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Parliamentary paper

# Roles, responsibilities, and funding of public entities after the Canterbury earthquakes

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# Roles, responsibilities, and funding of public entities after the Canterbury earthquakes

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## Auditor-General's overview

The Canterbury earthquakes of 2010 and 2011 killed 185 people, damaged more than 100,000 homes, destroyed much of Christchurch's central business district, and badly damaged infrastructure. Christchurch and Canterbury will never be the same.

Canterbury has begun to recover. The rebuilding of homes, infrastructure, and the Christchurch central business district is under way. The recovery – a huge challenge for the country – is likely to take many years to complete. It presents many opportunities to rebuild a better Christchurch and Canterbury.

Rebuilding Canterbury is a priority for the Government. The Canterbury Earthquake Recovery Authority (CERA) is responsible for leading and co-ordinating the work of many public entities. CERA cannot and should not deliver the recovery alone. An effective recovery requires all involved – public sector agencies, communities, non-governmental organisations, and the private sector – to co-ordinate and collaborate well.

This report discusses the response of public entities. The recovery calls for many public entities to work in new and challenging ways. As this report shows, the administrative arrangements for the recovery are complex, reflecting a wide-ranging and challenging programme of tasks. Complexity is not necessarily bad – it can bring opportunities as well as challenges. I understand that the State Services Commission has identified many good examples of public entities working in new and more effective ways in response to the earthquakes.

Setting up a statutory authority or lead agency to co-ordinate recovery from a natural disaster is common practice overseas. In Australia, for example, the Queensland Reconstruction Authority was set up after the flood events and Cyclone Yasi in 2010/11. The Victorian Bushfire Reconstruction and Recovery Authority was set up after the bushfires in Victoria in 2009. Both had similar roles and mandates to CERA's. In my view, it is important that CERA's leaders use the lessons that these and other recovery authorities have learned, such as the need to support local councils to pursue their local recovery agenda under the framework of broader reconstruction policy.

I've visited Canterbury several times in the past year. I'm always impressed by the commitment and hard work of public officials. I particularly thank the people who let me visit their houses and who shared their experiences with me.

I believe that – for the recovery to be effective and efficient – it's important that all the agencies involved know what each is doing. If there is a lack of clarity, there is a risk that their work might not be mutually supportive, could lack direction,

and could be wasteful because of duplication. Accountability could be unclear and, in the end, the effective use of public spending could be put at risk. Because rebuilding in a changing environment is complex, leaders in Canterbury must continually monitor these risks and take appropriate action to manage them.

The recovery is expensive. The Treasury estimates that the cost to the Crown will be about \$13.5 billion. Christchurch City Council and other local authorities will continue to have significant expenses from the earthquakes. The rising cost of insurance has been expensive for public entities.

With so much public spending, I've made it a priority of my Office to provide assurance that the recovery is being carried out effectively, efficiently, and appropriately. To this end, my Office will look at four aspects of the recovery:

- the roles and accountabilities of public entities;
- public funding of the recovery;
- public sector procurement; and
- the effect of the earthquakes on insurance in the public sector.

This is my first report from this work. It provides an objective view of how the recovery is being run. In doing so, it describes how the recovery is being carried out, the roles of agencies, how the recovery is being funded, and what the main risks and challenges are – for the agencies involved and for Cantabrians. I intend to provide updates on these matters at appropriate intervals.



Lyn Provost  
Controller and Auditor-General

8 October 2012



# Part 1

## Introduction

- 1.1 In this Part, we discuss:
- how we have structured our work for this report;
  - the importance of collaboration;
  - the complex insurance situation;
  - the costs of, and financing for, rebuilding; and
  - our role as auditor of public entities involved in the recovery.
- 1.2 Since the major earthquakes in Canterbury on 4 September 2010, 22 February 2011, 13 June 2011, and 23 December 2011, the region has moved from a state of national emergency and crisis response to a focus on repair, recovery, and rebuilding.
- 1.3 Internationally, natural disasters are managed in four phases – mitigating, preparing, responding, and recovery. In New Zealand, these phases are known as reduction, readiness, responding, and recovery (the “four Rs”). The United Nations Development Programme says that:
- Recovery is about shifting focus from saving lives to restoring livelihoods, effectively preventing the recurrence of disasters and harnessing conditions for future development.*<sup>1</sup>
- 1.4 The different phases often overlap because of the different time frames and complexities of tasks involved. Canterbury is moving into the recovery phase but we recognise that some Cantabrians are still experiencing the response phase. In this report, we refer to the efforts to reorganise, restore, repair, and rebuild greater Christchurch as Canterbury’s recovery. We use the Canterbury Earthquake Recovery Act 2011 definition of greater Christchurch as “the districts of the Christchurch City Council, the Selwyn District Council, and the Waimakariri District Council, and ... the coastal marine area adjacent to these districts”.
- 1.5 The public sector has a significant role in Canterbury’s recovery. Much public money (from national and local sources) is funding a programme of large projects and contracts that are being managed by many public entities with interacting roles and responsibilities. Public entities must manage funds from insurance and re-insurance contracts from New Zealand and overseas. How effectively and efficiently these funds are managed may influence future contracts.
- 1.6 During the time it takes Canterbury to recover, we will look closely at how effective, efficient, and appropriate the public spending on, and managing of, the recovery is. In 2012/13, our work will consider the recovery from four perspectives.

<sup>1</sup> United Nations Development Programme, Bureau for Crisis Prevention and Recovery, *Post-Disaster Recovery Guidelines (Version 1)*, New York.

These are:

- the roles and accountabilities of public entities;
- public funding of the recovery;
- public sector procurement; and
- the effect of the earthquakes on insurance in the public sector.

1.7 This report details responsibilities, funding flows, and accountabilities. It reports on some of the progress on the recovery and sets out the main challenges that public entities face and the main risks that they must manage to ensure that the Canterbury recovery is effective and efficient.

1.8 In future reports, we will look further at whether public entities carry out their recovery work effectively and efficiently, and how they manage the main risks.

## Carrying out our work

1.9 For this report, we chose five significant aspects of Canterbury's recovery:

- horizontal infrastructure (for example, roads and water systems);
- redeveloping the Christchurch central business district (CBD);
- the residential red zone – where damage was extensive, the risk of further damage is high, and repairing properties is uneconomic;
- Technical Category 3 (TC3) areas – considered to be suitable for continued residential occupation but likely to be significantly affected by liquefaction and lateral movement in a future earthquake; and
- the Port Hills – where the earthquakes caused rock falls, cliff collapses, and landslides.

1.10 For each of these, we sought to understand:

- what happened;
- the roles and responsibilities of public entities involved;
- the costs and funding arrangements for the public sector; and
- the effect on people.

1.11 In Part 2, we list the public entities working on the recovery and their core responsibilities. Part 5 outlines five case studies that helped us to identify those public entities.

1.12 In Part 3, we look at the costs of the recovery to the public sector. In Part 4, we look at insurance and the recovery.

## The importance of collaborating effectively

- 1.13 The United Nations Development Programme, the World Bank, and the Organisation for Economic Co-operation and Development, as well as other state and national audit offices, have separately studied efforts to recover from natural disasters. Their work has identified some factors that contribute to effective recovery.<sup>2</sup> These factors include:
- public confidence and trust, gained through being transparent and communicating openly;
  - clear relationships between different levels of government to manage risks of duplicating work and lacking co-ordination; and
  - recovery authorities having a strong focus on gaining and maintaining cohesion, co-ordination, and consensus.
- 1.14 For Canterbury to recover successfully, public entities must work collaboratively. Experience from other international natural disasters has shown how important it is to properly co-ordinate and govern how the public sector responds. If collaborating fails, recovery efforts can be hampered, causing delays and – in the end – poor outcomes for affected communities.<sup>3</sup>
- 1.15 It is important for the public sector to work well with the private sector and non-governmental organisations such as charities and community organisations. The Auditor-General’s mandate is for auditing public entities only, but we consider how public entities work with other agencies in the recovery and in providing public services in general.
- 1.16 We found instances of public entities working collaboratively in new ways. One example is the alliance between the Canterbury Earthquake Recovery Authority (CERA), Christchurch City Council (CCC), the New Zealand Transport Agency (NZTA), and private construction companies to rebuild infrastructure in Christchurch. This Stronger Christchurch Infrastructure Rebuild Team (SCIRT) alliance is meant to:
- ensure value for money;
  - help control costs; and
  - ensure that work is timely and of a high quality.
- 1.17 In our view, governance and oversight must be appropriate to ensure that these new ways to collaborate are effective. Purposes, roles, and responsibilities must be set out clearly. Governance needs the right skills, competencies, and ways to

2 Organisation for Economic Co-operation and Development (2004), *Large-scale Disasters: lessons learnt*; United Nations Development Programme, Bureau for Crisis Prevention and Recovery, *Post-Disaster Recovery Guidelines (Version 1)*, New York; and World Bank (2011), *Queensland Recovery and Reconstruction in the Aftermath of the 2010/2011 Flood Events and Cyclone Yasi*, Washington.

3 See, for example, Government Accountability Office (2009) *Disaster Recovery, Experiences from Past Disasters Offer Insights for Effective Collaboration after Catastrophic Events*, Washington.

monitor performance. Good governance ensures that the interests of Cantabrians and New Zealanders are managed effectively and efficiently.

- 1.18 Collaboration is essential for the right entities to make timely decisions. In Part 5, we highlight a complex situation in the Port Hills that requires public entities to have a wide range of expertise. Those public entities work hard to provide clarity to the people of the Port Hills. However, many people whose lives have been severely affected told us that they have found the process to be long and frustrating.
- 1.19 We have heard examples of public entities communicating well, but also criticism that communication is lacking in some instances. To be effective, central and local government need to lead communication in a co-ordinated way.
- 1.20 For the recovery to be effective and efficient, it is important that all the agencies involved know what each is doing. Without clarity, there are risks that:
- their work might not be mutually supportive;
  - their work could lack direction;
  - they could duplicate work;
  - their work could conflict with that of other agencies;
  - accountability could be unclear; and
  - in the end, public funds might not be used effectively.
- 1.21 Because rebuilding in a changing environment is complex, leaders in Canterbury must continually monitor these risks and take appropriate action to manage them.

### **Insurance and the rebuilding effort**

- 1.22 Insurance is vital in helping and paying for the rebuilding of Canterbury. Many people are experiencing delays and complications with their earthquake-related insurance claims, which have proved challenging for insurance providers. Reasons for the complications include:
- difficulty in attributing damage to a particular earthquake amid ongoing aftershocks that keep increasing the number of claims;
  - complications from the need to apportion damage to several claims for one property because there have been so many events – where the apportionment to one claim for a property is more than the Earthquake Commission (EQC) cap (\$100,000 for building claims), the EQC and insurer must agree about who is liable for what;
  - insurers having to understand new requirements and costs of changes to building and foundation standards since the earthquakes;

- geotechnical data having to be collected to understand the condition of land before rebuilding;
- different options being available to claimants for repairing or rebuilding their property; and
- some undamaged dwellings being uninhabitable because of hazards at neighbouring properties.

1.23 With no easy solution and many insurance claims, delays in settling claims with property owners have caused widespread frustration.

1.24 Since the Canterbury earthquakes, insurance premiums have increased substantially. Some public entities cannot get insurance. In 2012/13, we will report on how the earthquakes have affected the cost of insurance throughout the public sector.

### Costs of, and funding for, rebuilding

1.25 There is considerable public funding of Canterbury's recovery, with central and local government contributing significant amounts.

1.26 The Crown has set up a \$5.5 billion Canterbury Earthquake Recovery Fund (CERF), which the Treasury monitors. This is meant to be a way to transparently track the costs of the earthquakes. Central and local government will share much of the cost of rebuilding. International best practice in recovering from natural disasters highlights the need to have appropriate pre-agreed thresholds and cost-sharing formulas.<sup>4</sup> The World Bank has noted that funding needs to be "efficient, transparent, and firmly directed toward realizing the physical results envisioned in the reconstruction policy" and has identified the following conditions for successfully financing recovery efforts:

- having clear objectives;
- the sources of financing and the agencies working on the recovery co-ordinating well; and
- administering the receiving and distributing of funds carefully.<sup>5</sup>

1.27 Central and local government have agreed to share the cost of restoring essential local infrastructure after a natural disaster. Under the agreement, local authorities will usually spend and lodge a claim with central government later. However, this has put a significant onus on the Canterbury local authorities to pay to repair essential infrastructure before recouping some of the cost from central government.

<sup>4</sup> See, for example, World Bank (2011), *Queensland Recovery and Reconstruction in the Aftermath of the 2010/2011 Flood Events and Cyclone Yasi*, Washington.

<sup>5</sup> World Bank (2010), *Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters*, Washington.

- 1.28 To help the recovery, funds must be available quickly. However, there must be appropriate systems and controls to manage and track the public money spent.

### **Our role**

- 1.29 In our role as auditor of the public entities involved in the recovery, we will consider the systems and controls to transparently manage and track the public money being spent. We will seek assurance that funds are being used, or will be used, appropriately.
- 1.30 We will examine the controls and monitoring of funding of the recovery through our annual audits of public entities and in future reports on the recovery.
- 1.31 Strong procurement, project management, and value-for-money principles must be built into planning and reporting to minimise the risk of using public funds poorly. We will consider this aspect of the recovery in future performance audits and other work.

## Part 2

# Roles and responsibilities of public entities involved in the recovery

- 2.1 In this Part, we first discuss aspects of the Canterbury Earthquake Recovery Act, then describe the roles and responsibilities of:
- CERA;
  - Canterbury’s local authorities;
  - EQC;
  - NZTA;
  - the Department of Building and Housing – now part of the Ministry of Business, Innovation and Employment (MBIE);
  - the Ministry of Social Development (MSD);
  - the Department of Internal Affairs (DIA);
  - the Treasury, the Department of the Prime Minister and Cabinet (DPMC), and the State Services Commission (SSC);
  - the Ministry of Education and the Tertiary Education Commission;
  - the Canterbury District Health Board (DHB); and
  - other public entities involved in the recovery of Canterbury.
- 2.2 Canterbury will take a long time to recover. Most experts predict that it will take at least 10 years for Canterbury to fully recover and be rebuilt. This challenge requires more than just repairing damaged buildings and building new ones. It means rebuilding communities and creating a different Canterbury to the one that was there before the earthquakes.
- 2.3 The earthquakes have affected nearly all aspects of daily life in Christchurch. Schools, health care, infrastructure, leisure facilities, and many people’s homes have all been badly damaged. Because of this, the recovery affects the work of many local and central government entities that are working with the private sector, non-governmental organisations, and communities to rebuild Canterbury.

### **The Canterbury Earthquake Recovery Act 2011**

- 2.4 In April 2011, the Canterbury Earthquake Recovery Act repealed and replaced the Canterbury Earthquake Response and Recovery Act 2010.
- 2.5 The purposes of the Canterbury Earthquake Recovery Act are to:
- provide appropriate measures to ensure that local authorities and communities in greater Christchurch respond to, and recover from, the Canterbury earthquakes;
  - allow a focused and timely recovery;
  - allow communities to help plan their recovery without impeding that focus and timeliness;

- help the Minister for Canterbury Recovery (the Minister) and CERA to ensure that recovery;
- make it easier to gather information about land, structures, and infrastructure affected by the Canterbury earthquakes;
- help co-ordinate and direct planning, rebuilding, and recovery of affected communities, including repairing and rebuilding land, infrastructure, and other property;
- restore the social, economic, cultural, and environmental well-being of communities in greater Christchurch; and
- provide enough statutory power for the above purposes.<sup>6</sup>

2.6 The Canterbury Earthquake Recovery Act is subject to annual review. The first review was in July 2012.

2.7 Figure 1 shows the public entities and other organisations working for Canterbury's recovery, how their work is related, and how complex the public sector's role in the recovery is. The recovery involves private sector organisations, particularly insurance companies and construction companies, and many non-governmental organisations, including Te Rūnanga o Ngāi Tahu, the organisation that services the main South Island Māori tribe's statutory rights. At the centre of Figure 1 are the five tasks central to the recovery that we have used as case studies in this report.

2.8 The complexity of the recovery effort reflects the challenges of the task ahead and can bring opportunities for public entities to find better ways of providing public services. For example, the SSC is identifying innovations that public entities have taken in response to the earthquakes and is considering how some of these can be applied more widely.

2.9 The type of complexity we describe in this report is not unique. The United Nations Development Programme notes:

*... the aftermath of a major disaster is frequently characterised by a multiplicity of actors, national and international, promoting and initiating recovery activities. Coordination and information sharing thus become even more essential to avoid duplications and gaps and to optimise the resources available for sustainable recovery.<sup>7</sup>*

2.10 This complexity is typical of most recovery efforts from natural disasters. The challenge for governments and public entities is to manage this complexity effectively. International experience shows that it is important to properly

<sup>6</sup> See section 3 of the Canterbury Earthquake Recovery Act 2011.

<sup>7</sup> United Nations Development Programme, Bureau for Crisis Prevention and Recovery, *Post-Disaster Recovery Guidelines (Version 1)*, New York, page 5.

