Canterbury Earthquakes Aftermath:
Housing and Insurance Crisis

Bachelor Thesis

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Declaration

I, Zuzana Bzonková, hereby certify that this thesis has been written by me, and I properly cited and listed all the sources, references and literature I used.

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Abstract

The aim of this thesis is to expound the post-earthquake situation in Canterbury, New Zealand. The focus is on housing and insurance issues in Christchurch, the capital of Canterbury region. Despite the fact that New Zealand is a seismic nation and should be able to deal with earthquakes, the September 4, 2010 and February 22, 2011 earthquakes showed that the country had not been prepared. Thus, New Zealand has not been able to manage the aftermaths effectively enough. The greatest challenge has been the reluctance of international private insurers to settle claims in timely fashion and the government’s inability to put more pressure on them. As a result, insurance and housing crises have developed. Many have been awaiting the payouts for their properties for years. However, Cantabrians have a strong sense of community and, in spite of all the misfortunes, they have been coping relatively well with the challenging situation. Thanks to their spirit of charity and volunteering, the city is slowly recovering now, with contributions from non-governmental organizations and the local government in the form of Christchurch City Council.

Keywords

New Zealand, Canterbury, Christchurch, earthquake, earthquake commission, EQC, city council, CCC, CERA, zoning, red zone, rebuild, recovery, insurance claim, reinsurance, land damage, residential property, local government, central government, community involvement, non-profit organizations, protest, art, Gap Filler
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Introduction

This thesis will deal with the aftermath of the 2010 and 2011 earthquakes in Canterbury, New Zealand. Special attention will be given to housing and insurance issues that trouble Canterbury’s citizens, particularly the business and home-owners in Christchurch, the capital of the Canterbury region and the whole South Island. Issues such as the division of the city of Christchurch into zones, which significantly affects the future of the residential properties; home-owner insurance claims and delays in settling these claims by both the Earthquake Commission and private insurance companies will be discussed.

The aim of this thesis is to provide more information on a relatively recent catastrophe in New Zealand and its aftermath that is not very well-known in Europe. The intention is to look at the post-earthquake situation in Christchurch through the eyes of a Czech person who was living there prior to and during the disaster. Having experienced most of its strong earthquakes and frequent aftershocks between September 4, 2010 and April 20, 2011 and its immediate impact on the region, I will try to depict the specifics of New Zealand’s approach and its ability to cope with such an event. The actions of the citizens of Christchurch, its community as such and non-profit organizations’ contribution to the resolution of the pressing issues will be examined.

This thesis will attempt to answer the question how successful Cantabrians are in their fight against insurance corporations’ greed and sometimes even against their own government, seemingly helping the corporations instead of its people.

The first chapters will present the sequence of events and provide a more general background of the immediate and later circumstances, whereas in the latter chapters I will elaborate on the difficulties that property owners experience in connection with zoning and uncertain future of their real estate. The unwillingness of insurance companies to settle their clients’ claims in a timely fashion and pay for the damage is currently a burning issue that will be looked at.

The principal starting point for this thesis were two books: The Christchurch Fiasco: The Insurance Aftershock and its Implications of New Zealand and Beyond by Sarah Miles, and A City Recovers: Christchurch two years after the quakes by Paul Gorman and Press journalists. These sources helped me to familiarize myself with the
general situation in Canterbury during the first two years following the earthquakes and they drew my attention to many important topical issues. However, since the extent of this thesis does not allow me to discuss everything in detail, I have decided to focus on the housing and insurance issues, as the situation in this area seems to be, besides schooling, really critical.

*A City Recovers* embraces broader spectrum of issues and provided me with a rather general background; by contrast, *The Christchurch Fiasco* focuses specifically on insurance issues. Sarah Miles’ book is very thorough and does not contain information only about insurance and policyholder protection in New Zealand, but discusses them in broader context as well, often in connection with the United States or Australia. This allows the reader to see in a perspective how things work. Both books assisted me greatly in comprehending the current state of affairs in Canterbury. However, I used many other sources, especially online articles by Press, Stuff.co.nz and New Zealand Herald, and some legal documents. Since I believe it is important to withdraw some information from local citizens as well, I asked my friends in Christchurch several questions about the current situation. These people mostly confirmed the information stated in newspaper and the books, but in some cases their perception of the reality differed.
1 Earthquakes in New Zealand

New Zealand, with its relatively young and unsettled landscapes, is known to be a seismic country and the nation has already experienced several severe earthquakes in its past. According to GeoNet - a website providing public an access to hazards information including earthquake reports - the earthquakes have been in fact on a daily basis. The country’s location on the boundary between the Australian and the Pacific Plate (while “the Pacific Plate is moving to the west-south-west at about 50 mm a year”) means that “the entire plate interaction zone is potentially a source of moderate-to-large earthquakes in New Zealand” (“GeoNet: Earthquake FAQ”).

1.1 Occurrence of the earthquakes in New Zealand’s history

Wairarapa, the southern region of the North Island, was witness of the strongest earthquake in New Zealand’s history which took place on January 23, 1855. Reportedly, during the quake as much as 5,000 km² of land was shifted vertically and its magnitude\(^1\) was estimated at 8.2-8.3. However, so far the most devastating earthquake ever experienced was the 7.8 magnitude in Hawke’s Bay (the east coast of the North Island) that struck on February 3, 1931 and “caused the largest loss of life and most extensive damage of any quake in New Zealand’s recorded history” (“GeoNet: Historical earthquakes”). It is known as the Napier earthquake. (To become familiar with the locations, see the map 1 New Zealand of New Zealand.) GeoNet states that New Zealand was hit by more than twenty earthquakes above 7.0 magnitude between 1960 and 2011. It is startling that majority of them, sixteen, have occurred in last sixteen years. In total, from 1960 to 2011 New Zealand experienced 21,538 earthquakes between a magnitude of 4.0 and 7.9. The absolute majority of them ranked between 4.0 – 4.9 M\(^2\), which makes the total 19,824; an entire 1,565 of them were stronger – from 5.0 to 5.9 M on the scale, 117 between 6.0 and 6.9 M and lastly, 22 quakes exceeded 7.0 M. See the table

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1 Magnitude is “a measure of the energy released by an earthquake at its source. Magnitude is commonly determined from the shaking recorded on a seismograph. Each unit of magnitude on the scale represents a substantial increase in energy, for example a magnitude 5 releases 30 times more energy than a magnitude 4”. (“GeoNet: Earthquake glossary”)

2 magnitude
1 Frequency of Occurrence of Earthquakes since 1960 in the appendix. From the illustrations demonstrating the patterns of deep and shallow earthquakes on both islands (2 Deep and shallow earthquake), it is obvious that the earthquakes deeper than 40 km tend to occur in the north-east of the country (in a great part of the North Island and the north of the South Island) and then in Fiordland only; whereas the shallow ones are scattered all around the area and their occurrence is very problematic to predict.

New Zealanders were and are aware of risks of earthquakes, but these were expected to occur rather in the Southern Alps or around Wellington, the capital, for instance, not in Canterbury. The September 4, 2010 earthquake that struck near Banks Peninsula early in the morning was considered a shock, for it was said by many that the existence of fault beneath the region had not been known. (For better orientation see the map 3 Christchurch and Banks Peninsula (Canterbury))

In connection to the earthquakes, experts speak about ‘peak ground acceleration’ (PGA), ‘peak horizontal acceleration’ (PHA) and ‘peak ground velocity’ (PGV). Unlike the Richter scale which measures the total energy released by an earthquake, PGA records acceleration of ground movements (both horizontal and vertical), caused by the earthquake waves that spread from its epicenter (“Earthquake Hazard Program, ShakeMap Scientific Background”). ‘Peak ground velocity‘ is the highest speed of the ground. Both PGA a PGV differ in each earthquake and depend on several factors, such as magnitude, the depth of the quake, its duration, distance from the epicenter, length of the fault and type of ground that is affected. In the next chapter, it will be shown that shallow quakes generally cause more powerful acceleration (shaking force) than deeper quakes. According to “Earthquake Hazard Program”, it is due to the fact that the energy is “released closer to the surface”.³

1.2 Between September 4 and February 22

It is said that prior to September 4, 2010 the existence of the fault under Canterbury had been unknown. Paul Gorman et al. in the book A City Recovers: Christchurch two years after the quakes say that the 7.1 M earthquake in September “was the first to rupture the ground surface for more than about 5000 years” (92).

³ “Peak ground acceleration can be expressed in g (equivalent to g-force) as either a decimal or percentage; in m/s² (1 g = 9.81 m/s²); or in Gal, where 1 Gal is equal to 0.01 m/s² (1 g = 981 Gal)” (U.S. Geological Survey; “Geological Hazards Science Center. Explanation of Parameters”).
The city of Christchurch as well as Darfield and other towns were thus unprepared for this sort of disaster. The magnitude 7.1 earthquake with its epicenter about 11 km deep and 37 km west of Christchurch, near the town of Darfield, in tiny town Kirwee to be exact, caused serious building damage in mid-Canterbury and particularly in Christchurch (Miles 25). It hit on Saturday at 4:35 a.m. and was felt over the South Island, and even in the south of the North Island (New Plymouth). Thanks to the hour of occurrence, when most people were at home and sleeping in their one-storey bungalows, the bricks fell into empty streets, no life was lost and very few people were injured. Often, one did not realize the extent of material damage until he or she went closer to the center with its historical buildings. Many suburbs seemed untouched outwardly, with just a few collapsed chimneys. Nevertheless, the material damage was significant. Colombo street was lined with collapsed buildings and even the relatively remote cities of Timaru and Dunedin reported building damage. Railway lines had to be repaired and some schools could not be open for a few weeks. People were troubled with lack of power or water, transport difficulties and first of all violent and frequent aftershocks. Power, water and phone lines were all affected; however, most people in Christchurch were supplied with power in a few days of the quake; only inhabitants of rural and coastal areas had to wait longer. The eastern part of Christchurch with its sandy ground was hit hardest. For at least a week, tap water had to be boiled prior to usage. Widespread soil liquefaction⁴ caused a lot of problems with flooding, as well as damaging buried pipes and building foundations. Again, the situation was the worst in the east, close to the shore.

A postgraduate student from University of Canterbury, John Holdaway, calculated that the amount of energy released by September 4 earthquake was 2.8 quadrillion joules. He calculated that this would be enough to power the city for 14 days (Paul Gorman).

A number of strong aftershocks would continue to decrease in the coming weeks, and from a few violent ones a day it would fall down to one or two a week and later

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⁴ Liquefaction may be described as “water-saturated sediment losing strength and behaving as a fluid”. The soil that is likely to liquefy is principally sandy and silty. The volume of soil may during the liquefaction decrease, thereby the ground surface sinks down. (Environment Canterbury “The solid facts on Christchurch Liquefaction”). More about liquefaction in the appendix: 1 Liquefaction
even fewer. According to seismologists studying the Canterbury earthquakes, the reason for unusually strong aftershocks was the type of rocks along the fault-line.

The facts about the September 4 earthquake’s length differ; some say it lasted more than 4 minutes, some 30 seconds. It probably depends on if it is viewed as a longer or shorter sequence of several quakes. According to Paul Gorman et al., it “consisted of seven or eight moderate to large quakes that were triggered on each of seven or eight hidden faults underneath the Canterbury Plains” (85). The earthquake was considered to be an extremely strong shaking force (1.25g/125%g according to “GeoNet: Our Geohazards. M 7.1 Darfield”).

However, the earthquakes of 6.3 magnitude on February 22, 2011 and later the one of 6.4 magnitude on June 13, scored much higher on the PGA scale. Furthermore, the February 22 earthquake, whose consequences will be further examined, was an unbelievably strong shaking force that is unmatched in New Zealand (“GeoNet: Our Geohazards”).

On the sunny morning of September 4, when nature was showing its brighter side, people were curious to see the extent of damage and many went on a “cruise” around the city. At that time, a part of the city center was already cordoned off and the police were present. The traffic was very calm and smooth even without traffic lights functioning. The damage was, as already mentioned above, enormous, and some roads were not passable due to wide cracks and liquefaction (see pictures 4 Liquefacted road, 6 Liquefaction on the road, 7 Damage on roads 1and 8 Damage on roads 2). Many businesses had to remain closed for several days before all necessary safety assessment would be made. It seemed all rather speedy and efficient, and within a week the majority of the streets within the Central Business District (CBD) were accessible again. Most workers were paid their weekly salary during this period, which probably would not be the case in every country. Schools, pre-schools and universities also remained closed before proper safety assessments were carried out.

