience in the previous nine years. The training included 150 scheduled minutes of training on the damage inspection process and a three-hour damage inspection practical. About 500 assessment teams were deployed.
- 3.13 Rapid assessments were carried out after the 22 February 2011 earthquake (about 40% of assessments) to identify repair priorities and where emergency work was needed. Assessors and estimators were provided with iPads and trained to use them to assemble information. Rapid assessments were carried out on a property regardless of whether a claim had been lodged for that property.
- 3.14 Full assessments were also carried out after the 22 February 2011 earthquake (about 40% of assessments). Between June 2011 and October 2012, more

⁶ There have been allegations of conflicts of interest during EQC's 2012 recruitment of assessors. EQC took these allegations seriously, had the recruitment process independently reviewed, and publicly reported the review's findings. The independent review found that there were "no major causes for concern about the processes used" and that "EQC went to some lengths to ensure the processes were as fair as could be".

assessors and estimators were recruited and trained. During this period, the training programme lengthened to six days. The last intake of assessors and estimators was in October 2012. The six days' training included more time for practice and assessing houses, and an assessment of skills at the end of the training. Newly trained assessors were initially paired with more experienced assessors.

- 3.15 In practice, repair costs in the home-repair programme are, on average, higher than the originally assessed damage costs. The main reason for this is that houses have sustained more damage from earthquakes in the intervening period. Sometimes, the original assessment does not identify all the earthquake damage that a house has sustained.
- 3.16 Internal audit work commissioned by EQC suggests that additional earthquakes and damage hidden until repairs began have increased costs between the original damage assessment and the final scope of work in 60% of the claims looked at. The average increase in costs was about 15%. In October 2012, the PCG was informed that the average variance between the original assessment and approved work scope for repairs costing \$10,000-\$50,000 was 11%. For repairs costing more than \$50,000, the equivalent figure was 35%.
- 3.17 Increases because of inaccuracies with the initial assessment or because EQC had carried out a subsequent assessment were found for another 23% of the claims looked at. Feedback provided by Fletcher Construction to EQC identified similar matters with the accuracy of initial damage assessments. EQC told Parliament, in December 2012, that initial assessments were not always accurate, particularly after the September 2010 earthquake when assessors were less experienced.
- 3.18 The reasons identified by EQC and Fletcher Construction for any differences between the original assessment and the final budget for repairs were evident when we reviewed a sample of property files⁷ from six repair hubs. The sources of differences that we saw in these files included:
- further damage to houses in the period between the original assessment and the start of repairs;
 - damage that was originally identified as earthquake damage being reassessed as not earthquake damage;
 - earthquake damage that was not apparent when assessments were made; and
 - alternative repair strategies being used to those originally proposed.
- 3.19 To get a better understanding of the reasons for variance between the assessed and scoped cost of work, EQC's May 2012 internal audit referred to a project to

⁷ We examined 30 property files from six repair hubs. The owners of six of the properties had opted out of the home-repair programme, so our analysis of differences between the original assessment and the final budget was based on 24 files.

split current cost variances into detailed categories and use those categories from then on. This would have enabled EQC to better understand why costs change during the repair process. Without routinely recording this information, EQC can analyse only the amount of cost changes and not the reasons for them.

- 3.20 In May 2013, we asked EQC for information summarising the reasons for cost changes during the repair process, based on the categories to be used after the May 2012 internal audit report. EQC responded that the project had improved the visibility of the types of cost increases but not the reasons for the increases. This means that it is not possible to quantify (other than through a survey) the extent to which any specific factor, including those outside of EQC's control, has increased costs after the assessment stage.

Scoping of work

Joint scoping meetings confirm the damage caused by earthquakes and the strategy to repair the damage to the house. There are not enough EQC staff to attend all joint scoping meetings.

- 3.21 After assigning the contractor, contractor supervisor, and hub-based EQC representative to a claim, the hub organises a meeting (called joint scoping) between the homeowner and these three people. This joint scoping meeting confirms the damage caused by earthquakes and the strategy to repair the damage to the house. The meeting will also discuss other matters, such as whether the homeowner needs to move out during the repairs.
- 3.22 Homeowners can request a copy of the scope of works and any subsequent changes to the scope. EQC will not include costs in the information provided.
- 3.23 Joint scoping started in June 2012 in a pilot project and has been progressively implemented by all hubs. Previously, the contract supervisor and hub-based EQC representative would separately visit an earthquake-damaged home.
- 3.24 The joint scoping process is not always followed. In some instances, EQC allows Fletcher Construction contract supervisors to approve the scope of work and EQC's staff are not involved. This is because there are not enough EQC staff to attend all joint scoping meetings.
- 3.25 EQC has acknowledged that there is "insufficient resource" to jointly scope all claims. But in instances where the scope of work is outside a 75%-100% range of the cost already recorded by EQC, or where there are scope variations once work has started, EQC staff and not contract supervisors have to approve the work.

Managing the quality, safety, and timeliness of repairs

In our view, there have been risks with the way in which EQC has managed repair quality in the home-repair programme. However, there is now regular auditing of the quality of a sample of completed repairs against repair standards prepared by EQC. We have not formed a view on the appropriateness of the repair standards because we do not have specialist trade qualifications. However, we are concerned that a repair can “pass” even if it requires remedial work and takes so long that the homeowner is significantly affected.

Quality of repairs

- 3.26 EQC has identified substandard repairs as a main risk to the home-repair programme. The risks of substandard repairs include:
- damaging the programme’s reputation;
 - extra costs that might not be recoverable; and
 - in extreme instances, further damage to a house and/or safety risks.
- 3.27 There are now four main streams of work in the home-repair programme that relate to quality assurance of repairs. These are:
- site monitoring by contract supervisor staff;
 - monthly auditing of about a quarter of all completed repairs against repair work standards set for the programme;
 - a post-repair completion survey that EQC started in February 2013 and intends to regularly administer; and
 - a quality assurance team, set up in March 2013, to review quality concerns. This team receives referrals from the complaints management process.
- 3.28 The findings of the monthly auditing of completed repairs are reported to the PCG.
- 3.29 Performance against the quality criteria is reported as a composite percentage. The individual questions and the weighting given to each question when calculating the composite percentage are shown verbatim in Figure 5. For example, a score of 3 out of 4 for the first question would contribute 18.75% to the overall composite percentage score.⁸
- 3.30 In our view, it would be more appropriate for the scoring against each question to be on a 0-3 scale rather than a 1-4 scale. We consider that the inadequate situation described in the lowest score category should not contribute to the composite quality measure.

⁸ The example has been calculated using this formula: $((\text{score}/4) * \text{weight for question}) / \text{sum of weights for all questions} * 100$. The specific calculation is $((3/4) * 8) / 32 * 100 = 18.75\%$.

3.31 EQC considers 50% or more to be “effectively a pass”. A score of one or two against an individual question requires follow-up action. There are many combinations that would mean a result of 50% or more. For example, a repair could “pass” even if it required remedial work and took so long that the homeowner was significantly affected.

Figure 5
Earthquake Commission’s description of the repair-quality standards used in the home-repair programme

Question	Score				Weight
	1	2	3	4	
The repairs undertaken within EQC scope are	Shortcuts, poor substrate preparation	Meets minimum requirements of reinstatement	Meets owner expectations while remaining within scope	Exceeds owner expectation by taking care of minor blemishes	8
The workmanship quality of the repairs	Requires remedial work	to brush hand quality	Is done to a tradesman-like manner	Is to tradesman quality plus takes care of other minor defects voluntarily	8
The protection of the property during the repair process is	E.g. paint stored on drop sheets. E.g. access to room being painted is not protected	E.g. Drop sheets over carpet	Appropriate floor protection e.g. plastic coating and/or drop-sheets	Plastic laid and taped to skirting, furniture etc. Protected from dust.	5
The urgent repairs are	Fails to meet objective e.g. weather tightness	Temporary repairs which require ongoing maintenance	Repair suitable for 12 years	Emergency repair resolved matter permanently	3
The timeframe for repairs is	Long term overrun which significantly affects homeowner	Small overrun, minimal additional cost	Repairs progressing within agreed time frame	Completed in a shorter timeframe, homeowners thrilled	8

Source: EQC. The wording of the repair-quality standards has been reproduced verbatim.

Note: These standards are part of a wider package of quality assurance measures used by EQC to assess repairs.

- 3.32 A 75% result for the “workmanship” question has been reported in each of the eight months to the end of April 2013. It is based on EQC’s audits of 467 completed repairs.
- 3.33 A pilot review of completed repairs, reported in November 2012, found that 12% of repairs in the pilot needed remedial work (primarily painting and plastering).
- 3.34 We asked Fletcher Construction and EQC whether those results were the expected industry norm for rates of remedial work. They told us that the rates were about normal and that people with considerable industry experience had been involved in setting the quality standards. We were not provided with documentary evidence of industry norms for rates of remedial work.

Liability for substandard work

- 3.35 One of the main risks that EQC identified for the home-repair programme was the risk that EQC would be accountable for substandard repair work. EQC obtained legal advice on the scope of this risk, whether the risk could be mitigated, and the best way to do that.
- 3.36 EQC originally aimed to transfer the primary risk of liability for substandard repair work to the party appointed to manage the home-repair programme. The request for proposal for project management services envisaged that the project manager would:
- ... contract with trades-people and others in such a manner as to avoid any EQC exposure to further claims including for poor work and defects.*
- 3.37 None of the bidders for the project management services were willing to accept liability for substandard repair work. Therefore, EQC relies on other risk mitigation strategies, such as:
- having an accreditation process to reduce the risk of engaging tradespeople with substandard skills;
 - requiring Fletcher Construction to regularly monitor the work of contractors, including requiring remedial work during a repair;
 - requiring contractors to provide a 90-day warranty on their work;
 - withholding full payment to contractors until the warranty period has expired and any defects have been remedied;
 - relying on the building consent process and the obligations on tradespeople in the Building Act 2004; and
 - cash-settling where there is potential for EQC to become involved in weathertightness or deferred maintenance matters with a property.

- 3.38 Fletcher Construction told us that it requires contractors to repair defective work at no additional cost to EQC when this is required under the repair contract, warranty period, or the Building Act's 10-year obligations on tradespeople. The possibility of future and ongoing work within the programme is also, in effect, a security against defective work by contractors.
- 3.39 However, EQC has identified that:
- as at December 2012, quality controls were “yet to be fully embedded”;
 - the controls for ensuring compliance with the building code are not consistently followed;
 - there are risks with the accreditation process because there is no centralised database containing all of the data relevant to contractors;
 - some contractors were accredited and inducted before criminal, credit, and conflict of interest checks became a routine part of the accreditation process (a May 2013 internal audit report described these checks as “only recently” implemented);
 - the issuing of performance improvement notices (or PINs) to contractors has not been centrally recorded for most of the programme, with only six contractors (out of about 1200) losing their accreditation; and
 - there have been instances where the cost of fixing defects evident during the warranty period exceeded the amount of money withheld from the contractor until the end of the warranty period.
- 3.40 EQC has also identified that its Complaints Investigation Team received 791 complaints (about one complaint for every 27 houses repaired) on the quality of repairs (the largest category of complaints) under the home-repair programme from September 2012 to August 2013. We note that a higher proportion of surveyed homeowners have expressed dissatisfaction with the quality of repairs carried out under the home-repair programme.
- 3.41 It is difficult to gauge the scale of the risk of substandard repairs. In our view, EQC needs to improve its approach to identifying and managing the risk of substandard repairs.

Recommendation 1

We recommend that the Earthquake Commission continue to improve its approach to auditing repairs in the home-repair programme so the Commission is well informed about the scale and type of repair quality risks, can mitigate those risks where possible, and can match the resourcing of its quality assurance processes to the significance of those risks.

Homeowner feedback on the quality of repairs

- 3.42 EQC carried out telephone surveys of people who had home repairs completed between February and August 2013. The results showed that 79%-85% of people were satisfied with the quality of repairs (see Figure 6). EQC does not have information about people's satisfaction with the quality of repairs completed before 2013.

Figure 6

Percentage of surveyed homeowners who were satisfied or very satisfied with the quality of home repairs, February to August 2013

Date repairs were completed	February to April 2013	22 July to 28 July 2013	29 July to 2 August 2013	5 August to 10 August 2013
Percentage satisfied or very satisfied with the quality of home repairs	84%	79%	85%	85%
Number of respondents	769	100	112	109
Margin of error	+/- 3.0%	+/- 9.8%	+/- 9.2%	+/- 9.3%

Source: EQC.

- 3.43 The people who were dissatisfied or very dissatisfied with the quality of the repairs identified a range of matters. The main matters were work still to be completed or work of a quality not acceptable to them. Where people expressed a concern about repair quality, about half of those concerns were resolved satisfactorily.

Safety of the repair process

- 3.44 The provider accreditation and safety management processes for the home-repair programme are extensive. The focus is on reducing the probability of injury or fatality.
- 3.45 EQC and Fletcher Construction have jointly run a "safe6" campaign, introduced from February 2013. The campaign focuses on the six risks most likely to result in a fatality. The six risks are:
- falls from height;
 - working in confined or restricted spaces;
 - electrical dangers;
 - unsafe use of motor vehicles;
 - personal threats to workers; and
 - asbestos exposure.

- 3.46 Under the PMO Services Contract, EQC is the “principal” for the purposes of the Health and Safety in Employment Act 1992. Contractors also have a responsibility under the Health and Safety in Employment Act for maintaining appropriate safety standards when carrying out home repairs.
- 3.47 Under the PMO Services Contract, Fletcher Construction is required to help EQC meet its obligations by:
- requiring each project to have a health and safety plan – individual contractors must take responsibility for all aspects of health and safety on work sites;
 - raising health and safety matters with contractors, property occupiers, and any person in control of a workplace, to ensure that they have addressed the health and safety matters; and
 - acting in keeping with the *Statement of Intent: Safety in the Earthquake Recovery Project (EQR)* document;⁹ and
 - administering a contractor accreditation process.
- 3.48 Fletcher Construction employs six specialists to provide a safety advisory and monitoring service for the home-repair programme.
- 3.49 The accreditation process for contractors does not cover subcontractors. It is a contractor’s responsibility to ensure that subcontractors work safely and to the required standard.
- 3.50 Fletcher Construction carries out health and safety audits of contractors. These audits look at non-compliance against four dimensions of health and safety requirements: policies and procedures, equipment, people, and the environment. About 4600 health and safety audits have been completed in the programme to May 2013 (about 12% of completed repairs to that date). EQC has estimated that between 35% and 40% of site audits lead to one or more major or minor corrective actions. The audit findings have included:
- failure by contractors to wear identification;
 - failure by contractors or subcontractors to sign a site induction sheet or site-specific safety plan;
 - poorly erected scaffolding;
 - not complying with an asbestos removal or repair management strategy; and
 - incorrect use of ladders.