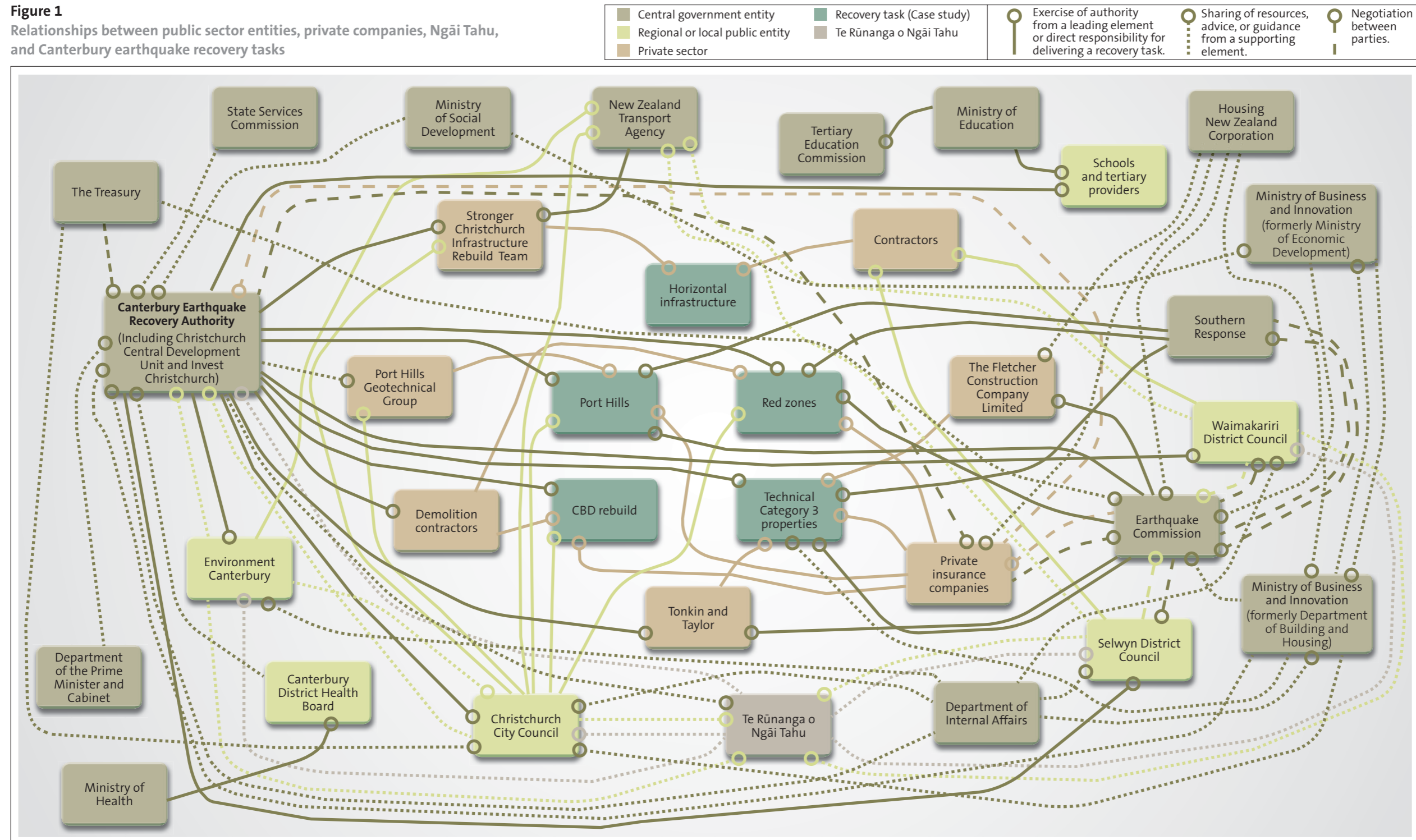


co-ordinate and govern public sector responses to natural disasters. Lack of co-ordination can lead to duplicating effort and gaps in critical areas and confuse people who need support and guidance from public entities.<sup>8</sup> With so many public entities working for Canterbury's recovery, this risk needs to be carefully managed.

- 2.11 In the rest of this Part, we describe the roles and responsibilities of public entities working for Canterbury's recovery and identify and describe the main risks and challenges that they face and must manage.

<sup>8</sup> See United Nations Development Programme, Bureau for Crisis Prevention and Recovery, *Post-Disaster Recovery Guidelines (Version 1)*, New York.

**Figure 1**  
Relationships between public sector entities, private companies, Ngāi Tahu, and Canterbury earthquake recovery tasks



## The role of the Canterbury Earthquake Recovery Authority

- 2.12 In March 2011, CERA, a government department, was set up under the State Sector Act 1988 to lead a co-ordinated response to the Canterbury earthquakes.
- 2.13 The main aspects of CERA's role are:
- leading the recovery, including overall monitoring of the recovery (see paragraph 5.42);
  - managing the Crown's buying of residential properties in the red zone;
  - leading, through the Christchurch Central Development Unit, the rebuilding of Christchurch's CBD;
  - co-funding and co-managing the repair and rebuilding of infrastructure (with CCC and the NZTA);
  - providing policy advice to the Minister about land zone decisions; and
  - working with insurers to monitor and encourage the timely settling of insurance claims.
- 2.14 CERA has a strategic leadership role. It is directly responsible for delivering programmes that are significant to the recovery. These include the ongoing demolition of dangerous buildings, managing the Crown's offer to buy properties in the residential red zone, and making decisions about land use in areas that the earthquakes have severely affected.
- 2.15 CERA has the lead role in co-ordinating the recovery and is responsible for delivering some of the main programmes in the recovery, such as overseeing planning and rebuilding the CBD, managing the residential red zone, and deciding the future status of land affected by the earthquakes.
- 2.16 The nature and scope of CERA's functions are set out in its *Statement of Intent 2012-2016*:
- Our purpose is clear: to return greater Christchurch as quickly as possible to a prosperous and thriving place in which to work, live and play by leading and partnering with all of the region's communities.<sup>9</sup>*
- 2.17 The Canterbury Earthquake Recovery Act says that the Minister must arrange for a community forum "to be held for the purpose of providing him or her with information or advice in relation to [the] Act".<sup>10</sup> The community forum must have at least 20 members (it has 38) and should meet at least six times a year.
- 2.18 The Canterbury Earthquake Recovery Act also requires the Minister to set up a cross-party Parliamentary forum to give him information or advice about

<sup>9</sup> Canterbury Earthquake Recovery Authority (2012), *Statement of Intent 2012-2016*, page 6.

<sup>10</sup> Section 6 of the Canterbury Earthquake Recovery Act 2011.

its operation.<sup>11</sup> Members of Parliament whose primary residence is in greater Christchurch and members of Parliament elected to represent constituencies in greater Christchurch must be invited to the forum.

- 2.19 CERA is a central government agency with a local focus. It has powers to direct the work of many different public entities, and to make decisions that affect the traditional roles and mandates of many public entities. CERA's powers are extensive. They include powers to compulsorily buy land and demolish buildings and to work out future land-use planning.

### The Christchurch Central Development Unit

- 2.20 In April 2012, the Minister announced a new unit within CERA, the Christchurch Central Development Unit (CCDU). CCDU is responsible for delivering the Christchurch Central Recovery Plan (the Recovery Plan)<sup>12</sup> and leading the work of public entities to co-ordinate rebuilding the CBD, including working with private investors. CCDU is part of CERA but reports directly to the Minister. Staff from CCDU are preparing an investment strategy to encourage new investment in the CBD.
- 2.21 CCDU's structure and purpose reflect those of international redevelopment programmes, such as:
- Solidere – The Lebanese Company for the Development and Reconstruction of Beirut Central District;
  - London Docklands Development Corporation; and
  - Lower Manhattan Development Corporation.
- 2.22 Setting up a statutory authority or lead agency to co-ordinate recovery from a natural disaster is common practice overseas. In Australia, the Queensland Reconstruction Authority was set up after the flood events and Cyclone Yasi in 2010/11.<sup>13</sup> The Victorian Bushfire Reconstruction and Recovery Authority was set up after the bushfires in Victoria in 2009. Both have similar roles and mandates to CERA. In our view, it is important that CERA's leadership use the lessons that these and other recovery authorities have learned.

### Risks and challenges for CERA

- 2.23 Through our discussions with staff at CERA and the many public entities involved in the recovery and with people living in Canterbury, we have identified that the main challenges for CERA were and are:
- setting up a government department immediately after a national emergency;

11 Section 7 of the Canterbury Earthquake Recovery Act 2011.

12 See Case Study 2 in Part 5.

13 World Bank (2011), *Queensland Recovery and Reconstruction in the Aftermath of the 2010/2011 Flood Events and Cyclone Yasi*, Washington.

- managing and adapting to multiple and changing roles;
- working with and through many organisations from different sectors; and
- ensuring that recovery efforts remain effective after CERA is disestablished (an effective “exit strategy”).

### **Setting up a government department immediately after a national emergency**

- 2.24 CERA was set up weeks after the 22 February 2011 earthquake. At first, it was staffed by people seconded from other government departments, and it was forecast that CERA would have a full staffing complement of 55 full-time equivalents (FTEs). In May 2012, there were 147 FTEs and 112 other personnel on short-term contracts working at CERA.<sup>14</sup> CERA employs some directly, others are contractors, and some are seconded from other agencies.
- 2.25 CERA inherited responsibility from the Civil Defence Controller for the cordon and the work to demolish CBD buildings and make the CBD safe. CERA took responsibility for assessing land damage in residential areas of greater Christchurch and began co-ordinating and preparing a recovery strategy.
- 2.26 In the meantime, CERA had to set up the effective policies, controls, and systems expected of a public entity under the Public Finance Act 1989. It took time to prepare adequate systems and controls, particularly to manage finances and operations.
- 2.27 During 2011/12, CERA improved its organisational capacity. CERA now has a leadership team of a chief executive and eight general managers. MSD provides many of CERA’s “back office” functions, such as information and communications technology, payroll, and finance systems.

### **Managing and adapting to many changing roles**

- 2.28 Since being set up, CERA has taken on further responsibilities, such as direct responsibility for delivering some of the programmes that are significant to the recovery. These include managing the Crown’s offer to buy insured properties in the red zone (along with managing the acquired properties and submitting insurance claims) and a direct role in engaging with communities and community welfare. With the setting up of CCDU, CERA is responsible for leading the rebuilding of the CBD, including working with potential investors and developers. CERA also has responsibility for monitoring the recovery’s overall progress.
- 2.29 This wide-ranging role means that CERA’s leaders must balance operational roles in some aspects of the recovery with leading and helping the work of other public entities. In our view, a further challenge for CERA is ensuring that it has an effective plan for when it stops operating.

<sup>14</sup> Standard Estimates Questionnaire 2012/13, Vote: Canterbury Earthquake Recovery, page 3.

**Working with and through many organisations**

- 2.30 CERA cannot manage or deliver Canterbury's recovery alone. The recovery depends on the contributions of many public, private, and non-governmental organisations, and on the communities of greater Christchurch. This is evident in Figure 1.
- 2.31 The Canterbury Earthquake Recovery Act required CERA to prepare a recovery strategy. In May 2012, CERA published the *Recovery Strategy for Greater Christchurch* (the Recovery Strategy).<sup>15</sup> The Recovery Strategy is meant to be used to help co-ordinate and integrate the many organisations involved in the recovery.
- 2.32 Under the Canterbury Earthquake Recovery Act, the Recovery Strategy has legal status and the power to amend other planning documents and instruments. The Recovery Strategy provides a framework for public entities to work with the private sector (including insurance companies), community organisations, iwi, and non-governmental organisations. It identifies six recovery components. Each component has goals and work programmes, with community well-being at the centre. These components are:
- leadership and integration;
  - economic recovery;
  - social recovery;
  - cultural recovery;
  - built environment; and
  - natural environment.
- 2.33 CERA has five strategic partners – CCC, Waimakariri District Council, Selwyn District Council, Environment Canterbury, and Te Rūnanga o Ngāi Tahu. To deliver the Recovery Strategy, CERA engages with organisations from six sectors:
- other government departments and agencies;
  - local and regional authorities;
  - private sector investors;
  - insurers;
  - non-governmental organisations; and
  - communities.
- 2.34 Managing interdependencies and conflicting priorities is an important challenge for CERA.

<sup>15</sup> See Recovery Strategy at [www.cera.govt.nz](http://www.cera.govt.nz).

### **Working with other government departments and public entities**

- 2.35 CERA has an important leadership and co-ordination role for the rest of government. As a government department based in Canterbury, CERA must influence and provide strategic direction to other public entities so that they make an effective contribution to the recovery through their normal work. For an effective recovery, public entities need to be well co-ordinated and work in line with and be operationally integrated with the Recovery Strategy. To this end, CERA must effectively bring together agencies and ensure that their work is mutually supportive and in line with the Recovery Strategy.
- 2.36 The further responsibilities that CERA has taken on have meant that its responsibilities and those of other public entities – especially about which should take the lead in preparing certain policies – have not always been distinguished clearly enough. This has been evident where CERA carries out work that government departments normally do or where the recovery has brought unprecedented challenges, such as in working out housing policies.
- 2.37 In our view, if there is a risk of confusion about roles, CERA and the organisations it works with should agree and formalise which agency is responsible and will be accountable for what. In some situations, a memorandum of understanding might be appropriate.

### **How CERA works with local authorities**

- 2.38 CERA is unusual in being a government department with a completely local focus. The Canterbury Earthquake Recovery Act allows CERA to oversee and help make decisions that are usually the preserve of local authorities. CERA works closely with strategic partners CCC, Waimakariri District Council, Selwyn District Council, and Environment Canterbury to:
- plan policy to release land for housing, infrastructure repairs, and rebuilding;
  - prepare a regional approach to recovery planning and strategy; and
  - keep Cantabrians informed about the recovery.
- 2.39 It is important that CERA and local authorities have strong operational relationships, particularly because local authorities will be important to the longer-term recovery of greater Christchurch when CERA is wound up.
- 2.40 International examples of recovery efforts from natural disasters show the important role that local authorities can play in the recovery effort, particularly during the longer term and especially after the disestablishment of recovery authorities. For example, the Queensland Reconstruction Authority has supported local councils in pursuing their local recovery agenda under the framework of broader reconstruction policy. The World Bank has reported that this approach

“does not only build the ownership of the local councils and their constituents, but it will also empower them to undertake future planning and investment decisions that incorporate resilience”.<sup>16</sup>

- 2.41 Through CERA, central and local government are working together in new ways. For example, CCDU has led the design of the Recovery Plan for rebuilding the central city. The Recovery Plan, based on CCC’s Central City Plan, identifies an overall vision for the city and 14 main projects for the city centre, including a new convention centre and stadium. CCC is likely to become responsible for managing these new assets.
- 2.42 Inevitably, disagreements about decisions and policies will arise. Managing these tensions is a challenging task. In our view, effectively addressing tensions between CERA and local authorities when they arise should be a priority for the leaders of these organisations.

#### **CERA and the private sector**

- 2.43 CERA is the government department with most responsibility for working with private sector investors to encourage investment, particularly in the new Christchurch CBD. CCDU has identified that it needs to work with private investors in the recovery of Christchurch city centre, and it has set up a special team to work with potential investors.

#### **CERA and insurers**

- 2.44 As described in the Recovery Strategy, “Timely settlement of insurance claims and the ability of households, businesses and government agencies to obtain insurance cover in [the] future are important factors in the recovery process.”<sup>17</sup> CERA staff are working with insurance companies to monitor and encourage timely settlements and help to create good conditions for the insurance market in greater Christchurch.
- 2.45 As a result of the Crown’s offer to buy properties in the residential red zone, CERA is responsible for managing insurance claims for more than 7000 properties. CERA staff are working with insurers and EQC on the claims against these properties. Managing these claims effectively will be crucial to recovering some of the Crown’s costs in offering to buy properties in the red zone.
- 2.46 Through our annual audit work, we will look at CERA’s systems, processes, and controls for making insurance claims and for managing the land in the red zone.

<sup>16</sup> World Bank (2011), *Queensland Recovery and Reconstruction in the Aftermath of the 2010/2011 Flood Events and Cyclone Yasi*, Washington.

<sup>17</sup> *Recovery Strategy for Greater Christchurch*, page 19.



### **CERA and non-governmental organisations**

2.47 The earthquakes have severely affected the lives of many of the people of greater Christchurch. Many people are living in damaged homes, and severe damage has physically divided and displaced some communities. Others are uncertain about their future. CERA is the main agency responsible for telling affected communities about the outcomes of decisions about future land policy. It has the most responsibility for ensuring that the people of greater Christchurch are involved in designing the recovery.

2.48 International comparisons show that the non-government sector plays an important role in helping communities to be resilient and bounce back from natural disasters. Public entities and reconstruction authorities can often best engage with communities through non-governmental organisations. The World Bank describes the importance of involving communities:

*Reconstruction begins at the community level. A good reconstruction strategy engages communities and helps people work together to rebuild their housing, their lives, and their livelihoods.*<sup>18</sup>

2.49 CERA works with charities and community groups to engage the communities of greater Christchurch with the recovery. These range from large international organisations, such as the Red Cross, to smaller and local voluntary organisations.

### **The importance of an effective exit strategy**

2.50 The setting up of CERA was linked to the Canterbury Earthquake Recovery Act. The Canterbury Earthquake Recovery Act will expire in April 2016 and the current plans are for CERA to stop operating in April 2016.<sup>19</sup> Because of this, it is important that there is ownership of the recovery effort throughout the public sector.