In comparison with later earthquakes, my observation is that this first one was not such a devastating experience; common people were not excessively worried about the material damage, and being still full of faith in their insurers they took photos and

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5 I was employed by Starbucks at that time and during the week it had to remain closed, all members of staff were paid for the shifts they had been supposed to work.
created evidence of the damage. Several weeks later life went on almost as before. The consequent aftershocks were tiring, though. The first days and weeks they would occur on a daily basis and one never knew whether to run out of a building, hide under a table or door frame, or whether it would stop after a couple of seconds. Living on unsteady ground is never very secure. Towards the end of November, the aftershocks became weaker and less frequent. However, finally after most road signs had disappeared and some heavily damaged buildings had been successfully demolished, and when the community of Christchurch was on its way of recovering from the September quake and the two months of constant aftershocks, the Boxing-Day earthquake hit and it was relatively strong.

Looking at “Christchurch Quake Map,” we can find that on December 26 there were 50 quakes in total in Christchurch, all between 2.1 M and 4.9 M. Four of them scored above 4 M: 4.2 M, 7 km deep at 2:07 a.m. local time; 4, 6 M km deep at 2:28 a.m.; 4.6 M, 7 km deep, 2:32 a.m. and finally 4.9 M, 5 km deep at 10:30 a.m. The mightiest one struck in the morning when the weather was sunny and the city center full of people hunting the shops for post-Christmas discounts. Although it was not too high on the magnitude scale (there were 16 stronger aftershocks between September 4 and December 26), it was very shallow and therefore quite devastating. According to The Telegraph, there were probably more than 20 buildings in CBD seriously affected, but surprisingly, and luckily again, no fatalities and not many injuries (“Boxing Day shoppers hit by New Zealand earthquake”). The quake came at the least suitable time - after people finally overcame most difficulties that resulted from the September earthquake - and this shake just reopened the fear. It caused problems to retail as well. Richard Ballantyne, a Christchurch citizen and a managing director, said to Stuff.co.nz: "Every day's trading is key and the Boxing Day sales are very important, both for the customer and for the business. It has shaken people's confidence again. It's not an easy time" (“Quake directly beneath Christchurch”). The further damage and number of insurance claims it generated will be discussed in later chapters.

1.3 22 February earthquake and its consequences

On Tuesday February 22, 2011, 51 minutes after noon, the city of Christchurch was struck by a fierce shaking force that resulted in vast material damage and, more importantly, loss of lives. This is the known February quake that took 185 Christchurch
citizens, thousands of family houses, hundreds of commercial buildings, some galleries and theaters, the famous Christchurch cathedral (see picture 27 The old Cathedral, symbol of Christchurch) and a lot of hope that things would ever get better. The great toll of casualties was due especially to the time of year (summer) and time of day. Despite a lower magnitude than the September 2010 quake, the February earthquake was more devastating because its epicenter was very shallow (only 5km underground) and closer to Christchurch. The PGA was extremely high and thus made it almost unfeasible for the buildings to survive intact (see collapsed buildings in pictures 9 Debris on Colombo Streetand 10 Pyne Gould Corporation Building). Liquefaction was far greater as well, which led to ground movement and vast destruction of infrastructure and foundations. For weeks and in some places even months people were “advised to avoid surface water and beaches due to sewage contamination” (“ChCh EQNZ Quake Update 88”).

It was the first time in New Zealand’s history that a state of national emergency was declared. Similar to the previous earthquakes, the outcomes of this February quake included vast liquefaction (with associated damage), destruction of water and sewage pipes, road and railway network, not mentioning the collapsed buildings and deeply shaken people, many of whom lost their relatives.

(The information in the following paragraphs is drawn from a letter written to the journalists of Mladá Fronta DNES on February 26, 2011, which was to provide them with topical information, not to be published.)

Hand in hand with the destruction went immediate lack of accommodation - hundreds of families did not have a place to stay. In fact, immediately after the quake people were advised to leave the city until the situation settled down. Some of those who stayed spent cold nights in Christchurch’s largest park, Hagley Park, where a temporary camping site was established. Those who did not leave were advised to stay at home and take care of themselves and their neighbors. They were urged not to drive on roads unless necessary. The ground continued to shake violently, there was no water, no power, no gas, and the supplies of food were limited as well. Air New Zealand airlines offered $50 tickets from Christchurch, and a great many people used the offer to fly to their relatives in other parts of the country. The majority went to Wellington. There rose a great sense of compassion and help all around the South Island, if not the whole of New Zealand - other towns’ citizens would invite Cantabrians to their homes.
until the situation would improve - the offers appeared in newspapers and on television. Whoever had a spare bed was glad to give assistance to citizens without a home. Other forms of help appeared as well: people were sending money, donating blankets and warm clothes, some psychologists proffering free consultations, students from Dunedin made a donation of 10,000 lunches, and about 15,000 students of Canterbury University organized themselves via facebook and went into streets to help with cleaning up the rubble and silt. One hostel in Oamaru became a rooming house for refugees - people simply shared what they had and were overall very sympathetic towards one another. Schools in other towns and regions opened themselves to pupils from Christchurch so that the children could just attend any school at that time.

In general, New Zealand’s society seems to me fairly cooperative, and the will to lend each other a hand manifested itself very clearly in the time of national state of emergency. Unfortunately, there were also a handful of instances of looting empty houses in the city. The rumors said that the perpetrators came mostly from other places than Christchurch. Few of them were actually arrested. However, the exceptional examples of human goodness prevailed. Many risked their own lives to help rescue others; I remember hearing about a man who used his climbing skills and from a building in the CBD he roped down and saved fourteen people.

Rescuers, medical staff, technicians, police officers, soldiers and many others worked extremely hard especially during the first weeks. The international response was very prompt: the first rescue team present in affected Christchurch were soldiers from Singapore who were having military training in Timaru, south of Christchurch, and soon after troops from Japan, Taiwan, Great Britain and the U.S.A. rushed to help.

For a long time it was accepted that both of the strong earthquakes that hit the area on December 26, 2010 (4.9 M, 12 km deep) and February 22, 2011 (6.3 M, 5 km deep) were part of the aftershock sequence. Only much later did GNS Science researchers discover that the February 22 earthquake would have ruptured eventually.\(^6\) (Gorman et al. 94-5). One should note that the number of casualties of the February event would have been much, much higher had it not been for the September event.

\(^6\) The previously unknown Port Hills fault had been greatly pressed before the September 2010 earthquake, therefore it was only a matter of time (decades or centuries) when the pressure would be finally released. (A City Recovers 84, 95)
earthquake, during which many non-earthquake-resistant buildings collapsed or were later demolished. In February 2011, some potentially dangerous areas were already cordoned off.

The scale of earthquakes and aftershocks in Canterbury sparked much interest from scientists all around the world; thus in 2011 a seismic survey in Canterbury started, and was conducted by researchers from the University of Canterbury and the University of Calgary. Thanks to this thorough research, seismic scientists have gathered plenty of valuable information. At approximately the same time, in May 2011, the public and media demanded more information about the quake forecast that GNS Science (the Crown Research Institute) calculated and provided to the Canterbury Earthquake Recovery Authority (CERA) (Gorman et al. 90, 97). GNS Science started to release the aftershock statistics and forecast on their webpage, gradually showing the dropping probabilities. However, scientists happened to be “caught in the media spotlight”, often being pressed to provide details, sometimes sooner than possible (ibid. 91).

Kevin Furlong, a professor at Department of Geosciences at College of Earth and Mineral Sciences in Utah, explains:

*Particularly in places like Canterbury, where we don’t have a good record of how an earthquake sequence will play out, it is important not to too quickly assume it will behave like some other well-defined fault system. Plate-boundary fault systems like the San Andreas in California or the Alpine Fault in NZ are better understood than what we term intra-plate fault systems, and the Canterbury fault systems seem to behave more like intra-plate faults.*

(ibid. 100)

### 1.4 Situation in post-February Christchurch

The Christchurch airport was reopened for domestic flights already on Wednesday, 23 February, and on the following day for international flights as well. Even so, the airport has been affected by a drop of more than 450,000 passengers a year since 2010, and a number of flights going through Christchurch had to be halted.
Propitiously, the government introduced a new 'open skies' policy, a considerable help for overseas airlines that desired to set up new Christchurch routes (Gorman et al. 228).

Christchurch hospital was said to perform very well during and shortly after the shake. Despite the fact that there were no more than four of the hospital’s 18 ICU (Intensive Care Unit) beds vacant when the earthquake struck the city, they managed to shift patients to vacate beds for critically injured citizens - 14 patients were moved to hospitals out of Christchurch and thus 18 quake victims were admitted to the ICU. Help from Australia soon arrived - Australian field hospital, which operated at Cowles Stadium in Aranui for several weeks, helped the injured and acted as a community health site. The district health board’s strong leadership was praised as its management was good at handling emergencies (ibid. 201-7).

One of the burning issues that Christchurch had to and continues to face is the above-mentioned lack of accommodation. Already in 2011, it was estimated that apart from the 10,000 houses that were condemned to demolition, there was an additional 100,000 homes (out of 140,000 city’s houses) that were seriously damaged by the February earthquake. Many of these homes could be repaired, though. However, we must not forget those damaged by the previous shakes (Tracy Watkins). The lack of accommodation soon developed into a housing crisis, as there were not enough flats for not only builders and foreign workers, but first of all for the city’s citizens.

The Canterbury region is the largest by area and second-largest by population. According to Statistics New Zealand, the city of Christchurch had 348,456 citizens in 2006 and 341,469 in 2013, which makes a change of -2.0 percent over the course of seven years. However, since there was no census in 2011 due to the earthquake, one should be careful to compare. There is likely to be a significant leap between 2011 and 2013, for after the February earthquake as many as 70,000 people were reported to have fled Christchurch (“A fifth of Christchurch's population may have left”), many of whom did not return; primarily young people without property commitments left Canterbury for good, often overseas. At the same time, many families also made the decision to leave the region, because not everyone could cope with the highly unstable ground, which incidentally caused much stress for the people. However, Christchurch remains the second largest city in New Zealand, after Auckland with its fast growing population of 1,415,550 (2013), and before Wellington with its 190,956 citizens (Statistics New Zealand).
Interestingly enough, alcohol consumption and smoking rates increased in post-earthquake Christchurch, which were most probably used as coping mechanisms. This was followed by increased rates of domestic violence and household break-ups, as well as heart attacks and influenza (due to the unusually cold winter and poor housing conditions). According to Christchurch hospital virologist Lance Jennings, “Canterbury’s influenza rate was 226 per 100,000 people, while the national average was 52 per 100,000” (Gorman et al. 209-11; and Georgina Stylianou). Luckily, the prognosis of gastroenteritis did not come to fruition despite people living in crowded accommodation and despite the interruption of water and sewage pipes. Neither did E-coli spread. However, due to high levels of dust, respiratory problems and eye irritation frequently troubled the citizens (ibid. 211).

In April 2013 the estimated cost of the rebuild rose from $30 billion up to $40 billion, much of which would come from insurance payments and construction (Dan Satherley).

Thirty percent of businesses closed or could not operate after the February 22 earthquake, and about 9,000 businesses were assented to grant payments for 45,000 employees. Together 62,000 Cantabrians obtained unemployment benefits from the government, valuing from 300 to 500 NZD a week for six weeks (Miles 33).

Prior to the earthquakes, there was a strong international student market from which the local economy profited up to $370 million annually. It is evident that the local economy suffered a great loss when the number of international students decreased by about 50 percent (from 11,206 in January 2010 to 5937 in August), and at the same rate in 2012. Obviously, private language schools experienced the greatest loss; there were twenty of them before the quakes and currently only about seven operate. It is important to realize that the income from international students has had a significant impact on the city, not only in terms of tuition-fees and the money they spent as tourists; but the students were also frequent users of public transport. They were usually visited by their parents from overseas at least once, and as they were hosted by Christchurch families, they provided the families with extra income (Gorman et al. 191).

There are three main tertiary education providers: Canterbury University, CPIT (Christchurch Polytechnic Institute of Technology) and Lincoln University. Naturally, they also underwent a decrease in applicants, Canterbury University being hit hardest
Gorman et al. (187). It has had to face a $16 million drop in tuition fees, to deal with increasing insurance costs and an estimated $150 million has been needed for repairs. It would have been nearly impossible to survive had it not been for help from the government which provided Christchurch’s tertiary education institutions with fee subsidies in 2011 and 2012. The subsidies were based on pre-quake values. CPIT has the potential to expand training to people needed for the rebuild and is therefore expected to have enough students. It is remarkable that in spite of all the deprivation and drop in student numbers and subsequent course closures, Canterbury University maintained “a relatively high ranking among the world’s top universities” (ibid. 187-8).