9 The document can be found at www.eqr.co.nz.

- 3.51 Compliance with health and safety expectations is increasing over time, as is the number of health and safety audits carried out.
- 3.52 One measure of contractor safety is the total recorded injury frequency rate. As at May 2013, the 12-month rolling average for this measure was 5.6 injuries for each month. However, EQC has noted that the actual rate is more likely to be between 10 and 15 injuries for each month because injuries are under-reported to Fletcher Construction. If accurate, this would be higher than the target rate (10 injuries for each month). EQC and Fletcher Construction are continuing to use an educative and coaching approach with contractors to improve safety practices.
- 3.53 EQC also identified a failure to manage contractor and staff well-being as an important risk. Many of the contractors and staff have had direct experience of the earthquakes and associated disruption to their lives. There has also been a high level of media, public, and political attention paid to EQC's work and its staff. EQC has identified a range of health and wellness activities to reduce this risk.

Electrical incidents

- 3.54 PCG meetings in February and March 2013 included discussions about quality and safety matters with electrical repairs. There have been 93 "electrical incidents" in the home-repair programme to June 2013.
- 3.55 Although the number is proportionately small, electrical incidents have had the potential for significant injury and property damage. In some instances, property has been damaged.
- 3.56 As a result of the electrical incidents, an *Electrical Safety Guideline* was produced and updated in 2013. It requires an electrical safety assessment to be carried out for houses meeting certain criteria, and a registered electrician must be engaged for any prescribed electrical work.

Homeowners' feedback on health and safety and site management

- 3.57 EQC telephone surveys of people who had repairs completed between February and August 2013 showed that most people (90%) were satisfied with the on-site management of health and safety matters (see Figure 7). EQC does not have information on satisfaction with the on-site management of health and safety matters before 2013.
- 3.58 The surveys also found high levels of satisfaction with other aspects of the site management (see Figure 7).

Figure 7
Percentage of surveyed homeowners who were satisfied or very satisfied with elements of the management of repair work, February to August 2013

Date repairs were completed	February to April 2013	22 July to 28 July 2013	29 July to 2 August 2013	5 August to 10 August 2013
Manner and politeness of staff	94%	85%	95%	95%
Management of health and safety matters on-site	94%	72%	89%	95%
Consideration of you and your neighbours' needs	92%	73%	90%	96%
Care of your property	87%	77%	84%	92%
Skill of the staff	85%	75%	83%	90%
Timeliness of project	81%	68%	78%	75%
Cleanliness and tidiness of the site	80%	75%	76%	79%
Overall management of on-site work	87%	86%	85%	89%
Number of respondents	769	100	112	109
Margin of error	+/- 3.0%	+/- 9.8%	+/- 9.2%	+/- 9.3%

Source: EQC.

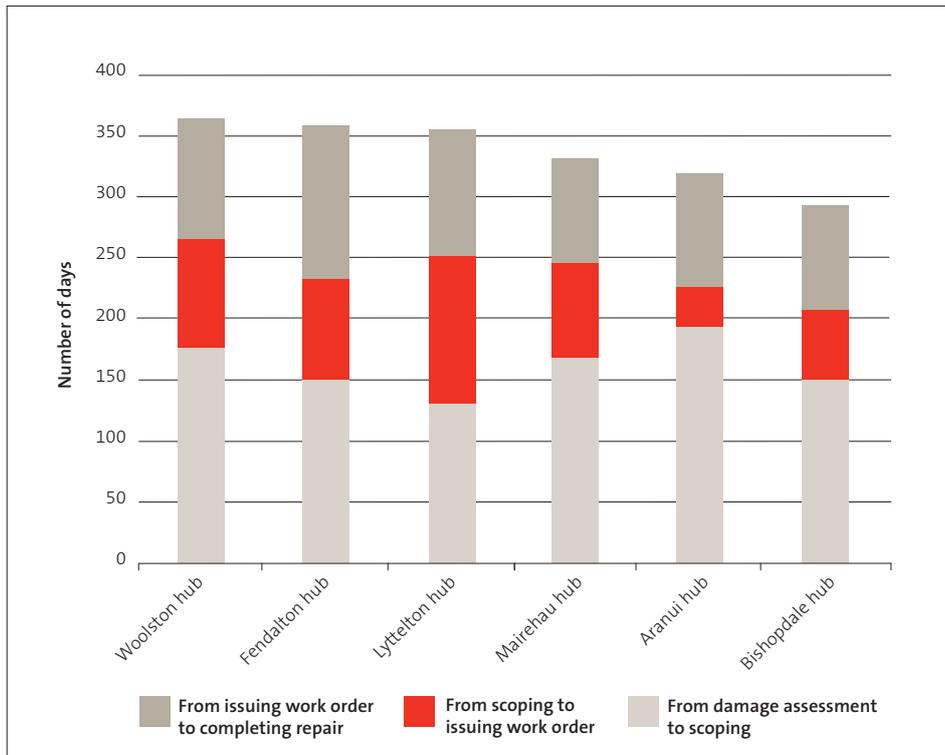
Timeliness of repairs

- 3.59 Timeliness of repairs is one measure of the home-repair programme's performance. The timeliness of repairs has been of major interest to homeowners. In late 2011, EQC set a target to complete 80% of the repairs by December 2014. During our audit, EQC brought the target completion date forward for *all* repairs to the end of 2014.
- 3.60 Normally, EQC has a year to settle a claim after it has determined the amount of damage. This requirement has been waived by an April 2012 Order in Council for settling home-repair claims in Canterbury. The Order in Council applies retrospectively from 4 September 2011.
- 3.61 To complete all of the repairs within a year would have required the completion of about 1600 home repairs every week or more than 300 homes every working day. An enormous trade and building material infrastructure would be required to support that volume and speed of repairs.

- 3.62 Because of the scale of the repair task and fixed resources, it is inevitable that many people will be waiting a long time for their homes to be repaired. In our view, it is critical that arrangements in the home-repair programme enable:
- homeowners to be kept adequately informed while they are waiting;
 - the available repair capacity to be fully and effectively used, to minimise the time taken to complete repairs; and
 - access to repairs to be effectively and fairly prioritised in the circumstances.
- 3.63 In our view, EQC has not adequately kept homeowners informed between an assessment of the damage and the start and completion of a repair.
- 3.64 EQC cannot readily provide complete information on the time taken for a claim to progress through the full repair process. Instead, we have had to rely on small samples of information taken at different times and collected in different ways.
- 3.65 These samples indicate that there is considerable variation in the time individual repairs take to progress through the different repair stages, and in the time taken for repairs to be completed. Our sample of 24 claim files from six repair hubs shows that, as at December 2012, the average number of days from carrying out a damage assessment to completing a repair was 334 days. When broken down to repair stages, the averages were:
- 204 days between carrying out a damage assessment and scoping of work;
 - 58 days between scoping of work and issuing a work order; and
 - 158 days between issuing a work order and completing a repair.¹⁰
- 3.66 Figure 8 shows the average number of days between repair stages, as at May 2013, for six hubs in EQC's sample (90 claim files). The six hubs in EQC's sample are not all the same as the six hubs in our sample.

¹⁰ The average number of days for each repair stage does not add up to the total average number of days from carrying out a damage assessment to completing a repair because the timeliness information was incomplete in some files.

Figure 8
Average number of days between repair stages, as at May 2013



Source: EQC.

3.67 There are many reasons for the variation in time taken to complete repairs. Factors to some extent within EQC’s control include:

- lack of controls on dates and time frames for each stage of the assessment and repair process – these mean, for example, when a repair that a contractor has said would take three weeks actually takes two months, there is no automatic flag to highlight the difference, question the appropriateness of the initial three-week time frame, or identify the reasons for the longer time frame;
- disagreements between claimants and EQC about damage assessments where EQC needs to obtain further information and/or specialist technical advice;
- disagreements between EQC and contractors about the cost of repairs (in one instance, we saw a disagreement that led to a delay of at least eight months);
- reassessments of damage being required because of the quality of initial damage assessments; and
- the need for Fletcher Construction to check the claims after receiving them from EQC because of the quality of data.

- 3.68 Factors outside EQC's control include:
- the complexity of repairs, including multiple claims and multiple earthquakes;
 - damage reassessments that are needed because additional earthquakes have occurred or the damage was not apparent before repairs started (in one instance, we saw three damage assessments for one dwelling within one year);
 - the need to obtain technical guidance, and technical guidance that emerges during the assessment and repair process, especially for foundation work;
 - disagreements between claimants and EQC about damage assessments where the claimant needs to obtain further information and/or specialist technical advice; and
 - the time some homeowners take to make repair decisions – Fletcher Construction told us that, as at July 2013, more than 3000 repairs in its computer system had “homeowner delay” noted.

What homeowners expected

- 3.69 EQC has not known enough about homeowners' experiences of the home-repair programme. One of the recommendations of an internal audit report was for EQC to survey all homeowners whose repairs had been completed. In 2013, EQC began telephone surveys of homeowners with recently completed home repairs. Figure 9 shows the percentage of people who said they were satisfied or very satisfied with the timeliness of their repair.
- 3.70 The surveys did not include people who were still waiting for repairs, had repairs in progress, or had repairs completed before 2013. We note that EQC's Complaints Investigation Team received 260 complaints from September 2012 to August 2013 about the time taken to repair houses. Given how many houses were awaiting repair during this period, the proportion of homeowners with recorded complaints about the timeliness of repairs could range from 0.4% to 0.6%.

Figure 9

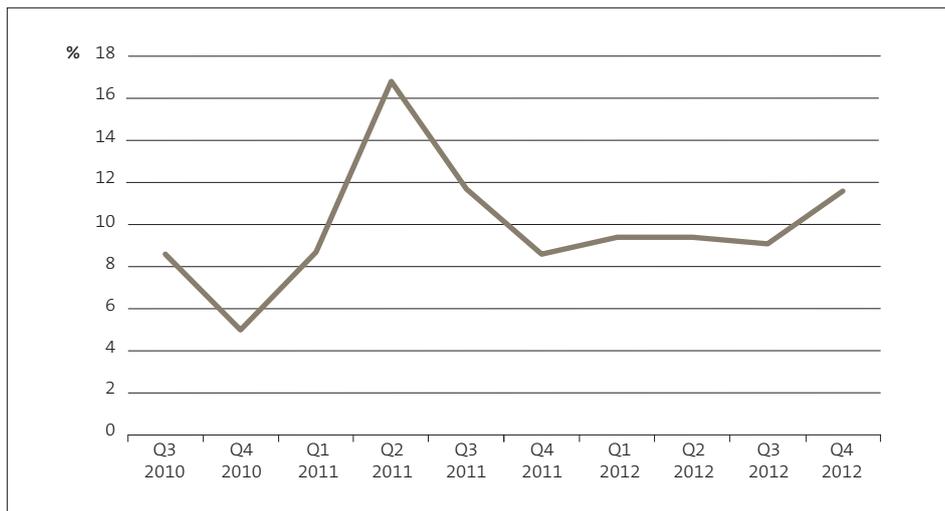
Percentage of surveyed homeowners who were satisfied or very satisfied with the timeliness of repairs, February to August 2013

Date repairs were completed	February to April 2013	22 July to 28 July 2013	29 July to 2 August 2013	5 August to 10 August 2013
Percentage satisfied or very satisfied with the timeliness of the repair project	81%	68%	78%	75%
Number of respondents	769	100	112	109
Margin of error	+/- 3.0%	+/- 9.8%	+/- 9.2%	+/- 9.3%

Source: EQC.

- 3.71 Without trend information about the experience of homeowners in the home-repair programme, we have looked at EQC's information about the satisfaction of all claimants (land, dwelling, and contents claims arising from the earthquakes and other natural disasters). Claimants in the home-repair programme are not separately identified, so the information is indicative at best.
- 3.72 Figure 10 shows that people with settled claims have identified the time EQC takes to settle claims as an aspect that could be improved. The proportion of claimants identifying this as an aspect to improve peaked in the second quarter of 2011 at 17%. It has fluctuated between 5% and 17% of claimants. It is important to note that these are the responses of people who had their claims settled during a given quarter. It does not include people whose claims have not yet been settled.

Figure 10
Percentage of surveyed EQC claimants identifying claims settlement time frames as an aspect to improve, 2010-2012



Source: Our analysis, based on information provided by EQC.

- 3.73 For all claims types (contents, land, and dwelling claims) there is a difference between some claimants' expectations of how quickly their claims will be settled by EQC and how quickly the claims were settled in practice. Using information from the fourth quarter of 2012, Figure 11 shows that, although about 10% of claimants expected that settling their claims would take longer than six months, in reality more than 30% of claims took longer than six months to settle.

Figure 11
Expected and actual time taken to settle claims for all earthquake claims settled during the fourth quarter of 2012



Source: Our analysis, based on information provided by EQC.

- 3.74 Similarly, in the fourth quarter of 2012, only about 40% of EQC's claimants were satisfied or very satisfied with the time it took to settle their claims. Satisfaction with the time taken dropped from 52% to 42% between 2010 and 2012.

Timeliness relies on sufficient trade capacity and capability

- 3.75 Without the necessary people, particularly tradespeople, it will not be possible for the home-repair programme to be delivered in the anticipated time frame, which is to complete the programme by the end of 2014.
- 3.76 Failure to retain the necessary people and skills is identified by EQC as a main risk to the home-repair programme. This risk will become greater as the anticipated end-point of the programme nears and contractors and staff seek opportunities beyond the home-repair programme.
- 3.77 Retention schemes for staff and contractors have been considered in the home-repair programme. EQC has decided that it is not yet necessary to implement

these schemes. We support EQC having a clear strategy and tactics for ensuring the home-repair programme can operate effectively until it is completed.

- 3.78 The implementation of any retention arrangements needs to be reasonable and comply with the Commerce Act 1986 and the Government's procurement policies.

Prioritisation of repairs

Because there are many homes to be repaired and resources are limited, it is important that repairs are prioritised. Effective prioritisation allows homeowners to know where they are in the repair queue and resources to be allocated to repairing homes with vulnerable occupants sooner. Active allocation of "repair slots" for repairs to vulnerable people's homes started in November 2012, two years after the start of the home-repair programme. In our view, this was too late. There is no end-to-end prioritisation of repairs in the home-repair programme.

- 3.79 The two main categories that have been used in the home-repair programme to prioritise the timing of repairs are whether a repair will cost more than \$50,000 and involves structural damage, and whether the repair is for a home with a vulnerable occupant.

- 3.80 There are a number of stages during the repair process where decisions can be made that could affect the relative priority given to a claim. The processes and the factors that could influence the prioritisation of a claim include:

- EQC's processing of a claim before the claim being transferred to Fletcher Construction – completion of assessments, including apportionment and technical investigations, is the main factor determining when a claim will be transferred to Fletcher Construction;
- Fletcher Construction's processing of a claim before the claim being transferred to a repair hub – available hub capacity and location are the main factors determining when a claim will be transferred to a repair hub; and
- processing of a claim within a repair hub before the claim being transferred to a contract supervisor and contractor – available contractor capacity and capability are the main factors determining when a claim will be transferred to a contract supervisor and contractor. These factors also influence whether a contractor is allocated work worth more than \$50,000.

- 3.81 EQC told us that it "is neither necessary nor practical" to prioritise claims throughout all three of the stages described in the previous paragraph. Because of this, there is no end-to-end prioritisation of a home-repair claim.