### **The role of Canterbury's local authorities**

2.51 The local authorities based closest to the largest earthquakes' epicentres are:

- CCC;
- Waimakariri District Council;
- Selwyn District Council; and
- Environment Canterbury.

2.52 These local authorities are dealing with significant damage to infrastructure, which has hindered the delivery of core services (for example, water supply and waste water collection and disposal). They are also dealing with damage to buildings, including community buildings (for example, libraries and community centres).

<sup>18</sup> World Bank (2010), *Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters*, page 183, Washington.

<sup>19</sup> Canterbury Earthquake Recovery Authority (2012), *Statement of Intent 2012-2016*.

- 2.53 Local authorities were involved in the immediate response through their roles in civil defence and emergency management and through the return of core services to their communities as soon as practicable.
- 2.54 The main roles of Canterbury's local authorities are:
- repairing horizontal infrastructure;
  - repairing amenities that they own and operate;
  - planning land use;
  - issuing building and planning consents;
  - supporting the community by providing information, advocacy, and other help;
  - being CERA's Recovery Plan strategic partner; and
  - for CCC, preparing the initial recovery plan for Christchurch's CBD.
- 2.55 The local authorities are critical to the recovery, largely because they own core infrastructure and community assets that need to be restored or replaced but also through legislation. Under the Canterbury Earthquake Recovery Act, CCC, Environment Canterbury, Waimakariri District Council, and Selwyn District Council are CERA's strategic partners in preparing the Recovery Strategy.

## Christchurch City Council

### Recovery Plan for the central business district

- 2.56 Section 17 of the Canterbury Earthquake Recovery Act specifies that CCC must consult with affected communities to prepare a recovery plan for the CBD within nine months of the Canterbury Earthquake Recovery Act coming into force. CERA, Environment Canterbury, and Te Rūnanga o Ngāi Tahu must have the opportunity to provide input into the recovery plan for the Christchurch CBD.
- 2.57 CCC prepared a recovery plan for the CBD and, in December 2011, gave this to the Minister to consider. In April 2012, CCDU became responsible for the design of the Recovery Plan, which was released on 30 July 2012. The Recovery Plan is a statutory document that directs the CCC to change its District Plan to ensure that the objectives of the Recovery Plan are met.<sup>20</sup>

### Rebuilding infrastructure and other assets

- 2.58 The earthquakes caused significant damage to infrastructure that CCC owns. This included damage to roads and water systems, as well as to many of the leisure and sports facilities that CCC manages. CCC is responsible for restoring this infrastructure to the community and has prepared a facilities rebuilding plan to provide a framework for deciding what work those damaged facilities require.

<sup>20</sup> See the Christchurch Central Development Unit website at [www.ccd�.govt.nz](http://www.ccd�.govt.nz).

2.59 CCC still requires a lot of resources, time, and money to assess completely the damage to, and repair needed for, the infrastructure and facilities. In its 2012/13 annual plan, CCC estimated the net cost to repair infrastructure at \$1.9 billion.<sup>21</sup> With insurance and other government recoveries, the total cost to CCC is forecast to be \$504 million.<sup>22</sup>

2.60 CCC facilities (such as libraries, and arts and sports facilities), parks, and stormwater systems are expected to cost \$890 million to fix.<sup>23</sup> The cost to CCC after insurance and other recoveries is forecast at \$292 million.<sup>24</sup> These forecasts are likely to change when CCC considers the implications of the Recovery Plan.

#### **Regulatory consents and planning**

2.61 The earthquakes have affected many of CCC's business-as-usual functions, such as its responsibilities for land-use planning, building consents, and resource consent applications. Orders in Council, through the Canterbury Earthquake Recovery Act, excluded CCC from having to perform certain functions and reduced the burden of some regulatory processes.

2.62 CCC has taken steps to manage regulatory tasks better. For example, processes under the Resource Management Act 1991 have been streamlined for businesses and householders relocating to temporary accommodation and CCC is employing more staff to help manage the anticipated increase in the number of building consents when the rebuilding phase gains momentum.

#### **Waimakariri District Council**

2.63 Waimakariri District Council is responsible for repairing significant damage to infrastructure and community assets.

2.64 In its 2012-22 long-term plan, Waimakariri District Council estimated the cost to repair infrastructure at \$46 million. Taking into consideration insurance and other government recoveries, the total cost to Waimakariri District Council for the repair of infrastructure is forecast to be \$7 million.<sup>25</sup>

2.65 Waimakariri District Council facilities and parks are expected to cost \$26 million to fix. The gross cost to Waimakariri District Council (after insurance and other recoveries) is forecast to be \$18 million.<sup>26</sup> Waimakariri District Council faces the same pressures as CCC in land-use planning, building consents, and resource

21 Christchurch City Council (2012), *Annual Plan 2012–13*, page 18.

22 Christchurch City Council (2012), *Annual Plan 2012–13*, page 18.

23 Christchurch City Council (2012), *Annual Plan 2012–13*, page 18.

24 Christchurch City Council (2012), *Annual Plan 2012–13*, page 18.

25 Waimakariri District Council (2012), *Ten Year Plan 2012 – 2022*, page 28.

26 Waimakariri District Council (2012), *Ten Year Plan 2012 – 2022*, page 28.

consents. Waimakariri District Council will have other earthquake-related costs of \$4 million after insurance and other recoveries.

- 2.66 Recently, Waimakariri has grown consistently quickly. In the next 10 years, Waimakariri district is forecast to experience medium-to-high growth. Although estimates of future growth have become less certain, it is expected that much of the growth will be from people moving out of Christchurch and from the influx of workers needed to support the rebuild. Waimakariri District Council reports that the district's infrastructure is well placed to cope with the immediate growth.

### **Selwyn District Council**

- 2.67 The earthquakes did not affect Selwyn District Council's assets as significantly as those in Christchurch and Waimakariri. However, Selwyn District Council has faced disruption and will need to spend to repair services.
- 2.68 Selwyn is growing quickly. As with Waimakariri, growth is likely to include people displaced from their homes by the earthquakes.

### **Environment Canterbury**

- 2.69 At first, after the earthquake and for some time while CERA was being set up, Environment Canterbury provided staffing resources to CERA.
- 2.70 Environment Canterbury is the lead agency behind the Greater Christchurch Urban Growth Strategy. Parts of the strategy have been fast-tracked to bring forward available land for new residential areas to replace those that have been zoned red. Environment Canterbury is leading work on the Natural Environment Recovery Strategy on behalf of CERA.
- 2.71 Under the Resource Management Act, Environment Canterbury is responsible for repairing and maintaining stop banks and processing resource consents for earthworks, discharges to land and water, and disposal of waste and rubble to landfills. Environment Canterbury maintains river management and drainage schemes throughout the region for flood protection purposes. Two schemes next to Christchurch were damaged – the Waimakariri scheme which protects the Christchurch, Waimakariri, and Selwyn districts from river flooding and the Halswell Drainage district next to Lake Ellesmere (Te Waihora). Repair costs totalling \$6.9 million were funded from reserves.
- 2.72 Environment Canterbury has responsibility for public passenger transport. The February 2011 earthquake took the central city interchange depot out of service. This was replaced with a temporary facility in early 2012. The loss of the interchange, coupled with the destruction of the central city (which led to

businesses moving to the outer suburbs) significantly changed commuter travel patterns, making many routes redundant. The downturn in patronage was significant. In June 2012, usage was 65% of what it was before the earthquakes. Environment Canterbury has designed more suitable routes and revised contracts to provide a public transport service that more closely matches the needs of Canterbury.

- 2.73 Environment Canterbury is working with CCC and CERA on supporting infrastructure.

### **Risks and challenges for local authorities**

- 2.74 Because the condition of underground assets is not known in many instances and will not be known until the repair of the assets starts, there is a risk that local authorities' estimates of damage to their assets are too low.
- 2.75 The earthquakes significantly damaged local authorities' assets and the costs to repair the damage are high. One of the largest risks the Canterbury local authorities face is working out how to fund the repairs. CCC and Waimakariri District Council have borrowed, and will continue to borrow, money to fund the repairs. The debt is forecast to be in line with the councils' respective policies for managing liability.
- 2.76 Repairing critical infrastructure and community services is significant work. There will have to be strong procurement and project management principles to show that repairs are consistent with what the community needs and using public money efficiently. In 2012/13, we will carry out a performance audit on aspects of procurement for the recovery.

### **The role of the Earthquake Commission**

- 2.77 EQC is a Crown entity as defined by the Crown Entities Act 2004. EQC's functions are set out in section 5 of the Earthquake Commission Act 1993 and all these functions are relevant to the Canterbury earthquakes. The main objectives of EQC are to:
- administer the insurance against natural disaster damage provided for under the Earthquake Commission 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.

- 2.78 The nature of the earthquakes, and the Government's response to them, has meant that EQC's workload has increased considerably. Having taken on new functions and with its role changed in a range of ways, EQC:
- manages more land damage assessments than ever before;
  - oversees the design and supervision of further land remediation work that the Crown funded separately;
  - delivers a winter heating programme; and
  - manages a repair programme for about 100,000 houses.
- 2.79 The main responsibilities of EQC in the Canterbury recovery are:
- managing the assessing and processing of residential contents, building, and land claims;
  - overseeing the home repair programme, through a contract with The Fletcher Construction Company Limited (Fletchers);
  - delivering the winter heating programme; and
  - funding Geonet's participation in the Engineering Advisory Group.
- 2.80 After the earthquakes, EQC's workforce increased substantially – from 22 to a peak of 1568 in October 2011. At the end of August 2012, the workforce included:
- 225 field staff;
  - 562 staff to process claims; and
  - 219 support staff.
- 2.81 To contain inflation in the cost of repairs and to ensure that the quality of repairs is consistent, EQC decided to deliver the home repair programme through a contract with Fletchers.<sup>27</sup>
- 2.82 About one-third of the estimated 100,000 home repairs are under way or have been completed.<sup>28</sup> EQC expects that the home repair programme will be completed by December 2015.

### Significant risks and challenges for the Earthquake Commission

- 2.83 Because of the multiple damaging earthquakes, the associated volume of claims, and the unique attributes of the land damage (such as widespread and extreme liquefaction), the duration of the required response by EQC greatly exceeds what it planned for.
- 2.84 The anticipated shortage of suitably skilled trades people (particularly carpenters, painters, bricklayers, and plasterers) is a significant risk to completing the repair programme throughout Canterbury. The many rebuilding projects throughout

27 Earthquake Commission (2011), *Briefing to the Incoming Minister*, page 18.

28 Earthquake Commission (2011), *Briefing to the Incoming Minister*, page 19.

Canterbury will mean that insurers, EQC, and private developers are, at some point, likely to compete for labour. EQC is working with insurers and with CERA to prepare plans for dealing with labour shortages.

- 2.85 The probable large migration of trades people to Canterbury will put pressure on available accommodation. We understand that EQC, alongside insurance and construction companies, is planning to provide additional accommodation to meet this demand.
- 2.86 On 18 September 2012, the Government announced that the Treasury would lead a review of the Earthquake Commission Act.
- 2.87 In 2012/13, we will carry out a performance audit on procurement by public entities involved in the recovery. We will look at the managing of the home repair programme that EQC is carrying out with Fletchers.

### Costs to the Earthquake Commission

- 2.88 The total costs of EQC's earthquake liabilities remain uncertain. Actuarial reports have calculated the outstanding claims liability and associated reinsurance recoveries to be about \$10.5 billion.<sup>29</sup> This means that EQC's claims liabilities, net of reinsurance, exceed its assets. The Crown has confirmed its intention to meet its obligation under section 16 of the Canterbury Earthquake Recovery Act to ensure that the Commission can meet all its liabilities.<sup>30</sup> This acts as a Government guarantee and ensures that EQC will be able to meet its obligations, regardless of the circumstances.

### The role of the New Zealand Transport Agency

- 2.89 NZTA has a significant role in rebuilding transport infrastructure. It owns damaged state highway networks in greater Christchurch and invests in local roads.
- 2.90 NZTA's main responsibilities in the Canterbury recovery are repairing and rebuilding national highways through SCIRT, in partnership with CERA and CCC.
- 2.91 The full cost to NZTA of repairing the damage to transport infrastructure is being worked out, but it will be about \$400 million during the next five or more years. This cost will be met through the National Land Transport Programme and will change NZTA's investment priorities in this region. As mentioned in paragraph 1.15, NZTA has helped CCC and CERA to prepare the SCIRT alliance delivery model to rebuild Christchurch's infrastructure.

29 The Treasury (2012), *Budget Economic and Fiscal Update 2012*, Wellington, page 108.

30 Earthquake Commission (2011), *Annual Report 2010/11*, page 29 (see Note 1, Notes to the Financial Statements).

## The role of the Department of Building and Housing

- 2.92 The Department of Building and Housing is now part of MBIE.
- 2.93 MBIE's main responsibilities for building and housing for the Canterbury recovery are:
- policy advice on housing;
  - publishing revised building standards;
  - testing solutions to land remediation and foundation designs;
  - technical guidance on building in earthquake-prone areas;
  - providing a sector education and training programme to help a quality rebuild;
  - providing the Canterbury Earthquake Temporary Accommodation Service (CETAS), in partnership with MSD; and
  - reporting on the structural performance of buildings in Christchurch.
- 2.94 Since the earthquakes, MBIE has issued a revised building code for all commercial and residential buildings. It has released guidelines for the design of foundations for buildings on land where the risk of liquefaction is high. These guidelines will affect the way in which houses with foundation damage in TC3 areas will be repaired or rebuilt (see Case Study 4 in Part 5).
- 2.95 MBIE has responsibility for housing policy in greater Christchurch. In this role, it contributes wide-ranging policy advice to CERA and the local authorities on the main recovery plans and strategies. This advice includes technical and general housing policy advice covering six main matters:
- how to rebuild in greater Christchurch;
  - housing supply and market response;
  - consenting systems and process – how to build on land in Canterbury;
  - information and monitoring – how to measure rebuilding;
  - the national effects of the Canterbury earthquakes on earthquake-prone buildings; and
  - the Canterbury Earthquakes Royal Commission.
- 2.96 Figure 2 shows MBIE's work programme and partners for the Canterbury recovery.



**Figure 2**  
**The Ministry of Business, Innovation and Employment's work programme and partners for the Canterbury recovery**

Matter	Work programme	Partner agencies
How to rebuild in greater Christchurch	Contributing to the recovery strategy and plans for the central business district Providing urban design guidance Guidance on foundations for areas prone to earthquake damage (Technical Category 3)	Christchurch City Council CERA
Housing supply and market response	Considering the implications of the rebuilding for the wider Canterbury housing market Preparing advice about affordable housing in Canterbury Temporary housing supply for people whose homes are being repaired Accommodation for temporary workers	Christchurch City Council CERA Stronger Christchurch Infrastructure Rebuild Team
Consenting systems and process – how to build on land in Canterbury	Preparing legislation to support the recovery Contributing to land zoning decisions Providing technical advice to the repair and rebuilding	Christchurch City Council CERA
Information and monitoring – how to measure rebuilding	Producing a monthly earthquake indicators report Monitoring the pace of the recovery	CERA
Earthquake-prone buildings – the national effects of the Canterbury earthquakes	Engineering assessments of earthquake-prone buildings in Canterbury Leading the review of earthquake-prone buildings policy	Christchurch City Council CERA
Canterbury Earthquakes Royal Commission	Preparing evidence for hearings Drawing up changes to the Building Act 2004, the Building Code, and Building Standards in response to the Commission's findings	Department of Internal Affairs Ministry of Civil Defence and Emergency Management

Source: The Department of Building and Housing.

- 2.97 MBIE has helped CCC to draw up a streamlined consenting strategy. This involved a review of building consent management and organisational structures, including supporting an information technology upgrade, and creating a model for outsourcing consents. MBIE has agreed measures with CCC to measure progress on the consenting strategy. MBIE is investigating the potential for a “risk based” consenting system (specifically for commercial consents) for the peak construction period. MBIE also:
- administers the Licensed Building Practitioners regime, and has created strategies particular to Canterbury to ensure that there are suitably qualified trades people available to take part in the rebuild; and
  - provides regulatory guidance and advice on the rebuild to insurers, architects and designers, engineers, project management offices and their contractors, and Canterbury local authorities.

### **Canterbury Earthquake Temporary Accommodation Service**

- 2.98 MBIE works with MSD to provide CETAS. CETAS provides accommodation matching and placing, financial help to home owners (through Temporary Accommodation Assistance), and information and advice through Earthquake Support Co-ordinators. MBIE also manages three temporary villages: Kaiapoi Domain, Linwood Park, and Rawhiti Domain, providing 83 accommodation units.

### **Risks and challenges for the Ministry of Business, Innovation and Employment**

- 2.99 Figure 2 shows that MBIE has wide-ranging responsibilities for housing. MBIE does a lot of work with many different public, private, and non-government agencies.
- 2.100 Effective housing policy is essential to successful recovery. In our view, MBIE must work closely with CERA to ensure that housing policy advice to Ministers is consistent and aligned with the Recovery Strategy, the Recovery Plan, and other rebuilding plans.