Since the rebuild of Christchurch is the number one priority for next several years, the university has devoted itself to earthquake research, with about 200 projects under way (“Earthquake Research”).

One of the most pressing issues resulting from the catastrophe has been schooling as many schools were severely damaged and deemed unsafe. A powerful aftershock that took place on June 13, 2011 meant that again great many families left the city. This resulted in a 16 percent decrease of pupils among 17 schools in the eastern suburbs, which put a lot of pressure on school finances. Since in 2012 the government ceased to fund the schools on pre-quake pupil numbers, many schools were forced to dismiss teachers, or to not resume fixed-term contracts. An entire 167 full-time teachers (4.5 percent) were made redundant according to the Education Ministry figures (ibid. 185). “At the post-quake peak, 10,207 Christchurch pupils were enrolled at other schools across New Zealand and 688 pupils had gone overseas. Another 1000 pupils swapped schools within Christchurch” (Gorman et al. 184). Since many schools closed and some had to be relocated, there was not enough space and some pupils had to attend school on a split shift. Home schooling typically took the morning shift, whereas the visiting school took the afternoon shift. The situation was far from ideal - reduced classes, no lunch breaks, pupils being at school an hour less and still getting home late after dinner (ibid.184). Schools gradually returned to their original locations in 2011.

7 In 2012/13 the University occupied the 221st position in the QS World University Rankings, which evaluates more than 2000 universities in the world. In 2013/2014, the Canterbury University fell onto 238th position (“Top Universities: Worldwide university rankings, guides & events”)
and 2012, but even so by September 2012, 21 early-childhood education centers had been permanently closed (ibid. 184).  

A friend of mine, a middle-aged woman teaching at a local Primary school, commented on the situation in December 2012:

_In September the Ministry of Education announced a major shake-up with schools in Christchurch, so my teaching job is uncertain. The Minister of Education in her ‘wisdom’ has decided to address the problems she perceives with NZ education, despite our education system and student achievement being ranked quite highly in the world. I’m not against change but her process has been underhand and without consultation with schools and their communities. She is planning school mergers and closures that make no sense, and are in the eastern suburbs that are the hardest hit by the earthquake. The worst aspect is that she is ‘hitting us while we are down’. Many people are exhausted and emotionally strung out from all they have had to cope with in the last 18 months. Schools are the one ‘constant’ and secure aspect in children’s lives at the moment. There has been an interesting trend across the city with an increase in children’s behavior problems in the last two years, and the only different variable is the earthquake. Anyway, after a stop-work meeting the teachers in Canterbury have voted to strike in February. Interesting times ahead!_

Paul Gorman et al. proclaim that September earthquake is estimated to decrease economic output by about 2.5 to 3 percent, and the February earthquake contracted the regional economy an additional 6 percent, which is comparable to a serious recession (according to data gathered by CERA’s Christchurch Central Development Unit (CCDU)). ‘The combined total impact over the September 2010 - June 2011 period was a decline in output of about 8 percent to 11 percent,’ CCDU reported (235).

Canterbury Employers' Chamber of Commerce chief executive Peter Townsend stated that out of the 52,000 people who were employed within the CBD prior to the earthquake...
February earthquake, 20,000 may never return to the area because temporary premises were found in the suburbs (Simon Collins). Moreover, a quarter of the 4,000 buildings in the CBD have been demolished, and is expected to be very different in the future - less crowded, and with lower structures. “The whole dynamic of the central city would change,” said Mr. Townsend (ibid.).

The majority of lost jobs were in retail and tourism, as well as in international schools, thus it is not surprising that more women than men lost their positions. The unemployment rose and “by the end of March 2011, the unemployed numbered 22,600," bringing the number up to 6.4 percent (Paul Gorman et al. 244).

A year later, however, the rates of unemployment began to drop: 5.2 percent in September 2012, much lower than the national rate of 7.3 percent (ibid. 246), 4.5 percent in September 2013 and even less, 3.2 percent in December 2013 ("Christchurch’s unemployment rate falls"). Canterbury’s population finally stopped declining in October 2012, “with positive inward migration recorded that month. The region continues to be a major source of new jobs and strong growth in the agricultural reconstruction” (Paul Gorman et al. 254). The situation for the Christchurch labor market looks brighter once again.

The post-earthquake economic shrinkage bottomed out in late 2011, and since then the Canterbury economy has been in recovery. Canterbury was the fastest growing region in the country for several months of 2012. And the ANZ Bank estimated that the regional economy grew 5.1 per cent in the year to Sept 2012. (ibid. 254)

9 Central Business District is the area between four avenues: Moorhouse Ave, Fitzgerald Ave, Bealey Ave and Deans Ave. Its businesses were typical of any city center: specialty shops and retail of various kinds, cafes, restaurants, nightclubs, pubs and bars, backpackers, food shops and wholesale stores. The bigger organization in the CBD included hotels, bank headquarters, government departments, local authorities, department stores, and many professional firms of lawyers, accountants, architects and IT specialists.

10 “About 15,000 fewer women were employed in September 2012 than two years earlier, as opposed to about 4000 fewer men” (Gorman et al. 246).
At the end of 2012, the Reserve Bank confirmed a recovery cost of $30 billion, which is equivalent to 15% of the gross domestic product - all the goods and services the country is able to produce annually. Thus the economic stimulus will also support the country’s economic growth over the next several years. The government’s estimate of the Christchurch rebuild is a 0.7% contribution a year to growth in the next few years. That is almost 30% of New Zealand’s total forecasted growth as a result of the rebuild (ibid. 254).
2 Government’s response

Governments are not indifferent to catastrophes, for they can be used to strengthen their positions over their political rivals. Christchurch citizen Sarah Miles believes that Cantabrians should be thankful for the fact that the first major Canterbury earthquake in September 2010 occurred shortly before elections, both for the central and local governments (Miles 61).

Financial assistance to people affected by natural disasters has been traditionally provided by governments, but although the government assisted Christchurch in forms of interim accommodation and financial injection into local businesses, Miles thinks that the quantity of assistance provided has been substantially less than what has been needed. She argues that the central government’s role should be, first, to provide an ongoing financial assistance to property owners, businesses and local governments to help rebuild the city; and second, to have control over the “direction the insurers carry out policy promises”, because without a reliable insurance market the rebuild and recovery in the region cannot take place (60-61).

Soon after the earthquake on September 4, a state of local emergency was declared within all three affected districts: Selwyn District, Waikamariri District and Christchurch City. The local state of emergency remained until September 16 (“Canterbury states of emergency lifted”).

The first working day after the 7.1 magnitude earthquake, on Monday September 6, the Hon. Gerry Brownlee was appointed the Minister responsible for the Canterbury Earthquake Recovery. On September 14, the Canterbury Earthquake Response and Recovery Act (2010) was passed, and at the time the government’s response was seen as prompt and adequate (Miles 62).

After the 22 February earthquake, Prime Minister John Key declared the national emergency, for a status of national emergency gives more control and authority to the government and enables it to “suspend some normal functions of the executive, legislative and judicial powers, alert citizens to change their normal behaviors, or order government agencies to implement emergency and rapid-response plans“ (Miles 63).

In New Zealand, if a disaster occurs, both the public and private sectors are responsible for immediate response and recovery. The city, the region, as well as the
nation should be involved. This means that no “single institution, person, or level of
government is perceived as responsible for the whole process” (ibid. 67).

2.1 Local government in New Zealand

“Local government is the system of locally elected members representing their
communities and making decisions on their behalf.” ("Local Government in New
Zealand.") It is obvious that locally elected councils can generally make decisions more
suitable for the community, because they can take into consideration the specific local
factors they are (unlike the central government) familiar with. The decisions should
meet the needs of the community, and be regularly reported to the community in a clear
way. In New Zealand, there are now 78 local authorities that encompass 11 regional
councils and 67 territorial authorities. The local authorities' primary responsibility is the
communities and not the central government or the Minister of local government.

Since the objectives of local authorities cannot be reached by the councils and
territorial authorities themselves, the cooperation with the central government and some
other public bodies, businesses and citizens is crucial.

Local government operates in a very similar way to the one of Parliament: the
representatives are elected by individuals to take care of relevant issues and work on
their solutions. For the local government, this includes infrastructural and planning
framework that allows both community and economy prosper. “Everything local
authorities do is within the legislative framework established and maintained by
Parliament or central government. Some statutes also establish councils’ accountability
to central government for delivering a function or for the expenditure of some grants
and subsidies.” (ibid.)

There were certain changes\textsuperscript{11} that gave councils more adjustable remits and tools
to work with and for their communities (ibid.).

City council manages the subdivisions within the city (and the Banks Peninsula)
and determines the land for residential and industrial activities, areas for urban growth
and details such as height of buildings. The Christchurch City Council (CCC) should
also protect significant landscapes and natural zones. As an outcome of the September 3
and February 22 earthquakes, the CCC needs to implement the recovery of Christchurch

\textsuperscript{11} Local Electoral Act 2001, the Local Government (Rating) Act 2002 and the Local Government Act
2002
into the Central City Plan. The Council is obliged to seek community input (on a variety of subjects) and act in accordance with consultation policy when making decisions. The principles are:

(a) conducting the council’s business in an open, transparent and democratically accountable manner;
(b) being aware of, and having regard to, the views of all of its communities;
(c) providing opportunities for Maori to contribute to decision making;
(d) conducting commercial transactions in accordance with sound business practice;
(e) ensuring prudent stewardship and the effective and efficient use of the Council’s resources; and
(f) taking a sustainable development approach.

(GOVERNANCE STATEMENT 2011 Christchurch City Council)

2.2 CCC - Christchurch City Council

In the event of a natural disaster, it is often the city council that should provide integrated emergency recovery, claims Miles (62). There is a strong mayor-council form of government in Christchurch, but the extent of damage did not allow the Christchurch City Council to manage the situation on its own. Therefore, Canterbury Earthquake Recovery Authority, known as CERA, a form of central government, temporarily replaced the local government (CCC). Many tasks were then to be shared between the CCC, CERA and local agencies, but not always were the lines of responsibility clear (ibid.). (More about CERA in subsequent chapter.)

The Council consists of two bodies: 1) Elected members (12 councilors led by the Mayor who settles the main direction and policies) and eight elected community boards which promote local community needs\(^{12}\); and 2) the Corporate organization led

\(^{12}\)“Community Boards are unincorporated bodies, directly funded by the council. Elected at the same time as the council, a community board usually consists of five or six members (often including one or more councilors). They cannot employ staff. Delegated responsibilities may include traffic management decisions and setting aside land for reserves or parks.” (Localcouncils.govt.nz) In general, they help to represent and advise councils on community views. A community board cannot be delegated the powers to make a bylaw or a rate.
by the Chief Executive Officer (CEO), accountable for maintaining the city's facilities. In “normal” times, its roles include taking care of local parks and reserves, running the libraries and a variety of services and facilities, organizing community events and managing rubbish collections ("How the Council works").

There are eight community boards representing eight wards. If a resident wants to raise a local issue they should address their community board and the community boards can forward the issue to the council if necessary. All council meetings must be advertised to the public, “unless there are specific reasons under the Local Government Official Information and Meetings Act 1987 for excluding the public”. However, “the right to speak at meetings is not available unless specifically requested”. (GOVERNANCE STATEMENT 2011 Christchurch City Council).

There are several companies and trusts in which the CCC controls 50 percent of the shares/voting rights and nominates more than 50 percent of the board heading the organization. These organizations are called Council Controlled Organizations (CCO) and the major ones are: Orion Group Ltd, Christchurch International Airport Ltd, Lyttelton Port Company Ltd, Christchurch City Networks Ltd, Red Bus Ltd, City Care Ltd. and EcoCentral Ltd. Apart from CCO, there are CCTO - Council Controlled Trading Organizations. A CCTO is like a CCO that runs a commercial activity for a financial gain. Both CCOs and CCTOs are accountable to the Council and required to produce an annual statement of intent with financial information and half-yearly and annual reports. The Council is entitled to appoint and replace their directors. (GOVERNANCE STATEMENT 2011 Christchurch City Council)

The key factor is that the CCC shares profits of these companies, the money that otherwise would have to be obtained from rates. Reportedly, there has been pressure on the CCC from the central government to sell some of these strategic assets in order to fund deficit in the budget that arose from the CERA’s blueprint of the central city. According to the statistics, the city’s investments are worth of approximately $1.57 billion. (Nicole Pryor; and Marta Steeman) However, the CCC repeatedly rejected this recommendation. The previous Mayor, Bob Parker, explained that “the council-owned

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13 Akaroa-Wairewa, Burwood-Pegasus, Fendalton-Waimairi, Hagley-Ferrymead, Lyttelton-Mt Herbert, Riccarton-Wigram, Spreydon-Heathcote, and Shirley-Papanui ("Christchurch City Council").
companies were tremendous investments that had been well managed and generated significant revenue for ratepayers” (Sam Sachdeva).