- 3.82 Vulnerable people's claims are transferred to the "Priority Hub".

Repairs costing more than \$50,000 involving structural damage

- 3.83 The home-repair programme target is to complete repairs on homes with structural damage that will cost more than \$50,000 to repair by the end of 2013. This date is later than was originally targeted and, based on the progress to date, is unlikely to be met unless EQC settles many of the remaining repair claims in cash.
- 3.84 Homes with repairs costing \$50,000 or more make up about 20% of all repairs being managed in the home-repair programme. As at May 2013, 6528 repairs costing more than \$50,000 had been completed, about 39% of the total in that category. A further 10,165 repairs costing more than \$50,000 were still to be completed or resolved through other means.¹¹
- 3.85 At the same date, about 47% of all repairs estimated to cost less than \$50,000 had been completed.

Vulnerable people

- 3.86 EQC has identified vulnerable people not being appropriately looked after as a main risk. EQC told us that the home-heating and emergency-repair initiatives were aimed at reducing the vulnerability of people to the cold and damp.
- 3.87 EQC told us that it has received information about vulnerable people in the course of its work, including in the following ways:
- people identifying themselves as vulnerable when talking to EQC's call centre staff;
 - EQC identifying people as vulnerable when they are talking to EQC's call centre staff;
 - the occasional identification of vulnerable people by assessment teams;
 - information provided to EQC at public meetings;
 - networks of community groups; and
 - identifying which land has been the worst affected (because EQC considered that occupants in those areas would be vulnerable).
- 3.88 EQC has prepared a set of criteria, in consultation with other agencies, to identify vulnerable people based on health conditions, dependency on a carer, and age. The specific criteria are explained on EQC's website.¹²
- 3.89 From November 2012, EQC had set a target of 100 vulnerable people's dwelling repairs for each month. Information provided by EQC indicates that, since that date, it has achieved that target every month with the exception of January 2013.

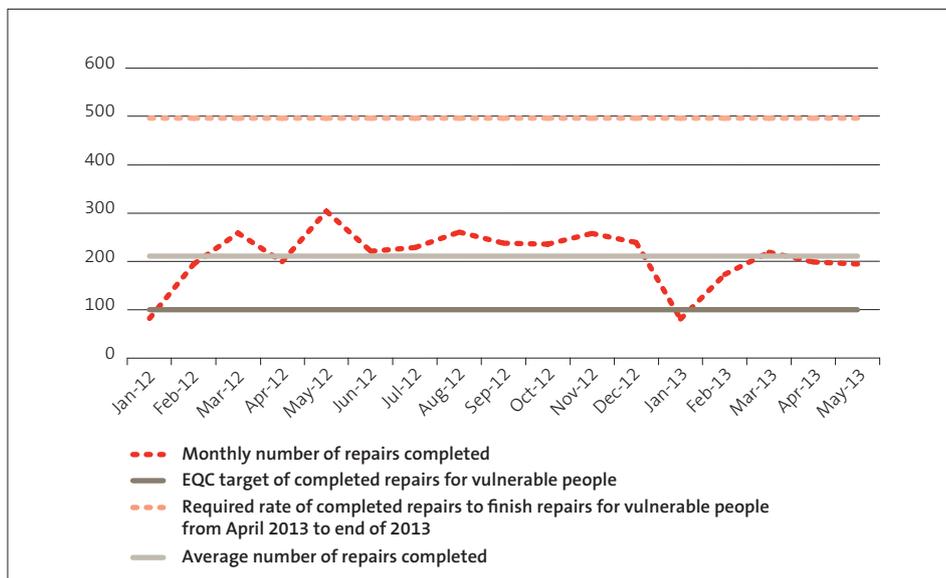
11 Information on the number of completed and to-be-completed repairs costing \$50,000 or more has been provided by EQC. EQC has noted that there are some limitations with the information that, in effect, may mean that it overstates the number of repairs costing \$50,000 or more.

12 See www.eqc.govt.nz/canterbury-earthquakes/home-repair-process/vulnerable.

Information EQC has provided also indicates that it achieved that target before November 2012.

- 3.90 The number of completed home repairs by month for houses with a vulnerable occupant is shown in Figure 12. Figure 12 also shows the completion rate that would be required to complete repairs of homes with a vulnerable occupant by the end of 2013, assuming EQC cash-settles about half of the remaining claims.
- 3.91 Information available on EQC’s website in May 2013 showed that EQC intended to cash-settle about half of all dwelling claims from vulnerable people. More recently available information on EQC’s website indicates EQC’s intention to settle vulnerable people’s claims by the end of 2013.
- 3.92 In our view, this might mean that many of the home-repair programme claims are to be cash-settled, given the allocation of 100 repair slots each month. Increasing the use of cash-settling to meet this deadline could be counter to the objectives of the home-repair programme if it contributes to cost inflation or offers are made to homeowners without the capacity to manage repairs on their own.
- 3.93 In our view, deciding to cash-settle a claim rather than manage repairs should include an assessment of the homeowner’s capacity to manage the repairs. Some elderly, disabled, sick, and otherwise vulnerable claimants might not be in a position to manage the repair without help.

Figure 12
Number of repaired houses with a vulnerable occupant against target rate, January 2012 to May 2013



Source: Our analysis, based on information provided by EQC.

- 3.94 Although EQC has been meeting its target number of repair slots for vulnerable people for each month, as at May 2013, EQC was not completing repairs to properties with vulnerable occupants any “faster” than repairs to other properties. EQC has said that the reason for this is because its “process for prioritising the vulnerable has yet to fully bed in”, in part because EQC did not know who its vulnerable claimants were until they had submitted a claim.
- 3.95 We have also noted, based on information that EQC gave us, that each month about 150 properties with vulnerable occupants are identified. There are 100 repair slots allocated for vulnerable people each month.
- 3.96 As at May 2013, EQC’s call centre had started to contact vulnerable claimants to discuss repairs to their homes.
- 3.97 In our view, the active allocation of repair slots to vulnerable people started too late.

Part 4

Homeowners' experiences of the home-repair programme

- 4.1 In this Part, we describe what EQC has learned, through surveys and complaints mechanisms, about homeowners' experiences of the home-repair programme. We discuss homeowner:
- well-being and satisfaction;
 - communication; and
 - complaints.
- 4.2 We also discuss matters that could negatively affect homeowners' experiences of the home-repair programme.

Summary of our findings

- 4.3 Before 2013, EQC did not collect customer satisfaction information specific to the home-repair programme. In our view, it should have. In 2013, EQC's surveys, carried out just after repairs were completed, report that many homeowners were satisfied or very satisfied with those repairs.
- 4.4 However, it is clear that the service experience has been poor for some homeowners despite the completion of many repairs and EQC's reported levels of homeowner satisfaction in 2013. There have been issues with the consistency and timing of communications about individual circumstances, the transparency of EQC's decision-making, and the quality of repair work. EQC knows that it has to continue to improve communication with homeowners about their claims.
- 4.5 The management of complaints within the home-repair programme needs to be better integrated between EQC and Fletcher Construction.
- 4.6 There was considerable inconsistency in the repair process and in the information recorded (including about contact with homeowners) in the files we reviewed when we visited repair hubs.

Homeowner well-being and satisfaction

In February 2013, EQC started surveying the satisfaction of homeowners who had just had their repairs completed. In our view, this work started too late. Communication, the availability of information, and the quality of repairs have been issues for homeowners.

Homeowner well-being

- 4.7 Fletcher Construction identified that, as well as the quality, safety, time, and value-for-money goals in its service agreement with EQC, there is also an "implicit" homeowner well-being goal.

- 4.8 Many of the people EQC is dealing with are living in challenging and stressful circumstances. Some have lost family or friends because of the earthquakes. Many have endured multiple earthquakes, had their lives disrupted, and lost homes and items of great personal value. Life has not been easy, and there are heightened levels of stress and anxiety in the community.
- 4.9 In October 2012, a survey by the Canterbury Earthquake Recovery Authority found that 65% of greater Christchurch's residents reported having to deal with EQC and/or with insurance matters about personal property and houses. More than half of those people (37% of greater Christchurch residents) reported that they have experienced a moderate or major negative effect on their everyday lives from dealing with these matters. The Canterbury Earthquake Recovery Authority told us that, in April 2013, the percentage had fallen to 26%.
- 4.10 Because the information is combined, we cannot be definitive about how much of that negative effect can be linked to how EQC is managing the home-repair programme.
- 4.11 Fletcher Construction told us that, in its experience, "stress levels rise from uncertainty as to timing, or a lack of information from which to make decisions, more so than stress relating to the effects of damage from the under \$100,000 nature of this programme".

Overall homeowner satisfaction

- 4.12 Figure 13 shows the percentage of homeowners surveyed by EQC who, overall, said they were satisfied or very satisfied with the home-repair process.¹³ It did not look at satisfaction with EQC's services other than the conduct of a repair, and was carried out by EQC staff. The surveys did not look at the satisfaction of homeowners who:
- had repairs completed before February 2013;
 - had repairs in progress at the time of the survey; or
 - were still waiting for repairs to start.

13 This level of satisfaction is similar to that reported by Fletcher Construction (86%) for recently completed repairs, as reported in *The Press* on 25 August 2013 and based on a survey by UMR Limited of 200 people.

A recent survey of satisfaction with completed home repairs in Canterbury was reported in *The Press* on 23 August 2013, based on an Opinions Market Research survey of 400 people. The survey was of all repairs, not just those completed within the home-repair programme. It reported a 37% level of dissatisfaction (dissatisfied or very dissatisfied with the repair results).

We have not reviewed the methodology of either of these two surveys as part of our audit work.

Figure 13
Percentage of surveyed homeowners who were satisfied or very satisfied overall with the home-repair process, February to August 2013

Date repairs were completed	February to April 2013	22 July to 28 July 2013	29 July to 2 August 2013	5 August to 10 August 2013
Percentage satisfied or very satisfied overall with the home-repair process	82%	77%	83%	84%
Number of people invited to participate in the survey	987	120	Not available	Not available
Number of respondents	769	100	112	109
Margin of error	+/- 3%	+/- 9.8%	+/- 9.2%	+/- 9.3%

Source: EQC.

- 4.13 As well as identifying satisfaction with the home-repair programme, the surveys also identified dissatisfaction. If the dissatisfaction rate from early 2013 was applied to the total number of homeowners in the programme, the owners of more than 14,000 repaired houses would be dissatisfied (and about 66,000 would be satisfied). Some of this dissatisfaction could stem from a gap in expectations between homeowners and EQC, which we discuss in paragraphs 4.47-4.48.
- 4.14 As part of these surveys, homeowners were asked to provide improvement suggestions or feedback. The six areas most frequently identified for improvement (between February and April 2013) were:
- communication;
 - time frames;
 - quality of contractors;
 - clean-up of repair site;
 - more information required; and
 - quality of repairs.
- 4.15 These issues were also raised during our discussions with homeowners and community groups, and in correspondence to our Office from members of the public.
- 4.16 Before the telephone surveys began, EQC sought to understand claimants' experiences with its services through other research. This other research has mostly been of all of EQC's claimants, including those within the home-repair programme. This means that this other research is at best indicative, rather than definitive, about the experiences of homeowners in the home-repair programme.

- 4.17 For example, in 2011/12, there were four UMR Limited claimant satisfaction surveys, three UMR Limited qualitative surveys of Canterbury claimants, and four (quarterly) Nielson Market Research polls.
- 4.18 Figure 14 draws on information from all of EQC's claimants, including those with dwelling claims. It uses the fourth quarter of 2010 because this was when the first major earthquake struck Canterbury, and the fourth quarter of 2012 because this was the latest information available before EQC started to separately survey those in the home-repair programme.
- 4.19 Figure 14 shows that, excluding the time taken to settle a claim, just over 60% of EQC's claimants were satisfied or very satisfied with EQC's service over four high-level measures of EQC's activities. The overall level of satisfaction with EQC's services assessed against these dimensions fell slightly between 2010 and 2012.

Figure 14
Percentage of surveyed respondents who were satisfied or very satisfied with aspects of EQC's performance, 2010 and 2012

Topic	4th quarter 2010	4th quarter 2012
How the claim was processed	54%	51%
The way the damage inspection was carried out	57%	66%
The way EQC handled the claim when it was first made	74%	68%
The overall quality of service delivery	63%	59%
The time taken to settle claim	52%	42%

Source: EQC.

- 4.20 In the fourth quarter of both 2010 and 2012, EQC's claimant research showed that about a third of its claimants identified that there were no areas of EQC's work that needed to be improved. Other claimants identified areas for improvement. Communications and settlement time frames were the areas for improvement that were most frequently identified.

Communication with homeowners

EQC knows that it needs to continue to improve communication with homeowners about their claims. Homeowners need as much certainty as early as is possible about their individual circumstances.

- 4.21 EQC has used its website, the media, its community contact centre, social media, an outbound calling programme, and EQC staff attendance at public meetings to communicate with homeowners.
- 4.22 EQC knows that it needs to continue to improve communication with homeowners. EQC has previously acknowledged publicly that it has provided conflicting and inadequate information to claimants.
- 4.23 EQC was planning, beginning in February 2013, to send letters to claimants providing information about the status of their claims. EQC's Chief Executive has subsequently indicated that the shutting down of EQC's systems after a privacy breach delayed the time frame for informing claimants. Subsequently, EQC has completed a 90-day programme for communicating with all claimants about their claims and is intending to continue its communication programme with these claimants.

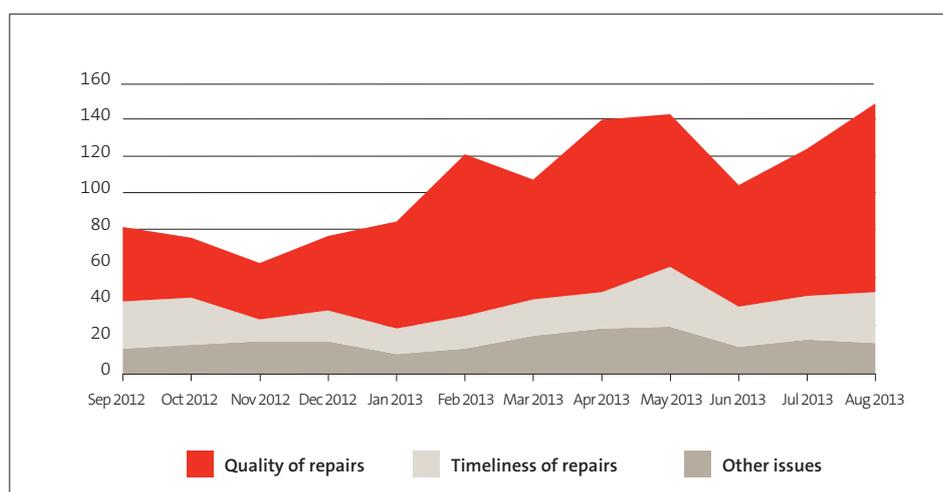
Complaints about the home-repair programme

Complaints have been made directly to EQC and to other organisations about the home-repair programme. EQC needs to better integrate how complaints are managed between EQC and Fletcher Construction.