### **Funding the Ministry of Business, Innovation and Employment’s recovery work in greater Christchurch**

- 2.101 In the 2011 Budget, \$12.7 million was appropriated for the former Department of Building and Housing’s recovery work in greater Christchurch. The 2012 Budget has appropriations of \$11.8 million. Of this, \$10 million will be used to fund technical investigations in 2012/13.<sup>31</sup>

31 See the Treasury’s website, [www.treasury.govt.nz](http://www.treasury.govt.nz).

## The role of the Ministry of Social Development

- 2.102 MSD is the lead agency providing welfare and employment support.
- 2.103 MSD provides CERA with the infrastructure for its finance and information technology functions under a shared service agreement. MSD has provided corporate services staff to CERA to help enhance CERA's organisational capacity.
- 2.104 MSD's main responsibilities in the Canterbury recovery are:
- leading the public sector welfare response;
  - managing Earthquake Employment Support (now ended); and
  - overseeing funding to the non-government sector.
- 2.105 MSD works with MBIE and CERA to provide CETAS (see paragraph 2.98). CETAS has a helpline for people who need advice about housing. It provides money for rent and motel costs to home owners whose homes are uninhabitable and whose insurance cover for temporary housing help has run out. MSD runs a website for this scheme, [www.quakeaccommodation.govt.nz](http://www.quakeaccommodation.govt.nz).
- 2.106 MSD and the Inland Revenue Department provided immediate financial support to employers and employees who experienced income loss as a direct result of the Canterbury earthquakes. The Christchurch Earthquake Employment Support Scheme provided a subsidy to companies (up to \$3,000 gross to cover six weeks for each employee or \$1,800 gross to cover part-time staff for six weeks) and a subsidy for people who were unable to contact their employer or whose place of employment had closed. This subsidy provided \$400 net a week for six weeks for full-time employees and \$240 net for part-time employees. To the end of June 2011, \$202 million was paid out under the Christchurch Earthquake Employment Support Scheme to about 20,000 employers and 50,000 employees.
- 2.107 MSD and MBIE, through CETAS, co-ordinate the Earthquake Support Co-ordinators, who provide information and put people in touch with the agencies best suited to help with financial, insurance, legal, and health matters.
- 2.108 MSD has a leading role in the wider public sector response to the welfare and support needs of residents in greater Christchurch, particularly in providing support to people suffering from psychological and social problems. MSD is aware that some families are experiencing particularly challenging circumstances and that other groups, especially the elderly, are vulnerable and will need help and support from welfare organisations.

### Funding for the Ministry of Social Development's Canterbury recovery work

- 2.109 Additional funding as a result of the Canterbury earthquakes in Vote Social Development in the 2012 Budget includes Non-Governmental Organisation Funding and Christchurch Support of \$13 million over two years. This funding is provided for:
- trauma counselling services;
  - co-ordination and case management for families and individuals facing multiple and/or complex issues;
  - capability building and training for volunteer community-level responses; and
  - a contestable critical community-based social services fund.
- 2.110 There is an expense transfer of \$1 million from 2011/12 to 2012/13 for Canterbury Employment Assistance.

### The role of the Department of Internal Affairs

- 2.111 DIA is the lead agency for reducing risk and building community readiness for emergencies.
- 2.112 DIA's main responsibilities in Canterbury's recovery are:
- being the lead agency for reducing risk, and building community readiness nationally;
  - overseeing reviews of the civil defence response to the earthquakes;
  - administering the Canterbury Earthquake Appeal Trust; and
  - providing policy advice.
- 2.113 Through the Ministry of Civil Defence and Emergency Management (MCDEM), DIA has overall responsibility for the Civil Defence and Emergency Management Act 2002 and the Guide to the National Civil Defence Emergency Plan (the Guide), which includes government financial support guidelines.<sup>32</sup> MCDEM was the lead agency in responding to the earthquakes, with responsibility for controlling and co-ordinating the response during the state of national emergency, which lasted for 10 weeks.
- 2.114 MCDEM commissioned an independent review of the response to the earthquakes. DIA also commissioned a review of the Fire Service. MCDEM and DIA will use what has been learned from these reviews to strengthen the strategic framework for civil defence emergency management throughout the country, including the role of the Fire Service and the Police.

<sup>32</sup> See the *Guide to the National Civil Defence Emergency Plan* at [www.civildefence.govt.nz](http://www.civildefence.govt.nz).

- 2.115 The Civil Defence Emergency Management Plan and section 26 of the Guide provide details on government financial support during and after a civil defence emergency. The Crown, through appropriations administered by DIA, has been liable for 60% of the response costs and the recovery costs for the essential water infrastructure assets (freshwater, stormwater, wastewater, and river management systems). The Crown has accepted liability for all eligible costs from the Canterbury earthquakes. Costs that are not eligible under the Guide are subject to case-by-case decisions by Cabinet before the Crown accepts any liability. In 2012/13, responsibility for managing this liability for recovery was transferred to CERA. The total amount of this provision is being worked out.
- 2.116 DIA contributes to the longer-term recovery by providing policy advice on local government and administering the Christchurch Earthquake Appeal Trust. To date, more than \$100 million has been raised, and \$40 million has been allocated. The Canterbury Earthquake Appeal Trust is an independent charity, registered under the Charities Act 2005. The Trust is required to file with the Charities Commission an annual return detailing its financial statements.
- 2.117 The total cost to the Crown through appropriations administered by DIA for earthquake response and recovery activities in 2010/11 was \$155.6 million, including \$133 million in Canterbury Local Authorities' Response and Recovery Expenses.<sup>33</sup>

## The roles of the Treasury, the Department of the Prime Minister and Cabinet, and the State Services Commission

### The Treasury

- 2.118 In the immediate aftermath of the earthquakes, the Treasury oversaw policy advice to ensure that it was co-ordinated and that policy included assessing how the earthquakes would affect the Crown's fiscal position. The Treasury also monitors EQC's performance.
- 2.119 The Treasury provides advice on the implications of policy decisions about the recovery and on insurance, business recovery, and regulations. The Treasury is working with CERA and the CCC on how to share the costs of rebuilding infrastructure between central and local government.

### The Department of the Prime Minister and Cabinet

- 2.120 DPMC had a lead role in co-ordinating the national emergency response in support of the MCDEM. DPMC's Policy Advisory Group and the Cabinet Office supported the setting up of a new Cabinet committee. DPMC supports CERA, mainly through providing staff to CERA.

<sup>33</sup> Department of Internal Affairs (2011), *Annual Report 2010/11*, page 141.

### The State Services Commission

- 2.121 The SSC is monitoring and assessing case studies to understand and promote innovations emerging from the responses to, and recovery from, the earthquakes and to support their wider use.
- 2.122 Innovations in delivering public services after the earthquakes include:
- designing services to centre on people and businesses to eliminate multiple interactions with different agencies and ensure that services are delivered more effectively;
  - working with private and community organisations to tap into the best available capability;
  - public entities co-locating and collaborating to be more efficient; and
  - sharing information and technology to provide better services.
- 2.123 The SSC is working with CERA and the Canterbury Government Leaders Group to support CERA's Effective Central Government Services work. That includes encouraging agencies to make the most of opportunities for further innovation in greater Christchurch, including trialling options for achieving Better Public Services Results.
- 2.124 SSC is monitoring and reviewing three main CERA programmes (demolition, horizontal infrastructure, and the red zone), the Greater Christchurch Education Renewal programme, and the Justice Sector Canterbury recovery programme (Emergency services hub).

### The roles of the Ministry of Education and the Tertiary Education Commission

- 2.125 The Ministry of Education is overseeing the rebuilding of damaged schools and colleges, and planning for education in greater Christchurch. After the Government's decisions about future land use, such as in the residential red zone, the demand for schools in greater Christchurch has changed.
- 2.126 Along with the Tertiary Education Commission, the Ministry has produced a draft Education Renewal Recovery Programme that includes planning for early childhood education, schooling, and tertiary education.<sup>34</sup> The Tertiary Education Commission is funding Christchurch tertiary education organisations to deliver more training to help meet the demand for trades people.

<sup>34</sup> See the Ministry of Education website at [www.shapingeducation.minedu.govt.nz](http://www.shapingeducation.minedu.govt.nz).

## The role of the Canterbury District Health Board

- 2.127 The Canterbury DHB has introduced a transition plan for delivering health services after the earthquakes, which damaged most of the DHB's 200 buildings and badly affected health services throughout Canterbury. Immediately after the earthquake, there were 106 fewer hospital beds,<sup>35</sup> 635 fewer rest home beds, 15 fewer pharmacies, five fewer general practices, and health organisations without facilities in the CBD.
- 2.128 The transition plan builds on plans that were in place before the earthquakes, but accepts that changes in demand mean that health services will be delivered differently.
- 2.129 The Canterbury DHB has worked with CERA and the Red Cross to help identify vulnerable people and has used its access to the Public Health Organisation register and its experience analysing populations to contribute to the Recovery Strategy.

## The roles of other public entities

- 2.130 Other public entities with roles in the recovery include the Commission for Financial Literacy and Retirement Income (formerly the Retirement Commission), the Ministry of Pacific Island Affairs, and Te Puni Kōkiri.

### The Commission for Financial Literacy and Retirement Income

- 2.131 The Commission for Financial Literacy and Retirement Income has set up a financial advice service for owners of residential properties in the red zone. The service provides access to free one-on-one advice from qualified, professional financial advisors.
- 2.132 The Commission for Financial Literacy and Retirement Income also produced the Red Zone Financial Decision Guide for Residential Red Zone Property Owners. This booklet, funded by the Christchurch Earthquake Appeal Trust, includes information on what owners of residential properties in the red zone should consider when deciding what to do with the Government payment, and where to go for advice.
- 2.133 The Commission for Financial Literacy and Retirement Income and qualified professional financial advisors provide a free financial advice service for residential red zone property owners.

<sup>35</sup> See the Canterbury District Health Board's website at [www.cdhb.govt.nz](http://www.cdhb.govt.nz).

## The Ministry of Pacific Island Affairs

- 2.134 The earthquakes have badly affected many Pacific people who live in Christchurch's eastern suburbs. The role of the Ministry of Pacific Island Affairs after the earthquakes has been to help Pacific people access services and to work with mainstream agencies to prepare ways to reach Pacific people. Until December 2011, the Ministry ran a one-stop shop in the eastern Christchurch suburb of Aranui for Pacific people to access services and information.

## Te Puni Kōkiri

- 2.135 Te Puni Kōkiri is working with Te Rūnanga o Ngāi Tahu, other Māori leaders, CERA and Government agencies to ensure that iwi and Māori are benefiting from and taking part in planning for and rebuilding Canterbury. This work includes seeking opportunities to support Māori to access further education, training, and employment opportunities, with particular emphasis on partnering with other organisations such as Infratrain and Fletchers. For example, the He Toki 2.0 model builds off work Te Puni Kōkiri did with the He Toki ki te Reka consortium. Through this model, Te Puni Kōkiri is working with He Oranga Pounamu, Hawkins Construction, Te Tapuae o Rehua, the BETA Alliance, the Ministry of Social Development, and the Tertiary Education Commission to support 300 Māori get training and employment.
- 2.136 Te Puni Kōkiri recognises that many psychosocial issues will affect whānau during the rebuild. Therefore, it supports the Canterbury Earthquake Support Co-ordinators programme by contracting He Oranga Pounamu and its Whānau Ora Collective to support whānau affected by the rebuild. This includes employing 11 Kaitoko Whānau/Whānau Ora Navigators to work directly with whānau to:
- support them to access broader government and non-government services;
  - ensure that Māori children access quality early childhood and compulsory education programmes;
  - ensure that Māori children's vaccinations are up to date;
  - support them to access quality housing solutions; and
  - where necessary, provide access to quality professional support and advice.
- 2.137 Access to quality housing solutions will be a major matter for Māori in the immediate future. Te Puni Kōkiri is prioritising this matter by supporting significant Māori housing initiatives such as:
- new accommodation units at Ngā Hau e Wha Marae;
  - land remediation, kaumātua housing, and insurance support at Rapaki;
  - the rezoning of Māori Reserve MR873 in Rangiora; and
  - unlocking the potential of the Te Kaihanga Development Cooperative.



## The roles of other parties

- 2.138 Other parties involved in the recovery include Te Rūnanga o Ngāi Tahu, Fletchers, Southern Response Earthquake Services Ltd (Southern Response),<sup>36</sup> and alliances such as SCIRT.

<sup>36</sup> For more about Southern Response, see paragraph 3.32.



## Part 3

# Public sector funding for the recovery in Canterbury

- 3.1 For the public sector, the cost of the recovery is high. The Treasury has estimated that the Canterbury earthquakes caused \$20 billion in damage.<sup>37</sup> Public entities are expected to pay for much of this cost. The Government notes that it may be some time before the final costs are known.
- 3.2 In this Part, we look at:
- the total public sector funding required as a result of the Canterbury earthquakes (including funding of the immediate emergency response and for the recovery);
  - CERF;
  - the funding of EQC;
  - the current estimated costs of the recovery to the Canterbury local authorities;
  - other sources of public funding for the recovery; and
  - risks to the cost and funding estimates.

### Total public sector funding

- 3.3 Figure 3 shows that gross direct costs for public entities arising from the Canterbury earthquakes are estimated to be at least \$14 billion (excluding recoveries from reinsurance and insurance).

**Figure 3**  
Total estimated gross direct costs for public entities (excluding anticipated recoveries)

	Estimated direct costs \$million
Canterbury Earthquake Recovery Fund	5,507
EQC	7,445
Other State-owned enterprises and Crown entities	23
<b>Total Crown</b>	<b>12,975</b>
Christchurch City Council	982
Waimakariri District Council	29
Selwyn District Council	2
Environment Canterbury	7
<b>Total Crown and local authorities</b>	<b>13,995</b>

37 The Treasury (2012), *Budget Economic and Fiscal Update 2012*, Wellington, page 51.

- 3.4 The most recent estimate of the total cost of the Canterbury earthquakes to the Crown, as outlined in the 2012 Budget, is \$13 billion.<sup>38</sup> Most of this cost is expected to fall between 1 July 2011 and 30 June 2014. This amount includes the \$5.5 billion for CERF, which was set up in the 2011 Budget and \$6 billion from the Natural Disaster Fund, which was built up over years through the payment of levies by insured residential property owners.
- 3.5 The CERF costs are the Crown's share of local government infrastructure, roads, insurance excesses on schools and hospitals, temporary housing, and other policy responses.
- 3.6 EQC, Southern Response (see paragraph 3.32), and other State-owned entities, and Crown entities are expected to incur the remaining Crown costs.
- 3.7 CCC estimates its financial contribution to the recovery to be about \$1 billion (excluding insurance recoveries and other contributions).<sup>39</sup> Waimakariri District Council, Selwyn District Council, and Environment Canterbury will incur millions of dollars of expenditure for the recovery of infrastructure and other assets.
- 3.8 All of the above excludes many indirect costs of the earthquakes to many public entities. For example, many organisations suffered interruptions to their business and damage to premises, and had temporary accommodation and relocation costs. We have not tried to quantify these costs.

### Canterbury Earthquake Recovery Fund

- 3.9 The purpose of CERF is to provide a mechanism to track the costs associated with the earthquakes in a transparent manner. The fund will be wound up several years after the final costs of the earthquake-related work are realised.<sup>40</sup>
- 3.10 The Treasury is responsible for monitoring and managing CERF. Individual agencies, such as CERA are accountable for delivering outcomes within any allocations from CERF.
- 3.11 The funds for CERF come from a combination of reprioritisation from existing public entity budgets and new government funding, which is largely funded through borrowing.
- 3.12 CERF includes response costs as well as the recovery costs. The fund has not been split between response and recovery, and we have not attempted to separate these expenses.

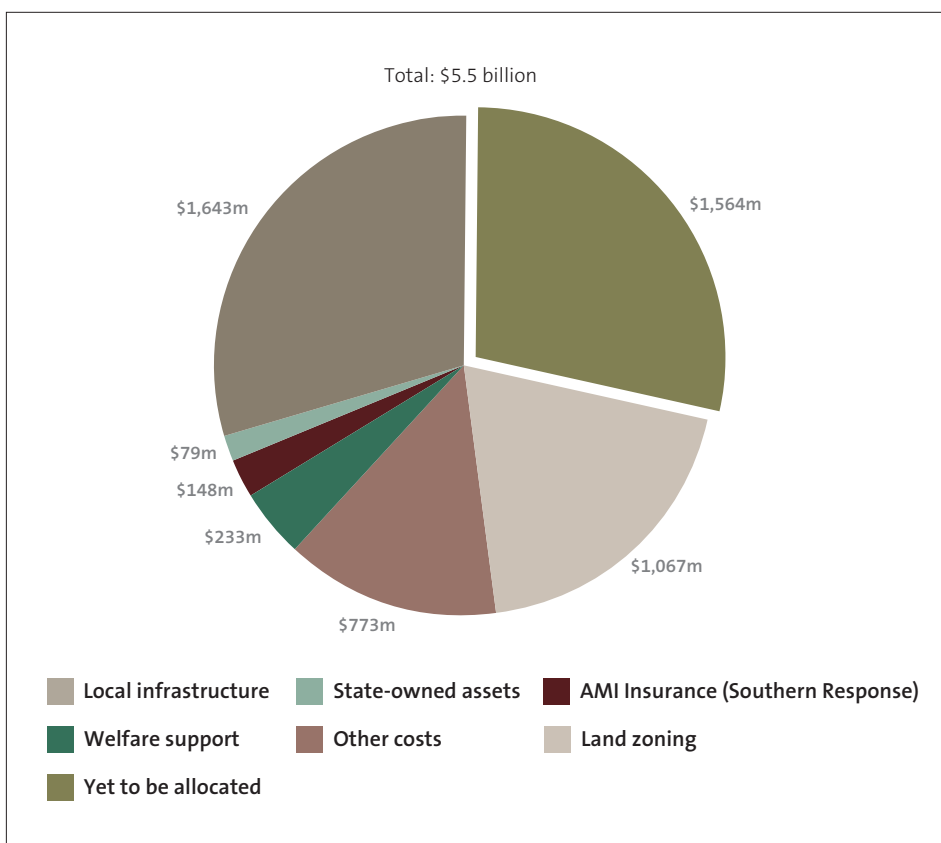
38 The Treasury (2012), *Budget Economic and Fiscal Update 2012*, Wellington, page 38.