Despite the on-going miscommunication and the fact that the central government adopted many of the local government’s roles (in the first place the development of the CBD), some speculate that the CCC was glad to have authoritative CERA to make the unpopular decisions (above all, the one on the future of the destroyed cathedral). These two institutions appeared to have spoken in their own distinct languages, leading them to constantly misunderstand one another. “As the earthquake continued and the recovery response became more complex, the CCC was criticized for a total lack of strategy” (Miles 71).

2.3 CERRA and CERA

On September 14, 2010, several days after the September earthquake, the government passed under utmost urgency the Canterbury Earthquake Response and Recovery Act (2010), known as CERRA, under which the Canterbury Earthquake Recovery Commission was also created. The creation of the Commission was badly criticized, for “it did not go through the usual regulatory impact analysis process, which meant that its design benefited neither from detailed analysis of recovery best practice, nor from the scrutiny and feedback from experts that consultation would have provided” (Miles 64). The Commission was later replaced by CERA. CERA was established by the Government under the State Sector Act as a public service department the week before the second major earthquake in February 2011 (ibid. 63).

However, CERRA was also later replaced. It was repealed by the Canterbury Earthquake Recovery Bill 286-I (2011). This bill “sets out appropriate measures to enable the Minister for Canterbury Earthquake Recovery and/or the Canterbury Earthquake Recovery Authority (CERA) to facilitate and direct, if necessary, greater Christchurch and its communities to respond to, and recover from, the impacts of the Canterbury earthquakes” (“Canterbury Earthquake Recovery Bill”). The bill also expects the community to be involved in the decision-making processes while weighing this against the demand for a timely and coordinated recovery process. The purpose of the bill is to ensure statutory power to enable community engagement in decision-making while also guaranteeing a focused, timely, and speedy recovery of greater Christchurch (“Canterbury Earthquake Recovery Bill”). The bill itself has also been
criticized, as it shifts much law-making power from Parliament to the Executive Branch with very little specification on how that power should be used (Miles 65). (For more see chapter 2.5 Criticism.)

CERA’s chief executive was at first being searched for from among the civil servants. In May 2011, however, Roger Sutton, who was previously the chief executive of a private power company, Orion, was appointed to the position and began on June 13, 2011. CERA’s mandate is for five years (“Roger Sutton appointed quake recovery czar”).

The Government established the Canterbury Earthquake Recovery Authority in order to lead and manage the recovery efforts already under way, and to support organizations in making well coordinated and timely decisions. Its objective is to restore the social, economic, cultural and environmental prosperity of greater Christchurch communities ("About CERA"). CERA should closely collaborate with the Christchurch City Council (CCC), the Selwyn District Council, the Waimakariri District Council and Environment Canterbury. It is also meant to engage local communities and the private and business sector. CERA should provide coordination for the ongoing recovery effort, accent business recovery, help to reestablish local communities and keep them informed, and ensure the right structures are in place for rebuilding. “CERA reports to the Minister for Canterbury Earthquake Recovery, Gerry Brownlee, who is responsible for coordinating the planning, spending, and actual rebuilding work needed for the recovery.” (ibid.) However, many question the issue of keeping the people informed. There have been concerns about transparency and CERA is said to be too strong of a body with unparalleled powers. The term ‘collaboration’ is constantly being emphasized, but in Miles’ opinion too many citizens of Christchurch would not agree - they actually feel pushed aside, their voices not being heard. She states that despite the fact that Gerry Brownlee is a Christchurch citizen, “authoritarianism has dominated to the point of the Government assuming total control over the shape and scale of the rebuild of the city in a totally undemocratic fashion” (60).

The Canterbury Earthquake Recovery Minister is not obliged to consult the development of Recovery Plans with anyone. Sarah Miles claims that there has been no public consultation at all, despite calls from the public for involvement. The head of CERA is to report to the Parliament (66-7).

The City Council has been supposed to lead the rebuild of the central city, but “CERA superseded many of the responsibilities that the Christchurch City Council
would normally have been responsible for. There has been a continual power struggle between the two factions,” states Miles in her response to my question regarding why there have been concerns about the cooperation and relation between CERA and the CCC (on the facebook page TheChristchurchFiasco). CERA’s resumed task had been already started by the Civil Defense. Each body has been given its mandate, but doubts and disorganization soon appeared, hand in hand with an impression that decision-making was too centralized. The community did not know then how to play a part in its own recovery (Miles 67). Moreover, Council meetings have not always been open to the public and thus the risk of poor accountability has arisen. Miles emphasizes the importance of “site-specific adaptive planning” although she acknowledges that the central government policies were crucial at the beginning (ibid.). When it comes to the long-term recovery period, local governing and community involvement are a must. And the lack of community involvement is seen by many as the main deficiency in New Zealand’s approach to this sort of disaster.

2.4 CCDU - Christchurch Central Development Unit - I will finish it then

In April 2012, Gerry Brownlee, the head of CERA and Minister responsible for earthquake recovery, announced the creation of a new unit within CERA - the Christchurch Central Development Unit. The CCDU was created to help bring the central city to life, based on the citizens’ ideas expressed in the campaign ‘Share an Idea’. It was given 100 days to prepare a ‘Blueprint for Action’. However, many perceived the CCDU as a sign of no confidence in the Council’s ability to lead the rebuild. Brownlee claimed that the CCDU and the CCC would work together, but people knew that it was unlikely as some key council staff were subordinate to the CCDU. (Gorman et al. 50, 77) Warwick Isaacs, who was previously managing demolitions in the city, both residential and commercial, was appointed the director of the CCDU. The CCDU was meant to provide “high quality information” to investors in the CBD and “stimulate interest in Christchurch and hence tenant demand” (Christchurch Central Development Unit). This was also at a time when rent was already quite high due to the shortage of accommodation. Mayor Bob Parker complained that the first 70 days he saw nothing of the CCDU’s work and only five days prior to the public unveiling the CCC was shown the plan for the CBD that “came with a $1 billion funding gap that it expected the council to fill”. Tension and conflicts
became inevitable with the government unwilling to compromise and the CCC unable to pay (Gorman et al. 77-8).

2.5 Criticism

Both CERA and the CCC, as well as the government as such, have been subjected to much criticism over the course of last three years and, although one cannot say that they would not try to help, the criticism often seems justifiable.

Soon after the establishment of CERRA (Canterbury Earthquake Response and Recovery Act) in September 2010, 27 constitutional law experts representing all six of New Zealand's law faculties distributed a letter they had written, which described concerns over the powers given by CERRA. They claimed that it would leave a ‘dangerous precedent’ because it differed so much from the already established constitutional principles (Miles 64).

The Canterbury Earthquake Response and Recovery Bill that replaced CERRA in 2011 was said to have “poorly-framed general power to regulate” with little legislative monitoring (ibid.). Looking at the document Canterbury Earthquake Recovery Bill itself, one can see that the list of ‘Powers to be exercised in accordance with the purpose of the Bill’ is truly extensive.

Dean Knight, senior lecturer at the Faculty of Law at Victoria University of Wellington, argues that Canterbury Earthquake Response and Recovery Bill is a “constitutional outrage” (“Canterbury Earthquake Response and Recovery Bill: Constitutionally Outrageous.”). In his opinion, it “grants extreme executive power – unbridled and effectively unchecked – in a way that has the potential to undermine their very democratic foundations”. Knight believes that there are other ways in which the response could be administered, ways that would be “more consistent with basic democratic principles and the Rule of Law” (ibid.).

Sarah Miles sees CERA’s achilles heel as the lack of CERA’s independence. She states that instead of public service, CERA should have been established as a Crown entity, which would prevent it from scheming\(^\text{14}\). Having observed recent disasters in

\(^{14}\) Crown entities are defined under the Crown Entities Act 2004 and there are several categories of them. Independent Crown entities are generally independent of government policy (New Zealand Legislation).
Australia and the way they had been managed, she criticizes New Zealand’s government for “inventing its own recipe for recovery without any heed to international experience”. The Australian natural calamities were managed by Crown agencies (or their equivalents), she says, not by government departments like in New Zealand (69). The coupling of roles between the central government (CERA) and the local government (the CCC) has been an issue of major importance in Canterbury. People have also complained about not being involved, or being involved little despite their desire to engage more in the recovery process (ibid. 59)

The Press journalists in A City Recovers confirm this by saying that CERA seized many of the council’s traditional decision-making roles. Many were worried that too many decisions about the future of Christchurch were being carried out in the capital and the due to the CERA Act the community’s voice was not being heard (Gorman et al. 75-80). Sarah Miles continues:

*International experience shows that recovery should be a grassroots process, with the community actively involved in the creation of the plan. Instead, Christchurch is seen to have a model whereby the Government makes decisions through CERA - in fact the Minister does - and announces them through the media to the citizens rather than face-to-face with the affected communities. A community engagement is critical to recovery; it is not a waste of time or something that stands in the way of decision-making. Decision-makers who engage with the affected communities and major stakeholders send a powerful message of support and thereby gain respect. The community is entitled to the information, the explanations and alternatives. Communities often produce ideas that are not immediately apparent to those tasked with writing plans and strategies. (Miles 70)*

Many Christchurch citizens have felt that there is too much attention to big businesses instead of on the residential property owners. Why is there so much focus on the Central Business District while thousands of people do not have their homes

“Creating a Crown entity reflects a decision by Parliament that the function should be carried out at ‘arms length’ from Ministers” (“Crown Entities: A guide for Ministers ”).
repaired or rebuilt yet, and they have been waiting for years for payouts from their insurance companies, often without success? Many continue paying mortgages on their destroyed houses while simultaneously paying rent elsewhere (for their houses are uninhabitable) and what they have seen is the government being concerned with the CBD and international business much more than with the desolate situation on the housing and insurance market (Miles 61).

As stated in the previous chapter, the eastern suburbs were in more urgent need than others of a swift and focused response, but since the resources were rather limited, people organized themselves and aided each other. Since the central government often lack the knowledge of the environment in which an emergency occurs, the primary response must be aimed at the local level and provide what the community needs most - food, shelter and medical attention (Miles 60). From my observation, the Christchurch City Council, assisted by the government, was doing very well at this stage. However, the essential element for a long-term recovery and rebuild in Canterbury is a steady insurance market (ibid. 61). Unfortunately, it seems that this has not been the case to date.

In late 2011, severe criticism rose against chief executive officer of the CCC, Tony Marryatt. In times when thousands of families still lived in damaged homes, struggling to pay everyday expenses, Marryatt’s salary rose by $68,000 to $538,529 a year (“Marryatt takes controversial $68k pay rise”). This increase naturally caused a wave of protests, and Marryatt eventually ordered his pay rise be stopped. However, he reserved the right to take it in the future. In February 2012, some 4,000 people protested and demanded Marryatt’s resignation for having received 26,000 back pay (that he had promised to return) and for not having attended important council meetings and having played golf instead (“Marryatt sticks to his word over pay rise”; and “Tony Marryatt staying in Christchurch”).

Apart from the thorny issue of the CCC CEO’s pay rise, local government in Christchurch has been experiencing many other problems; the most obvious ones were the above mentioned miscommunication between the CCC and CERA, failure of trust and internal quarrelling and leaking information. The people’s confidence in the Council’s ability to govern for well-being of the citizens faded (Miles 73-5).

15 Marryatt chaired the CCC from 2007 till late 2013 when he resigned.
Three years after the 22 February earthquake, it is possible to start drawing some conclusions. Philip Burdon says that unlike the Waimakariri and Selwyn District Councils which both have “implemented innovative strategic plans that anticipate the rapid growth of population far beyond historically anticipated levels“, and therefore have gained respect of the communities, Christchurch City Council’s response has been “fully and comprehensively chronicled“. Former mayor Bob Parker decided not to run for the new election, so Christchurch has got a new and dynamic mayor, Lianne Dalziel, Christchurch resident and Member of Parliament for Labor. Burdon reports that the new CCC presided by Dalziel is expected to be more transparent and willing to consult its decisions with the community (Philip Burdon).

Expectations of CERA’s guidance were high, but three years after its establishment it is seen to have failed. Burdon in his article “‘Doughnut' represents Cera's failings” says that CERA failed in its “well-intended ambition to kick-start and accelerate the revival of the CBD” which, in fact, is still rather lifeless and shows very few signs of coordinated development. The blue-chip tenants who were expected to become a part of the revived city centre, took long-term leases on the periphery, because the progress in CBD has been just too slow.