Complaints to EQC

- 4.24 EQC needs to do more to analyse and learn from complaints and better integrate complaints management processes and systems with Fletcher Construction. The number of complaints received was one means by which EQC intended to judge the success of its performance in response to a large-scale natural disaster.
- 4.25 Figure 15 shows the number of complaints received by EQC's Complaints Investigation Team from September 2012 to August 2013 about the home-repair programme. The number of complaints has been increasing, including complaints about the quality of repairs. These figures do not necessarily include complaints to Fletcher Construction, because the complaints systems are not fully integrated. Also, the information excludes disputes between EQC and claimants about the scope of works.

Figure 15
Number of complaints received monthly, by category, from September 2012 to August 2013



Source: EQC.

- 4.26 Overall, the Complaints Investigation Team received 1,265 new complaints during the period. Many (62%) of the complaints were about the quality of the repairs, and 21% were about the repair time frame. According to EQC, redecoration work lends itself to a risk of dissatisfaction.
- 4.27 EQC and Fletcher Construction began integrating complaints information from late November 2012, but their complaints systems were not technically connected. There were inconsistent complaints processes between repair hubs.
- 4.28 EQC identified two actions to improve complaints management, in response to the findings of the May 2013 internal audit of the programme:
- a review of EQC's complaints process based in Wellington, before complaints are transferred to Fletcher Construction when that is necessary; and
 - a "follow-up" to the process used from November 2012 where claims not resolved within 10 days by Fletcher Construction are referred back to EQC.
- 4.29 The internal audit work confirmed that these actions have been carried out.
- 4.30 EQC set up a mediation service¹⁴ in the second half of 2012, and has met with various stakeholder groups. A regular formal consultation forum with these groups has been held since September 2012.

¹⁴ See www.eqc.govt.nz/about-eqc/make-complaint/mediation-service.

Recommendation 2

We recommend that the Earthquake Commission continue to improve communication with individual homeowners about their claims, giving homeowners as much certainty as possible as early as possible.

Complaints to other organisations

- 4.31 Because of the technical and complex nature of EQC's and other public entities' responsibilities in the recovery efforts for Canterbury, resolving complaints about an entity's performance can require specialist and professional expertise and full knowledge of the circumstances. Where complaints cannot be resolved directly with an entity, there are a range of other organisations that people can contact. We have listed these organisations in Appendix 4.
- 4.32 Our Office is one of the organisations listed in Appendix 4. Our interest lies in the effective and efficient use of resources by public entities, including those working on the recovery in Canterbury. We cannot attempt to resolve individual disputes with public entities, including individual disputes with EQC.
- 4.33 On 20 April 2013, Fairfax News reported that a spreadsheet attached to a leaked email indicated that EQC had overpaid earthquake claims by up to \$100 million. This matter was raised with our Office and was the subject of widespread media coverage.
- 4.34 In response to this, EQC's Chief Executive, Ian Simpson, issued a press release on 23 April 2013. He refuted the allegation on the basis that the spreadsheet "was never regarded as fit for purpose by EQC management and, because it had no practical value, its maintenance was discontinued and staff were instructed not to use it."
- 4.35 We considered it appropriate to extend the financial audit work on claims payments as part of our 2012/13 financial audit of EQC (work that is separate from this performance audit). The Appointed Auditor carried out audit procedures on a large audit sample of EQC payments. They did not identify any material matters that would have required audit adjustments to the 30 June 2013 financial statements.

Matters that could negatively affect homeowners' experiences

During our audit, and from complaints received by our Office, we saw a lack of clarity, consistency, and transparency in EQC's systems and decision-making that could, in our view, negatively affect homeowners' experiences of the home-repair programme.

Systems and capacity

- 4.36 EQC's systems and capacity have not been capable of supporting interaction and information sharing that the public was expecting or of coping with the volume of requests under the Official Information Act 1982 (OIA requests) made to EQC after the Canterbury earthquakes.
- 4.37 EQC is not fulfilling its statutory requirements for timely responses to OIA requests. Some requests made to EQC under the Official Information Act may be claimants trying to fill an information gap about their individual circumstances.

Availability of private information

- 4.38 As already noted, EQC has breached the privacy of its claimants more than once. The details of the privacy breaches have been widely reported in the media. We did not look at privacy breaches as part of our audit. The Privacy Commissioner is the appropriate authority to investigate them.

Unavailability of information

- 4.39 EQC's withholding of individual home-repair cost estimate information has been the subject of a complaint to the Office of the Ombudsman. The Ombudsman found that, under section 9(2)(i) of the Official Information Act, EQC had good reason to withhold cost estimates. This was so that EQC (or Fletcher Construction on EQC's behalf) could carry on negotiation with contractors without prejudice or disadvantage. (The Ombudsman's decision was specifically about houses in, or likely to be in, the home-repair programme.)
- 4.40 The Office of the Ombudsman is the appropriate authority to investigate and comment on matters with the provision of information under the Official Information Act.
- 4.41 There has been inconsistency in the information provided to claimants about the scope of works and variations to the scope of works. This includes some claimants being asked to sign off on work that they were not aware was to be performed because they were not given the scope of works.

Lack of operational policy

- 4.42 There has been a relative paucity of operational policy guidance available to homeowners and to EQC staff, indicating how EQC goes about applying the provisions of the Act when settling a claim and repairing a home.
- 4.43 Although operational policies do not replace the need for staff to consider the application of the Act to the relevant facts of each case, they can help streamline the decision-making process and give claimants confidence that their repair is being managed in a manner consistent with those of people in similar circumstances.

Changes to operational policy

- 4.44 Originally, EQC had a policy of not allowing homeowners to organise and pay for insulation to be added when repair work was carried out, even though that repair work might expose cavities in which insulation could be installed. EQC later changed that policy to allow insulation work to happen simultaneously with repair work.
- 4.45 Changes in policies such as this may be understandable because of the challenges faced by EQC in balancing the differing expectations of EQC's stakeholders, and the complexity of technical, liability, equity, safety, and administrative matters with such policies.
- 4.46 Although we do not have a view on the appropriateness of the policy, the change in policy has potentially disadvantaged homeowners who might have wished to, and could have afforded to, install insulation at the same time as repair work was carried out.

An expectation gap between EQC and homeowners

- 4.47 The Act states that EQC can pay out funds only for the purposes of replacing or reinstating a house to a condition that is substantially the same as, but not better or more extensive than, its condition when new. EQC describes this as a "like-for-like basis". EQC's application of the Act has been the subject of differences of opinion between it and homeowners, resulting in an expectation gap. The Act also states that EQC "shall not be bound to replace or reinstate exactly or completely, but only as circumstances permit and in a reasonably sufficient manner."

- 4.48 Part of the expectation gap stems from different interpretations of the standard of repair required under the Act.¹⁵ Part stems from unrealistic expectations (for example, aspects of a house should be improved when there is no change in building code requiring that), and part stems from areas of genuine dispute (for example, homeowners wanting a different method for repairing the damage from that chosen by EQC, or EQC disputing whether damage is earthquake-related).

Inconsistencies in repair files

- 4.49 There was considerable inconsistency in the repair process and in the information recorded (including about contact with homeowners) in the files we reviewed when we visited repair hubs.
- 4.50 This is a consequence of EQC concentrating on getting repairs done before supporting systems and controls had been fully prepared and implemented. It meant that we determined that a more comprehensive review of EQC files at that time would not have been a productive use of our resources.

¹⁵ The courts are the appropriate mechanism for determining the requirements of the Act.

Part 5

Governing and monitoring the home-repair programme

- 5.1 Governance and monitoring are important components in effective management and control. Good governance requires effective monitoring of a programme's performance. Good controls require effective risk identification and management.
- 5.2 In this Part, we assess how the home-repair programme has been governed and managed. We look at:
- programme governance;
 - operational controls;
 - risk management and internal audit; and
 - key performance indicators.

Summary of our findings

- 5.3 The home-repair programme is governed by a group consisting of senior EQC and Fletcher Construction staff. The group meets regularly and its decisions are clearly recorded. The group has identified that it needs further clarity on the authority given to it by EQC. We support that happening.
- 5.4 The introduction of key systems, controls, and support functions needed to keep pace with the evolving scale, nature, and complexity of the programme. They did not. Some systems, controls, and support functions needed to be in place earlier.
- 5.5 EQC has an understanding of the main risks to the operation of the home-repair programme and has investigated some aspects of operation in detail through two internal audits.
- 5.6 Performance metrics reported at a governance level have evolved during the home-repair programme and were under review when we were finalising this report. In our view, EQC's main measure of the home-repair programme's value for money is of limited use.

Programme governance

The home-repair programme is governed by a group consisting of senior EQC and Fletcher Construction staff. The group meets regularly, and its decisions are clearly recorded. The group has identified that it needs further clarity on the authority given to it by EQC.

- 5.7 EQC has recognised that it could improve the governance of the home-repair programme.
- 5.8 The PCG is the home-repair programme's governance body. The PCG's monthly meetings are formally carried out, have clear action points, and are well minuted.

- 5.9 As part of common practice, governance bodies carry out evaluations of their effectiveness. During its February and March 2013 meetings, the PCG discussed the need for the “PCG forum to be more effective in providing strategic leadership and direction for the Canterbury Home Repair Programme”.
- 5.10 The minutes of the February 2013 meeting also state that “clarification on what authority has been given to PCG from EQC was needed in order to establish true functionality and purpose”.
- 5.11 The PCG has recognised that clarifying its objectives will allow confirmation of the new terms of reference and resetting of key performance indicators.

Operational controls

The introduction of key systems, controls, and support functions needed to keep pace with the evolving scale, nature, and complexity of the programme. They did not. Some systems, controls, and support functions needed to be in place earlier.

Controlling the repair process

- 5.12 Although the circumstances behind the home-repair programme certainly meant action was required, the introduction of systems, controls, and support functions needed to keep pace with the scale, nature, and complexity of the programme. They did not. In our view, they needed to be in place earlier, because more than \$500 million was spent during the first 18 months of the home-repair programme.
- 5.13 At the time of the first major Canterbury earthquake, there were no processes, procedures, and controls for setting up and running a home-repair programme. The processes, procedures (primarily a set of 17 Standard Operating Procedures, or SOPs), and controls had to be created “from scratch”.
- 5.14 The SOPs are meant to ensure consistency between hubs. They cover topics such as scoping, contractor management, pricing, approvals, and variations to scopes of work. Fletcher Construction has also produced best trade-practice guides, including one for painting and decorating.
- 5.15 There have been, and there still are, inconsistencies in practice between repair hubs. We observed inconsistencies in practice across the repair files that we reviewed and from our discussions with hub staff. Inconsistencies create the potential for inequitable treatment of people, but they can also be a source of innovation.

- 5.16 As well as the set of SOPs, other systems, controls, and support functions have had to be created or enhanced to match the complexity, risks, and nature of the home-repair programme. These include:
- detailed risk-based data analysis;
 - fraud prevention and identification systems;
 - programme-specific surveys; and
 - complaints and mediation systems.
- 5.17 Mechanisms for detailed risk-based data analysis, integrated complaints management, mediation, and fraud prevention and identification, appropriate to the nature and scale of the home-repair programme, were finalised about one and a half years after the programme started. While these controls and support functions were not fully in place, there was a higher risk of programme weaknesses not being picked up and acted on.
- 5.18 EQC started regularly obtaining satisfaction feedback specific to the home-repair programme in February 2013.

Strengthening controls over the repair process

- 5.19 EQC's internal and contracted audit work and our annual financial audit work¹⁶ have identified the need for EQC to put in place further controls on aspects of its home-repair activities and to strengthen some of the controls already in place.
- 5.20 The overall state and effect of the evolving controls over the home-repair programme were summarised in a May 2012 internal audit report:
- Fundamentally both [EQC and Fletcher Construction] lack effective quality control of processes that validate that functions are being performed consistently throughout the managed repairs network. This impacts costs and also the customer experience through the process.*
- 5.21 The 2012 internal audit work also found "pockets of excellence" at every hub audited. These were practices that individuals in those hubs had put in place to create efficiencies, improve effectiveness, or enhance the control environment.
- 5.22 In May 2013, there was a follow-up to the 2012 internal audit. This showed that some progress had been made in addressing consistency matters, but there were still further improvements required.

¹⁶ The need to strengthen controls was noted in our Office's briefings to the Finance and Expenditure Committee about EQC, available at www.parliament.nz (in the Advice section, Committee documents).

Important tools and controls

- 5.23 Based on our analysis and observations during our audit work, we have identified potentially important tools and controls for managing a home-repair programme. These are described in Figure 16, including the reasons why they are important.

Figure 16
Tools and controls for managing a home-repair programme

Tools and controls	Why they are important
Mechanisms to identify and provide services to vulnerable people	These help to ensure that the people who need specialised or timelier assistance do receive it
Monitoring and governance arrangements that meaningfully cover the repair cost, project management cost, repair quantity, repair quality, timeliness, and safety dimensions of the programme	These help to manage the value-for-money aspects of a programme, recognising that what is considered value for money will vary by stakeholder and circumstances
Operational policies that translate legislation into practice without fettering an agency's discretion	These help staff to make difficult decisions fairly and give homeowners confidence that they are being managed in a manner consistent with people in like circumstances
Procedures for managing the repair process	These help to ensure consistency of repair processes throughout multiple locations and to avoid rework
Programme-level risk-management systems	Fraud and other risks need to be managed throughout the whole programme, especially when multiple organisations are involved
Programme-level systems for obtaining and managing homeowner feedback, including complaints	Homeowner feedback can be a useful mechanism for testing and improving the design and operation of a programme
Quality control and quality assurance mechanisms to reduce substandard repair work risks	These help to manage the major risk of substandard repair quality
Systems for communicating with clients and managing their claims	Certainty as early as is possible is important to enable homeowners to plan their lives

Risk management and internal audit

EQC has an understanding of the risks to the operation of the home-repair programme and has investigated some aspects of operation in detail through two internal audits. EQC has operated the programme with a high level of awareness of the risks to EQC.

- 5.24 An important finding of the May 2012 internal audit was a lack of effective independent review by EQC of Fletcher Construction's quantity surveyor cost approvals and of invoices for home-repair work. The 2013 follow-up internal audit found a lack of reconciliation of financial information between EQC's and Fletcher Construction's systems.
- 5.25 Both internal audits found a degree of inconsistency in practices between repair hubs.

Risk management

- 5.26 Although EQC has never operated a large repair programme, it has, over several years, identified risks associated with settling claims by repairing damaged houses. This includes lessons from the small home-repair programme it put in place after a 2003 earthquake in Fiordland.
- 5.27 In our view, these lessons and risks should be considered by the managers of any future repair programme. The risks with a large-scale repair programme, identified by EQC before 2010, include:
- conflicts of interest if the people who manage the repair project are also directly involved in repair work;
 - paying margins to project management providers that are outside of market conditions;
 - further damage occurring before repairs are paid for;
 - inadequate consideration of economic conditions in the area where the work is being done when assessing the cost of repairs;
 - repairs being made to damage that was not caused by the earthquake;
 - inadequate quality control or quality assurance checks of the repair work;
 - much repair work involving redecoration (a type of repair work with which there can be a high level of homeowner dissatisfaction); and
 - having a range of costly liabilities (for losses as a result of defective repairs and for obligations under the Health and Safety in Employment Act 1992, the Building Act 2004, and the Resource Management Act 1993).