39 Christchurch City Council (2012), *Annual plan 2012–13*, page 18.

40 The Treasury (2011), *Fiscal Strategy Report*, Wellington, page 41.

3.13 Figure 4 shows that, at the time of the 2012 Budget, the two largest allocated costs that CERF covered were local infrastructure and land zoning.

**Figure 4**  
Allocation of Canterbury Earthquake Recovery Fund funding



Source: The Treasury (2012), *Budget Economic and Fiscal Update 2012*, Wellington, page 38.

**Local infrastructure**

3.14 The costs allocated for local infrastructure relate to the Government’s potential commitment to contribute 60% of the cost of repairing essential local infrastructure. Local infrastructure means freshwater, stormwater, wastewater, sewerage systems, and stop banks. The costs also reflect the Crown’s contribution to repairing local roads.

**Water, stormwater, and sewerage**

- 3.15 The Guide<sup>41</sup> says that central government will pay 60% of restoration costs for essential local infrastructure after a natural disaster, as long as the local authority can meet the remaining 40%.
- 3.16 Local authorities have forecast that they will receive about \$560 million, 60% of the \$940 million of the estimated damage to water, stormwater, and sewerage assets.
- 3.17 In 1993, local authorities created a mutual fund called the Local Authority Protection Programme (LAPP) fund, so that they could meet their 40% share of restoration costs. LAPP covers 40% of the material damage losses to essential infrastructural assets caused by a natural disaster.
- 3.18 Only local authorities can be members of LAPP, and they pay annual membership contributions. The contributions, set each year, are assessed using a risk-based formula, taking into account the replacement value of each member's infrastructure assets adjusted to recognise exposure to risk (such as floods and earthquakes).
- 3.19 The total amount payable by LAPP to Canterbury local authorities is limited by the reinsurance that LAPP had. CCC has disclosed in its annual plan that there could be a shortfall of \$196 million from LAPP. This amount is included in the Council's estimated earthquake response and recovery costs.

**Roads**

- 3.20 The primary government mechanism for contributing to the repair of local roads and state highways is the National Land Transport Fund, administered by NZTA.

**Land zoning costs**

- 3.21 Land zoning costs result from the Government's red zone offer to insured property owners (see Case Study 3 in Part 5).

**Costs yet to be allocated**

- 3.22 Reflecting the uncertainty of the cost of future policy options, the second-largest part of CERF are funds that have not been allocated but may be needed. There are several areas of uncertainty, such as the risk of rock falls in the Port Hills (see Case Study 5 in Part 5) and contributing to specific projects in the CBD rebuilding (see Case Study 2 in Part 5).
- 3.23 Since we began writing this report, decisions about how to allocate most of these funds have been made.

41. *Guide to the National Civil Defence Emergency Plan*, available at [www.civildefence.govt.nz](http://www.civildefence.govt.nz).

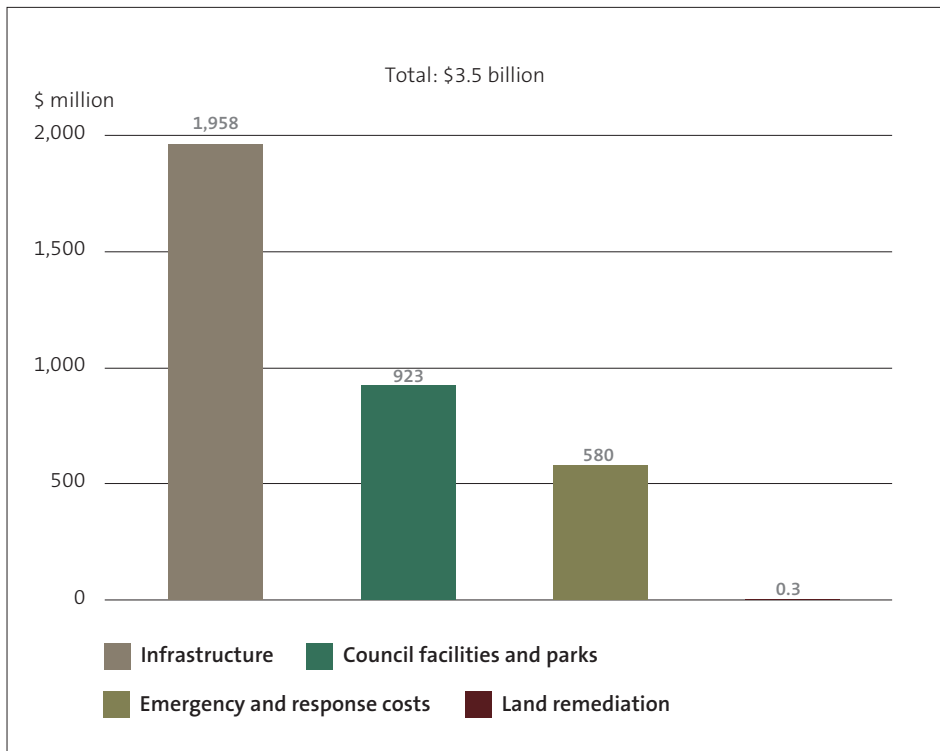
### Earthquake Commission funding

- 3.24 EQC says that liability for paying for damage from the Canterbury earthquakes is uncertain and sensitive to assumptions (such as reinsurance recoveries and apportionment to specific events). The liability will be provided from \$6 billion from the Natural Disaster Fund, \$4.7 billion from secured reinsurance and a contribution from the Crown in line with its obligation under section 16 of the Earthquake Commission Act to ensure that the Commission can meet all its liabilities.<sup>42</sup>
- 3.25 Support from the Crown is necessary because EQC’s liabilities are larger than its assets (see paragraph 2.88).

### Estimated costs of the recovery for the Canterbury local authorities

- 3.26 Figure 5 shows that the Canterbury local authorities face an estimated collective \$3.5 billion cost associated with the earthquakes. Excluding emergency and response costs, the total cost of the recovery to the affected local authorities is an estimated \$2.9 billion.

**Figure 5**  
Summary of costs for the Canterbury local authorities



42 Earthquake Commission (2010), *Annual Report 2010/11*, page 29 (see Note 1, Notes to the Financial Statements).

- 3.27 Insurance or other contributions (such as the Crown's contribution to local infrastructure) will meet some of these costs.
- 3.28 Figure 6 shows that the Canterbury local authorities expect to fund \$1.013 billion of the cost from deferred works programmes, rates, and borrowing. It is forecast that CCC ratepayers will be liable for almost \$1 billion of that amount.

**Figure 6**  
**Canterbury local authorities' sources of funding for the recovery**

		\$million
Forecast cost to repair or rebuild		3,456.8
Central government funding (included in the CERF)	1,579.7	
Insurance	841.0	
Other contributions	23.0	
		2,443.7
<b>Balance to be funded by local authorities</b>		<b>1,013.1</b>

## Other sources of funding

### The Canterbury Earthquake Appeal Trust

- 3.29 The Government set up the Canterbury Earthquake Appeal Trust (the Trust) to be the official global fundraiser for the recovery effort of Christchurch and Canterbury.<sup>43</sup> DIA is responsible for administering the Trust.
- 3.30 Trust funds are to be allocated to economic revitalisation, education, environment, alleviating hardship, heritage and culture, spirituality and faith, and sport and recreation projects. The focus is on funding projects that are not already provided for or would take a long time to raise funds for.

## Risks to the cost and funding estimates

- 3.31 By far the largest exposure that the Crown has to costs from the Canterbury earthquakes is through insurance claims. The Crown has exposure through EQC and Southern Response Earthquake Services Limited (Southern Response), the part of AMI Insurance Limited that is now owned by the Government.
- 3.32 In April 2011, the Government stepped in to support AMI Insurance. In December 2011, IAG New Zealand Limited (part of Insurance Australia Group) successfully bid for parts of AMI Insurance, excluding earthquake-related claims and certain other claims for which a reinsurance claim had been made. In April 2012, this transaction was completed and the Crown took ownership of AMI Insurance.

43 See [www.christchurchappealtrust.org.nz](http://www.christchurchappealtrust.org.nz).



At the same time, AMI Insurance was renamed Southern Response Earthquake Services Limited.

- 3.33 The net cost to the Crown of settling the AMI claims is uncertain. The Budget Economic and Fiscal Update in May 2012, estimated that \$148 million would be required from CERF.<sup>44</sup>
- 3.34 Southern Response is responsible for:
- settling an estimated \$2 billion of claims; and
  - that part of a \$850 million contribution from EQC for rebuilds and repairs that Southern Response carries out.<sup>45</sup>
- 3.35 If necessary, the Government will provide further funds to ensure that claims are settled.<sup>46</sup>
- 3.36 Local authorities have used assumptions to calculate the cost of the rebuilding. The Crown has also used assumptions to estimate costs. These assumptions include land zoning decisions (see Case Study 3 in Part 5), rock falls (see Case Study 5 in Part 5), and damage to infrastructure (see Case Study 1 in Part 5). There is a risk that the estimates are understated and the costs could be greater. We will continue to monitor this.

44 The Treasury (2012), *Budget Economic and Fiscal Update 2012*, Wellington, page 38.

45 The rest of the \$850 million is money that Southern Response does not use for rebuilding or repairing a house. That money goes directly from EQC to homeowners who are not rebuilding or repairing their house but are buying one elsewhere.

46 See the Southern Response website, [www.southernresponse.co.nz](http://www.southernresponse.co.nz).

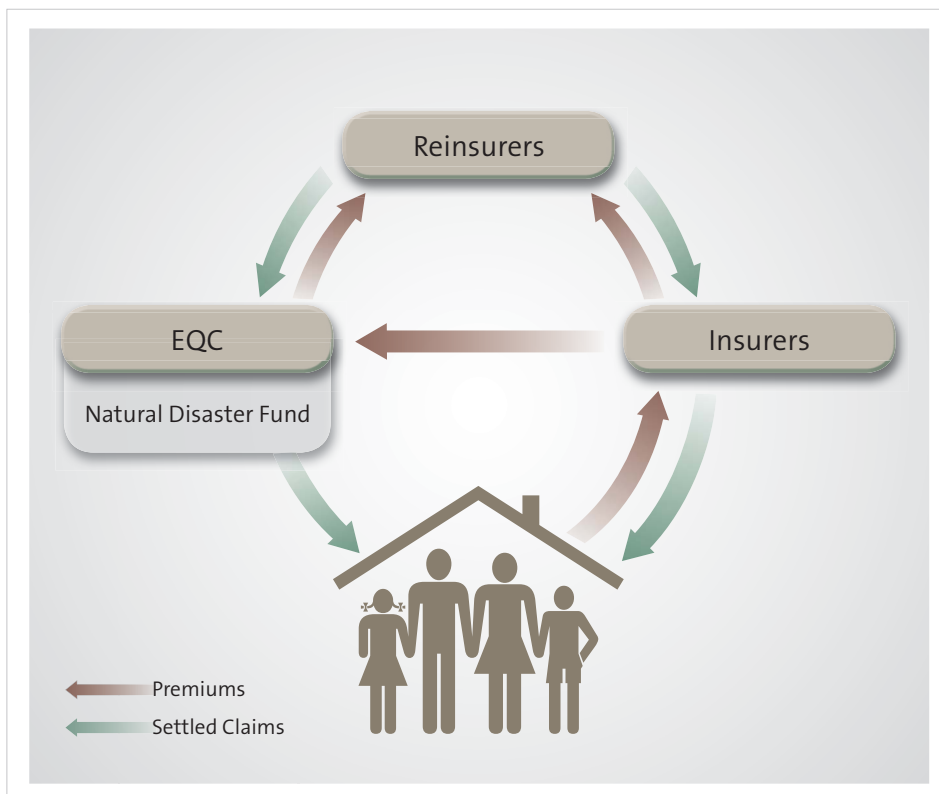


## Part 4

# Insurance and the recovery

- 4.1 In this Part, we discuss:
- the effects of insurance complexity on owners of residential properties;
  - the need to apportion damage to particular earthquakes;
  - other complications;
  - insurance premiums; and
  - new insurance for public entities.
- 4.2 Insurance has a vital role in helping and funding the recovery.
- 4.3 The Canterbury earthquakes have created challenges for insurers and people with insurance claims. The Reserve Bank of New Zealand has reported that insurers' estimates indicate that the total cost of the earthquakes to insurance companies could be about \$30 billion (although there is considerable uncertainty about this estimate).<sup>47</sup> This estimate covers all insurance costs, not just those relating to the recovery.
- 4.4 Figure 7 shows how the insurance market works for property owners.

**Figure 7**  
**Insurers and the recovery**



<sup>47</sup> Reserve Bank of New Zealand (May 2012), *Financial Stability Report*, page 31.

## The effects of insurance complexity on owners of residential property

- 4.5 The volume and complexity of the work that is required to repair homes in Canterbury was not planned for and, although some properties have been repaired and the rebuilding of others is under way, there has been relatively little rebuilding. There are many reasons for this, including that:
- insurers and EQC are still deciding on the solutions and the eventual cost of repairs to some homes – this is particularly so with TC3 properties (see Case Study 4 in Part 5);
  - decisions about the extent of damage and the apportionment of damage to properties from the different earthquakes are complex and challenging – deciding on when damage to a property was caused can affect whether a claim to EQC is above or below the \$100,000 cap, and whether the property will be repaired by EQC or the insurance company;
  - geotechnical assessments of land need to be completed to work out the best resolution for TC3 properties with damage to foundations; and
  - ongoing seismic activity creates uncertainty.
- 4.6 Many householders are still working with EQC and their insurers to settle their claims. To date – through its Managed Repairs Programme – EQC has completed more than 21,000 repairs to the estimated 100,000 homes in the Programme.

## Apportioning damage to particular earthquakes

- 4.7 EQC's cover of \$100,000 for damage to individual buildings is reinstated after every earthquake. This means that, when settling a claim on a property, EQC assessors must assess the cost of damage to the property and identify which earthquake caused the damage. Some properties have suffered damage in each of the earthquakes, so EQC and private insurers must apportion the instances of damage to the property (and the cost) to particular earthquakes, up to the event that made the property uneconomic to repair.
- 4.8 EQC and private insurers must agree on the amount of damage caused by each earthquake.
- 4.9 Working out apportionment requires input from several data sources and is complex and time consuming. There have been disagreements between EQC and insurers about apportionment. The earthquakes have created circumstances not previously seen. As a result, EQC and private insurers have required and sought legal advice to clarify interpretations of the Earthquake Commission Act.

- 4.10 Reinsurers require the apportionment of damage and respective liabilities to be resolved before they will make payments to EQC or insurers. Reinsurance is a prudent risk management strategy used by insurance companies to minimise losses. EQC and private insurers buy reinsurance from the companies to limit their liability from a large-scale event. Reinsurance is provided by overseas companies. Like ordinary insurance, catastrophe reinsurance is only drawn on when claims are more than a certain value for an individual insurer. To receive this cover, insurance companies pay a premium to the reinsurers.

### Other complications

- 4.11 Further complications arise when:
- the Government has not yet decided how to zone of land;
  - there are delays in clarifying the liability that EQC has for land damage in TC3 areas;
  - the flood management area has had to be redrawn because of land subsidence and estuary blockages;
  - the risk of rock falls or cliff collapses has increased; and
  - the technical design of some types of repairs is yet to be worked out.
- 4.12 In these situations, home owners cannot finalise their claims with EQC or their insurers. CERA has a role in liaising with insurers to monitor and encourage timely settlements of claims.<sup>48</sup>
- 4.13 By 25 June 2012, EQC had received 413,928 building claims and 92,873 land claims, and had paid a total of \$3.175 billion.<sup>49</sup>
- 4.14 Part 5 includes case studies of properties that have suffered damage in the TC3 area and in the Port Hills area of Christchurch.

### Insurance premiums

- 4.15 Insurance premiums have increased substantially since the Canterbury earthquakes. Insurers and reinsurers now see catastrophe insurance as posing higher risk because of many recent events worldwide, including the Canterbury earthquakes. The cost of reinsurance has risen sharply for insurers since the earthquakes and premiums for residential insurance have increased significantly.

48 Canterbury Earthquake Recovery Authority (2011), *Recovery Strategy for Greater Christchurch: Mahere Haumanutanga o Waitaha*, page 19.

49 See the Earthquake Commission's Canterbury Earthquakes website, [www.canterbury.eqc.govt.nz](http://www.canterbury.eqc.govt.nz).