Andrew Peach, a Christchurch citizen, confirmed this state of affairs in his email from April 6, 2014: “People talk of the "doughnut" effect. The malls in the suburbs have flourished at the center’s expense. Businesses are adaptable, and have sprung up where they can.” He states that in terms of the big picture, the city coped quite well, and actually only the center and the east were gravely affected. Another Christchurch citizen, Marie Williams, added (in her email from April 7, 2014) that: “The central city has reopened and we now have access to it, although it is still a bit of ghost town as the building progresses. They are trying really hard to make it presentable but there are so few business truly able to open there yet that it is not much of a destination for people.”

Philip Burdon is afraid that the city, for the lack of bold and dynamic leadership, will accommodate a very ordinary solution instead of seizing the opportunity to create imaginative and exciting city center that everybody hopes for (2014).
3 Zoning

During the massive earthquakes, most city houses suffered from minor to total damage, as did 600 kilometers of roads, infrastructure, water and sewage pipes etc. In November 2011, the city had waste water flowing again in all streets apart from residential red zones where the land was not suitable for residential occupation.

Soon after the quakes, the whole area of Christchurch was divided into zones, determining the future of the land and properties. The zoning became an inseparable part of post-earthquake life in Canterbury. In this chapter, I will look at the matter of zoning with special attention to the ‘red zone’.

3.1 CBD - Central Business District

After the 6.3 earthquake in February 2011, as well after the September 2010 earthquake, the area within the four avenues\(^{16}\) was quickly cordoned off and patrolled by the New Zealand Defense Force and the New Zealand Police. The public was forbidden to enter and the CBD residents had to pass an access system ("CBD Rebuild Zone."). The soldiers were present for several months, and in fact they became an indispensable part of the post-earthquake picture. About 800 buildings within the Central Business District were destroyed by the earthquakes (Sally Carlton).

The first time the public could see what the CBD looked like was in late 2011 when CERA organized bus tours. These tours did not stop inside the CBD as the safety was still a high priority, but at least the people could finally see the changes with their own eyes.\(^{17}\) As many as 180,000 citizens took advantage and went to see the red zone cordon. Later, a walkway from the ‘pop-up’ Re:START mall to the Cathedral square was opened (ibid.). (More about Re:START in chapter 5.2 Art in Christchurch.) Already by the end of 2011, a great number of buildings had been demolished, another great number awaited demolitions and some buildings still had uncertain future. Some historical facades were to be saved (“CBD red zone with Warwick…”). (See the aerial

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\(^{16}\) Central Business District is defined by four avenues: Bealey Ave, Fitzgerald Ave, Moorhouse Ave and Deans Ave. (See the map 12 Central Business District.)

\(^{17}\) A 32-minute video of the route was produced for those who could not take part in the public bus visits. Available on youtube as “CBD red zone with Warwick Isaacs, General Manager Demolition”.
photos 13 CBD after some demolitions, 14 CBD in November 2012 and 15 CBD in November 2012 in the appendix.)

In September 2012, a discussion arose around CERA’s intentions to acquire 53 hectares of private property in the CBD for an estimated NZ$ 636 million. Miles claims that around 880 letters “were sent to central city property owners advising them that their property was to be compulsorily acquired under the powers of the Canterbury Earthquake Recovery Act 2011” (81). The government was seen to nationalize the land.

It was already mentioned that the lines of liability for the city center’s development were not clear and that the central government represented by CERA seized many of the CCC’s responsibilities. Finally on June 30, 2013 the last official CERA cordon fences were removed and the CBD fell back to the hand of the CCC and building owners (ibid.). Before doing so, the central government produced a blueprint with a significant financial gap and expected the CCC to fill it. The CCC felt that the central government did not put enough confidence in its ability to produce a decent solution. Moreover, there were pressures from the central government on the CCC to sell some of its strategic assets such as the airport (Marta Steeman). The community felt neglected although there was an attempt to collect some ideas through a project called Share an Idea. Many have perceived as the main problem the lack of vision in the rebuild and desired a simple, defining vision that would combine both ambitions and the ideas expressed by the community through Share an Idea (Rebuilding Christchurch). There has been little community consultation due to the government’s focus on markets and the speed of recovery instead of on the people. There seems to lie the grave incompatibility of the rebuild driven by the government and the meaningful community consultation. However, this practice of neglecting social relations can endanger democratic principles (Sally Carlton).

3.2 **Zoning**

In June 2011, the city was divided into several zones according to the type of land and the extent of the damage. Properties in green zone were to be repaired or rebuilt again. Orange-zoned properties (on flat land) and white-zoned properties (on the Port Hills\(^\text{18}\)) required further assessment. Red zone meant that land repair would not be

\(^\text{18}\) The Port Hills is a range of hills that lies between Christchurch and Lyttelton.
economic and the properties in red zones were therefore not to be repaired/rebuilt at all. The Port Hills were, because of the rock-fall risks, zoned differently, and 500 of those homes were regarded too unsafe to inhabit although they were not damaged (Miles 36). Nowadays there are no orange and white zones - all have been classified as either red, or green ("Land Zones"). Green-zone land was further divided into three technical categories – TC1, TC2 and TC3 ("Residential green zone technical categories"). These categories characterize how the land is expected to behave in future earthquakes, and outline new foundation systems that would be required in the corresponding areas.

In the discussion led by CERA’s chief executive, Roger Sutton (first broadcast on Maori Television on November 19, 201119), Malcom McMillan from Department of Building and Housing explained the new categories within the green zone: Technical Category 1 (TC1, known as ‘grey’) means that “future land damage from liquefaction is unlikely” and standard foundations for concrete slabs or timber floors may be used. People living on land classified as Technical Category 2 (TC2, ‘yellow’) shall expect minor to moderate land damage from liquefaction if a moderate to strong earthquake occurs, and thus the foundations should be improved. Technical Category 3 (TC3, ‘blue’) means a moderate to significant risk of land damage from liquefaction, and therefore “site-specific geotechnical investigation and specific engineering foundation design are required”. However, it has not been required from the property owners to replace their foundations unless their house is to be rebuilt or the land was damaged and needs repairs to the foundations ("Overview of..."); and “Green zone changes - what they mean for you”).

The difference between the TC3 (in green zone) and the red zone may not be obvious, because for both categories the risks of significant land damage exist. Nevertheless, the land in the red zone would need a complete repair and new infrastructure if to be built on again. The process would be identical to creating new subdivisions; whereas in the TC3 individual solutions are available and people can rebuild their homes with assistance of engineers, and these homes with stronger foundations are likely to resist future quakes. By contrast, in the red zone, they would have to “start from the scratch” as the land requires complete repair, which is not economic, explained Reid Stiven from EQC (“Green zone changes - what they mean for you”). This new ‘blue’ category affected around 6,000 homes and questions arose about

19 Available on www.youtube.com as “Green zone changes - what they mean for you”.

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who would pay the additional costs (Miles 39). Dean MacGregor from IAG Insurance stated that the stronger foundations, including the geotechnical assessment reports and engineer advice, would be fully covered under people’s insurance policies (“Green zone changes - what they mean for you”).

3.3 Red Zone

It is puzzling to comprehend the largeness of the residential red zone which is four times greater than Hagley Park, the city’s biggest open area (1.61 km²). (See 17 Christchurch's residential red zone.) For a long time, there was no clear plan for the future of this land and community activists suggested that a part of it be transformed into a green belt stretching from the city center to the beach (Gorman et al 46).

Altogether about 8,000 homes have been declared red-zone (some of them later labeled green), but so far only a half of them has been demolished. It is obvious that the demolition has to accelerate if CERA wishes to meet its target (5,000 homes demolished on flat land by June 2014, and all flat-land homes demolished by the end of 2014). The clearance on the Port Hills will commence later, probably in late 2015 at the earliest. The percentage of pulled-down houses differs in each suburb as much as 59% in Burwood and only 5% in the Heathcote Valley. Red-zoned properties on Port Hills prove very challenging to demolish specially due to rock-fall risks and unsafe land (Charlie Gates).

Although some insurers (in order to save money on claims) proclaimed some red-zone houses repairable, properties in the red zone are without exception deemed to demolitions, regardless of the extent of actual damage (Miles 79). The demolitions and rebuild is a long and uneasy process, but after three years some people ran out of their patience and vent their discontent for example in comments below online articles. CERA, EQC and private insurance companies have been criticized the most:

*CERA is the only government agency I know of that has the luxury of being able to set its own deadlines and yet, despite this, it has failed over and over again to meet those deadlines. Land zoning - fail. Port Hills - fail. Maintenance of red zoned property - fail. Demolitions - fail. Their performance has been

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20 Until March 4, 2014, 3920 homes were demolished and 3919 are still waiting (Charlie Gates).
abysmal. They are not part of Christchurch’s future. They are a significant part of the problem.

(a comment by Robbie from March 19, 2014, under an article by Charlie Gates)

One of the most delicate topics has been the government’s offer to buy out red-zoned properties, which was first announced in June 2011. The properties were to be bought out at 2007 rateable values and of course that the buy-outs produced some “losers”, who lost as much as NZ$ 150,000, claims Miles (36). She also repeatedly stated that people felt pushed into accepting the government’s offer. Gerry Brownlee, however, proclaimed that the offer made by the Crown was fair, voluntary and more generous than the approach after the Napier earthquake in 1931.21 The net cost to the taxpayers of that effort was expected to go beyond NZ$1 billion (Gorman et al. 6). Miles also challenges Brown’s proclamation that the division of residential red zones was based on research by EQC. Her argument is that some 200 properties were later shifted from red to green without any explanation, so the residents logically suspected the transparency (47). In April 2012, residents in red zone started getting more letters with offers of purchase by the government. The residents’ agreements to sell were to be lodged by May 19, 2012. The government was unlikely to extend the deadline (“Govt offers to red zone homeowners expire soon”). Many questioned the government’s intentions with the purchased land, and saw this as an act of usurpation and “undermining citizens’ contractual and property rights to appease foreign insurers, saving them from the cost of honoring replacement contracts, EQC land payments and then yielding the government a huge parcel of land for future development” (Miles 76-77). People felt pushed out from habitable properties, for there was reportedly no geotechnical report available to show how zoning had been set (ibid.). However, since many were tired from the aftershocks, uncertainty and on-going insurance struggle, they agreed with the sale.22 This had been encouraged by a warning on CERA’s website that those who would not accept the offer would find it difficult to have new services

21 “The date set for assessing compensation for Napier landowners was February 4, 1931 - the day after the earthquake.” (Gorman et al. 6)
22 Reportedly, 5,000 homeowners accepted the government’s offer (Miles 76).
installed and maintained, and even their insurance policies could be cancelled (ibid.). In Miles’ opinion, the red zoning could have been “an arbitrary ruling by the government to save Treasury from the embarrassment that EQC has not been managed to properly provide the protection the NZ population has paid for since 1944” (78). There were concerns that private insurers would be deliberately delaying settlements and thereby forcing homeowners to accept government offers, which were much lower than what they were entitled to (ibid. 79).

For some residents it was out of question to leave a place where they had grown up, gotten married and brought up children. They claimed that there was an unbelievable sense of community and the emotional roots too deep to allow them to retire elsewhere (Gorman et al. 51). Nevertheless, eventually many people had to say to their properties farewell. A typical red-zone suburb is now a lonesome, desolate and very silent place. (See an aerial photo of 16 Residential red zone in Horseshoe lake, 2013” in the appendix.)

On the website called Rebuilding Christchurch, maintained by James Macbeth Dann, Charlotte Grimshaw comments upon her experience of returning to her hometown:

*Broken-hearted Christchurch: you could certainly say it’s got more interesting.*

*The residential red zone was poignantly beautiful in late summer sun, the wrecked houses by the pretty river weed-choked and overgrown. Past the keeled-over pillars of the Holiday Inn, you could look at whole streets sinking and decaying, returning to the earth. There was something to see here all right: after the natural disaster, a disaster of neglect.*

*You could only wander through it and marvel. How can those in charge justify this mess? What on earth does the Government think it’s doing?* (*“Rebuilding Christchurch”*)

### 3.4 Housing crisis

After the quakes, the price of land plummeted, but it did not completely collapse (Gorman et al. 6). Soon the prices began to rise, especially the prices of properties. There has not been enough accommodation, people were lining up to see houses for
rent/sale and the rents were as high as never.\textsuperscript{23} The situation has grown really serious and now we speak about a housing crisis. Christchurch's “as-is-where-is house market” can serve as evidence: a damaged home on TC3 land was sold for NZ$ 1.13 million. The house was considered uneconomic to repair and had no insurance. There are more such properties being sold and purchased (Liz McDonald).