Risks with the home-repair programme

- 5.28 EQC identified the main risks with the home-repair programme and has assessed the effect of those risks should they occur. We discuss how EQC has managed these risks elsewhere in this report. The main risks include:
- substandard repair work (see paragraphs 3.26-3.43);
 - failure to provide adequate safety arrangements (see paragraphs 3.44-3.58);
 - failure to manage contractor and staff well-being (EQC has identified a range of health and wellness activities to reduce this risk);
 - failure to retain the necessary people and skills (EQC uses standard organisational health practices to reduce this risk, which are outlined in its annual reports);
 - vulnerable people not being appropriately looked after (see paragraphs 3.79-3.82 and 3.86-3.97);
 - a lack of streamlined end-to-end repair processes (see paragraphs 5.12-5.23);
 - sub-optimal procurement of building materials (see paragraphs 6.18-6.26); and
 - failure to manage fraud and other forms of exploitation (see paragraphs 6.27-6.35).
- 5.29 EQC and Fletcher Construction have held joint home-repair programme risk-identification workshops from 4 November 2011. EQC began to analyse in detail the contractor and repair data to inform risk identification from about July 2012.

Key performance indicators

Performance metrics are sent to the PCG to help govern the home-repair programme. These metrics have evolved during the programme and were being reviewed when we were finalising this report. In our view, EQC's main measure of the home-repair programme's value for money is of limited use.

- 5.30 Some metrics reported to the PCG are not consistently reported (for example, the results of quality audits of completed repairs), some metrics have no targets in the reported material (for example, the number of houses to be repaired each month), and there is no comparative data reported for some metrics (for example, the number and types of complaints received).
- 5.31 EQC has set targets for finishing all repairs in the home-repair programme and for overall claims-handling costs as a percentage of total costs (this measure is wider than the home-repair programme).

- 5.32 “Value for money” metrics are identified in monthly reports to the PCG. These are percentage differences between:
- the "original budget" (the assessed damage) and the "adjusted budget" (the approved work scope); and
 - the "adjusted budget" (the approved work scope) and the final invoiced cost.
- 5.33 We commented in Part 3 on the reasons for variance between assessed damage and the approved work scope budgets. The reasons are a combination of matters outside EQC’s control, such as multiple earthquakes and hidden damage, and matters within EQC’s control, such as the quality of damage assessments.
- 5.34 Because of the range of matters contributing to percentage increases, including many outside of EQC’s control, EQC instead focuses on the increase in costs between the adjusted budget (the approved work scope) and the final invoiced cost as the main measure of its performance. So far, the cost increase is less than 2%.
- 5.35 In our view, this measure of the home-repair programme’s value for money is of limited use. It does not cover all the main elements of value for money in the circumstances, and EQC adjusts the approved scope of work as more information is made available. This means that large differences between the approved scope and the final cost are unlikely.
- 5.36 When we were finalising this report, EQC was reviewing the key performance indicators for the home-repair programme. We encourage EQC to also consider the relationship between the key performance indicators and the objectives of the home-repair programme.

Recommendation 3

We recommend that the Earthquake Commission continue to refine key performance indicators for the home-repair programme to consistently and meaningfully cover cost, time, quality, and safety, with targets where practicable.

Part 6

Efficiency of the home-repair programme

- 6.1 In this Part, we assess the efficiency of the home-repair programme. Efficiency refers to the extent to which resources are used in the best way.
- 6.2 If resources are not used in the best way, there will be waste, the cost of elements of the home-repair programme might be higher than necessary, and resources might be lost through inappropriate behaviour (such as fraud). If the programme is not managed efficiently, then it might not deliver repairs within the expected cost.
- 6.3 We look at:
- total costs;¹⁷
 - repair costs and risks; and
 - project management costs and risks.

Summary of our findings

- 6.4 **Repair costs** have been reasonable to date, but there are risks to that continuing. Repair-cost inflation has been at about the national inflation rate for construction, and less than in Canterbury generally. EQC has implemented controls to keep repair costs within market norms. Hourly labour rates have been kept static.
- 6.5 Keeping repair costs at a reasonable rate depends on EQC continuing to manage controls and systems well, staying ahead of the private insurance and central city repair and rebuild work, and completing the home-repair programme by the December 2014 deadline that EQC has set.
- 6.6 We have obtained indicative **project management costs** from various sources, including confidential information from several other organisations. The information suggests that project management costs (on average, about 12% of the cost of a repair) have been at the higher end of what we consider reasonable in the circumstances.
- 6.7 Achieving reasonable project management costs at the end of the home-repair programme depends heavily on EQC:
- completing the home-repair programme by December 2014;
 - managing the hub reconfiguration project effectively to deliver the expected benefits; and
 - continuing to control repair-cost inflation because Fletcher Construction receives a fixed proportion of repair costs as a fee.
- 6.8 EQC's initial controls for fraud prevention and investigation and conflicts of interests were not appropriate to the scale and nature of the home-repair

¹⁷ EQC provided the actual and projected cost information used in this report. We have not independently verified the information, but we do carry out annual audits of EQC's financial statements.

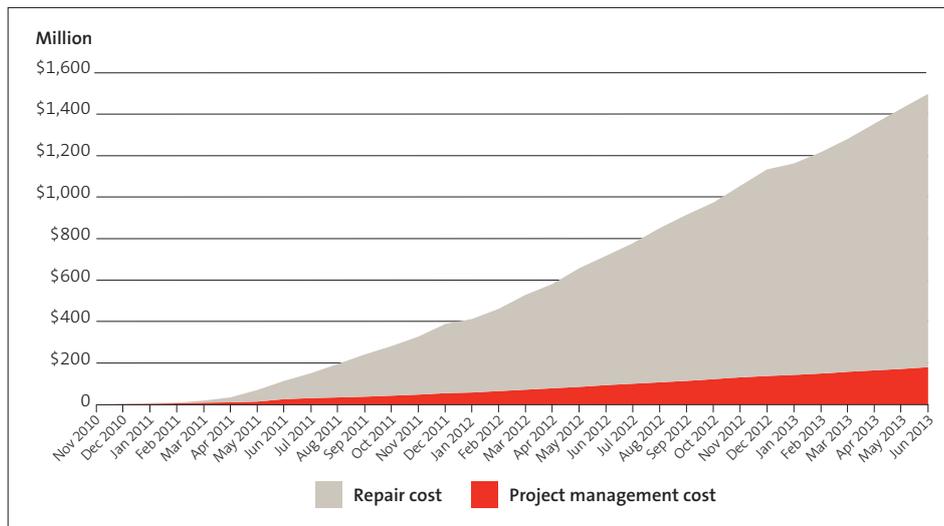
programme. EQC has sought professional advice about fraud risks and used this advice to inform its work. It has also increased the number of staff working on fraud controls, and improved its controls for conflicts of interests.

Total cost

The total cost of the home-repair programme to June 2013 was about \$1.5 billion. We estimate that the overall cost of the home-repair programme will be between \$2.5 and \$3.1 billion.

- 6.9 To 30 June 2013, the total cost of the home-repair programme was about \$1.5 billion. This is made up of \$1.3 billion in repair costs (including the home-heating and emergency-repair initiatives) and \$180 million in project management costs.
- 6.10 Figure 17 shows the cumulative monthly cost of the home-repair programme to June 2013. The proportion of the total cost made up by repair costs and by project management costs is also shown.

Figure 17
Cumulative costs by month, November 2010 to June 2013



Note: Our analysis, based on information provided by EQC.

- 6.11 We have analysed information provided by EQC and Fletcher Construction using various scenarios to estimate how much the home-repair programme will cost once it is completed. At this stage, we estimate that the total cost of the programme will be between \$2.5 billion and \$3.1 billion, and project management costs will be around 10%-12.5% of the total.

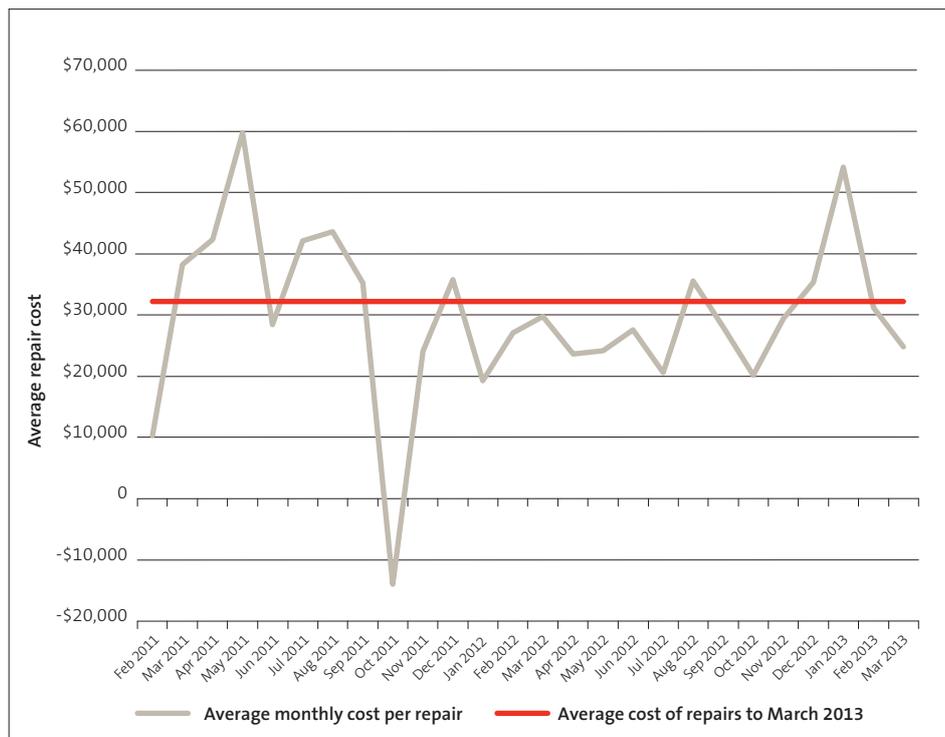
- 6.12 It is difficult to provide a more precise estimate of the total programme costs because of the sensitivity of costs to the assumptions we have made. In particular, the estimate is sensitive to assumptions about:
- inflation in the cost of repairs;
 - the scale of the average repair;
 - the effect of EQC's decision to complete the home-repair programme at the end of 2014 instead of the end of 2015; and
 - gaining the financial benefits expected from reconfiguring the repair hubs.
- 6.13 It is critical that EQC manages its hub reconfiguration project effectively to deliver the expected benefits, including financial benefits, and continues to be successful in controlling repair-cost inflation. If EQC does not achieve these, there is a risk to the efficiency of the programme and, in particular, a risk that the final project management costs will be at the upper range of what might be reasonable in the circumstances.

Repair costs

Repair costs have been reasonable to date. Keeping repair costs at a reasonable rate depends on EQC continuing to use controls well, staying ahead of the private insurance and central city repair and rebuild work, and completing the home-repair programme by the December 2014 deadline that EQC has set.

- 6.14 To date, \$1.3 billion has been spent on repair costs in the home-repair programme. This figure includes the cost of the home-heating and emergency-repair initiatives but excludes project management costs paid to Fletcher Construction.
- 6.15 Figure 18 shows the average cost to repair a house in the home-repair programme, by month. The average cost has fluctuated between \$10,000 and \$60,000 for each house, but has been between \$20,000 and \$30,000 in many months.

Figure 18
Average cost to repair a house in the home-repair programme, by month, February 2011 to March 2013



Notes: This is our analysis, based on information provided by EQC. The costs shown reflect “substantive works (core repair work outside of emergency works and clean heat)”. EQC’s information includes a negative value for October 2011. EQC told us that this is because of a “re-classification” of repair costs with the introduction of an “urgent” category. In effect, the negative expenditure is a credit to the “substantive works” category for costs incurred in that category, up to that point, that were not “substantive works”.

- 6.16 Based on EQC’s 2012/13 business plan, by the end of the home-repair programme, Fletcher Construction projects that the average cost of a house repair (excluding project management) will be about \$31,000. Based on this average, the total cost of the remaining repairs in the programme (excluding project management) is projected to be about \$1.2 billion. This will bring the total projected repair costs to about \$2.5 billion.
- 6.17 However, this cost depends, in part, on actual repair-cost inflation, the effect of this on the average cost of a repair, the rate of homeowners opting out (that is, choosing to organise their own repairs), and the rate of repair jobs exceeding the \$100,000 cap during repairs. When all these factors are taken into account, we estimate that the total cost of repairs in the home-repair programme will be between \$2.2 and \$2.7 billion.

Risks to the cost of repairs

Risks of inflation in the cost of repairs

- 6.18 Repairs are costed in units that combine the costs of materials and labour needed to complete a specific type of repair – for example, a unit cost for painting a square metre of an internal wall. Fletcher Construction provided us with information indicating that, based on its regular sampling of completed repairs, between 60% and 70% of the repair unit costs are labour costs. The hourly labour rate assumed in the home-repair programme has remained unchanged.
- 6.19 The approach EQC is taking to containing repair-cost inflation runs the risk of repair work being priced at the rates ceiling price, rather than being up to a rates ceiling price. This is because each time a contractor bids for a job they have, in effect, the opportunity to test the ceiling rate. Some contractors are bidding on large numbers of jobs throughout multiple repair hubs. For example, about 300 accredited contractors are responsible for 85% of the completed home-repair work to date. We spoke with hub staff who were clear that some contractors had a good understanding of the rate ceiling prices, and information about the labour costs assumed in the rates ceiling prices has been in the public arena.
- 6.20 Generally speaking, for each repair job, only one accredited contractor is asked to quote for the work. Potentially higher costs because of only one quote are a trade-off in the circumstances. The risks of higher quotes will, to some extent, be ameliorated by the rates ceiling approach.
- 6.21 If a contractors' quote exceeds the rates ceiling price, a quantity surveyor is expected to examine the nature of the repair work required for anything that might not be factored into the rates ceiling price. If the nature of the repair work does not justify pricing above the rates ceiling, there is an expectation that a quote will be obtained from another contractor.
- 6.22 The rates ceiling arrangements appear to have been operating for a long period without a structured process for regular review. When we drafted this report, EQC was setting up a regular quarterly review mechanism for rates ceiling changes. The mechanism is intended to include external professional review of rates ceiling changes against current market rates.
- 6.23 EQC has done some modelling of rates ceiling changes by examining changes in the cost of a "basket" of repair units required for the "typical" repair. The results of EQC's modelling indicate about a 6% increase in the cost of a "typical" repair between the first earthquake and April 2013. This is consistent with the change in Statistics New Zealand's price index for the construction of dwellings during a similar period.

- 6.24 EQC indicated that some of the reasons for increases in rates ceiling schedule costs include:
- new building code requirements requiring stronger brick work; and
 - more time being added to some repair units involving sanding and preparation of services for painting.