## New insurance for public entities

- 4.16 Insurance costs for many public entities have risen sharply since the earthquakes, and some public entities are struggling to insure their assets. In 2012/13, we will survey all public entities to understand how public entities are insuring their assets and at what cost.

## Part 5

# Case studies

- 5.1 This Part sets out five case studies that show the complexities arising from the number of public entities involved in the recovery. The case studies show how the earthquakes have affected the lives of many Cantabrians. For each case study, we describe:
- what happened;
  - the roles and responsibilities of public entities involved;
  - the costs and funding arrangements for the public sector; and
  - the effect on residents.
- 5.2 The five case studies are about:
- repairing and rebuilding roads, water supply, stormwater systems, and wastewater systems (horizontal infrastructure);
  - redeveloping the Christchurch CBD;
  - the Government's red zone offer;
  - damaged properties in TC3 areas; and
  - managing risks to homes in the Port Hills.

### Case study 1: Repairing and rebuilding horizontal infrastructure

#### What happened?

- 5.3 Roads, water supply, stormwater systems, and wastewater systems (known as horizontal infrastructure) suffered severe damage in the earthquakes, affecting many residents and causing localised environmental damage.
- 5.4 There are estimates that 1021 kilometres of roads in Christchurch need rebuilding (52% of urban sealed roads in Christchurch), 124 kilometres of water supply mains in Christchurch were damaged, and about 528 kilometres of Christchurch's sewerage were badly damaged (about a third of the total sewerage in Christchurch).<sup>50</sup>
- 5.5 The repair and rebuilding of horizontal infrastructure is under way and expected to take about five years to complete. This is a complex and challenging task because many of the infrastructure systems are underground, making damage assessment and designing repairs and replacements difficult.

<sup>50</sup> See the Stronger Christchurch Infrastructure Rebuild Team's website, [www.strongerchristchurch.govt.nz](http://www.strongerchristchurch.govt.nz).

- 5.6 The challenges and risks to repairing and rebuilding the horizontal infrastructure include:
- integrating work to repair the horizontal infrastructure with the wider Recovery Strategy;
  - being able to sequence and prioritise the horizontal infrastructure work and ensure that the work is carried out in the most efficient and cost-effective way;
  - connecting horizontal infrastructure to new residential subdivisions and core services (such as schools and medical facilities); and
  - managing and sharing the cost of the repairs between local and central government.

#### **Who is responsible for what?**

- 5.7 CCC, Waimakariri District Council, and Selwyn District Council own most of the horizontal infrastructure damaged in the earthquakes. NZTA is responsible for national highways and for repairing damaged highways.
- 5.8 The horizontal infrastructure rebuilding is being carried out differently in each district. Waimakariri District Council and Selwyn District Council have separate contracts with construction companies to carry out infrastructure recovery projects in their districts.

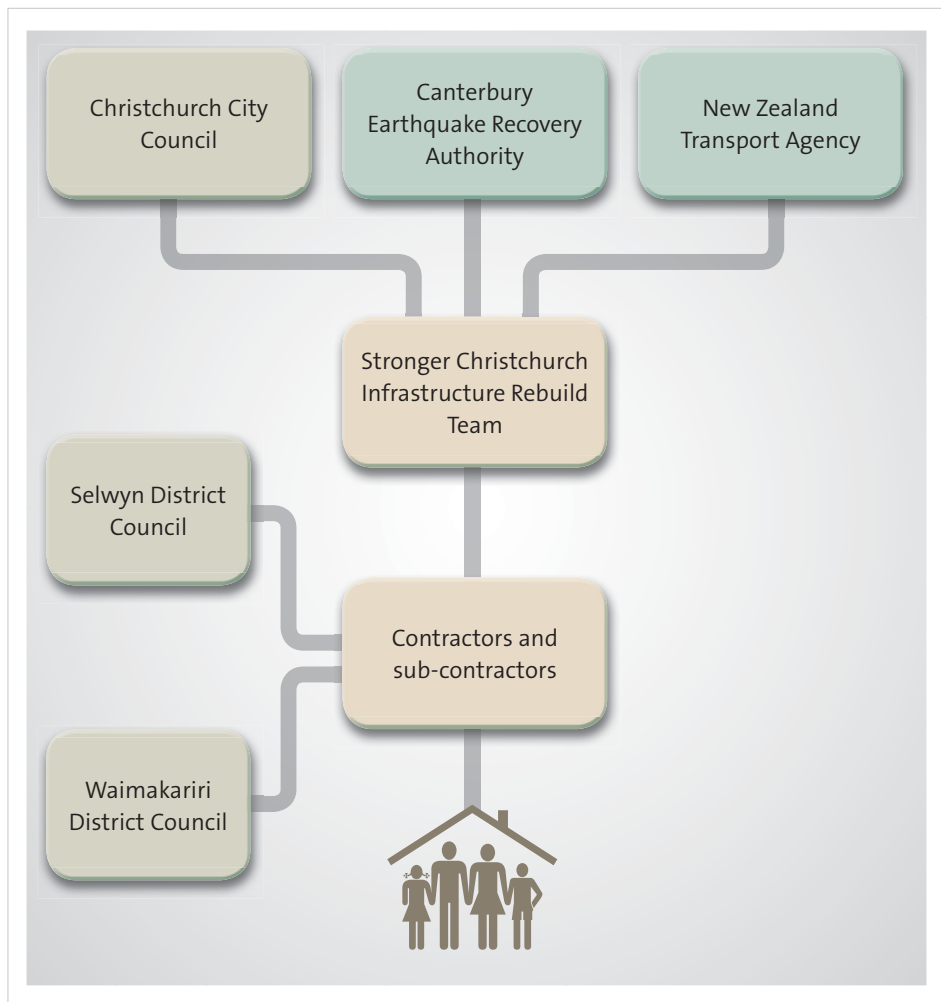
#### **Stronger Christchurch Infrastructure Rebuild Team**

- 5.9 In Christchurch, about 85% of the damaged horizontal infrastructure is being repaired and rebuilt through the SCIRT alliance arrangement with five construction companies, in partnership with CCC, CERA, and NZTA (see Figure 8). The five construction companies are City Care Limited (owned by CCC), Downer New Zealand Limited, Fletchers, Fulton Hogan Limited, and McConnell Dowell Construction Limited.
- 5.10 CCC, CERA, and NZTA set up SCIRT to manage the large volume of repairs and building projects required throughout Christchurch – to provide a way of controlling cost inflation, to fast-track repairs, and to ensure that work done is of high quality.
- 5.11 An alliance arrangement is normally used in complex and high-risk infrastructure projects, where risks are often unpredictable and best managed collectively. For example, NZTA uses alliances for several large roading projects. However, an alliance of this size and complexity, covering multiple projects, is unusual in New Zealand.



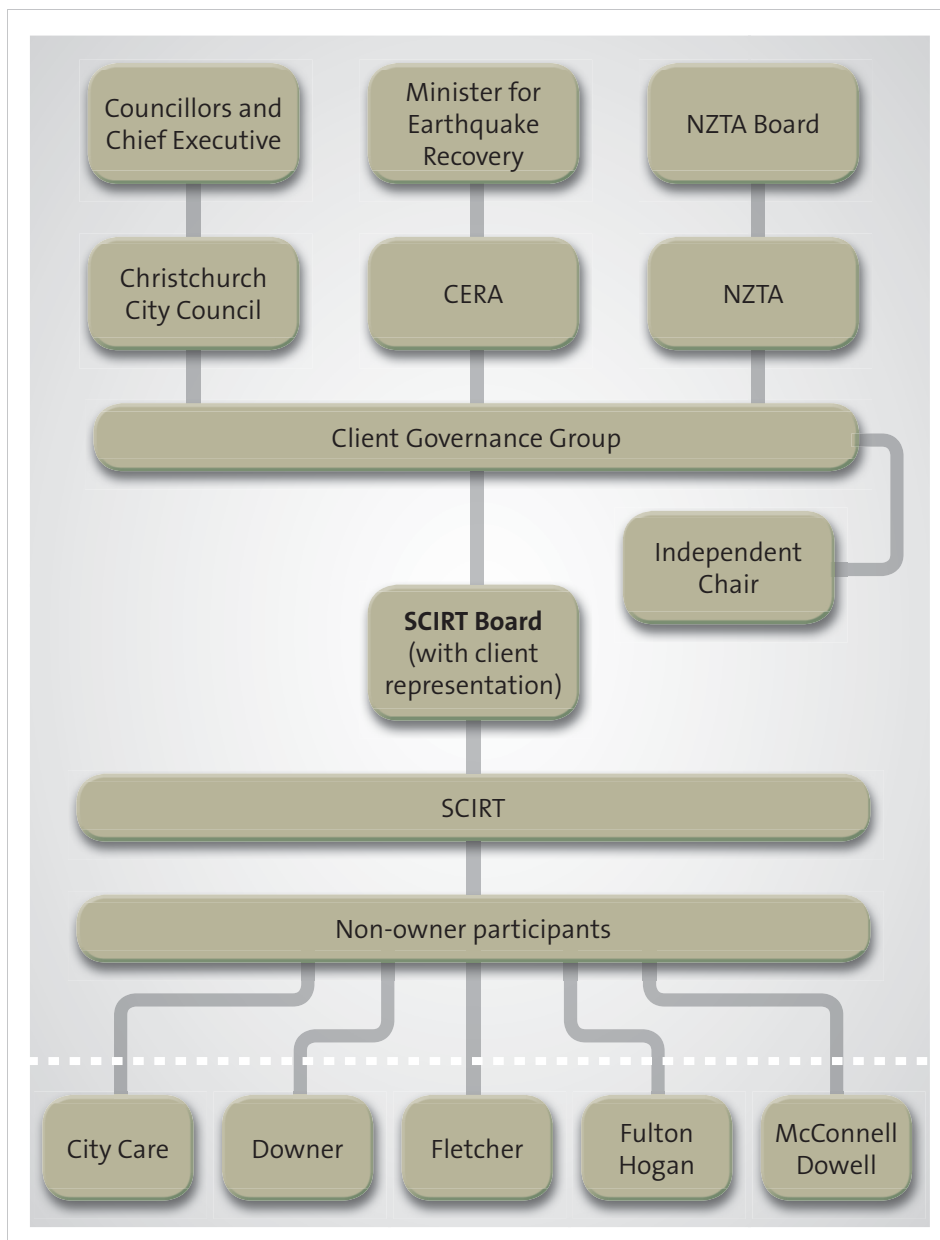
- 5.12 SCIRT is complex because it has three clients – CCC, CERA, and NZTA. The alliance carries out wide-ranging work made up of multiple projects that directly affect the lives of residents because of the disruption that the repairs cause, including road closures, extensive road works, noise, and dust. Residents will observe many different contractors carrying out repairs and causing disruption to their lives. It is important for residents to understand where, when, for how long, and why this disruption will happen, to help them to accept and deal with disruption.

**Figure 8**  
Responsibility for repairing and rebuilding roads, water supply, stormwater systems, and wastewater systems in greater Christchurch



5.13 SCIRT has governance and oversight arrangements to provide guidance and to monitor the delivery of the infrastructure programme in Christchurch. Figure 9 shows how the alliance is governed.

**Figure 9**  
**The Stronger Christchurch Infrastructure Rebuild Team’s description of its governance arrangements**



Source: Stronger Christchurch Infrastructure Rebuild Team.

- 5.14 The Alliance General Manager – whose role is similar to that of a chief executive – manages SCIRT day to day. SCIRT has a board that is responsible for providing direction to the Alliance General Manager. The board is made up of eight executive managers (one from each participating public entity and construction company) and is responsible for ensuring that the alliance achieves the desired outcomes.
- 5.15 A Client Governance Group – whose members are managers from the three public entities – provides direction to the SCIRT board. The Client Governance Group has an independent chairperson (appointed by the Minister) and is supported by:
- SCIRT's scope and standards review team, which sets standards and confirms the scope (where required);
  - the strategy reference group, which provides strategic direction to the programme (including keeping it in line with the Recovery Strategy); and
  - the funding team, which works out and monitors how the work is paid for – recommending processes and controls to ensure that funds are used in the most efficient way and that apportioning is in line with the cost-sharing policy.

### The costs and funding arrangements

- 5.16 Because the condition of the below-ground assets (such as water pipes) has not been completely assessed, the estimate of the cost of the repair and rebuilding of horizontal assets is highly uncertain. The condition assessment, which is expected to be completed in 2013, will provide data for a more certain estimate of cost.
- 5.17 Because of the decisions to assign certain residential properties to the red zone, infrastructure needs in greater Christchurch differ from what much of the current infrastructure was designed for. Many decisions on the future design and configuration of horizontal infrastructure and services remain to be made. Until these decisions are made, estimates of cost will remain uncertain. The cost of maintaining temporary infrastructure is also significant.
- 5.18 CCC's latest estimate of the cost of infrastructure rebuilding is \$1.9 billion.<sup>51</sup> Waimakariri District Council's 2012-22 long-term plan disclosed about \$46 million of projected expenditure (operating and capital expenditure) to repair and rebuild horizontal infrastructure assets.<sup>52</sup> Almost half of Waimakariri District Council's costs were forecast to be incurred by 30 June 2012.
- 5.19 In contrast, the estimated damage to Selwyn District Council's horizontal assets is much less. The Council's 2010/11 annual report disclosed about \$4 million of damage.<sup>53</sup>

51 Christchurch City Council (2012), *Annual Plan 2012-13*, page 18.

52 Waimakariri District Council (2012), *Ten year plan 2012-2022*, page 28.

53 Selwyn District Council (2011), *Annual Report 2010/11*, page 125.

- 5.20 The combined cost to the three local authorities of repairing horizontal assets is estimated to be nearly \$2 billion, as shown in Figure 10.

**Figure 10**  
Forecast cost of repairing or rebuilding horizontal infrastructure assets

Asset	\$million
Local roads	1,023.5
Wastewater/sewerage	718.6
Water supply	143.8
Stormwater	72.5
<b>Total</b>	<b>1,958.4</b>

- 5.21 Insurance or Crown funding will meet much of the forecast cost to repair or rebuild horizontal infrastructure. However, the three local authorities are required to fund a large proportion.
- 5.22 Figure 11 shows that repairing horizontal infrastructure is expected to cost local authorities about \$513 million. This cost is outlined in the local authorities' respective planning documents as well as the local authorities' individual proposals to fund the repair.

**Figure 11**  
Sources of funding for the forecast cost of repairing horizontal infrastructure assets

		\$million
Forecast cost to repair or rebuild		1,958.4
Central government funding	1,266.8	
Insurance	179.1	
		1,445.9
<b>Balance to be funded by local authorities</b>		<b>512.5</b>

- 5.23 Local authorities are billed for the repair and rebuilding of horizontal infrastructure when contractors carry out the work. It is then up to the local authority to recover funds from other sources (that is, roading costs from NZTA for its contribution to the repair of local roads; funding from the Crown for restoring water, stormwater, and sewerage infrastructure; and recoveries from insurance companies). This will continue during the entire recovery.

- 5.24 Under this model, local authorities have to first incur the spending. The costs to date have been significant. For example, initial emergency response works and setting up SCIRT, including building the SCIRT office, cost CCC about \$70 million. CCC will recover some of this from CERA and NZTA as project overheads, but it is estimated that this will take five years.
- 5.25 Each month, CCC incurs direct costs to pay for the repairs and rebuilding that SCIRT has done. The Council is funding a significant proportion of these costs through borrowing. This puts significant onus on the Council to manage the initial cashflow requirements of the horizontal infrastructure work. Up to May 2012, CCC had incurred \$798.7 million of response and recovery costs. It had received \$266.3 million from the Crown.
- 5.26 The Guide says that it is normal procedure for CCC to spend first and lodge a claim later. However, the Guide's drafters may not have envisaged damage of the size and scale in greater Christchurch. CCC has asked for an advance allocation of funding from NZTA and CERA based on a cost-allocation model so that CCC pays 40% of the costs and NZTA and CERA each pay 30%.

### **What is the effect on residents?**

- 5.27 Many residents in earthquake-affected areas do not receive the same level of service they received before the earthquakes. Most of the repairs and reconstruction of infrastructure require digging up roads, which causes further disruption to traffic and services. The disruptions and delays in receiving these services could continue for a long time.
- 5.28 Community groups have sought good communication about the progress of the horizontal infrastructure work. Many people told us that SCIRT was a positive example of providing good communication.

## **Case Study 2: Redeveloping the Christchurch central business district**

### **What happened?**

- 5.29 The earthquakes badly damaged Christchurch's CBD. Nearly all the businesses in the CBD were displaced, and about 1000 buildings will be demolished and many others will require substantial repair. The CBD's horizontal infrastructure was badly damaged.
- 5.30 After the February 2011 earthquake, cordons were set up around central Christchurch. Properties were assessed to work out which buildings were unsafe

and had to be demolished. Since then, CERA has been gradually reducing the size of the cordoned area as streets are made safe.

- 5.31 CERA and CCC have also supported initiatives such as the Cashel Mall Restart project to encourage people to use the centre of the city and to help attract businesses and investors back into the CBD when the rebuilding begins.