“Upset the delicate balance of supply and demand that regulates the property market even a little and there’s bound to be trouble. Unleash two years of seismic chaos, an insurance freeze and the loss of thousands of homes, and you have the Christchurch property market today.” (Gorman et al. 141)

Christchurch has experienced an acute rental housing shortage since the earthquakes. The high number of displaced tenants caused that rental properties have been heavily demanded and rents rose on average by 12\% a year; rentals under NZ$ 250 a week no longer exist. Family homes near schools in red-zoned neighborhoods were most desired (ibid. 144). Also, landlords could be ‘picky’ and the less desirable tenants (with animals and without jobs or clean police records) were suddenly disadvantaged. With the flood of international insurance workers being lodged on companies’ chequebooks, a new market emerged: “While these $1000-a-week homes were more a motel substitute than part of the standard rental market, their removal from the rental pool further increased the pressure.” (ibid.) There have been concerns that the situation will worsen and the inflation will rise with rebuild workers arriving to Canterbury (ibid. 143).\textsuperscript{24}

The best available solution for red-zoners has been to buy an existing home, but the trouble is that there have not been enough of them. The disproportion caused the prices of houses to increase by 10\% within the first two years after the September quake. “By Christmas 2012, the city’s average house value topped $400,000 for the first time. There was talk of multi-offers on houses, queues at open homes, and competitive bidding at auctions.” (ibid. 142-3) Some owners in less-damaged suburbs took advantage of increased prices, sold their properties to the red-zoners and moved on to greener pastures (ibid.). Nonetheless, Gorman et al. state that housing affordability had

\textsuperscript{23} Information from local people received in email correspondence.

\textsuperscript{24} Housing situation in numbers: Since the February 2011 earthquake, the greater Christchurch region was affected by a loss of 7,860 houses and a further 9,100 properties were estimated to be uninhabitable ("Housing Pressures in Christchurch").
already been an issue in Christchurch before September 2010, when during the housing boom of 2003-2008 the real-estate prices doubled (142).

New subdivisions have been built behind the outskirts of the city. They are called exurbs in America, say Gorman et al. Prior to the earthquakes there had been no need for them in Canterbury with plenty of land. (Towns in Canterbury were traditionally based on industrial or farming economies.) But now the situation is very much different it seems that the compact Christchurch is gone.
4 Natural disaster insurance

4.1 EQC - Earthquake Commission

Earthquake Commission provides natural disaster insurance for residential homes, land and contents. Everyone who has a private insurance policy for home that includes fire insurance (most do) has automatically EQC insurance (EQCover) for their home and land. Similarly, those with private insurance for contents that includes fire insurance have EQCover for contents as well. The natural disasters that are covered by EQCover include earthquakes, natural landslips, volcanic eruptions, hydrothermal activity and tsunamis. EQC also insures residential land against storm and flood damage, and properties against fire resulting from any of the above-mentioned natural catastrophes (EQC).

EQCover costs only 15 cents plus GST25 for every $100 of home or contents fire insurance. The owners pay this amount to their insurer, who transmits it to EQC. The maximum a person pays per home and its contents is $180 + GST per year. This amount entitles them for cover of $100,000 (+GST) for their home, $20,000 (+GST) for contents, and $200,000 for insured residential land (not covered by private companies). “This amount of insurance is available for each event of natural disaster damage.” (ibid.) House and contents damage above this is referred to private insurers. Claimants with damage under $10,000 (a threshold later increased to $15,000) received cash payouts to manage repairs themselves (Gorman et al. 161). In other words, the first $100,000 of house damage is paid by EQC, the rest by private insurers, the first $20,000 for contents damage is paid by EQC, the rest, again, by private insurers.

EQCover is guaranteed by the government. This means that if there is a serious natural disaster and EQC cannot cover its obligations from the Natural Disaster Fund and its reinsurance, the government will pay the shortfall (EQC).

It is hard to imagine that prior to September 4, 2010 the Earthquake Commission had had only 22 employees. Within two weeks following the quake, the number of staff grew to 600, and by November 2010 to almost 1150 (Gorman et al. 160). Even though the seismic risks in New Zealand had been known, EQC was not prepared. Miles

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25 GST = Goods and Services Tax (15%)
reveals that EQC’s documentations “makes consideration of a major disaster as constituting no more than 30,000 to 150,000 claims“, whereas the recent events produced more than 500,000 claims (68).

In December 2011, a scandal appeared in connection with EQC’s new personnel: Many people were outraged by the fact that new EQC assessors did not need any building knowledge. The only quality EQC required was competence to “communicate effectively and empathetically with a wide range of people, often in stressed situations” (Martin Van Beynen: “Aussies cash…”). Moreover, it was revealed that some newly employed assessors were relatives of senior EQC workers (Miles 40). As if that was not enough, the practices of hiring stuff from abroad and from Wellington emerged: a private investigation company Verifact Australia was earning $33,000 a week “as its margin for supplying staff to the Earthquake Commission“ (Martin Van Beynen: “Aussies cash…”). This company was the largest supplier of field staff to the commission and their assessors made $75 an hour minimum, plus allowances. Group leaders were paid $110 an hour, and no one had accommodation and travel costs because EQC took cake of them (ibid.). Verifact Australia was not the only company making money by supplying staff to EQC - Wellington company Best Build Construction was taking $10 for each hour worked by each worker it had provided (Martin Van Beynen: “Firms clips…”). This was happening in times when the Earthquake Commission was practically running out of money. EQC’s response times were very slow and residents complained about a lack of information provided (Gorman et al. 161). But however protracted the performance of EQC has been, it has been more steady and satisfactory than the performance and claim settling process of the private insurance companies (Miles 104).26

4.2 Zoning and insurance

The government’s decision to divide all occupied land in the city into technical categories (TC1, TC2 and TC3) was meant to be only a guide to deal with the problem of repairing devastated foundations, but insurers and banks took the new labels too seriously. Insurance companies considered the most damage-prone TC3 sites too risky

26 By October 21, 2011, EQC had assessed 100,000 homes (since the February 22) and had it not been for more aftershocks at the end of 2011, it would have been on target to complete all assessments by Christmas, in contrast to private insurers (ibid.).
and banks were not willing to lend on them. Thus, buyers had little choice but to avoid them (Gorman et al. 147). “The average price differential between TC3 and TC1 homes, compared against rating valuations, was 15%,” but individually, some TC3 property values fell by as much as 50% (ibid.).

There appeared a new class of risk-tolerant investors who started to purchase the cheap properties. They could not obtain the insurance, but in worst case they had a piece of land to rebuild on (Gorman et al. 149).

Due to increased natural risks, riverfront and hilltop locations were no longer attractive. The ones losing most in this property game were “the uninsured, the underinsured, the red-zoners with rating valuations considerably under market value and others such as those in the middle of construction or a property deal” (ibid.). Gorman et al. add:

Valuers estimate that council rating values, a rough desktop calculation for rating purposes only, can vary from 50 per cent more to 50 per cent less that a home’s value on the open market. Those with a high market value relative to rating value, like owners of well-kept, renovated older homes, came out worse than those who had a lower market value but high rating value, such as neglected home from recent decades. For many, borrowing more cash was the only way to re-house themselves. (...) Properties left bordering a reserve or waterway after neighboring demolitions may suddenly gain value, while others near red zones will find the loss of amenities such as schools and shops detrimental to real estate prices. In most cases, those needing a rebuild will score a new house and tax-free capital gain. All over the city, people who would never have dreamt of choosing a house design from a catalogue will feel like Lotto winners. (152)

4.3 Private insurance

In July 2011, Canterbury Employers' Chamber of Commerce chief executive Peter Townsend warned that the economy cannot recover and no progress can be achieved without “a free-flowing insurance market”: 
After the September earthquake, insurers imposed a temporary freeze on all new business policies in Canterbury lasting 28 days. The freeze was re-imposed after every major shake, meaning that since February 22 there has been almost no opportunity to take out a business insurance policy and without insurance cover, businesses could not get bank loans or make meaningful financial decisions, Townsend said. While existing polices were still being renewed, the cost had exploded, with every commercial insurer at least tripling premiums for Canterbury businesses. For owners or tenants of pre-1980s buildings, premiums had at least quadrupled, even if the building was unscathed, while excesses had jumped even more dramatically. (...) The Government needed to intervene, and possibly assume some of the insurance burden in the short term to give businesses and insurers certainty.” (Ben Heather)

The government was, however, very reluctant to intervene, and up to date it has not pushed the insurance companies into action. What is more, the government was making it easier for the insurers instead of for its people: Damage was assessed under new guidelines (introduced late in 2011), which allowed larger cracks in foundations (Miles 80). These changes did not apply only to the red zone, and saved the insurers and EQC substantial amount of money (ibid.).

Major private insurers on New Zealand’s market have been: Insurance Australia Group (IAG), Allied Mutual Insurance (AMI), VERO, Ansvar Insurance and Lumley Insurance (part of Westfarmers Insurance, one of the largest Australian companies). In November 2011, when IAG officially purchased the second biggest residential insurer, AMI27, it became the most important player on the market. VERO came to be the second largest general insurer in New Zealand then (Miles 34-43). Ansvar Insurance, which specialized in insuring churches and education and heritage buildings, withdrew from the country completely in September 2011, “stating

27 for NZ$ 380 million; without consultation with the policyholders. AMI had 485,000 policy holders, 51,000 of them in Christchurch, more than a third market-share in Canterbury (ibid.). In April 2011, AMI found itself in difficulties.
that it had NZ$ 700 million in claims and only NZ$ 35 million in premiums and was unable to find affordable reinsurance” (Miles 36-7). Ansvar’s policyholders thought that Ansvar would arrange for continued insurance elsewhere, but it did not happen. Although the Earthquake Minister Gerry Brownlee was pleaded to do something about the situation, he stated that the Government would not intervene (ibid.).

By spring 2011 (October and November), the fact that earthquake insurance is inaccessible started to be a real problem. People wanted to buy homes, build new ones or sell and were not able to. The failure to secure insurance eventually cost the city some productive citizens. Furthermore, home insurance premiums were expected to increase significantly (up to 150%), which would exclude many from the market and leave them with no cover (ibid. 34-43). The property values did not stop increasing (Liz McDonald).

Overall, the private insurers did not do very well in 2011 and 2012, and were severely criticized. Some of their tactics how to avoid complying with their obligations will be outlined in the following chapter.

4.4 ‘Good faith’ concept

Insurance contracts differ from all other contracts - they are based on utmost good faith. This is the standard on which the courts judge performance by insurers. There is also a duty of disclosure by policyholders in the insurance contracts, which is about the duty of openness and honesty. Under the ‘good faith’ (Fair Insurance Code), insurers are obliged to settle valid claims quickly and fairly (after the policyholder has provided the necessary information) and not to put their own financial interests above those of the policyholder (Neil Campbell). There have been few (mostly small) insurers who have met their contractual obligations. The majority of large corporations, however, showed instances of ‘bad faith’ instead (Miles 110-11).

Miles explains that the time between receiving premiums and paying out claims is called ‘float’ (111-12). Insurance corporations earn money from investments they make with the premiums, thus the longer the ‘float’ is, the more subsequent income the corporations can generate. It is obvious then that the corporations have no intention to reduce these periods and pay out their policyholders soon after the disaster. Not paying out, paying out as late as possible, or paying out less “has helped produce record profits for the insurance industry”, states Miles (113). The longer the delay, the higher chance
for the insurers to pay less at the end. She adds that in the past 12 years insurance company net income has escalated; even after Hurricane Katrina in the U.S.A.\(^{28}\) She suspects that Cantabrians are major contributors to the insurance industry profit statistics now (113).

In Australia in 2012, in a court case Oakland Investments Ltd v 'Certain Underwriters at Lloyds', the court recognized policyholders’ legal action against delayed payments. This case should serve as an exemplary case for all insurers who indulge in delayed payments ("Insurers beware of delayed payment..."). Meanwhile, the insurance corporations in New Zealand rely on a fact that for most people litigation is financially unattainable. And if someone dare to litigate, the insurance corporations "use every means open to them to delay trial, often for years. Having had the financial benefit of huge delay, insurers rarely go through the courtroom door, preferring to ‘settle on the steps of the courtroom’ before trial (Miles 114). Miles informs that in the U.S.A. (Louisiana) there is a special body established for complaints - Louisiana Department of Insurance. Unfortunately, there is none in New Zealand so far, so “the underlying insurance dishonesty scenario continues to be ignored by the government and regulators"(191).