The supply of building materials

- 6.25 Bulk supply contracts are in place for plasterboard (and associated fasteners, adhesives, and joining compounds) and paint. In mid-February 2013, the PCG was advised that the paint supply agreement had failed because of “non-compliance from the painters”. Subsequently, Fletcher Construction has indicated that the paint supply agreement has resulted in a small discount for the contractor at the point of purchase.
- 6.26 EQC’s work with MBIE on bulk procurement should continue. MBIE is working with public entities in Canterbury on bulk procurement matters.

Fraud risks

- 6.27 During 2012 and 2013, EQC increased the size of its team (from 10 people to 19 people) that scrutinises claims for fraudulent behaviour. This is the Claims Review Team. The Claims Review Team has commissioned and received advice on the inappropriate behaviour risks it needs to identify and manage. The Claims Review Team plans to focus on contractor and contract supervisor risks in the home-repair programme in 2013. The Claims Review Team’s work covers all aspects of EQC’s work, not just the home-repair programme.
- 6.28 Fletcher Construction also has fraud investigative capacity within the home-repair programme. EQC’s internal audit work has identified the need for better integration of fraud reporting, recording, and investigation between Fletcher Construction and EQC. A joint fraud strategy is planned.
- 6.29 EQC has identified a number of inappropriate behaviours that could potentially occur in the home-repair programme. These include:
- claiming for repair work that was not earthquake related;
 - claiming for repair work that includes improvements not required to return a house to the state it was in before the earthquakes;
 - invoicing for repair work that has not been completed or carried out;
 - creating or altering invoices to contain false information;
 - creating or altering engineering reports to contain false information;
 - inflating invoices;
 - using inappropriately obtained information to inform quotes;

- invoicing for material or items not used in a repair; and
- charging more than once for the same work.

We saw an example of an alleged invoicing fraud during our visits to repair hubs.

- 6.30 The most common types of fraud that we have identified in the public sector¹⁸ are:
- theft of cash;
 - theft of plant, equipment, or inventory;
 - fraudulent expense claims;
 - payroll fraud; and
 - false invoicing.
- 6.31 Fraudulent claims and false invoicing feature in the types of potentially inappropriate behaviour that EQC has identified could occur in the home-repair programme. This is consistent with the types of fraud that have occurred in public entities.
- 6.32 EQC has noted that, in all of its insurance work, including the home-repair programme (as at 23 May 2013):
- it has investigated about 900 instances of suspected fraud;
 - 21 have been referred to the Police, and five of these have resulted in convictions;
 - individual instances of fraud detected within the home-repair programme range from \$5,000 to about \$150,000 in value; and
 - the Claims Review Team's work has saved more than \$5.5 million.
- 6.33 We support EQC continuing to work with other public entities on how to further reduce the risks of fraud and other inappropriate behaviour.
- Conflicts of interest risks**
- 6.34 EQC has clear expectations about declaring conflicts of interest, and the expectations are outlined in a policy for its staff. This policy and the associated disclosure form were updated in March 2013. Before the update, there was a greater risk that EQC's staff within the home-repair programme did not consider or declare non-financial conflicts of interest and perceived conflicts of interest. The updated policy and form have made it clearer that these matters should be considered as conflicts of interest and are required to be declared.
- 6.35 Internal audit work within the home-repair programme has identified the need for improved conflict of interest management throughout the whole programme, covering both Fletcher Construction and EQC staff within the home-repair

¹⁸ See *Fraud awareness, prevention, and detection in the public sector*, available at our website: www.oag.govt.nz.

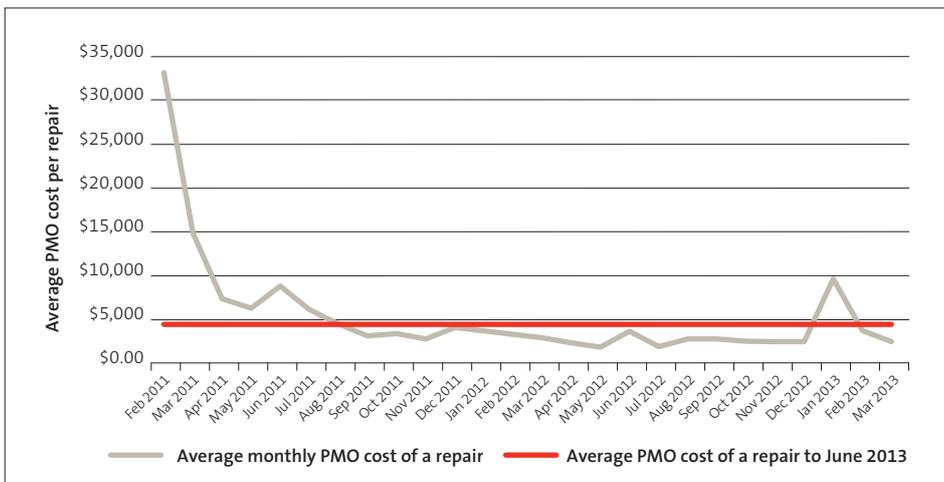
programme. The internal audit work also found that the recommendations to address this matter have been carried out.

Project management costs and risks

Our analysis suggests that project management costs (on average, about 12% of the cost of a repair) have been at the higher end of what we consider reasonable in the circumstances. Achieving reasonable project management costs at the end of the home-repair programme depends heavily on EQC completing the home-repair programme by December 2014, managing the hub reconfiguration project effectively to deliver the expected benefits, and continuing to control repair-cost inflation.

- 6.36 In total, \$180 million had been spent on project management costs to the end of June 2013.
- 6.37 Average project management costs have been about \$4,500 for each repaired house in the home-repair programme to June 2013. Figure 19 shows the average project management costs in the programme by month. Those costs have been higher during the early stages of the programme because of set-up costs.

Figure 19
Average project management costs for a repaired home by month, February 2011 to March 2013

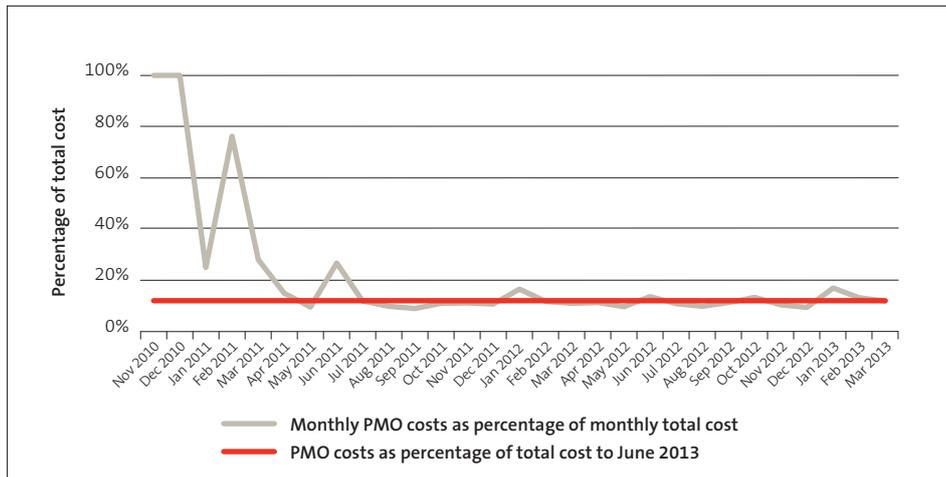


Notes: Our analysis is based on information provided by EQC. We have excluded the early months of the home-repair programme from the figure because of the effect of set-up costs. The spike in average cost in January 2013 was because of the effect of the holiday period, when fewer repairs were completed.

- 6.38 The project management costs we describe in this report are covered by EQC's contract with Fletcher Construction. They include the cost of Fletcher Construction's staff, buildings and equipment, and a margin on the cost of repairs.
- 6.39 The project management costs exclude the staff employed by EQC to administer and manage the home-repair programme contract, including the overall programme manager and the EQC staff located in repair hubs. Those staff are included in the costs of the Canterbury Home Repair Programme Business Unit within EQC's Customer Services Group. At 30 June 2013, about \$20 million has been spent on the Canterbury Home Repair Programme Business Unit.
- 6.40 EQC followed a sound process in the circumstances to procure project management services for the home-repair programme. It acted quickly in setting up the home-repair programme and the project management services contract. These were done in circumstances that involved many uncertainties and additional earthquakes.
- 6.41 The final contract is a "cost-plus" contract, which means that Fletcher Construction recovers the actual costs it incurs in providing the project management services, and a fee linked to the value of repair work completed. The fee is a 3.5% margin on the value of the completed repair work.
- 6.42 There is no directly comparable information available about the market cost of project management services for a home-repair programme. We have obtained a number of indicators of project management costs from various sources:
- the professional assessment of the cost of project management services in the two short-listed bids received by EQC;
 - the actual project management costs in the programme compared to those anticipated in the successful bid, noting that assumptions were made at the time of the bid that have proved to be invalid because of multiple earthquakes;
 - professional advice to an insurer assessing the market price for project management services (we have agreed to maintain the confidentiality of this information);
 - the actual project management costs being paid by an insurer involved in the recovery (we have agreed to maintain the confidentiality of this information);
 - the actual margins paid by an entity on a range of construction jobs (we have agreed to maintain the confidentiality of this information);
 - independent advice provided to EQC on aspects of project management costs for different types of building projects; and
 - a reinsurer's report about EQC's claims-handling costs (we have agreed to maintain the confidentiality of this information).

- 6.43 We have compared the most relevant information from each of these indicators with the equivalent aspects of actual project management costs in the home-repair programme. The comparisons do not provide a definitive view on the appropriateness of the project management costs, but they do provide indicative information.
- 6.44 On average, project management costs have decreased during the home-repair programme as a proportion of the total cost of repairing a house. To June 2013, project management costs were, on average, about 12% of the total cost (project management and repair costs combined) of repairing a house in the programme. The percentage continues to fluctuate by month (see Figure 20).

Figure 20
Project management costs as a proportion of the total cost for a repaired home, by month, November 2010 to March 2013



Note: Our analysis based on information provided by EQC.

- 6.45 We estimate that total project management costs for the home-repair programme will be between \$288 million and \$333 million. This equates to an estimated average project management cost for each repaired house of between \$3,900 and \$4,500.

Risks to project management costs

Risks of using a single provider of project management services

- 6.46 EQC could have contracted with more than one project management provider to contain project management cost risks. EQC's RFP for project management services envisaged the possibility of multiple providers of those services. This has not happened because EQC decided that having more than one provider would have higher transaction costs for EQC and would also involve providers competing against each other for tradespeople and building materials. Given the circumstances, we understand this approach.
- 6.47 To mitigate against the risk of paying the provider of project management services for poor performance, because of the "cost-plus" nature of the contract for those services, there are arrangements in the contract that give EQC complete control of whether or not it refers repair work to Fletcher Construction. If it chose to, EQC could allocate work to an alternative provider.
- 6.48 EQC was revisiting the repair hub structure and configuration when we were drafting this report. EQC's stated goals of the hub rationalisation are to:
- enhance claimant and contractor experience;
 - provide a platform for improving efficiency and consistency; and
 - improve communication throughout the hub network.
- 6.49 In our view, EQC needs to maintain ongoing scrutiny of the scale, configuration, type, and cost of project management services in the home-repair programme. This includes taking any opportunities that arise as the project progresses to use additional relevant information to inform decisions about project management costs.

Risks of conflicts of interest

- 6.50 There are some conflict of interest risks inherent in the design of the home-repair programme. These are with the role of quantity surveyors working for Fletcher Construction and the role of Fletcher Construction more generally.
- 6.51 There is limited independent review of Fletcher Construction's quantity surveyor assessments of proposed repair strategies or sign-offs of repair quotes. There is a risk that inflated prices could be paid for repair work through quantity surveyors accepting higher cost quotes or altering the EQC reserve amount against which invoices are compared before being paid. These risks are, to some extent, ameliorated by the price ceiling approach used in the programme.

- 6.52 The contract between EQC and Fletcher Construction requires Fletcher Construction to use “reasonable endeavours” to ensure that conflicts of interest do not arise with its project management role. A clear conflict of interest would arise if Fletcher Construction was, for example, carrying out some of the repairs.
- 6.53 The project management contract does not prohibit Fletcher Construction from carrying out repair work. It requires both EQC and Fletcher Construction to agree that contractor capacity constraints are “unduly limiting the rate of reinstatement” before the possibility of Fletcher Construction carrying out repair work can be contemplated. This had not been necessary at the time we published this report.
- 6.54 This appears to be a pragmatic way of balancing the potential conflict of interest risks with a possible solution to a capacity problem if one arises in the circumstances. Stringent cost protections would need to be included if Fletcher Construction were to directly carry out repair work.

Part 7

Lessons from the home-repair programme

- 7.1 In this Part, we set out our conclusions on what has been learned from operating a home-repair programme in Canterbury. We discuss:
- a need for ongoing improvement;
 - the importance of preparing for the future; and
 - our intention to follow up on EQC's progress.

Summary of our findings

- 7.2 EQC has subjected itself to scrutiny and review through internal audit and commissioned review work. This scrutiny and ongoing improvement needs to continue.
- 7.3 As a priority, EQC needs to continue work to give homeowners more certainty, improve consistency of practice, and support repairs to the required quality.
- 7.4 Repairs in the home-repair programme started ahead of most rebuilding work in Christchurch's central city and ahead of most rebuilding work that is the responsibility of private insurers. This has been helpful for managing repair-cost inflation. It means that repairs have been completed before the demand for building materials and tradespeople has significantly escalated.
- 7.5 EQC needs to identify and preserve any lessons, tools, and information from managing the home-repair programme that might be useful in responding to future disasters.

Ongoing improvement

EQC has been committed to improving how it manages the home-repair programme and has acted on the findings of various reviews and audit work. Ongoing improvement work needs to continue.

- 7.6 EQC has prepared and put in place a sensible internal audit work programme, acted on the findings of our financial audit work, and responded to the findings of various reviews it commissioned on aspects of its operation. Although EQC has not fully carried out all of the recommendations of its internal audit work, progress with these recommendations is regularly tracked and reported, and the recommendations are being prioritised.
- 7.7 The recovery environment in Canterbury is continuing to evolve. EQC needs to continue to assess and amend aspects of the home-repair programme to ensure that it is appropriate as the environment changes. Actions that give homeowners more certainty, improve consistency of practices, and support repairs to the required quality should remain high priorities.

- 7.8 The timing of repair work in the home-repair programme to date has been before the Christchurch central city and private insurer rebuild activity has substantially escalated. This has been helpful for managing repair-cost inflation. It means that repairs have been completed before the demand for building materials and tradespeople has escalated, which could make it harder and more expensive to find building materials and tradespeople. EQC's decision to complete the home-repair programme by the end of 2014 should also mean that the remaining repairs are completed before the peak of rebuild activity is reached.
- 7.9 When we finalised this report, EQC was in the process of reviewing and/or changing important aspects of the home-repair programme, including governance arrangements, key performance indicators, and repair hub structures and locations. The hub reconfiguration is intended to support greater consistency of practice within the home-repair programme. It is important that EQC continues these review and improvement activities.