### **Who is responsible for what?**

- 5.32 Under the Canterbury Earthquake Recovery Act, CCC was responsible for preparing a draft central city recovery plan for ministerial approval. CCC prepared the plan in partnership with CERA, Environment Canterbury, and Te Rūnanga o Ngāi Tahu and gave it to the Minister in December 2011 (see paragraph 2.56). The plan is in two volumes. Volume 1 contains the overall vision for the new CBD, and Volume 2 sets out proposed regulatory changes to CCC's city plan (a district plan under the Resource Management Act) to achieve the vision outlined in Volume 1.
- 5.33 Five principles that CCC said would create a vibrant and prosperous city guided this initial central city plan. These principles were to:
- foster business investment;
  - respect the past;
  - take a long-term view;
  - have a city that was easy to get around; and
  - foster vibrant central city living.
- 5.34 In April 2012, the Minister announced that he had asked that the powers under the Canterbury Earthquake Recovery Act be used to set up CCDU within CERA to effect the Recovery Plan and to take overall responsibility for redeveloping the CBD.
- 5.35 CCDU has roles in planning what the new CBD will look like, working with developers, and encouraging businesses to return to the CBD. The first task of CCDU has been to prepare a “blueprint” plan for significant building projects – “anchor projects” – which includes their location in the CBD.
- 5.36 CCDU appointed Boffa Miskell Limited as a lead company in a consortium to prepare the blueprint, which was published at the end of July 2012 (see paragraph 2.57). Boffa Miskell has worked with CCDU, the Council, and other organisations to prepare the blueprint, which outlines how central Christchurch will grow and provides direction for the Recovery Plan, of which it is a part.

- 5.37 CERA, through CCDU, is involved in many relationships that are critical to the success of the Recovery Plan. These include relationships with:
- CCC, which is likely to be responsible for managing many of the facilities and amenities proposed in the Recovery Plan;
  - private sector investors, whose investment will be needed for the Recovery Plan to be realised;
  - owners of land that CERA will need to buy so that the Recovery Plan can be put into effect;
  - Te Rūnanga o Ngāi Tahu, as a strategic partner to the Recovery Plan;
  - public entities that will move their offices and services back into the CBD; and
  - the people of Christchurch, who will use the new CBD and have views on how it should take shape.

### **Costs and funding arrangements**

- 5.38 The cost of creating a new CBD is still to be worked out. It will include a significant contribution from central government, a contribution from CCC, and investment from the private sector. Public entities will build and own some of the new buildings and amenities in the CBD (such as the Convention Centre and Town Hall).
- 5.39 CCC told us that it had spent a lot of time on the Recovery Plan before presenting it to the Minister in December 2011. However, the costs of preparing it have not been quantified.
- 5.40 CERA received an increase in appropriations in the 2012 Budget to set up CCDU and to put the Recovery Plan into effect.

### **What is the effect on residents?**

- 5.41 The lack of a functioning CBD has had a significant effect on the residents of Christchurch. Since the February earthquake, Christchurch has not had a central commercial, cultural, or social centre. Services, amenities, and resources such as the Central Library and Arts Centre have not been available. This has affected the city's identity and is a daily reminder of the extent to which the earthquakes have affected those who live in and use the city.

## Case Study 3: The Crown's offer to buy properties in the residential red zone

### What happened?

- 5.42 The earthquakes caused extensive land damage throughout Canterbury, and some areas were particularly badly affected. After the earthquakes, CERA zoned land in the earthquake-affected areas of Canterbury into four categories, based on area-wide land assessments, to help inform decisions about repair and reconstruction.
- 5.43 The assessments used information on the damage to land, buildings, and infrastructure to work out what the different policies and procedures for repairing homes and buildings should be. The assessments considered matters of timeliness, cost-effectiveness, certainty, disruption, and the well-being of communities.<sup>54</sup>
- 5.44 The four zones were called red, orange, green, and white zones. Orange zones have since been assessed and put into the red or green zones.<sup>55</sup> All residential properties in the earthquake-affected areas of Canterbury now fit into one of three zones:
- red – where damage was extensive, the risk of further damage is high, and it is uneconomic to repair properties;
  - green – considered to be viable and suitable for continued residential occupation; and
  - white – in the Port Hills, where mapping and final zoning decisions have recently been made.
- 5.45 As of 18 May 2012, there were 7256 properties inside the red zone.<sup>56</sup> On 29 June 2012, the Government announced that 285 properties in the Port Hills had also been zoned red. On 13 September 2012, the Minister announced that a further 37 properties at risk from rock falls had been zoned red. The residential red zone is mostly in the east of Christchurch (along the Avon River and other areas near waterways), the north-east of Christchurch (such as Brooklands), the beach areas of Waimakariri District (Pines Beach and Karaki Beach), Kaiapoi, and, more recently, the Port Hills.
- 5.46 The Government defines the red zone as areas where:
- land repair would be prolonged and uneconomic;
  - land has suffered significant and extensive damage;

54 Canterbury Earthquake Recovery Authority (December 2011), *Technical categories and your property*.

55 Canterbury Earthquake Recovery Authority (December 2011), *Technical categories and your property*.

56 See the Canterbury Earthquake Recovery Authority's website, [www.cera.govt.nz](http://www.cera.govt.nz).



- most buildings are uneconomic to repair;
- there is a high risk of further damage to land and buildings from aftershocks, flooding, or spring tides;
- infrastructure needs to be completely rebuilt;
- land repair solutions would be difficult to carry out, prolonged, and disruptive for landowners; and
- rebuilding is unlikely in the short to medium term because of the obstacles posed by the significant land or infrastructure damage and high risk of further damage.

5.47 In June 2011, the Government announced a package to buy insured residential properties in the first areas confirmed as being in the red zone. The same offer has been made available in all residential areas that are zoned red.

5.48 Under the Government's package, residents in the red zone who own insured residential property have two options:

- Option 1: CERA, acting for the Government, buys the property at a price based on the most recent rating valuation for the land and improvements. The Crown takes over any insurance claims for the property.
- Option 2: CERA, acting for the Government, buys the property at a price based on the most recent rating valuation for the land. The Crown takes over the EQC claim for land damage only. These claims are managed by CERA. The owner retains the benefit of all insurance claims for damage to the property.

### **Who is responsible for what?**

5.49 CERA has overall responsibility for administering the red zone offer. This includes communicating the offer to residents, making the offers, buying, managing, and demolishing the properties, and recovering insurance on the properties that the Government has bought.

5.50 No decisions have been made on who will be responsible for managing the land in the residential red zone in the future. Until future land use is worked out, CERA will manage the land on behalf of the Crown. CCC and Waimakariri District Council are working with CERA to prepare plans for managing this land. In the meantime, while residents progress with their settlements and gradually move out of the red zoned suburbs, CCC and Waimakariri District Council continue to provide infrastructure and services to properties. The unit cost of these services increases as more people move out of the red zone.

## Costs and funding arrangements

- 5.51 CERF funds the Government's red zone offer. There are also appropriations in Vote Canterbury Earthquake Recovery that fund CERA's work on managing red zone properties. Figure 12 sets out the relevant appropriation budgets for CERA's spending on the residential red zone.

**Figure 12**  
**Red zone costs and liabilities for the Government**

Appropriation	Budgeted 2011/12* \$million	Budgeted 2012/13** \$million
Managing voluntarily acquired insured residential properties	4.2	1.0
Buying further red zone properties	3.0	nil
Buying Christchurch red zone properties	569.5	nil
Contributing towards legal fees incurred by owners of properties in the red zone	3.2	2.0
Managing voluntarily acquired insured residential red zone properties	84.7	10.0
<b>Total</b>	<b>664.6</b>	<b>13.0</b>

\* *Addition to the Supplementary Estimates of Appropriations for the Government of New Zealand and Supporting Information, for the year ending 30 June 2012, Vote Canterbury Earthquake, June 2012, page 875.*

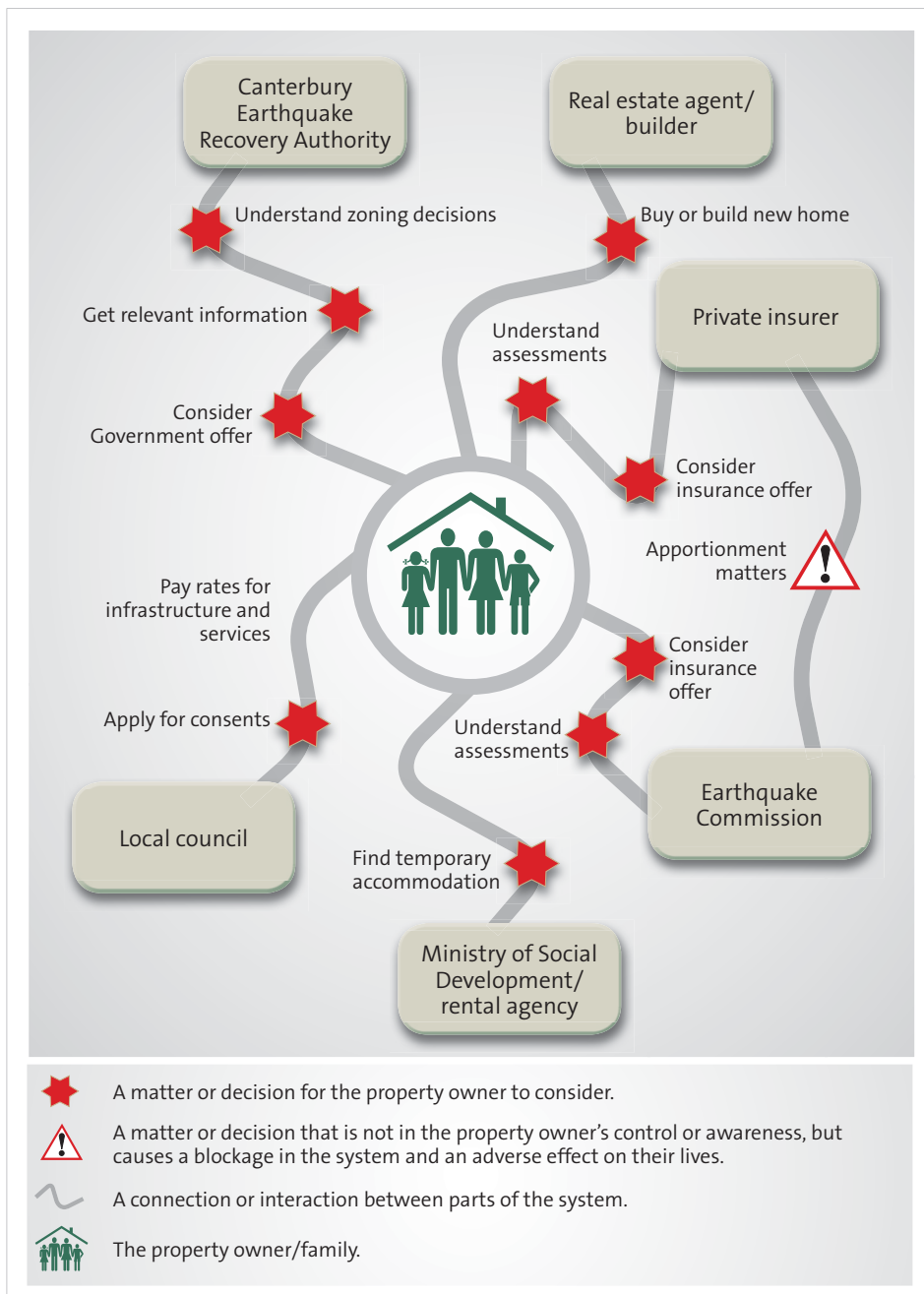
\*\* *The Estimates of Appropriations for the Government of New Zealand, for the year ending 30 June 2013, May 2012, page 21.*

- 5.52 The Government will recover some of the cost of buying properties in the red zone through claims to insurance companies and EQC for the land and buildings, but the total amount that will be recovered is still being worked out. The eventual amount of money recovered will depend on the different insurance policies that cover the properties that the Government has bought.
- 5.53 CERA is considering how to value the residential red zone land that it has bought, and what will be done with the land.

## What is the effect on residents?

- 5.54 Figure 13 shows the complex range of matters and decisions that home owners in the red zone must manage.

**Figure 13**  
**What the Crown’s offer to buy properties means for people living in the red zone**



- 5.55 Figure 13 shows that completing the Crown's offer involves working with many different organisations and agencies, including EQC, insurance companies, lawyers, architects, CERA, and the relevant local authority. This can be challenging, especially for elderly home owners and other vulnerable groups.
- 5.56 The most important decision for property owners is whether to take Option 1 or Option 2. The best option for property owners will depend on several factors, including the particular insurance policy they have, the extent of the damage to their property, and what insurance or EQC payments they received before the Crown's offer.
- 5.57 When choosing Option 2, property owners must settle their EQC and insurance claims before they can buy or build a new house. While they are settling claims with their insurers, property owners often pay for rental accommodation and mortgages. Some property owners live in their damaged homes until they settle their claims.
- 5.58 Some property owners have disagreements with their insurers on the amount that they are entitled to. For example, some property owners chose Option 2 because preliminary assessments led them to believe that their insurer would pay out the replacement value of their house. However, in some instances, property owners have found that their insurers will fund repairs to properties but not a rebuild. In these instances, property owners may face a shortfall in funding the cost of rebuilding, or buying a property, elsewhere. While these matters are being resolved, property owners are unable to take up the Crown's offer. Property owners have 12 months from the date of their offer letter to accept the Crown's offer.
- 5.59 The red zone offer is voluntary, and owners of properties are under no obligation to accept it. It is not certain what will happen if some property owners choose to stay in the red zone after the Crown's offer expires.
- 5.60 Soon after the Government announced the red zone offer, CERA held eight workshops in Christchurch and one in Kaiapoi to explain the two options and to answer questions from property owners. At the same time, CERA staff visited all homes in the red zone to explain the zoning decision, the implications for residents, and the options available to them.
- 5.61 CERA and other public entities, such as the Commission for Financial Literacy and Retirement Income, have published information to help property owners to make the best decision about their property. Property owners can also access subsidised legal advice and get funding to help pay for their legal costs.

- 5.62 Help and support for property owners in the red zone includes:
- a free guide, *Red Zone Financial Decision Guide for Residential Red Zone Property Owners*, produced by the Commission for Financial Literacy and Retirement Income and funded by the Christchurch Earthquake Appeal Fund;
  - a financial advisory service set up by the Commission for Financial Literacy and Retirement Income that uses qualified financial advisors who have agreed to provide their time and services at no charge;
  - a discount of up to 50% on the cost of legal advice, funded by CERA and estimated to cost about \$3.8 million;
  - two Earthquake Assistance Centres, one at the Avondale Golf Club and the other in Kaiapoi, where people can get advice and help with matters relating to the Government's red zone offer, as well as access to other services; and
  - financial help from CETAS (see paragraph 2.98), which is available to home owners whose homes are uninhabitable and whose insurance cover for temporary housing has run out. Temporary accommodation assistance is available to all home owners to help pay for rent and motel costs.

## Case study 4: Damaged properties in Technical Category 3 areas

### What happened?

- 5.63 After CERA made its announcement on the different land zones in greater Christchurch, the then Department of Building and Housing assessed land damage in the green zone (see paragraph 5.44). Land in the green zone is still generally considered suitable for residential construction but some properties have experienced liquefaction and considerable settlement during the series of earthquakes. The Department of Building and Housing analysed land damage, property damage, groundwater depth, and underlying soil composition.
- 5.64 After assessing the land, the Department of Building and Housing categorised land in the green zone into three technical categories, which affect the type of guidance provided for repairs and for new buildings.<sup>57</sup>
- 5.65 Houses with foundations that are built correctly to meet the ground conditions will perform better in future earthquakes. The three technical categories form an important part of MBIE's guidance for the repair and rebuilding of houses. They are a guide to how much geotechnical investigation is required (and who should do it) to work out the most appropriate foundation for a house.

<sup>57</sup> Department of Building and Housing (2012), *Guidance Appendix C Repairing and Rebuilding Foundations in TC3 Areas*, page 12.

- 5.66 Technical Category 1 land is unlikely to be damaged by liquefaction or movement in an earthquake. Standard foundations or enhanced concrete slab foundations recommended for most standard timber-framed homes can be used. The only site-specific geotechnical investigation required is a shallow soil strength test, which is standard for all homes.
- 5.67 Technical Category 2 land will suffer minor damage in a small earthquake and moderate damage in a major earthquake. Standard or enhanced concrete slab foundations can be used. The only site-specific geotechnical investigation required is the shallow soil strength test.
- 5.68 In an earthquake, liquefaction and lateral movement is likely to significantly affect TC3 land. Further geotechnical information is required on TC3 land to provide certainty about foundation repair and replacement options because there is no “one size fits all” solution. MBIE guidance recommends three foundation types for TC3 land – deep piles, site ground improvement options, and surface structures with shallow foundations. Chartered professional engineers will use the information gathered from geotechnical investigations to design the most appropriate foundations.
- 5.69 The three technical categories reflect the variable nature of the Canterbury soils. The categories provide a starting point for repair or rebuilding of earthquake-damaged house foundations by directing engineering resources where they would be needed most – to areas where the land is most susceptible to liquefaction and lateral movement in an earthquake. MBIE estimates that about 80% of houses in the green zone on flat land do not need deep geotechnical investigations and specific foundation designs.
- 5.70 For TC3 houses that have suffered damage to foundations, the land requires deep geotechnical investigations (by drilling) to inform a tailored design for repairs to the foundations. These properties will need more rigid foundations or site-specific foundation designs to reduce the risk of injury to people and damage to homes in any future earthquakes.
- 5.71 The Department of Building and Housing introduced technical guidance for foundations. Undamaged foundations will still meet building standards because building code changes do not apply retrospectively.<sup>58</sup>
- 5.72 The Department of Building and Housing issued guidelines for repairing and rebuilding foundations for TC3 properties. The guidelines include methods that can be used to make properties safe and compliant with the new building code, subject to normal engineering, building, and consenting standards.