The list of practices how to avoid spending money on claims is endless; another instance is proclaiming the house ‘non-compliant’ with current building codes. The insurers have been also heard that there would not be any ‘betterment’ in the work carried out (Miles 122-3). This is simply not possible, because the old houses were built when the construction standards varied and insurers had agreed to insure the properties in full knowledge of that. In addition, the new building standards are imposed by the present regulations, not by the homeowners (ibid.).

Another evidence of ‘bad faith’ behavior is excessive investigation of claims. It is actually another common tactic that allows insurers to gain more time and thereby increase the yields (ibid. 116).

Inability to explain the extent of true coverage obtainable to the policyholders is regarded as another ‘bad faith’ behavior, frequently performed by the private insurers. The same applies to “reducing a settlement amount without explaining why, and failure to properly investigate claims” (Miles 115). “In addition, there were reports of insurers

\(^{28}\) Insurance companies’ profits: USD 73 billion in 2007, which is 49% increase from USD 49 billion in 2005 (ibid.).
discouraging professionals being present at meetings, be they lawyers, engineers or builders. Often the ‘professionals’ they [private insurers] employ to prepare reports are ‘captive’, understanding well that their job in the process is to ensure that the lowest costs are achieved, not the best solution.” (ibid.)

It is hard to believe that some insurers attempted to settle claims with vouchers from retailers instead of paying out in cash, despite it is not mentioned in policy ‘terms and conditions’ and thus it is illegal. It was then impossible for policyholders to obtain identical replacements (Miles 118).

Lawyer Andrew Hooker warns against insurance companies settling a repair job for cash: “Beware the insurance company that tries to settle a repair job for cash. It is probably because they know that the costs of repair will escalate and you will be caught short. If you agree to cash settle, insist on an escalation clause in case the repair job ends up costing more.” (“Ensuring you get...”)

It is a well-known fact that the insurers tend to incorporate a very abstract language into the contracts so that they are at advantage over non-professionals when it comes to arguing about the conditions and obligations. It often allows them to ‘invent’ surprising interpretations of the policy terms.

Miles reveals how various functions within the insurance industry are deliberately specialized and compartmentalized. It is supposed to be an effective way to train and supervise employees, but it also means that “no one person is likely to develop a conscience in respect of unfair transactions” that are taking place (118).

There have been reports of big discrepancies in various assessors’ estimations. It is because some assessors quickly employed by EQC and the private insurance companies had often no experience/qualification in building industry. Some discrepancies were as much as NZ$ 600,000. Another factor contributing to the disparities have been rising prices in Canterbury and the software insurance companies used and whose (price-)data are deliberately obsolete (Miles 117-121).

It was already mentioned in one of previous chapters that the building standards have been loosened and even large cracks in foundations were tolerated. Obviously, both EQC and the private insurers would take advantage of that in order to pay the clients less (Miles 116).

There have been many more issues connected to bad faith practices, but it is not the aim of the thesis to describe them all.
4.5 Reinsurance

The proportion of the thesis does not allow a deep analysis of the complex topic of reinsurance. To put it briefly, reinsurance (also known as ‘insurance for insurers’) is a sphere of insurance that enables insurers to “cover their risks by ceding them to a reinsurer”. “Reinsurance can provide a ceding company with several benefits, including a reduction in net liability on individual risks and catastrophe protection from large or multiple losses.” (Scor: “About Reinsurance”) Thus, in order not to pay an enormous obligation, a part of a risk is transferred to other parties in exchange of a fee. However, apart from reinsurers assuming the primary insurer’s losses (above a fixed limit), there is another possibility - primary insurers and reinsurers may “share both the premiums and losses” (Miles 131). Miles says that majority of reinsurance placements are shared between a number of reinsurers. On a simple example she shows how it works:

_A NZD 1.5 million reinsurance (due after the insurer excess of NZD 500,000)_ means the reinsurer(s) assumes the risk between the NZD 500,000 and NZD 2 million. That NZD 2 million layer may well be shared by 30 or more reinsurers. The lead reinsurer sets the premium and contract conditions for the reinsurance contract. Other companies subscribing to the contact are known as ‘following reinsurers’. (132)

Thus the ability of the insurer to cover a risk directly depends on the strength of its reinsurer/s. Reinsurance industry has been merging with investment banking, which is an important factor in “increasing complexity within the reinsurance and insurance marketplace”, says Miles. This blend can surely contribute to “the uncertainty of the re/insurance safety net in an even increasingly uncertain global financial market” (131). In her opinion, the primary insurance sector in NZ is hardly regulated and the reinsurance industry is controlled even less. But according to AIG CEO Robert Benmosche, banks and investment firms “should not be subject to forced government regulation, and the country’s financial institutions should be trusted to ‘row their boats in a manner they see fit’. The only way that can happen is if the financial experts are let run their own operations, without the intervention of a federal government that clearly
does not know how to control its finances.” (WatchBlog: “AIG CEO: "Trust us to self-regulate"”) Clearly, after New Zealand’s experience, this is not the way to go.

4.6 Recovery and Rebuild

Peter Townsend (see chapter 4.3) emphasized that the recovery would not be possible without a healthy insurance market. This proved to be the key problem in Canterbury. Prolonged insurance settlement caused many businesses to fail and many residents to move elsewhere or simply remain caught helpless and dependent. Without the insurance payouts, most homeowners were not able repair the damage or build/buy a new home and move forward with their lives. Many believed that “quick settlement of each individual insured’s claims would serve the region as a whole by mitigating economic disaster in the affected area (Miles 113). The difficulty to secure insurance worsened the situation further. Reportedly, some builders decided to arrange own insurance for their customers, otherwise they could not commence the rebuild. Insurers were then blamed for strangling the rebuilding process (Miles 121).

Regardless of voters’ political colors, it is everyone’s interest to ensure that disasters are managed effectively and equitably. The Christchurch experience highlights a substantial conflict of interest between the public, the government and private insurance corporations. (Miles 174)

The situation finally started to look brighter in 2014 when it was announced that the earthquake claims payouts topped NZ$ 7.3 billion for commercial claims and NZ$ 3.7 billion for residential claims (“Canterbury earthquake claims…”). This showed real progress is settling claims and enabling the residents and businesses of Canterbury to get back on their feet, says Insurance Council Chief Executive Tim Grafton (ibid.).

Some Christchurch residents claim the situation has improved (Andrew Peach and Marie Williams in their emails), but there are still some vulnerable people with unsettled insurance claims. In March 2014, reporter Greenhill comments the current state of affairs by saying that there still are more than 800 vulnerable citizens to be fully settled by insurers (Marc Greenhill). The category ‘vulnerable’ typically includes young families, the sick and those with seriously damaged homes.
Buildings in New Zealand were generally very badly insulated and here lies a big green opportunity for Canterbury: with the rebuild and new construction standards, the future living comfort shall improve significantly. New houses are expected to be not only more earthquake resistant and easier to repair, but also warmer (double glazing) and ecological, some with solar roof panels for heating water and generating electricity (Gorman et al. 153).

To conclude, Christchurch could be seen as a city divided into two halves - some people can live in their homes (with a little damage), while others are either waiting for reports, decisions and remediation plans and above all insurance payouts. One cannot disagree with Miles that “the whole fiasco demonstrates very clearly that catastrophe insurance is too important to be left to private insurers” (175). There is a conflict of ideologies - the private insurance companies want to profit and it would be a mistake to assume that these profit-based corporations will act with compassion (175). Sarah Miles sees the situation in post-earthquake Canterbury still quite dark. She is not alone, though. There are many others who have undergone the tedious process of settling the claims, waiting, settling new claims, waiting again, new assessment processes, complaining, calling the insurers and EQC, more waiting, listening to promises from the insurers and from the government and more waiting with little impact... If one draws information only from official websites of insurance companies and the government, they cannot obtain a full and credible picture of the situation. Words are one thing, action another. Therefore, it is necessary to take into account personal experience of local people, one of whom Sarah Miles represents. Or James Macbeth Dann, who sees Christchurch as “a symbol of failure and broken promises from the national-led government”. In his view, Christchurch is a man-made disaster, “worse that the one caused by mother nature” (Rebuild Christchurch).
5 Christchurch’s community

Although comparison is not the aim of this thesis, I must say that I have always had the impression that the Christchurch’s community is really interested and engaged in what is happening, unlike in the Czech Republic where people are more individualistic and less cooperative. The community life in Christchurch was vibrant, more vibrant than in even smaller cities in the Czech Republic.

It is also worth noting that volunteers in New Zealand generally come not only from the ranks of students, but also from the middle-aged and retired (typically women) whom are already independent economically. Prior to the earthquakes, there were as many as 160 non-governmental organizations (NGOs) in the city. Only 94 operated fully after; the rest closed, moved to new premises or offered restricted assistance (Gorman et al. 214-16).

I am not deeply interested in politics, but I was not the only Czech who found New Zealand’s politics more transparent and politicians less corrupted and more willing to serve the people. The more I was shocked by the direction the events took after the earthquakes, especially by the lack of government’s interest in Canterbury citizens that clearly demonstrated itself in the reluctance to put some pressure onto insurance companies. I wanted to find out whether the state of politics demoralized the Canterbury community. It seems to me now that the community (although hit quite hard by the course of events and subsequent policies) remained strong and is getting back on its feet. However, people have been busier after the quakes; trying to cope with the unforeseen situation and with the endless struggle with EQC and insurers. Many fell victim to significant tension, so it is not surprising that the domestic violence, smoking rates, alcohol consumption, heart attacks and children’s misbehavior increased.

Regarding the immediate response, I have already mentioned that people proved to be very compassionate. After the February 22 earthquake, they walked around their neighborhood in order to make sure everyone around them is all right. Then, there rose a great sense of compassion and help all around the South Island, if not the whole of New Zealand, as stated in the first chapter (1.3). Other towns’ citizens invited Cantabrians to their homes, some donated warm clothes and blankets, some psychologists offered free services, students from Dunedin donated 10,000 lunches,
15,000 students from Canterbury University came to clean up silt and rubble, etc. Many companies were helping their employees by paying wage when they were not working.

Two months after the February earthquake, I remember that the community was still full of hopes for better future. They were sure that a better Christchurch would be built and were willing to do everything they could to make it come true. However, the things took much longer than anyone could imagine...

5.1 Protest and community’s role in the rebuild

Ahmed Aziz, a New Zealand resident living in Christchurch, (in response to my questions from April 4, 2014) stated that the city is recovering and the mood is getting better, but it is still far from the life that is used to have and skepticism prevails. Just like Marie Williams and Andrew Peach, he believes that the life of the city depends on the development of the city center which is recovering, but not quickly enough. The greatest part of work is still done by the Council although people have a spirit of charity and there are several initiatives taken by different organizations.

I was very interested in who makes the decisions on the future of Christchurch, how much say people have in the new projects, whether the community is well informed about what is going to happen and whether the government pay enough attention to the community’s needs. Aziz says:

Simple answer, mainly the central government, city council and a few building contractors are doing the bulk of the work. There has been some agitation about only a few companies getting contracts for the rebuild (e.g. Fletcher Building) but they have been sporadic and not really massive to make any impact. The council did have an initiative in the past when it was about to launch the new rebuild plan when it sent mail to all residents and asked their opinion about the rebuild. DID they really incorporate those suggestions in the actual plan? That’s anybody's guess, nobody really knows.

Sarah Miles writes about frequent protests in Christchurch; but how large have they really been? Both Mary Williams and Ahmed Aziz say that the protests were not usually joint protests, as mainly small groups protested. Some of the few significant
ones took place last year and regarded insurance payouts and the rebuild of the Christchurch cathedral and sports complex replacing damaged Queen Elizabeth II stadium. Sue Peach adds that the most effective method how to protest on inaction on the part of insurance companies was to get the story in the media; often only then action follows.

I would say that New Zealanders can be quite patient and as a rule do not protest much, so the frequent protests that took place in last two and half years show quite a lot of frustration.

In the previous chapters, I already introduced the difficult situation of the community that does not feel enough involved in the rebuild. In the next chapter, I will show the alternative ways the Christchurch residents have found.

5.2 Art in Christchurch

Christchurch is generally seen as a rather conservative and in way very English city. However, after living there for 15 months I gained the impression that the city is actually very much alive and ‘bubbly’, but rather in its own (calm) way. It seemed to me that the city was becoming more and more artistic every month, but some say that this process was interrupted by the sequence of the earthquakes when the city lost, apart from the galleries, theaters and cinemas also most of its very stylish and charming bars, cafés and restaurants. Suddenly there was no life in the center, and, for the future was very uncertain, many people were considering leaving. Especially the young and productive, including artists. Luckily, some did stay and attempted to resuscitate the city. The efforts began in the suburbs, because the center was closed for many months.