Recommendation 4

We recommend that the Earthquake Commission continue to review and, if necessary, adjust the configuration of repair and project management services in the home-repair programme to deliver the best value and results in the circumstances and treat homeowners fairly and consistently.

Preparing for the future

The lessons, tools, and information from the home-repair programme that could usefully contribute to responses to future large-scale natural disasters need to be identified and preserved.

- 7.10 All public entities need to use a mix of preventative actions and tactical, strategic, and operational responses to prepare for, and respond to, unlikely but catastrophic events.
- 7.11 The right mix of types of response to a catastrophic event depends on the circumstances and will change as the circumstances change.
- 7.12 Although the decision to have a home-repair programme was clearly a strategic decision, EQC's operation of the programme has been largely reactive, in part because of changing circumstances beyond EQC's control.
- 7.13 Because of EQC's "standing start", policies, procedures, processes, and systems for a home-repair programme had to be developed and modified as the programme evolved.

- 7.14 It is important that EQC does not lose any home-repair programme lessons, tools, and information that are useful for the future. When we were performing our audit, the Act was being reviewed. In our view, identifying and preserving the home-repair programme lessons, tools, and information for future disasters would be prudent, regardless of whether there are changes to EQC's functions as a result of that review.
- 7.15 We acknowledge that EQC identified in its December 2011 briefing to the responsible Minister that the "lessons on the balance between maintaining flexibility and having detailed plans in place, coordination challenges, and the trade-offs necessary in a recovery need to be collated and analysed". We support this analysis being performed.

Recommendation 5

We recommend that the Earthquake Commission identify and record the lessons, tools, and information from the home-repair programme that could usefully support responses to future large-scale natural disasters.

Following up on the Earthquake Commission's progress

- 7.16 Our Office will carry out follow-up work to track the progress made by EQC with the recommendations in this report, following the expected completion of the home-repair programme by the end of 2014. Our follow-up work will include a review of the final programme costs. In our view, follow-up work is necessary, given the need for ongoing improvement in the home-repair programme, and because the appropriateness of the final programme costs depends on EQC making changes to the home-repair programme.

Appendix 1

Steps in the home-repair process

This Appendix describes the steps in the home-repair process.

Assessing damage to houses

After a homeowner submits a claim for earthquake damage, the Earthquake Commission (EQC) first checks that the home is insured and covered for natural disaster damage under the Earthquake Commission Act 1993 (the Act).

EQC then assesses the damage to the house. Because of the many earthquakes in Canterbury, it is likely that there will have been multiple assessments of the damage done to the house.

The technology used by EQC to support the assessment process has changed during the home-repair programme. Paper forms were used after the 4 September 2010 earthquake, and iPad technology was progressively used for assessments after March 2011.

Assessing damage to land

Land damage caused by the Canterbury earthquakes complicates the repair or replacement of damaged foundations for some homes. This is because some damaged houses are on land assessed as TC3.¹⁹

The Ministry of Business, Innovation and Employment (MBIE) issued interim technical guidance on foundations for houses on TC3 land in April 2012, with an updated version released in December 2012.

To ensure that foundations are repaired or replaced using designs best suited to how TC3 land is expected to react in any earthquakes, EQC has been investigating soil conditions by drilling deep into the ground around or near residential properties.

EQC completed the drilling work on 21 December 2012. The information gathered will be analysed by geotechnical and structural engineers to design an appropriate foundation for each earthquake-damaged home in a TC3 area. After this work has been done, and if the earthquake damage is still under the EQC cap (\$100,000 of damage), the claim will be transferred to Fletcher Construction for repair. EQC has to go through this process for about 10,500 homes before the foundations can be repaired or replaced.

The work EQC is doing to identify the soil conditions in TC3 land for foundation design purposes is different to the work it is doing to assess land damage. Land damage is not part of the home-repair programme.

¹⁹ TC3 is land that is likely to be significantly affected by liquefaction and lateral movement in an earthquake.

The land claim for a home does not need to be settled before repairs start on a home. This is because damaged foundations, and any work necessary to fix the foundations, are considered part of the claim for the home.

Reinstatement of EQC cover

In 2011, EQC and the Insurance Council of New Zealand²⁰ applied to the High Court for a declaratory judgment on when the \$100,000 EQC cap is reinstated after a natural disaster.

In September 2011, the High Court ruled that EQC cover is restored after each natural disaster classed as an event:²¹

Neither the occurrence of, nor the making of a claim for, an event of natural disaster damage reduces the amount of cover available for a subsequent event of natural disaster damage ...

This meant that for any natural disaster big enough for EQC to class as an event, EQC is liable for the first \$100,000 worth of damage.

If possible, EQC uses information from house damage assessments after an event. When a current assessment from an event is unavailable, EQC uses other sources of information to estimate the damage from each event. This process, called apportionment, involves determining how much damage each event caused.

EQC refers all claims to the homeowner's private insurance company if the apportionment process shows that the cost of repairing damage to the house will be more than the cap for any one event.

If the apportionment process shows that the cost of repairing damage to the house will be less than the cap for each relevant event, the house is repaired as part of the home-repair programme – unless homeowners opt out of the programme.

Opting out

To opt out, the homeowner needs to fill out a form agreeing to be responsible for managing all aspects of the repairs to their property.

After receiving the form, EQC will contact the homeowner to arrange a meeting with the homeowner and their contractor. This is to agree on the scope of the repairs to be covered by EQC.

20 The Insurance Council of New Zealand represents 27 insurance companies that collectively hold 95% of all fire and general insurance policies in New Zealand. The Insurance Council of New Zealand's website is www.icnz.org.nz.

21 *Re Earthquake Commission* [2011] 3 NZLR 695 (HC) at [18].

The homeowner arranges for the contractor to prepare a quote based on the agreed scope of work and sends the quote to EQC. EQC will then send a “Confirmation to Proceed” letter. This enables the homeowner to tell the contractor to start the repairs.

If a homeowner opts out of the home-repair programme, they are responsible for paying the contractor for the repairs. This may involve the homeowner paying the contractor for the repairs before the homeowner has received money for the repair from EQC. EQC will pay only for repairs that it has assessed as necessary and that fall within the requirements of the Act.

The latest stage that a homeowner can opt out is when Fletcher Construction is arranging to scope the work. When we were finalising this report, about 6350 homeowners had opted out of the home-repair programme.

Allocation of a claim to Fletcher Construction

If the claims for earthquake damage to the house are close to the EQC cap, the claims go through the apportionment process. The outcome of the apportionment process decides whether the repair will be managed by EQC or a private insurer. If the damage to a house is expected to cost between \$15,000 and \$100,000 for each event, EQC transfers a claim to Fletcher Construction for settlement through repair.

Allocation of a claim to a hub

EQC sends claims that are within the scope of the home-repair programme to Fletcher Construction. Fletcher Construction checks the claim against criteria to ensure accuracy and that settlement of the claim should be through the home-repair programme. The location of the house generally determines which hub will manage the repair. Fletcher Construction transfers the claim to the hub when the hub can accommodate the work.

“Welcome Pack” issued to homeowner

Before repairs begin on a house, Fletcher Construction sends a “Welcome Pack” to the homeowner. This pack includes information on the home-repair process and a commencement form. The commencement form needs to be signed and returned by the homeowner. By signing, the homeowner confirms that they understand the repair process and their obligations.

Appointment of a contract supervisor and contractor

The hub assigns the claim to a hub-based Fletcher Construction contracts supervisor (the contracts supervisor) and the contractor who will be doing the repair. The hub decides which contractor will do the repair based on the workload and work rate of the contractor. Usually, a given contract supervisor is responsible for managing the repairs done by a given contractor for a given hub.

The homeowner can choose a contractor to do the repair when Fletcher Construction is arranging to start the work. Fletcher Construction must have accredited the contractor (see Figure 21) for the contractor to be able to do the repair as part of the home-repair programme.

Figure 21 Fletcher Construction's process for accrediting contractors

Fletcher Construction runs a contractor accreditation process. A contractor has to be accredited before doing any repairs for the Canterbury Home Repair Programme. This accreditation process involves:

- reviewing the application form from a potential contractor;
- reviewing and evaluating the contractor's safety policy and health and safety plan; and
- an interview between Fletcher Construction and the contractor.

There is also a review of the competence of the contractor to do the repairs. To determine the competence of a contractor, Fletcher Construction looks at the qualifications of the contractor, their capabilities, experience, company stability, and references.

The aim of the accreditation process is to ensure the use of qualified and experienced tradespeople to uphold professional standards in the home-repair programme. At the time of our audit, more than 1200 contracting firms had been accredited.

Scope checked by visiting property

After assigning the contractor, contractor supervisor, and hub-based EQC representative to a claim, the hub organises a meeting (called joint scoping) between the homeowner and these three people. This joint scoping meeting confirms the damage caused by earthquakes and the strategy to repair the damage to the house. The meeting will also discuss other matters, such as whether the homeowner needs to move out during the repairs.

Homeowners can request a copy of the scope of works and any subsequent changes to the scope. EQC will not include costs in the information provided.

Joint scoping has been done since June 2012 in a pilot project and has been progressively implemented by all hubs. Previously, the contract supervisor and hub-based EQC representative would separately visit an earthquake-damaged home.

The feedback we received from both EQC and Fletcher Construction was that the joint scoping process was positive and successful.

Internal audit work within the home-repair programme has identified that, in November 2012, there was variation in the implementation of joint scoping of work in hubs from 10% of work to 95% of work. EQC told us that joint scoping is only one of the options available to repair hubs to validate scope and variations, and it is up to hubs to determine their own strategies on when to jointly scope work.

It was clear from our visits to hubs that there was considerable variation in the extent to which all work was jointly scoped.

The contractor uses the decisions made at the joint scoping meeting to provide a quote to Fletcher Construction. A hub-based Fletcher Construction quantity surveyor checks the quote against prices in a rates ceiling schedule (see Figure 22). If it is under the rates ceiling schedule, the quantity surveyor sends the quote to the hub-based EQC representative for approval to issue a work order.

Figure 22
About the rates ceiling schedule

EQC and Fletcher Construction use the rates ceiling schedule to control the cost of repairing homes. It contains information on the amount that EQC is willing to pay for each type of repair.

By using information from contractor quotes, trends noticed by quantity surveyors, and EQC representatives, Fletcher Construction and EQC keep the rates ceiling schedule up to date with changes in the Canterbury marketplace.

The rates ceiling schedule is to be reviewed and updated at least quarterly.

If the quote is higher than the rates in the rates ceiling schedule, the quantity surveyor communicates with the contractor to reduce the cost. If unsuccessful, the quantity surveyor gets a second quote from a different contractor. Sometimes, a repair cannot be done under the price in the rates ceiling schedule. In those instances, the hub-based EQC representative needs to approve the repair (they carry out their own check on whether the quote is fair and reasonable).

Before the contractor begins to repair the home, the contractor has to submit a site-specific health and safety plan and a programme of work for approval from the contract supervisor.

Construction phase

The contract supervisor is responsible for managing the relationship with contractors, checking the contractors' performance, and managing the relationship with homeowners. During the repair, the homeowner can contact the contract supervisor with any questions or matters to raise.

The contract supervisor checks the progress of the repair, visits the site at least once, and ensures that the contractor is following the health and safety plan. If the contract supervisor identifies any matters, they follow them up with the contractor. Figure 23 describes the process for monitoring the performance of contractors further.

Figure 23 Monitoring the performance of contractors

Fletcher Construction monitors the performance of contractors. The hub-based contract supervisors are expected to complete a review of each contractor's performance every six months. There are regular meetings between hub staff and the contractors who work for each hub.

Fletcher Construction operates a "three strikes and you are out" policy. If a performance matter arises, there is a meeting with the contractor to resolve the matter, and Fletcher Construction issues a performance improvement notice. When a contractor has a series of performance matters that cannot be resolved, Fletcher Construction initiates the "three strikes" procedure. A written warning is given first, a final written warning second, and then a notice of dismissal leading to de-accreditation. Performance matters include poor quality of work and breaches of Fletcher Construction's guidelines, procedures, and rules.

The six-monthly performance review criteria include homeowner satisfaction, safety management, management and supervision, quality of work, and competency of staff.

A variation to the scope of the repairs occurs when a contractor discovers more earthquake damage while repairing a home. For example, a contractor might lift the carpet and see more earthquake damage. The contractor submits a variation request after discovering and describing the extra damage. The supervisor then checks the variation request.

After the contract supervisor has checked the variation, the contractor submits a quote to repair the extra damage. A quantity surveyor then checks the quote against the rates ceiling schedule. This is then approved by the hub-based EQC representative, after they have either viewed the damage or viewed photographs of the damage. The approved variation is issued to the contractor.

The repair cost sometimes goes over the EQC cap during repairs. When this happens, the repairs stop until EQC gains approval from the homeowner's private insurance company for the repairs to continue. EQC and the private insurance company split the cost according to their liability.

Completion

When the contractor has completed the work, they notify Fletcher Construction. The contract supervisor arranges for an inspection of the repair with the contractor and homeowner present. If the inspection identifies any work that is incomplete, the contractor will rectify the work.

Once the repair has been verified as complete, the contractor receives a practical completion certificate from Fletcher Construction. The practical completion certificate confirms that the contractor has completed the repair to the standard required by Fletcher Construction.

After Fletcher Construction has issued the practical completion certificate, there is a check by the quantity surveyor of the invoice from the contractor and then payment is approved minus any retention (usually 5-10% of the repair cost). Part of the payment is retained to ensure that there is money available to cover any further repairs that might be necessary if there are defects in the work.

90-day defect liability period

A 90-day defect liability period starts after Fletcher Construction issues the practical completion certificate. During this time, if the homeowner finds any repair to be substandard, Fletcher Construction will verify it. If Fletcher Construction agrees, it will arrange for remedial work.

After the 90-day defect liability period has passed, the money retained is paid to the contractor and EQC will consider the homeowner's claim/s settled.

All claims lodged with EQC are subject to an excess. EQC calculates the excess at the end of the home-repair process and sends an invoice to the homeowner. The excess is either \$200 or 1% of the cost of the repair, whichever is greater.

In April 2012, the Governor-General signed an Order in Council that made it clear that EQC could invoice homeowners to collect the excess. The Order in Council also suspended the requirement to settle claims within one year if EQC is settling the claim through repair. The Order in Council applies retrospectively from 4 September 2011.

Appendix 2

Preparations before the Canterbury earthquakes

Preparedness expectations of the Earthquake Commission

At the time of the first Canterbury earthquake on 4 September 2010, there were no specific legislative or Ministerial expectations about the scale of event the Earthquake Commission (EQC) was to be prepared for. The Government had not indicated which of the range of responses available under the Earthquake Commission Act 1993 (the Act) were preferred.