58 Earthquake Commission (2012), *Land information – Technical Category 3 (TC3)*.

- 5.73 EQC has initiated a drilling programme to gather the geotechnical information needed to design new foundations, for claims that are below the EQC cap that are EQC's responsibility.<sup>59</sup> The drilling programme is to be carried out suburb by suburb during 2012 and 2013. The timetable for the drilling programme is published on the EQC website.

### **Who is responsible for what?**

- 5.74 Under section 19 of the Earthquake Commission Act, EQC is liable for the cost of land damage to residential properties, but EQC cover for land damage is not designed to change the technical category of property, or reduce the future risk of liquefaction. Insurance policies do not normally include liability for damage to land, but will normally include liability for repairing the foundations to houses.
- 5.75 MBIE is responsible for building standards and publishing guidance on engineering solutions for repairs to houses with damaged foundations in TC3 areas.
- 5.76 CERA has co-ordinated community meetings in TC3 areas so that residents and property owners have been able to ask representatives from EQC, insurance companies, the Department of Building and Housing and CCC about TC3 matters.

### **Costs and funding arrangements**

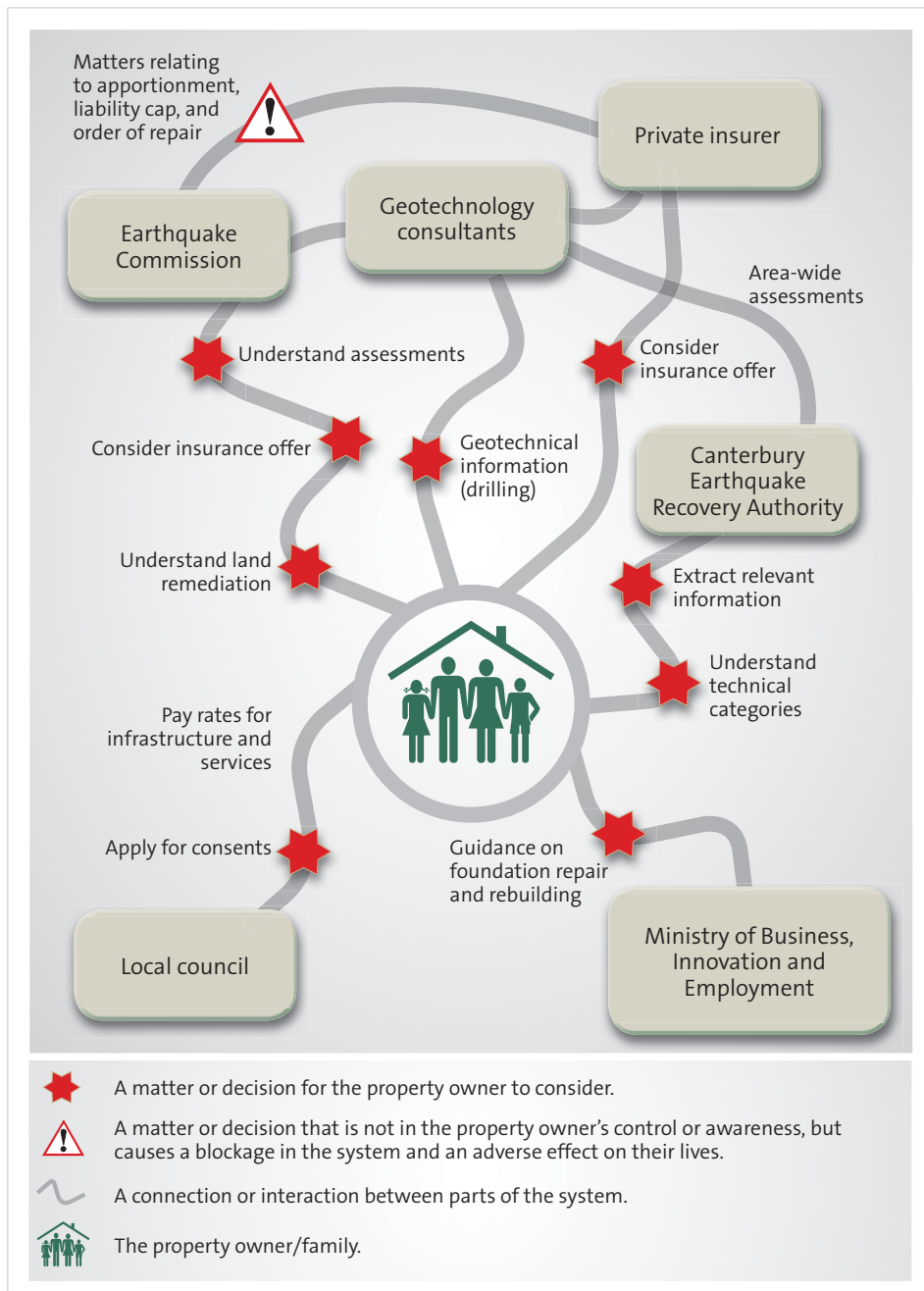
- 5.77 EQC estimates that the overall costs of the drilling programme to be about \$50 million. The cost of damage assessments and geotechnical investigations such as the drilling programme form part of the EQC cap for each event for each property.

### **What is the effect on residents?**

- 5.78 Figure 14 shows some of the issues that owners of damaged property in TC3 areas must manage and the different agencies and organisations that they must work with to resolve them.

<sup>59</sup> Earthquake Commission (2012), *EQC Connects*.

**Figure 14**  
**Matters that owners of damaged property in Technical Category 3 areas must manage**





- 5.79 Of about 28,000 houses in TC3 areas, EQC estimates that between 10,000 and 12,000 will require repairs to foundations. Owners of property in TC3 areas that have damaged foundations need to have the land around their property assessed geotechnically to confirm the appropriate method of repair. Until a design solution has been worked out for houses with foundation damage in TC3 areas, property owners cannot proceed with repairs.

## Case Study 5: Risks to homes in the Port Hills

### What happened?

- 5.80 The earthquakes of 22 February and 13 June 2011 caused rock falls, cliff collapses, and landslides in many parts of the Port Hills, a rugged area to the south and east of urban Christchurch, within the Christchurch City Council boundary. These destroyed some homes, damaged others, and put many at increased risk of damage in a future earthquake.<sup>60</sup>
- 5.81 Since the earthquakes, CERA and CCC have carried out work to assess the risks to property and life in the Port Hills. Many owners of properties in the Port Hills had not been able to begin repairing their homes until these risks had been accurately assessed.
- 5.82 The recovery process for the Port Hills is more complicated than on the flat land, because it involves unusual geotechnical hazards and risks to human life. For CERA to work out the best future for the Port Hills, and for CCC to decide about the safety of individual homes, geotechnical experts have to assess each risk.
- 5.83 CCC commissioned GNS Science to assess earthquake damage in the Port Hills and to work out the resulting risks to property and people. CERA commissioned a three-dimensional rock fall study to help identify protection measures that might be suitable to shelter properties from rock falls.<sup>61</sup>
- 5.84 Assessing these risks and how to manage them is challenging. At first, engineers used assessment methods prepared from overseas examples, but the substantial damage from the 13 June 2011 earthquake showed that these methods were inadequate to effectively work out the current and future risks to life and property.<sup>62</sup>
- 5.85 When risks have been worked out, engineering solutions need to be considered to manage those risks so the danger to people can be minimised. Possible solutions include building fences, retaining walls, and other forms of barriers to prevent

60 Canterbury Earthquake Recovery Authority (February 2012), *Port Hills White Zone: Information for Property Owners in the Port Hills White Zone*.

61 Canterbury Earthquake Recovery Authority (February 2012), *Port Hills White Zone: Information for Property Owners in the Port Hills White Zone*.

62 Canterbury Earthquake Recovery Authority (May 2012), *Port Hills White Zone Issues*.

falling rocks from hitting buildings. There are no standards for structures that are erected for remediation, and insurance companies will need to agree that the solutions adopted reduce the hazard satisfactorily.

- 5.86 After geotechnical investigations and analysis and further geotechnical work, CERA has made decisions about the future of most houses in the Port Hills:
- On 5 September 2011, 9700 residential properties in the Port Hills white zone were zoned green, with about 3700 properties remaining in the white zone for further investigation.<sup>63</sup> CERA wrote a letter to all property owners explaining the zoning decision.
  - On 19 December 2011, CERA made a second announcement, rezoning a further 1600 homes to green. Because of the complex nature of investigations, CERA was unable to put a time frame on further announcements until recently.
  - On 18 May 2012, the Minister announced that 421 properties in the Port Hills had been zoned green.
  - On 29 June 2012, 285 properties were zoned red and 1107 were zoned green. On 13 September 2012, 37 properties at risk from rock falls were also zoned red.

### Who is responsible for what?

- 5.87 The situation in the Port Hills presents a unique and complex set of challenges for public entities and residents. Because the extent and type of rock fall risk is unprecedented, it is difficult for CCC and CERA to work out and assess the level of risks to property and life and to find ways to manage those risks.
- 5.88 CCC has statutory obligations under the Local Government Act 2002, the Building Act 2004, and the Resource Management Act 1991, which include making decisions about the use of buildings, including declaring buildings to be unsafe and uninhabitable. Under these obligations, CCC has responsibility for assessing the hillside land and properties in the Port Hills and issuing section 124 notices (often called “red stickers”) to properties that it believes are unsafe because they are prone to rock falls.<sup>64</sup>
- 5.89 CERA has responsibility for making decisions about land use in the Port Hills, so it works closely with CCC to assess risks and land-use policy. CERA must tell the affected communities when it decides about land use.<sup>65</sup> CERA has organised community meetings that have also involved CCC and EQC.
- 5.90 CCC and CERA are working closely together on the Port Hills project and CERA is preparing a cost-benefit analysis. A signed partnership agreement between CERA, CCC, and the other local authorities forms the basis of their working arrangement.

63 Canterbury Earthquake Recovery Authority (2012) *Port Hills Land Announcement*, available at [www.cera.govt.nz](http://www.cera.govt.nz).

64 Canterbury Earthquake Recovery Authority (2012) *Port Hills White Zone Issues*, available at [www.cera.govt.nz](http://www.cera.govt.nz).

65 See website of the Canterbury Earthquake Recovery Authority, [www.cera.govt.nz](http://www.cera.govt.nz).

A memorandum of understanding outlines more clearly the respective roles and responsibilities of the agencies involved, particularly CERA and CCC.

### Costs and funding arrangements

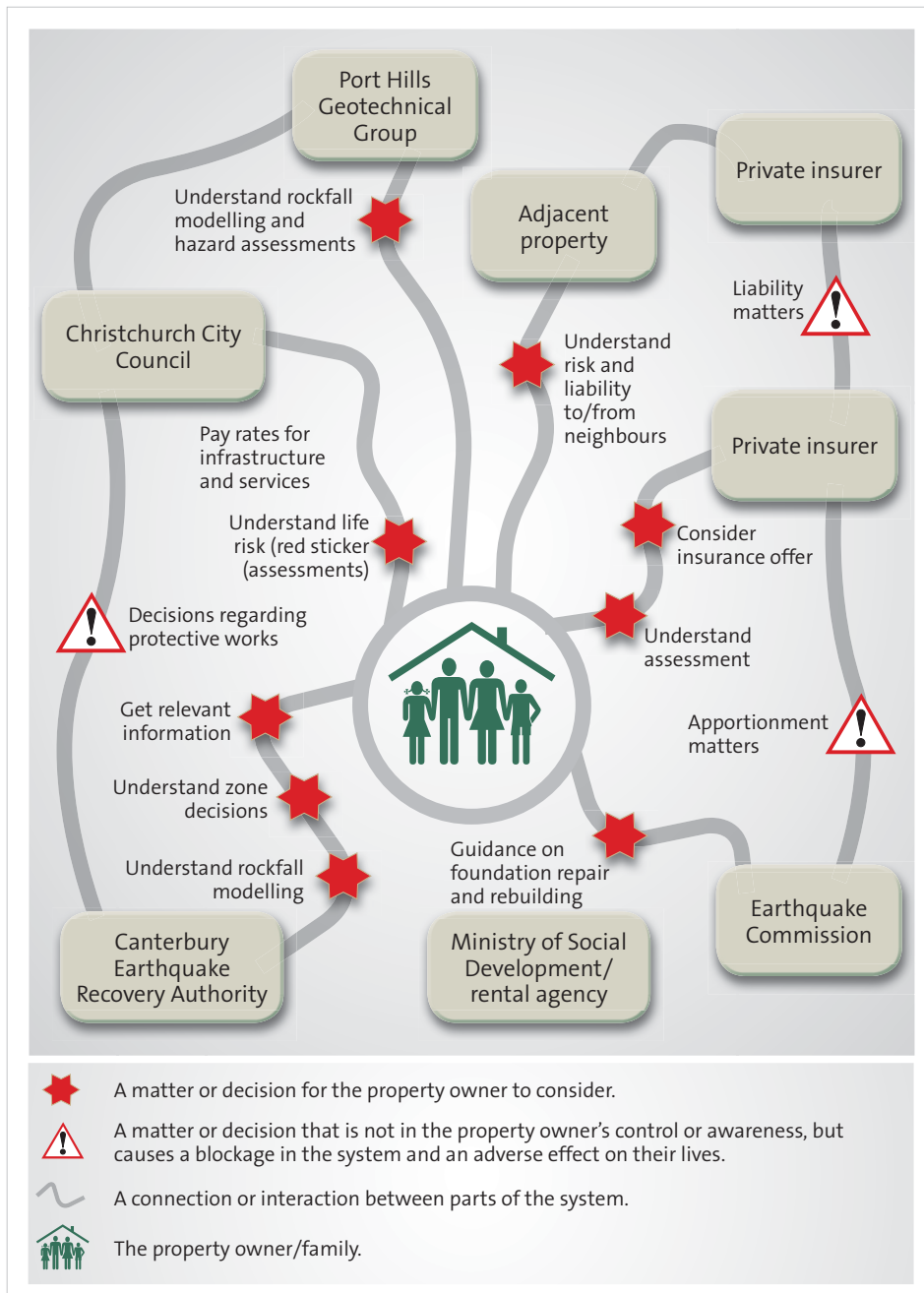
- 5.91 CCC has paid for the work that the Port Hills Geotechnical Group has carried out. Rock fall work to June 2012 cost \$19.7 million. The project spending has been on mapping and field assessment, risk reporting, and physical works for reducing imminent risk. Vote CERA (Supplementary Estimates 2011/12) includes an appropriation of \$10 million for reimbursing CCC for the Crown's share of the costs to procure rock fall protection systems.<sup>66</sup>
- 5.92 The decisions about land use and remediation in the Port Hills have long-term cost implications. Protective infrastructure, such as fencing, is costly to maintain (the through-life costs have been built into the cost-benefit analysis) and creates expectations for more infrastructure to be built if further areas are identified as dangerous.

### What is the effect on residents?

- 5.93 Owners of properties in the Port Hills have experienced different situations, with varying risks and strains. Some people have been out of their properties for more than a year, paying mortgages for houses they cannot live in and paying rent to live elsewhere.
- 5.94 Because the future has been uncertain, many people commute long distances to schools and jobs, and are under considerable financial strain. Many have made short-term accommodation arrangements, paying higher rent as a result, because time frames have not been worked out.
- 5.95 Figure 15 shows the complex range of matters confronting owners of properties in the Port Hills.
- 5.96 In some instances, property owners have houses that are not directly at risk, but are surrounded by properties (or driveways) that are at risk and no longer inhabited. This has left some people isolated and unable to move – the lack of damage means there is little chance of an insurance settlement and their properties will be difficult to sell.

<sup>66</sup> Addition to the Supplementary Estimates of Appropriations for the Government of New Zealand and Supporting Information for the year ending 30 June 2012, Vote Canterbury Earthquake, June 2012, page 876.

**Figure 15**  
**Matters that Port Hills property owners must manage**



# Publications by the Auditor-General

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

- Effectiveness of arrangements to check the standard of services provided by rest homes: Follow-up audit
- Inquiry into aspects of ACC's Board-level governance
- Education for Māori: Context for our proposed audit work until 2017
- How the Far North District Council has administered rates and charges due from Mayor Wayne Brown's company, Waahi Paraone Limited
- Reviewing financial management in central government
- Realising benefits from six public sector technology projects
- Annual Plan 2012/13
- District health boards: Quality annual reports
- Fraud awareness, prevention, and detection in the public sector
- Institutional arrangements for training, registering, and appraising teachers
- New Zealand Qualifications Authority: Assuring the consistency and quality of internal assessment for NCEA
- Statement of Intent 2012–2015
- Public entities' progress in implementing the Auditor-General's recommendations 2012
- Inquiry into how Christchurch City Council managed conflicts of interest when it made decisions about insurance cover
- Overview of the Auditor-General's work in the transport sector
- Local government: Results of the 2010/11 audits

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