Arts hold an important role in the recovery process, first of all in the mental recovery process. And since the arts can elevate one’s spirits and have the power to “enhance a sense of well-being”, it has been crucial for the people of Christchurch to find relief in creative activity (Wainwright. In Gorman et al. 286).

Very soon after the September 4 earthquake, a creative urban movement called Gap Filler appeared and started to fill empty sites with various projects. It greatly expanded after the February 22 earthquake. The aim was to activate these sites and make them alive again; make the post-earthquake Christchurch more vibrant and interesting. I first heard about Gap Filler in an email from Lisa Pilkington on December 16, 2012: “A volunteer organization has sprung up called Gap Fillers. They install
interesting projects on empty demolition sites. My favourite to date is the outdoor cinema powered by the audience riding bikes."

Their projects do not include only mural paintings and poems, graffiti and sculptures, but also an open-air performance space made of shipping pallets (known as 20 Summer Pallet Pavilion), mini golf course, the above mentioned cycle-powered cinema, temporary “inconvenience stores”, photograph exhibitions, Dance-o-Mat (see picture 19 Dance-o-Mat), outdoor book-exchange spots where one can exchange any book, colorfully-painted pianos ready for impromptu concerts and petanque clubs. (See some instances of the temporary works that bring life to the city in appendix - pictures 21 Bowling Alley; CPIT student project (Gap Filler), 22 One of many outdoor pianos and 23 An impromptu concert in Woolston) The ideas, as well as the realization, have come from the community. Gap Filler aims at non-repetition, thus each project is unique. (Gap Filler)

Gap Filler operates on volunteer-based system and receives financial contributions (Gap Filler). It strives for the revitalization of the city, because the professional response often takes too long, and many felt that Christchurch is rather dead and ghostly. It was necessary to stop citizens from fleeing, and Gap Filler’s experiments and site-specific projects indeed managed to ‘inject some life’ into Christchurch’s center. The projects became very popular not only with the young generation who lost their clubs, theaters and cinemas and hungered for some entertainment.

Coralie Winn, a co-founder of Gap Filler, says that by assisting people to take part in those artistic projects, they want to promote community spirit and awareness. “Communities are strongest when working for public benefit, social capital and a flourishing environment,” she says; the community spirit goes hand in hand with the idea of ‘public good’ (Justin Bergman).

Greening the Rubble, another community group, takes care of small parks and gardens in vacant parcels. Similarly to Gap Filler, everything is very temporary and they have to be always ready to move out, which may happen even after the construction of a project begins (ibid.).

Both Gap Filler and Greening the Rubble, as well as a few other groups and individuals work under “an umbrella organization” called Life in Vacant Spaces (LiVS). Life in Vacant Spaces is an independent trust established in June 2012 funded by the CCC. “LiVS manages privately owned property for landowners and finds short and
medium-term uses for the countless vacant sites and buildings of our city.” (Life in Vacant Spaces) Their mission is to open permissions and make empty space available for temporary usage until a long-term activity takes place.

One of the artists that stayed in Christchurch, Pete Majendie, installs art work around the city, and became well-known for his poignant quake-anniversary memorial of 185 white chairs which were installed in February 2012, a year after the disaster, on a 185 sq meters lot. (See picture 24 185-white-chairs memorial in the appendix.) Each chair is different to represent individual personalities of those who died in February 2011. The chairs were painted, because painting, unlike spraying, allowed the author to think (TravelSkite). The project was designed to be only temporary, until a permanent monument would be built. However, there is still none, so a group of volunteers repainted the chairs prior to the third anniversary (Nicole Mathewson).

Mike Hewson, another artist, is an author of sensational installations on the sides of destroyed buildings. The buildings then looked much livelier (see pictures 25 A photoreal installation by Mike Hewson at Cranmer Courtsand 26 A photoreal installation by Mike Hewson).

A designer Juliet Arnott returned to New Zealand after the earthquakes to make furniture and jewelry from wood from the demolished houses (otherwise to be wasted) and set up a company Rekindle (Rekindle).

The most visible attempt to revive a building amid debris is probably the cardboard cathedral by Japanese architect Shigeru Ban, who is well-known for innovative work with recycled paper and cardboard tubes. Like most other artistic works in present-day Christchurch, neither the cardboard cathedral is meant to be permanent. Until the final decision on the future cathedral is made, it will serve for church’s congregations and as a new tourist attraction (Justin Bergman). (See the unique cathedral in the appendix - pictures 28 Christchurch Cardboard Cathedral 29 Christchurch Cardboard Cathedral, inside.)

One of the first significant projects was so called Re:START on Cashel Mall in the CBD. Cashel Mall has always been a street lined with stores and after the earthquake, when there were no more markets and shows at the square and in the Art center, it became the only place in the CBD to provide shopping and entertainment. Re:START accommodated many businesses previously located elsewhere in the CBD, as well as some buskers. (Re:START; and Facebook site “Cashel Mall Re: START”)
The colorful Re:START mall is formed from shipping containers that have been very popular in Christchurch after the quakes. (See Re-Start on Cashel Mall from the air.)

Some people, Justin Bergman including, see many opportunities in the current, post-earthquake situation. The shock from the earthquakes may be very beneficial because people have started to pay more attention to the possibilities that lie in art and to see how important the art is. Bergman says there are many more chances for creativeness and innovation than before. Even the Christchurch Art Gallery, the city’s pre-eminent art institution, was driven to the streets. However, the precondition is that the creative community stays in Christchurch - and this is what it has been about - to make the productive people stay in Canterbury.

All these projects and incentives confirm my assumption that New Zealanders are an inventive and resourceful people, not afraid of trying something new. Although, on the other hand, the destruction and need to replace brought a conflict: there lies a dilemma between the good old and the new. Since New Zealand is a young nation and there is little heritage, it is important to realize that New Zealanders are really proud of that little they have got - the colonial heritage, the buildings from the 19th century, so common in Europe, are a treasure to them. New Zealanders, even the young generation, feel generally quite attached to the old things and everything vintage is considered ‘cool’. This dilemma between replacement on one hand and new solutions on the other demonstrates itself very well in the Cathedral issue which has been being discussed for three years by now. Everyone knows that the replacement (deconstruction and rebuild) would be too costly, but many people still cannot imagine the city without its traditional symbol. Everyone knows that buildings do not grow stronger with time and that the high, stone structures on the sandy ground are not safe enough, but all the same they are not completely ready to surrender the ancient designs.

The earthquake showed that nothing is permanent; therefore the time for transition has arrived. And LiVS and other artists are here to facilitate the transition process - “transitional spaces encourage transitional experiences”, says Sophie Jerram (“Life in Transition”). It is going to be about balance, and I believe that Cantabrians are on the right track and there is a high chance they will eventually reach that balance and make Christchurch a vigorous, modern and primarily safe city which will not lack the soul it used to have.
The aim of this thesis was to examine the housing and insurance crisis in Canterbury and the impact of the earthquakes on the community particularly in Christchurch. Upon starting writing the thesis, I assumed that New Zealand’s society is more collaborative, less individualistic and slightly more determined to reach their goals than Czechs are. It seemed to me that New Zealanders have better capability to organize themselves and assist one another, not only in times of need. Although they do rely on their government, they do not seem completely dependent on its actions. If the government’s help is inadequate, they do not have the tendency to sit on their hands only, but they are likely to undertake some steps. I did not want to compare the societies, though. I was interested whether the attitude of the people changed in those abnormal circumstances and if so, how.

I observed that there is quite a great variety of non-governmental organizations in New Zealand and, as stated above, volunteering is very much a part of life there. The earthquake proved that the organizations can be of a significant help in times of need, but also that people are able to organize themselves without any umbrella association.

Although the situation in Christchurch is still far from ideal, Cantabrians are making it better every day and the city (perhaps apart from the CBD) is very much alive now; thanks to Life in Vacant Spaces and other ideas that the community produce and realize. New Zealand’s nation could be characterized as quite creative and inventive. New Zealanders love DIY manuals (“Do It Yourself”) and are able to make many things by themselves, which happens to be a great advantage in the earthquakes aftermath. However, the fact that many of them have not obtained their money from the insurers and that the future of their property and thus of their lives as such is very uncertain, made it harder to be creative and productive. Therefore, the arts and entertainment in general are so crucial in the post-earthquake Christchurch - they help people to forget their troubles not only with the insurance claims. Gap Filler, the community and the artists, they all are doing a fantastic job to help the region to recover. Many citizens are finding relief through their involvement in the projects.

Christchurch also received a big psychological help for its tourism sector by being rated as one of top ten cities for 2013 by Lonely Planet. It won number 6 for
“bouncing back with a new energy and inventiveness” (“Lonely Planet puts Christchurch...”).

It would be very interesting to watch the progress in Christchurch over the next decade. I myself want to return there to see what direction it has taken - whether the city center will become original, fresh, lively, green and pedestrians and cyclists-friendly, or whether the government will accommodate an average solution, and the streets will be lined with big modern glass buildings, cold and characterless, as some people fear.
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Appendix

1 New Zealand

<http://www.virtualoceania.net/newzealand/regions/>
1 Frequency of Occurrence of Earthquakes since 1960

<table>
<thead>
<tr>
<th>Magnitude</th>
<th>Annual Average</th>
<th>Minimum</th>
<th>Maximum</th>
<th>&quot;Rule of Thumb&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0 - 4.9</td>
<td>381</td>
<td>129</td>
<td>1,343</td>
<td>1 per day</td>
</tr>
<tr>
<td>5.0 - 5.9</td>
<td>30</td>
<td>7</td>
<td>120</td>
<td>2.5 per month</td>
</tr>
<tr>
<td>6.0 - 6.9</td>
<td>2.3</td>
<td>-</td>
<td>9</td>
<td>2 per year</td>
</tr>
<tr>
<td>7.0 - 7.9</td>
<td>0.4</td>
<td>-</td>
<td>2</td>
<td>1 per 2.5 years</td>
</tr>
<tr>
<td>8.0 or over</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1 per century*</td>
</tr>
</tbody>
</table>

* Based on geological investigations and historical record of earthquakes.


2 Deep and shallow earthquakes

3 Christchurch and Banks Peninsula (Canterbury)

1 Liquefaction

“Liquefaction is a “phenomenon that occurred with every moderate aftershock” and posed a great risk to buildings and infrastructure (Department of Civil Engineering).

Liquefaction “occurs in saturated soils, that is, soils in which the space between individual particles is completely filled with water. This water exerts a pressure on the soil particles that influences how tightly the particles themselves are pressed together”. Normally the water pressure is relatively low, but it steeply grows during the shaking “to the point where the soil particles can readily move with respect to each other” (ibid.). See the illustrations 5 Liquefaction and the photos 4 Liquefacted road and 6 Liquefaction on the road.

4 Liquefacted road

6 Liquefaction on the road


7 Damage on roads 1

8 Damage on roads 2


9 Debris on Colombo Street

Change in census usually resident population count
By South Island territorial authority area
2006–2013 Censuses

Percentage change
- Less than -5.0 percent
- -5.0 to -0.1 percent
- 0.0 to 4.9 percent
- 5.0 to 9.9 percent
- Greater than 10 percent

Change in census usually resident population count
Canterbury region
2001–06 and 2006–13 Censuses

Note: This time series is irregular. Because the 2011 Census was cancelled after the Canterbury earthquake on 22 February 2011, the gap between this census and the last one is seven years. The change in the data between 2006 and 2013 may be greater than in the usual five-year gap between censuses. Be careful when comparing trends.

Source: Statistics New Zealand

12 Central Business District

13 CBD after some demolitions

Source: Image by BeckerFraserPhotos.
<https://www.facebook.com/CHCH.EQ.Photos/photos_stream>
14 CBD in November 2012

15 CBD in November 2012

16 Residential red zone in Horseshoe lake, 2013

Source: Image by BeckerFraserPhotos.

<https://www.facebook.com/CHCH.EQ.Photos/photos_stream>
17 Christchurch’s residential red zone

18 Re-Start on Cashel Mall from the air

Source: Image by BeckerFraserPhotos.
<https://www.facebook.com/CHCH.EQ.Photos/photos_stream>

19 Dance-o-Mat

20 Summer Pallet Pavilion


21 Bowling Alley; CPIT student project (Gap Filler)

22 One of many outdoor pianos

![Image of an outdoor piano]


23 An impromptu concert in Woolston

![Image of an impromptu concert]

24 185-white-chairs memorial


25 A photoreal installation by Mike Hewson at Cranmer Courts

26 A photoreal installation by Mike Hewson

The old Cathedral, symbol of Christchurch

28 Christchurch Cardboard Cathedral

<http://www.moveablefeasts.co.nz/content/venues.html>

Photo by Bridgit Anderson