Legislation

EQC is a Crown entity. Its functions, as described in section 5 of the Act, are:

- (a) to administer the insurance against natural disaster damage provided under this Act:*
- (b) to collect premiums payable for the insurance provided under this Act:*
- (c) to administer the Fund [the Natural Disaster Fund] and, so far as is reasonably practicable, protect its value, including by the investment of money held in the Fund:*
- (d) to obtain reinsurance in respect of the whole or part of the insurance provided under this Act:*
- (e) to facilitate research and education about matters relevant to natural disaster damage, methods of reducing or preventing natural disaster damage, and the insurance provided under this Act:*
- (f) such other functions as may be conferred on it by—*
 - (i) this Act or any other Act; or*
 - (ii) the Minister, in accordance with section 112 of the Crown Entities Act 2004.*

Settling claims is a part of EQC's insurance administration function. The Act enables EQC to settle insurance claims for natural disaster damage to houses in a number of ways:

- by cash settlement;
- through replacement of a house;
- through reinstatement of a house – that is, through repairs to return a house to its state before the natural disaster; and
- by relocating and then reinstating a house.

The Act also states that EQC “shall not be bound to replace or reinstate exactly or completely, but only as circumstances permit and in a reasonably sufficient manner.”

EQC considers that its first settlement option under the Act is to consider a cash payment. The advantages of cash settlement are administrative simplicity and the potential for minimising EQC's costs and liability. Cash settlement also has a number of social and economic risks, the extent of which depends on the scale of an event. The risks include:

- pushing up the cost of repairs by flooding a market with money;
- the order of repairs being determined by people's ability to pay regardless of need;
- settlement money being used for purposes other than repairing damage, and in the extreme case leading to a risk of depopulation and degradation of the housing stock; and
- EQC being perceived to be "walking away" from a difficult situation.

For example, after the 2007 Gisborne earthquake, there was some concern that:

... claims settlements in cash were being spent other than on repairing the damage they were compensating for, leaving some homes in an unsafe condition or prone to further damage (or a repeat claim for the same damage after the next earthquake).

Overall, EQC has the discretion to decide which settlement method it uses in a given situation.

Internal policy

EQC has determined a claims settlement policy that gives it the flexibility to adopt any settlement method specified in the Act. The policy, adopted by EQC's Board in 2004, states:

EQC would prefer to settle claims by paying the amount of the damage. This may be by way of settlement being made direct to repairers at the discretion of the claimant.

EQC will elect to settle claims by repair, replacement or reinstatement, or by relocation, if good reason exists to do so. The claimant's wishes will be taken into account.

An election to repair, etc, must be recorded on the file along with reasons and any steps taken to limit EQC's liability, for example, the agreement of the "top up" insurer to bear costs that exceed EQC's maximum sums insured or the wording of a building contract for which EQC is the principal.

Ministerial and government expectations

Respective Governments have treated EQC as a Crown Financial Institution (CFI). This is because EQC administers a large fund (the National Disaster Fund, which was \$5.9 billion on 1 July 2010) that is used to pay the costs of settling claims resulting from natural disasters (as defined in the Act). The guidance and expectations given to EQC before the Canterbury earthquakes were consistent with those provided to other CFIs. These included:

- being a responsible investor (2007 Ministerial letter of expectation);
- engaging in investment activity that adds value to the Crown (2011 Ministerial letter of expectation); and
- providing responsible Ministers with high-quality information and analysis about EQC's performance against its plan (2012 enduring Ministerial letter of expectations).

In February 2011, the Minister responsible for EQC, also the Minister of Finance, included a paragraph about the first Canterbury earthquake in his Annual Letter of Expectation to EQC. This stated:

Clearly, the EQC's response to the Canterbury earthquake will continue to be your top priority for some time to come, and particularly the new functions and roles that the EQC has taken on in dealing with the earthquake. While bearing in mind the importance of responding to the Canterbury earthquake, the Government seeks reassurance and confidence that the EQC has the capability to respond to any future disasters.

Planning for a large-scale natural disaster

EQC's planning for a large-scale natural disaster was based on the probabilities of such a disaster happening. For example, in 1999, EQC identified that its greatest earthquake risks were in the Wellington region and in Christchurch, and estimated that there was:

- a 20-25% probability of a large earthquake occurring on a fault in the Wellington region in the next 50 years;²² and
- a 50-75% probability of the same shaking intensity occurring in Christchurch as a result of an earthquake.

EQC anticipated that a large-scale natural disaster, such as an earthquake in Wellington, could result in about 150,000 claims and claims settlements of at least \$6.8 billion.

²² Although the Wellington fault is only one of the significant fault risks to Wellington, recent research has indicated a lower chance of a large earthquake happening on the Wellington fault than was previously known. It is estimated that there is about a 10% chance of rupture in the next 100 years. Further information is available on the Institute of Geological and Nuclear Sciences' website (www.gns.cri.nz/Home/IOF/It-s-Our-Fault/Likelihood-Phase).

EQC's plan for responding to such an event was to outsource the services it would require if it was settling claims in cash. It had a service-level agreement with an Australian-based claims administration company. The agreement covered the provision of claims administration, including back-office support, to approve and settle claims.

The outsourcing agreement assumed the capability for handling 60,000 claims for each year, operating in normal business hours, and using the provider's own staff. Additional staff and extended working hours would be used to handle a claims load exceeding 60,000 for each year.

Catastrophe Response Programme

EQC's plan for responding to a "large-scale" natural disaster is known as the Catastrophe Response Programme.

The objective of the Catastrophe Response Programme is to achieve a successful response to a major natural disaster. EQC's indicators of success for the Programme are:

1. All claimants are able to lodge claims with EQC within the statutory 30-day period or such extended period approved by the Minister.
2. Claims are settled within a time frame that gains broad public acceptance.
3. Claims are settled to standards of individual and overall fairness perceived as acceptable by the public.
4. Essential office services are maintained at a level commensurate with a standard of operational efficiency acceptable to the Board.
5. The health and welfare of staff is maintained over long work hours, particularly in the avoidance of stress.

The Catastrophe Response Programme was reviewed by an external panel in 2009. It had been activated for relatively small events and EQC's Board was interested in EQC's capability to handle the number of claims anticipated from a large Wellington earthquake.

The EQC Chairperson wrote to the Minister of Finance in August 2009 about the findings of the review. The letter noted:

The two most significant findings and recommendations are;

- *the need to ensure that EQC's assumptions and planning for a major event, and the capacity and systems which are then based on those plans, are aligned with the Government's expectations of EQC (and its emergency management and response agencies) in a major natural disaster; and*

- *the need to have extraordinary measures planned for the largest natural disasters EQC could face. Our working assumption to this date has been, broadly, to maintain a single process for claims management which could be increased in scale to respond to disasters generating high numbers of claims.*

... In responding to both the major findings referred to above, EQC is initially identifying each of the earthquake scenarios that will provide the stiffest challenges to current preparations. The resources needed to handle each scenario will then be calculated using quantitative methods to identify potential “choke points”. Plans to address these will be developed. Once these have been completed, and timescales calculated for the settlement of most claims, we will engage with other Government agencies as the first step to ensure alignment of both planning and expectations.

By October 2009, EQC had held various internal meetings about its response to the review and an action list had been compiled. The actions included preparing a “structure” for discussions with the Government about its post-disaster expectations of EQC.

The current Chief Executive of EQC joined the organisation in February 2010. On 9 June 2010, he wrote to the EQC Chairperson noting that, as a result of the review, EQC’s Claims Team was “looking for ways to increase our capacity to process claims in the aftermath of a significant event”. He sought the Chairperson’s permission to commission a “short review by an external organisation with experience of high volume claims processing in the insurance industry”. The Chairperson agreed to that request.

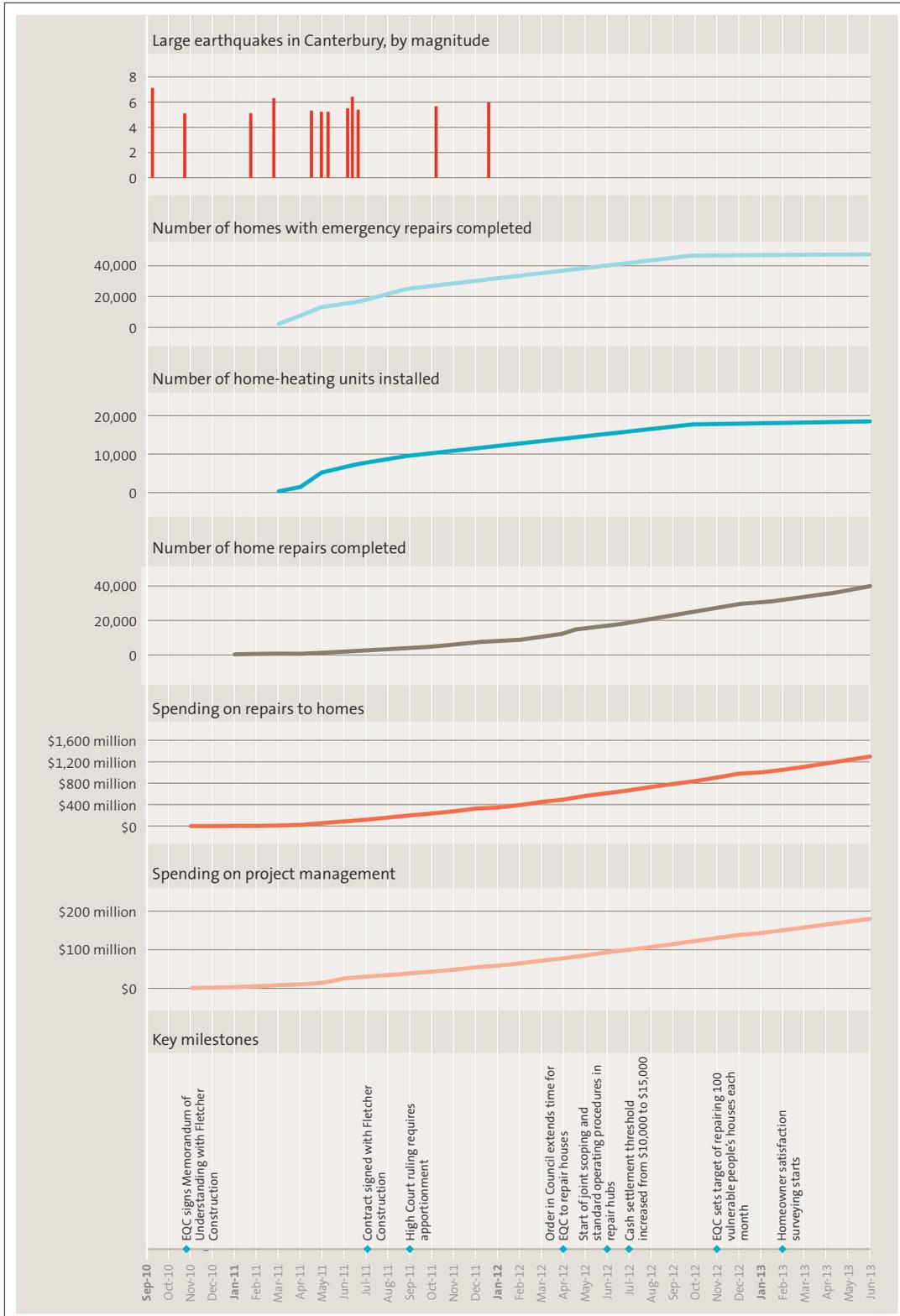
During mid-2010, the EQC Claims Team continued work modelling the effect of large-scale events on EQC. This included using a “system dynamics model” for events generating more than 30,000 claims.

An external organisation was commissioned in mid-2010 to carry out a quality assurance review of EQC’s claims management process, because that process was being modified to address the recommendations of the Catastrophe Response Programme review. The quality assurance review included a workshop with EQC staff in late June 2010.

Towards the end of 2011, EQC commissioned an external review of its response to the Canterbury earthquakes and record the lessons learned.

Appendix 3

Home-repair programme timeline



Appendix 4

Complaints about earthquake-related matters

As a general principle, it is preferable for complaints to be resolved as close to their source as is possible. Potential sources of advice and assistance include:

- the Canterbury Earthquake Recovery Authority’s Residential Advisory Service (www.advisory.org.nz); and
- the Canterbury Insurance Assistance Service, administered by the Canterbury Insurance Assistance Trust Board (www.canterburyinsuranceadvocacyservice.wordpress.com). The Canterbury Insurance Assistance Service has informed us that it expects to be fully functional from early 2014.

When parties are unable to reach resolution, complaints can be made to a range of agencies (see Figure 24). We are providing the information in Figure 24 because, to our knowledge, it has not been made available in one location before.

Figure 24
Agencies to which formal complaints about aspects of the recovery effort in Canterbury can be made

Agency	Types of complaint considered	Website address
Canterbury Earthquake Recovery Authority	Concerns about the earthquake recovery strategy, policy, planning, and co-ordination	www.cera.govt.nz
Human Rights Commission	Consideration of whether a person’s human rights have been breached	www.hrc.co.nz
Institution of Professional Engineers New Zealand (IPENZ)	Complaints about alleged unethical conduct or incompetent or negligent engineering work by a member of IPENZ, or a Chartered Professional Engineer, or a holder of an engineering quality competence mark	www.ipenz.org.nz/IPENZ/finding/complaints/
New Zealand Police	Instances of fraud or other criminal behaviour	www.police.govt.nz
Office of the Auditor-General	Improper conduct affecting a public entity’s effectiveness or efficiency	www.oag.govt.nz
Office of the Ombudsman	Disputes about administrative decisions by a public entity, including individual repair and settlement decisions made by EQC Concerns about agencies’ handling of requests for information under the Official Information Act 1982	www.ombudsman.parliament.nz
Office of the Privacy Commissioner	Instances where personal information may not have been protected or respected	www.privacy.org.nz

Agency	Types of complaint considered	Website address
Relevant licensing body for a given trade – for example, the Building Practitioners Board for builders	Disputes about whether the conduct of a tradesperson has been consistent with the licensing requirements for their trade	www.lbp.govt.nz
Serious Fraud Office	Instances of serious or complex fraud, or bribery and corruption	www.sfo.govt.nz

As well as these agencies, there is the option of testing decisions and practices in the courts.

Publications by the Auditor-General

Other publications issued by the Auditor-General recently have been:

- Using the United Nations' Madrid indicators to better understand our ageing population
- Annual Report 2012/13
- Using development contributions and financial contributions to fund local authorities' growth-related assets
- Commentary on *Affording Our Future: Statement on New Zealand's Long-term Fiscal Position*
- Annual Plan 2013/14
- Learning from public entities' use of social media
- Inquiry into Mayor Aldo Miccio's management of his role as mayor and his private business interests
- Managing public assets
- Insuring public assets
- Evolving approach to combating child obesity
- Public sector financial sustainability
- Education for Māori: Implementing *Ka Hikitia – Managing for Success*
- Statement of Intent 2013–2016
- Central government: Results of the 2011/12 audits
- Health sector: Results of the 2011/12 audits
- Transport sector: Results of the 2011/12 audits
- Local government: Results of the 2011/12 audits
- Crown Research Institutes: Results of the 2011/12 audits
- Inquiry into decision by Hon Shane Jones to grant citizenship to Mr Yang Liu

Website

All these reports, and many of our earlier reports, are available in HTML and PDF format on our website – www.oag.govt.nz. Most of them can also be obtained in hard copy on request – reports@oag.govt.nz.

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